# MUSIC INDUSTRY IN INDIA -TECHNOLOGICAL CHANGES AND MARKET DYNAMICS

# REVISED THESIS SUBMITTED TO THE UNIVERSITY OF CALICUT

For the award of the degree of

### **DOCTOR OF PHILOSOPHY IN ECONOMICS**

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April, 2017

### CERTIFICATE

This is to certify that the revisions are made in the thesis as per the suggestions made by the external examiners.

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### Certificate

This is to certify that this thesis entitled "Music industry in India-Technological changes and market dynamics" is submitted for award of the Degree of Doctor of Philosophy of the University of Calicut is a bonafide record of research work done by Ms. Bindu Balagopal, under my guidance and supervision. The contents of this thesis, in full or in part, have not been submitted and will not be submitted to any other institute or University for the award of any degree or diploma. Plagiarism is checked and found within the permitted limits.

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### DECLARATION

I Bindu Balagopal, do hereby declare that this written account titled "*Music industry in India-Technological changes and market dynamics*" is a bonafide record of research done by me under the guidance of Dr. K.P Mani, Supervising Teacher, Department of Economics, University of Calicut. I also declare that this thesis has not been submitted by me earlier for the Award of any degree, diploma, title or recognition.

Thrissur 12<sup>th</sup> April, 2017 **Bindu Balagopal** 

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### ACRONYMS

Abbreviation	Expansion
ASCAP	American Society of Composers, Authors and Publishers
B2C	Business to consumers
BMG	Bertelsmann Music Group
BMI	Broadcast Music, Inc.
CAGR	Compound Annual Growth Rate.
CBS	Columbia Broadcast System
CD	Compact Disc
CEO	Chief Executive Officer
DMCA	Digital Millennium Copyright Act
DPD	Digital Phono record Delivery
DRM	Digital Rights Management
DVD	Digital Versatile Disc
EFTA	European Free Trade Association
EMI	Electric and Musical Industries
EU	European Union
EULA	End User License Agreement
FICCI	Federation of Indian Chambers of Commerce and Industry
GATT	General Agreement on Tariffs and Trade
GB	Giga Bite
GDP	Gross Domestic Product
GNP	Gross National Product
GR	Growth Rate
HD	High Display
HMV	His Master's Voice
ICT	Information Communication Technology
IFPI	International Federation of the Phonographic Industry
IMF	International Monetary Fund
IP	Intellectual Property
IPC	Intellectual Property Corporation
IPR	Intellectual Property Rights

ISP	Internet Service Provider
IT	Information Technology
LP	Long Playing
MGM	Metro-Goldwyn-Mayer
MP3	MPEG Audio Layer 3
MTV	Music Television Community
NAFTA	North American Free Trade Agreement
P2P	Peer To Peer
PWC	Price Waterhouse Cooper
RAM	Random Access Memory
RCA	Radio Corporation of America
RIAA	Recording Industry Association of America
RPM	Revolutions per Minute
SAARC	South Asian Association for Regional Cooperation
SESAC	Society of European Stage Authors and Composers
TRIPS	Trade-Related Aspects of Intellectual Property Rights
TV	Television
UIS	UNESCO Institute for Statistics
UK	United Kingdom
UN	United Nations
UNCTAD	United Nations Conference on Trade and Development
UNDP	United Nations Development Programme
US	United States
VFX	Visual Effect
VPA	Visual and Performing Arts
WCT	Wipo Copyright Treaty
WIPO	World Intellectual Property Organisation
WPPT	WIPO Performances and Phonograms Treaty
WTO	World Trade Organisation

#### ABSTRACT

Music industry has undergone dynamic changes from the period of sheet music and vinyl records to audio tapes and CDs and now to digital distribution of music. All over the world physical sales of music have been falling and digital sales rising. This is especially true for India, where digital sale of music has surpassed physical sale. India is one among the top entertainment markets of the world and as such plays an important role in trade in music goods. The study focuses on the impact of technological change in music industry.

The study also analyses the structure of music industry in terms of its markets, distribution and trade. The Indian entertainment industry has shown tremendous growth in recent years. The Music industry in India, which is a part of entertainment industry, shows a revenue of 13.1 billion Rs in 2012 as compared to 6.7 billion Rs in 2004. But there is a shift in sales from physical to digital components. Physical sales fell from 6.7 billion Rs in 2004 to 2.3 billion Rs in 2012, a fall of 65%.Digital sale of music began in 2005. It increased from 0.5 billion Rs in 2005 to 10.8 billion Rs in 2012. In 2010 there was a structural shift from the physical to the digital. Digital sales outpaced physical sales.

Top ten entertainment markets are identified and India is one among the top markets. A look at the top entertainment markets show that there is a very high growth in music exports in Japan, China, India and US in the period 2004 to 2012. The period 2004 to 2012 shows high growth in music imports in China, France and India. During this period Indian music imports grew from 33.6 million dollars to 1042 million dollars. Analysis of the secondary data and information gathered from primary data both indicate that the changes in Indian music industry is a reflection of the changes occurring all over the world.

The study analyses the shift in consumption of music as a result of technological change. Primary data was used to analyse consumption and sale of music. Music consumption based on income, status, age, gender and education were taken for analysis. Results that came out from the primary data shows that Income is not a significant factor influencing music purchase. Status does not seem to influence the frequency of listening to music or amount spent in music purchase. Since technology is gender neutral and there is no difference between men and women in the use of mobiles and other electronic appliances it is understandable that gender does not influence any of the variables taken in primary data. Age of the respondent influences factors like listening to music while travelling, use of mobile music and awareness of piracy but do not influence the amount of music purchase. Again education is a significant factor in downloading music, listening to music online, type of music purchase and awareness of copyright laws.

The study tries to examine the changing trends in sale of different music formats through retail outlets during the period 2010 to 2014. There are regional differences in the sale of different music genres and the data seem to corroborate general beliefs regarding the cultural ancestry of the region concerned. Regional differences in sale of music can also be seen in the case of sale of different music formats. Sale of Cassettes and records have been steadily falling and the sale of MP3 rising. By 2014 in almost all regions, sale of cassettes have almost stopped. In the 1990's India was the second largest producer of cassettes in the world. After two and a half decades Cassettes are no longer produced and sold. Cassette have given way to digital distribution of music. The rise and fall of cassette industry in India shows how innovations can demolish one industry and make place for a new industry. Schumpeterian analysis of creative destruction holds good with regard to the transformation in music industry.

Music shops are gradually disappearing. Exclusive music shops have become rare. Unable to withstand the onslaught of digital revolution most music shops have converted themselves into mobile shops or electronic shops. Factor analysis conducted to study the problems faced by music industry reinforces the idea that piracy, spread of online music and mobile music are largely responsible for the fall in music sales. Music industry is forerunner to other similar industries undergoing digital revolution. Film industry and Book publishing industry is already undergoing digital transformation. Music industry, to survive in the digital world, has to redefine itself to accommodate the technological revolution that is taking place globally.

#### **CHAPTER - 1**

#### **DESIGN OF THE STUDY**

#### **1.1 Introduction**

The overtones of culture and creativity surrounding the very concept of music often divert the focus from the economic aspect of music, that music is an industry. It is an industry that generates billions in revenue, is a great export earner, gives employment to millions and in general provides primary sustenance to large sections of people who may or may not be directly related to the generation of music. Not only composers, performers, publishers, record companies and singers, but a large class of technicians, advertisers, and others distantly placed in the value chain in the production and distribution of music, view music as an industry which provide them income. The fact that the centre stage is occupied by the artist with creativity does not in any way reduce its position as an industry. But the industry has to reckon with other problems special to itself because it is dealing with a cultural good whose enjoyment and thereby its market, is governed by forces which are outside the purview of a regular industry.

The organizational structure of the music industry can be divided into two periods. The traditional music industry before widespread file sharing and the music market under the impact of peer-to-peer networks. Music companies and artists depend on each other as they work together to produce music products for the mass consumer market. Artists create music, while companies promote and distribute the copyrighted works. The findings of the traditional music industry are that, companies can do more efficient marketing and have command over the essential retail distribution network. Hence their role in the production process is indispensable and they should own the copyright. This is the reality of the music business today. But as information technology advances further, alternative ways to promote and distribute music emerge. Labels become less important as artistic inputs dominate the innovation process. Artists can promote themselves via the web and costless electronic distribution becomes possible. Digital music is one of the products that can be delivered to the end consumer via the computer. Technological developments create an economic environment for traditional players in the music industry that is highly uncertain. Information technology and the Internet allows musician to offer their music directly to their consumers and it creates opportunities for new intermediaries to emerge. It also allows people to buy music conveniently and cheaply in digital or physical format. Such developments pose a threat to existing intermediaries in this industry such as music publishers, record companies and retail outlets. This also affects the copyright question as it is presently configured. If intermediaries such as record companies respond slowly to technologically induced changes they may not be able to maintain their present hold on the market.

The extent and coverage of the term music industry can best be understood by identifying the components of the music industry. The following are the group of stakeholders in the music industry.

- Creative artists such as composers, songwriters and musical performers.
- Agents, Managers, Promoters etc. who act on behalf of artists.
- Music publishers who publish original work on various formats like album, music videos etc.
- Record companies, which make and distribute Long Playing records (LPs), expand Cassettes, Compact Discs(CDs), Music Videos, Digital Versatile Disc (DVDs), Copyright collecting societies, which administer the rights of artists, publishers and record companies.
- A variety of other service providers including studio owners, manufacturers, distributors, retailers, broad castors, ticket agents etc.
- Users of music such as filmmakers, multimedia producers, advertisers etc.

• Individual consumers, who purchase a musical good or service or consume it for free.

#### **1.2 Review of Literature**

Literature review of the study is compiled from books and journal articles. More than 100 studies have been reviewed comprising of books and articles. This is classified into various themes and arranged chronologically.

- 1. Economics of arts and culture
- 2. Economics of Music industry
- 3. Technological changes in Music industry
- 4. Copyright issues and music piracy
- 5. Indian music industry

#### **1.2.1 Economics of arts and culture**

This section focuses on the evolution and development of cultural economics. Economics of arts and culture evolved with the study of Baumol and Bowen. Baumol and Bowen (1966) discusses arguments for and against public support of arts. This is considered to be the pioneering work dealing with the economics of arts. There is the argument that government spending may drive out private expenditure on the arts. Another argument against public support is the danger of public control. Public support may lead to more regulation and ultimately more control by the government. The more serious objection to government support of the performing arts is simply that those who want to enjoy them ought to pay the price. Insolvency per se does not constitute adequate grounds for public support. Government funds are supplied involuntarily by many individual members of the public. Every one early in life should get opportunities of acquiring higher tastes in the enjoyment of the arts and the government should provide these. It is felt that if children and adolescents are exposed to artistic performance early they stand a better chance of enjoying them later.

The third ground which can be used to justify government expenditure involves the class of commodities called public goods. Public goods are items which, when provided to one person, automatically becomes available to other people. The provision of public goods cannot be entrusted to market forces alone. Market forces cannot successfully regulate the supply of public goods. These goods do not have saleability. While public goods fail the market test it does not follow that such items are unwanted by the general public. Even though consumers cannot be made to pay, they may regard them as well worth the cost. Government financing may be the only way in which the wishes of the consumers can be satisfied. If the performing arts are mixed commodity they are eligible for government support since they confer benefit on the entire community. There are several types of general benefits. One is the prestige conferred on the nation by its performing arts another is that cultural activity boosts business activity in the vicinity. Future generations obtain acquired tastes in the cultural arts. Provision for the future involves expenditure in the present. If we agree that the performing arts confer benefits on the community they have to be treated as public goods and as such deserve to be eligible for government support.

Baumol (1976) analyses the economics of performing arts .In early writings Baumol and Bowen have predicted that live performing arts would experience rising costs that would outstrip the rate of inflation in the economy. The costs of such activities would rise cumulatively. The rise in funding by the public sector on arts over the years proved their point .Funds could be raised also from private donors and non-profit organisations. But these ran in to difficulties when business conditions were bad. Combinations of inflation and recession have been bad for performing arts. Live performances are vulnerable to economic events beyond their control.

With the advent of electronic mass media there has occurred great technological advance and increase in productivity as the change from live to televised orchestra with an increase in audience from 3000 to 30 million with no change in man power. But this reduced severely the scope for further productivity gains. In order to determine whether costs of the performing arts have indeed been rising in recent years, Baumol has assembled the most recent data available that is data regarding cost per performance for 11 of the best known orchestras in the US. From Ford foundation he found that total expenditures per orchestra have been increasing even faster than cost per performance. The data has shown that the rise in price has been nowhere near that of cost per performance. This study confirms what Baumol and Bowen have put forward in their 1966 study on the same issue.

Blaug (1976) introduces a series of articles on the economics of the arts and the phenomenon known as Baumol's cost disease. There are many articles dealing with the rationale of public subsidies to the arts. There are three striking facts about arts; one is that the arts are everywhere subsidized; two is that the level of subsides varies enormously between countries and between different types of artistic activities within countries and three is that the ratio of private charity to public subsidy likewise varies enormously from country to country

Blaug discusses Moore's full length article 'The economics of American theatre'. Moore states seven reasons for subsidization; 1.the divergence between social and private benefits that is externalities 2. national prestige 3. attraction of business and tourism 4. equity considerations 5. price discrimination as a method of maximising revenue, 6. the infant industry argument and 7. the need to stimulate artistic innovation. Another selection is from Baumol and Bowen's book Performing Arts. The economic dilemma they discuss the arguments for public intervention. They single out three arguments 1. the issue of income distribution. 2. the education of minors assuming that a taste for the arts is instilled by early experience and three the fact that the arts partake of some of the characteristics of public goods. Baumol and Bowen argue that the performing arts are mixed goods and they consider intergenerational benefits of maintaining a vital tradition of live performances.

Peacock's paper introduces the concept of Baumol's cost disease. Baumol's cost disease refers to the inevitable increases in costs of production occurring in certain labour intensive industries in which technical progress is incapable of raising the productivity of labour for the simple reason that in these industries labour is both an input and an output. In the rest of the economy, wages are continually rising and these wage increases are not necessarily inflationary because they are accompanied by equally continuous increases in the productivity of labour. These no inflationary wage increases spill over into such fields as arts in the form of rising prices for materials and ancillary services, as well as rising salaries for artists. But these latter salary increases are wholly cost inflationary because they are not offset by productivity gains within the arts. The net result of these forces is either price inflation in the arts, or if prices are held down by custom and tradition, cost inflationary or a growing gap between receipts and expenditures in arts organizations.

Baumol and Bowen (1976) in their article predicted that live performing arts would experience rising costs that would outstrip the rate of inflation in the economy. The costs of such activities would rise cumulatively. The rise in funding by the public sector on arts over the years proved their point. Funds could be raised also from private donors and nonprofit organizations. But these ran into difficulties when business concerns were bad. Combinations of recession and inflation have been bad for performing organizations. The authors argue that the performing arts are a case of mixed commodities and they strengthen the argument by considering the inter-generational benefits of maintaining a vital tradition of live performance. This entails an accumulated heritage of knowledge and skills. One of the counter arguments raised is that future generations will be able to satisfy their needs for performing arts if we utilise our resources and devote them to productive investments rather than to unproductive luxuries such as the arts. But, the question arises whether a lack of public support would sap the tradition of liver performances beyond the capacity of any future generation to revive it.

Bruner (1990) points out that, despite being a strong promotional tool, music is not well understood or controlled by marketers. The purpose of the article is to examine the behavioural effects of music with special emphasis on music's emotional expressionism, and role as a mood influencer. Little music related research has been performed in marketing. The present discussion first reviews the few studies on non-behavioural outcomes of music in marketing context, then reviews studies examining behavioural issues like sale volume, product selection etc.

Several researchers over the years have studied tempo and arrived at the same general conclusion: other things being equal, fast music is considered more happy and pleasant. They found that slow tempo evoked tranquil, sentimental moods. But, the relationship is not a simple mono tonic one. The rhythm aspect of the time component has also been studied. Smooth flowing rhythms were considered happier. The optimal complexity model, as it pertains to music has found considerable support. This model suggests that a liking for a range of music compositions would take an inverted y shape. But the article does not make clear how marketing can be influenced by the mood created by music.

Throsby (1994) discusses that if creative work in the arts and culture results in the generation of both economic and cultural value it would appear that economic as well as cultural influences will affect the way creative ideas are formed. In studying the connection, the author primarily takes the examples of poets, painters, actors, composers etc. The author develops a model of creative process and does not distinguish between individuals or groups in the process of creativity. After posing the question whether all creative art is a sublimation of irrationality, he reviews the traditional and postmodern theories of creativity-traditional view that it stems from genius and the postmodern view that artistic creation and its valuation occur in a social and political context. Though the genius idea is there, subjectivity and relativity cannot be ignored. Creativity can be envisaged as a process of constrained optimization, where the artist is seen as a rational maximiser of individual utility subject to both internally and externally imposed constraints. A pure creativity model is first posed and then extended to incorporate economic variables.

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If the artistic or cultural worth of the work when completed can be defined as its cultural value, the artistes' aim can be seen as maximizing this cultural value. In an economic model this is not the objective function, but just one of the decision variables. This represents the artist's utility function i.e., the utility of the artist is seen as a function of the cultural value of the work. But the artistic work is not created in a vacuum. The artist has to earn money to live on. The author specifies income from artistic work as an explicit variable in the model.

Towse R (1997) analyses cultural economics as the application of economics to the production, consumption, and distribution of all cultural goods and services. What all cultural goods have in common is that they contain a creative or artistic element. Cultural goods are tangible objects such as an art work or a book; others are intangible services, like a musical performance or a visit to a museum. Besides this, like all other goods and services cultural goods utilize economic resources and therefore entails opportunity costs.

An important question in cultural economics has been whether the allocation of resources via the price mechanism can produce the socially desirable output of cultural goods and services. The general consensus is that it cannot, for a variety of reasons. One reason is that they have qualities of public goods. Depending on the extent of external benefits the greater the degree of 'publicness', the more likely it is that the state will intervene in the market. There have been changes in cultural policy, in many countries. Culture policy once concerned with high culture arts and heritage has broadened out to include crafts, community arts, minority arts etc. Cultural policy can be direct like government ownership and control or indirect like subsidization and tax relief. Even in countries that spend relatively large amounts on public provision or subsidy of culture, the cultural budget is a small portion of government spending, often less than one percent of the government budget.

In addition to analysing the broad aspects of cultural production and cultural policy, the author examines the approaches taken by culture economists. They are microeconomic price theory, welfare economics, macroeconomic growth theory, property rights economics, institutional economics, public choice and political economy. Like all branches of applied economics, cultural economics too feeds on and are nourished by the body of analysis we call economics. Blaug offers two methodological criteria of progress; analytical and empirical progress. Cultural economics has made little analytical progress since the publication of Baumol and Bowen's 1966 seminal work; but it has made empirical progress. Towse points out that it is likely that as and when it broadens analysis to include problems generated by the information revolution it will make analytical progress.

Heilbrun and Gray (2001) examine the economics of arts and culture. The economic dilemma Baumol and Bowen referred to was the problem of financing the performing arts in the face of perpetually rising unit costs. These they argued are the result of productivity lag. The resulting cost pressure has come to be known as Baumol's cost disease. Productivity is defined by economists as physical output per work hour. Increases in productivity over time may occur due to several reasons like improved technology, increased labour skills etc. Increases in technology are in industries that use a lot of machinery or by investing in new equipment that embodies improved technology. As a result in the typical manufacturing industry, the amount of labour time needed to produce a physical unit of output declines dramatically decade after decade. The live performing arts are at the other end of the spectrum. Machinery and equipment play only a small role in their production. Costs in the live performing arts will rise relatively to costs in the economy as a whole because wage increases in the arts have to keep up with those in the general economy even though productivity improvements in the arts lag behind. Industries including the arts compete to hire labour in a nationally integrated labour marker and therefore artists should be paid higher. Their remuneration overtime should therefore rise. The live performing arts cannot much benefit from technology revolution. They cannot hope to match the remarkable rise in productivity enjoyed by the economy as a whole.

Data from Ford Foundation study showed that from the mid-sixties to mid-seventies while the expenditure of performing art firms would rise between five and seven percent per year the income earned would rise by 3.5to 5.5 yearly. A study by Samuel Schwarz and Mary Peters indicated that in the 70s the relative size of the earning gap fell substantially. More recent data indicate that the gap continued to decline into the early 90s. On the whole, dire predictions that productivity lag would lead to rising earnings gap proved to be incorrect. In this instance, expenses of performing arts companies did rise as predicted, but earned income rose at an equal or higher rate, so the relative size of the earnings gap began to decline. Apparently the ticket prices rose much faster than the general rise in prices without causing a drop in attendance. This may be the result of rising per capita income caused by technology improvement.

Besharov (2003) contends that Baumol and Bowens work on the economics of the arts in the1960's laid the foundation for a new field and provided arguments for public support. The paper discusses influences on their work, the nature of their analysis, and their impact on the development of the field. Actually, Baumol and Bowen did not perform a welfare analysis. They relied on Scitovsky's cost disease model to show that the quantity of the performing arts would decline over time in the absence of subventions, but without considering that the income effects of productivity growth might increase demand for the arts. Nor did they establish why the quantity of the arts should not be allowed to decline, relying instead on an exceptional ism never made explicit.

The Besharov paper was prepared for the Luce conference "The case for the public support of the arts." The author concludes that it is difficult to characterise the full nature of Baumol and Bowen's analysis of the performing arts. They discussed the income gap as evidence of the need for support, yet at the same time wrote that the needs of the non-profit performing arts groups are unbounded. They distanced themselves from their own arguments for public support, but strongly favoured government involvement. They recognised economic arguments for the arts and argued that the cost disease would result in lower levels of artistic performance. They did not address the resulting welfare consequences. The influence of Baumol and Bowens work is immense. While it did not centre round a welfare analysis it could still have been the foundation of a literature that did. Still, a significant literature has not emerged on the welfare effects of government support of the arts. In the absence of such literature, there cannot be a case for the arts that accords with current standards in economics. The author concludes that Baumol and Bowens work neither developed an argument for arts exceptional ism nor served as the basis for such an analysis that did.

Frey (2003) in his work, Arts and economics focuses on the relationship between the arts and the economy. Part one of the book presents a survey of arts and economics and introduces the particular characteristics of the economic approach to culture. Part two deals with various aspects of museums and special exhibitions and art festivals. Part three discusses how the arts can be supported by public, whether arts may be left to democratic decisions and what the role of government support in artistic creativity is. The last part of the book is an enquiry on whether art is a lucrative investment and how the value of cultural goods can be evaluated.

Vogel (2004) analyses the economics of entertainment industry. Art is said to be an acquired or cultivated taste in the sense that one has to be familiar with art to find pleasure in it. Taste is an important variable determining consumer demand; if the public's taste for art increases the demand curve for art shifts to the right along the supply curve. But if taste depends on exposure there is the danger of being trapped in a suboptimal position. Consumers would greatly enjoy art if they were familiar with it: however, familiarity comes only with exposure, and the public will not expose themselves to it since they have not the taste. This vicious circle can be broken only by subsidizing art.

The mass media caters to the taste of the majority, in this case for popular culture such as rock. Exposure through the media reinforces that taste: audience surveys then inform commercial producers that popular culture is what the audience wants and profit motive insures that they will continue giving it to them. Actually there is a spectrum of tastes in art and entertainment reflecting a multitude of influences, among which exposure through the mass media is only one. But there is little doubt that the mass media do influence the outcome by catering to the majority or popular taste. Radio stations are numerous and competitive .Rarely do they offer anything but popular music. The principal sources of broadcasts of classical or serious music are the publicly operated stations affiliated with a public radio network. Thus for most part the listening public is offered popular music becomes familiar with it and wants to hear more. And a very large industry has grown up devoted to producing more.

The cultural impact of television is more powerful. So little of "high" culture is shown today on commercial television that it does not turn up in statistical studies. In prime time Programme comparison this is much higher in the case of public television. The argument is that if more time is devoted to high arts they could also stimulate the taste for those forms. As cable TV connections increased media analysts began to take note, the possibility of catering to the tastes of the minority seemed more feasible. However the experience of the 4 cable TV channels showed that losses were made and advertising revenue was far lower than expected. The cost of producing authentic culture products were high and demand for each variety not assured. Not only did public television offer a good deal of culture, it had high reputation The very great cost of high quality original programming dimmed the prospect of narrowcasting as a possible solution to the problem of developing goods taste.

Einarsson (2016) in his book cultural economics focuses on cultural good and services from an economic stand point, that is, their creation and production. It deals with various factors that are common to the economics of culture and other factors that are unique to culture. Special attention is given to the role of government in supporting arts. It also deals with trade in cultural goods. The book discusses financial management in cultural industries and explain funding needs, financing and investment. Interspersed throughout the book are biographies of individuals who have been influential in culture and cultural economics.

#### **1.2.2 Economics of Music industry**

Review of articles relating to the economics of music industry is included in this section. Major works relating to music business are included and arranged chronologically.

Isherwood (1998) looks at the music industry and its key elements. The starting point is the legal framework with reference to the rights of the recording artists, record companies, composers and music publishers. This is dealt with in Chapter 2. Chapter 3 looks at the contractual framework. Chapter 4 shows how the rights are administered and the various industry agreements. Chapter 5 looks at music and the media. In appendix 1, the author gives a profile of the music industry. The treatment is explanatory and narrative rather than critical.

The author considers the impact of technological progress relating to compression of digital music files and electronic distribution by internet, cable or satellite. This technology has the potential to reduce record company's minimum efficient scale and hence market concentration on online marketing can be direct and through the use of consumer profiles. This can be targeted more effectively than off line methods. In sum, in the online environment, minimum efficient scale is low. This will also lead to deconcentration in the record industry. The reduction in online record company minimum efficient scale is likely to cause a greater incidence of creative artists vertically integrating and starting up their own record companies. However, whether de-concentration occurs depends on how far record companies integrate with online retailers. Record companies are already vertically integrating with online retailers. This seems a shame since online market offered potential for welfare gains by reducing entry barriers to record companies and also increase the number of music titles released.

Monson (1999) contributes to discussions in ethnomusicology, concerned with global circulation of the musical practices of European music in the context of colonization, westernization and missionary activities and the African diaspora music in the context of slavery and the middle passage. Mission choirs, military band and western style music educators of the colonised world, contributed to extra ordinary spread of a variety of practices associated with western art music by the mid-20th century. The article reviews the underlying, societal imperatives, reflected in a policy of intangible cultural heritage and the intellectual property like regimes being developed to protect these interests. Global public policy will be far better served through emphasis on localism's attributes of developing human capital to improve the quality of content being produced and encouraging local communities to focus on the content of their own choosing.

Tucker C and Strobl Eric (2000) conducted an empirical study investigating the dynamics of chart success in the UK pre-recorded music industry over the period 1980-1993 using album chart listing. The article brings out why chart success acts as publicity which can affect sales of current and future work.

The first part of the article discusses the evolution and nature of the pre-recorded popular music industry. The dependence of the music industry to chart success is discussed. In the next section, the data source used in the study is discussed. An analysis of the dynamics of the UK popular music charts is made using the chart listing compiled for new musical express which is a weekly music magazine. The album chart is compiled by chart information network solely based on sales figures. An analysis of the distribution of chart listings in order to determine the incidence of chart

success amongst the listed artists and albums using this data is made. An econometric investigation is made considering the importance of album type, listing reoccurrence, seasonal demand and initial demand as potential factors in influencing the chart life cycle of albums. The findings of the study show that the incidence of chart success is substantially skewed to the right. The results of the study indicate that the type of album seasonal demands and initial popularity play an important role in ensuring continued chart listing of album.

Weber (2001) in developing his theory of the rationalization process, analysed the standardisation and growth of western music in Europe as one of his illustrative examples. The methodological, theoretical and historical research tools Weber employed are significant to contemporary historical and comparative researchers. The flows and contributions of his paper is being examined in this article by the author.

Weber's theory rested on a unique vision of the west and the assumption that deep rooted structures unknown to the human actors were shaping historical events. Weber applied a methodology of researching music notation in the Roman Catholic Church to uncover the evidence of rationalization. The data he found proved his theory that it was indeed the church monks who standardise notation to teach and passion liturgical music. In this paper, a review of contemporary literature concerning Weber's theory is followed by an examination of Weber's theory of music development. A counter system critique of Weber's thesis is used to examine music production and standardisation in India.

Weber's two main interests, the rationalization process in the western capitalist development and his love of music came together in his study of the sociology of music. According to Turley, Weber remains an outstanding starting point for music researchers and by broadening Weber's methodology; it is possible to continue the important work of the sociology of music. On one level, music was an artefact of the historical rationalisation process that brought on the development of capitalism in the west. On another
level, music was a deeply meaningful part of a society's culture. It is obvious that Weber's passion for music led him to write about the sociology of music and incorporate it into his grand theory of rationalisation. Rationalisation is the universal historical process that is central to Weber's work. He was intrigued at the possibility of detecting this process at work in the irrational arena of culture. This was the template he used to investigate the rise of western music.

Burke A (2004) presents a perspective of the economics of music business. The focus is on record industry. The sector is highly dynamic with high levels of product differentiation, exit and entry among artists, and high levels of technological innovation in audio software and hardware. In the industry, there are creative imaginative musicians, risk taking music publishers, and record companies who are alert to new market trends.

However the industry has static aspects as well. With features such as highly concentrated markets and low levels of change in firms' market share. There is highly skewed income distribution among artists and threats from trade in counterfeit products. The analysis requires a welding of traditional industrial economics with more recent literature on the dynamics of industrial organisation. Industry concentration is a persistent feature of these markets, where the creative artist, record company and the retail market are highly concentrated. The creative artist segment is the most dynamic with high levels of entry and exit. The static segment could be explained by the presence of economies of scale and the minimum efficiency scale which is quite high in this sector. There are economies in distribution, in marketing, in finance costs etc. The reputation of the record company is another factor of stability. There is high market concentration coupled with low market turbulence. The dominant core is accompanied by a turbulent competitive fringe of firms which operate above minimum efficiency scale.

The greater the competition between record companies in order to sign a creative artist, the greater the payoff to the artist. The majors' dominance is not complete since established artists can insist and get higher payoffs. There also exists the danger of cannibalization when a major signs an artist who has a substitute already in the roster.

A perpetual feature of the record industry is that a small minority of creative artists dominate most of the market at any one time. Thus even if the highly competitive online environment materializes the market power embedded in artists may be sufficient to cause monopolistic practices.

Levin & Rhee (2004) relates consumer ethics and attitudes to the recent controversy over file sharing websites such as Napster, Morpheus, and Kazaa. Data were collected from college students to determine their ethical attitudes towards downloading music without paying as well as their attitudes toward record companies and recording artists. Twenty one students participated in a qualitative study, and 210 participated in a follow up quantitative study. Results the authors point out, suggests that downloading reflects more than just access to high speed technology. The findings suggest that respondents who download music from the Internet differ from those who do not download in that downloaders have lesser ethical concern, indicating a greater willingness to endorse ethically questionable acts and that downloaders are more likely to believe that downloading files does not harm the company or the artists. The authors conclude that though the prevailing feeling about downloading music for free may be that it is common practice, the extent to which this is done depends on ones ethics and ones rationalizations, as well as access to technology for downloading.

Stokes (2004) points out that the term 'world music' came to be used from 1987 onwards. It incorporates the work of rock musicians like Robert Fripp, and David Byrne who used non-western sounds through multilateral tracking. A complex dis course emerged, intended to enthuse compact disc buyers and now exist in the peripheries of academia. The fetishisation of local flavour is most intense in the cultural work taking shape in studios. For many anthropologists and sociologists, global cities are new sites of multicultural energy and creativity significantly freed from the dictates of nation states. Music, understood in the context of global city, as in studies based on New York, testify for the processes by which Diasporas and migrant populations from nearly everywhere interact in neighbourhood festivities and religious practices in local media and multicultural institutions. In this paper, the author analyses how and why particular music format, styles processes, sounds, rhythms, metrical practices traverse national cultural boundaries.

Wikstorm Patrik (2005) traces the development of international music industry. The global music industry has declined by \$6.2 billion in value terms- a fall of 16.3% in dollar terms. IFPI the trade organisation representing the international recording industry identifies three factors as the main causes for the downturn. 1) digital piracy 2) competition from other entertainment sectors and 3) the general economic uncertainty.

The objective of the article is to explore other possible causes that led to the current situation. The major question raised by the article is whether the policies and strategies designed by the major record companies might have contributed to the current difficulties. A model is presented which indicates that business strategies which were designed to cope with the challenging business environment have reduced product diversity, damaged profitability and in short might have contributed to the downturn. The model indicates that although there are exogenous explanations to the current dynamics endogenous causes might also have contributed to the situation. The study focuses on popular music industry and top forty music industries are chosen from the Swedish music market. The author claims that the interviews are not focused on Swedish music industry but on international music industry and the findings of the article are relevant to international music market.

Krueger A and Connolly M (2006) consider the issues and trends in 'Rockonomics': the economics of popular music. The analysis focuses on concert revenues the main source of performers' income. Issues considered include price measurement, concert price acceleration in the 1990s, the increased concentration of revenue among performers, reasons for the secondary ticket market, and methods for ranking performers, copyright protection, and technological change.

The article analyses the economics of popular music industry which the authors call 'Rockonomics'. They identify popular music as an important cultural industry and points out that it provides a testing ground for some important economic theories. Also the industry is affected by rapid technological changes. The article describes the organization of the music industry devoting particular attention to live performances. The next section describes theoretical issues in the pricing of concerts. Major developments in the music industry with particular emphasis on prices, ticket sales, revenue are also discussed. The role of scalpers, method for ranking performers based on economic data, etc. is studied. The role of radio and royalties and the related issues involved in file sharing is analysed. The article concludes by highlighting important questions for further research.

Mixon (2006) examines price dispersions in the music recording industry between new release and older recordings. The model suggests that new release prices are lower than midlevel recordings. This result follows from differing buyer characteristics and varying levels of close substitutes, leading to higher demand elasticities for new release recordings. In the past, the industry has been characterised by new production technologies, which have led to 1. Waves of entry in to the industry by new firms and 2. Lower production costs. The present study offers a theoretical and empirical explanation of retail price dispersions between new releases and midline recordings.

The author hypothesizes that the typical customer of older CDs is more likely to be a devoted fan of the artist and will purchase replacements. Additionally, the scope for consumption at low cost of new recordings has grown in recent years. There are also numerous outlets for live performances. Thus the number and availability of substitutes for old CDs is less than for new. On the basis of these arguments the author asserts that the demand curve for older material will 1.lie to the left of that of new material but 2.be significantly less elastic than that of new material. The elasticity difference – for new and midline release - is the dominant feature and is useful in explaining retail price dispersions between these e type of releases and across all types of music. The author suggests that if his expectation concerning price elasticities is accurate, the price of new CDs will be lower than the price of older CDs. The model employs the framework developed within the industrial economics literature and provides empirical results suggesting that new release prices are lower than those of midlevel recordings. The author surmises that many factors play into the pricing of compact discs. The present paper has focused on one of them-time-and has demonstrated that the relative age of music recordings is negatively related to the price elasticity of demand. Thus older compact discs typically exhibit less elastic demand curves than their newer counterparts. This is because of differing buyer characteristics and varying levels of close substitutes. The resulting expectation, which the author has confirmed empirically, is that higher prices will be Associated with older CDs.

Williamson and Cloonan (2007) puts forward the notion that a single music industry is an inappropriate model for analysing the economics and politics surrounding music. Instead it is necessary to use the term music industries. The term music industry suggests a homogenous industry whereas the reality is that of disparate industries. Also the term is frequently used synonymously with the recording industry.

When referring to processes surrounding music production the record industry uses the term music industry. Recent years have witnessed the political economy of music industry being examined and unpicked and recognition given to the reality of a series of interrelated industries. The land mark report 1995 by British invisibles on the 'overseas earnings of music industry identified five areas of earnings -recording; publishing; performing; musical instruments; and musical theatre and miscellaneous. In 2002, The National Music Council reported the industry as having made up of seven sectors-composers and publishers; instrument and audio makers and sellers; promotion; management and agency related activities; live performance; recording; retail and distribution; and education and training; Within the various reports there is a consensus on the importance of recording, live music, publishing, and artists and composers as distinct sectors. The general starting point in academic literature on music is with the work of The Frankfort School and in particular Theodor Adorn. However most academic studies continued to privilege the recording industry as the music industry. To argue that there are music industries rather than an industry represents considerable shift in thinking. The authors give many reasons for this.

It is an anachronism to continue to use record industry synonymously with music industry when the value of recorded music industry is in decline and other industries such as live music and music publishing are increasing in value. The recorded music industry still represents 70 percent of music industry, though this percentage is declining. And is likely to further decline as a result of the growth of live music industry. In addition there are other growth sectors like DVD and video. The existing notions of music industry ignore the inequalities within the industry resulting from the diversity within it. Big multinationals benefit but small companies are side lined. The abuse of the term music industry in effect eliminates these small operators from the debate. Related to the issue of inequality is the problem that the term disguises conflicts within the industries. It assumes the common interest of musicians and label, of promoter and venue and of organisations which are in daily conflict with each other. The use and misuse of the term music industry is of increasing significance in an era of government help. To make policy decisions on the assumption of homogeneity within the industry is incorrect and unjust.

The authors come to the conclusion that the issue of defining the music industries is important academically and policy wise. The aim is to recognize the significant contemporary organizational changes within the music industries and to redress the balance away from the concentration on the recording industry. The point is to m move away from the simplistic notions of a homogenous music industry to realisation of complexity within the industry. The authors advocate the need to talk about the music industries in the plural and to recognize the diversity of interests and scale of activities in the different areas of music production

Brusseau Eric (2008) gives an in depth analysis of the flow of revenue within the music industry and of the emerging practices. This article is based on a case study of the French music industry. The study aimed at making clearer the structure of revenues of the different stakeholders of the industry. The study points out that the only category in which sources of revenue are really threatened are the record companies.

The author claims that the record companies used to play a role that was useful for the dynamic growth and quality of music production and analyses whether it can be maintained in the current set up. Two strategies corresponding to different segments of the markets are highlighted in this paper. One targets the relationship between mass market and recording companies. This dependence is recognized by online distributors. The second strategy targets on the building of communities of customers sharing common tastes and values on the development of their loyalty. The article is divided into three sections. The first section high lights the structure of revenues of the various participants in the music industry. The second section analyses the way the digitalisation of music is actually changing the logic of the industry. The third section explains the future of the record companies.

Field (2010) is a career expert, motivational speaker and stress management specialist. The author takes the stand that music business is just business with a special set of problems and opportunities She gives a detailed description of job opportunities, education and training, promotion ladder, special skills required etc. She discusses job opportunities in recording and recording business, radio and television, in the music retailing and wholesaling sectors, instrument repair, restoration and design. One step removed from the music business proper are job opportunities in the media, publicity and advertising, support services for the recording artists. The book is not an academic exercise but rather in the nature of a best seller and offers suggestions regarding how to go about getting a job in the music industry.

## 1.2.3 Technological changes in Music industry

Technological changes have brought about structural changes in the market. The studies reviewed here show how the impact of technology has influenced the dynamics of music market.

Kleve & Kolef (1999) discussed that, the technological revolution has provided the music industry with ways to run its business more efficiently by distributing music over the Internet. But this technology is also proving a threat to the music industry, as music is infinitely copied among users. Copy protection systems will not provide a lasting solution because the protection scheme will eventually be bypassed. Copyright legislation can only try to keep up by differentiating between commercial and personal non-commercial use of music.

New technology is unstoppable. The Internet and other computer related developments are at the heart of the Information Age economy, and the music industry has to face that fact. The future will allow the music industry to reduce its distribution costs but will also force the industry to find new ways of making money. Copy protection schemes should not be part of that future. Apart from the fact that these systems will need enormous investments, they cannot prevent copying in the long run. Therefore, music must be freed from copyright claims for personal, non-commercial use. The future role of music business will be more about offering a service. Such a service could consist of personal selections made for consumers, and offering various services to music professionals such as artists, concert organisers and TV stations. Copyright will not disappear, at least in the commercial sphere because it is still a very good way to secure income for artists and the industry around them. All the same some organisations are looking for new laws and protection systems. In spite of the enormous amount of legislative work and writing that has been done recently, there have not been any real changes. The right to use copyrighted material after it has been bought is self-evident and the only legal Change that must be made is a division between commercial and personal non-commercial use of music.

Kapur (2001) points out that, e-commerce seems to have created a more competitive environment especially for homogeneous goods, such as books and CDs. Entry of new online firms and the ease with which buyers can search for low prices makes for extremely competitive environment. Lower set up costs of firms and the dramatic reduction in consumers search costs eliminates frictions in the markets and leads to greater competition. But long run outcomes may not be so competitive. While cost of setting up a new website is low, online markets require substantial investment in technological and organizational infrastructure. To establish and preserve a brand name on the internet requires substantial expenditure on advertisement. Customer bases could be preserved only by sustained advertisement expenditure.

Books and CDs are homogeneous goods and hence uncertainty about the quality of the product is minimal. Not surprisingly they were among the first products to migrate to online markets. The new intermediaries have a cost advantage over their brick and mortar rivals. Though their current market share is very low –books 5%, it may grow substantially in future. Branded consumer durables, computer hardware and memory modules, airline tickets, and simple financial products such as insurance and mortgages come in this category. The second category of goods that the authors consider, is information goods, such as downloadable software, online newspapers, information and entertainment services. Given that these products can be digitalized and transmitted at low cost over the net, these will increasingly be distributed through online channels. Where it is difficult to make users pay for these services producers will try to generate income indirectly, through advertising.

Information goods have high fixed costs-first copy, first print-and zero or near zero marginal costs. A firm that fixes price at marginal costs will not be able to recover its fixed costs. If information goods are in digital form, they can be copied and distributed with relative ease, example Napster.

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Access cannot be confined to those who pay. There is the problem of nonexcludability and free riding. Devising better methods of controlling piracy and legislation that protects copyrights will have to be depended. Information goods come in bundles-with added services-and are amenable to some degree of product differentiation. Online sellers come to acquire some market power. To that extent they are able to practice price discrimination. They charge old customers a high price since they are locked in. Although they deny this, it has been found that Amazon.com has been practicing this strategy. Versioning is a method of price discrimination which has been successfully practiced. Student versions of software with many qualities disabled enables the seller to sell products with many attributes to others at high prices. Degrading certain versions has come to be an accepted practice. Selling multiple versions increase revenue. The same is the case with first editions of books which are anxiously awaited by the public. Online auctions are another strategy which traders are experimenting with.

These emerging trends have welfare implications. The internet has made markets more efficient. Coordination of supply chains make for minimum inventory. Electronic distribution of information goods is an improvement over their distribution through physical media. The welfare consequences of different pricing strategies on the internet are not transparent. We know that price discrimination and the use of auctions increase welfare for some consumers but more thorough studies have to be done to analyse their full implications.

Rabinovich and Carter (2003) analyses that, the emergence of the internet has fundamentally altered the mechanisms underlying information exchanges between sellers and end consumers. The authors feel that little attention has been given to the impact these mechanisms have on the efficiency of supply chain operations. Their paper addresses this deficiency and develops a theoretical framework to empirically test this and come to the conclusion that transaction costs are considerably reduced by internet operation systems. Empirical testing, via structural equation modelling, is

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based on archival data in the internet music CD market. The results show that Internet mediated purchases by consumers allow for greater transactions efficiencies when inventory ownership is postponed farther upstream in the supply chain.

The internet may reduce transaction costs by increasing coordination among supply chain members. Internet mediated transactions with consumers allow product ownership to be postponed farther upstream in the supply chain until consumer demand for products materializes. Low search costs in internet purchasing minimize demand side search and location liabilities. More effective transaction monitoring mechanisms may allow sellers to economically spot product demand postpone inventory ownership decisions and exchange inventory with downstream supply chain buyers. As intermediaries, internet retailing sites allow for the aggregation of multiple heterogeneous consumer orders. By focusing on the music CD retailing industry on the internet, the paper extends prior research. It empirically examines transaction efficiency originating from consumers 'internet based purchases in a supply chain setting.

The results of this paper imply that the implementation of the internet as a mediating technology in transactions with consumers provides the decision makers in retailing organizations with important avenues for realizing higher transactions efficiencies across their supply chains. Thus through transaction efficient attributes associated with internet mediated exchanges with consumers, decision makers can achieve higher supply chain transactions efficiencies. This is most pronounced in the upstream end of the supply chain. Intense price competition in internet mediated transactions along with high levels of product standardization and homogeneity prevalent in the cd industry, underscores the importance of developing competitive advantages pertaining to the adoption of the internet.

Liebowitz S. J. (2003) critically examines the impact of technological developments in the music industry in his article 'will MP3 downloads annihilate the record industry – the evidence so far'. The study is based on

empirical analysis of data. The analysis consists of examining the sales of albums and trying to determine the factors responsible for changes in sales. Emphasis is given on the sales during the period when MP3 downloads started to see whether there is any variation in sales. Economic factors influencing record sales are examined. This paper investigates the impact of peer to peer networks that promote the unauthorised downloading of MP3 file exert on the recording industry. Using data on the historical sales of prerecorded music the article examines in detail the recent decline in record sales and an attempt has been made to gauge the importance of various factors that have been put forward to explain this decline. The author concludes that evidence is consistent with a claim that MP3 downloads decrease sales.

Asvanund, Clay, Krishnan, Smith and Heinz (2003) discusses that, peer to peer networks, although an important medium for the distribution of information goods has not attracted much academic research regarding the optimal design of these networks under real world situations. The research under review represents an initial effort to analyse the impact of positive and negative network externalities on the optimal size of these P2P networks. The analysis uses a unique data set collected from the six most popular Open Nap Peer to Peer networks between Dec 19, 2000 and April 22, 2001.

The authors find that users contribute value to the networks in terms of additional content and additional replicas of content at a diminishing rate, while they impose costs on the network in terms of congestion on shared resources at an increasing rate. Together, these results suggest that the optimal size of peer to peer networks is bounded -at some point the costs a marginal user imposes on the network will exceed the value they provide.

In this paper in part I authors study one component of P2P network operation: the interplay between positive and negative network externalities in a real world environment. The study seeks to measure how both positive and negative externalities vary in P2P networks as a function of network size. Section 2 provides background on P2P networks. Section 3 presents a model of positive and negative externalities in P2P networks. Section 4 discusses methodology and data. Section 5 presents empirical results. Section 6 concludes and identifies areas for future results. A policy implication of the study is that P2P networks in their current stage, follow the economic theory of private provision of public goods. Free riding can reduce network externality.

Dolfsma W (2004) carries out an in depth study on the economics of digital content. The article points out that the music industry is going through a period of unprecedented changes influenced by ongoing digitalisation and informatisation. The descriptive nature of technological development makes that the market for entertainment products and other contents undergo fundamental changes. The article begins with an explanation on content industry. Content may be defined looking at the use of communication infrastructures such as internet, on the information exchanged that is not necessary to maintain the infrastructure itself. Content is the product of deliberate efforts of individuals and organization to be creative.

In analysing the transition in content industries the author discusses the transition in the kind of product exchanged and the way in which it is exchanged. Product differentiation and price discrimination is discussed as the two important features of the relationship between retailer and consumer. The market dynamics as well as industry dynamics of information goods differs significantly from that of physical goods. Article points out that market for digital content though it is not a perfect information market will affect developments in the market for physical content.

Smith D Alan and Rupp T W (2004) explored the impacts of P2P networks on the entertainment industries. P2P networks allow potential users to share digital data without forcing them to publish the data on the internet. This paper focuses on how the entertainment industry is affected by the rise of P2P networks.

The authors point out that any solution that will solve the problem the entertainment industry is currently facing will have to address the problem of a decline in ethical and morally .acceptable behaviour in terms of intellectual property rights. It has become the norm to download music off the internet and transfer them onto CD's without compensating the artist who created the music. But the adoption of new technology by firms allows consumers to sample the product and make instant purchases over the internet without allowing them to download freely. This will benefit the entertainment industry by expanding the number of distribution channels P2P networks can thus be used to the advantage of firms' rather than to their disadvantage the paper concludes that internet plays a very important role in entertainment industry .strategically the entertainment industry should find ways to use the power inherent in P2P networks to their mutual benefit and finally understand what information does to a firms competitive advantage.

Janice K. D (2004) evaluates the power relations between corporate elites and online music file sharers on the web. Foucault's work on power is used as a starting point for investigating strategies employed by corporate elites and file sharers to shift the balance of power. The interplay between power and the regulation of new technologies is close knit. The paper discusses the dispute between recording industry association of America 'RIAA' and online music pirates and shows how power relations machinates through the subtleties of discourse imposition. It provides an overview of the 'RIAA's struggle to restrict the use of P2P file sharing system. Foucault's work is used to analyse changes in discourse and practices surrounding the free exchange of music through P2P file sharing systems since 1998 to march 2004. The paper concludes that the significance of the online struggle is embedded not only in their outcomes but also in the processes leading to them.

Breen and Forde (2004) in their discussion points out that the new struggle in music industry is about technology and access to music through computer mediated technology. It is about getting music in downloadable form through internet. Music is now available in the virtual world as peer to peer. Yet popular music is still produced and performed in the same way. Music industry can no longer be assumed to mediate the relationship between the producer and the consumer. In effect the internet offers to remove the middlemen and in so doing changes the nature of the mediation. Disintermediation circumvents the middlemen with a direct access relationship between producer and consumer this is offering dramatic changes in the relationship between record companies and consumers and musicians and their fans. This is a direct even pure communication between the musician and the listener. Such technologically mediated potential offers redundancy to the record industry. Direct access relationship makes marketing campaigns and advertising superfluous to some extent. Internet interaction increases the speed of music delivery. Music production would be governed from the musical and cultural needs and interests of users. The drama of the change is such that consumers who download music have been characterised as enemies of music industry. The mediator who exploited the musicians and consumers was threatened with irrelevancy in the relationship. The result was that the industry threatened those it most needed-consumersteenagers. Research shows that 40 to 60 percent of population in the world is not connected to the internet. It cannot be assumed that every popular music user is connected to the internet. To a large majority of music users music comes with no reference to technology.

Forde (2004) argues that the new and immediate delivery models that have emerged post Napster will make the music industry in its current incarnation redundant. The idea is that music industry as the middleman is removed the artists have a direct relationship with their fans. There is also the implicit assumption that the music industry is either too powerless or too cumbersome to fully control and capitalise on music delivery on line. The author suggests that there are numerous movements and developments within the industry at a legislative, organisational and technological level which need be considered. The scale of the legal actions being taken by the music industry needs to be considered concurrently with the utopian idea that labels are being superseded. Studies suggest that it is not primarily cost considerations that prompt P2P but lack of availability, the example of Apples iTunes and the way it boosted legitimate downloading suggest possibilities. Online is simply a new distribution channel. - it will not make music in a physical format redundant. But it is true that the music industry is forced to change. The music industry is seeking alternative revenue sources beyond the exploitation of physical content. The sales of poly phonic ring tones as well as streamlined audio video content show that the music industry has taken up the challenge.

Tschmuck (2005) in his work Creativity and innovation in the music industry develops the area of research delineated by culture institution studies. The music industry is understood as an institution in which-cultural symbols like music are turned into objects of exchange. The study emphasises the creation of new ideas against the institutional back ground provided by the music industry. Methodologically the study mobilises historical content analysis in the context of music industry development. The study formulates an explanatory model for creativity and innovation in the music industry based on inter active analytical approach. The result is a model of action that fashions creativity and innovations as part of an interactive process that considers social, economic, technological, and legal and other aspects. Hence, insights from economic disciplines (such as innovation theory) contribute as much to the model as those gained from the arts and sciences or sociology. The book offers a study which is one of the first to exemplify an extended application of the research principles of culture institution studies. This study has recourse to the history of music industry to accomplish another goal-the search for an explanation of the emergence of novelty in the music industry. In chapter 10, various theories of innovation and creativity are discussed. In the final chapter, the model is applied to the value added chain that currently exists in the music industry.

The book participates in the area of research delineated by culture institution studies. The music industry is understood as an institution in which, cultural symbols (music), are turned into objects of exchange, thus charging the symbolic entities economically. The interdisciplinary approach prevents economic aspects becoming the sole object of investigation and ensures consideration of these fields cultural practices in their entirety. This study emphasises the creation of novelty in front of the institutional background provided by the music industry.

Peitz M and Wael Brock P (2005) discuss the impact of digitalisation of the music industry. The article is structured to act as an economist's guide to digital music. The study uses market and survey data at the international level. With the diffusion of fast internet connections in home computing, the music industry is facing one of the biggest challenges. Contrary to traditional formats, digital music files that can be found on file sharing networks can be separated from their physical support. At the same time, technology companies are developing technological measures of protection known as digital rights management (DRM) to control the use of music in digital format.

Hinduja S (2006) critically examines the digital music phenomena and its effect on the music industry. The article elucidates the impact of mp3 technology in the music market and gives forth arguments for and against the use of mp3 as against traditional music CD's. Practical and legal issues are discussed, there is the argument that the technology works as a dubious tool allowing individuals to obtain CD quality music without purchasing an audio cd thereby denying proceeds rightfully due to artists and the recording industry. This article tries to explore this complex relationship by applying the concepts of criminology to the phenomena. The article provides a basic explanation of the technology of MP3's and this work describes the critical view held by MP3 supporters who perceive the government and music industry as controlling agents restricting distribution of free music among masses the question raised here is can this control be treated as victimisation of society. These issues are developed and analysed and given a critical interpretation. Sodhi and Lee (2007) discusses that the consumer electronics industry is a huge global one with a small number of highly competitive players .Many of the risks associated with any global supply chain in this industry is described in this article. As illustration, they also describe steps that the Samsung has taken to mitigate these risks. The description of the risks and illustration of mitigation efforts is hoped to point to future areas of research in this field.

In listing different types of risks, risks are characterised in a variety of ways. One way is to take a supply chain view point and associate risks with suppliers i.e. production and distribution within the company, and with demand i.e. customers including end consumers (Johnson 2001). Associated with suppliers are possible disruptions due to political risks and acts of God or acts of man in terms of war and terror. Associated with demand side are risks pertaining to unanticipated changes in demand, possibly stemming from loss of reputation for quality, from loss of technological or design competitive edge, from unpredictable changes in consumer preferences or even a worldwide recession. There are also contextual risks that cut across the supply chain like cultural differences in multinational operations, environmental risk, regulations risk, and exchange risks. The study has great relevance in the music industry which is subject to all these risks. Companies can mitigate risks by building various forms of reserves, including inventory, capacity. The authors point out areas of research both empirical and modelling oriented in this field.

Power D and Hallen Creutz D (2007) in their paper Competitiveness local production systems and global commodity chains in the music industry traces the principal channels and barriers that determines the condition of access for musical products entering the US music market. It is shown that music distribution channels and retail environment exists in a network commodity chain dominated by a limited set of oligopolistic global firms. The authors point out that the aim of the paper is to explore empirical the need for more complex approaches to economic geography and for the need to explore further the relationship between localised production and market dynamics. This is done by focusing on the complex relations of access and gate keeping that structures the US market for recorded music.

In the rest of the paper, the conditions and problems of entry faced by foreign musical products in the US music market are examined. The paper focuses on the sale of physical media (CDs, DVDs cassettes etc.). The authors do not deny that the new possibilities offered by digital revolution have led a severe impact on the music industry. But they point out that music is still sold in physical formats in physical retail spaces. The paper argues that one of the reasons that foreign products have been less successful within the US market has been due to difficulties in accessing US distribution channels. The results reported in the paper come from a series of interviews carried out within the US music industry by the authors during October 2002. In addition to the research conducted in US the paper draws on research undertaken as part of two broader projects in Sweden and Nordic countries.

Kauffman, Lang and Clemons (2007) attempts an approach combining the economics of growth, the economics of intellectual property rights, the theory of design science and the theory of art and culture to create a new theory of open source remix culture. The development of digital technology and developments in software has made changes in culture industry that are amenable to analysis of an interdisciplinary kind. Using multiple perspectives, a new theory is built to suggest how 'rip mix and burn' strategies based on reuse and recombination of content can create significant economic value, stimulate artistic innovation and spur creativity and growth in the culture and entertainment industry.

Transmutability, the technical capability to easily change cultural content products that are encoded as digital data is an inherent property of digital goods. As long as culture goods were delivered in analog form property rights were assured. The shift to digital platform made the culture content more like fluid ideas. Now they are amenable to endless modification, extension and recombination. Artistic creators equipped with powerful IT

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tools can employ various rip mix and burn strategies in the creative process. Transmuters use IT to add something substantially new to an existing digital culture product. Entire modding communities of users creating and exchange game content have grown up on the web around games such as Half-life, Tomb raider etc. Digital culture products are a subset of digital information goods and as such possess some of their characteristics. This include high fixed cost of developing first copy, low cost of reproduction and distribution, indestructibility, non-rivalry, non-excludability and transmutability. Pricing based on marginal analysis would lead to near zero prices and so value based pricing would be necessary.

The authors are building a theory of open source culture and remix as part of the economics of digital culture. Culture content products are essentially knowledge based and knowledge creation is amenable to the economics of growth. Arrows learning by doing model, Romer's endogenous growth theory argue that knowledge based industries achieve increasing returns to scale. Aggregate knowledge accumulation spill over to the public domain. Reuse and recombination of existing knowledge has become the driver for innovation and economic growth. They quote research studies to prove that strong patent protection is not necessary to stimulate innovation.

Intellectual property rights have become central to information economy. On the one hand, copyright protection should enable content creators to appropriate enough value from their works to provide strong incentives. On the other hand, social progress would be best served if culture products are made easily available to society. Creative artists use digital samples not as copies but as raw materials from which they craft and mould something entirely different. Allowing more openness to culture products will spur innovation. To theorise about value creation of digital technology goods it is necessary to use art and culture theory. Art and Music are essentially public goods. Music for centuries has been created distributed and valued in common and the categories of creator and consumer were not exclusive. A new stage of the evolution in culture consumption was ushered in by innovation in recording technology. With first the wax cylinder to vinyl LP to cd formats the recording industry made production models that created economies of scale and made culture products cheaply available. Art and culture theorists have long championed the idea of creative reuse and recombination of existing expressions. In the digital age copyright holders generally pull in one direction to restrict uses and consumers and artists pull in the opposite direction by practicing wider and more flexible uses. Romer warns that allowing the recording companies to control what devices and software to use to play digital music will slow down technological innovation.

Transmutation and remix strategies are already occurring on a large scale and there is little chance that the trend may be reversed. The authors suggest new opportunities that emerge in selling products complementary to the actual digital culture products themselves .Both Apple and Microsoft have already taken steps in this direction. To take advantage of new rip mix and burn possibilities consumers repeatedly upgrade hardware and bandwidth, acquire additional software and buy gadgets that enhance their experience with digital culture. The combined market for these complementary products is far larger and more profitable than the entire culture and entertainment industry.

Grassi (2007) in his work analyses that Internet, mp3 files, peer to peer software and digital technologies for copying have radically modified the music sector. In this paper the author presents a theoretical model that investigates the consequences of the appearance of a pirate low quality good [typically mp3 file] in the music market. In this model he proposes a model of sampling, considers the possibility that the firm modifies its business by entering into the low quality segment. He investigates the supposed conflict between the recording company, whose profit depend on the CDs sold, and the artist, whose profit depends on the live performance (the demand of which can increase because of the positive externality resulting from the illegal download of music).

According to the recording industry, the unprecedented decrease in music sales, which started in the year 2001, following a decade of constant growth in the market size, is due to the diffusion in the use of peer to peer software and mp3 in particular. The author considers the data on the sales of the Italian music market and, the data on the increase in the number of internet users with the penetration of the broadband. An analysis of the sales in the Italian music market from 1998 to 2005 shows a dramatic decrease in the number of musical support sold, from a historical maximum of almost 54 millions of units in 1999, to just 29 million in 2005. Surprisingly the increasing economic theoretical literature that in the last years have analysed the file sharing and piracy problem, has ignored how the strategy and the profit of the firm can change, if the monopolist itself enters the low quality market. The second part of the paper investigates whether the firm can do this and how the profits of the firm would change as a result. Moreover, music market presents an interesting distinction on the supply side between the record company, that produces the music, and the artist who writes it. The author notes that file sharing can undermine the contrast between recording companies and the artists.

The growing diffusion of personal computers and internet in the world can lead to a rise in copyright infringement for any kind of digital good. The main case for this emerging problem is the download of audio file in the mp3 format, by means of file sharing peer to peer networks. Recording companies maintain that their business is destroyed by the peer to peer system while advocates of online file sharing argue that file sharing should be unrestricted. These views represent the two extremes presented in the model. Since a high degree of substitutability exists between a cd and an mp3 file, the outlook for the recording industry is quite worrying. The 'sample effect 'or the positive network externalities caused by illegal downloading is not high enough to compensate for the losses. Finally, the author shows that the file sharing can undermine the contrast between the artists and the recording companies. Patokos T (2008) in his paper 'a new era for the music industry' analyses the impact of new technologies on the three major players in the music industry: consumers, artists, and record companies. The technological developments in the last ten years especially the internet has created a crisis in the music industry. Music piracy has become more serious and widespread. The authors treat music piracy as a form of duplication and/or distribution of music that takes place without the copyright holder's consent. By 2000, music piracy was widespread – most home computers could burn or duplicate compact discs or copy music.

The study points out that the consumers now have the option to download the entire content of the product they are interested in and store it in a digital format. The sound quality is almost identical to that of the original recording. Digital downloads are substitutes for compact discs having the same content. Though recording companies first viewed the internet with enthusiasm because of less advertising expenditure, digital downloads alarmed the recording industry. The phenomena of file sharing have created a panic. Easy piracy would reduce their profits. The study concludes on the note that the companies' strategic moves throughout the year reflect a strong effort to fight piracy since efficient legislation does not exist. Laws regarding patents and copyrights are quite inadequate to the meet the current situation. The article investigates recent developments in legal and technological production of digital music and describes new business models. The authors start the analysis with a review of the traditional business of selling music. The first section describes the players in the industry and present figures related to the production of a CD. The second part presents the causes and consequences of the digital challenge to the music industry. The third section describes the legal and technological measures taken by the record companies to protect their digital content. The paper concludes by describing different ways of selling digital music.

Ferreira & Waldfogel (2010) discusses that, the ongoing technological revolution has made the cultural goods of one country more

readily available to consumers in another, raising concerns that cultural products from large economies - in particular the US- will displace the indigenous cultural products of smaller economies. In this paper, the authors provide stylised facts about global music consumption and trade since 1960, using data from 22 countries representing 98% of global music market. They find that trade volumes are higher between countries that are geographically closer and between those who share a language. Contrary to growing fears of large country dominance, trade shares are roughly proportional to country GDP shares; and relative to GDP the US music share is substantially below the shares of other smaller countries. The authors find a substantial bias towards domestic music which has, increased sharply in the past decade. No evidence could be found that new communications channels, country Specifically MTV channels and Internet penetration, reduce the consumption of domestic music.

Surprisingly, the study also reveals, that the degree of home bias has increased sharply since the late 1990s.Overall, the studies reveal that concern about cultural domination by large economies is misplaced, for music. The US is the largest consumer and exporter of music, but relative to its GDP, the US share of world music trade is the sixth behind Sweden, Canada, Finland, the UK, and the New Zealand. They could not extrapolate the same conclusion, for other cultural goods such as movies and TV program's. The production of music requires only a fraction of the fixed costs demanded in the movie industry and the distribution of movies and TV shows depend on other channels. The authors conclude that additional empirical research is necessary to gauge the potential effect of globalisation on these goods.

David (2010) asserts that this book is about file sharing and the impact of digital media on the music industry. The book examines the circulation of compressed digital computer files over the internet using an array of location and exchange software. In making their music collections available, online file sharers create a community of sharing that takes the affordances of network technology in a radical new direction. Hundreds of millions of networked computer users and a billion files made available at any one time challenge the monopoly power of major record labels. This fundamentally challenges existing business models and enable new and alternative business models to thrive. As such the music industry has been radically reconfigured in the context of the network society.

Essentially, this book has done three things. First it provided a historical overview of issues related to today's file sharing. Second, the book outlines dimensions of this conflict as it currently continues. Third, the book outlines the contradictions and conflicts within the established economic relations. The first dimension is addressed in chapters 2, 3 and 4, with accounts of the rise of network society, file sharing and intellectual property rights. Chapters 5, 6 and 7 detail the character of current conflicts in the fields of law, technology and culture respectively. This book constructs several typologies :where does creativity come from, what are the functions of record labels, what are the alternative futures for the cultural economy of music making, how can theories of the informational society be organized, how can IP been constructed by different actors at different points of time.

According to the author, the purpose of the book is to provide a framework that explains reality; to explore a reality composed of multiple actors and types of actors, operating across a range of fields of practice and developing a range of resources, techniques affordances, claims and interpretations of rules. Such complexity requires reflexive epistemological diversity. This book does not suggest one course of action or another, but very much highlights that the future will be determined by the choices made as to how to take up the challenges and opportunities of the present. Challenges to the established business model of recorded music and royalties brought about by file sharing have created conditions for new business models. Artists can reach audiences without major record labels. The future is not what it used to be. What has been happening in the music industry is paradigmatic for the network society generally. Currently, conflicts in the fields of computing, film, television, pharmaceuticals and agribusiness hinge up on disputes over intellectual property and the increased vulnerability of such property rights that are both virtual in nature and easily replicated across virtual networks.

Grassmuck (2010) in his paper presented at the free culture research conference, 2010 at the Free university, Berlin raises the question, Is P2P file sharing responsible for the slump in recorded music sales or does it create demand. The empirical research literature is inconclusive. Both sides seem equally strong. There are quite a number of different dynamics at work yielding a mixed result with respect to album sales, gains in concert and merchandising revenues and a clearly positive effect on social welfare through improved market chances for non-star music, greater cultural diversity and increased consumers' surplus.

Even the IFPI grants that file sharing functions as a discovery tool for digital music buyers and that file sharers are often also buyers of music. The author find as effects on the negative side: some downloads substitute for the purchase of music; some downloads lead to deferred purchase at a lower price than the price at launch. Neutral effects include: consumers download music that they do not value enough to buy; some downloaders simply do not have the money to buy. On the positive side, likely effects include: some downloads lead to discovery of music of artists from whom consumers subsequently buy; some downloads enhance artist's popularity and thus increase revenues from concerts and related products; cultural diversity is enhanced. While the reviewed studies have been selected for their focus on the interaction between P2P file sharing and record sales, some throw light on the changes in the knowledge environment. Some general trends in digital culture could be identified. With the convergence of the information and communication infrastructures in the universal medium of the networked computer, cloture is entering a new phase. The research overview makes it clear that much of the emerging dynamics in the digital environment is still in the dark. We need a facts based social welfare oriented public policy.

Einhorn (2002) examines the impact of digitalization in music industry. With the advent of digitalization economists are anxious about analysing the role of property rights in providing maximum social welfare since we are dealing with the category of mixed goods. Besides providing immediate accessibility to more content, digital technology presents other important dimensions. Peer to peer file sharing and forming of new community viewers groups directly impact demand for music products. Industry players now move cautiously primarily because copyright rules that were adopted in an analog era of paper, vinyl, tape and celluloid are outmoded in the fast digital jungle of wires, bits, and hard drives. Copyright problems in the here and now digital technology are 3 fold. First, anyone with a PC can indiscriminately distribute unauthorised reproductions of unprotected work. Second, the combined cost of prosecuting each violation is prohibitive. Third, it is possible to enable copying between hard drives by using accommodating software. Economic decision making in a digital world is characterised by great uncertainty. Each option may pose offsetting costs and losses. The best decision must maximise expected gain.

There are three general technologies for delivering content to a computer. First content can be ripped and stored in hard drives. If enabled by file sharing software, Napster for example unprotected files on a donor hard drive can immediately be transferred to others. Transferred files can be burned on to blank CDs or DVDs. As a second technology, listeners may download files from commercial websites that a user may subsequently access at her personal discretion Using local area network, people may eventually beam received content from a personal computer to any compatible player. As a third technology, streaming users may buffer and play in real time instantaneously received bits with no need for permanent storage. Economists generally welcome the opportunity for various technologies and business models to compete, hopeful that outcome will maximise social welfare.

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Traditionally law provides the copyright holder with a legal remedy for loss resulting from unauthorised reproductions. However the architects of analog copyright law could not conceive of the problems posed by digital technology. Where every personal computer can distribute fair copies, persistent access protection is needed. There are 3 principal ways of protecting copyrighted works. First, data shields stop direct ripping of CDs and DVDs to hard drives. Second, encryption technologies serve to disable the playback of files transferred from one hard disc to another. Finally, watermarks can be conveyed to digital imprints to prevent unauthorised access.

Economic analysis presents certain compelling reasons: production costs are largely sunk Infringers act after production costs are sunk. Access protection is a blunt form of copyright protection. It may present a credible social commitment to fight piracy. If consumers are denied the right to fair use such as the right to make personal backups or lend copies demand is likely to fall. It would become necessary to reduce purchase price to restore market equilibrium. Price discrimination –which is the non-uniform pricing of products based on consumer intensity– is often economically efficient. Discriminators generally charge lower prices to more b basic users. Customers with need for more sophisticated service accoutrements can expect to pay more. With potential economic benefits price discrimination is not possible if buyers can resell or practice arbitrage between low and high end markets. If made available, circumvention technologies would indiscriminately enable both fair users, who would extend similar analog rights, and viral reproducers who would plunder creative investments.

## **1.2.4 Copyright issues and music piracy**

Copy right issues and related piracy forms a serious problem in the growth of music industry. Technological changes have rendered the existing copy right laws ineffective. The studies reflect the complexity of copy right laws. Silva and Ramello (1999) examines the case of copyright piracy in sound recording market. Industries producing and distributing information protected by Intellectual Property Corporation [I.P.C.]-Software, the press, cinema, music etc. are today a significant part, of the economies of postindustrial countries. The author, in this paper, attempts to analyse the organisation and the economics of information industries starting from the case of the phonographic market. The focus is on the relationships between copyright, and unauthorised sound reproduction. The protection of intellectual property is the burning problem of the information industries.

The article studies the links between I.P.C. market development and unauthorised reproduction in the phonographic industry. The production process of these industries is divided into 3 phases; creation of a prototype, its duplication and the commercialization of copies .In the first, an idea is created and transformed into a master by a single individual or individuals through a complex and expensive process; example from a film script to the master copy In the second phase, manufacturing, the prototype is reproduced as a number of copies by the author or licensee. In the third phase, marketing, the licensee manages the marketing and commercial distribution of copies. In these industries the copyright plays pivotal role; it grants the owner the right to exploit their idea exclusively for a statutory period, thus giving them a monopoly rent .In this way the copyright forbids any illegal reproduction of the prototype. All IPC industries are characterised by product differentiation. Quality is not always objective often being judged by market success Quality and market success are two sides of the same coin. Although the economic aspects of patent protection are continually discussed the issue of copyrights is often neglected. Though there is a vast legal literature on the subject economists have often neglected it. There are still many problems seeking solutions. What is the effect of copy right on the supply of ideas, on the firm's and market's organisation and prices. Does copyright allows maximisation of consumers' welfare Are the unauthorised activities a pathological or a physiological aspect of the market.

In this article the analysis of the phonographic industry has a dual aim; to describe and interpret the peculiar competitive process and to examine the existing interactions between legal and illegal markets. This paper shows that unauthorized sound recording is the outcome of the particular institutional setting of this industry and it may have positive effects for consumers and sometimes even for producers. Phonographic firms favour a repressive policy against free copying. This position is understandable, but a deeper examination of the costs and benefits of copy right and repression of illegal activities suggests a more balanced position. Unauthorised reproduction covers several infringements on copyrights; it covers private copying, counterfeiting, genuine piracy and even bootlegging. Private copying is not illegal in many countries. Counterfeiting consists of manufacturing products identical to the original. The artist and the company are cheated by the distributor and illegal reproducer. Genuine piracy introduces into the market unauthorised copies of a record which is already circulating; the free loader producer does not have to sustain any cost connected with master production .Bootlegging comes last, being the unlawful recording of concerts to meet a localised demand. The quality is normally lower than that of legal recordings Surveys show that more illegal recordings occur in lower income brackets and in less developed countries. Sound recording is an oligopolistic industry where majors practice differentiation on the basis of quality, labels, copyright etc.; sunk costs are more important than marginal costs of manufacturing.

Unauthorised reproduction appeared as a consequence of technological innovation. Private copying merely puts some limits on absolute monopoly power causing some profit reduction, but also some benefit, for the producers, for the artists, and for social welfare. Monopoly created by copyright excludes from the market, consumers unwilling to pay monopolistic prices, and are buying cheaper copies. In this case demand for unauthorised sound products might not upset demand for originals and might satisfy a larger number of consumers. Consumers could buy a pirated product at a far lower price than the legal one. In the long term the legal producers

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will benefit from the musical culture thus fostered, as income grows they may later turn out to be full price buyers. The authors come to the conclusion that the positive effects of unauthorised reproduction more than compensate the negative effects in the long run. They are against the simplistic argument that piracy and private copying upset the legal market and thus is to be condemned. However, analysis of the structure of the market and of the competition mechanisms shows a more complex situation. Historical experience also proves a profitable coexistence between the recording industry and unauthorised reproduction. The private copying case shows that an unauthorised reproduction can bring about welfare improvements without significantly affecting firms' profits. The piracy case is more questionable because it concerns illegal activities. However what emerges is that it has economic reasons to exist. The efforts to tighten copyright protection will only strengthen monopolies,

Yen C. Alfred (2001) analyses the different aspects of the recording companies' case against Napster an Internet service provider .Napster itself is a software that enables users to search and download MP3 files. The importance of the Napster case has its roots in the very operation of the internet. Modern technology allows the inexpensive digitalization of copyrighted material like music, sound recordings, and even movies, and they find their way onto the internet, where potentially millions of people can download them for personal use. The Internet threatens copyright holders because the unauthorised availability of copyrighted material may cut into their profits. On the other side are various consumer and internet user groups as well as makers of electronic and computer equipment. They argue that internet provides no excuse for altering the balance between copyright holders and consumers. Electronic and computer equipment manufacturers contend that restricting the availability and use of Napster could slow technical progress. Copyright holders have successfully lobbied for amendments to the copyright law that make it illegal to circumvent digital locks. They have also expanded the targets for copyright litigation to include

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providers of the technology that make such sharing possible. For example the ISPs are facing lawsuits over the behaviour of their users. The story of Napster begins with MP3. Before MP3, the sheer size of digital music files made their transfer over internet cumbersome. A user looking for a specific song might have to search dozens of internet sites. Napster software offers a partial solution Napster users who log on to the internet, automatically communicate with a server maintained by Napster Inc. That server keeps track of all Napster users who happened to be logged on at a given time and the MP3 files they have made available for sharing. A click of the mouse sends a command from the user's computer to the computer containing the desired file, and the file is then copied and sent to the requesting user. Napster's obvious value is its ability to greatly speed the location and retrieval of MP3 files. The recording industry finds such widespread copying of music files threatening. The recording industry has sued Napster for copyright infringement. The defence of Napster is that Napster itself commits no copyright infringement. The recording industry can point to 2 doctrines – vicarious liability and contributory liability which may impose liability against Napster.

An economic understanding of Napster case focuses on two attributes of products like sound recording. First, non-excludability. A copy can be replicated infinitely. Second, non-rivalness in consumption, ie, public goods may be enjoyed by an infinite number of people without diminishing their enjoyment by others. This has conflicting policy implications. Creators of music will be producing less than the social optimum. However there is the free ride r problem. Government action is therefore required to make its provision optimal without adversely affecting incentives. Coase theorem has a direct application to the Napater case. Coase theorem says that the initial allocation of a resource has no effect on its efficient allocation within society. The outcome of the Napster litigation will have no effect on the efficient production of recorder music because that litigation simply represents a struggle for initial control of Napster. The recording industry and Napster inc have significant incentives to bargain with each other because profit maximisation strategies for both sides involve their mutual cooperation.

The foregoing implies that negotiating for Napster's cooperation will not prove futile as long as recording industry intelligently exploits Napster already existing competitive advantage. This article has cast doubt on the claim that the efficient production of recorder music requires an injunction against Napster. The stake in the Napster case is not the efficient production and distribution of recorded music but who will control technology that disseminates recorded music Courts should therefore approach copyright claims against internet technology providers with great caution. Plenty of time exists for the legal system to study the impact of Napster and similar technologies. If this argument is incorrect and the production of copyrightable material begins to evaporate, courts can easily implement corrective measures. By contrast it will be impossible to recoup losses that will result from premature suppression of new internet development.

Reese Antony (2001) examines the ramifications of copyright laws on internet music transmission. Copyright laws in the digital era attempts to facilitate the development of legitimate dissemination of music over the internet. Part one of this article explains current copyright laws relevant to internet music transmission. The study clarifies the difference between copyrights needed for music works and those needed for sound recording. Part II of the article deals with the copyright owners rights including rights to reproduce and publically perform copyrighted works. Part three of the article presents possible solutions so as to protect copyright owners works and to make legitimate internet music transmission more feasible. The article takes current copyright laws as given. It assesses how internet exploitation of music takes place given the existing system and considers how adjustment to current law might facilitate legitimate internet exploitation of music.

Loren L.P (2002) analyses the crisis in music industry and the inadequacy of existing copyright laws. The article identifies two fundamental aspects of the 1976 copyright act that should be altered if copyright for music

is to survive the digital revolution. The layering of copyright ownership interests and the complexity of copyright law has played a major role in the inability of the industry to respond to the changing nature of the way in which digital works can be distributed and otherwise exploited. The article proposes revisions primarily meant to prepare copyright laws to address future innovations in technology by enhancing the ability of copyright owners, particularly in the music industry, to quickly embrace new methods for exploiting their works.

Part I of the article is descriptive explaining the tangle of legal rights in the music industry and identifying the vested industry players and their respective roles. Part II explains why the structure of the music industry and the interplay between the vested industry players has led to the current prices. Part III proposes concrete changes that should be implemented in the new copyright act. It also explores the problem associated with industry consolidation and the existing and potential mechanisms to reduce the negative effects of the present consolidation.

Vanwisk J. (2002) studied the problem of intellectual asset management in music and software as a part of increasing piracy in music industry. The music and software industry are employing copy protection devices in CD's and digital downloads to fight against the problem of piracy. The article analyses the efforts of the software and music industry to combat home copying and file sharing by copy protection techniques. The first part of the article provides a theoretical explanation for copyright protection which is conceived as knowledge based strategy. Then the impact of copy protection in relation with other industry sectors and with consumers is discussed. Finally, questions are raised about how firm should manage stakeholder relations when their strategies to protect intellectual assets overrules traditional consumer rights to make home copies. The effectiveness of copyright protection strategy is explained in the grounds that (a) knowledge involved in copy protection is generally too sophisticated for consumers to circumvent and (b) consumers are not allowed to use circumvention techniques created by knowledgeable third parties. Copy protection is controversial because it deprives consumers from making home copies of music and software and hence overrules copyright law that exempts the copying for private use. The article argues that the technical enforcement of copyright protection necessitates a wide consensus between business and society about the legitimacy of private and fair use.

Burnet (2002) discourses that, the purpose of the study is three fold. The first is to show that popular music is an important and neglected area of research within the area of media and communication studies. The second is to describe the contemporary popular music industry. The third is to analyse some of the factors and constraints under which the popular music industry functions. Chapter 2 starts off by examining the role of the music industry within the expanding global entertainment industry. In chapter 3, an attempt is made to locate the study of popular music within the theoretical approaches to the concepts of mass culture and popular culture. Chapter 4 is a description of the developments in the popular music industry. Chapter 5 introduces the production of culture model. Chapter 6 examines the consumption system of popular music and takes up the role of technology. Chapter 7 is devoted to the largest and single most important market for commercial music -the US. It is obvious that developing technology that helps lots of people to create music is a good thing. It is exciting that an artist anywhere can record among at home using a Macintosh based digital recording studio, and then upload it in the Internet enabling millions to hear it. The interesting paradox is that the big six Trans nationals may continue to dominate with digitalisation giving them greater control or it could open a Pandora, a box that could ultimately destroy their own control of popular music. If artists start self-distribution over the wire, then what happens to the big six. The author laments that the hardest part in the study of music is the fact that things are happening so fast that it is impossible to be always up to date.

Akatwijuka and Regner (2003) apply the property rights theory of Grossman-Hart to the music industry and study the optimal allocation of copyright between the artists who creates music and the labels that promote and distribute it. Digital technology opens up a role for new intermediaries. The authors introduce a mentor, a new intermediary to the label, and analyse if this triggers a change in the ownership of the copyright They find that in the current structure the label ownership becomes less likely.

The paper analyses the consequences of the recent advances in information processing and transmission, for the ownership of copyright in the music industry In the model, the artist A and the label L differ only in the degree of indispensability. The digital technology makes labels more dispensable. Digital technology opens up a role for new intermediaries. The authors introduce a third agent a mentor, M who offers an alternative exposure channel to newcomer artists There is increasing need for new intermediaries in digital content. They analyse a non-drastic change where the label is not replaced entirely. The effect of digital technology in the allocation of copyright is analysed in four different cases. In three cases they show that the labels are less likely to own copy rights when the new intermediary is introduced. Either artist ownership become more likely or the mentor owns the innovation and acts as a venture capitalist. The introduction of new intermediary changes the relative importance of investments in favour of either A or M. and with separate investments, additionally gives a central role in production. Both forces work against label ownership and therefore it becomes less likely.

The authors compare artist and intermediary ownership to find the optimal allocation of copyright in the three agent case, under both separable and complementary investment. The relative importance of investments changes in favour of the artist or the mentor. The artist also assumed a central role under separable investments which leads to a higher bargaining payoff for him. Subsequently label ownership becomes less likely. Therefore artist ownership dominates unless the importance of mentors investment or his indispensability is high enough. This would lead to mentor owner ship i.e. venture capitalism. However label ownership is still possible if the label
manages to be indispensable, this is particularly realistic when the artistic input does not come from one artist alone, Instead of one artist if we consider 'boy groups' where artists merely sing, the label may be providing the rest of the artistic inputs like song writing, choreography etc. plus the essential promotion of the band. Here the label ownership still has its place. Therefore we can distinguish between the production of music under label ownership and the creation of music under artist ownership. The analysis can be extended to drastic changes in technology where the label becomes obsolete. The established artist has then the choice of going independent while the newcomer has the choice of working either with the label or the mentor.

Petrick (2004) analyses that, in fighting piracy and online file sharing, the music industry has begun to adopt technological measures, often referred to as Digital Rights Management (DRM), to control the sale and distribution of music over the Internet. The analysis in the paper suggests that the economic effects of implementing DRM technology are generally negative or uncertain. It may inhibit piracy, but decrease social welfare by raising barriers to entry and aggravating a number of existing market failures. Specifically, the author feels, the DRM implementation may facilitate the extension of monopoly pricing, decrease the amount of information available to potential music consumers, diminish the number of positive externalities, and raise artistic and informational barriers to entry into certain genres of music. This paper focuses on music exclusive of all other types of copyrighted works. The paper is also speculative in its treatment of the music industry's implementation of DRM technology. Part 2 of this paper explains the various technologies utilised in the digital era. Part 3 examines the current legal structure surrounding artistic creations and music in particular. Part 4 takes a closer look at the economics of music creation. Part 5 uses economic principles to determine the effects of DRM on music industry. Part 6 suggests that total social welfare from the creation and consumption of music is likely to decrease under a system that utilises DRM technology.

DRM will safeguard against consumer copying and distribution of music. It would also provide music industry with the means to charge consumers for each use of a music file and prohibit a variety of uses, including piracy and free file sharing. Utilizing DRM technology would make price discrimination easy since consumers make micro payments. Producers will be able to introduce multiple pricing schemes. This leads to an increase of total surplus and a larger share to the producer. The author presents detailed theoretical analysis of the economic effects of DRM implementation. DRM may indeed tend to increase competition and diversity in the music industry. However it is also possible that DRM implementation will create losses in total surplus in the music industry. Empirical analysis is necessary to study whether DRM solution can be implemented cheaply enough to lead to greater competition. The analysis also suggests that exacerbation of some market failures may be endemic to the DRM solution.

Reese and Lemley (2004), in their paper discusses that, Copy right owners usually sue facilitators of infringement and go after secondary and tertiary liability. Courts award penalty to service providers. Even those who provide technology to crack encryption that protects copyrighted works are penalised. In such a scenario, what will happen to innovation and what are going to be investors' reaction. It is this area that the authors concentrate in this article.

Lawsuits against ISPs, search engines, telephone companies and other indirect providers are problematic. Going after makers of technology for the uses to which technology may be put threatens to stifle innovation. Similarly, going after third parties like investors and law firms will stifle investment in innovation. Lawsuits based on indirect liability sweeps together both socially beneficial and socially harmful uses of a program or service. A middle ground has been lacking in this debate. The authors try to seek this middle ground. Optimal digital copyright policy with respect to P2P networks would do two things: deterring technological innovators as little as possible, and permit cost effective enforcement of copyright in the digital environment. In part 1 of the article, the authors make the case that the liability for infringement is shifted to facilitators. In part 2 they analyse the economics of digital copyright infringement. Part 3 explores how a system of criminal prosecution against high load up loaders might work. Implementing a combination of strategies may offer copyright owners effective protection without unduly harming innovation. For innovators who are also Internet service providers, safe harbour provisions are there under Digital Millennium Copyright Act (DMCA) which protects them from liability under certain conditions.

Copyright owners sue facilitators online because it is cheaper and easier to enforce than suing direct infringers. The shift to these who are further removed from the act of infringement imposes substantial social costs. The solution is to change the economics of targeting direct infringers. One way to do this is to enforce civil and criminal copyright statutes against high volume up loaders. Alternatively, the cost of targeting direct infringers could be reduced by imposing a levy on the technology used. None will stop the demand for digital content, and so, serious effort by copyright owners to offer digital content online should be made. It is imperative that policy makers set legal rules, taking into account the change made by the Internet in copyright enforcement.

Imfeld and Ekstrand (2005) traces the developments in the music industry which culminated in the passing of the Digital Millennium Copyright Act. Section 512-of the Act limits the liability of the Internet Service Provider whose users infringe the copyright of others. The RIAA has aggressively tried to combat online piracy. They challenged the safe harbour provisions of the DMCA. There is strong influence of interest groups on the statute's legislative history. Special interest groups wanted the copyright infringement provision to be extended to the service providers. However the government wanted to ensure the vitality of the internet by providing adequate incentives for online service providers-the infrastructure of the internet-and content providers.

The DMCA of 1998 stems from the white paper issued by the national Information Infrastructure Task Force. The white paper addressed several copyright issues including the first sale doctrine, fair use and exclusive rights. The working group recognized that content owners needed the software and infrastructure to upload works to the internet and online providers needed content in order to make their products-and the internet -viable. There was heated debate as to whether copyright responsibility should be placed on internet service providers. Although statutory liability was not placed on them statute does not preclude the imposition of liability on them in case of infringement. Traditionally courts have identified three kinds of copyright infringers-direct infringers, vicarious infringers and contributory infringers. The ISPs should be immune from liability because they only serve as the path for content for content providers. The music industry claimed that if online service providers were granted limited liability, content owners who posted works in cyberspace would suffer tremendous economic harm because online users could pirate their works without penalty. Online service providers and manufacturers and providers of computer, information processing and communications-related products and services championed amendments to the propose bill that would prevent online service providers from strict liability under copyright law. By September 1997, the music industry began to step up its efforts to prevent the pending legislation from moving forward. Online service providers continued to claim that current copyright law would chill future investments particularly from smaller providers. The online Copyright Infringement Liability Limitation Act ultimately became part of the DMCA of 1998. In the meanwhile several additional caveats were introduced increasing the liability of ISPs. In fact, the subpoena powers under the liability provision-now section 512 of copyright law-are today the music industry's primary strategy for suing both the users of peer to peer file sharing networks and the networks themselves. The legislative history of the ISP provision demonstrates the significant influence of interest groups on the making of new copyright laws.

Colbert, d'Astons & Montpetit (2005) discusses the effects of music piracy on the web based on an experimental study conducted among 139 young adult consumers engaged in swapping music over the internet. Antipiracy arguments like negative personal consequences of pirating music, negative consequences for the artists, unethical nature of the behaviour etc. were stressed in the questionnaire given to the respondents. The sample was composed of a greater number of male respondents (60.4%) than females (39.6%). The mean age was 22, ranging from 19 to 30 years. The results show that the intention to swap music online depended on one's attitude towards music piracy and on a person's capability to actually download music. Having swapped music in the past often acts as a strong motivation to do it again. The study reveals that, contrary to expectation the antipiracy arguments had no significant impact on the behavioural dynamics underlying online music piracy.

Vacca R. (2007) in his article traces the historical development of copyright laws, first sale doctrine and the record rental amendment act. First sale doctrine attempts to balance the rights of copyright owners with the rights of purchasers of phono records and copies. According to the first sale doctrine, once a consumer buys a phono record or copy, the copyright owner's permission is unnecessary for the consumer to sell, trade or otherwise disposes of that phono record or copy. The consumer is in effect authorised to distribute that particular phonograph or copy. The genesis and historical amendments to that first sale doctrine are then discussed. Second part of the article deals with the record rental amendment act. RRA forbids renting, leasing, lending for the purposes of direct or indirect commercial advantage. The article examines whether the RRA act should be amended to include audio books and other non-musical works and ultimately suggests two alternative amendments.

Scherer (2007) explores the history of copyright protection for musical compositions for the period 1709 to1850. The author has compiled a systematic database on 646 composers born between 1650 and 1849. The

criterion of sampling was a composer's music legacy as shown by records and the author tried to assess whether there was significant correlation between musical contributions and copyright protection they enjoyed. He tried to do this by dividing the population into two samples on the basis of copyright protection enjoyed by them. He could not come to any definite conclusion in this regard. But he was able to make several important conclusions on the basis of the empirical study.

In the samples covered, income distribution was highly skewed. The top 10 composers accounted for fifty percent of market sales. Mozart, Beethoven and Bach tower over all the rest. Composers supplemented their incomes by performances, teaching etc. Copyrights affected four main types of diffusion. Creative credit for musical works, performance of individual voice or instrumental compositions, performance of operas and symphonies and the publication of printed musical works. Before copyright laws were passed several practices like payment of flat fees for original compositions existed; but often uncompensated performances were made. Composers could do little about it they tried to resist this in their individual ways.

The first modern copyright law was the law of Anne enacted in U.K. in1709. The Law was later extended to printed music versions also. The privilege system was replaced in 1793 by a copyright law, with performance rights. The U.S passed a copyright law in 1790 and added performance rights in1870. By 1840 an effective copyright law was in place for Germany, Italy, Austria and Czechoslovakia. Giuseppe Verdi benefited greatly from the new copyright law. Verdi's correspondence makes it clear that greater price for each composition made it possible to reduce effort along a classic backward bending supply curve. Even without copyright benefit, opera composers behaved in a similar fashion. For 23 composers the data was collected, the wealthiest 10 percent i.e. two accounted for 53 percent of total sample assets. Extraordinary economic success as in the case of Verdi must have been the incentive for others to persist in the field. The author tentatively suggests that too much importance should not be given to the beneficial influence of copyright. Even without that, glorious music was produced. Several composers like Beethoven befitted. But copyright laws were not the only operative stimulus. The role of Johann Christian Bach, Ludwig van Beethoven and Johann Hummel in securing legal changes in copyright laws is analysed. How Verdi exploited the new copyright laws is traced. How the creative work of composers declined with higher incomes is noted. The high incentive stimulus on other artists is analysed. However the writer confesses that the attempt to determine the impact of legal changes on entry into composing is inconclusive.

Blythe and Wright (2008) examines the idea of technology scruples and why intimidation may not save the recording industry. The software industry devotes considerable efforts to combat software piracy. The industry's trade organizations like Software and Information Industry Association and the Business Software Alliance, fight unauthorized use of copyright, not only in the courts but through extensive lobbying in the legislative and executive branches of government and by influencing public opinion through different means. The complaint is that software piracy causes huge losses to the industry. Their efforts have resulted in the passing of several legislations and agreements-the trips, the Wipo copy right treaty ,the digital millennium copyright act in the us and the increased government spending on enforcement of copyrights.

Why it is that software publishers do not go in for greater protection? Economists have not analysed why publishers might prefer tolerating piracy over adopting explicit methods of technical protection. An answer to this question is the main contribution of this article, as well as its analysis of the increased opportunities for legal controls. The author suggests that there is a dissonance between the music industry's loud claims of losses and the prevalent failure to technically protect piracy. Protection technologies like 'key disks', access locks etc. were 'annoying 'the consumers. The software industry had an interesting experience in the 80s, because at that time when the personal computers just became popular, most software came with copy protection. By the late 80s every single company abandoned the approach for the simple reason that legitimate customers did not like it. And the same bias very much exists today. But the magnitude of software piracy and the apparent lack of any applied protection suggest that there are other issues at work.

Network externalities are very much present in the case of information goods. The more people use it the more valuable it becomes. Members of the software network can easily share files and more easily communicate with each other. The result is that a particular software network becomes increasingly valuable and attractive as its user base grows, while competing networks may become less valuable and less attractive. This phenomenon is sometimes referred to as positive feedback. If a market is characterised by positive network externalities, that are large enough to ignite substantial positive feedback, the market may tip in favour of one player.

The profitability of a strategy of allowing limited software piracy in network markets has been described and modelled by several economists. Piracy may be used as price discrimination specifically second degree discrimination-the publisher offers the same high quality product for all users, but with different levels of legal or moral risk. The high end version is the authorized legal one, the other, the pirated one. The complement to this strategy is anti-piracy campaigns which are aimed at changing customer's preferences.

Information goods have high switching costs. Users tend to be locked in to their pre chosen technologies. This phenomenon is the basis for the second stage of the protection free software strategy. After the positive feedback has played its role it is time for calling in the payments. Now starts 'vigilant and vigorous' pursuit of software pirates. This usually means initiating enforcement action leading to settlements. There is a clear business reason for this type of enforcement.ie for an ex-post pursuit of infringers rather than an ex ante prevention of infringement through the application of software protection schemes. The rationale lies in the holdup potential created by high switching costs. Unprotected software acts as bait.

Another benefit of ex-post enforcement is that it enables the software publisher to maximise his consumers' surplus. The infringer can be legally punished. The publisher can cancel the EULA-the end user agreement. Altogether the infringement turns out to be costly and makes the infringer ready for settlement. While every software publisher can holdup his locked in customers, in a market with strong network effects the dominant software publisher's hold up power is greater. Switching costs for the non-dominant software user is the cost of switching minus the gains from joining the dominant network. Network effects thus magnify the holdup power of the dominant software publisher.

The theory of this article has wider policy implications. Understanding how piracy really works and what its true implications are is important for any policy maker, such an understanding can contribute to making informed decisions about proposals to strengthen intellectual property protection, impose harsher penalties or spend greater public funds on enforcement. They should ask themselves whether such proposals are necessary for incentives to maintain optimal provision of such goods or whether they are increasing the bargaining power of copy right holders.

Shukla (2010) work is an exploration to the legislative protections granted to the intellectual property rights granted to the owners of these rights in entertainment media such as rights in films and sound recordings. This work highlights the appropriate provisions at an international level for the infringement of rights involved in these areas. The entertainment industry today faces the gravest of challenges faced by piracy. The copyright legislation is modern and responds to the industry requirements by providing a wide range of subject matter that can be statutorily protected. Efforts are being made to curb piracy and the industry believes that a multipronged strategy is required to tackle the threat. Piracy can be a barrier to entry if there is threat of entry, the incumbent may go in for predatory pricing Instead tolerated piracy can create a set of users who widens the network effects but can be charged with infringement. The publisher who tolerates piracy suffers lower losses because he price discriminates and only some of the customers pay the lowest price. Tolerated piracy is thus a form of strategic pricing that may have a predatory nature.

Saikia (2010) has developed a paper on Indian copyright laws. This paper has been first published in 2010 and has been revised many times. One of the key objectives of the Indian Copyright Amendment Bill, 2010, was to protect the authors of underlying works in films, such as script writers, lyricists and music composers from exploitation by effecting extensive structural changes in the Indian Copyright Act 1957, and consequently in India's film and music industry. The amendments proposed in the 2010 Bill covered a range of subjects including the exhaustion of rights, the regulation of copyright contracts and the role of copyright societies.

This paper examines the provisions of the copyright amendment bill 2010 relating to the film and music industry. With reference to both the report of the Parliamentary standing committee and the 2011 revisions made to the Bill, it explores whether the proposed amendments are likely to realise their objective, if they are passed, taking into consideration the factual background. The author, in concluding the study, expresses the opinion that the proposed amendments are at times unclear, while at other times, it is the rationale behind them which is unclear.

Srivastava (2012) discusses that, current copyright law has strayed far from its original constitutional intent. The purpose of copyright law is to encourage creativity and development by establishing exclusive right for, those who did the creating, but only to the extent that the works would be disseminated to the public. Online digital distribution of music has the potential to offer various benefits to artists, the recording industry and the consumers. For artists the Internet provides a method by which a broad audience may be reached at very little cost. For record companies, container less music offers large savings from the elimination of manufacturing costs, associated with CDs and losses from over production. For consumers, online digital music distribution allows them to choose the music they want to hear, when they want to hear it, without hassles. Purchasing could become much more efficient and consumers would have access to an unprecedented catalogue of music.

The author feels that if music is distributed illegally at no cost over the Internet, musicians may be deprived of compensation for their work. Copyright law intends to provide creators with enough economic incentives to encourage the creation and dissemination of creative works.

Saikia (2012) in her article discusses the amendment to Indian copyright act. The amendment of 2012 of Indian copyright act of 1957 brought extensive changes to Indian copyright law to protect the authors of underlying works in films(such as script writers, lyricists and music composers). The other objectives were to update India's copyright statute to cause it to be compliant with the WIPO Internet treaties. It also brings it into consonance with new technological developments. The 2012 Amendment cover a wide range of subjects including the exhaustion of rights, the regulation of copyright contracts and the role of copyright societies. This paper examines the provisions of the 2012 amendments which affect the film and music industry, taking into consideration the factual background, explores whether the amendments are likely to realise their objective. The author takes care to examine the provisions of the amendment and often goes into the implications of those for the music and film industry. The Act intended to implement extensive structural changes in the Indian copyright law. But the amendments are at times unclear. At other times the underlying rationale seems unclear. And the likely effect of the amendment is open to debate.

The author feels that if at all the copyright statute was to be used to regulate copyright contracts in the film and music industry, such regulation should have been made in a manner so susceptible to misinterpretation. Instead of creating clear cot provisions which would benefit authors of underlying works, the 2012 Act appears to create confusing situations which would benefit those who interpret the law and not the real stakeholders.

In the Indian situation, the problem is not that the law is flawed but rather that the law will not be followed always. That the Act is well intentioned is not debatable, it covers a range of issues relating to the film and music industry and how far it will be effective will have to be decided through long and protracted litigation.

Dicola (2012) analyses the issue of whether copyright protection provides necessary financial incentive to the original creators of music or other arts. The article focuses on the music industry as a case study in how copyright incentives operate. The author has conducted a survey in 2011 on how much money musicians receive from creating copyrighted works. According to the incentive theory, these financial rewards are what the public trades for the production of creative works. The article is organized in five parts: part 1 explains the motivation for the survey by explaining the incentive theory, part 2 describes the survey methods used, part 3 reports the survey results, part 4 discusses the implications of the survey findings. Part 5 is just the conclusion.

The survey findings provide information about the degree to which different subgroups of musicians depend on copyright protection. The survey findings provide evidence of the ways that technological change is affecting musician's revenue. The key findings about changes over time simply confirm the news that has been reported for the past decade. Revenue sources like traditional retail, sheet music and mechanical royalties have suffered. Online retail, on demand streaming and webcasting are beginning to grow. The article describes the results of a nationwide survey of over 5000 musicians in the US. The survey finding is most consistent with a particular version of incentive theory of copyright. Rather than provide marginal incentives to create to all musicians at all times, copyright law mostly affects the revenue of the highest income musicians in a direct fashion. This is not a surprise, given the prevalence of winner takes all markets in the entertainment industry. In sum, some musicians are more dependent on revenue streams that are directly related to copyright than others. Some musicians have wider range of roles and revenue sources that go beyond composing and recording. Musical creativity takes a number of forms, not just the kind that copyright law protects.

Carrier (2012) addresses the problem of ignoring the effect of copyright law and enforcement on innovation. The emphasis in all discussions is on copyright and infringement. Even though innovation is the most important factor in economic growth, it is difficult to observe. The article presents the results of a ground breaking study of 31 CEOs, company founders, and Vice Presidents from technology companies, the recording industry and venture capital firms. Based on in depth interviews, the article offers original insights on the relationship between copyright law and innovation. It also analyses the behaviour of record labels, when confronted with digital music revolution. The article also takes a look at copyright litigation. It demonstrates the debilitating effects of law suits and statutory damages .It points to losses to innovation, venture capital, markets, licensing, and the magic of music. The story of innovation in digital music has been ignored and the article tries to fill this gap.

Part 1 of this article offers a background on the Napster service and litigation. Part 2 explores the consequences of the Napster ruling. Part 3 analyses the response of music labels to Napster ruling. Part 4 is about how litigation has caused harm, how labels have treated retailers as their customers and not end users. Part 5 takes a look back at copyright litigation more generally. Part 6 takes on the challenge posed by the consideration of copyrights effect on innovation. Part 7 introduces innovation in to this enquiry and sets forth a best estimate of what have been lost from the Napster decision and from copyright litigation in the music industry.

Suzor (2014) points out that, modern copyright law is based on the assumption that users, given the choice, will free ride rather than pay for access. In fact, many consumers of cultural works-music, games, books, films

and other works- fundamentally want to support their production. Humans are motivated to support cultural production, not only by external forces, but also by social norms of fairness and reciprocity. This article explains how producers across creative industries have used this insight to develop increasingly sophisticated business models that rely on voluntary payments to fund their costs of production.

The recognition that users are not always free riders suggests that current policy approaches to copyright are fundamentally flawed. While recent copyright reform debate has focused on creating deterrence through enforcement, increasing the perceived fairness and legitimacy of copyright law is likely to be more effective. Part 1 of this article explains the foundational role that free riders play in the basic justification for copyright law. In part 2 the author introduces a series of pay- what- you- want experiments in the creative industries that demonstrate that consumers often choose not to free ride. The author provides 4 categories of social motivations that explain why people pay: norms of pride, shame and fairness, concern for the welfare of third parties, a basic desire to reciprocate in kind and moral commitments to alternative systems that enable more desirable outcomes. In part 3, it is argued that the mainstream focus on deterrence in copyright, the increased gap between law and practice and the perceived failure of copyright to provide fair outcomes for either artists or consumers is likely to dampen consumer reciprocity and encourage free riding. Finally, the author sets out the hypothesis that compared to conventional copyright systems, "the commons based" systems of production can be more efficient and more conducive to human flourishing.

# 1.2.5 Indian Music

Studies related to Indian music industry were few and most of the studies reviewed here relate to Indian music and its history rather than the music business.

Manuel (1993) studies the impact of cassette technology on popular music in North India. It explores the nature and ramifications of the changes cassettes have wrought on the structure of the Indian music industry. It explores the structure, content and social significance of most of the styles of music that emerged in close connection with the cassette industry. It shows how portable cassette players caused a major transformation in music industry. The spread of cassette technology in the 1980's changed India's popular music industry from a virtual monopoly of a single multinational manufacturer to hundreds of local cassette producers. The result was a revolution in the quantity, quality and variety of Indian popular music and its patterns of dissemination and consumption. Manuel shows that the cassette revolution has brought new contradictions and problems to Indian music culture. Cassette culture is a scholarly account of Indian popular music and the first case study of the technological revolution, now sweeping the whole world.

Scaruffi (2002) discusses that, Indian classical music is based on the ragas, which are scales and melodies that provide the foundation for a performance. Unlike western classical music which is deterministic, Indian classical music allows for a much greater degree of personalization of the degree of performance, almost to the level of jazz like improvisation. Thus each performance of a raga is different. The goal of the raga is to create a Tracey state, to broadcast a mood of ecstasy. The main difference with western classical music is that the Indian ragas are not composed by a composer but were created via a lengthy evolutionary process over the centuries. Thus, they do not represent the mind of the composer, but a universal idea of the world. They transmit not personal but impersonal emotion.

Another difference with the western music, which the author perceives is that the Indian music is monodic not polyphonic. Hindustani ragas are assigned to specifically times of day or night, and to specifically seasons. Many ragas share the sarigama scale, and many ragas share the same melodic theme. There are thousands of ragas but six are considered fundamental: Bhairav, Malkauns, Hindol, Dipak, Meghalaya and Shree. A raga is not necessarily instrumental, and if vocal, is not necessarily accompanied. But when it is accompanied by percussion, the rhythm is rather intricate because it is constructed from a combination of fundamental rhythmic patterns or talas. The main instrument of the ragas is the Sitar, although *Veena* is equally important. Carnatic or South Indian ragas constitute one of the oldest systems of music in the world. They are based on seven rhythmic cycles and 72 fundamental ragas. The founder of the Karnataka school is considered to be *purandara dasa* (1494).Carnatic music is mostly vocal and devotional in nature and played with different instruments than Hindustani music,(such as the *mridangam* drum, the ghatam clay pot, the *veena* as opposed to sitar, tambura and *tabla*).

The fundamental format of Carnatic music is the "kriti" which are usually set in the style of a raga (the raga serves as the melodic foundation) The golden age of Carnatic music was the age of Shyama sasthri, who died in 1827, of Tyaga raja who died in 1847 and who composed the Pancharetna kriritis, as well as two "operas" the prahlada vijayam and Nauka charitham, and of Muthuswamy Dikshithar, who died in 1835.

Booth (2008) in his book behind the curtain, discusses the making of music in Mumbai's film studios. The book is an oral history of the Mumbai film music industry. As popular music, film music benefitted from being embedded in a film production system. This book can also be seen as a response to the nature of the West's reception of Hindi film music. The author asserts that the technology and practice of playback is a primary determinant in the history of film song in Mumbai. In one sense, it is about the interaction between music and film. The material in the book is structured into a combination of industrial, technological and ethnographic chapters organised into three parts. The second part of the book draws on the musicians perspective of music production. It examines matters of training, identities and the pathways by which instrumental musicians adapted to film music. It also examines the role and tasks of creating and recording music in the film industry. The last part of the book addresses the growth and eventual demise of the studio orchestras in Mumbai which was mainly due to the advent of digital revolution.

Mathur (2010) discusses that, Indian classical music is a heritage that has evolved through centuries. It is a blend of ritualistic, folk and cultural expression of the subcontinent and represents music of several genres. At one extreme, it is classical music; at the other, it is a mixture of musical genres of different regions that reflect the diversity of India.

Hindustani classical music is an Indian classical music tradition that took shape in North India. The music can be traced back to the sama gana sung by priests as part of religious rites. Hindustani classical music has its origin as a form of meditation and is based upon ragas and tals, each designed to affect different chakras or energy centres. The artist is like a worshipper in his attempt to reach Brahmananda. Indian music is traditionally practice oriented. Indian music production provides a perfect counter system analysis to Western music production.

Although we get tantalising glimpse of the music culture of antiquity, we just do not have evidence to either confirm or deny a Vedic connection with contemporary classical music. Due to the extreme age of the Vedas, it is not reasonable to expect to find clear unambiguous links. It is fortunate that the Vedas, especially. The sama Veda are basically hymn books Therefore elements of the Vedic musical system are expressed both explicitly and implicitly within them. India gives the oldest surviving text on music and stagecraft in the world, the Natya shastra. Again, sculptures and inscriptions on the walls of Hindu temples provide some evidence regarding the musical culture of antiquity. Indian classical music is based on melody and rhythm and not on harmony, counterpoint, modulation, chords, dynamics and other structural elements of western classical music. Furthermore, the tradition of Indian classical music is an oral one. The guru teaches it directly to his disciples. There is no sheet music and no written tradition as in western music.

### 1.3 Research Gap

A review of the literature pertaining to music industry revealed that though there are many studies relating to the global music industry, there is no reference to a study on Indian music industry. The present study focuses attention on the pre-recorded music industry and pre-recorded music market. Review shows that there are no studies relating to pre-recorded music industry analysed using the tools of Economics. There is a research gap, which is the justification for the present study.

## **1.4 Statement of the Problem**

The present study examines the changes that are taking place in the music industry in India: Specifically to analyse the impact of technological changes in, the Indian music industry.

The music industry has grown in the last fifty years to become an important global industry. It encompasses a major area of economic activity, and attracts huge global investment. Over the last few years, the spread of digital music, the popularity of MP3 format and the emergence of Internet as an alternate distribution medium have disrupted the existing music format, pricing and distribution. As long as music goods were delivered in the analog form, firms marketing musical products were able to treat their products as assets which are not easily transformable. Sharing of music through internet was difficult because it involved movement of bulk data. Manipulation of the contents in such cases requires considerable skill and expense and even then the possibilities of making modifications are limited. But the shift from analog to digital platform has made the distribution of music easy.

The Music industry in India shows a revenue of 13.1 billion Rs in 2012 as compared to 6.7 billion Rs in 2004. A hundred percent increase can be seen in the total sales. But there is a shift in sales from physical to digital components. Sale of cassettes and CD's is the traditional source of income for music companies and constitutes the physical component of sales. It fell from 6.7 billion Rs in 2004 to 2.3 billion Rs in 2012, a fall of 65%. In 2004 there was only physical sales, and digital sales emerged from 2005 onwards. In India the pattern of music consumption and distribution has shifted radically. Music buying has decreased, the number of units being sold is falling. This has led to a spiralling decline in revenues.

### **1.5 Scope of the study**

Music industry has a complex organisational structure. It consists of music composition, publishing, live performance, musical instruments and sound recording. It exhibits the characteristics of an old industry as well as a new industry. The term music industry encompasses a wide array of components under the same umbrella starting from the creation of music by composers, song writers, lyricists and performers, music publishing, music live performance, production of musical instruments, the sound recording industry and distribution of music through sale outlets and downloading services.

Musical composition is done by composers and song writers. Words are created by lyricists who work together with composers. Composition is a broad field and includes musicals and opera, classical music and rock music, music for films and TV programmes, jingles for advertising and ringtones for mobile phones. The composer may perform the work for his own use or may be hired by a firm. Music cannot simply exist in the mind of the composer or on paper, it needs to be performed and in order to get the composition to market, composers and song writers depend on the services of a music publisher.

Music publishers perform a range of tasks. They print musical notes and lyrics for sale as sheet music. Give licences to performers and recording companies. They negotiate the use of musical work used. The role of music publisher has shifted from publishers of sheet music to managing musical copyrights for composers and song writers in films, TV programmes etc. In terms of the market structure of the music publishing industry, the major publishers are the subsidiaries of the major record companies.

Sound recording forms the business part of music industry. The market structure is oligopolistic with 80% of the world sound recording

market in the hands of the four international corporations: Universal music group, Sony BMG, EMI and Warner music group. Sound recordings in the form of CDs, DVDs and cassettes are produced and sold in the music market.

Sound recordings are sold to the public through variety of outlets including music shops, supermarkets, book shops, shops selling mobile phones and electronic goods and even by street vendors. The online distribution of music is increasing and are in the hands of specialised companies like iTunes, Press play, Saregama etc. They act as middlemen and provide the technical facilities for downloading tracks made by the record labels. Radio and TV stations play an important role in the public performance and dissemination of recorded music. Music videos have become an important part of sound recording as they are used to promote music albums and music bands.

The development and spread of record players and records led to the consumer boom of sound recordings which spread to all developed countries (Towse 2010). Cassettes enabled consumers to play music outside the home and record music from the radios by themselves. The emergence of CDs improved the quality of music disseminated but it was with the development of digital technology that dynamic shifts occurred in the music market. The Internet constituted a new distribution channel for music. At the beginning of the 1990s, a method for compressing digital audio signals appeared on the Internet under the name MP3 (Motion Picture Expert Group-1/Layer 3). The principle of downloading music data onto computer hard drives based on Peer-to-Peer Services (P2P) emerged. Because music can be stored digitally, it became possible to offer music as a service to the consumer independent of any phonograms. This was done through two methods: streaming and downloading. The streaming procedure allows one to listen to music but not store it on a computer. Downloading, in contrast, stores music files on a computer, which then enables one to make an infinite number of copies. P2P Services allowed users to download desired music files directly from the hard drive of a computer which is also known as file sharing. Technological

changes brought about structural changes in the music industry from physical to digital platform.

In the sphere of international trade, the cultural and entertainment goods has assumed a dynamic and mature presence and the entertainment industry itself has come of age. At the heart of the change lies the digital revolution transforming the world of entertainment, its spread and its influence. Top 10 entertainment markets are identified and a period from 2004 to 2012 is taken for analysis. The top entertainment markets of the world are US, UK, Brazil, Spain, Australia, India, China, Japan, France, Italy and Russia. Entertainment industry comprises of different segments including film industry, music industry, TV, radio, advertisement, internet, print media etc. The market share of top entertainment markets is calculated for the period 2004 to 2012. The market share of entertainment industry is highest in Japan followed by US, UK and Australia. In India the entertainment market forms 1.35% of the GDP. Developed countries like Australia, US, UK and Japan have a higher market share in entertainment industry compared to developing economies like India, China and Brazil. Entertainment industry forms more than 3% of GDP in developed nations while it forms only below 2% in the case of developing economies like India.

Export and import data of the top entertainment markets is found for the period 2004 to 2012. The period 2004 to 2012 shows high growth in music imports in China, France and India. During this period Indian music imports grew from 194 million dollars to 1015.2 million dollars with a CAGR of 60 per cent. A look at the top entertainment markets show that there is a very high growth in music exports in Japan, China, India and US in the period 2004 to 2012. From 2004 to 2012 Indian music exports grew from 96 million dollars to 601 million dollars with a CAGR of 27 per cent. With the advent of technological revolution and the increased pace of globalisation, trade in music goods have increased.

The centrality of creative content and the place which music has, in the lives of the people, masks one fundamental fact -that music is an industry first and foremost and an industry on par with any brick and mortar one. The share of GDP it contributes, the revenue it generates, the foreign exchange it brings in and the number of people who depend on it for livelihood makes it an important industry.

# **1.6 Objectives**

The basic objective is to study about the economics of music industry in India More specifically the objectives are

- 1. To analyse the structure of music industry in terms of its markets, distribution and trade.
- 2. To examine the shift in consumption of music as a result of technological change.
- 3. To examine the changing trends in sale of different music formats through retail outlets during the period 2010 to 2014.
- 4. To study the impact of technological changes in music industry.

## **1.7 Hypothesis**

Technological changes and structural changes in music industry are related.

Technological change brings shifts in the music industry from physical to digital platform.

Related to the main hypothesis various sub hypothesis have been formulated, which is added in appropriate places.

### **1.8 Methodology**

The study uses both primary and secondary data. Secondary data were collected from Govt. departments, directorate of economics and statistics, music departments. Price Water House Cooper (PWC) publishes annual reports on entertainment and media industry. Their published reports on Global entertainment and media industry and Indian entertainment and media industry from 2000 to 2012 is used in compiling secondary data. Another source of secondary data available is the Digital Music Reports (DMR) published by International Federation of the Phonographic Industry (IFPI) from 2000 to 2012.Creative economy reports published in 2008, 2010 and

2013 are also used for data compilation. Federation of Indian Chambers of Commerce and Industry (FICCI) also publishes annual reports on entertainment industry, which is used for data compilation. United Nations Conference on Trade and Development (UNCTAD) data on trade related to creative goods is also used for analysis.

The present study focuses attention on pre-recorded music market. Consumption and sale of pre-recorded Records, Cassettes, CDs DVDs and MP3s are analysed based on primary data and secondary data. Trade in prerecorded music goods of the top entertainment markets of the world are analysed based on secondary data compiled for the period 2004 to 2012. Technological changes and its impact has brought about dynamic changes in the music market which is analysed with the help of primary and secondary data.

Primary data were collected from music consumers and retail cassette shops from selected cities in Kerala using interview schedules. Data were collected from music shops in Trivandrum, Ernakulum, Calicut, Thrissur and Palakkad, using interview schedule. Samples were collected randomly. A total of 125 samples was collected, 25each from the selected districts. There is no correct data available, regarding the number of music shops in the State. Another problem is that music is sold not only through music shops ,they are sold in book shops, electronic shops, they are also sold by street vendors, CDs and MP3s are sold in buses and trains by vendors, they are also sold via counters in super markets. The universe is not clearly defined.

A survey was also conducted to analyse consumer preferences regarding music buying and music listening habits. Date were collected randomly by selecting individuals who purchase music and listen to music. A total of 200 samples was taken from the selected districts, 40 each from Trivandrum, Ernakulum, Calicut, Thrissur and Palakkad district using interview schedules.

# **1.9 Statistical Tools**

Various statistical tools were used for data analysis. Growth rate and market share of music in entertainment markets is found from the data compiled for the period 2004 to 2012.

The weighted mean rank method is used, based on the responses collected from the respondents. The weighted mean rank is computed from the ranks assigned by the respondents. Mean rank was found by giving due weightage to different groups. The formula used for ranking is  $\sum wx/\sum w$  where w is the weight assigned. W stands for number of respondents and X stands for the number of observations. X takes the value depending on the rank assigned by the respondent to a particular issue. The values assigned to ranks are in descending order, i.e. as we move from rank 1 to rank 5, the value assigned falls from 5 to 1.

Non parametric tests like Kruskal Wallis and Mann Whitney U test was used to analyse the significance of variables which influences music consumption and music sales. Regression was formed to analyse the relation between GDP and entertainment markets.

The study used the technique of multivariate factor analysis to identify and analyse the problems faced by music industry. Information was collected from sellers by framing statements. They were asked to rate the statements from strongly agree to strongly disagree. Values were given from 5 to 1. Twenty five statements were given. Using the extracted factors regression was carried out.

### 1.10 Chapterisation

Chapter II The development of cultural economics and the theoretical frame work of the study. History of music, evolution of music industry and the history
frame work of the study. History of music, evolution of music industry and the histor
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Chapter III Chapter III
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The growth of global entertainment market, India
Chapter IV entertainment market, Indian music market and trade i
entertainment goods of top entertainment markets with th
help of secondary data.

- Chapter V An analysis of the shifts in music consumption based on primary data.
- Chapter VI An analysis of sale of music goods using primary data.

Chapter VII The findings and conclusion of the study.

# **1.11 Conclusion**

Music industry can no longer be assumed to mediate the relationship between the producer and consumer. In effect the internet offers to remove the middlemen and in so doing changes the nature of the mediation. Disintermediation circumvents the middlemen with a direct access relationship between producer and consumer. No longer are they needed to act as promoters and intermediaries. This is offering dramatic changes in the relationship between record companies and consumers and musicians and their fans. Creative artists and performers are better placed in the sense that they could get much exposure without the intervention of middlemen. There is a direct even pure communication between the musician and the listener. Direct access relationship makes marketing campaigns and advertising superfluous to some extent. Internet interaction increases the speed of music delivery. The trends and patterns of music industry in India is in fact a reflection of the changes that have been taking place in the global sphere. The technological revolution, resulting in the digitalisation of music, attendant problems of piracy and anti-piracy moves, changes in copyright laws- all reflect global patterns.

# CHAPTER – 2 MUSIC INDUSTRY IN THE REALM OF CULTURAL ECONOMICS

### **2.1 Introduction**

The present chapter deals with a narration and analysis of existing economic theories trying to explain the economic aspect of culture industry. The creative, entertainment and even the mystic quality of cultural goods make us forget that their consumption and production is governed by economic laws. Many ardent devotees of the performing arts, be it music or dancing fail to perceive this and insist that the term culture industry itself is a misnomer.

Cultural economics is the application of economics to the production, distribution and consumption of all cultural goods and services. Cultural economics uses economic principles to analyse problems along with empirical research. In fact, cultural economics can be regarded as a branch of economics; only that it is also a part of the wider investigation of the world of arts and culture. Cultural economics adapts economic ideas to the specific features of the cultural sector. Culture goods are distinctive and have to be treated separately because of their special characteristics. The industries which produce market or distribute them have special features too. Their treatment using economic tools is sometimes called cultural economics.

Culture and entertainment represents a significant industry in the present day and age. Music industry is a subset of the broader category of cultural economics. The two fold nature -both cultural and economic- builds up a distinctive profile for cultural industries. They include industries that combine the production and commercialization of contents which are intangible and cultural in nature. These contents are typically protected by copyright [UNESCO, 2000]. The field of the cultural industries comprises somewhat contested territory. Many creative artists believe that their art is divine; the thought that their activities form part of an industry is anathema to them. Yet the fact remains that individuals and firms producing goods and services for sale create a grouping of industries. The word industry to art and

culture does focus attention on the economic processes by which cultural goods and services are made, marketed distributed and sold to the end consumers. The term cultural industry does carry with it the sense of the economic potential of cultural production to generate output and employment. [Throsby, 1994].

Performing arts, creative industries, galleries, and museums have much in common especially the amenability to economic analysis. Cultural economics deals with the special problems presented by cultural goods for example in the necessity for government subsidies, vulnerability to rising costs [Baumol's cost disease] etc.

## **2.2 Origin of Cultural Economics**

The first systematic work that stimulated the birth of cultural economics was that by William Baumol and William Bowen on the performing arts [Towse 2010]. The origin of present day cultural economics is considered to be Baumol and Bowen's book' Performing Arts-the economic dilemma' published in 1966. Baumol and Bowen presented a thoroughly researched systematic empirical study of finance, costs and prices in theatre, orchestra, opera and ballet in the US and also of payments to and employment of performing artists there with comparative material from UK and they evolved the theory that has come to be called the 'cost disease in the arts'. In the 1970's Michael Montias carried out pioneering research on the art market. Alan Peacock initiated the first economic analysis of museums and of built heritage; he also investigated the finance of broadcasting of the British Broadcasting Corporation, known as the Peacock Report. In Australia, David Throsby and Glenn Withers researched the performing arts in the late 70's, developing some of the theoretical models widely adopted in cultural economics.

Cultural goods like music have certain special characteristics. These goods may be marketed by recording companies but their meaning and ultimate value depends on the consumer's judgment. In creative industries decisions pertaining to production and consumption are ultimately

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determined by the public in a social network. These social networks function as markets. The value of creative goods is realized as a social process and not through individual consumption. In the case of music goods the meaning and value is created mainly through shared experiences. Individual choices are influenced by information feedback and other social networks rather than innate preferences and price signals. Music is treated as an experience good, which is a good that needs to be tasted before consumers can assess its value.

Thus, cultural goods industries have certain common characteristics: First, they are all concerned with the production of 'experience goods [Bourdieu1971, Pine and Gilmore1999]. Second, they are generally subject to Engel's law which suggests that as disposable income increases, consumption of luxury products will rise more than proportionately. Third, firms in cultural products industries are subject to competitive and organizational pressures forcing them to agglomerate [Throsby 1994].

## 2.2.1 Baumol's cost disease

The model which led to the conclusion that the performing arts are predestined to be victims of a cost disease which condemns their cost [ per performance] to rise persistently faster than the economy's rate of inflation, rests on the basic premise that the technique of live performance is inherently stagnant. Both their labour productivity and total factor productivity is inherently resistant to change. A string quartet written in 1800 for a half hour performance requires almost exactly as much capital [four instruments] and as much labour [two person hours] today as it did in the year it was written. Meanwhile productivity in the manufacturing sector in the economy, having risen at an estimated average rate between 1 and 1.5 percent per annum, compounded over the entire period has gone up about twenty fold in the interval. As an example, there was a hundred fold increase in labour productivity in the manufacture of watches [non electronic] over the 300 year interval since the last decades of the 17<sup>th</sup> century. If the wages of watch makers and musicians have remained about the same over the period it means that the ratio of the cost of a performance to the cost of a watch must have

risen one hundred fold. That is, the opportunity cost of admission to a theatre in terms of number of watches it would have bought would have gone up about 100 times. The relative rise in admission prices can be expected to persist continually as it has done. In other words, because manufactured goods have benefitted from technological advance year after year, while live performances have not, almost every year, theatre and concert tickets have grown more and more expensive in comparison with the price of watches. The message is simple. Prices of manufactured goods do not rise as quickly as those of concerts, dance, or theatrical performances because manufactures benefit from labour saving innovation while performing arts do not. This is another way of saying that cost per attendee or performance must rise faster than the average price of other things.

Baumol and Bowen have thus provided an explanation for the behaviour of costs and prices of live performances which has come to be called Baumol's cost disease. This underlies their analysis of the cost behaviour of broadcasting and movies also. The productivity lag empirically proved and thus explained has great implications for public policy. Many issues like subsidising the arts have to be analysed in a new context.

Cost disease originates from the fact that even though there is some productivity growth in the stagnant services, it is significantly slower than productivity growth in the remainder of the economy. But a society, whose productivity is growing everywhere, albeit slower in some areas than in others, obviously can afford to consume more. It has the means to enjoy more, of all output. Alternatively, it can chose to devote all of its increased productive capacity to a selected smaller group of items; but that is a decision to be made by society as a whole. The cost disease had created the illusion that society can no longer afford many things it used to be able to obtain. But the opposite is in fact true. A society beset by cost disease can each year afford more and better endowed artistic activity each successive year despite the rising real cost, and more manufactured goods as well. But to say that they can afford to, is not the same thing as saying they ought to do so. All that can be said is that a society should be kept from making a negative decision, that is a decision to cut back on the arts and other services contributing to the quality of life, solely by the misapprehension that it cannot afford to do so [Baumol and Bowen, 1966].

The problem with the cost disease analysis is that it ignores consumer demand. It assumes that consumption of the arts falls off with technological growth in other sectors and ignores the wealth created by technological growth. Without considering consumer demand, it is impossible to say whether technological advances in the non-arts sectors will lead to an increase or decrease in the arts. People may be so much better off because of the technological growth that they wish to attend more performing arts events. [Robinson J 1969]

Baumol and Bowen's work was treated as providing a case for public support of the arts and was taken up by its advocates like, Alan Peacock [Besharov 2003]. It seemed to offer objective and technical evidence that public subsidies for orchestras and opera should be tied to the growth in their costs. The cost disease issue has been widely taken up in a number of countries as spelling doom for the live arts unless governments intervene by funding. [Throsby 1994].

### 2.2.2 Theory of concentric circles

Cultural industries may be considered as centring round the locus of origin of creative ideas, and radiating outward as those ideas become combined with more and more other inputs to produce wider and wider range of products. Thus, at the core of this industry model lies the creative arts as traditionally defined: music, dance, theatre, literature, the visual arts, the crafts video art, performance art, computer and multimedia art and so on. Each of these art forms on its own can be regarded as industry, and is frequently referred to as such, although such a usage generally embraces more than just the original producers. So, for example, the 'music industry' refers to an enormous range of participants including composers, performers, publishers, record companies, distributers, promoters, retailers, collecting societies and so on; even so, the core of the industry can still be seen to be the original musician. The next group in the ever widening pattern of concentric circles defining the cultural industries comprises the industries whose output qualified as cultural commodity, but where other non-cultural goods are also produced. These include, advertising where creative input is required in some aspect of its operation; tourism, where some market segments are built on a cultural base and architectural services, where designs may be more than functional. However, these industries could be thought of as component of cultural industries [Throsby 1994]. The scheme represents a concentric circles model of the cultural industries with the arts lying at the centre, and other industries forming layers or circles located around the core, extending further outwards as the use of creative ideas is taken to wider production contexts.

Cultural goods are similar to other goods in that their production utilizes resources of land and capital and other inputs. These resources have other uses and therefore have an opportunity cost and price. But, Creative goods differ from the conventional good in the structure of their costs. Producing a creative good is costly but reproduction is relatively cheap. The cost of producing a film runs into crores of rupees but it is possible to make near perfect copies of the first print at negligible costs. These goods have relatively high fixed costs of production but their marginal cost is equal to zero. If the marginal cost is equal to zero, then pricing based on the marginal cost principle is not feasible. A firm that sets its price at marginal cost will not be able to recover its fixed cost.

But all cultural goods have this in common that they contain a creative or artistic element. Some cultural goods are tangible objects, such as an artwork, or a book; others are intangible services, like a musical performance or a visit to a museum. Some are final goods that are supplied to consumers; others are intermediate services that go into the production of other cultural products. An important question in cultural economics has been whether the allocation of resources via the price mechanism can produce the socially desirable output of cultural goods and services. The general consensus is that it cannot, possessing as they do, some of the characteristics of public goods [Towse 2001] Cultural goods and services involve creativity in their production, embody some degree of intellectual property and convey symbolic meaning. Such a definition would enable specific industries to be defined around particular cultural products such as music. In some usages, one or other of these characteristics on its own might be looked to as the principal definitional base. For example, creativity might be emphasized as in the 'creative industries.' Alternatively, the generation of intellectual property rights might be seen as a sufficient criterion to enable the term 'copyright industries'. The term cultural industries can be used more or less synonymously with 'copyright industries'.

As long as culture goods were delivered in the analogue form, firms marketing cultural products were able to treat their products as immutable assets. Manipulation of the contents in such cases requires considerable skill and expense and even then the possibilities of making modifications are limited. But the shift from analogue to digital platform for the distribution of cultural goods make them into fluid ideas amenable to extensions, re-combinations and innovations. Once a text, song or film is converted into bits, those bits can be copied, changed, recombined and morphed to produce new works that are entirely made of complex layers of modulated samples. Digital files are inherently liquid because they are transmutable. User friendly interfaces have lowered the expertise required to appropriate digital culture products for further processing. Because they are digital, culture products have migrated from playback platforms (audio and video players) to computing platforms. Sampling from existing works modifying and recombining pieces and releasing the new derivative product is becoming a mode of cultural creativity in the digital age.

Digital culture products are a subset of digital information goods and as such possess some of their characteristics. This include high fixed cost of developing first copy, low cost of reproduction and distribution, indestructibility, non-rivalry, non-excludability and transmutability. Internet and other technical means of communication and exchanging information allow for an easier copying and distribution of information. The internet is a viable medium for online distribution of information goods. The list includes computer software, recorded music and entertainment, information services, archival data bases, electronic newspapers and scholarly journals among others. These goods can be stored in the digitalized form and distributed at relatively low-cost over the internet for innovation and economic growth. Culture content products are essentially knowledge based and knowledge creation is amenable to the economics of growth.

Cultural products in the digital form also exhibit the properties of quasi-public goods. When the products move from the analogue form to the digital form, consumption becomes increasingly non rival and exclusion is possible only at a high cost. Culture has become increasingly digital and many cultural artefacts have become liquid in the digital age. They are easily reproduced, easily distributed and amenable to endless modifications, extensions and combinations. Pricing based on marginal analysis would lead to near zero prices and so value based pricing would be necessary. The market dynamics as well as industry dynamics for information goods differ significantly from that of physical goods.

Cultural industries are placed at the leading edge of development into the future. Changing patterns of consumption and rising real incomes are leading to secular increases in the demand for cultural goods and services. The cultural industries are important content providers in the development of new information and communication technologies. The cultural industries foster creative thought and expression, which are important in innovation. The cultural industries have an important impact on employment levels. But most important of all, cultural industries are about creating more than economic value which make life of individuals and countries richer.

### 2.3 The performing arts as 'mixed services'

Cultural goods come under the category of mixed goods. They confer direct benefit on those who attend a performance but also offer benefits to the community as a whole. Therefore the government support of the arts might well be completely consistent with the desires of the entire community.

There are at least four types of general benefit which may flow from the arts. There is a prestige conferred on a nation by its performing arts. Many persons who themselves have no desire to attend an opera or a program of contemporary dance, take pride in the international recognition of their singers and the creativity of their artists. A second advantage, equally materialistic, is the advantage that the availability of cultural activity confers on business in its vicinity-the fact that it brings customers to shops, hospitals restaurants and bars. On a national level, distinguished performance arts organisations may serve analogously as a significant tourist attraction. A third, and a much more appealing type of social contribution credited to the performing arts involves future generations. The ability to appreciate the arts cannot always be achieved without a suitable period of training and acquaintance. People who themselves have not been exposed to a particular art form, feel it important that members of their family get such an opportunity. This same phenomenon has a significant extension to the posterity of the community as a whole. Provision for the future requires support for the arts in the present. The development of mature cultural activities of exacting standards of performance and of understanding audience cannot be achieved overnight. Funds must be provided today if the arts are to be kept alive for tomorrow. A Program to preserve the arts for posterity is a case for indiscriminate benefit and hence resources must be provided for that purpose. Though everyone is happy that the arts are preserved for the future generations, and are content to have funds spent for the purpose, there is no way in which the free market, unaided by public funds, can enable this.

Still another benefit provided by the arts is their educational contribution. If, as is generally conceded, a liberal education confers indirect and non-pricable benefits upon the community, the same must be true of the arts. If the teaching of the humanities makes for a finer civilization, for a richer community, for a better life for everyone, this is necessarily so with the arts as well: for without the arts, a vital element is taken from the humanities. Drama and music cannot be taught if their performances are not available for the student to experience. If the arts are reduced to an atrophied relic of ancient history, a critical component of our educational system must concurrently be lost.

If we agree that the performing arts confer general benefits on the community as a whole, in the manner described above or in other ways, we must conclude that in part and in large part, the arts are public goods whose benefits demonstrably exceed the receipts at the box office. It is a long standing tenet of economics that if the wishes and interests of the public are to be followed in the allocation of the nation's resources, this is the ultimate ground on which Government expenditures must find their justification.

### **2.4 Digital remix and culture industry**

Digital remix is one of the specific issues at the intersection of technology, economics and business strategy which will play a central role in the digital entertainment space. Remix culture is an open source approach where content product in the arts and culture industries are increasingly rearranged, manipulated and extended in the process of creating new works. Transmutability, the technical capability to easily change cultural content products that are encoded as digital data is an inherent property of digital goods. It makes the sources of digital culture goods open for reuse and remix. [Kauffman 2007]

Although digital and entertainment goods are an example of the general class of information goods, they are different in several important

ways. Culture goods require treatment as a separate category for several reasons. First, culture goods may be marketed by firms, but their meaning and their ultimate value is created only by their audience. Second, the value of culture goods is realized as a social process, not through individual consumption. Their value is largely created through shared experience. Songs and stories are situational and realize their values in specific cultures. The ownership and control of culture of one country belongs to that country and its people and culture goods belong in the public domain .Culture has elements of a public good and can be regulated by copyright. [Kauffman, 2004]

As long as culture goods were delivered in analogue form, firms marketing culture goods were able to treat their products for the duration of the copyright term as immutable assets, intellectual properties whose content was physically fixed in the analogue vehicles used in distribution. Manipulation of the content in the analogue form such as vinyl LPs were near impossible. Today, however the shift from analogue to digital platforms for the distribution of culture goods has made them less like frozen properties and more like liquid ideas appropriable for extension, recombination and innovation. [Katz, 2001]

Locked into a single protected form by both legal copyright and the technological barriers to reproduction and modification inherent in printing presses, vinyl LP and CD stampings, these culture and entertainment products were delivered in the past to a public whose main function was to passively consume. But those technological barriers no longer exist. Culture has become increasingly digital and many culture artefacts have become liquid in the digital age. They are easily reproduced, easily distributed and amenable to endless modification, extension and recombination. Once a text song or film is converted into bits, those bits can be copied, changed, recombined and morphed to produce new derivative remix works or new works that are entirely made of complex layers of modulated samples whose origins may no longer be recognizable to a casual audience.
Digital files are inherently liquid because they are transmutable. Creators have digital technology at hand to sample and remix. Artists with the urge to do so now have the technical means to create derivative works with ease. User friendly interfaces have lowered the expertise required to appropriate digital culture products for further processing. Because they are digital, culture products have migrated from playback only platforms [audio and video players], to computing platforms, where passive consumption has never been the form. Instead, artistic creators, equipped with powerful IT tools can, almost by nature of the digital medium, employ various 'rip, mix and burn' strategies in the creative process. Sampling from existing works [ripping], modifying and recombining pieces [re-mixing], and releasing the new, derivative product [via burning] is becoming a defining mode of cultural creativity in the digital age [Katz 2004, Lessig 2004].

Transmutation activities rest upon two convergent developments. First the culture industry has almost completely shifted from analogue form to digital formats [Alderman 2001]. Second the IT industry has increased the power of microcomputer programs to such a point that most forms of multimedia content can be manipulated with relative ease, using software and hardware available at low cost to virtually anyone who wants to acquire and learn to use it.

Because digital culture products are also digital information goods, they take on the qualities of such goods. These include high fixed cost of developing the first copy, low cost of reproduction and distribution, indestructibility, non-rivalry and non-excludability and transmutability. [Liebowitz 2002] Analyses of digital information goods under these conditions have concluded that non cost based pricing methods such as value based pricing are necessary since pricing based on marginal cost would lead to near zero competitive prices for digital products. [Kauffman and Walden 2001].

Changes in production resources have shifted power in favour of artists who increasingly use easily available digital recording technologies and no longer need to depend exclusively on record labels for access to recording and production capacity. Reduced transaction costs made possible by IT may lead to a move towards unbiased electronic markets with the result that record labels are being forced to reconsider their selling and distribution strategies. [Granados et al, 2006].

In peer to peer [p2p] file sharing networks and other consumer to consumer content sharing sites, consumers not only reproduce legally frozen works, but actually alter or transmute them in ways that improve their usability and performance. Songs from CD's are unbundled from albums, offered as single tracks, re-bundled in users custom made playlists, and re encoded as Mp3's. The industries defences against these modifications include legal restrictions on use and digital rights management. Some prior economic research suggest that this approach will not lead to optimum outcomes [Romer, 2002].

Current experimentation with digital culture products in the market place suggests that not only the risks but also the considerable potential benefits of transmutability need to be considered. The appeal of digital video recording for electronically storing programs include the ability to edit and customize programs. The old star wars series were made available to fans and they were invited to produce their own mashups using video mix technology. In computer gaming, fans alter or add to the content and code of their favourite games [via game mods or modding] and exchange their innovations with others. In weblogs, bloggers elect, manipulate and recombine images and snippets of news stories and other text from all over the internet, accompanied with their own thoughts and commentary. Podcasters do the same with audio and video content. In popular music, fans are acquiring digital music files and putting them on computers, PDAs iPods, cell phones car stereos and customized playlists and mix CDs. Clearly consumers are willing and prepared to do more with digital culture products than just passively purchase and consume them. Creators and consumers alike are

already engaging in transmutation and remix activities and continue to do so on an increasing scale and intensity.

There are mainly four levels of transmutation possibilities. Each of the four level implements some form of rip, mix and burn strategy. Ripping means accessing and sampling content for further processing by making digital copies of a selected part. Mixing encompasses the various forms of digital manipulation of sampled content. Burning refers to arrangements resulting in a final copy of the digital remix that can be distributed for consumption or serve again as input material for new remixes by someone else.

# 2.5 Economic theory and culture goods

There are two areas in economics that are particularly relevant to the issue of digital remix production. First, modern economic growth theory considers the recombination of knowledge component as an important factor for growth and development. Second, the economics of intellectual property rights analyses the impact of regulation affecting the transmutation activities, and remix methods relative to the appropriateness of value and innovation. Here, cultural content is conceptualized as one concrete form of knowledge.

Classical growth theory derived economic output models from the input factors of capital and labour and treated technology change and knowledge merely as a residual variable [Solow 1988]. However in the modern economy, the factors of production must also include technological change and the creation of, access to, and use and reuse of information and knowledge as endogenous variables [Baruaetal 2000]. Knowledge has been variously described as ideas, innovation, know-how, best practices and creative designs. This conceptualization can be extended by the contention that culture content products are essentially knowledge based goods. Knowledge creation and innovation can be extended to include cultural creativity and development. [Kauffman 2004]

'Learning by doing model' by Arrow first introduced explicitly the concept of organizational knowledge creation in economic analysis. [Arrow, 1962]. Romer's endogenous growth theory argues that knowledge based economics can achieve increasing returns with respect to firm specific investments in research [Romer1986]. Modern growth theories now emphasise aggregate knowledge accumulation and its beneficial impact.

While hard empirical data referred to in empirical growth theory i.e. actual growth in knowledge stock, is hard to come by, Schiff's [1971] analysis of macro-economic data from the period when Europe industrialized suggest that strong patent protection regimes may not be necessary to stimulate innovation. During 1850 to1907 both the Netherlands and Switzerland repealed legal patent protection. Yet innovation in Dutch and Swiss firms flourished and helped grow the national economies.

There are a few economic theories which try to explain the production and consumption of culture goods, taking full cognizance of the special characteristics of such goods, foremost among them being Baumol's cost disease. Since then there have been several attempts at explaining the peculiar nature of culture goods. But the present study concentrates on what has happened and is happening in music industry with the onset of digital revolution and finds the analytical framework of Schumpeter's theory of creative destruction most suitable for the purpose.

#### **2.6 Intellectual property rights economics**

Intellectual property rights has become an issue that is more central in the information economy than it ever was in the industrial economy. Farrell and Shapiro 2004. This is particularly true in the digital culture industry, where copyright questions significantly influence competitive conditions. The goal of copyright regulation is to strike a balance between productive and consumption efficiency. On the one hand copyright protection should enable content creators to appropriate enough value from their works to provide strong incentives for them to create new works in the future. On the other hand there is the intent to achieve social progress by making culture products easily available and to promote artistic development by limiting patent and copyright protection.

Reverse engineering has become an area in which important knowledge discovery is enabled by content reuse. The economic benefits of this kind of knowledge reuse have been acknowledged. Courts have granted extensive rights for content reuse in the case of reverse engineering technology products. (Samuelson and Scotchmer, 2004). Nevertheless many scholars are calling for reforms in patent law to enable better knowledge sharing. Similar arguments have been recently made in the context of sharing artistic ideas in producing culture products (Lessig, 2004,). Reverse engineering has always been possible and have been widely used by creators of music, movies, literature and so on. Copying characters, story lines, sounds and melodies has been the standard mode of artistic creation and the result was positive so long as there was new content creation. This kind of artistic inspiration and knowledge spill over and reuse has been considered positive, since it provided better choices for consumers. Copyright protects specific expressions of ideas and not the idea itself. But, in the digital age, the boundary between artistic ideas e.g. styles and patterns and their specific expression e.g. as sound recordings or movie images is no longer so clear, as creative artists use digital samples not as identical copies but as raw materials from which they craft and mould something that is often entirely different from the original. Digital remix approaches are similar to reuse of artistic ideas and hence they should not be entirely prohibited by copyright protection. Rather there should be an efficient process in place that provides profit oriented creators better access to cultural materials in a predictable and affordable manner.

# 2.7 Art and culture theory

For most of human history, art and music have been essentially public goods, appropriable to anyone who came across cultural artefacts. Music, for example ,was for centuries a good created, distributed and valued in common, not privately and the categories of creator and a consumer were not exclusive (Hauser1982). Musicians actively borrowed and modified each other's work and it was understood that they would do so. A new stage of the evolution of culture consumption was ushered in by a technological innovation in recording technology that made it possible not only to preserve a specific performance, but to market consumer products out of frozen moments in time. Before the advent of the phonograph, experiencing music was essentially a social act, since there was no alternative to live performance. With first the wax cylinder, then the wax record, vinyl LP, and CD formats the recording industry developed production models that created economies of scale and made cultural products cheaply available to mass consumer markets (Theberge1997).

As long as the technical means of creating and distributing were expensive and difficult to use, the recording industry was able to exercise a high degree of channel power over music products. During this period culture industry firms built comprehensive repositories of exclusive copyrights covering the works produced and distributed by them. Copyright ownership became a strategic resource in the culture industry, a resource that was strongly defended by digital technologies (Clemons and Lang 2003). A sampling of three notes from a copyrighted work can constitute infringement.

At present cultural industry has arrived at a new stage of development. The massive sharing and computing capabilities, among consumers and independent creators have affected the role of content ownership in the digital age. Social networks of online consumers are employing information technology not just to enjoy culture goods individually, but also to share their experiences and opinions with each other.

Art and culture theorists have long championed the idea of creative reuse and recombination of existing expressions. Such methods of artistic expressions is called collage. This innovative art form is seen generally as fundamental to thievery idea of modern art. The creation of new artwork based on existing cultural goods has been a universally accepted practice that artists in different disciplines have been developing since the turn of the century (Taylor2004).

## **2.8 Regulating culture content and remix**

In the US copyright law, ideas were not copyright able while specific expressions of ideas as knowledge goods like recordings are protected. However protection is mandated for a limited time only after which created works pass into public domain. In the digital age, copyright holders generally pull in one direction to restrict uses, while consumers and creators pull in the opposite direction by practicing wider and more flexible uses. The question of intellectual property rights policy has strong advocates on two opposing sides (Farell and Shapiro, 2004). The incentives school of thought favours a strong copyright protection scheme .The openness school, on the other hand prefers weaker copyright regimes that emphasizes the stimulation of creativity and innovation. They argue that artists are motivated to create even in the absence of strong copyright protection.

Romer, for example, warns that allowing the recording industry to control what devices and software are used to play digital music could slow down technological innovation (Romer, 2002). Similarly Boldrin and Levine (2002) argue that locking up ideas in order to create a condition of intellectual monopoly has hidden social costs, and that, better alternatives are available.

# **2.9 Implications for firm strategies**

Transmutation and remix strategies, whether sanctioned or not, are already occurring on a large scale, as a fundamental consequence of broad access to digital data and the power of information technologies. There seem to be no chance of the trend reversing. Rather, the growing availability and ease of use of multimedia will only strengthen it.

One set of opportunity centres on selling products which are complementary to the actual digital culture products. Both Apple and Microsoft have already taken steps to exploit this opening. Apples Rip, Mix and Burn and Microsoft's create something sonic Ad campaigns, explicitly encourage their customers to Mix and Mash up content. To take advantage of these new rip, mix, burn possibilities, consumers repeatedly upgrade hardware and bandwidth, acquire additional software and buy new gadgets that enhance their experience with digital culture. The combined markets for these complementary products are far larger and more profitable than the entire culture and entertainment industry. For IT and telecommunications, this means the more consumers adopt content transmutation activities, the more they demand necessary complementary products. So locking up content cannot be in the interest of the IT industry. Pressure to deregulate the cultural content industry is as likely to come from the IT industry as it is from consumer groups.

# 2.10 Globalisation and cultural industries

With the advent of technological revolution and the increased pace of globalisation, countries have expressed the fear that there would be large country dominance in international trade in cultural goods. European countries expressed the fear at the Uruguay round of talks and countries were allowed the freedom to impose quotas on the imports of cultural goods.

But, economists find from empirical study, that music trade is roughly proportional to country's GDPs: trade in music bears some similarities to the trade of physical goods: shorter distances and sharing a common language promote higher trade volumes, between countries and those relationships have been relatively stable over the last 50 years. There is also a large bias towards domestic consumption of music which has surprisingly increased in the past two decades. (Ferreira 2010). Increased home bias is positively associated with increase in local MTV channels and Internet penetration. The role of protectionist policies may also have resulted in the home bias. Over all, the fears of cultural domination seem misplaced (empirical estimates), 22 countries covering 98% of global music (Ferreira 2010).

Music, along with other reproducible culture products such as movies, is a differentiated product that is produced subject to increasing returns. The costs of recorded music, particularly as distribution technology has advanced, are almost entirely fixed. Consumers like variety, and trade makes a wider variety of products available to consumers in each country. Because of increasing returns, each variety is produced in one country. It is not clear which product gets produced where, but trade is balanced in the sense that the representative consumer's product bundle has proportional representation from each producing country.

Despite popular and policy maker concern over large country dominance, repertoire shares of the world market and world trade are roughly proportional to country's shares of world output. Second, despite this rough proportionality, consumers clearly prefer domestic repertoire over imported music. Third, imports favour repertoires from countries that are geographically closer and which share a language. Fourth, despite rapid improvement, in information and communication technologies over the past half century, the effects of distance and language have remained fairly constant. Fifth, perhaps surprisingly, the degree of home bias has increased sharply since the late 1990's. Sixth, evidence is provided (Ferreira2010) that this change occurs amid the adoption of the Internet, the regional splintering of MTVs and occasionally, the growth of domestic radio airplay quotas. Overall, it can be suggested that concern about cultural domination by large economies is misplaced for music.

#### 2.11 Music Industry viewed in the frame work of Creative Destruction

In explaining great economic upheavals, conventional economic frameworks have always been used. Political economy has always provided its own theoretical framework for the great techno economic surges like the industrial revolution (market economy model), the depression of 1929 (Keynesian model), the recession and stagflation of the early 70's (monetarism). Keynesian economics has served as Theoretical model, not only for the 29 depression, but for several other revolutionary changes. Marxian model, unconventional as it is, could still be used for explaining dynamic movements in society. It is against this theoretical backdrop that we make use of Schumpeter's analysis of innovations and creative destruction to explain the dynamic changes in music industry.

The technological swings rocking the music industry, as the aftermath of the ICT revolution could be analysed in the framework of the neo Schumpeterian model. The cost escalation and the ensuing problems in the entertainment industry was first analysed by Baumol and Bowen in 1966 which is considered as the beginning of cultural economics. Baumol and Bowen models deals with the cost structure of the music industry especially with its focus on escalating costs of live performances. The subsequent studies which followed Baumol's cost disease dealt with the question of subsidization of arts, the debate initiated by Mark Blaug, Peacock, Moore and others. The present study has its focus, not on the cost structure of the music industry but on the dynamic changes that have taken place in the music industry as a result of digital revolution. And as such, we cannot analyse it with Baumol and Bowen model. The ideal framework for the dynamic changes in the music industry seems to be the Schumpeterian model of creative destruction. Growth is a dynamic process which passes through instability and destruction of the old.

Creative destruction refers to the incessant product and process innovation mechanism by which new production units replace outdated ones. It was coined by Joseph Schumpeter (1942), who considered it 'the essential fact about capitalism'. Schumpeter's theory sets forth the idea that the vital force behind capitalism is innovation, and the entrepreneur willing to introduce it. His thesis was that the introduction of innovations was responsible for both the progress and the instabilities of capitalism. Those instabilities he attributed to the principle of "creative destruction," a process in which new technologies, new kinds of products, new methods of production and new means of distribution make old ones obsolete, forcing existing companies to quickly adapt to a new environment or fail.

Schumpeter pointed out that, the essence of capitalist economies was, as Marx had recognized before him, the entrepreneur and the innovator: the risk taker who sets in motion new and more-efficient ways of making old or new products, and so produces an economy in constant change. Marx saw that the coming of capitalist economies destroyed all feudal, traditional, and patriarchal relationships and orders. Schumpeter saw farther: that market

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capitalism destroys its own earlier generations. There is a constant "process of industrial mutation that incessantly revolutionizes the economic structure from within, destroying the old one and creating a new one. This process of Creative Destruction is the essential fact about capitalism."

Schumpeter's analysis is not like a traditional equilibrium narrative, all of which end at the same point. It is a growth story, and as such more open ended, uncertain and path dependent. Marx too wrote in the growth genre. Marx's determinism- wherein capitalism necessarily seeds its own destruction- found room for a hero, the radical intellectual. It is the radical intellectual who can pierce the historical veil and see the truth of historical inevitability. Schumpeter's hero, of course, was the entrepreneur the agent of innovation, and Schumpeter said the pivot on which everything turns. Schumpeter's now famous theory of entrepreneurship was developed first in Theory of economic development (1911).

Creative destruction and the dynamic process of innovation forms the major force used to explain the vitality of capitalism by Schumpeter. An innovative idea, be it a new technology, a process or a product or even a new marketing technique can move forward efficiently, only if the debris of the old are swept away. Innovation can proceed smoothly only in this newly created path. Thus, creative destruction means the incessant product and process innovation mechanism by which new production units replace outdated ones. Joseph Schumpeter considers this the essential fact about capitalism. Schumpeter's theory puts forward the idea that the dynamic force behind capitalism is innovation and this is attributed to the class of enterprising entrepreneurs who are imaginative and willing to take risks. The phrase "The perennial gale of creative destruction" captures his conception of the constant and continuous workings of the dynamic and entrepreneur driven capitalist system, in his 1942 work, "capitalism, socialism and democracy".

Experimenting with new economic phenomena requires new economic thinking in a creative way and seemingly also requires taking a

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distance from traditional economic theory and its basic assumptions. It means thinking beyond our manufacturing and technology biased analytical apparatus, which is a direct consequence of the dominance of the neoclassical economic framework. (Gallouj, 2002, 145). As the fabric of today's industrialised economies is mostly made of service activities, our analytical apparatus should be better attuned to understanding services and innovation in general, rather than manufacturing and technologies. The most important lessons to be learnt from scholars focused on the study of innovation in service activities such as Gadrey, Gallouj and Miles is the necessity to focus on the changing relationships between businesses that are linked in the value chain of an industry and between users and consumers. On the one hand the relationship between producer and consumers (the manufacturing perspective) follows the line of quantities and prices. The focus is on the object of relationship rather than the relationship itself. On the other hand, relationship between providers and users (service perspective) is more specific, contingent and can take complex forms. Moreover, in this case, it is also important to understand, how innovations are likely to change this relationship. Examples of these complex and contingent relationships in information industries include service agreements regarding the supply of IT support services and contracts regarding the syndication of broadcasting rights.

Schumpeterian and neo Schumpeterian economics seem to offer a better framework for analysing the revolutionary changes that have been occurring in the music industry in the wake of ICT. There is a great surge of development or a techno economic paradigm. Institutional changes become essentials for driving investments from short term to long term opportunities for reaping the benefits of technical innovations and as a result, economic and social wellbeing. The effectiveness of traditional economic theories as prominent tools for understanding the modern evolving music industry is challenged.

Neo Schumpeterian economics tells us that new Theoretical frameworks, aiming at explaining the evolving industries should learn from industries that have emerged as success stories in the past 20 or 30 years. Schumpeter argued that competition would take place dynamically through new technologies. Changes in technology can catch out the incumbent firms in an industry, making way for new entrants that understand and can manage the new technologies better. The recent history of the music industry, which was unable to handle the digital delivery of music directly to customers, is an inability to grasp and benefit from new technology. Economists call this "technological lock in", meaning that once a firm has invested in a certain technology that is embodied in its capital equipment and its human capital assets, there will be a significant cost of switching to newer or different technology. The high outlay of investment in many information goods industries exacerbates the switching costs to a firm and locks it in to an older technology, which eventually makes its costs too high or its products too old fashioned to compete successfully.

Technology as the means of reproducing and copying words, sounds and moving images is basic to the publishing, sound recording, film, and video industries, since without it, they could not have developed in the first place, and they are subject to ongoing technological progress. Process and product innovation have been very important in the development of creative industries. The digitalisation of content into what Shapiro and Varian have called "bits and bytes" and the development of computers and Internet as means of distributing them have now, radically altered many economic aspects of creative industries. Shapiro and Varian characterise the creative industries as part of the wider information economy, which displays certain economic features: high fixed or sunk costs combined with very low or even zero marginal costs, reflecting economies of scale, of synergies between similar products, scale economies in advertising and marketing them and the pooling of risks in similar undertakings and possible network economies that increase consumers' willingness to pay for a product. The Internet enables delivery of customised bundled services and discriminatory pricing for identical products and services and also the sale of different versions of the same item, a phenomenon called versioning according to Shapiro and Varian.

The great ICT revolution, which seems to be a continuing one, has revolutionised the world. It has created a new elite, has made many billionaires and paupers, has revolutionised our day to day life, but still, there has occurred destruction of the old. There has been creative destruction when innovations have been made. New technology has been created making the old technology obsolete and redundant. Music industry is one among the several industries that have been affected by the ICT revolution. The industry has been transformed; new beneficiaries and stakeholders have been created. Many establishments have closed down. This is the scenario which could rightly be explained with the help of Schumpeter's theory of creative destruction and innovations.

#### 2.12 Creative destruction of Music Industry

The installation phase of a great surge of development is driven by the Schumpeterian process of creative destruction. This occurs when a large number of technical innovations, initiated by the development of a key factor leads to creation of new technical systems and spreads to the entire economy. The established branches, either evolve, reorganise or adapt to the new innovation logic of the time or fade out and disappear in competition. (Perez 2009). Innovations and the spread of digital technology have caused massive changes in music industry. There have been many transformations, from the period of vinyl records to the present day world of MP3s and peer to peer networks. Schumpeter's analysis of creative destruction can be used as a frame work to analyse the transformation in music industry.

Up till the 1970's vinyl records was the only music format available for purchase. For over sixty years, music fans bought their pre-recorded music almost exclusively on vinyl. By the end of seventies gulf returnees popularized cassette players and cassettes. Most of these were Japanese cassette recorders. In 1979 came the launch of the Sony Walkman. Prior to the advent of the Walkman, only AM/FM radio was portable. The Walkman provided the first truly moveable and convenient way for music fans to take their own music with them. Records gradually disappeared and were replaced by cassettes.

By 1980's Cassette sales skyrocketed. Sales of cassettes increased from \$1.2 million in 1980 to \$ 12 million in 1986 to over \$21 million in 1990. Exports of Indian made tape recorders increased from 1.65 million rupees worth in 1983 to 99.75 million in 1987. By the late 1980's, Indian consumers were buying around 2.5 million cassette players annually. Philips, the largest local maker of cassette recorders in the early 1980's, sold 72,000 units in 1983 and 395,000 units in 1986 introducing seven new models in the mideighties. It became one of the dynamic sectors of the economy. By 1991,India became the second largest manufacturer of cassettes, marketing about 217 million cassettes, surpassing China (125 million), Britain (83 million), the first being United States (446.2 million) (Manuel 1993)

The development of cassette technology brought about structural changes in the music industry in India. By the mid1980's cassettes accounted for 95% of the recorded music market (Manuel 1993). Correct estimates are not found about the number of cassette producers in India in the eighties. A survey conducted by Venus records estimate it to be more than 250. HMV remained the largest music company. By mid-1980s T series emerged as the leading producer of cassettes. They produced cover versions of HMV's classic songs. T series is alleged to have progressed by resorting to pirated versions of film songs originally released by HMV (Manuel 1993). Music India Limited, Venus records and tapes, Music today, TIPS music were some of the largest producers of music in India during this period.

CDs emerged by mid-90s as an alternative to cassettes. The quality of music was better in CD compared to cassette. But CD was costly, having a price range of Rs 300 to 400 depending upon the type of CD, whereas the price of a cassette was around Rs 50. CD players were also expensive with a

price of about Rs. 5000. As a result, purchase of CD remained confined to the upper classes. The supremacy of cassettes remained unchallenged.

The end of 1990s witnessed the emergence of MP3 technology. MP3 had large storage space and was less costly. A CD contains a maximum of 10 to 12 songs, but an MP3 can store up to 200 songs or more. As compression technology is used in MP3s the quality of songs is affected. Though CD could not make much of a dent in the cassette industry, the spread of MP3s challenged the existence of cassette industry. Cassette sales began to decline by mid-2000 and by 2010 cassettes almost disappeared from music shops. Music shops which were filled with cassettes began to stock only CDs and MP3s. Cassette players disappeared. New and improved versions of CD players emerged.

The rise and fall of cassette industry can be seen in the Schumpeterian frame work of creative destruction. Creative destruction refers to the incessant product and process innovation mechanism by which new production units replace outdated ones. This was what has happened to the cassette industry in India. With the advent of digital technology cassettes became obsolete. The producers of cassettes either had to close down production or had to adapt themselves to the new technology. An industry which reigned supreme for over twenty years disappeared without a trace. India who was the second largest producer of cassettes in the world witnessed the collapse of cassette industry. Now we can hardly see a cassette in a music shop. Cassette players are no longer available. Those producers of music who adapted themselves to the new technology, survived, the rest of the producers perished under the onslaught of new technology.

The music industry was heavily transformed by the emergence and distribution of new ICTs i.e. the technical innovations that fuelled the process of creative destruction. Overall, the production of music has increased as new technologies provide a better support to professional and amateur creative talents than the old technologies. The increase in music production is well matched by a growth of consumption, since music is now experienced in many different forms and through a variety of devices.

There is a large unexploited demand for music from lesser known artists or new artists and dynamic pricing may help the artists and reward the hard core fans. The main stakeholders in the music business have still a lot to learn from thirty years of creative destruction. The value chain of the industry has changed: there is more competition at the end of the value chain for user's attention. Users can actively experience the same music in different forms and therefore the sale of records is destined to produce a smaller value for the industry than in the pre digital era. The multiplication of forms of packaging has contributed to move the core value generation up the chain. Instead of being a record selling activity, the music industry is now a business that provides a variety of music experiences to its users; and the more unique is the experience, as it is the case of live performance, the higher is the price the consumers are willing to pay.

Therefore, copyright owners and distributors should lower their expectations of higher margins from the sale of records and in addition to looking for ways to limit the proliferation of unauthorised copies of records, they should look into a better tuning of their price structure and into rebalancing prices depending on forms of delivery and the media exposure of the artist. (Rogers, Sparviero 2011). Perhaps a better strategy would be to, differentiate more the price of records between artists and make it proportional to the price the audience is willing to pay for their live performances i.e. the core activity of the sector. Or, the music industry could follow the steps of other industries that sell services and goods online, and make the price rise along with the quantities bought by the audience. The price of records of relatively unknown artists would remain low until they become famous.

The deployment phase of a great surge of development (for example, the ICT revolution), which is the phase that follows, is a period of social and institutional rather than technical change. It is a period as Perez (2009), defines it of 'creative destruction'. During this period, new theories emerge, values change and regulation is likely to be more accepted. It is a period when change is more demand driven rather than supply pushed. The music industry's consumer base has already indicated what is expected: more music, better variety and lower prices. So far, the music industry's response has been to brand the unauthorised use of music files illegal and claim the lack of receipts for their already very wealthy established artists and their large corporation. Such an attitude does not buy a lot of support even with the claims that poor artists are suffering. Great benefits, on the other hand will be drawn by the ones that will a adapt and realise that they are no longer music manufacturers, but service providers, which are expected to better tailor their output for different audience segments.

# 2.13 Conclusion

This chapter introduces cultural economics and traces the development of cultural economics. It discusses the pioneering work of Baumol and Bowen and the major studies that have led to the development of cultural economics. Cultural economics adapts economic ideas to the specific features of the cultural sector. Music industry is seen in the cultural economics frame work. Schumpeter's theory of creative discussion can be applied in the case of music industry. Digital revolution has caused the destruction of Cassette industry and paved the way for CDs, DVDs and MP3s. Impact of technological changes can be seen in the structural transformation of music industry from a physical to digital platform.

# CHAPTER - 3 HISTORY OF MUSIC, EVOLUTION OF MUSIC INDUSTRY AND COPYRIGHT LAWS

# **3.1 Introduction**

How far back can we trace the origins of music. At one level, music could be as old as human life itself. The sound of the sea, of wind, of birds' song must have enthralled human beings even before they acquired civilization and their imitations of these sounds must have been some kind of music Here music simply stands for pleasant sounds enjoyed by humans as far back as human history. But music in any real or scientific sense must be presumed to have started only when sensible differences of pitch coexist with definite groupings of notes under some recognized principle or order.

The history of music treats chronologically, the direct development of modern civilized music and can be divided into several stages – the pre historic, primitive, Semi civilized, ancient, medieval and modern.

# **3.2 Prehistoric music**

Prehistoric music technically includes all of the world's music that has existed before the advent of any historical source. Music must have been in existence for at least 50000 years, and must have predated writing. Music was not a free art by itself but treated as complementary to poetry, dance and religious rituals. The laws of musical practice were largely under the control of the priestly class. Music was crude and simple and harmony was unknown. The most direct evidence of musical practice is derived from the representations of musical instruments and players upon the Assyrian and Egyptian monuments. The music of Hebrews was considered divine service and not art.

The music of the Greeks is distinct by its greater refinement and scientific elaboration. They developed a rational scale system based on acoustic laws and a system of notation which has survived. The Greek musical system was the precursor to that of the early Christian church and the line of descent is unbroken from Greece, through Rome, to the middle ages. The Greek idea of the arts of poetry, music and action expressed itself in the Athenian theatre out of which came the modern opera. Greek music in the classical age was reserved and delicate. Rhythm was more studied than tune. Lyre and the flute were the typical musical instruments.

## **3.3 Primitive or Barbarous music**

It includes the music of savage people, especially in Australia, the Pacific islands, the East Indies, Central Africa and the America. Music in some form appears among all savage races [Dickinson, 1946]. They are all of them distinct but have some common characteristics. Primitive musical attempts are a kind of play, a diversion, or an attempt to give an outlet for surplus energy keeping vocal and muscular powers in healthy condition. Music always has marked rhythm; the basal rhythm may be accentuated by singing and by instruments. Rhythms vary much and are often intricate. The melodies arise spontaneously accompanying rhythmic noises and become definite through the influence of instruments. In some cases melodic progress results from the habit of free improvisation; in others from ingenuity in using instruments. The instruments often used are gongs, rattles, drums, whistles, horns etc. Instruments usually accompany dancing and not singing. Rudimentary harmony is often present. Tonality is often traceable .Some tribes -the Africans and Australians -show greater capacity for this. In general, music is a social institution, being cultivated as a centre of common interest.

Music passes over from the primitive to the semi-civilized stage along with other activities of an evolving society. The change depends chiefly on the increase of deliberate reasoning and persistent care in the analysis, ordering and improvement of musical processes and implements. Here ,elements of true art emerges, with its characteristics of sustained practice, heightened dexterity, calculated effect, regulated procedure, established works and styles, recognized artistic classes etc. Why some races have crossed this line and others have not is an unsettled question.

The category includes the music of people like the Chinese, Javese, Hindus, Persians, and Arabians etc. Music is known to have achieved artistic development, without much influencing modern civilized music, in China, India, and Arabia; also in Japan, Java and Siam, Persia and perhaps Mexico. [Dickinson 1946.] In all these countries are found systematic musical study, many and often intricate instruments, more or less recognized compositions, a music profession and often much discussion of musical acoustics and aesthetics. The understanding of these systems is however imperfect. In China, music is held to date from at least 3000 BC, considered to be superhuman in origin and have been under imperial regulation. However, except in certain religious rites, it is chiefly used among the lower classes, in the streets and theatres. The scale is usually pentatonic, but both diatonic and chromatic forms are known. Twelve modes are distinguished with something of tonality. The rhythms are duple and usually conspicuous. The notation consists of letter like characters. The rudiments of harmony are known but seldom applied. Noisy, shrill and harsh effects are popular, forming a jangle disagreeable to western taste. The instruments are many and interesting like bells, drums and gongs, clay whistles flutes, pipes, trumpets etc. the literary comments on music often resemble those of the west, possibly indicating past contacts with Hindu Greek and other writings.

Indian music predates western music by almost 2000 years. [Sjoberg and Cain, 1971]. Highly standardized and formalized, it possesses many parallel elements to Western music like rhythm, melody and scales and structural sections. Indian music has its own unique elements. When one considers the hundreds of years that Indian music has functioned without the necessity of written notation one wonders whether western music is the most advanced music or simply the most commodified musical art. [Max Weber, 2001].

Using India's traditional music as a counter system to western music, one can see that it is a highly developed art form. While formalized and highly structured, it has not produced the rationalised and bureaucratized outcomes of western classical music. [Weber 2001] The importance of the master, and thus his trained students, has kept the musician an important component of Indian music.

In India, Music is fancifully ascribed to a creation of Brahma. It has been much cultivated especially in religious and literary circles. The scale, beginning perhaps on a pentatonic basis, early expanded to a heptatonic form, and from there to the present division of octave into twenty four 'shrutis'.No less than thirty six modes are enumerated; and there are certain traditional melody types [ragas] which are technically demanded in connection with particular subjects or styles of song. Melody embellishments are frequent, but harmonic effects are slight. The rhythms are remarkably numerous, tending to triple varieties. The most popular effects are those connected with dreamy, imaginative or sensuous lyrics or with sprightly or voluptuous dances. Indians are sensitive to tonal beauty [Dickinson 1946], and often appreciate and adopt simple European music. The instruments are many belonging to every class like the Chinese but having greater delicacy and scope especially in the category of stringed instrument group. The most characteristic are the veena, a seven stringed lute, the tambura, the sarangi; drums and various tambourines, gongs, bells, flutes, bagpipes and trumpets.

#### **3.4 Ancient Music**

In the history of music, certain systems of music are important because of their direct connection with recent and more artistic music. Medieval music grew out of Early Christian music, and this in turn was on the one hand derived from that of Greeks and Romans and on the other from that of the Hebrews. Back of these ancient styles lay those of Egypt and Assyriya. The literary and scholarly continuity from ancient music to modern is unbroken. Of the ancient systems, Greek is by far the most extensive and notable.

The history of Greek music is bound up with the history of Greek literature. There are mainly three periods- a. the mythical period b. the classical period c. the period of foreign extension when Greek culture flourished in Alexandria and Rome. In the early period, guidance in music was attributed to superhuman personages like Appollo. Dancing was common and was musically accompanied. Probably, music was used in all social and religious festivities. The scale was apparently rudimentary, with some recognition of octave and of the tetra chord. Lyres, flutes and trumpets were used .In the classical period, music advanced rapidly, partly because of Egyptian influence and partly because of general intellectual awakening in Greece. Poetry in every form became popular. The famous Greek tragedies of Aeschylus, Sophocles and Euripides belong to this period and the connection between poetic lyrics and music was singularly close. This connection has been historically influential up on the development of modern dramatic music.

In the classical period is found the beginning of a theory of music. Acoustics developed under Pythagoras. The nature of music and its moral influence was discussed by Plato. Theoretical knowledge was much advanced by Aristoxenus. The Aristoxenians counterbalanced Pythagorean dogmas by insisting that taste should fix practical rules. Tones were brought together by rational principles of tuning. A tonal system emerged which was not uniform. Series of tunes were conceived downward and were arranged in tetra chords. Tones were accurately designated by a letter like notation. Rhythms were various and often intricate. During the classical period, the use of instruments developed to an art. The third period was characterized by the decline of original poetry and its growing dissociation from music, and a tendency to lower music from its dignified position to a mere form of amusement. The transition from the ancient to the medieval styles was due primarily to the rise and spread of Christianity. The leading centres of Christianity were under the direct influence of Greek music. Christian music began on a distinctly Greek foundation, though modified somewhat by Hebrew traditions and Roman usages.

Actual styles could only be conjectured up on. Music appears to be an adjunct to prophetic ecstasy and to the rites of public worship. Out of this latter use, developed, the extensive poetic literature of the psalms. Song was mostly in unison, loud and harsh in tone, with a strong rhythm, rude and limited in range.

## **3.5 Medieval Music**

It is not until the time of some of the ancient civilizations that writings and sometimes pictures and artefacts have recorded the use of musical instruments. Over the years, many human endeavours have had the benefit of language. In particular; a written language can convey a lot of information about past innovation. Music could not be presented in the ordinary language. Only with the development of music notations could something be recorded of past music. This is the reason why the music of East Asia and India which goes back to 2000 BC got ignored in the musical history of the world.

Medieval music includes the gradual advance of early Christian music through various experiments to a systematic, expressive and progressive fine art from about 100 to 1600 AD. This development was wholly confined to Europe. During most of the medieval period, covering the Christian era, there existed two separate streams of music-one by technical musicians and the other comprising the common people. The former was largely based on ancient music, and was scholarly; the latter was spontaneous, irregular and simple. The literature now belongs to scholarly and sacred music and gives the impression that there was little else; but recent investigation indicates the great historical importance of popular music. In the 16<sup>th</sup> century the two lines of development came together, and popular music suddenly began to dominate all further progress.

The musical development of this period was confined to Europe, Italy, France, Germany, Netherlands and Britain. In the 16<sup>th</sup> century, after the invention of music printing, there emerged a cosmopolitan quality which made the centres of music to shift and change. [Gerbert, Fink 1896.]

During the first ten or eleven Christian centuries the musical progress was slow and the amount of artistic achievement small. The search was for ritual music for public worship and a beginning was made in the Gregorian style. In connection with this, important advance was made towards the theory of scale, towards a practical notation, and towards the making of organs. Singing in public worship was usual, as is shown by casual references in the New Testament. For Jewish converts this was a continuation of the psalmody of the synagogues. The new Christian styles were taken from Hebrew or Greek music. As Christianity became the state religion under Emperor Constantine, there was need for uniformity of creed and ritual. A distinct style emerged –the Gregorian style-which was destined to last till the reformation. The earliest recorded Christian monophony was Plain song with its single unaccompanied vocal melody. This was the first and foremost musical style of Italy, Ireland, Spain, and France. The most important fact in the history of music of the church in the first four or five centuries is the transfer of song from the laity to the choir, composed of clerics. A change occurred with Emperor Constantine officially accepting the church. Progress occurred in church music keeping pace with the growth of ceremonialism. The music of the Italian church became a liturgics music; its methods borrowed from eastern practice. Evidence of this is seen in the beginning of antiphonal singing in Milan. Anti phonal psalmody was introduced into Rome by pope Celestine 1. The history of the papal choir goes back to the 5<sup>th</sup> century. The first singing schools were established in this period and by 6<sup>th</sup> century the Roman liturgy was completed with musical setting. His entire ritual of the Catholic Church was originally rendered in a peculiar form of musical utterance known as Plain song, Gregorian chant or choral. The liturgics chant is therefore as ancient and universal as the liturgy itself. It is the only form of music that is officially recognized by the church. Chief among the simple chants are the 'Gregorian tones', used in the singing of psalms. The origin of the Plain song, attributed to pope Gregory 1 who is supposed to have compiled them has now been successfully challenged by Gerveart, director of the Brussels Conservatory of music.

The system of 8, afterwards 10 modal scales-the so-called Gregorian scales are the foundation of the whole of medieval music down to about 1600. The slowness of musical progress in the early Christian era and the difficulty

of identifying the original form of the chant melodies are due to the crude form of the notations used during the period. The music of the church passed through 3 phases- first the liturgical chant, second the contrapuntal unaccompanied chorus based on the Gregorian key and third the mixed solo and chorus music now dominant in the church music. Mozambic chant, Byzantine chant, Armenian chant, Brneventan chant, Ambrosian chant and others were various forms of plainsong which were all monophonic. Many of these monophonic chants were written down and contain the earliest music notation to develop after the loss of the ancient Greek system. In the early 9<sup>th</sup> century, further development occurred in the form of the organum tradition by adding voices in parallel to Plain chant melodies. The earliest organum merely augmented the texture of the melody by adding a second voice in parallel octaves. By the 11<sup>th</sup>century, the organum had developed a style called free organum, evolving into a polyphonic tradition. Weber (2001) applied a methodology of researching music notation in the Roman Catholic Church to uncover the evidence of rationalization .The data he found proved his theory that it was indeed the church monks who standardised notation to teach and pass on liturgical music.

Western classical music history is traditionally understood as beginning with plain chant, the vocal religious practice of the Roman Catholic, Church. Plain chant was transmitted by memory until early 9th century, when the holy Roman emperor arranged for it to be notated Limited in pitch range and monophonic, plain chant was sung largely by monks, nuns and clerics rather than professional singers. Gregorian chant is a monophonic melody (no harmony) liturgical that dates from the 18th century. Musical notation allowed the church to disseminate the Gregorian chants throughout medieval Christendom.

Early (10th century) church policy held that musical instruments were inappropriate for use during worship services. Even so, pipe organs came to be used in liturgical music. Elfeg, Bishop of Winchester, procured an organ for his cathedral, having 26 pairs of bellows. It is possible that the development of the pipe organ led to the invention of polyphonic music; on the organ, it was possible to playchords.

Early polyphony used two melodic lines simultaneously at parallel intervals, usually at the fourth, fifth or octave. The resulting hollow sounding music was called organum and very slowly developed over the next hundred years.

The earliest major repertory of western secular music that have come to us is that of Troubadours and traverses, French poet musicians of the Middle Ages who set their own poems to music. The majority of the resulting songs were about love, often the fictionalised abstracted courtly love of a male character for a noble woman above his social level. Because Troubadours songs were notated as simple rows of patches without rhythm, the rhythms and instrumental accompaniments of performances are based on conjecture. Images of Troubadours in medieval manuscripts have offered hints as to what instruments were used.

The history of music from the 11<sup>th</sup> to the 18<sup>th</sup> centuries is that of the slow mastery of the art of pure vocal counterpoint. Beginning with the two part descant, there is the discovery and application of the various methods of interweaving melodic parts so as to produce a smooth coherent musical tissue.

#### **3.6 Modern Music**

This includes the whole highly artistic development from 1600 to the present. This period, by far the largest and most important of all, can be further subdivided in various ways by centuries, by countries, by styles, or schools.

## 3.6.1 The Renaissance

Generally considered to be from AD 1420 to 1600, the renaissance was a time of great cultural awakening and a flowering of the arts. With the rise of humanism, sacred music began for the first time to break free of the confines of the church ,and a school of composers mastered the art of polyphony in their settings of sacred music One of the early masters of the Fleming style Was Josquin des Prez. These polyphonic traditions reached their culmination in the unsurpassed works of Giovanni da Palestrina. Secular music also thrived during this period and instruments and dance music was performed, if not always written down. It was left for others to collect and notate the whole variety of irrepressible instrumental music of the period. The late renaissance also saw in England, the flourishing of the English madrigal, the best known of which were composed by such masters as John Down land, William Byrd, Thomas Morley and others.

The renaissance version of the trombone, first appeared in c.1500. Renaissance bass cornet, the serpent, appeared in c.1590. The newer instruments were more nimble and gave musicians greater control, richer tone and increased range.

## **3.6.2** The Baroque Age

Named after the popular ornate architectural style of the time, the Baroque period1600 to 1750 saw composers beginning to rebel against the styles that were prevalent during the high renaissance. This was a time when the many monarchies of Europe vied with each other in pride, pomp, and pageantry. Many monarchs employed composers at their courts, where they were little more than servants, expected to churn out music for desired occasions. The greatest of the period, Johan Sebastian Bach, though of this category, was still able to break free and produce first class music and in so doing succeeded in creating an entirely new style of music.

It was during the early part of the 17th century that the genre of opera was first created by a group of composers in Florence, Italy and the earliest operatic masterpieces were composed by Claudio Monte Verdi. The instrumental concerto became a staple of the Baroque era, and found its strongest exponent in Venetian composer Antonio Vivaldi. Harpsichord music achieved new heights due to the works of such masters as Domenico Scarletti and others. Vocal and choral music reigned supreme and culminated in the operas and oratorios of German composer George Handel. As new orchestration techniques developed, the use of the harpsichord as an anchor came to an end. People heard music in church, saw it performed in live concerts, and played it themselves if they could afford to. There was no widely deployed technology available to record/ replay music until late in the 19th century.

Royal families could patronise the arts by supporting composers; churches could hire composers to write religious music to be included in services.

# 3.6.3 The classical period

From roughly 1750 to1820 artists architects and musicians moved away from the heavily ornamental styles of the Baroque period, and embraced a clean uncluttered style they thought reminiscent of Classical Greece. The newly established aristocracies were replacing monarchs and the church as patrons of the arts and were demanding an impersonal but tuneful and elegant music. Dances such as minuets and gavotti were provided in the form of entertainment for serenades and divertimenti.

At this time, Vienna, Austria became the musical centre of Europe and works of the period are often referred to as the Viennese style. Composers came from all over Europe to train in and around Vienna and gradually they developed and formalised the standard musical forms that were to predominate European musical culture for the next several decades. A reform of the extravagance of the Baroque opera was undertaken by Chrisoph VPN Gluck. Johan Stamitz contributed to the growth of the orchestra and developed the idea of the orchestral symphony. The classical period reached its majestic culmination with the masterful symphonies, sonatas and string quartets by the three great composers of the Viennese school Fran z Joseph Haydn, Wolfgang Mozart, and Ludwig Beethoven. During the same period, the first voice of the burgeoning Romantic musical ethic can be found in the music of Viennese composer Franz Schubert.

In the meanwhile, music must have escaped from churches, and temples and courts must have ceased their patronage. Instead, demand for music on a large scale must have prompted the generation of music attuned to the tastes of a large populace. It must have, then, created the need for mass production of music. From here, we can trace the history of the music industry.

# **3.7 Evolution of Music industry**

Music must have evolved into an industry with the beginning of mass distribution and the commercial use of music. We can thus speak of a music industry from the moment that music production and consumption severed ties with the context of the feudal court and church. Even though the printing of sheet music was invented in 1501, this alone did not constitute an industry as such. It was merely a business, and the technology of copper engraving only allowed a few manually produced copies for a few elite consumers. The technology of the period did not allow reproduction of music on a large scale. This has prevented the development of music into an industry. Technical developments along with musical experiments made reproduction of music possible which slowly led to development of the production and sale of music. Its reliance on religious or court patronage came to an end and its potential as an industry began to be recognized.

The foundation of the industrial basis for the music industry only resulted from the inter play between a blossoming music publishing business and an emerging public music concert - culture, in the 18th century. Concert and opera promotes arranged successful public performances of music; music publishers subsequently distributed these performances in forms of sheet music and adaptations for various instruments. Consequently, music publishers and concert promoters assumed the function of institutional gate keepers who decided which music reached the public and in what form, thus determining the parameters within which creativity was able to unfold. (Tschmuck 2001). They did not just control artists but also dominated the subsidiary elements of the value added chain. The steady increase in musical instruments production especially that of piano would have been unimaginable without the exponential growth of repertoire available on sheet music.

# 3.7.1 Phonograph

The invention of phonograph in 1877 by Thomas Alva Edison did not get due attention from the producers of sheet music. Edison himself did not realise the commercial potential of phonograph. This is all the more remarkable since shortly after Edison presented the phonograph to the public, the possibility of music reproduction was indeed recognized but not seriously considered. (Tschmuck 2006)

On April 24, 1878, Edison founded the Edison Speaking Phonograph Company. To this end, he assembled financiers who were all closely connected with the telephone industry, which just like the recording industry was still in its infancy. These financiers regarded the future of the phonograph to be in its ability to store phone messages and in its use as an office machine - essentially as a Dictaphone - to store speech. In 1880, Alexander Graham Bell founded a machine called the "Graphophone," a modified version of the Edison-phonograph. The Graphophone patent was recorded on May 4, 1886, and Bell, together with Tainter, founded the Volta Gramophone Co., which was taken over in 1887 by a group of investors and renamed American Gramophone Company. The Pacific Phonograph Company, which owned the West-coast distribution license for the Edison-phonograph and Graphophone, was the pioneer in the business with the jukebox's precursors. In 1889, Louis Glass, the company's chairman, added a coin-in-the-slot mechanism and four headphone pairs which were featured as music boxes. For a nickel per listener per play, patrons could avail themselves of the sounds of a pre-recorded 'entertainment' cylinder. Other distribution companies of the North American Phonograph joined in the profitable business of the "coin-in-theslot" machines. Saloons, amusement parks, and retail shops developed a steady demand for the music box.

## 3.7.2 Graphophone

In January 1902, the Graphophone factory in Bridgeport shipped the first machines, called Columbia Disc Graphophone, together with the matching records. The record thus established itself as the standard of music storage. The year 1902 witnessed the birth of the phonographic industry as part of the music industry.

The companies of the phonographic industry were already globally acting corporations around 1900. Between 1902 and 1910, the U.S. and European companies expanded their business activities into the most remote regions of the world. The phonographic companies built new record plants in regions that promised a particularly high profit. In 1910, for example, the Gramophone Company operated record plants not only in Hayes near London, Hanover, and Paris, but also in Barcelona, Aussig (Austria-Hungary), Riga, Moscow, St. Petersburg and Tiflis (Russia), Milan, and even Calcutta (India).

#### 3.7.3 Teleharmonium

In 1906, Thaddeus Cahill invented and patented the 'Teleharmonium,' weighing about 200 tons in which music was transmitted using telephone wires. Teleharmonium was a massive structure. It consisted of two components, a performing console resembling a pipe organ and a separate tone generating machinery to which it was wired. Nearly 2000 switches were required to connect the keyboard. Cahill launched Teleharmonium Company to market his electronic music service. It is said that the working of Teleharmonium resembled that of a power plant. (Holmes 2008).Cahill set up the company in New York. Moving the Teleharmonium to New York required more than 30 rail road flat cars.

With the beginning of the war in Europe, the development of the U.S. phonographic industry completely changed. In 1919, already 166 companies operated in the phonographic industry (Alexander 1994: 116-117). This founding boom also had positive effects on the number of phonographs that were being produced at the time. Whereas in 1909 and 1914 a total of 345,000

and 514,000 machines were assembled, respectively, in 1919 the number increased to 2,230,000 (Gronow 1983: 59).

World War I forever changed the ownership structures of the phonographic industry in Europe. The two largest European markets were controlled by a duopoly- In Britain, The Gramophone company and The Columbia Gramophone. Similar was the case in Germany and France. Shortly after the war, at the pinnacle of the boom, the music mainstream appeared to have run its course. This would have meant the premature end of an entire industry had it not been for innovative impulses generated from outside the system of the music industry. The globally acting corporations lost their branch offices that were now located in enemy territory. The entire industry was affected by the economic downturn that fundamentally altered the industry's structures and resulted in the appearance of new protagonists on the horizon. The war had destroyed the international corporate structures of the European phonographic businesses, which led to a strong market concentration in the national markets.

The phonographic repertoire between 1900 and 1920 was determined by, on the one hand, technological restrictions - acoustic recording technology and a recording capacity of only 2-3 minutes per side - and, on the other, by aesthetic requirements of a music industry keen on providing entertainment. Before 1900, during the pioneer period of the phonograph, the phonographic industry recorded the kind of regional music that was demanded by local audiences; subsequently, however, the entertainment conglomerate consisting of music publishers, music theatre houses, and phonographic companies formed the music taste of large parts of the population. The rapidly growing market for phonographs and phonograms pushed the market for sheet music to the background. Power in the music industry shifted as a result of the phonographic companies' economic success. Phonograms were now at the heart of the music industry, for which music publishers provided the copyright protected repertoire, and for which live performances functioned as a key promotional instrument. The innovations generated from outside the system of the music industry emerged, on one hand, from technological novelties such as the invention of broadcasting and electrical recording procedures and, on the other hand, from musical innovations such as the Jazz and the Blues. These innovations subsequently revolutionized the structures and processes of the music industry and especially those of the phonographic industry.

# **3.8 Romantic age**

As the many socio political revolutions of the late 18th century established new social orders and new ways of life and thought, so composers of the period broke new musical ground by adding a new additional depth to the prevailing classical forms. Throughout the remainder of the 19th century (1820 to1900) artists of all kinds became intent in expressing their subjective personal emotions. Romanticism derives from the romances of medieval times- long poems telling stories of heroes and chivalry, of distant lands and faraway places, and often of unattainable love. The romantic artists are the first in history to give to themselves the name by which they are identified. The earliest romantic composers were all born within a few years of each other in the early years of the19th century. These include the great German masters Felix Mendelssohn and Robert Schumann; the Polish poet of the piano, Chopin, the French genius Berlioz and the greatest pianist showman of history, the Hungarian composer Farnz Liszt.

During the early 19th century, composers from non-Germanic countries began looking for ways in which they might express the musical souls of their homelands. Many of these nationalist composers turned to indigenous history and legends as plots for their operas, and to the popular folk melodies and dance rhythms of their homelands as inspiration for their symphonies and inspirational music. Others developed a highly personalised language and melodic style which distinguished their music from that of the Austro Germanic traditions.

The continued modification and enhancement of existing arguments plus the invention of new ones, led to the further expansion of the symphony orchestra throughout the century. Taking advantage of these new sounds and new instrumental combinations, the late romantic composers of the second half of the 10th century created richer and even larger symphonies, ballets and concerts. Two of the giants of this period are German born Johannesburg Brahms and the great Russian melodise Peter Ilyich Tchaikovsky.

The 20th century was a time of global war, genocide and environmental destruction. It was also the century in which political freedom and human rights became the norm in most of Europe. The music of the century is complex, sometimes dissonant, unsettled and forceful.

There is an impressive range of styles: Impressionism - Debussey (1862-1918); Maurice Ravel (1875-1937) Serialism (12 tone): Arnold Schoenberg (1874-1951); Anton Webern (1883-1945). Bela Bartok1881-1945; Zoltan Kodaly, 1882-1967, Both Hungarian Igor Stravinsky 1892-1971, Russian, lived in Paris. Sergey Prokofiev, 1891-1953, Dmitri Shostakovich 1906-1975, both Russian. George Gershwin1898-1937; Aeron, Copland, 1900-1990 Both American.

By the turn of the century, and for the next few decades, artists of all nationalities were searching for exciting and different modes of expression. Composers such as Arnold Schoenberg explored unusual and unorthodox harmonies and tonal schemes.

#### **3.9 Different Music Genres**

A genre is, a group of styles, of music having a common tradition or common fundamental mental values. A music genre is further subdivided into sub genres - just like species in a genus. Superficially, the species may look nothing like each other in their present day forms, but they evolved from the same ancestor. The concept of sub genres can best be explained by the huge number of disparate sounding sub genres currently grouped under the titular title of rock music. In modern times, the all-pervasive music industry often has a larger say in creating a new genre than the music itself. Numerous modern genres can be thus to have been created as a commercial gimmick than an artistic endeavour. Music, in its broadest division can be classified into two styles: western and oriental. African music can be included as a separate genre, but quite a few African styles have made their way into western music via immigrant African Americans; hence it has been included in the category of western music. Within the Western music, the following categories can be made- Rock, jazz, Classical, Blues, Rand B, Country, Reggae, Hip hop, Electronic, Latino, Western music.

## 3.9.1 Rock

The umbrella term rock is used to describe a large variety of music styles. The origins of this stupendously popular style lie in a fusion of two other popular genres- blues and country along with significant elements of jazz. Along with the influences from these two styles, rock and roll was typified by the extensive use of the snare drum. The rock and roll movement of the mid 1950 s revolutionised the music scene in the west, with the proponents of this innovative and flamboyant style shaping the trends in racism, fashion and lifestyle. Rock and roll - especially glam rock-artists garish costumes were famous and in the racially charged1950s, rock and roll provided an avenue for the appreciation of popular music without segregation. The success of the rock and roll movement is personified in the everlasting fame of 'the king' Elvis.

In the late 60s and early 70s, two pillar sub genres developed Hard rock and Heavy Metal. Both have gone on to become massively popular. The contemporary emergence of inventive guitarists like, Jimim Hendrix, Jimmy Page and Eric Clapton helped to mould the malleable style of rock music into numerous other popular styles. The term rock music has since gone on to represent a massive range of styles, many often sounding nothing like the original rock and roll sound. The all-encompassing term rock music includes everything from the melodious Beatles to the aggressive Carcass and Deicide.

It can be said that rock music is the most popular genre of music in the history of mankind. Notable bands are The Beatles, The Rolling Stones, The Byrd's, The Yard birds, Led, Zeppelin, Aerosmith, Queen, Acdc, and Pink
Floyd Nirvana etc. Notable performers: John Lennon, Paul mc Cartney, Little Richard, David Bowie, Syd Barrett, Alice cooper Keith Moon etc. There were sub genres like Heavy Metal, Death Metal, Garage Rock, Psychedelic rock, Black metal, Glam rock, Punk rock, hard rock, Jazz rock, Acid rock, Christian Metal, Art rock, Dream pop, Indie pop, Folk rock, and numerous others of the same ilk.

#### **3.9.2 Jazz**

Jazz developed among the African American community of the southern US. This can be called a classical version of the blues music. The African influence on this indigenous American style of music can be seen in the emphasis on improvisation and a combination of different but simultaneously played rhythms, which is very unusual in the western tradition of music. Jazz is often performed by ensembles, with importance laid on their ability to play off each other and improvise ex tempore. The improvisational style of jazz links it to Indian classical music, which also values improvisation over repetition of set melodies. This intrinsic similarity has produced numerous collaborations between jazz and Indian classical artists. Pt. Ravi Sanker, who frequently collaborated with western musicians is one of the most famous Indian musicians in the west. John mc Laughlin, a noted jazz guitarist formed fusion ensembles with western and Indian musicians such as zakir Hussain and Vikku Vinayakam. The noted performers were Louis Armstrong, Miles Davis, Frank Sinatra, John Coltrane, Thelonious Monk, Ella Fitzgerald, Charles Mengus, Benny Goodman, Dave Bruebeck etc. The subgenres include Bebop, Acid jazz, Avant garde jazz, Boogie Woogie, Bossa Nova, Chamber Jazz, Continental jazz, Cool jazz, Cross over jazz, Latin jazz, Ethno jazz, Free jazz, Gypsy jazz, Jazz blues, Jazz funk, Jazz fusion, Jazz rock, Kansas city Jazz, Orchestral jazz, West coast jazz etc.

### **3.9.3** Western classical

The classical music of Europe (along with the much older Indian classical music) is one of the oldest surviving styles in modern music. In

direct contrast to its Indian counterpart, and the western style of jazz, European classical music values rendition and set renditions of melodies, without much scope for improvisation.

Classical music can be of several forms: symphony, sonata, concerto, suite, cantata, oratorio etc. These are either played on instruments such as a piano or violin or sung. Western classical music is classified according to period- Medieval, renaissance, Baroque Classical, romantic and modern. The medieval period ran till the 15<sup>th</sup> century renaissance till 1600, Baroqe till mid-1700, classical early1800, Romantic till the 1900 and then to the modern.

Notable modern exponents include Yehudi Menuhin Leonard Bernstein, Igor Stravinsky, Claude Debussey, George Gershwin, Yanni etc. **3.9.4 Blues** 

Like Jazz music, the Blues genre originated from African Americans work songs and was built around the premise of simple lyrics sung in a simple tune. The simple plain structuring of a blues song is open to innovations and improvisations; this has led to the emergence of several completely different styles, such as rock music. Since the blues genre was ingrained in local calls and work songs, the sub genres of blues music are often named after places. Dallas blues is the first blues song ever published in 1912. It was written by Hart Wand, and although there has been unpublished blues songs and published quasi blues songs, before his time, his was the first blues song to be published.

Blues music was primarily played with acoustic instruments, but by forties and with the entry of electronic instruments it was revolutionised. Although many blues artists chose electric instruments both electric and acoustic renditions of blues music are popular today. Jup blues an energetic, fast type of blues music is considered to be precursor of rock and R&B music.

### **3.9.5 Rhythm and Blues**

This is a sub-genre of Blues and jazz music and is considered as a genre itself. The primary difference between mainstream blues and R&B b is as the name suggests, the dominance of rhythm. Popular genres like soul and

funk have been derived from R&B music. The notable performers were Robert Johnson, Muddy Waters, Robert Nighthawk, Bessiem Smith, etc. The sub genres include British Blues, African blues, Blues rock, Canadian blues, Chicago blues, Country blues, Delta blues, Detroit blues, Electric blues, Gospel blues, Hill country blues, jazz blues etc.

#### **3.9.6 Country Music**

Like blues music, Country music emerged from folk songs of the southern USA in the early 1920's. Immigrants in the Appalachian Mountains area, who had brought along instruments from their own countries merged their art forms to create the famous genre of country music. Hence, it contained elements and instruments from various countries such as Ireland, Italy, Germany and numerous African countries. Many of the early instruments of country music were, string instruments, with the notable exception of the harmonica.

Country music has much in common with blues music; the simple three chord arrangement of songs is an important element found in early recordings of both of these genres. The simple arrangement in both these genres left much scope for innovation and like the blues Country music has been adapted and moulded by various artists, in different forms.

The structuring and instrumentation of country music underwent several changes over the years. The early bands almost exclusively used string instruments. Along the 1940's, electric guitars and drum began to appear in country bands. Although rejected at first by purist audiences, they soon became an integral part of country music. The next two decades saw the emergence of the early strains of rock music. Elvis, who started as a country singer, helped the genre develop into the more energetic, upbeat rock and roll. Charles too concentrated on country music around this time. Since then, country music has remained a popular genre in the US, and has undergone several successful transitions, giving rise to several successful Subgenres. The notable performers were Jimmie Rodgers, Elvis Presley, Vernon Dalhart, Fiddling John Carson, Roy Acuff, and Garth Brooks etc. The subgenres include Blue grass, Cajun, Classic country, country rock, Nashville sound, Honky Tonk, Cow boy music, Close harmony, Dansband music, Rap country, Blues country, Hillbilly, Progressive country etc.

### 3.9.7 Reggae

Reggae music has its roots in a Jamaican music style, called Ska, based on R&B, Jazz and Caribbean musical traditions. Ska originated in the 1960's and later spawned the world famous genre Reggae.

Like all Caribbean music genres, Reggae extensively uses drums, typified by high pitched snares. It has, also incorporated electric instrument, such as Guitars and synthesisers. Unlike virtually every other genre, the drum rolls in Reggae do not end with the cymbal. The orchestra is the important part in Reggae performances. It is an instrument based genre, rather than vocals based. The notable artists were peter Tosh, Bob Marlry, Bunny Wailer, Lea scratch Perry, Jimmy cliff etc. The related sub genres include Rock steady, Lovers rock, Ragga, Dub

#### **3.9.8 Hip Hop**

Favourite among youngsters all over the world, hip hop is one of the most popular modern genres of music. Hip hop music emerged as an offshoot of the hip hop movement, in the 1970s. Centred in Bronx, the movement soon spread to the rest of US, and Hip hop music benefitted from the expansion, becoming one of the most followed genres of the 1970-1980s.since the 1990s, the genre has become synonymous with rapping, although rapping is only one part of the hip hop music. The notable groups are public enemy, the roots, The Black eyed Peas, Beastie Boys. The notable performers are Eminem, Snoop Dogg, Kanye west, Akon, Hard Kaur, Fergie, Ad rock etc.

### **3.9.9 Electronic**

One of the most modern genres of world music, electronic music is based on electronic instruments. These instruments include the electric guitar, synthesisers, and the remix. Electronic music is widely known in the form of house or disco music. It gained popularity in the 1970s and 1980s and has remained a popular genre ever since. Over the ages, extrinsic music was inculcated in various other genres such as metal hard rock etc. The notable artists were Halim el Dahn, Karl Heinz, Stockhousen, Robert Moog, Brian Eno, Africa Bambaatakaa, Wendy Carlos etc.

The Sub genres are Ambient, Break beat, Acid breaks, Chip tune, Disco, Electronically, Electronic rock, electronic jazz, Downtempo, Video game music, Drumand bass, Alternative dance, Dream trance, Hardcore dance, Digital Hard core, Industrial metal, Industrial rock, etc.

# 3.9.10 Latino

Latino music evolved in Latin America. Some Latino styles such as Samba, Rumba, Salsa, and tango are popular all, over the world. Bossa nova, listed as a sub-genre of jazz music, is also famous Brazilian music form. Many Latin forms have successfully blended components of American music into their own and created highly popular genres such as Tejano music.

Latino music is reputed for its emphasis on rhythm and consequently exhilarating beats; the effervescent style of samba has become the symbol of Brazil. However Latin operas and ballads are just as popular as their upbeat counterparts. Different styles of music can be found across the numerous countries in Latin America, but all of them can be grouped together by the love of rhythm. Interestingly, the Latino music is the only genre in western music, classified according to geography.

Especially in the Caribbean, the influence of Indian music can be clearly observed as Chutney music and its subsequent incarnations. Lyrics laced with Hindi and Bhojpuri, as well as traditional Indian rhythm patterns are seen in these genres. As with the African immigrants in the US, Indian immigrants in the Caribbean have helped shape the music of the tropical islands.

The notable performers are Roberto Carlos,Heitor villa lobos, Joan Gilbert's, Antonio Carlos jobim, Dropati, Sunder popo, Enrique iglasias, Mark Antony, Shakira. The Sub genres are Samba, Rumba,Bachata, Salsa, Tejano, Son,Calypso, Soca, Chutney, Mambo, Merengue.

### **3.9.11 Oriental music**

Traditions in oriental music stretch back to hundreds, thousands years. Indian classical music, the oldest surviving musical genre in the world is traced back to the Vedic period, though it has undergone fundamental changes. Chinese and Japanese music traditions can also be traced back to the middle Ages. The music of China, Japan and Southeast Asia developed fairly independently; all three have long standing traditions of music. The music in these traditions focuses on ensemble singing. After the Mughal invasion, the highly malleable music of North India developed into an in discernible mixture of Indian and Persian musical traditions and retained the ancient Indian trait of being solely centred around the solitary artist.

Ancient Indian music was centred on chants, and songs sung primarily in praise of god. Due to the Islamic influence, the topic and composition of the lyrics changed along with the age old style. Mughal composers and singers like Tansen transformed Indian music into its modern format. The iconic Indian instruments the, the drone Tambura, the drone and tabla also entered Indian music around this time.

Indian classical music makes extensive use of musical modes. Indian music places emphasis on the artist's interpretation of a particular mode and his own style of singing rather than a flawless rendering of a composition written by someone else. As a result, ensembles are very rare in North Indian music although it is an important part of South Indian Carnatic music. Some well-established genres of Indian classical music are Arab, Khayyal, Dhrupad and Thumri.

Many western musicians studied Indian music and instruments extensively; notably George Harrison took sitar lessons and collaborated with Indian sitarist Ravi Shankar. Ravi Shankar also performed at Woodstock and several other prestigious venues in the west. Indian music easily lends itself to fusion with other art forms especially in the late 20th and 21<sup>st</sup> century. Collaborations between Indian and western musicians became increasingly common. Many Indian classical musicians like Zakir Hussain, Taufik

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Qureshi, and L Subramanyam have frequently collaborated with western artists.

#### 3.9.12 Oriental pop

Pop music in Asia is heavily influenced by western pop music. Western sounds began to make their way into Asian communities in the mid-20th century, and soon became popular all over the continent. Youth, studying in the West, often brought home the musical influences of their stay in the West and Asian pop music started to develop accordingly. Notably in China these modern strains of music and its accompanying showmanship was considered vulgar and was banned. Asian pop music has become increasingly famous in the west.

#### **3.10 Indian music**

Indian music production provides a perfect counter system analysis (Sjoberg and Cain 1971) to Western music production, because this music goes back by 2000 years than western music. Highly standardized and formalized, it possesses many parallel elements to western music like rhythm, melody, scales and structured sections. Indian music has its own unique elements. Indian music is based on the Rag and Tal; Rag is the melody line and Tal is the rhythmic form. There is no harmony in the western sense, but there is an important interplay of instruments. The three basic instruments are :the tambura, which functions as the drone, the Tabla (a pair of drums which actually perform an expressive function more often than a strict rhythmic one) and the Sitar, (a truly unique instrument of three to four main strings with three to four drone strings plus a dozen sympathetic strings that vibrate when the other strings are struck, its function is melody, rhythm and drone combined). In western music, a song may be based upon 1 of the 12 chromatic scale tones (whole to half tone distance) of which, there are the major, minor and diminished families. Indian Ragas are based upon more tones than the western 12-note scale (example a quarter tone scale distance and the family of scales numbers up to 20, depending upon the region of India) (Nettl, 1985:37). The rhythmic meter of Indian music is also very different. Western

music is either 4/4 (simple straight beats), 3/4 waltz tempo) or (odd (meter 7/8, 9/8, or 5/4). Indian music is based on cycles of 7, 8,10,12,14 or 16 beats, which are further subdivided to achieve an extremely complex musical form (Courtney, Chandrakantha, Indian classical music, unpublished circulated paper).

The Indian music form is as highly structured as any western idiom. The instruments and ensemble act both as the means of transmission of knowledge and the means of performance. The apprentice musician must learn his or her craft on the neck of the Sitar or the drum or tabla, directly from the master. One could say that the music is not reducible to notation systems and that the standardised ragas are regional constructs. Thus, they are unable to be translated effectively without a qualified instructor. In fact, an extremely formal set of transmission institutions has developed around master musicians who teach these important ragas, so they would not be lost. Indian tone symbols, similar to the western do-re-me vocal scale (actually sare-ga-ma-pa-dha-ni-sa for Indian music) and the name of the raga give the musicians an indication of pitch, intonation, and ornamentation (gamakas) (Nett 11985:66).The masters and the tone symbols of Indian music are the system of notation.

This is not much different from the rise of western music because instructors had to lead / train musicians before there was notation and then train them as to how notation is to be used. This training was very important, else, the novice musician would be unable to effectively translate the symbols on the page to music. The instructor acted as interpreter and medium between musician - notation- performance; Indian music eliminates the importance of the middle step. When one considers the hundreds of years that Indian music has functioned without the irrational necessity of written notation, one has to doubt whether Western music is truly the most 'advanced' music or simply the most commodified musical art. (Turley2001)

Using India's traditional music as a counter system to Western classical music, it can be seen that it is a highly advanced art form. While

formalized and highly structured, it has not produced the rationalised and bureaucratized outcomes of western classical music. The importance of the master and, thus, his trained students, has kept the musician an important component to Indian music. The early history of Indian music can be explained by the Indo- European theory. Mythology has it that music was brought to India from the Gandharva desh, or Kandahar, the modern Afghanistan. It may represent a cultural connection to Indo Aryan culture. Evidence may be seen in the musical structure. In the first few centuries BC, Indian music was based upon seven modes. Further, the Indian scales follow the same process of modulation that was found in the Ancient Greek music. Since Greece is also Indo European, this is another piece of evidence for the Indo European connection.

The nature of music in pre historic India may be obscure, but the picture begins to become clear in the first few centuries BC. Bharathas Natya shastra (circa 200 BC), provides a detailed account of stagecraft in that period. Here we find mention of seven shuddha jati (pure modes) and eleven mixed jats (modal forms not produced by simple modulation). There is also a very detailed discussion of the musical instruments.

The first millennium provides several texts which show the evolution of Indian music. The Brihaddeshi written by Matanga (circa 700AD) is very important. It is in this work that we first find the word 'rag' mentioned. However, there is some doubt whether the concept was the same as it is today. Another important text is the Sangeetha Ratnakar, by Sharang dev. This work, written around the 13<sup>th</sup> century, gives extensive commentaries about numerous musical styles that existed at that time. Another milestone in the development of Indian music was the life of Amir Khusru (Bhatkande 1934) (born 1934, died 1325). Although the extent of his contribution is more legendary than factual, he symbolises a crucial turning point in the development of Indian music. This influence was felt more in the North Indian music than in the south. The consequence of this differing degree of influence ultimately resulted in the bifurcation of Indian music into two distinct systems; the Hindustani Sangeeth of the North and the Carnatic Sangeeth of the South. The musical career of Tansen is another milestone in the development of Indian music. He symbolises the maturing of the North Indian system as a distinct entity from the South Indian music. The 18th century marks the birth of many of the musical forms that we think of today. Dadra, Kheyal, Thumri, and a host of other forms are traceable to this period. Sadarang and Adarang are two men who have made particular contribution in this matter.

The early part of 20th century brings the most recent revolution in North Indian music .This is provided by two people: V N Bhatkhande and V.D. Paluskar. These two men revolutionized the concept of Indian music. Paluskar is responsible for the introduction of the first music colleges, while Bhatkhande is responsible for the introduction of an organised system which reflects current performance practice. Both are also responsible for the development and popularisation of a modern musical notation.

A look back at the evolution of Indian classical music shows that the Hindustani style of music developed after the Mogul invasion. In the mogul period, i.e. the 13th century, cultures derived from Persia and elsewhere merged with the Local traditions. The indigenous music of India with its intricate systems of talas and ragas continued uninterrupted and has become the Carnatic or South Indian style originally, all Indian music was sung in Sanskrit. But after the two systems divided, Hindustani music was centred round Hindi and its dialect Brajabhasha, whereas the Carnatic system was in Telugu, Kannada and Tamil.

#### **3.10.1 Indian classical music**

Indian classical music is a heritage that has evolved through centuries. It is a blend of ritualistic, folk and cultural expression of the subcontinent and represents music of several genres. At one extreme, it is classical music; at the other, it is a mixture of musical genres of different regions that reflect the diversity of India. Hindustani classical music is an Indian classical music tradition that took shape in North India. The music can be traced back to the sama gana sung by priests as part of religious rites. Hindustani classical music has its origin as a form of meditation and is based upon ragas and tals, each designed to affect different chakras or energy centres. The artist is like a worshipper in his attempt to reach Brahmananda.

Indian music is traditionally practice oriented. Indian music production provides a perfect counter system analysis (Sjoberg and Cain 1971) to Western music production.

## **3.10.2 North Indian music**

Hindustani classical music is said to have originated in the 13th and 14th centuries when influences of Arabia and Persia permeated into the North Indian classical compositions. A Hindustani music performance commences with the Alan, which is a slow monvocation. This is followed by the John, which is a rhythmic piece. The rapid rhythm called Jhala comes next. The next stage is the gat, which introduces the percussions. This stage moves from the slow, to medium paced to rapid. And finally, the performance concludes with the Alap. The following are the popular variations of Hindustani music. Hori Dhamar are compositions associated with the colourful festival of Holi. Tappa is a style of Hindustani music that has originated from the state of Punjab. Thumri has come into being from the eastern section of UP. The compositions contain lyrics that portray the life of lord Krishna and his beloved Radha. Ghasal is a collection of couplets clubbed together and set to a soothing musical tune. Tarana are songs sung to convey bliss, happiness and contentment. Gharana was a musical system that was categorised according to the family or the school that carried the tradition forward. (Indian art, Artists pages.org. Music Fraternity).

The raga is a concept unique to Indian music. Raga is linked to rang or colour. Raga may be thought of as an acoustic method of colouring the mind of the listener with an emotion. This explains the general aspect, but what is its musicality. It is not a tune, melody, scale or mode. It is indeed a combination of different characteristics which actually define the raga.

The instruments used to play the ragas are Bansuri, Dilruba, Esraj, Gotuvadyam, Harmoniam, Jal Gharana, Mayuri , Veena, Nadaswaram, Rabab, Rudra veena, Santur, Sarangi ,Sarod, Shehnai, Sitar, Violin etc.

Tal is the Indian system of rhythm. Tal literally means clap. Today, tabla has replaced the clap in the performance. The basic concepts of Tal are: tal, Khalistan, vintage, matra, Bol, theka, lay, Sam, and avartan.

Tal is the pattern of clapping; each Tal, is characterised by a particular pattern and number of claps. Khali is the wave of the hands; these have characteristic relationship with the claps. Vibhag is the measure each clap or wave specifies a particular section or measure. Matra is the beat. Bol, is the mnemonic system where each stroke of the drum has a syllable attached to it. The syllable is the Bol. Theka is a conventionally established pattern of bolster and Vibhag. Laya is the tempo, which may be slow or fast. Sam is the beginning of the cycle. The first beat of any cycle is usually stressed. Avarthan is the basic cycle.

#### 3.10.3 South Indian music -Carnatic music

The present form of Carnatic music is based on historical developments that can be traced to the 15th- 16th century AD and thereafter. From the ancient Sanskrit works available and the epigraphical evidence, the history of classical music traditions can be traced back about 2000 years. Carnatic in Sanskrit means "soothing to ears". Carnatic music is completely melodic, with improvised variations. The main emphasis is on vocal music. Most compositions are written to be sung, and even when played on instruments, they are meant to be performed in a singing style.

There is a staggering amount of written work on music that exists in India. A good many of them are extremely sophisticated with a high degree of abstraction and fascinating mathematical foundations for music. There exist elaborate frameworks on which the musical system is based. Even in Vedic times, mantras were chanted using selected notes. Initially, only a few notes were used but eventually more notes got added. Sama Veda the most musical of the Vedas is almost sung out even these days. For most parts, the lower octave was employed (mandra stayi). Music was considered divine and was kept in the selected social circles for most part. The earliest ragam is speculated to be 'sama ragam', which could be a derivative of the modern day kharaharapriya. Theories and treatises were being written, about how the sound om gave rise to the notes etc.

By the time of the epic period, the seven notes being used as building blocks in Indian music ,sa, ri, ga, ma, pa, dha, ni came to be entrenched in the musical tradition. The only thing that was not fixed was the exact frequency or pitch (in the octave) which was used to produce each of these notes. Which keys could be used to produce these seven notes. The relationship between sruti (frequency) and swaram (notes) has been the focus of several theoretical works.

Bharathas Natya sastra was the first work which elaborated the octave and divided it into 22 keys. Bharatha based his idea on a stunning scientific experiment he performed using his musical instrument made of strings which proved that there could be only 22 basic frequencies that could be generated in an octave. Bharathas theory has been the guiding principle for subsequent musicologist s through history. The next major work was Dathilam. Here too, the author sticks to 22 sruti per octave formalism and even goes on to suggest that these 22 sruti s are the only ones a human body could make. This view was also expressed in the Sangeetha Ratnakara by Sarangadeva, another famous musicologist.

There were other seminal works such as Brihaddesi (9th century AD), written by Matanga. He takes the credit for the term Ragam, though the term had been used before him. Matanga was the one who explained it and helped define it. Sangeetha makaranda (11th century), by Narada enumerates 93 ragas and classifies them into masculine and feminine genders. The next major work was Sangeetha Ratnakara by Sarangadeva (13th century).

It was roughly around this time that Indian music began to be classified into Hindustani music of the North and Carnatic music of the South. Sangeetha Ratnakara was a milestone in some ways. Not only was it a musicology text, but it also had detailed instructions for performance, the grammar and framework usually called Lakhshana and the actual performance called Lakhshaya. Saranga deva, among other things, defined almost 264 ragas, including Dravidian and North Indian ones. The book provides a veritable guide to the performers. Saranga devas work probably launched a whole new era in music compositions and performance. Any standard reference like DrRamanuja Iyengar or Bhagya Lakshmy or Bhringi gives details of the work. In fact, for several centuries afterwards, theorization of music became dormant.

In the 17th century there was a resurgence of theoretical works, such as Sangeetha sudha (Govinda Dikshithar) and Chaturdadi prakasikam (Venkatamakhi). The latter expounded the present day Melakarta ragas. The author mentions the 12 sruti octave and defines the Melakartha ragas. At that time, only 19 out of 72 were known. While such elaborate theoretical works were being made, eminent composers appeared on the scene and produced music. Annammacharya (1424-1503), a devotee of the Lord of Tirupathy composed several notable pieces. He was followed by Purandaradasa (1480-1564).Purandaradasa is considered the father of Carnatic music. He is said to have composed nearly a quarter million songs in his lifetime. Even discounting for exaggeration, he was quite prolific and hundreds of his songs are still available. His compositions were mostly in his native tongue, Kannada.

The golden age of Carnatic music was perhaps the time when the trinity of Carnatic composers Thyagaraja1767-1847), shyamasastri (1763-1827), and Mutuswami Dikshithar (1775-1835) made music. They were contemporaries and hailed from the same district -Thanjavur. Their life styles, attitudes seem so different which could explain their musical styles being so different from each other. Volumes have been written on them.

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Thyagaraja is hailed as the king of Carnatic music His songs have the raw emotion Bhakti and are considered emotional. He composed songs in his mother tongue, Telugu. It is not known how many songs he has composed, but nearly a thousand songs are available at present, completely notated and interpreted. He has also composed operas. From the musicology point of view, Thyagaraja is credited with the invention of 'sangatis' and numerous other creative ideas in rhythm. Dikhithar was more of an academician and a pedagogue. Hindustani music influenced him. About 800 of his songs exist at present. Shyama sasthri is the most obscure of the three. He is considered a wizard of rhythm and composed several pieces called Swarajati which enunciate various rhythmic patterns. There are several other notable composers- Gopalakrishna Bharati, Arunagirinathar, Swati Tirunal, king of Travancore, and in recent times Papanasam Sivan and Balamuralikrishna.

# **3.10.4 Overview of Indian folk music**

India has a rich tradition of folk music. The extreme cultural diversity creates endless variety of folk styles. There is a tendency to club folk music with tribal music. Folk music is a rustic reflection of the larger Indian society; tribal music often represents cultures that are very different and often throwbacks to cultural conditions that existed thousands of years ago.

Tribal and folk music is not taught like classical music. The economics of rural life does not permit a lifelong devotion to the study. The musical practitioners must attend their usual work to earn a livelihood. Music in the villages is learned as if by osmosis. From childhood the music is heard and imbibed. Numerous public activities in the village that allow villagers to practice and perform. Music is an indispensable part of weddings, engagements and births. There is a plethora of songs for such occasions. There are also, songs associated with planting and harvesting. In these activities, the villagers routinely sing of their hopes, fears and aspirations. Musical instruments are often different from those found in classical music. Crude drums such as daf, dholak or nal will be used. Often instruments such as ektar, dotar, Rabab and Santur are used. The instruments usually are not as refined as those used by the classical musicians. It is very common to find folk instruments that have been fabricated of commonly available materials. Clay pots, coconut shells, skins, bamboo are used to make musical instruments. A revival, of interest in folk music is found everywhere in India. A search for our past or a search for variety may be behind such heightened interest.

Side by side with these developments in musical styles, changes were happening on the technical side, focusing attention on the storage and reproduction of music.

Edison founded in 1896 the National Phonograph Company, which became the exclusive U.S. distributor for the Edison-phonograph. 1896 marks the year in which Edison finally recognized the potential of the phonograph as an entertainment instrument. Edison Phonograph Works' began to produce "coin-in-the-slot" machines. The phonograph industry evolved into the music box industry.

#### **3.11 Radio Industry**

At the beginning of World War II, the record industry was worldwide completely dependent on broadcasting due to varying market conditions. This is reflected not only in the ownership structure but also in the record repertoire. Record companies had subordinated themselves in all aspects to the production logic of the closely connected radio and film industries. Thus in the 1930s and 1940s the music industry was primarily a radio industry. A full-fledged music industry boom characterized the immediate post-war years in the United States. From 1945 to 1946, record sales doubled from \$109 million to \$218 million. In 1947, sales reached a new record high at \$224 million. In 1948, however, sales declined by 15% to \$189 million, and in 1949 by an additional 8% to \$173 million.

The basic technology of the record industry had not changed since the inception of electrical recording. They produced shellac records at 78 rotations per minute (RPM), which could hold no more than four minutes of music. Furthermore, shellac records were very fragile, and their

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transportation and distribution required a great deal of care. The high costs ensuing from such complicated logistics prevented smaller companies from distributing their own products. Hence, they had to depend on the distribution infrastructure of the majors, who used their market power to keep unwanted market competition at bay.

### 3.12 Vinyl Records

In response to the quickly accelerating demand for records after the war, record companies tested new technological possibilities to extend the playing length of records. After two years of research, Peter Goldmark, found a solution to the problem. The decisive factor was finding a new material – vinyl – that was more malleable but less fragile. They expanded the long player's (LP) diameter while reducing the rpm's to 331/3. The LP's sound was as good as that of shellac. Most importantly, however, an LP could store up to 20 minutes of music per side.

### 3.13 Jazz revolution

During the Jazz revolution, of early 1920's, the structures of the music industry radically altered. In this new paradigm, live performances of musicians, which were broadcast into the homes of radio listeners, assumed a central position. The phonograph was integrated into radios, which were produced on the same assembly lines that were once used to assemble Gramophones and Graphophones. Phonographic companies were integrated as sub-units into broadcasting conglomerates, and their role became to exploit popular music titles for a second time. The broadcasting era reached its peak with Swing music, which was created in such a way that it perfectly matched broadcasting criteria. Radio used technological innovations such as the electrical recording method, the Magnetophon, and High Fidelity before phonographic companies made use of them.

### **3.14 Phonographic Industry**

After the stock market crash in October 1929, the phonographic industry plummeted into its worst crisis to date. Thomas A. Edison Inc.'s production of phonographs became the first prominent victim. On November

1, 1929, the company announced that it would stop the production of phonograms and phonographs. The recording industry in the U.S. suffered through the trough of the recession in 1932 and 1933. The economic depression caused a strong decline in demand in Europe as well. This manifested itself in the phonographic industry in the form of a number of company breakdowns. The years between 1929 and 1938 demarcate a structural break that permanently altered the phonographic industry. Whereas one company after the next had to file for bankruptcy or was taken over by a competitor, most often broadcasters, the power of both broadcasting networks, CBS and RCA/NBC, continually grew larger. However, in Europe, too, broadcasting and the electrical recording technique played an important role in the complete restructuring of the industry. The recession of the 1930s thereby marks a structural break within the industry, which resulted in a different kind of phonographic industry. With the introduction of sound film in 1927, the broadcasting networks broadened their interests to include the medium of film. Since the 1930s, film studios were also active in the music industry.

Many 20th century composers turned away from harmonic methods that have been used in music form in the past 150 years. The French musician Claude Debussey,1862-1918), rejected the rules of the 19th century .harmony mass taught in the Paris Conservatoire, instead infusing his practice with harmonic techniques from East Asia and Russia. Debusseys association with French painters led to his being labelled impressionist. Debussey did share with impressionist painters a propensity for depicting nature .With Debussey, we enter the modern era of western art music, an era which presumably continues to this day.

Igor Sravinsky also wrote music that did not use the harmonic methods of the 19th c.1882-1971). Stravinsky incorporated the folk music of his native Russia into his early compositions, while using harmonic techniques that were radically modern at the time. The late 1930s thus represent the end of the second phase of the phonographic industry. After the pioneering phase until 1902, when the phonographic industry emerged from an industry focusing on the production of dictation machines, the second phase lasted until the late 1920s. The phonographic industry experienced the rise and fall of large corporations, which initially understood themselves as producers of phonographs but later were primarily perceived as producers of phonograms. With the onset of the industry recession and the success of broadcasting, a process of transformation became visible, which ended up generating an entirely restructured industry by the late 1930s. By no later than 1940, the phonographic industry had entered its third phase, which was characterized by a high degree of market concentration and homogenous music production.

### **3.15 Magnetic Tape**

The second important technology responsible for the post-war boom the magnetic tape - was not developed by the phonographic industry. Valdemar Poulsen had already developed the basic technology for the magnetic tape back in 1899.originally this was used for the purpose of for the purposes of telegraphy. The recording apparatus was thus appropriately called "Telegraphon". But it was not used to record music. The reason for this was the fact that music could only be replayed in very poor quality; also, the tape players were technically complicated and used up lots of space. In the early 1930s, Fritz Pfleumer, a German scientist, developed the electromagnetic recording technology but used acetyl-celluloid tape layered with iron oxide instead of steel tape. He named this as the "Magnetophon," Yet, the Magnetophons were unwieldy and extremely expensive and were exclusively used as dictation machines (Tschmuck, 2006). Radio stations especially bought this tape, which allowed them to pre-record their programs. Bing Crosby was actually the first musician to use the new medium. Dissatisfied with shellac's poor replay quality, he arranged to have his popular radio shows produced on magnetic tape for the first time in 1946.

However, the phonographic industry's majors rejected the use of magnetic tape, since they feared promotion of a potential substitute for the record. They were mainly concerned that consumers would switch to the much cheaper magnetic tapes and record music directly off of radio broadcasts. In order to prevent the dissemination of the new technology, the majors' own recording studios refused to use the magnetic tape for recording purposes. In contrast, smaller record companies seized the opportunity provided by the new medium. They started to record their repertoire on magnetic tape and offered it in this form to radio stations.

The 1950s saw a revolution in the music industry, as Peterson and Berger (1975: 165) explain: Instead of offering a homogenous product for the entire market, as was practiced by the large networks, small independent stations specialized in catering towards a particular audience, providing them with the music they desired. Local stations in urban areas developed specialized broadcasting formats that they maintained essentially without change throughout the day (Denisoff 1973). The change of broadcasting in the 1950s resulted in the break-up of the majors' oligopolistic control of music marketing. They also lost control of distribution channels. Independent labels began to create their own distribution networks so that they would not have to depend on the majors.

This seemingly omnipotent broadcasting system of production, distribution, and reception was shaken by the Rock 'n' Roll revolution of the 1950s. This new paradigm change initiated the era of the phonographic companies. Company-owned music publishers had control of creative inputs. Record contracts ensured that successful musicians were bound to the company for a long time. Company-owned labels produced any music as soon as it promised to be commercially successful.

## 3.16 Rock 'n' Rol

The music industry's structure drastically changed with the introduction of new technologies. Whereas in 1948, the top four companies (CBS-Columbia, RCAVictor, Capitol, and Decca) released 81% of all titles

that reached the weekly top 10, by 1958 this share had decreased to 36% (Peterson and Berger 1975: 160). Instead of the six large record companies (CBS-Columbia, RCA-Victor, Capitol, Decca, MGM, and Mercury) controlling the production, distribution, and marketing of records in an oligopolistic way, by 1958 hundreds of small, independent companies had successfully taken away market shares from the majors. One reason for this dramatic loss of the majors' market control was the emergence of Rock 'n' Roll. Rock 'n' Roll and the technological change occurring at the end of the 1940s constituted the prerequisites for this structural break, which became visible around 1955. Before the mid-1950s, four majors-RCA-Victor, CBS-Columbia, Decca, and Capitol-dominated the phonographic industry. According to Peterson (1975: 161-163), their market power was based on two factors: the record companies' vertical integration, which allowed them to control the entire value-added chain from procuring raw materials to distribution, and the control of creative factors. Composers, lyricists, and interpreters were tied to the companies through their own music publishing houses and A&R divisions.

### 3.17 Payola

The power of radio consisted of its ability to make a song famous through repetitive playing. If the record companies had the ability to exert direct influence on radio programming, they did so without calling much attention to their practice. The situation was more difficult with popular Disc Jockeys, whom the record companies now tried to bribe to play their songs. Radio DJs accepted bribes from record companies for pushing particular songs in order to create hits for them. This type of trade restriction eventually became known as "Payola". In the mid-1950s, the U.S. majors lost their control of the value-added chain in the music industry. The causes for this were both the development of the essentially unbreakable vinyl record, which made the majors' complicated distribution network superfluous (Peterson 1990: 101), and the use of the Magnetophon for the production of music.

The development of the music industry from the mid-1960s to the early 1970s was characterized by a growing market and a simultaneous market concentration. This concentration had the effect that the majors of the early 1970s differed fundamentally from those of the early 1950s, even though some company names of that earlier era continued to exist. Chapple and Garofalo (1977: 82-87) distinguish three types of mergers that could be observed in the music industry beginning in the mid-1960s. First, there were the horizontal mergers where record companies joined to increase their market share and thus market power. EMI and Capitol's merger is an example of this. Another form of record company mergers was characterized by vertical integration. CBS-Columbia and ABC particularly, along with others, attempted to control the music industry's value-added chain. The vertical integration of the industry continued like an avalanche, because competitors tried to insure themselves against other companies' aspirations to create monopolies. However, the most frequent type of merger was characterized by the entry of large corporations into the music industry.

The 1950 s witnessed the creation of rock 'n' roll genre, a genre still popular today. Founded in 1952, Bill Haley and his comets, introduced the world to rock n Roll. The band proved successful, achieving 9 hits, in the top 20. The band was considered revolutionary. The most iconic figure of the 50 s was Elvis Presley. Renowned as the king of rock n roll, he brought rock n roll to the households of 1950.

With the swinging 60 s came Motown Record Corporation. With this, arrived the important advance of racial integration into music, as this was the first record label to be owned by and featuring African American artists. It was in this period that Bob Dylan brought in the musical video, "subterranean music blues".

The 70 s were famous for its leap into the rock genre. Aerosmith, one of the greatest rock bands of all time, merged with Columbia records in 1972, after which they released some of their most memorable songs. The rock music began to become more associated with the younger generation as they

could relate their anger and aggression through wild performances. It was during this time that 'punk rock'; a sub-genre of rock was formed.

With the 80 s came the MTV, 1981, standing for music television. This channel was created to show music videos, guided by a video jockey. MTV became most popular and their first video, premier The Beatles came first in the hit charts of 16 different countries. Hard rock, heavy metal, and glam metal experienced great popularity in the 80 s, becoming one of the most popular genres of the decade. The hip hop scene developed in the 80 s exhibiting a strong influence in the music industry.

The 1990 s saw several diverse genres of music. Grunge music and similar sub genres peaked in popularity in 90-91', with the success of bands like Nirvana. This style is strongly associated with the decade.U2's ground breaking Zoo Tv and Bobmart tours were the top selling tours of 92' and 97.Britpop, a sub-genre of alternative rock created in the UK, was formed in this decade. This sub-genre developed as a reaction against various musical and cultural trends. Female icons such as the spice girls, took the world by storm, becoming the most commercially successful group since the Beetles. While N sync, Britney Spears and Sisgo battled Eminem, Nelly and Limp for chart superiority; great battles were fought far from studios and concert stages. The controversy over music sharing program Napster began here. The creator Shawn Fanning was only 18, when he wrote the source codes that shook the music world. His free Internet song swapping service was the talk of down loaders everywhere. The record labels sued and shut down Napster. Britney spears became a prominent figure in mainstream popular music during 2000. Her first two albums established her as a pop icon. **3.18 Emergence of Music Cassettes** 

The declining record sales of the late 1970s and the stagnation during the first half of the 1980s is often explained by the worldwide recession after the second oil crisis, as well as the emergence of music cassettes that enabled private copying of music. While it is true that the worldwide recession and the emergence of a new phonographic technology had an impact on the music industry, the influence of these phenomena should not be overstated. Recordings on magnetic tapes had been made since the late 1940s, and they were the basic technology responsible for the drastic growth of small radio stations in the U.S. throughout the 1950s. The majors, however, hesitated to adapt this new technology, fearing that they would inadvertently promote a serious competitor for the vinyl record. From the early 1960s on, the research and development department of the electronic company Philips began to work on improving magnetic tape technology. The goal was to develop a phonogram that could be easily handled and that could be used for both the reproduction and recording of music. In 1963, Philips introduced the first cassette recorder to the market. Since this new technology made it very easy to reproduce music, it became possible to produce copyright-protected music en masse out of sight of copyright enforcing agents. In the western industrial nations, however, the music cassettes was not able to prevail as a substitute for the record, even though the quality of reproduction drastically improved with the introduction of Dolby's noise suppression system in 1966. In other parts of the world, where the populations' purchasing power was considerably lower than in Europe, Japan, and the U.S., the music cassettes assumed a life of its own that its inventors had not anticipated. The majors thus quickly lost influence in many African, Asian, and Latin American countries. For instance, when cassette technology spread across the Indian subcontinent in the early 1980s as a result of returning Indian guest workers, who brought the new technology with them, the vinyl record quickly disappeared from the Indian market. After 1982, India produced hardly any records, and the former monopoly holder, the Gramophone Company, found itself competing against 200 other companies (Manuel 1993). In 1991, India was the world's second largest producer of blank tapes, with the annual production of tapes reaching 217 million. In some countries such as Tunisia, the so called piracy share in form of recordable MCs increased to more than 90% (Wallis and Malm 1984: 184).

#### **3.19 Compact Disc**

The music industry majors found themselves in an economically weakened position when, in 1983, a new phonographic technology appeared on the market. In 1979, a joint venture between Philips and the Japanese electronics corporation Sony developed the prototype of the Compact Disc (CD). The CD was a child of the digital revolution, which began in the early 1980s. The ability to store information digitally made it possible to put music in compressed form on a storage medium. In many ways, the CD, which is read by a laser, was superior to analog phonographs (vinyl record and MC). Annoying noises in the background disappeared. The CD could not be scratched either and was simply easier to manage than the vinyl LP. The innovation of CD players developed by Sony constituted a significant technological progress over that of the record player. In 1986, 130 million CDs were produced worldwide, which amounted to only 5% of the 2.5 billion phonographs produced that year. The U.S. market was key for the CD's breakthrough. In the same year, more than 53 million CDs were sold there, which amounted to 10% of all record sales. In 1988, the sales of CDs surpassed those of records for the first time, a development that continued in Europe in 1989. The increased sale of CD, which led the market to increasing growth rates in the first half of the 1990s, is often attributed to the innovative potential of the music industry. But this success can be attributed to mainly one company, Sony, which entered the music industry in 1988.

In 1997, worldwide record sales (based on US\$) declined slightly for the first time after the sales increase caused by CD sales; between 1999 and 2003, sales declined by 17.2%. Compared to the sales peak of 1996, this amounts to a nearly 20% decline. A similar picture emerges for the World's largest market, that of the U.S. After years of growth at the beginning of the 1990s, the market began to stagnate, beginning in 1994. Only in 1998 did it witness a sales increase of 9%. Between 1999 and 2003, sales decreased by an additional 16.9%. The worldwide shrinking of phonographic markets seems to indicate that the music industry is undergoing a transformation at the turn of the 21<sup>st</sup> century. The new media and the internet seem to be the drivers of this change.

### **3.20 Digital Revolution**

The Internet constitutes a new distribution channel for music and other types of content available in the form of electronic data. The introduction of the M-Bone-Systems in 1992 was crucial for the transmission of audio and video signals. From that point on, it was possible to send music data easily over the Internet. At the beginning of the 1990s, a method for compressing digital audio signals appeared on the Internet under the name MP3 (Motion Picture Expert Group-1/Layer 3). Only then did it become possible to send music through the Internet in a quality that approximated that of CDs and store it on a computer hard drive. Because music can be stored digitally, it is possible to offer music as a service to the consumer independent of any phonograms. This can be done through two methods: streaming and downloading. The streaming procedure allows one to listen to music but not store it on a computer. Downloading, in contrast, stores music files on a computer, which then enables one to make an infinite number of copies. From the music industry's vantage point, the greatest dangers to its interests are posed by downloading. Downloading undermines the phonographic business by making it superfluous.

The pioneer of free download services was the Internet-company MP3, which Michael Robertson founded in November 1997 in San Diego, California. In March 1998, it commenced its business activities as the world's first music service provider. Its core business, the so-called digital automatic music service, allowed customers to put together their own CDs based on free downloads, which MP3.com would then burn and send to the consumer. The principle of downloading music data onto computer hard drives is based on Business-to-Consumer (B2C) and Peer-to-Peer Services (P2P). The basic difference between these models is that B2C Services store music data on a central company server from which consumers download desired files, whereas P2P Services function as trading sites. P2P Services allow users to download desired music files directly from the hard drive of a trading partner, rather than from a company server. This is also known as file sharing.

The music majors rejected MP3.com mostly because it allowed customers to upload privately owned CDs onto the web through an MP3.com databank that, in turn, made such CDs locally available. To this end, MP3.com created a comprehensive music data bank for which no licensing fees were paid. After a long legal fight, MP3.com agreed in an out-of-court settlement to pay four of the five music majors \$80 million (\$20 million per major) in compensation. The majors however, consider MP3, a technology enabling the illegal dissemination of copyright protected music through the Internet and that, this leads to enormous losses caused by music piracy on the Internet. The first response to the success of Internet music providers like Napster, was to sue them for their violation of legal copyrights. At first, they attacked music companies such as Napster and MP3.com as the main culprits. Once the music majors managed to shut down these companies through successful lawsuits and acquisitions, they swamped Napster imitators Morpheus/KaZaA, Aimster, and Audio galaxy with lawsuits. The recording industry currently expends much energy and resources to combat Internet providers that offer music not in the form of phonograms but as services. This has resulted in a paradigm shift that has completely changed the structures of the music industry.

#### **3.21 History of Copyright Laws**

The crisis in the music industry has been brought about only in part by the digital revolution. The layering of copyright ownership interests and the complexity of copyright law has played a major role in the inability of the industry to respond to the changing nature of the ways in which digital works can be distributed and otherwise exploited. The layering of copyright interests and the complexity of the law began long before digital technology .Digital technology, however has laid bare the flaws of the current system that have been created by a process of accretion. The fundamental purpose of copyright law is to promote the progress of knowledge and learning. Some level of protection is to be given to the author to provide an incentive for the creation and distribution of works of authorship. How much protection is the fundamental question. When elements of the copyright system hinder dissemination of copyrighted works without providing adequate benefits to the creators or distributers of works, those elements of the system should be eliminated. As of now, the copyright act is no longer responsive to the reality of the digital world. Many of its provisions create obstacles to both widespread dissemination of knowledge and compensation to the author in order to continue to provide the incentive necessary to stimulate the creation of new works.

The production process of copyright industries is divided into three phases: creation of a proto type, its duplication and the commercialization of copies. In the first, an idea is created and transformed into a 'master' by an individual or group of individuals through a possibly complex and expensive process. In the second phase, 'manufacturing', the prototype is reproduced as a number of copies by the author or licensee. In the third phase, 'marketing', the licensee manages the marketing and the commercial distribution of copies.

In these industries, the copyright plays a pivotal role: it grants to the owner or licensee the right to exploit the idea exclusively for a statutory term, thereby granting them a monopoly rent. The copyright forbids any illegal reproduction of the prototype. While the economic aspects of patent protection is continually discussed, exhaustive studies on the way copyright has shaped the market is lacking. A vast legal literature deals with the topic, but economists have mostly neglected it.

### **3.22 Copyright laws and Music Industry**

The world of music copyright is one of the most complicated areas within copyright law. The complexity stems from the historical development of the music industry and the corresponding process of regulation through accretion that responded to changes in the industry. It was in 1831 that music compositions were added to the categories of copyrightable works. Musical work copyright owners were granted the same rights as any copyright owner. For musical works, this meant sale of sheet music. At this time, there existed three interested parties in the copyrighted musical works. First, there were the composers, the authors of the musical compositions to whom the copyright act granted copyright protection. Next, there were the music publishers who would purchase the copyrights from the composers and would exercise the rights of the copyright owner. Finally, there were the consumers who would pay the purchase price to obtain a copy of the musical composition in sheet music form. The consumer could then learn and perform the musical work.

The same uncomplicated system continued till the 1909 copyright act. Along with the right of printing and vending the sheet music, music publishers controlled the making of adaptations with one major exceptionthe act brought the creation and distribution of mechanical copies under compulsory license. The rights of reproduction, distribution and derivation continue to be part of the copyright act today. Music publishers continue to be important industry players in the legal landscape of music copyrights and the National Music Publishers Association remains a powerful force throughout the industry.

In the case of player piano industry, the legal position was that player piano rolls did not constitute reproductions of musical compositions and therefore were not infringing upon the copyright owners rights in those compositions. The 1909 Act overturned this, specifically granting to musical work copyright owners the right to control the 'mechanical reproduction' of their works, thereby encompassing the player piano rolls as infringements of the musical composition copyright. In addition, the mechanical reproduction right was subjected to compulsory licensing system. This licensing system allowed the manufacturer of piano rolls to use any musical composition without negotiating with the copyright owner for permission, so long as the musical work had been previously licensed to someone else for mechanical reproduction, and the manufacturer paid a statutory royalty. Once the right to mechanical reproduction is granted, anyone else could obtain the right by paying a statutory royalty.

The compulsory right to mechanical reproductions of musical works, or 'mechanicals', remains a part of the Copyright Act to this day and is applicable to CDs, cassettes, and any other 'phono record' that mechanically reproduces the musical work. Currently codified in section 115 of the copy right act ,the compulsory license allows recording artists to record what are commonly called 'covers'-musical works written by someone else and previously released on an album by a different recording artist. Section 115 retains the requirement that the musical work must have been previously distributed to the public, embodied in a phono record created under the authority of the copyright owner. The compulsory license even allows for a new arrangement of the work to conform it to the style of the recording artist, but does not allow for a change in the basic melody or fundamental character of the work. The copyright office periodically updates the statutory royalty rate.

Most creators of phono records, however do not use the compulsory license mechanism to obtain permission to use musical works. In 1927, the National Music Publishers Company created the Harry Fox Agency which has been granted authority by the copyright owner to act on the copyright owners behalf. Most mechanical licenses are obtained through this agency. Harry Fox represents more than 27000 copyright owners who in turn represents about 1,60000 song writers. The mechanical license remains an important part of the copyright act today. Its existence has shaped almost a century of development in the music industry, facilitating the wide availability of remakes of classic tunes.

### 3.23 Copyright laws in India

No estimates are available in India to ascertain contribution of copyright based industries to the national economy. No systematic effort is taken to arrive at fair indicators of the sectors contribution to GDP. It is believed that copyright industries collectively contribute enormously to the national economy. But there are no reliable estimates to give an account of the losses arising out of copyright piracy. In this back ground, the ministry of HRD, Govt. of India initiated a comprehensive study to know the ground level realities of the copyright piracy phenomenon.

The copyright legislation in India has kept pace with legislation all over the world and are comparable to those of many developing countries has come a long way since it was introduced during the British rule. First law on copyright was enacted in the year 1847 by the then governor general of India. When copyright Act 1911 came into existence in England, it became automatically applicable in India. This Act was applicable until Independent India passed its own Act of 1957. Thereafter, the Act has undergone many amendments. The latest in the series is 94 amendment, which came into force in 1995. Since then global developments and India's response to them have necessitated many amendments. The copyright amendment bill of 2010 became the act of 2012.

The Indian copyright act today is compliant with most international conventions and treaties in the field of copyrights. India is a member of the Berne convention as modified in1971, the universal copyright convention of 1951, and the agreement on the trade related aspects of intellectual property rights of 1995. Though India is not a member of the Rome convention of 1961, WIPO copyright treaty and the WIPO Performances and the phonograms treaty, the copyright act is compliant with it.

Digital music and concerned technology is advancing so fast that copyright legislation has to struggle to keep pace with it. Digital representation affords much greater potential for adding functionality and utility to a corpus of information. Once information is digitally encoded, new tools and systems could be invented to create an alto together new form of publication. One output from the application of digital technology is multimedia, a juxtaposition of text, picture, sound, video etc. in a single medium. Given the sheer complexity of mixed media and interconnected

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rights in the digital environment, determining what rights exist and how they apply to a publication under use is not an easy task. Therefore, the process of determining copyright, tracking them and ultimately facilitating monetary compensation to the right holders for use of their works remains very complicated. Then there is the question of what is free and protected in a vast sea of information that is available in the net. This is not always clear to the Internet providers the web users and sometimes even to the lawyers .As a result the fear of loss of income due to unauthorised use is more in an electronic environment, compared to the traditional publishing.

The issue is far more complicated in case of multimedia work. Historically, copyright law has been split between different media. For example, text comes under literary works copyright, still images are artistic works, copyright, and moving images fall within the jurisdiction of cinematic works copyright. In multimedia, all these are put together in a single product. Existence of a number of copyrights with different owners and perhaps with different terms of protection, make a multimedia product an ideal battleground in the case of copyright protection.

In spite of these complications, the world is fast moving in the digital era because of its advantages.

With new technology, copying has become simpler and less costly. Very often, pirated products are of equally good quality. Piracy also thrives because of demand supply gap. The distribution network in India in respect of audio cassettes is not very strong. This leaves a wide gap especially in the semi urban and rural areas. The pirates reign in such areas. The rural markets with buyers, without much knowledge of piracy are thus controlled by the pirates.

While piracy is an integral part of the Indian music market, the exact extent of it is very difficult to know. The IFPI India Report 1996 mentions that piracy level has come down from as high as 95% in 1985 to 30% in 1995. The piracy reports published by IFPI shows that in1995 India is the world's third largest pirate market in volume terms and the sixth in value terms. The piracy percentage has been showing a declining trend. The extent of piracy in terms of CDs, measured in percentage terms, is, much lower than in cassettes. (Study on copyright piracy in India. sponsored by the ministry of human resource development).

Piracy takes away a certain portion of revenue from the legal owner of copyrights. The commercial exploitation of copyright also yields income to the owners in the form of royalties. The state gets income in the form of excise duty, sales tax, income tax etc. which pirates do not pay. Therefore, piracy brings in losses for all involved in the legitimate production and distribution of copyright items. The important among these is the trade loss and loss to the state exchequer.

Piracy in sound recordings takes three principal forms. First, songs from different CDs cassettes are copied in a single cassette / cd without taking proper authorisation. These are generally copied in blank tapes, mostly at the instance of buyer's .A large number of music lovers in the country demand recent hits in a single medium. Since no single legitimate cassette/ CD can fulfil this demand, pirates step in. Second, there is the counterfeiting where pirated version is similar to the original in almost all respects including appearance and price. Buyers at the time of buying feel that they are buying original products. Only in use can they be found out to be counterfeit. The third category is bootlegging, where unauthorised recordings of performance are made without the knowledge of anybody.

Another related problem that arises in this segment is noticed while producing cover versions, though strictly speaking, this is not purely a copyright violation. Cover version is the reproduction of old songs by different artists using the same tune and lyrics. The law permits cover version production subject to certain conditions. But problem arises when the producers of cover version try to give the impression of bringing out the same songs (by using similar inlay cards as that of the original producer) with lower price. The ordinary end users feel as if they are buying the same songs at cheaper rates. But the fact remains that cover version songs are sung by different less familiar singers. All-time favourites from Latha Mangeshkar, for example, are sung by Anuradhapura poduwal under the banner of T series and sold to an unwary public. This sometimes results in loss of revenue to the original producers. In the past years two big music companies in India are seen to be involved in legal battles with respect to a number of cover version productions.

The reasons behind copyright piracy in sound recordings are numerous. The first and foremost is pecuniary in nature. If ordinary buyers can get certain products at a lower price, they do not mind even if they are pirated ones. The pirates can also afford to sell at lower price. They need not spend on advertisement, infrastructure, and payments to the state exchequer and therefore enjoy price advantages. The instruments to beat the privates are through quality. Generally pirated products are of lower quality. But, with advancement of technology, copying has become simpler and less costly. Therefore pirated products are equally of good quality, which makes the task of legitimate producers more difficult.

Besides, piracy also thrives because of demand supply gap. When there is demand for a product and the legitimate market is not in a position to supply, piracy creeps in. The problem is compounded by the presence of income constrained end users prepared to sacrifice quality for a lower price.

Piracy and the potential for piracy are exacerbated by the technological revolution which assures quality for the pirated product. Protecting the rights of authors, musicians and other creative artists become more difficult with existing laws. India has enacted a series of amendments on the 1957 copyright act, the oldest extant intellectual property legislation. The Act has been amended five times, prior to 2012 once each in the years 1983, 1984, 1992, 1994 and 1999 to meet the national and international requirements. And now, the copyright amendment act of 2012 has been enacted, making the Indian copyright law compliant with the Internet treaties, WIPO copyright treaty (WCT) and WIPO performances and Phonograms treaty (WPPT). The amendment grants performers rights to performers.

While introducing technological protection measures, the law ensures that fair use survives in the digital era by providing special fair use provisions. The amendments have gone beyond the limited mandate of WCT and WPPT and made many author friendly amendments facilitating access to works and other amendments to streamline copyright administration.

Broadly, the amendments strengthen the rights of the authors, streamline the process of assignment, and grant of licenses, facilitate better access to works, and extend fair use provisions in general and in particular to the Internet. There are also welcome reforms to administration and copyright societies and the copyright board. Overall, the amendments have the signature of a reformist touch.

One issue which was much discussed but was left unresolved was the issue of parallel imports. However, a fair use provision has been introduced to facilitate the parallel imports provision contained in the Patent Act 1970 and The Trademarks Act 1999. Though WCT and WPPT were concluded in 1996, the adoption of these treaties as national legislation had taken sometime. Each treaty had to be ratified by thirty countries before their entry into force. The WCT entered into force in 2002 and the WPPT in 2002 may. The US had implemented these provisions through DMCA and European Union Directive adopted its provisions in Europe. With the present amendments India is one of the few countries which has extended fair use rights to the digital era, through legislation.

#### 3.24 The 2012 copyright amendment act provisions

The amendments can be categorized into

- 1. Amendments to rights in artistic works, files and sound recordings,
- 2. WCT and WPPT related amendments to rights.
- 3. Author friendly amendments on mode of assignment and licenses.
- 4. Amendments facilitating access to works.
- 5. Strengthening enforcement and protecting against internet piracy.
- 6. Reform of copyright board and other minor amendments.

#### 3.24.1 Amendments to rights in artistic works and sound recordings

The right to reproduce an artistic work, to make a copy of a cinematographic film or embodying a sound recording, now includes storing of it in any medium by electronic or other means. The right exists in the case of literary and musical works but is extended to artistic works, cinematograph films and sound recordings. The right to store the work is of particular importance in a digital environment due to the special natures of transmission of digitalised work over the Internet where transient copies gets created at multiple locations, including over the transmitting network and in the user's computer. It is as though copyright has been extended to the right of storing of works.

It also creates liability for the Internet service providers .While adding this right, the Act also treats as fair use transient or incidental storage and safe harbour provisions to service providers. The amendments address technical issues like storing and therefore address some of the digital era challenges.

#### 3.24.2 WPPT and WCT related amendments to rights

The term hire in sections 14 (d) and (e) with regard to cinematograph film and sound recording respectively is replaced with the term commercial rental. The primary reason is to exclude non-commercial hire.

#### **3.24.3** Performer's rights

The amendment has introduced affirmative performers rights. Section 38(a) provides for performers right as an exclusive right to do or authorise the doing of any of the acts in respect of performance without prejudice to the rights conferred on authors. The proviso to the section enables performers to be entitled for royalties in case their performances are subjected to commercial use. This is a welcome development.

### **3.24.4** Author friendly amendments on mode of assignment and licenses

This amendment strengthens the position of the author if new modes of exploitation of the work come to exist.
### 3.24.5 Amendments to facilitate access to works

A grant of compulsory licenses amendment deals with compulsory licenses of works withheld from the public. A new section 31(c) provides for statutory license for any person desiring to make a cover version of a sound recording in respect of literary, dramatic or musical work. The amendment provides that the person making sound recording shall give to the owner prior notice of his intention and pay in advance the royalty at the rate fixed by the copyright board. Such sound recordings can be made only after the expiry of five years after the publication of the original.

A new section providing for statutory license for broadcasters has been brought to facilitate access to the works to the broadcasting industry. The amendment provides that any broadcasting organisation desiring to broadcast a work including sound recording may do so by giving prior notice to the right holders and pay royalty in advance. The names of the authors and principal performers shall be announced at the time of broadcast.

# **3.24.6 Fair use provisions**

Section 52 enumerates fair use clauses, acts that will not be infringement of copyright. The fair use provision has been extended to cinematograph and musical works. Fair use provisions have been extended to the digital environment. Any transient and incidental storage of any works through the technological process has been provided exceptions as per the international practice.

A new clause seeks to provide that transient and incidental storage of a work or performance purely in the technical process of electronic transmission shall not constitute infringement of a copyright. The unauthorised use of copyright work over the internet leads to the suspension of the service provider's activity.

Section 53 dealing with importation of infringing copies, has been substituted with a new section providing detailed border measures to strengthen enforcement of rights by making provision to control import of infringing copies by the customs department, disposal of infringing copies and presumption of authorship under civil remedies. As a result, any person whom circumvents an effective technological measure applied for the protection of any of the rights, with the intention of infringing such rights shall be punishable with imprisonment. The rationale is to prevent high rate infringement i.e., digital piracy, in the electronic media.

# **3.24.7 Digital rights management information**

This amendment is intended to prevent the removal of the rights management information without authority and distributing any work, fixed performance or phonogram, after removal of rights management information. As a result, any unauthorised removal of rights management information is punishable, by law. The protection of technological measure and rights management information were introduced in WCT and WPPT as effective measures to prevent infringement of copyright in digital environment.

The present study offers only a brief discussion on copyright laws. The focus of the study is not on copyrights and since this has legal ramifications, the study cannot do justice to an in depth study in copyright laws.

# **3.25** Conclusion

Looking back from today's vantage point, to the beginnings of music industry we can only wonder at the enormity of change that has occurred. From notations on copper plates called sheet music, to Teleharmonium weighing 200 tons, to modern file sharing; music industry has come a long way. The industrial and economic possibilities of storing and selling music were realized early on and scientists like Edison devoted much time and energy for such inventions. The complete transformation that occurred in the contemporary music industry is the result of digital revolution. Copyright laws also have changed to accommodate the changes of digital revolution. Great innovations are made now from one day to another and not from one decade to the next. The music industry is in a state of flux when those who depend on music have to be very alert lest they be left on the wayside by a fast moving music industry.

## **CHAPTER - 4**

### MARKET DYNAMICS OF ENTERTAINMENT INDUSTRY

#### **4.1 Introduction**

Entertainment industry is going through a period of structural change. The spread of digital technology has transformed the sector from physical to digital. This change can be witnessed in almost all the segments of the entertainment industry. This is especially true of music industry where the shift from analog to digital platform is much easier. A technology revolution is a great stride forward for any industry; costs would come down, profits would rise and those who surround the industry and live by it would benefit. The structure of music industry has been transformed by the digital revolution, the powerful record companies who were the intermediaries find themselves redundant though still performing music promotion and allied peripheral activities. Creators of music are more powerful, though the act of creation of music is complex and require the services of others, which is still managed by the old intermediaries. A new face or a new voice is not completely dependent on music producers for promotion. They can upload their music via the net and can create an appreciative audience by themselves. Stars are crated overnight and producers of music bend before popular appeal.

The PWC reports (2014) predict the growth of entertainment industry in India with a CAGR of 15 per cent for the period 2013 to 2018. Internet is the fastest growing segment. Music industry is expected to grow with a CAGR of 13 per cent for the period 2013 to 2018. In India the digital sale of music is fast out pacing physical sales. The main component of digital sale is mobile ring tones and downloading music online through mobiles. The chief source of revenue to music industry comes from mobile companies. Though number of internet users is high, Internet penetration as such is low. Internet usage is mainly smart phone enabled. In 2014 India topped as the world's fastest growing smartphone market. As of December 2014, there were about 173 million mobile internet users in India. Fuelled by the availability of low-cost smartphones and dropping data plan tariffs the absolute number of internet connections is at a record high, but internet penetration stands at about 19 per cent, which is still lower compared to internet penetration across other countries. The total number of mobile internet users is expected to grow by CAGR 21 per cent from 2014 to 2019.

Price Water House Cooper (PWC) publishes annual reports on entertainment and media industry. Their published reports on Global entertainment and media industry and Indian entertainment and media industry from 2000 to 2012 is used in compiling secondary data. Another source of data available is the digital music reports (DMR)published by IFPI from 2000 to 2012.Creative economy reports published in 2008, 2010 and 2013 are also used for data compilation. FICCI also publishes annual reports on entertainment industry, which is used for data compilation. The report on Global data is published region wise. The region wise classification of entertainment and media markets is given as United States, EMEA (Europe, Middle East and Africa), Asia/Pacific, Latin America and Canada. The table shows that the percentage change of growth of entertainment and media industry is more rapid in the case of Latin American countries and in the Asia/Pacific region which includes countries like India and China. In the Asia/Pacific, market has expanded from 193 billion in 2000 to 492 billion in 2012. The percentage change has almost doubled from 3.6 to 6.6.

### 4.2 Global Entertainment Market

Price Water House Cooper (PWC) publishes annual reports on entertainment and media industry. Their published reports on Global entertainment and media industry and Indian entertainment and media industry from 2000 to 2012 is used in compiling secondary data. Another source of data available is the digital music reports (DMR) published by International federation of phonographic industry (IFPI) from 2000 to 2012. Creative economy reports published in 2008, 2010 and 2013 are also used for data compilation. Federation of Indian chamber of Commerce and industry (FICCI) also publishes annual reports on entertainment industry, which is used for data compilation. The report on Global data is published region wise. The region wise classification of entertainment and media markets is given as United States, EMEA (Europe, Middle East and Africa), Asia/Pacific, Latin America and Canada. The table shows that the percentage change of growth of entertainment and media industry is more rapid in the case of Latin American countries and in the Asia/Pacific region which includes countries like India and China. In the Asia/Pacific, market has expanded from 193 billion in 2000 to 492 billion in 2012. The percentage change has almost doubled from 3.6 to 6.6.

Table 4.1.1 shows Global entertainment market region wise, for the period from 2004-2012. The annual PWC reports for a period of 9 years from 2004 to 2012 are used to find out global changes in the music industry. The tables are on entertainment and media industry of which music industry is part. The year 2004 to 2005 is a watermark in the transition from physical to digital formats and therefore must be included in our table. Reports are compiled from 2004 to 2012. The table shows that the percentage change of growth of entertainment industry is more rapid Asia/Pacific region which includes countries like India and China. The GR for the period 2004-2012 for Global entertainment market is 32.6. The year 2004 to 2005 marks a period of change. During this period internet penetration increased and digital sales of music emerged, causing structural changes in music industry. During the period 2004 to 2012, many countries experience a fall in entertainment market, especially US, showing a comparatively smaller GR of 3.1. The GR from 2004 to 2012 shows a high growth rate in the entertainment and media market by Latin American countries and Asia/Pacific region. Middle East countries show comparatively slow growth. Global entertainment market shows sluggish growth.

Region	2004	2005	2006	2007	2008	2009	2010	2011	2012	GR
United States (% Change)	52058 (8.00)	545295 (4.7)	576762 (5.7)	504934 (-12)	498639 (-12)	466333 (-6)	491896 (5)	508029 (3.2)	536741 (5.6)	3.1
EMEA (% Change)	46287 (5.00)	494202 (7.9)	533473 (-7.9)	454104 (-14.8)	470444 (3.6)	460569 (-2.1)	522828 (13.5)	549867 (5.2)	569277 (3.5)	22.98
Asia Pacific (% Change)	25447 (8.00)	278861 (9.15)	304404 (12.04)	341076 (6.9)	364832 (1.76)	371256 (18.07)	438351 (6.9)	462232 (5.4)	492655 (6.6)	93.59
Latin America (% Change)	36582	40989 (12.04)	45982 (12.18)	51535 (12.07)	67145 (30.2)	59093 (-11.9)	77122 (30.5)	84455 (9.5)	92198 (9.16)	152.03
Total (% Change)	1274523	1359347 (6.24)	1460621 (6.93)	1351649 (-8.06)	1401060 (3.52)	1357251 (-3.22)	1530197 (11.30)	1604583 (4.63)	1690871 (5.10)	32.6

 Table No: 4.2.1 Global entertainment market by region 2004-2012 (US \$ Millions)

Source: PWC reports on Global entertainment and media industry compiled from 2004-2012

Table 4.2.2 shows the global entertainment and media market divided into eleven segments including filmed entertainment, TV network, internet, gaming, book publishing, Newspapers and recorded music. TV networks broad cast and cable and internet advertising and access spending shows an increased growth. The percentage change in recorded music has increased from -2.1 in 2004 to 2.5 in 2012. GR of film industry for the period 1999-2004 is 10, for book publishing it is 18 and for TV networks it is 9. Internet advertisement and access spending shows a high growth of 42.Recorded music for the period shows little or no growth. The global entertainment and media market for the period 2004 to 2012 shows a GR of 52.8 percent. Film industry shows a GR of 7.2 per cent. Recorded music shows an overall growth of 39.3 percent. In recorded music market, though physical sale of music has fallen this is offset by an increase in digital sales which has led to overall growth. Internet advertisement and access spending and games show high GR compared to other segments. High internet penetration, increased piracy and inefficiency of existing copyright laws have led to sluggish growth in most of the segments.

Segment	2004	2005	2006	2007	2008	2009	2010	2011	2012	GR
Eilm Industry	91069	81661	83781	82258	82019	83359	84897	85433	87877	7 0
Film industry	81908	(-2.7)	(2.6)	(2)	(-0.3)	(1.6)	(1.8)	(0.6)	(2.9)	1.2
TV Networks	15/161	148222	160070	52119	61661	63901	75594	89766	105411	21.60
I V Networks	154161	(8.90	(8)	(32.5)	(18.3)	(3.6)	(18.3)	(18.7)	(17.4)	-31.02
TV distribution *	144024	147086	156440	171271	173158	160561	179479	185005	196507	26.42
I V distribution *	144054	(3.4)	(6.4)	(3.2)	(1.1)	(-7.3)	(11.8)	(3.1)	(6.2)	30.45
Decorded Music	26600	35765	34861	56793	54221	53154	49270	49886	51124	20.2
Recorded Music	30099	(-2.1)	(-2.5)	(-2.9)	(-4.5)	(-2)	(-7.3)	(1.3)	(2.5)	39.3
Internet e desertieine	101265	161318	202498	255937	290441	314431	351066	406738	456417	276.06
internet advertising	121305	(32.9)	(25.5)	(26.3)	(13.48)	(8.25)	(11.6)	(15.8)	(12.2)	270.00
Magazines	05005	77169	78629	87094	85550	75948	75855	75221	75337	20.7
	93003	(3.9)	(1.9)	(2.2)	(-1.8)	(-11.2)	(-0.1)	(-0.8)	(0.2)	-20.7
Newenanana	171667	182323	185891	195917	187998	168328	169091	167968	168553	25
newspapers	1/400/	(3.6)	(2.9)	(2)	(0.8)	(-4)	(-10.5)	(-0.7)	(0.3)	-3.3
Education	103201	104905	106061	114329	114944	113599	113530	112066	112173	<u> </u>
books and training	-	(5.1)	(1.1)	(5.3)	(0.5)	(-1.2)	(-0.1)	(-1.3)	(0.1)	8.09
Business	72760	155640	163565	215607	212411	191572	190349	191125	194462	162 62
Information	13/02	(4.4)	(5.1)	(4.8)	(-1.5)	(-9.8)	(-0.6)	(0.4)	(1.7)	105.05
Video Comos	26102	28395	32954	44449	54022	55201	57459	58723	62349	129.02
video Games	20195	(5.7)	(16.1)	(26.1)	(21.5)	(2.2)	(4.1)	(2.2)	(6.2)	158.05
Dadia	61127	68327	72097	82142	81717	73221	76948	79195	83410	26.12
Radio	01157	(4.8)	(5.5)	(13.9)	(-0.51)	(-10.3)	(5.1)	(2.92)	(5.32)	30.45
Total	062001	1085906	1170786	1243587	1283198	1239676	1310008	1389060	1481447	52.00
Fotal   9	968991	(10.77)	(7.25)	(5.85)	(3.08)	(-3.51)	(5.369)	(5.69)	(6.24)	32.88

 

 Table No: 4.2.2 Global entertainment and media market by segment for the period 2004 -2012 (US \$ Millions) (Figures in brackets show percentage change)

Source: PWC reports on Global entertainment and media industry compiled from 2004 to 2012. Note: \* TV Distribution include TV station, cable, and satellite

Table 4.2.3 shows entertainment market in the Asia Pacific region for the period 2004-2012. The entertainment and media market in the Asia/Pacific region is divided into eleven segments including filmed entertainment and recorded music. Filmed entertainment, TV networks, broad cast and cable and internet advertising and access spending shows an increased growth. Total entertainment market shows a GR of 120.14 per cent. The percentage change in recorded music has fallen. Internet advertisement and access spending shows the highest growth with 382.83 per cent. Total entertainment market shows a growth of 120.14 per cent. Internet and gaming shows highest GR. Recorded music market shows a growth of 52.65 per cent. Table 4.1.3 shows that GR is very high in Internet advertising and access spending, video games, and casino gaming. The impact of digital technology is greatest in all the three. It is lowest in recorded music, magazine publishing, and book publishing. In the period 2005 to 2006 and in 2007 there is a sluggish increase in recorded music, but in 2008, 2009, 2010, and 2011, recorded music has fallen absolutely, and in the row showing percentage increase the values are negative. We can see the impact of global recession clearly in recorded music. Though all segments show the impact of global recession, it is more marked and persistent in recorded music. It begins to show a slight increase only by 2012, when digital sales definitely began to compensate for the fall in physical sales. In the publishing of books, magazines and newspapers to the change to digitalisation has impacted the physical sales and only picked up when people are more attuned to the change in format to digital.

Segment	2004	2005	2006	2007	2008	2009	2010	2011	2012	GR
Eilm Industry	14064	14875	16040	19046	19481	19964	21101	21991	23564	57.07
Fillin mausu y	14904	(-0.6)	(7.8)	(5.3)	(2.3)	(2.5)	(5.7)	(4.2)	(7.2)	51.21
TV notwork	21022	23853	26168	25745	28244	31654	34544	38894	42545	102.97
I V HELWOIK	21052	(13.4)	(9.7)	(11)	(9.7)	(12.1)	(9.1)	(12.6)	(9.4)	102.87
TV cable	20/82	30660	31908	41894	42338	40803	45624	48232	48681	65 11
& satellite	29403	(4)	(4.1)	(3.5)	(1.1)	(-3.6)	(11.8)	(5.7)	(0.9)	03.11
Record	7206	7596	8055	12136	11972	11605	11096	11037	11138	52.65
music	1290	(4.1)	(6)	(1)	(-1.4)	(-3.1)	(-4.4)	(-0.5)	(0.9)	52.05
Internet	25011	49442	59894	102482	117069	128071	143428	155900	173391	202.02
Advert.	55911	(37.6)	(21.1)	(71.1)	(14.2)	(9.39)	(12)	(8.69)	(11.2)	302.03
Magazinas	13825	14495	14927	20393	20162	18244	18167	17920	18176	21 47
Magazines		(4.8)	(3)	(-0.2)	(-1.1)	(-9.5)	(-0.4)	(-1.4)	(1.4)	51.47
Nowepopore	12710	45304	46898	60353	61422	59028	60935	63093	65234	40.21
Newspapers	43/19	(3.6)	(3.5)	(3.1)	(1.8)	(-3.9)	(3.2)	(3.5)	(3.4)	49.21
Education	20512	21294	22570	30085	31592	31340	31160	31240	31752	54 70
books	20312	(3.8)	(6)	(8.2)	(5)	(-0.8)	(-0.6)	(0.3)	(1.6)	54.79
Business	16853	17676	18374	30916	31522	29918	30238	30206	31196	<b>85</b> 1
info	10055	(4.9)	(3.9)	(6.4)	(2)	(-5.1)	(1.1)	(-0.1)	(3.3)	0.5.1
Video comos	0170	9934	11760	15215	18624	20942	23059	24313	26982	102.05
video games	9179	(8.2)	(18.4)	(28.1)	(22.4)	(12.4)	(10.1)	(5.4)	(11)	195.95
Radio	12101	13517	14323	21747	22702	21226	22240	23269	24584	57.64
	15101	(3.2)	(6)	(51.8)	(4.4)	(-6.5)	(4.7)	(4.6)	(5.65)	37.04
Total	225875	248646	270917	380012	405128	412795	441592	466095	497243	120 14
225875	(9.158)	(8.2206)	(28.708)	(6.1995)	(1.8573)	(6.52118)	(5.2571)	(6.2641)	120.14	

 Table No: 4.2.3 Entertainment and media market by segment in Asia Pacific Region 2004 -2012(US \$ Millions)

(Figures in brackets show percentage change)

Source: PWC reports on Global entertainment and media industry compiled from 2004 to 2012

The period taken in table 4.2.4 is different from all the other tables. This is because the shift to digital sales start during this period that is in 2005, and for purposes of comparison must be included. Similarly the true impact can only be known if changes that occurred in 2013 and 2014 are included. As could be anticipated from general market observation, recorded music sales started its downward trend from 2005 and is still continuing to fall. Physical sales of recorded music has plummeted, clocking in a CAGR of -7.5 by 2014. Except for table 4.1.5, in general the data from the period 2004 to 2012 is taken.

Table 4.2.4 shows changes in global recorded music market both physical and digital. The period is taken from 2005 to 2012 as digital sales begin from 2005 onwards. The physical sales shown in millions of dollars has fallen off consistently from 2005 to 2012. The table also gives information about 2013 and 2014 when the trend is continuing. The CAGR is -7.57. Digital sales have compensated for the fall in the physical and increased over the years concerned. But the change in the format has adversely affected the recording companies and made music piracy simple and effective. When we look at the global sales there is a negative growth rate of -2.54%. In 2012 the physical sales and digital sales are almost equal. By 2013, digital sales have surpassed physical sales.

Music Sales	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
Physical Distribution	32398	29480	25367	20971	18269	16119	14371	12987	11824	10885
Digital Distribution	2127	3610	5212	6269	8103	9800	11670	13366	15141	16988
Total	34525	33090	30579	27240	26372	25919	26041	26353	26965	27873

Table No: 4.2.4 Global Recorded music market Physical/Digital sales(\$Millions)

Source: PWC reports on Global entertainment and media industry compiled from 2005 to 2012

Table 4.2.5 shows global recorded music market region wise. Recorded music market shows negative growth in all regions for the period 2000 to 2004. Total recorded music market grows at the rate of 5 per cent CAGR for the period 2004 to 2012, whereas it showed a negative growth (-2) for the period

2000 to 2004. Growth of recorded music is high in Asia Pacific and EMEA compared to other regions.

Region	2004	2005	2006	2007	2008	2009	2010	2011	2012	GR
United	10700	12270	11728	19777	18291	17879	16009	16528	17247	25 5
States	12720	(-3.6)	(-4.4)	(68.6)	(-7.5)	(-2.3)	(-10.5)	(3.2)	(4.4)	55.5
	14452	13848	13075	23544	22698	22407	20925	21062	21441	10 21
ENIEA	14433	(-4.2)	(-5.6)	(80)	(-3.6)	(-1.3)	(-6.6)	(0.7)	(1.8)	40.34
Acia Decifia	7206	7596	8055	12136	11972	11605	11096	11037	11138	57 65
Asia Facilic	1290	(4.1)	(6)	(50.66)	(-1.35)	(-3.06)	(-4.38)	(-0.53)	(0.91)	52.05
Latin	1102	1214	1221	1336	1260	1263	1240	1259	1298	00
America	1195	(1.8)	(0.6)	(9.41)	(-5.7)	(0.2)	(-1.8)	(1.5)	(3.1)	0.0
Total 35	25670	34928	34079	56793	54221	53154	49270	49886	51124	12 22
	55070	(-2.1)	(-2.4)	(7)	(-4.7)	(-2)	(-7.8)	(1.2)	(2.4)	43.32

 Table 4.2.5 Global Recorded music market (\$Millions)

(Figures in brackets show percentage change)

Source: PWC reports on Global entertainment and media industry compiled from 2004 to 2012

Table 4.2.6 shows the internet access market, region wise, for the period 2006 to 2012. Latin American countries shows a very high growth of 22.09 per cent followed by Middle East countries with 12.88 per cent. Asia Pacific region shows a CAGR of 11.69 per cent. Data regarding internet access is available only from 2006 and internet as a viable distribution medium for digital sales was accepted only from 2005 onwards. Though the growth in internet access is less in Asia pacific countries compared to Latin American countries in value terms, Asia Pacific is the region with the highest internet access.

Table 4.2.6. Global Interne	t access market by region: Wired and Mobile
(Us \$ Millions)	(Figures in brackets show percentage change)

Region	2006	2007	2008	2009	2010	2011	2012	GR
United	33,882	38,927	42,076	45,400	49,298	58,941	66,583	06 51
States	(-14.3)	(-14.4)	(-8.1)	(-7.9)	(-8.6)	(-19.6)	(-13)	90.31
ЕМЕА	58,007	67,749	76,361	83,179	90,455	111,000	122,237	110 72
LIVILA	(-22.2)	(-16.3)	(-12.7)	(-8.9)	(-8.7)	(-22.7)	(-10.1)	110.72
Asia	69,529	89,935	101,264	110,975	122,200	130,835	142,783	105 25
Pacific	(-32.5)	(-17.1)	(-12.6)	(-9.6)	(-10.1)	(-7.1)	(-9.1)	105.55
Latin	5,935	7,207	9,049	10,976	13,519	16,196	19,403	226.02
America	(-42.4)	(-32.7)	(-25.6)	(-21.3)	(-23.2)	(-19.8)	(-19.8)	220.92
Total	167,353	203,818	228,750	250,530	275,472	316,972	351,006	100 72
Total	(-25.1)	(-16.8)	(-12.2)	-9.5	(-10)	-15.1	(-10.7)	109.75

Source: PWC reports on India entertainment and media industry compiled from 2000 to 2012

Whereas it showed a negative growth (-2) for the period 2000 to 2004. Growth of recorded music is high in Asia Pacific and EMEA compared to other regions.

Table 4.2.7 shows the leading internet access markets in the world. United States, Russia, China, Brazil and India shows high growth rates and are the leading internet access markets in the world. These are also the top entertainment markets in the world. Russia has the highest growth in internet access market with a CAGR of 20.75 per cent followed by Brazil with 21.69 per cent, China with 13.85 percent and India with 12.9 percent. Japan surprisingly shows a negative growth rate.

Table 4.2.7. Leading Internet Access Markets (US \$ Millions)										
	(Figures in brackets show percentage change)									
Country	2007	2008	2000	2010	2011	2012	СР			

Country	2007	2008	2009	2010	2011	2012	GR
Australia	20054	32903	32803	34264	35021	37003	22.52
Australia	29934	(-0.3)	(-4.5)	(-2.2)	(-5.7)	(-100)	23.33
Drozil	2502	4229	5060	6205	7608	9346	166 70
DIazii	5505	(-19.7)	(-22.6)	(-22.6)	(-22.8)	(-99.8)	100.79
China	63667	73845	81194	95702	109059	120948	80.06
Ciiiia	03007	(-10)	(-17.9)	(-14)	(-10.9)	(-100)	89.90
France	9651	11502	12405	13233	14142	15202	57 51
	7051	(-7.85)	(-6.67)	(-6.87)	(-7.5)	(-99.94)	57.51
<b>T</b> 1.	12400	14947	15490	17264	21628	24778	00.01
India	13480	(-3.63)	(-11.45)	(-25.28)	(-14.56)	(-99.95)	83.81
T4 - 1	7144	7584	8135	8802	10084	10924	52.01
Italy	/144	(-7.27)	(-8.2)	(-14.56)	(-8.33)	(-99.92)	52.91
Ionon	105808	200147	193627	195667	192796	198938	1 50
Japan	193808	(-3.3)	(-1.1)	(-1.5)	(-3.2)	(-100)	1.39
Duccio	1678	2235	2738	3335	3809	4387	161 //
Kussia	1078	(-22.5)	(-21.8)	(-14.2)	(-15.2)	(-99.5)	101.44
Snain	1668	5342	5570	5736	7362	8077	73 02
Span	4008	(-4.27)	(-2.98)	(-28.35)	(-9.71)	(-99.86)	15.02
United	8057	10432	10921	11216	11916	12856	13 53
Kingdom	0,57	(-4.7)	(-2.7)	(-6.2)	(-7.9)	(-99.9)	+J.JJ
United	35167	37845	40577	43706	53369	59123	68 12
States	55107	(-7.22)	(-7.71)	(-22.11)	(-10.78)	(-99.98)	00.12

Source: PWC reports on India entertainment and media industry compiled from 2007 to 2012

### **4.3. Indian Entertainment Industry**

The reach of India's entertainment industry by 2015 extends to millions of consumers, represented by 161 million TV households, 94067 newspapers, about 2000 multiplexes, 214 million Internet users of which 130 million are mobile Internet users. These are all delivery platforms that could drive change and be transformational catalysts. The year 2013 to 2014 saw the major industry components performing well and bringing larger revenues. The big hope for the future of entertainment industry is digital. An Internet user base of 200 million enhances the potential of the industry to engage with customers, generating higher revenues for the industry. With the addition of new media such as social networking services, animation and VFX, online gaming and applications running on mobile devices, a new dimension has been added to the entertainment industry. In calendar year 2013, the Indian entertainment industry registered a growth of 11.8% over 2012 and touched INR 918 billion. The industry in the period began to see some benefits from the digitalisation of media products and services.

	2004	2005	2006	2007	2008	2009	2010	2011	2012	GR
Television	128.7	158.5	191.2	223.9	244.7	265.5	306.5	340	383	197.59
Filmed	- 50.0	(0.23)	(0.21)	(0.17)	(0.09)	(0.08)	(0.15)	06	(0.12)	
Entertainment	-	(0.14)	(0.24)	(0.14)	(0.12)	(-0.11)	(-7.89)	(0.09)	(16.6)	86.97
Drint Modia	97.8	109.5	128	149	162	161.5	178.7	190	212	116 76
	-	(0.12)	(0.17)	(0.16)	(0.09)	(-0.03)	(10.6)	(0.07)	(0.12)	110.70
Internet Access	-	-	-	-	-	-	74	116 (0.57)	171 (0.47)	131.08
Dadia	2.4	3.2	5	6.9	8.3	9	10.8	14	15	505
Radio	-	(0.33)	(0.56)	(0.38)	(0.20)	(0.08)	(0.2)	(0.11)	(0.07)	525
Music	6.7	7	7.2	7.6	6.9	7.5	9.5	12	13.1	05 52
wiusic	-	(0.04)	(0.03)	(0.04)	(-0.08)	(0.09)	(0.27)	(0.25)	(0.08)	95.52
Animation, Gaming &VFX	-	-	10.5 -	15.7 (0.25)	19.6 (0.25)	23.8 (0.22)	31.3 (0.32)	11 (0.33)	18 (0.64)	71.42
Out-of-home	8.5	9	10	12.5	15	12.5	14	16	17	100
advertising		(0.06)	(0.11)	(0.25)	(0.2)	(-0.17)	(0.12)	(0.11)	(0.06)	100
Online	0.6	1	1.6	2.7	5	6	7.7	10	23	3733
advertising	-	(0.67)	(0.6)	(0.69)	(0.85)	(0.2)	(0.28)	(0.31)	(1.3)	5755
Total E & M	304.6	356.3	438	514.3	568.5	580.8	646	805	965	216.8
Industry	-	(0.17)	(0.23)	(0.17)	(0.11)	(0.02)	(0.11)	(0.18)	(0.20)	210.0

 Table 4.3.1 – Indian entertainment and media industry (Rs. Billion)

 (Figures in brackets show percentage change)

Source: PWC reports on Global entertainment and media industry compiled from 2004 to 2012

Table 4.3.1 shows the growth in Indian entertainment industry during the period 2004 to 2012.Growth in different segments are shown including film industry, TV, print media, gaming and music. The growth in Indian entertainment and media industry is shown above. The market is categorized into ten segments. The entertainment and media market has shown an overall growth of 14.18 per cent. Recorded music market has shown an increase with a GR of 95.52 per cent. In the total entertainment and media industry of INR 965 Billion, Music industry contributes to about INR 13 Billion. Market share of recorded music in the entertainment market comes to 1.34 per cent.

In the total entertainment and media industry of 965 INR, TV contributes the highest with 383 billion INR followed by print media and film industry. The Indian entertainment industry generated 1120 billion INR in revenue in 2013, an increase of 19 % over the previous year. The largest segment is TV industry with revenue increasing from 383 billion INR to 420 billion INR in 2013representing a growth of about 15%. This growth was led by an increase in subscription revenue, driven by the process of digitalization. Internet access and Internet advertising have been the fastest growing segments with annual growth rates of 47% and 26% respectively (PWC 2014).

Over the years under consideration, recorded music industry has not shown the same positive technology impact as has been shown by the growth in Internet access, filmed entertainment, animation or online advertising. Music industry share has only grown from INR 6.7 billion in 2004 to INR 13 billion in 2012 and the compound annual growth rate is only 3.5, this can be compared to the 95 % CAGR of animation and gaming and 52 % in Internet access. Obviously, while net access boosted industries like gaming and animation, it has only reduced the importance recorded music industry.

The Indian music industry is set to grow robustly in the next few years on the back of steady macro-economic growth, rising consumer spend and positive demographic indicators. The industry revenues are expected to reach INR 1764 billion by 2016, with a CAGR of about 17% from 2012 to 2016.As of now, India is only the 14th largest Music market in the world with industry revenues of constituting 1% of GDP. India's CAGR over 2011 to 2016 is 17%, the highest in the world. Industry stakeholders accept that India has the potential to achieve path breaking growth over the next few years to reach a size of 100 billion USD. This would require game changing initiatives focused primarily around advertising spend, consumer spend and infrastructure and policy support. Achieving the vision of an industry worth 100 billion US\$, will require a consolidated and focused approach towards developing and deploying relevant infrastructure and supported by a strong policy framework.

### **4.3.1. Digital Revolution in Entertainment Industry**

The global trends are reflected in the Entertainment industry in India on a magnified scale. In the media sector, digital media continued its rapid penetration, as indicated by the stupendous 44.5 % growth in digital advertising in 2014 over 2013. One of the major highlights in 2014 was the announcement of digital India: a programme to transform India into a digitally empowered society and knowledge economy by the government. India topped as the world's fastest growing smartphone market. By the end of 2014 India had around 116 million Internet enabled smartphones and the number is expected to reach 435 million by 2019. This growth presents a good opportunity for digital content aggregators, advertisers, app developers and online streaming companies to engage users through relevant mobile fed strategies. (FICC Report 2015)

When compared with sectors like manufacturing, healthcare, pharmaceuticals and others, India entertainment industry is far ahead when it comes to digitalisation. The most challenging problem faced by the industry is one of storage. The reason behind this is digitalisation. Due to the use of highly sophisticated devices, the quality of the image size has increased .From standard definition to high definition, high definition to 2k, and now to 4 k, when you want to deliver a much higher resolution image or a content, storage becomes an issue.

Storage is a major challenge in the industry. It was also one of the major drivers for hybrid cloud to gain ground. The use of cloud computing is gaining momentum. Adoption of hybrid cloud will increase in the entertainment industry. Apart from storage, scaling and dealing with through put challenges also stands as a barrier for the entertainment industry. A particular bandwidth is required to playback a video. Previously we were habituated in playing a 25 GB file and now suddenly we have to playback a 50 or 100 GB file in one single second. So the storage has to deliver that much more content. Therefore, now we need more spindles throughout the same data which means there is a through put challenge. Storing data and making that data available at all times at each end point is the challenge that has to be faced by the entertainment industry.

The problem for entertainment companies is that the expectation of an immersive content experience is now extended across the mass market, so that providers have to deliver this promise and also on an ever extended scale. With smart devices now enabling easier, and fuller social interaction around such content as newspapers and magazines, that same sense of socialised immersion is emerging in other media as well and is driving spending choices. There is a movement towards a media hub from the old concept of TV. The growing number of ways and contexts in which people can experience video content is creating a blend of confusion, excitement and choice for consumers. It is also raising questions about value propositions and pricing of TV only bundles, given the preferences of techno savvy and urbanised young consumers. They want more flexibility, first in the ways they access and pay for content and second what content they get. The new consumers like the old, are passionate about live concerts, radio, magazines, books and so on but they demand, consume and function in a world of globally connected social media. They are increasingly adept at incorporating the various elements of content and connectivity into their media consumption mix. All of this points towards the multichannel Multi content, multi experience future: a concept that could be termed a media hub, wherein a mass of content is available for an agreed price on all devices.

The first signs of the socialised Multi screen future are already emerging. Since the launch of the original I Pad in April 2010, tablets have brought home to consumers what the future of media may look like. For the first time, consumers became willing to watch premium video content on the go. And in addition to cutting into PC sales; the tablet provides a look into the future. As soon as consumers held tablets they could imagine the same on the living room wall; but they need a handy sized one for a decent personal or social content experience on the move; and a small one in the form of a smart phone, for times when connectivity, information and immediacy are the priorities. Each device suits different content and contexts. But the key is portability, accessibility to content and on demand capability; high resolution and acceptable screen size has finally been reconciled.

The phased progress in digitisation has been the leverage for the industry's growth and success thereby bringing about a paradigm shift in key indicators, particularly within the domains of TV and film sectors. Growth in spending in India through 2018 will be spearheaded by Internet advertising, video games and internet access.

# 4.3.2. Internet access

Revenue from wired and mobile internet access grew from 171 billion INR to 252 billion INR in 2013 representing a growth of 47%, driven by growth in mobile internet access revenue. The presence of mobile phone connections estimated at 886 million in December 2013, availability of smart phones, technology up gradation by mobile operators and the tech savvy young generation have driven the growth in mobile internet access revenues (PWC 2014). Mobile Internet access increased from 26% of total Internet access spending to almost 40% by 2015. A driving high broadband penetration boosts Internet access and advertising. Broadband penetration and usage in the country has increased manifold. Widespread broadband roll out will also enable consumption of content anywhere and on any device, opening up incremental revenue streams for content owners.

## 4.3.3. TV Industry

TV penetration in India is about 65% and is expected to reach 72% by 2017. With 168 million TV households, India is the world's second largest television market after China, in 2015. India has a large broadcasting and distribution sector, comprising approximately 796 satellite TV channels.

Television industry in India is on a transformation path. Multiple channels in each genre competing for TRP, increasing pay TV penetration,

expanding, yet fragmented local as well as overseas viewership of Indian channels, demand for more specific content, all set the stage for the next level of growth and transition for players across the television value chain. While new digital content distribution platforms are emerging, new formats of entertainment - computers, mobiles and other handheld devices are gaining importance.

#### **4.3.4. Film Industry**

Indian Film industry grew from 112 billion INR in 2012 to 126 billion INR in 2013 representing a growth of 13%. In 2013, Indian films have completed 100 years, from the soundless films (Lumiere brothers) brought to India in 1896 to the first Indian film, King Harichandra (1913) and now to Indian films in English in 2014.

Film segment revenues in India comprise of ticket collection at the box office, home video sale, and ancillary revenues like broadcast syndication rights, mobile VAS and other film related sales through the new media. Over 1000 films are produced every year in more than 20 languages. 14 million Indians go to films on a daily basis. Rising disposable income, increasing popularity of alternate delivery mediums, digitalisation of film distribution and value added services like movie on demand through pay channels are set to open up new revenue streams and business models for the film industry. Emergence of multiplexes has already improved revenue reportage and average ticket price. There are over 400 production houses in India. Nearly 30 corporate houses are involved in the business of production. The aggressive expansion of multiplexes, access to organised funding, and entry of corporate houses into film production, popularity of digital film prints have all combined to bring some remarkable changes to Indian film business.

The main challenges faced by film industry are lack of high quality content. High technology is often accompanied by low quality of creative content. There is lack of quality infrastructure as well as shortage of training institutes. There is also the contradiction of growing viewer base outside India, but poor performance at international festivals.

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Indian film companies are using digital media to generate new ancillary revenues and to promote films direct to end consumers. Indian audiences are actively consuming digital film content; film related songs, games and mobile themes account for 50 % of Indian mobile value added service revenues. Going forward, studios will integrate digital media more effectively including social networks, games and exclusive video and music content, to engage audiences, promote theatrical releases and develop new revenue streams. Increased bandwidth availability will also open new revenue streams for studios to, exploit bandwidth heavy content.

Innovations in theatrical 3D content are experimented with: recent release of Hollywood movies in 3D has generated higher revenues. Domestic studios are investing in 3D for local films. Studios are experimenting with new release windows. Studios are releasing films in different media in distinct windows and charging differentiated prices to consumers. Films are now available to home audiences, on the day of theatrical release itself and are streamed directly by digital cinema.

Using social media to market movies- Indian studios are realising the need for direct to consumer engagement through social media to generate positive word of mouth during the release of a film. The Indian home entertainment market forms just 8% of film industry revenues due to relatively high pricing and piracy. As a result film studios are not in a position to fully exploit their large libraries of content. However studios expect the introduction of 4G and mass broadband availability to open a new market for home entertainment through the online delivery of movies over Internet connected TV, PCs and Tablets. As broadband penetration deepens, there is a growing need to develop effective distribution models and for studios in India to invest in digitizing and developing content for digital delivery.

India's growing middle class, rising disposable incomes, high volume of content consumption and conducive regulatory environment hold high potential for foreign investments across all segments of the entertainment industry. Digitization creates additional opportunities to cater to a new generation of digital consumers. There is an increasing urgency to capture the Indian market.

Success in India calls for an understanding and ability to adapt to economic and cultural nuances in India and a willingness to invest in content and services tailored for the local market. High inequality in incomes in India and the unashamed exhibition of status consumption has generated several market segments each of which needed to be addressed to differently. In fact, in the present scenario, the corporates even more than the government desire creation of purchasing power for the poor classes so long as the same may not create any value erosion for them. On the flip side, entertainment companies, operating in emerging markets like India, continue to be exposed to risks ranging from local competition, fraud, corruption and piracy. Ongoing structural and regulatory reforms and e development of corporate governance norms will hopefully, mitigate these threats.

#### 4.3.5. Printing and publishing

Indian print industry grew from 2009 billion INR in 2012 to 223 billion INR in 2013 showing a growth rate of 7 %. Newspapers account for 207 billion INR (93 %) and consumer magazines about 16 billion INR (7 %) to print sector revenue (PWC 2014).

While in a number of international markets the newspaper industry is facing declining readership because of digital media, the print industry in India is thriving, driven by an increasing consumer spending, a rise in literacy rates, and the growth of regional language and specialty newspapers. Indian newspapers have low cover prices by international standards. India is also considered a destination for media sources. Outsourcing lay out design, classified and display design, graphics and data compilation are typically outsourced to India to take advantage of low cost. Magazines form about 19 % of the publishing industry. Specialty magazines are being published covering niche segments like travel, healthcare and life style. It is expected that, electronic books share of total global spending on consumer and educational books will rise from 5 % in 2011 to 18 % in 2016.

The growing penetration of internet in India through broadband and mobile networks is expected to drive consumers to access news through digital platforms. Online news consumption in India is growing. However in contrast to other countries, where digital consumption has led to falling traditional readership, print circulation in India is seeing strong growth. Publishers expect that traditional print will continue to dominate in India. Still, they are launching Internet portals and e-commerce solutions to supplement the traditional medium.

### 4.3.6. Online Gaming

The Indian gaming industry showed a growth of 21 billion INR in 2013 representing a growth of 20 %. This growth is chiefly due to mobile gaming which grew by 34 % to reach 10 billion INR in 2013. There has occurred especially in Asia a behaviour pattern where online video gaming has overtaken console/handheld games in 2010. Such online games especially advanced casual games and massive multiplayer online games were providing consumers with connected social media experiences before people were even talking about social networks. Asian countries have led the way and have maintained their lead in terms of growth in online mobile gaming revenues. The abundance of games on mobile phones and falling price of smart phones have led to high growth in mobile gaming. It is clear that online and mobile gaming has acted as a precursor of the socialisation of other media and has led the way in creating flexible and sophisticated revenue models.

The revenues of the Indian gaming industry are expected to grow at 15% CAGR from 21 billion INR in 2013 to about 43 billion INR in 2018. India is ranked fifth in terms of forecasted growth rate (PWC 2014). The growth of Indian gaming industry is expected to depend on mobile gaming, with revenue generation mainly from subscriptions and advertising.

#### 4.4. Indian music industry

Music industry has grown in the last fifty years to become an important global industry. It encompasses a major area of economic activity, and attracts huge global investment. Over the last few years, the proliferation of digital music, the popularity of MP3 format and the emergence of Internet as a viable distribution medium have disrupted the existing music format, pricing and distribution standards. The 1990s witnessed a technological shift based on wide spread penetration of information and digital technologies. The shift from analog to a digital platform caused significant changes in the structure of music industry. This has brought about fundamental changes in the market for entertainment products. Digital music is one of the products that can reach the final consumer directly through the internet. With the MP3 technology it became very easy to transfer music through the internet. MP3 technology compressed music and made it possible to send music over the internet.

Music industry in India has definitely gone digital. It is the first of the entertainment industry to become digital. The coming together of different forces prepared the ground in India for the digital take off. Digital content and digital delivery of content have become ubiquitous, driven by the expanding technological capabilities and performance of delivery platforms, the rapid development in broadband technologies, innovative creation and use of content and better performance of hardware and software. The whole of Music industry impacted by the availability of digital broadband content and is project transformations in the industry. All over the world digital sales of music is fast out pacing physical sales. At the start of 2011, international digital services were present in 23 countries. By 2012 this has increased to 58 countries as per IFPI Report 2012. Recording companies are focusing on new developing markets where digital infrastructure is fast developing. In India the ratio of digital sales to physical sales is higher like many developed countries of the world. India has more than 40 million smart phone users and 14 million broad band connected households.

Table 4.4.1 shows the growth in Indian music industry from 2004 to 2012. The GR for the music industry in India shows a growth of 8.35 per cent. The above table shows that, there is a definite increase in the digital sales of music as compared to physical sale of music. The digital sale of music is showing tremendous growth in the period 2004 to 2012. GR of digital sales for the period is 63.12. All over the world digital sales of music is fast out pacing physical sales.

	2004	2005	2006	2007	2008	2009	2010	2011	2012	GR
Music	6.7	7	7.2	7.6	7	7.5	9.5	11.9	13.1	8 35
Industry	-	(0.04)	(0.03)	(0.06)	(-0.08)	(7.14)	(26.6)	(25.26)	(37.89)	0.55
Physical	6.7	6.5	6.6	6.5	5.3	4	3.3	2.8	2.3	12.5
sales	-	(-0.03)	(0.02)	(-0.02)	(-0.19)	(-0.25)	(-0.175)	(-0.17)	(-0.3)	-15.5
Mobile	-	-	-	0.7	1	2.1	4.4	4.7	5	51 11
VAS	-	-	-	-	(0.43)	(1.1)	(109.5)	(59.1)	(13.6)	34.44
	-	-	-	0.2	0.4	1	1.2	1.4	1.6	50.62
Radio	-	-	-	-	(1)	(1.5)	(20)	(16.7)	(12)	30.02
Tutowest	-	-	-	0	0	0.1	0.1	0.1	0.2	22.11
Internet	-	-	-	-	(0.2)	(3.78)	(27.9)	(27.3)	(1)	23.11
Public	-	-	-	0.2	0.2	0.4	0.5	0.6	0.7	22.24
Performance	-	-	-	-	(0.48)	(0.53)	(31.5)	(19.1)	(5)	52.24
Digital	-	0.5	0.6	1.1	1.6	3.6	6.2	9.1	10.8	63 12
sales	-	-	(0.2)	(0.83)	(0.45)	(1.25)	(0.72)	(0.47)	(0.19)	03.12

Table 4.4.1–Indian Music industry physical / Digital sales (Rs. Billion)2004 to 2012(Figures in brackets show percentage change)

Source: PWC reports on Global entertainment and media industry compiled from

By 2012 in the world music market, physical sales and digital sales have become equal as shown by Table 4.4.1.But in the case of India the shift from physical to digital is much faster with digital sales out pacing digital sales by 2010. Physical sales have fallen with a negative GR of -13.46. Another segment which shows a high growth is the mobile subscriber base which shows a tremendous growth of 54.44 per cent.

At the start of 2011, international digital services were present in 23 countries. By 2012 this has increased to 58 countries as per IFPI Report2012. Recording companies are focusing on new developing.

Markets where digital infrastructure is fast developing. In India the ratio of digital sales to physical sales is higher like many developed countries of the world.

Table 4.4.2 shows the market share of entertainment industry in India over the period 2004 to 2012. The market share of entertainment industry as a percentage of GDP is 1.11 in 2004. The share of entertainment market is consistent throughout the years. The market share is 1.35 per cent in 2012.

Voor	Entertainment	GDP at Market	Market share
1 cai	market	Price	(%)
2004	8070	721,585	1.11
2005	11,230	834,214.70	1.34
2006	13,432	949,116.77	1.41
2007	13,480	1,238,699.17	1.08
2008	14,947	1,224,097.07	1.22
2009	15,490	1,365,371.47	1.13
2010	17,264	1,708,458.88	1.01
2011	21,628	1,835,814.45	1.17
2012	24,778	1,831,781.52	1.35

Table 4.4.2- Market share of entertainment industry in India

Source: World Bank Reports

The top entertainment markets of the world are identified as Australia, Brazil, China, France, India, Italy, Japan, Russia, Spain, UK and US.

Table 4.4.3 shows the top entertainment markets in the world. GR is calculated for the period 2004 to 2012. The table shows that Brazil has the highest growth with 234.5 per cent. Followed by, India (207), USA (189.2), China (153.6) and Australia (108.4). Growth rate shows that India is second among the top entertainment markets of the world. Projected growth rates predict that India will be the top entertainment market by 2020 followed by China.

Country	2004	2005	2006	2007	2008	2009	2010	2011	2012	GR
Australia	17759	22963	23859	26208	28949	29480	34264	35021	37003	108.4
Ausualia	-29.3	-3.9	-9.85	-10.46	-1.83	-16.23	-2.21	-5.66	(-99.97)	100.4
Drozil	12948	17734	21192	24829	27756	28718	35379	39168	43307	224.5
DIazii	-36.96	-19.5	-17.16	-11.79	-3.47	-23.19	-10.71	-10.57	(-99.97)	254.5
China	47685	48839	47583	58020	68992	75085	95702	109059	120948	1526
China	-2.42	(-2.57)	-21.93	-18.91	-8.83	-27.46	-13.96	-10.9	-10.9	153.6
Enonac	51552	64497	56269	60247	62584	64626	73392	77098	79495	54.2
гтапсе	-25.11	(-12.76)	-7.07	-3.88	-3.26	-13.56	-5.05	-3.11	-3.11	54.2
India	8070	11230	13432	13480	14947	15490	17264	21628	24778	207
	-39.16	-19.61	-0.36	-10.88	-3.63	-11.45	-25.28	-14.56	(-99.95)	207
T. 1	37000	47517	40709	42822	43901	41715	45402	46099	47024	27.09
Italy	-28.42	(-14.33)	-5.19	-2.52	(-4.98)	-8.84	-1.54	-2.01	-2.01	
Ionon	103221	124150	164687	174732	178279	172768	195667	192796	198938	00.72
Japan	-20.28	-32.65	-6.1	-2.03	(-3.09)	-13.25	(-1.47)	-3.19	-3.19	92.15
Duccio	13491	20658	23526	19766	21508	19282	21523	24140	26437	05.06
Russia	-53.12	-13.88	(-15.98)	-8.81	(-10.35)	-11.62	-12.16	-9.52	(-99.95)	93.90
Crain	27504	31404	26721	28841	28465	26063	28702	29412	28516	905
Spain	-14.18	(-14.91)	-7.93	(-1.3)	(-8.44)	-10.13	-2.47	(-3.05)	(-99.99)	-805
United	86069	102274	70857	76304	77223	74404	82278	83367	85225	0.09
Kingdom	-18.83	(-30.72)	-7.69	-1.2	(-3.65)	-10.58	-1.32	-2.23	-2.23	-0.98
United	169368	545295	455520	469713	461737	429912	450095	463863	489873	190.2
States	-222	(-16.46)	-3.12	(-1.7)	(-6.89)	-4.69	-3.06	-5.61	-5.61	189.2

 Table 4.4.3- Top entertainment and media markets

Source: World Bank Report

Table 4.4.4 shows the GDP of top entertainment markets. The GDP of the top entertainment countries are taken to calculate the market share of entertainment goods. GDP of top entertainment markets is compiled from World Bank report for the period 2005 to 2012.

Table 4.4.5 shows the market share of entertainment goods for the top entertainment markets. The market share is found in terms of GDP. The table shows that developed countries like US, UK, Japan etc. have a higher market share of entertainment goods compared to developing economies like India and China. In India the market share of entertainment goods have remained almost steady at 1.35 per cent during the period 2010 to 2014.

Country	2005	2006	2007	2008	2009	2010	2011	2012
Australia	693,075.48	746,880.80	853,053.31	1,054,557.74	926,563.83	1,142,250.51	1,389,919.16	1,537,477.83
Brazil	892,103.19	1,107,802.14	1,395,938.06	1,694,585.01	1,664,586.38	2,209,433.27	2,615,234.94	2,413,135.53
China	2,268,598.90	2,729,784.03	3,523,094.31	4,558,431.07	5,059,419.74	6,039,658.51	7,492,432.10	8,461,623.16
France	2,203,678.65	2,325,011.92	2,663,112.51	2,923,465.65	2,693,827.45	2,646,994.70	2,862,502.09	2,681,416.11
India	834,214.70	949,116.77	1,238,699.17	1,224,097.07	1,365,371.47	1,708,458.88	1,835,814.45	1,831,781.52
Italy	1,853,512.45	1,943,530.34	2,204,085.49	2,391,875.54	2,186,239.35	2,126,747.58	2,278,089.16	2,074,631.56
Japan	4,571,867.44	4,356,750.21	4,356,347.79	4,849,184.64	5,035,141.57	5,495,385.62	5,905,632.34	5,954,476.60
Russia	1,524,917.47	989,930.54	1,299,705.76	1,660,846.39	1,222,644.28	1,524,917.47	1,904,793.93	2,016,112.13
Spain	1,431,672.85	1,264,551.50	1,479,341.64	1,634,989.01	1,499,074.74	1,431,672.85	1,487,924.66	1,339,946.77
United Kingdom	2,418,941.82	2,588,077.28	2,969,733.89	2,793,376.84	2,314,577.04	2,403,504.33	2,594,904.66	2,630,472.98
United States	1,496,437.20	13,855,888.00	14,477,635.00	14,718,582.00	14,418,739.00	14,964,372.00	15,517,926.00	16,163,158.00

 Table 4.4.4. GDP of Top Entertainment Markets [GDP at Market Price (In Million \$)]

Source: World Bank Report

Country	2005	2006	2007	2008	2009	2010	2011	2012
Australia	3.31	3.19	3.07	2.74	3.18	2.99	2.51	2.4
Brazil	1.98	1.91	1.77	1.63	1.72	1.6	1.49	1.79
China	2.15	1.74	1.64	1.51	1.48	1.58	1.45	1.42
France	2.92	2.42	2.26	2.14	2.39	2.77	2.69	2.96
India	1.34	1.41	1.08	1.22	1.13	1.01	1.17	1.35
Italy	2.56	2.09	1.94	1.83	1.9	2.13	2.02	2.26
Japan	2.71	3.7	4	3.6	3.4	3.5	3.2	3.3
Russia	1.35	2.37	1.52	1.29	1.57	1.41	1.26	1.31
Spain	2.19	2.11	1.94	1.74	1.73	2	1.97	2.12
United	1 22	2 73	2 56	2.76	3 21	3 12	3 21	3 73
Kingdom	4.22	2.75	2.30	2.70	3.21	5.42	3.21	5.25
United States	3.64	3.28	3.24	3.13	2.98	3	2.98	3.03

 Table 4.4.5. Market share of Entertainment Goods (%)

Source: World Bank Report

A regression model is estimated to analyse the relation between GDP and entertainment markets. Top 10 entertainment markets are identified and a period from 2004 to 2012 is taken for analysis. Entertainment markets is taken as the dependent variable. GDP of countries is taken as the independent variable. Regression coefficients show positive value.1% increase in GDP causes 1.173% increase in market for entertainment goods. P value is .000 which is statistically significant. GDP has a positive impact on entertainment market. R square value is 0.881. The explanatory power of the model is high, equal to 88.1%. It is found that GDP has a positive impact on entertainment market.

Table 4.4.6. Regression of entertainment markets with GDP	
$\ln entertainment market = -22.57 + 1.173 \ln GDP + U$	

Co	Coefficients <sup>a</sup>													
Model		Unstand	lardized	Standardized										
		Coeff	icients	Coefficients	t Sig									
		B Std. Error Beta												
1	(Constant)	-22.570	1.268		-17.793	.000								
<sup>1</sup> ln GDP	ln GDP	1.173	0.044	0.939	26.431	.000								
a. 1	Dependent Va	riable: ln En	tertainment	a. Dependent Variable: In Entertainment market										

Source: PWC reports on Global entertainment and media industry compiled from 2004 to 2012

India is among the world's youngest nations, with more than half a billion people under the age of 25. With favourable demographics and a rise in disposable incomes, the propensity to spend on leisure and entertainment is growing faster than the economy itself. Demographic edge, with a rapidly growing young population coupled with increased usage of 3 G and portable devices to augment demand. Global companies, enticed by liberalisation and the huge volume of consumer demand for leisure goods now link their growth increasingly to emerging giants like India. The Indian entertainment industry is at a new inflection point with a surge in mass broadband adoption led by the launch of 3G and 4G services in conjunction with the country's mobile phone user base. The scale and impact of potential digital content consumption is enormous. The mandatory digitisation of the country's TV distribution infrastructure has spurred growth of digital cable and DTH necessitating expansion for the companies.

Consumer's ongoing migration to digital modes of consumption, accelerated in the period of depression, has continued to gain pace during recovery and is now driven by 3 strong forces labelled social, mobile and local possibly with the additions of terms like global and commercial.

Another factor is India's diverse content markets. The majority of India's urban consumption comes from non-metro cities, the so called tier 2 and tier 3 towns, regional markets with district cultures, languages and content preferences. Companies that understand and adapt to the economic and social fabric of the Indian operating environment and that invest in tailored content and services are likely to maximise their success.

Digitisation is creating tremendous opportunities across the broadcasting value chain and providing more choice to consumers. DTH and cable operators are expanding aggressively and focusing on premium services. Fragmented analogue cable operators are making alliances, and trying to focus on regional content. International and domestic channels are launching niche channels. Broadcasters are doing this by leveraging the lower cost of delivery to focus on regional and niche content. The entertainment

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industry has been and will continue to be one of the beneficiaries of India's favourable demographics. Being one of emerging markets, with high volumes of content consumption, a vigorous indigenous content creation industry and a favourable regulatory framework, makes India an attractive investment destination for global entertainment companies.

# 4.5. Creative Industries

United Nations Conference on Trade and Development (UNCTAD) and the United Nations Development Programme (UNDP) produce reports for understanding and identifying the functioning of the creative economy, particularly with respect to its growing importance in international trade. Creative industries are a much broader concept compared to entertainment industry. Creative industries deal with the creation, production and distribution of goods and services that use creativity and intellectual capital as primary inputs. Creative industries include traditional arts and crafts, publishing, music, visual and performing arts, films, television, radio and broad casting and new media. (Creative economy report 2008).

Arts-Craft	Audio Visuals	Design	New Media	Performing Arts	Publishing	Visual Arts
Carpets	Film	Architecture	Recorded Music	Music (CDs, Tapes)	Books	Antiques
Celebrations	Music	Fashion	Video Games	Printed Music	Newspaper	Painting
Other		Glassware			Other Printed Matter	Photography
Paper ware		Interior				Sculpture
Wicker ware		Jewellery				
Yarn		Toys				

 Table 4.5.1. All Creative Industries

Source: PWC reports on Global entertainment and media industry compiled from 2004 to 2012

Country	2004	2005	2006	2007	2008	2009	2010	2011	2012	GR
Australia	4352.2	4657.6	4907.7	6439.4	7412.8	6846.8	7410.7	8309.8	8263.0	89.86
Brazil	495.6	658.6	921.8		2052.5	1802.3	2382.9	3122.4	3192.6	544.1
China	3296.7	3610.0	3969.6	9439.5	9855.9	9377.2	11373.0	14054.1	14196.7	330.63
France	14492.3	15557.4	16470.2	21571.8	23867.1	20255.4	21219.4	23876.4	23062.1	59.13
India	985.63	1146.12	1522.21	1790.34	2683.67	4140.12	3714.78	5537.12	8916.57	804.66
Italy	8328.6	9146.2	10090.5	12828.3	13512.7	11244.3	12457.0	13788.2		65.55
Japan	14311.6	16032.6	16976.7	19612.2	19982.7	18422.0	19161.3	21571.7	23424.2	63.67
Russia	1823.2	1938.8	2511.3	3451.1	5411.6	4312.0	5869.0	6954.9	8468.6	364.49
Spain	6957.3	7893.8	7964.6	10741.1	11090.7	8055.1	8533.0	8597.0	7337.2	5.46
United Kingdom	23644.9	24877.2	27192.6	35527.2	32566.1	25584.4	27613.7	31012.8	31522.6	33.31
United States	76968.3	83507.4	88071.9	99122.4	93417.2	74247.8	84604.4	86394.1	88103.0	14.46

**4.5.2** Total Creative Goods imports of top entertainment markets

Source: PWC reports on Global entertainment and media industry compiled from 2004 to 2012

The table 4.5.2 shows the total creative goods imports of top entertainment markets. Growth rate is found for the period 2004 to 2012. The table highlights the importance of creative goods in international trade. The growth rate of creative goods imports is highest for India 804.6 per cent followed by Brazil, Russia and China. Though creative goods imports are higher in US, UK and Japan in 2012 the growth rate in these countries are lower than that of developing countries like India and China.

Table 4.5.3 shows the creative goods imports of world music market. The import of creative goods have increased by 56.27 percent during the period 2004 to 2012. In the different segments of creative goods market, audio visuals and new media shows high growth. Music forms an integral part of both which indicates that import of music goods is increasing.

Table 4.5.3 Values and shares of creative goods Imports to the entire World 2004-2012
(US Dollars at current prices and current exchange rates in millions)

Year	2004	2005	2006	2007	2008	2009	2010	2011	2012	GR
All Creative Goods	276254	308093	328634	395234.1	438496	369880	410074	453412.6	431703	56.27
All Cleative Goous		(11.5)	(6.7)	(20.3)	(10.9)	(-15.6)	(10.9)	(10.6)	(-4.8)	
Art Crofts	25306.3	26568.4	27706.3	26990.8	28213.1	23188.5	27227.5	30091.9	27741	9.62
		(5)	(4.3)	(-2.6)	(4.5)	(-17.8)	(17.4)	(10.5)	(-7.8)	
Audio Viguala	15676.2	16979.6	16654	39607.3	40974	35597.7	35130.2	36715.4	29748	89.76
Audio visuais		(8.3)	(-1.9)	(137.8)	(3.5)	(-13.1)	(-1.3)	(4.5)	(-19)	
Docian	162521	184784	195508	210128.2	234823	198626	228022	261643.1	255077	56.95
Design		(13.7)	(5.8)	(7.5)	(11.8)	(-15.4)	(14.8)	(14.7)	(-2.5)	
Now Modio	11603.4	13989.2	18054.6	42734.8	55173.1	48707	50397.2	48179.4	45905	295.61
new media		(20.6)	(29.1)	(136.7)	(29.1)	(-11.7)	(3.5)	(-4.4)	(-4.7)	
Dorforming Arts	4007.9	4273.2	4477.5	4658.1	5326	4518.4	4923.7	5347.8	5166.2	28.9
renoming Arts		(6.6)	(4.8)	(4)	(14.3)	(-15.2)	(9)	(8.6)	(-3.4)	
Publishing	37566.4	40280.3	42710.8	41524.3	46083.1	39787.8	40477.9	42976.8	38132	1.5
		(7.2)	(6)	(-2.8)	(11)	(-13.7)	(1.7)	(6.2)	(-11.3)	
Visual Arts	19572.6	21218.5	23522.2	29590.7	27904.3	19455.2	23894.9	28458.3	29933	52.93
		(8.4)	(10.9)	(25.8)	(-5.7)	(-30.3)	(22.8)	(19.1)	(5.2)	

Figures in brackets show percentage change

Source: PWC reports on Global entertainment and media industry compiled from 2004 to 2012

Countries	All Creative Goods	Art Crafts	Audio Visuals	Design	New Media	Performi ng Arts	Publish ing	Visual Arts
Australia	59.85	60.1	132.43	114.76	171.65	43.7	11.07	43.83
Brazil	544.18	606.01	1669.91	798.74	12009.6 8	562.5	112.26	64821
China	22.09	74.36	343.29	301.5	1333.54	324.8	215.87	415.26
France	59.13	-0.78	57.3	76.95	207.58	79.24	3.92	15.9
India	804.65	193.14	2991.02	2025.9	414.93	543.88	106.83	1103.83
Italy	-99.21	-96.15	-93.76	-98.76	-90.02	-89.08	-98.54	-82
Japan	63.67	42.96	104.34	45.42	1564.39	46.26	-32.24	2.7
Russia	364.49	311.09	281.6	547.24	410.95	644.27	56.67	53.62
Spain	5.46	-0.18	16.48	12.97	39.88	13.22	-10.64	-62.54
United Kingdom	33.31	-8.5	14.48	23.11	134.12	-13.74	-17.29	122.06
United States	14.46	-4	26.05	10.7	189.61	-15.13	-32.02	35.78

Table 4.5.4. GR of Total Creative Goods Imports of Top entertainmentmarkets 2004-2012 (in %)

Source: UNCTAD report 2004-2012

The table 4.5.4 shows the growth rate of creative goods imports of top entertainment markets. Growth rate is found for the period 2004 to 2012.All creative goods are categorized into seven segments. Arts and crafts, Audio visuals, Design, New media, performing arts, publishing, and visual arts. The table shows the growth in various components in creative industries for the period 2004 to 2012. The growth of audio visuals and new media is high for all the entertainment markets which shows that the share of music in the international market is increasing.

Table 4.5.5. Shows the gross domestic product of top entertainment markets. GDP is compiled for the period 2004-2012 from the World Bank Report. Using GDP as independent variable regression is found for import of creative goods.

Country	2005	2006	2007	2008	2009	2010	2011	2012
Australia	693,075.48	746,880.80	853,053.31	1,054,557.74	926,563.83	1,142,250.51	1,389,919.16	1,537,477.83
Brazil	892,103.19	1,107,802.14	1,395,938.06	1,694,585.01	1,664,586.38	2,209,433.27	2,615,234.94	2,413,135.53
China	2,268,598.90	2,729,784.03	3,523,094.31	4,558,431.07	5,059,419.74	6,039,658.51	7,492,432.10	8,461,623.16
France	2,203,678.65	2,325,011.92	2,663,112.51	2,923,465.65	2,693,827.45	2,646,994.70	2,862,502.09	2,681,416.11
India	834,214.70	949,116.77	1,238,699.17	1,224,097.07	1,365,371.47	1,708,458.88	1,835,814.45	1,831,781.52
Italy	1,853,512.45	1,943,530.34	2,204,085.49	2,391,875.54	2,186,239.35	2,126,747.58	2,278,089.16	2,074,631.56
Japan	4,571,867.44	4,356,750.21	4,356,347.79	4,849,184.64	5,035,141.57	5,495,385.62	5,905,632.34	5,954,476.60
Russia	1,524,917.47	989,930.54	1,299,705.76	1,660,846.39	1,222,644.28	1,524,917.47	1,904,793.93	2,016,112.13
Spain	1,431,672.85	1,264,551.50	1,479,341.64	1,634,989.01	1,499,074.74	1,431,672.85	1,487,924.66	1,339,946.77
United-Kingdom	2,418,941.82	2,588,077.28	2,969,733.89	2,793,376.84	2,314,577.04	2,403,504.33	2,594,904.66	2,630,472.98
United-States	1,496,437.20	13,855,888.00	14,477,635.00	14,718,582.00	14,418,739.00	14,964,372.00	15,517,926.00	16,163,158.00

 Table 4.5.5 GDP of Top Entertainment Markets at Market Price (In Million \$)

Source: UNCTAD report 2004-2012
Table 4.5.6 Regression of creative goods imports with GDP of top entertainment markets

	Coefficients <sup>a</sup>										
Model		Unstand Coeffi	lardized cients	Standardized Coefficients	4	S:a					
		B Std. Error		Beta	L	51g.					
1	(Constant)	-22.243	2.746		-8.100	.000					
	ln GDP	1.103	.096	.781	11.475	.000					
a. De	ependent Var	iable: In imp	oorts creativ	e							

ln imports of creative goods =  $-22.243 + 1.103 \ln GDP + U$ 

Source: PWC reports on Global entertainment and media industry compiled from 2004 to 2012

A regression model is formed between imports of creative goods and GDP, of top entertainment markets. Imports of creative goods is taken as the dependent variable. GDP of countries is taken as the independent variable. Regression coefficients show positive value. 1% increase in GDP causes 1.103% increase in import of creative goods. P value is .000 which is statistically significant. GDP has a positive impact on import of creative goods. R square value is 0.611. The explanatory power of the model is 61.1%.

The Table 4.5.7 shows the exports of creative goods from all over the world for the period 2004 to 2012. Growth rate in various segments of creative goods is shown in the table. Audio visuals and new media shows high growth in exports. This indicates that the growth of music exports is also increasing as music forms an integral part of these two segments. Growth rate of exports is very low in publishing. Arts and crafts and performing arts also show slow growth. Only those segments impacted by digital changes show faster growth.

Table 4.5.7. Total Creative Goods Exports - Values and shares of creative Goods Export from World 2	2004-2012
(US Dollars at current prices and current exchange rates in millions)	

Year	2004	2005	2006	2007	2008	2009	2010	2011	2012	GR
All Creative	259047	287517	313108	364422.5	417285	375306	416323	489814	473791	82.89
goods		(11)	(8.9)	(16.4)	(14.5)	(-10.1)	(10.9)	(17.7)	(-3.3)	
Art Crofts	24031.2	25878	27931.3	27277.6	30236	26629	30429	35732.2	34339.5	42.89
An Clans		(7.7)	(7.9)	(-2.3)	(10.8)	(-11.9)	(14.3)	(17.4)	(-3.9)	
Audio Viguala	13962.7	15501.5	15262.7	36867.2	38294	34872	35406.8	36149.3	32054	129.6
Audio visuais		(11)	(-1.5)	(141.6)	(3.9)	(-8.9)	(1.5)	(2.1)	(-11.3)	
Dasian	150415	168560	183769	189198.8	221026	207605	238880.7	298225	284888	89.4
Design		(12.1)	(9)	(3)	(16.8)	(-6.1)	(15.1)	(24.8)	(-4.5)	
New Medie	10188.6	12582	16055.9	35826.9	46631	40191	40356.7	40392.4	40873.4	301.2
inew meula		(23.5)	(27.6)	(123.1)	(30.2)	(-13.8)	(0.4)	(0.1)	(1.2)	
Performing	3416.6	3582	3725.6	4029	4549.4	3917.4	4621	5188.5	5051.7	47.85
Arts		(4.8)	(4)	(8.1)	(12.9)	(-13.9)	(18)	(12.3)	(-2.6)	
Publishing	37229.2	39347.3	41369	43492.4	47499	39641	40175.2	42896.5	38260.3	2.76
r uonsning		(5.7)	(5.1)	(5.1)	(9.2)	(-16.5)	(1.3)	(6.8)	(-10.8)	

(Figures in brackets show percentage change)

Source: UNCTAD report 2004-2012

The table 4.5.8 shows the total creative goods exports of the top entertainment markets. Growth rate is found for the period 2004 to 2012. Italy has the highest growth in creative goods exports followed by India and China.US and UK shows moderate growth in exports of creative goods. Brazil shows negative growth in creative goods exports. Developing counties like India and China are surging ahead in the export of creative goods.

The Table 4.5.9 shows the growth rate of creative goods export of top entertainment markets during the period 2004-2012. Among the different segments new media and Audio visuals show high growth for all countries. In India the growth rate is highest in Performing Arts and Audio visuals. In Australia, Brazil, Spain and Italy the growth of creative goods exports is low.

Country	2004	2005	2006	2007	2008	2009	2010	2011	2012	GR
Australia	933	977.1	984.4	1118.9	1069.8	891.2	999.8	1483.5	1340.5	43.67
Brazil	1019.4	1044.3	1012.5	-	1107.5	888.5	904.9	945.5	917.4	-10
China	45055.9	54850.9	61898.4	77632.3	90288.7	79715.4	101775	129032.7	151182	235.54
France	11320.4	12279.3	13513.3	16357.06	17936.6	15466.3	16130.7	19669.33	19774	74.67
India	6580.6	7442.5	8927.2	9811.6	15693.4	18155.7	13967.2	22211.9	25846	292.76
Italy	19780.6	20239.3	22656.2	26495.8	27816.2	20800.8	231426	27022.2	292158	1376.99
Japan	4341.8	5861.8	5203.7	11433.7	11578.6	8386.1	8909.9	9745.3	7721	77.82
Russia	1053.8	1213.3	1338.5	1493.5	1749.2	1348.9	1198.1	1388.3	1617.6	53.5
Spain	5018.6	4945.5	5042.6	5918	6286.6	5354.3	5152.5	6029	5922.1	18
United Kingdom	16379.2	17964.6	18346.2	22888.2	21127.3	16793.4	19543.5	20748.4	23083	40.92
United States	20125.4	23110.3	26783.9	35278.2	37546	32451.2	33942.6	36262.2	37844	88.04

 Table 4.5.8 Total Creative Goods Exports of Top Entertainment Markets (US\$ Millions)

Countries	All Creative Goods	Art Crafts	Audio Visuals	Design	New Media	Performing Arts	Publish ing	Visual Arts
Australia	43.67	-34.32	44.28	156.35	-39.86	2.35	22.14	11.31
Brazil	-10	-22.81	-23.81	-25.4	7800	-54.34	-20.93	281.25
China	235.54	191.37	804.72	223.14	350.08	118.84	244.01	335.85
France	74.67	-25.77	31.05	105.96	446.57	73.56	0.82	100.23
India	292.76	49.56	389.78	356.69	230.72	412.5	199.8	-38.39
Italy	36.6	10.59	-2.55	40.73	321.22	-9.04	10.38	29.62
Japan	77.82	17.99	869.16	11.97	400.6	-6.59	-4.09	1.33
Russia	53.5	453.84	134.15	183.87	190.16	127.27	15.92	-51.65
Spain	18	25.84	-32.53	42.18	1.14	-12.63	-21.51	9.34
United Kingdom	40.92	-28.44	-11.14	75.23	115.58	-21.94	-3.6	58.53
United States	88.04	-14.25	141.6	112.32	168.03	61.99	18.3	108.68

 Table 4.5.9. GR of Total Creative Goods Exports of Top entertainment

 markets 2004-2012

A regression model is estimated to study the relation between export of creative goods and GDP. Exports of creative goods is taken as the dependent variable. GDP of countries is taken as the independent variable. Regression coefficients show positive value .1% increase in GDP causes 1.17% increase in export of creative goods. P value is .000 which is statistically significant. GDP has a positive impact on export of creative goods. R square value is 0.397.

Table 4.5.10. Regression of creative goods exports with GDP of topentertainment markets

ln export of creative goods = -24.452 + 1.177 ln GDP + U

Coeff	icients <sup>a</sup>										
	Model	Unstanc Coeffi	lardized	Standardized Coefficients	4	C: ~					
WIUUEI					ι	Sig.					
		B Std. Error		Beta							
1	(Constant)	-24.452	4.322		-5.657	.000					
-	In GDP	1.177	.151	.630	7.785	.000					
a. Dep	a. Dependent Variable: In exports creative										

Source: PWC reports on Global entertainment and media industry compiled from 2004 to 2012

Year	2004	2005	2006	2007	2008	2009	2010	2011	2012	GR
CD, DVD,	15088.2	16332.2	15969.2	38943.1	40303.9	34917.1	34547.2	36232.2	29608.5	06.00
Tapes	-	(8.2)	(-2.2)	(143.9)	(3.5)	(-13.4)	(-1.1)	(4.9)	(-18.3)	96.23
Musical	3902.3	4166.3	4355.6	4546.6	5210.5	4412.6	4817.0	5248.8	5067.9	20.86
Instruments	-	(6.8)	(4.5)	(4.4)	(14.6)	(-15.3)	(9.2)	(9.0)	(-3.4)	29.00
Printed	105.6	106.9	122.0	111.5	115.5	105.9	106.7	98.9	98.4	6.91
Music	-	(1.3)	(14.1)	(-8.6)	(3.6)	(-8.4)	(0.7)	(-7.2)	(-0.6)	-0.01
Recorded	2919.0	2984.0	3116.0	17335.0	19951.0	20423.	24766.0	27171.0	25346.0	760 21
Music	-	(2.2)	(4.4)	(456.3)	(15.1)	(2.4)	(21.3)	(9.7)	(-6.7)	/08.31
Total	22015.1	23589.4	23562.7	60936.2	65580.9	59858.5	64236.9	68750.9	60120.8	173.08
Source: LIN	CTAD ro	nort 2004	2012							

4.5.11. Music imports to the entire World 2004-2012 (US Dollars at current prices and current exchange rates in millions)

Table 4.5.11 shows music imports of the entire world in the period 2004 to 2012. There is marked increase in the imports of CD, DVD and tapes, with a GR of 173.08 %. Recorded music increased by a GR of 768.31 per cent. The growth rate for printed music shows a fall of -6.81 per cent. Import of recorded music shows the highest growth rate. Growth of import of music instruments is comparatively low.

The table 4.5.12 shows the total music imports of top entertainment markets. Growth rate is found for the period 2004 to 2012. India has the highest growth of music imports followed by Brazil and China. In India in 2004 music imports was only 33.6 million dollars, it increased to 1042 million dollars in 2012. China is the highest music import market in 2012 with US, UK and Japan close behind. Growth in music imports is faster in developing countries compared to developed economies.

Country	2004	2005	2006	2007	2008	2009	2010	2011	2012	GR
Australia	324.6	352.7	333.0	940.0	934.9	774.5	796.1	812.3	664.5	104.71
Brazil	32.5	40.1	52.9		297.7	316.1	372.3	463.9	431.2	1226.77
China	1005.01	1201.11	1205.67	8406.2	9695	10190.6	11679.5	13226.8	13695.5	1262.72
France	1232.5	1315.4	1323.2	2981.1	3090.2	2619.8	2646.5	2682.3	2355.4	91.11
India	33.6	30.5	28.1	590.6	1047.6	2061.4	1284.8	1976.5	1042	3001.19
Italy	874.5	884.7	861.5	1913	2060.2	1489.2	1265.2	1277.4	1300	48.66
Japan	909.8	930.3	932.9	3291.6	3438.2	2854.4	2588.3	2594	2296.3	152.40
Russia	75.9	53.6	83.6	220.3	364.3	220.1	303	407.8	337.9	345.19
Spain	468.9	558	594.7	1225.2	1178.4	915	878.9	839.3	622.9	32.84
United Kingdom	2022.9	2094.9	1935.4	4040.6	3875.6	3001.4	2904.9	3075.4	2922.2	44.46
United States	2965.7	2961.3	2614.5	5977.4	4855.2	3766.4	4353.2	4301.1	4239.8	42.96

 Table 4.5.12 Total music imports of top entertainment markets

 Table 4.5.13. GR of Music Imports of Top Entertainment Markets

Countries	CD, DVD, Tapes	Musical Instruments	Printed Music	Recorded Music
Australia	142.54	44.69	22.72	-11.76
Brazil	1669.91	564.39	200	5100
China	343.79	325.65	0	11479.51
France	63.07	84.49	-16.88	324.39
India	3380.68	536.53	0	4400
Italy	45.84	16.09	-31.14	216
Japan	109.21	47.73	-20.31	592.5
Russia	293.3	64274	100	183.33
Spain	21.94	12.65	33.33	406.66
United Kingdom	15.88	-15.4	29.82	461.33
United States	55.58	-15.12	-14.73	217.93

Source: UNCTAD report 2004-2012

The table 4.5.13 shows the growth of music imports in the top entertainment markets from 2004 to 2012.Music imports comprises of CD, DVD, Tapes, Musical instruments, Printed music and recorded music. Growth rate of recorded music shows an increase in the case of almost all countries except in Australia. In Australia recorded music imports show negative growth. Growth rate of recorded music imports is highest in China, Brazil and India. Except printed music, all components of music imports show a rise in growth.

A regression model is formed to study the relation between import of music goods and GDP of top entertainment markets. Imports of music goods is taken as the dependent variable. GDP of countries is taken as the independent variable. Regression coefficients show positive value. 1% increase in GDP causes 1.075% increase in import of music goods. P value is .000 which is statistically significant. GDP has a positive impact on impact of music goods. R square value is 0.48. The explanatory power of the model is 48%.

Table 4.5.14. Regression of music goods imports with GDP of topentertainment markets

		Unstand	lardized	Standardized		
]	Model	Coeff	icients	Coefficients	t	Sig.
		В	Std. Error	Beta		
1	(Constant)	-23.563	3.871		-6.087	.000
1	ln GDP	1.075	.136	.655	7.935	.000
a. Depe	ndent Variabl	e: In music im	ports			

 $\ln music \ imports = \ -23.563 + 1.075 \ln GDP + U$ 

Source: UNCTAD report 2004-2012

The table 4.5.15 shows the music export market of the entire world for the period 2004 to 2012. The various components of music exports are shown in the table. Recorded music has the highest share of music export market. The growth rate of recorded music is 822.7 per cent. Printed music shows negative growth rate. Musical instruments have an export market of 49 per cent. Total music export market has grown at 200 per cent.

# Table 4.5.15. Music Export from the entire World 2004-2012(US Dollars at current prices and current exchange rates in millions)

(Figures in brackets show percentage change)

Year	2004	2005	2006	2007	2008	2009	2010	2011	2012	GR
CD, DVD, Tapes	13297.8	14834.2 (11.6)	14526.1 (-2.1)	36080.4 (148.4)	37527.7 (4.0)	34138.4 (-9.0)	34772.8 (1.9)	35655.8 (2.5)	31915.0 (-10.5)	140.02
Musical Instruments	3305.4	3462.8 (4.8)	3612.2 (4.3)	3910.8 (8.3)	4430.0 (13.3)	3809.0 (-14.0)	4495.3 (18.0)	5080.0 (13.0)	4946.5 (-2.6)	49.64
Printed Music	- 111.2	119.2 (7.2)	113.4 (-4.9)	118.2 (4.3)	119.4 (1.0)	108.5 (-9.2)	125.7 (15.9)	108.5 (-13.7)	105.2 (-3.1)	-5.39
Record Music	2 426 (9.5)	2 808 (15.7)	2 964 (5.6)	17 093 (476.7)	19 107 (12.0)	19 285 (0.9)	21 584 (11.9)	23 226 (7.6)	22 385 (-3.6)	822.7
Total	19210.7	21224.2	21215.7	21482.8	61184.1	57340.9	63187.3	64070.3	59351.7	208.95

Source: UNCTAD report 2004-2012

The table 4.5.16 shows the total music exports of top entertainment markets from the period 2004 to 2012.India has the highest growth in music exports followed by Brazil and China. Total music exports is highest in US in 2012 followed by Japan and China. The growth rate shows that India will become one of the top music exporters of the world in coming years. India is one among the top entertainment markets and music forms an integral part of entertainment goods.

Country	2004	2005	2006	2007	2008	2009	2010	2011	2012	GR
Australia	122.7	147.3	126.1	370	272.9	263.4	287	314.7	149	21.43
Brazil	35.9	40.6	47.6	-	207.4	159.9	165.3	256.1	229.3	538.71
China	907.7	1012.7	1037.2	4777.8	4071.6	3830	4754.2	5712.7	5507.6	506.76
France	917.3	937.6	963.7	1828.8	1895.3	1712.6	1828.2	1868.2	1678.2	82.94
India	168.1	213.6	217.5	295.7	519.1	914.6	773.6	869.9	1106.4	558.17
Italy	354.9	367.8	385.1	602.7	677.9	665.2	697.6	737.2	781.6	120.23
Japan	984.2	985.3	882.6	4296.1	4791.9	3510.4	3898.3	3757.5	3766.7	282.71
Russia	67	44.5	61.9	240.7	385.2	298.7	349.8	342.5	310.8	363.88
Spain	256.7	264	239	449.7	517.4	508.1	485.9	415.8	399.6	55.66
United Kingdom	1614.3	1932.3	1730.4	2934.7	2439.7	2603.7	2558.2	2367.8	2156	33.55
United States	2092.1	2105.3	2117.7	8144.7	8086.7	7120.1	6839.8	6780.6	6621.7	213.5

Table 4.5.16. Total Music Exports of Top Entertainment Markets(US \$ Millions)

Source: UNCTAD report 2004-2012

The table 4.5.17 shows the growth rate of music exports for the period 2004 to 2012. The components of music exports include CD, DVD, Tapes, Musical instruments, printed music and recorded music. Growth rate is calculated for the period 2004 to 2012 for the top entertainment markets. Growth rate of recorded music is high in almost all countries except in Australia. In India recorded music has a growth rate of 796.29 per cent. Printed music has low export growth .In India printed music mainly consisting of sheet music of piano notations has no market. The growth of exports in the case of musical instruments is also low in most countries. Recorded music shows high export growth in Brazil, China and India.

Countries	CD, DVD,	Musical	Printed	Recorded
Countries	Tapes	Instruments	Music	Music
Australia	61.17	30.15	-77.27	-51.28
Brazil	-23.3	-54.34	0	1105.55
China	805.1	118.79	0	5321.73
France	34.58	79.16	-32.14	306.8
India	446.68	425.64	0	796.29
Italy	121.15	-8.75	-13.48	257.84
Japan	877.8	-6.83	92.3	447.45
Russia	145.91	90.9	300	1366.66
Spain	-36.07	-13.17	-66.66	376.36
United Kingdom	-9.3	-27.53	-3.64	331.4
United States	145.05	68.97	-18.41	980.27

Table 4.5.17. Growth Rate of Music Exports from 2004 to 2012 (in %)

A regression model is formed to study the relation between export of music goods and GDP of top entertainment markets. Exports of music goods is taken as the dependent variable. GDP of countries is taken as the independent variable. Regression coefficients show positive value. 1% increase in GDP causes 1.595% increase in export of music goods. P value is .000 which is statistically significant. GDP has a positive impact on export of music goods. R square value is 0.67. The explanatory power of the model is 67%. There is a definite relation between GDP of countries and the music exports. Developed countries have high music exports compared to developing countries like India.

 Table 4.5.18. Regression of music exports on GDP of top entertainment markets

		Unstandardized Coefficients		Standardized Coefficients				
Γ	Model	В	Std. Error	Beta	t	Sig.		
1	(Constant)	-38.676	3.327		-11.623	.000		
	ln GDP	1.595	.116	.819	13.702	.000		
a. Dependent Variable: In music exports								
b.	b. Source: UNCTAD report 2004-2012							

$\lim \max C exports = -30.07 + 1.395 \lim GL$	exports =	-38.67	+1.595	$\ln GDP +$	U
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#### 4.6 Conclusion

The centrality of creative content and the place which entertainment has, in the lives of the people, masks one fundamental fact that Entertainment is an industry first and foremost and an industry on par with any brick and mortar one. The share of GDP it contributes, the revenue it generates, the foreign exchange it brings in and the number of people who depend on it for livelihood makes it a true industry. The importance of the creative content, the imagination and creative ability it require, the cultural context it represents and the overwhelming influence it has on everyday life often makes this dimension go unrecognized. Several developments of the 21<sup>st</sup> century have brought its importance to the fore. For technological innovations there seem to be no limit. Globalisation has, for ever, changed the tastes and sensibility of people.

India has much more to gain in the present context and already, the rest of the world is cognizant of Indian advantage. For one, India is poised to reap the demographic dividend, because half the population in India is below 25. The young are computer knowledgeable and crazy for the possession of new gadgets. It is these qualities that the entertainment industry covets in a market. The English speaking Indian youth have flown to and settled in different parts of the globe. The Indian diaspora has come of age and is proud of Indian cultural heritage .With instant global connectivity they provide a sizable market for India's cultural goods. Thus, the contribution of entertainment industry to India's foreign exchange is also not small. The industry is all set to grow in the favourable regulatory environment in India. But, if India is to get a sizable share of the growing entertainment business, the government has to play a much bigger role than that of a facilitator and to provide the necessary quality infrastructure so that Indian start-ups in the field may not be at a disadvantage.

India is one among the top entertainment markets of the World as per PWC reports. India also occupies top position as far as export and import of creative goods are concerned as given by UNCTAD reports. The segments

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included in the entertainment and media industry category and creative industries category are slightly different. Though music forms an integral part of both. The trends shown in both reports indicate that India will occupy a powerful position by 2020. In fact, India seems to be occupying the first or second position of best performing country both in exports and imports of music already.

## CHAPTER – 5 TRENDS AND PATTERN IN MUSIC CONSUMPTION

#### **5.1 Introduction**

Chapter four deals with the structural changes in music industry. The impact of technology has caused structural changes in music industry. This is reflected in music sales all over the world. With digital revolution, physical sales of music decreased and digital sales of music increased. In many developing countries like India, digital sales surpassed physical sales. India is one among the top entertainment markets of the world and music forms an integral part of entertainment industry. With regard to the import and export of entertainment goods and especially music, India's position is among the top markets of the world. Music industry has a prominent place in India's economy. It is in this context that an analysis of music consumption and the shifts in music consumption in the wake of digitalisation, becomes imperative.

Consumption of music is different from the consumption of other goods. Music is a cultural good, an entertainment good and as such its consumption pattern differs from other goods. This chapter focuses on analysis of music consumption using primary data and studies the pattern of shift in music consumption as a result of technological change due to digital revolution. The value of music as a consumption good is realized as a social process and not through individual consumption. For music industry, the change is not about costs, demands or profits but about music itself. The very nature of the product has altered. Before digitalisation became pervasive, music was a product for the end user. It had the attribute of a pure private good. Music as a pure private good can be bought by the consumer, and exclusively used by himself. A CD belongs to the consumer who has bought it and its enjoyment is his own. Consumption is rival and excludability applies. But with digitalisation the character of music as a consumption good has changed. Music exhibits the properties of a public good now. Consumption is non-rival and exclusion is not always feasible.

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Cultural goods like music have certain special characteristics. These goods may be marketed by recording companies but their meaning and ultimate value depends on the consumer's judgment and his preferences. Music is treated as an experience good, which is a good that needs to be tasted before consumers can assess its value. When we consider music as an experience good, we are entering a more nebulous territory. Music is appreciated and enjoyed by the listener in relation to his mood, his tastes, his knowledge, familiarity with the particular genre, and peer appreciation. Another aspect of music is that it grows on you or rather its enjoyment increases with repeated hearing. A song, which, on first hearing does not appeal or is ignored, is better enjoyed when heard a few times or seen with picturisation on screen. This is not true to the same extent in the case of films or books.

In music industry, decisions pertaining to production and consumption are ultimately determined by the public in a social network. These social networks function as markets. The role of music companies as promoters of music decreased with digitalisation, because any one with a musical content can promote themselves through social media. Intermediaries became redundant. In the traditional music industry an artist needed the backing of a recording company. Labels and brand names were important.

Music can be mood swingers: fast music with emphasis on rhythm makes a person more alive and active; Melancholy music makes for nostalgia or regrets, sad songs which brings up tears may be an instrument of catharsis .When music is selected it is either to satisfy your mood or to alter it. Music is truly a many splendored thing. Sometimes, a piece of music becomes trendy and becomes popular out of all proportion to its real merit. There is a sort of band wagon effect about appreciation of this sort with more and more people falling under its spell. In the case of music goods, the meaning and value is created mainly through shared experiences. Individual choices are influenced by information feedback and other social networks rather than innate preferences and price signals.

#### **5.2 General Profile of the Respondents**

The present study is based on a survey conducted from individuals who consume music. Random sampling is adopted by selecting individuals who purchase music and listen to music. Two hundred samples is taken, forty each from the districts of Trivandrum, Ernakulum, Trissur, Palakkad and Kozhikode. The survey analyses the consumption pattern of music of individuals based on interview schedule.

Table 5.2.1. Place of Residence

Residence	Frequency	Percent
Rural	128	64.0
Urban	72	36.0
Total	200	100.0

Source: Sample Survey, 2015

Table 5.2.1 shows the place of residence of the respondents. Of the respondents taken, 64% were from rural area and 36% from urban area. With the spread of technology and use of smart phones, the rural/urban distinction in the consumption of music has almost disappeared.

 Table 5.2.2. Gender of the Respondents

Gender	Frequency	Percent
Male	106	53.0
Female	94	47.0
Total	200	100.0

Source: Sample Survey, 2015

Table 5.2.2 shows the gender of the respondents.53% of the respondents were male and 47% female. Music consumption is not influenced by the gender of the respondent. It reflects the tastes and preferences of respondents. The digital technology which evolved is also considered gender neutral.

Age	Frequency	Percent
Under 20	25	12.5
20-30	96	48.0
30-40	43	21.5
40-50	19	9.5
50-60	13	6.5
60 and above	4	2.0
Total	200	100.0

 Table 5.2.3. Age of the Respondents

Table 5.2.3 shows the age of the respondents. People from different age group who listen to music are taken for the survey. Age of the respondents is divided into different classes. 48% of the people belong in the age group of 20 to 30, 12.5% are teen agers and 2% are old.

Status	Frequency	Percent
Student	54	27.0
Self Employed	33	16.5
Govt. Service	43	21.5
Private Service	43	21.5
Professional	12	6.0
Housewife	15	7.5
Total	200	100.0

 Table 5.2.4. Status of the Respondents

Source: Sample Survey, 2015

Table 5.2.4 shows the status of the respondents. Survey is conducted from people of different status such as students, self-employed, government servants, private service, professionals and house wives.

 Table 5.2.5. Education of the Respondents

Education	Frequency	Percent
Below SSLC	5	2.5
SSLC	15	7.5
Plus Two	39	19.5
Degree	69	34.5
Post Graduate	49	24.5
Professional	23	11.5
Total	200	100.0

Source: Sample Survey, 2015

Table 5.2.5 shows the education of the respondents. Respondents are categorized based on their educational qualification. Highest numbers are degree holders followed by post graduates. 12 % are professionals and only 2.5 % have below SSLC qualification.

Monthly income	Frequency	Percent
Below 10000	39	19.5
10000 - 20000	104	52.0
20000 - 30000	31	15.5
30000 - 40000	9	4.5
40000 - 50000	5	2.5
50000 and above	12	6.0
Total	200	100.0

 Table 5.2.6.Monthly Income of the Respondents

Source: Sample Survey, 2015

Table 5.2.6 shows the monthly income of the respondents. Respondents are categorized based on their income level. There are people from different income classes. Majority belong in the income group of Rs.10, 000 to Rs. 20,000. 6 % have income above Rs. 50,000 and 20 % have income below Rs. 10,000.

#### **5.3 Music Consumption**

Respondents were asked to rank their preferred mode of entertainment from music, movies, TV, reading and games. The weighted mean rank method used to analyse the preferred mode of entertainment of the respondents. The weighted mean rank is computed from the ranks assigned by the respondents.

Table 5.3.1 shows the mean rank of the respondents regarding mode of entertainment. Mean rank was found by giving due weightage to different groups. Majority of the people ranked music as the primary mode of entertainment. Music has a mean score of 3.975 followed by TV with a mean score of 3.765 and movies with a mean score of 2.825. This shows that music is still the primary source of entertainment. Very few people prefer reading and games as their preferred mode of entertainment.

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Mode of Entertainment	1	2	3	4	5	Scor e	Mean Score	Rank Position
Music	77	70	31	15	7	795	3.975	1
Movies	23	38	56	47	36	565	2.825	3
TV	61	62	51	21	5	753	3.765	2
Reading	27	25	44	73	31	544	2.72	4
Games	14	6	16	45	119	351	1.755	5

 Table 5.3.1.Mode of Entertainment Mean Rank

Only people who listen to music were taken as respondents. Table 5.3.2 shows the frequency of listening to music. They were asked about their listening habits. 62.5% of the people listen to music daily. Only 3% said that they listen to music less than once a week.

Frequency of Listening to Music	Frequency	Percent
Daily	125	62.5
5 - 6 Times a Week	49	24.5
3 - 4 Times a Week	9	4.5
Once Or Twice a Week	10	5.0
Less Than Once a Week	6	3.0
More than one option	1	0.5
Total	200	100.0

Table 5.3.2. Frequency of Listening to Music

Source: Sample Survey 2015

Table 5.3.3 shows the time of listening to music .As most of the respondents are students or working people, it is expected that they listen to music either in the morning hours before 10 am or after 5 pm in the evening. But with the increased use of mobile phones for music listening this distinction is no longer applicable. Table 5.3.3 shows that people listen to music at all times. This change in consumption habit is a by-product of change in technology.

Time of Listening	Frequency	Percent
6 am - 8 am	24	12.0
8 am - 10 am	15	7.5
10 am - 1 pm	7	3.5
1 pm - 3 pm	6	3.0
3 pm - 5 pm	41	20.5
5 pm - 8 pm	40	20.0
8 pm - 10 pm	23	11.5
After 10 Pm	25	12.5
More Than 1	19	9.5
Total	200	100.0

 Table 5.3.3.Time of Listening

Table 5.3.4 shows the different genres of music. There are different genres of music like Devotional, Classical, Hindustani, Album songs, Film songs, Instrumental music, Western music and other kinds of music like folk songs etc. Listening to different genres reflect the individuals tastes and preferences. Almost all people listen to film songs (96.5%). Of the respondents surveyed, very few people listen to Western music or instrumental music. There are more devotees to Classical, Hindustani and Devotional music compared to other genres. Age of the respondent is an influencing factor in this division.

Genres of Music	Listen	Do Not Listen
Devotional	74 (37%)	126 (63%)
Classical	76 (38%)	124 (62%)
Hindustani	40 (20%)	160 (80%)
Film Songs	193 (96.5%)	7 (3.5%)
Album Songs	48 (24%)	152 (76%)
Western	10 (8%)	190 (95%)
Instrumental Music	16 (5%)	184 (92%)
Other Music	4 (2%)	196 (98%)

 Table 5.3.4. Genres of Music (Figures in bracket show percentage)

Source: Sample Survey, 2015

Table 5.3.5 shows the shifts in music consumption. Respondents were asked whether there is a change in preference in music listening as age

increases. 57% were of the opinion that a shift in interest take place as age increases. Old people tend to prefer slow music compared to the fast paced music of younger generation. But it is not always possible to generalize as music lovers listen to all kind of music provided it is good, irrespective of age.

In a family consisting of people of different age groups, a conflict in music listening may arise because old people may not be tolerant of loud rock or pop music. In the same way Classical and devotional music are barely tolerated by younger generation. 42% of the respondents replied that there is conflict in music listening between family members.

Another interesting phenomenon is that 80% of the people listen to music while travelling. Before mobile phones and MP3 players became wide spread, only people who had private vehicles with record players had the privilege of listening to music while travelling. Today with smart phones becoming universal it is much easier to listen to music while travelling. This again shows how technological change is impacting upon the music consumption habits of people.

Table 5.3.5. Shift in Mus	ic Consumption
---------------------------	----------------

(Figures in bracket show percentage)

Attitudinal Shift	Yes	No
Shift of interest in music as age increases	114 (57 %)	86 (43 %)
Conflict of interest in music between family members	84 (42 %)	116 (58 %)
Listening to music while travel	161 (80.5 %)	39 (19 %)

Source: Sample Survey, 2015

Mode of listening to music is taken as the medium through which music is accessed by the respondents. The common mode of listening seems to be radio, CD/MP3/DVD players, TV and mobile phones. Table 5.3.6 shows that people do not depend on one media to listen to music.76.5% of the respondents listen to music from different media. Majority of people depend on mobile phones for hearing music much more than traditional music players.

Mode of Listening	Frequency	Percent
Radio	9	4.5
CD/MP3/DVD player	9	4.5
TV	3	1.5
Mobile	25	12.5
More than 1	153	76.5
All	1	0.5
Total	200	100.0

 Table 5.3.6. Mode of Listening to Music

Table 5.3.7 shows the music players owned by the respondents. Majority of the respondents own CD/MP3/DVD player. Tape recorders and record players have become outmoded and are not readily available in the market. Table 5.2.7 shows that 28% of the respondents own CD players. 62% of the respondents use more than one music player. Record players and tape recorders have become outmoded and very few people use them. Tape recorders are owned by only 5% of the sample.

 Table 5.3.7. Music Player Owned

Music Players Owned	Frequency	Percent
Radio	12	6.0
Record player	1	.5
Tape recorder	1	.5
CD/MP3/DVD player	56	28.0
I pod	4	2.0
More than 1	124	62.0
All	2	1.0
Total	200	100.0

Source: Sample Survey, 2015

Table 5.3.8 shows that most of the respondents purchase music players from electronic shops rather than music shops. 7% of the respondents purchase from online shops. 28% purchase from music shops and 62% from electronic shops. There is no hard and fast distinction between electronic shops and music shops. Many electronic shops supply musical products and music shops often supply electronic equipment.

Purchase of Music player	Frequency	Percent
Music shop	57	28.5
Electronic shop	121	60.5
Online shops	14	7.0
More than 1	8	4.0
Total	200	100.0

 Table 5.3.8. Purchase of Music Player

Table 5.3.9 shows the digital media players owned by the respondents.TV, Computer, Mobile phones are all products of digital revolution. The wide spread owner ship of these products attest to the spread of digital revolution. Of the 200 people surveyed there is only one person who does not have a TV. 99.5 % of the people surveyed own TV. There are 12 people who do not have mobile phones and 82 who do not have computers. 94 % have mobile phones and 59 % have computers.

 Table 5.3.9. Digital Media Players Owned (Figures in bracket show percentage)

Media players	Yes	No
Radio	133 (66.5%)	67 (33.5%)
TV	199 (99.5%)	1 (.5%)
Mobile Phone	188 (94%)	12 (6%)
Computer	118 (59%)	82 (41%)
Internet connection	109 (54.5)	91 (45.5%)

Source: Sample Survey, 2015

It is seen from Table 5.3.10 that most people purchase music and movies from shops. Online purchase is more in the case of music compared to movies. Music downloads are also higher compared to movie downloads. At present physical sales are higher compared to digital sales. But it can be seen that people are gradually moving from physical to digital shops.

 Table 5.3.10. Purchase of Music/Movies (Monthly)

(Figures in bracket show percentage)

Purchase	Purchase of music	Purchase of movies
Shop	113(56.5%)	144 (72%)
Online stores	11 (5.5%)	4(2%)
Download music from internet	30 (15%)	14 (7%)
More than 1	4 (2%)	-
All	32(16%)	15 (7.5%)

Source: Sample Survey, 2015

Type of music purchase shows the purchase of different music formats like MP3, CD, Records and Cassettes. Table 5.3.11 shows that most people purchase CDs, about 28.5% compared to MP3s which comes to only 12.5%. No one purchases cassettes. There are only very few shops where cassettes are currently available. 1% still purchase records. 33% of the people purchase music in different formats.

<b>Type of Music Purchase</b>	Frequency	Percent
MP3	25	12.5
CD	57	28.5
DVD	50	25.0
Records	2	1.0
Cassettes	0	0
More than 1	66	33.0
Total	200	100.0

 Table 5.3.11. Type of Music Purchase (Monthly)

Source: Sample Survey, 2015

Table 5.3.12 shows the use of mobile music by the respondents. Of the people surveyed, 94% has mobile phones. 88.5% of the people use mobile phones with music. And 86% of the people listen to music from mobiles. But comparatively less people download music from mobile. 46.5% download music and 28% of the people purchase mobile ring tones. Though usage of mobile phones and listening to music from mobile has become universal, downloading from mobile and purchase of ring tones is yet to increase.

Table 5.3.12. Use of mobile music by the respondents

Mobile Music	YES	NO
Mobile	188	12
Mobile	(94%)	(6%)
Mobile With Music	177	23
Woble with Music	(88.5%)	(11.5%)
Liston To Mobile Music	172	28
Listeli 10 Mobile Music	(86%)	(14%)
Download Music From Mobile	93	107
Download Music Fioli Mobile	(46.5%)	(53.5%)
Durchasa Mahila Ding Tanas	89	111
r urchase woone King Tolles	(44.5%)	(55.5%)

Source: Sample Survey, 2015

Table 5.3.13 shows the money spent on song purchase through mobile phones. Money spent on purchase of songs through mobile phones is mostly less than Rs 200. 10 % spent only less than 50 per month for the purchase of songs. Less than 5% of the people spent more than 150 for purchasing songs.

Money spent in Rs. (Monthly)	Frequency	Percent
Below 50	19	9.5
50-100	16	8.0
100-150	12	6.0
Above 150	9	4.5
Total	56	28.0
Do not purchase	144	72.0
Total	200	100.0

Table 5.3.13. Money Spent on Song Purchase through mobile phones

Source: Sample Survey, 2015

Table 5.3.14 shows the time spent on TV/Computer by the respondents. Of the 200 people surveyed 199 persons own TV. Only one person does not have TV. Majority of the people watch entertainment channels in TV. 10% watch news, 10% watch films, and 7% watch music programmes and 6% watch all programmes.

#### Table 5.3.14. Time Spent on TV/Computer

(Figures in bracket show percentage)

Time	TV	Computer
1 hour	36 (18%)	36 (18%)
2 hours	82 (41%)	27 (13.5%)
3 hours	53 (26.5%)	40 (20%)
4 hours	22 (11%)	4 (2%)
More than 4 hours	6 (3%)	11(5.5%)
Total	199 (99.5%)	118 (59%)
No TV	1 (.5%)	82 (41%)

Source: Sample Survey, 2015

Table 5.3.15 shows the usage of internet by the respondents .People use internet mainly for communication purposes, 27% of the internet users use it for communication. 14% use it for social networking. 43.5% of the

respondents surveyed do not use internet. Only 0.5% use it for entertainment purposes. Though only 109 respondents have internet facilities as per table 5.3.9, it is possible that they can depend on internet cafes.

Use of Internet	Frequency	Percent
Communication	54	27.0
Social network	14	7.0
Games	2	1.0
Entertainment	1	.5
More than 1	37	18.5
All	5	2.5
Total	113	56.5
Do not use	87	43.5
Total	200	100.0

 Table 5.3.15. Usage of Internet

Source: Sample Survey, 2015

Table 5.3.16 shows consumers attitude towards piracy. With regard to the consumer's attitude towards piracy, a large percentage of people are unaware of copy right violations (59%). MP3s sold by retail music shops and vendors are often pirated, but only 46% of the people seem to be aware of this.

#### Table 5.3.16. Consumers Attitude towards Piracy

(Figures in bracket show percentage)

Attitude towards Piracy	Yes	No
Awareness of Copyright Violation	82 (41%)	118 (59%)
Awareness of MP3 Pirated	92 (46%)	108 (54%)
Free Music Downloads	89 (44.5%)	111 (55.5%)

Source: Sample Survey, 2015

Table 5.3.17 shows mode of music purchase through internet. Music can be purchased from music stores on line. Music can be purchased per song, per film or a collection of songs. But very few people make use of song purchase through online stores. 85.5% of the people do not purchase music through on line stores.

Online purchase	Frequency	Per cent
Per song	25	12.5
Per film	5	2.5
CD collections	11	5.5
Selected bundle of songs	2	1.0
More than 1	11	5.5
Do not purchase	144	72
Total	200	100.0

 Table 5.3.17. Mode of Music Purchase through Internet

Table 5.3.18 shows online music stores popularly used by the respondents. The number of on line stores from where music can be purchased and downloaded are increasing day by day. There are several on line stores from where music can be downloaded and purchased. These are the online stores frequented by the people surveyed.

 Table 5.3.18. Online music stores popularly used by the respondents

Online music store	Frequency	Percent
123 music	4	7.14
Acharya net	2	3.57
Alibaba	10	17.85
Amazon	7	12.5
Saregama	18	32.14
Different stores	2	3.57
Google	2	3.57
Kuttyweb	4	7.14
Gaana.com	2	3.57
Mango	5	8.92
Total	56	100

Source: Sample Survey, 2015

#### **5.4 Music Consumption of the Respondents**

Music consumption of individuals is analysed based on their Income, Status, Age, Gender and Education. These are some of the variables which affect the consumption pattern of music. Rural urban differences of individuals were tested for the purpose of analysis. But no significant difference was found for analysis of factors taken. So region was not included and music consumption based on income, status, age, gender and education was analysed. The following section is divided into five parts

- 1. Music consumption based on Income of the respondent.
- 2. Music consumption based on Status of the respondent.
- 3. Music consumption based on Age of the respondent.
- 4. Music consumption based on Gender of the respondent.
- 5. Music consumption based on Education of the respondent.

Based on the selected categories, several factors are identified to analyse the music consumption pattern of individuals. These are then tested against Income, Status, Age, Gender and Education.

#### Factors identified to analyse Music Consumption

- Frequency of listening to music
- Listening to music while travelling
- Mode of listening to music
- Amount spent on music purchase
- Type of music purchase
- Mode of music purchase
- Use of mobile music
- listening to online music
- Downloading music
- Purchase of online music
- Awareness of copyright violation
- Awareness of MP3 being pirated.
- Purchase of MP3

#### 5.4.1 Music Consumption Based on Income of the Respondent

Music consumption based on income of the respondent is analysed. Respondents are categorized into different income classes. 52% of the respondents fall in the income category of Rs.10, 000 to Rs.20, 000 per month. 19.5% of the respondents belongs to the income category below Rs. 10,000 and 6% have income above Rs. 50,000. Based on income of the respondents, the expenditure pattern on music is analysed. It is seen that irrespective of different levels of income, people generally purchase music from shops. Very few people purchase online music and this is not influenced by their income class.

Monthly income		Purchase of music							
(in Rs.)	No Purchase	Shop	Online stores	Download	More than 1	All	Total		
Below 10000	1	17	2	8	1	10	39		
10000 -20000	8	62	5	13	1	15	104		
20000 - 30000	0	16	2	8	0	5	31		
30000 - 40000	0	9	0	0	0	0	9		
40000 - 50000	0	1	1	1	2	0	5		
50000 and above	1	8	1	0	0	2	12		
Total	10	113	11	30	4	32	200		

 Table 5.4.1.1. Purchase of Music (Monthly)

Source: Sample Survey, 2015

It is seen from Table 5.4.1.2 that amount spent on music purchase does not increase as income increases. Majority of the people spend below Rs300 for the purchase of music. People who have income above Rs. 50,000 spent less on music.

Monthly		Amoun	Amount Spent on Music Purchase in Rs.						
Income	No	Below	100-	200-	300-	Above	Total		
(in <b>Rs.</b> )	purchase	100	200	300	400	400			
Below 10000	1	4	13	12	7	2	39		
10000 - 20000	8	5	36	35	10	10	104		
20000 - 30000	0	6	4	14	4	3	31		
30000 - 40000	0	1	0	5	2	1	9		
40000 - 50000	0	0	1	3	1	0	5		
50000 and above	1	0	3	5	2	1	12		
Total	10	16	57	74	26	17	200		

 Table 5.4.1.2. Amount Spent on Music Purchase (Monthly)

Source: Sample Survey, 2015

It is seen from Table 5.4.1.3 that majority of the people spend between Rs 200 to 300 on the purchase of CD/MP3. This is irrespective of their income. Income is not a significant factor influencing the purchasing decision of people.

Monthly		Mone	y Spen	t on CD	/MP3 (	in Rs.)		
Income	No	Below	100-	200-	300-	Above	Total	
(in Rs.)	purchase	100	200	300	400	400		
Below 10000	1	7	13	16	2	0	39	
10000 -	Q	0	34	18	0	5	104	
20000	0	0	54	40	9	5	104	
20000 -	0	7	7	1	12	4	21	
30000	0	0	/	/	1	12	4	51
30000 -	0	0	0	1	2	6	0	
40000	0	0	0	1	Z	0	9	
40000 -	0	1	1	2	0	0	5	
50000	0	1	1	3	0	0	3	
50000 and	1	1	2	5	1	2	10	
above	1	1	Z	5	1	2	12	
Total	10	16	57	74	26	17	200	

 Table 5.4.1.3. Money Spent on CD/MP3 (Monthly)

Table 5.4.1.4 shows that less number of people purchase online music. People spend less than Rs 100 on the purchase of online music. Only very few people spend more than Rs 100 on purchase of online music. Amount spent on purchase of online music does not increase as income increases.

Monthly		Moi	Money Spent for Online Music							
income (in	No	Below	100-	200-	300-	Above	Total			
Rs.)	purchase	100	200	300	400	400				
Below 10000	28	3	3	2	2	1	39			
10000 - 20000	81	2	11	4	4	2	104			
20000 - 30000	22	2	2	3	0	2	31			
30000 - 40000	3	2	1	3	0	0	9			
40000 - 50000	3	1	1	0	0	0	5			
50000 and	7	1	1	2	0	1	12			
above		1	1	Δ	0	1	12			
Total	144	11	19	14	6	6	200			

 Table 5.4.1.4. Money Spent on Online Music (Monthly)

Source: Sample Survey, 2015

Table 5.4.15 shows the money spent on mobile ring tones in a month. Of the 200 respondents surveyed 41 of the respondents purchase mobile ring tones for less than 100.Though it is seen from the survey 89 persons purchase mobile ring tones, very few people are willing to spend large amounts of money on it.

Monthly		Money Spent On Mobile Ring Tone						
(in Rs.)	Nil	Below 100	100- 200	200- 300	300- 400	Totai		
Below 10000	20	6	11	1	1	39		
10000 - 20000	70	16	15	3	0	104		
20000 - 30000	14	6	11	0	0	31		
30000 - 40000	2	5	2	0	0	9		
40000 - 50000	2	2	1	0	0	5		
50000 and above	3	6	2	1	0	12		
Total	111	41	42	5	1	200		

 Table 5.4.1.5.
 Money Spent on Mobile Ring Tone (Monthly)

Source: Sample Survey, 2015

To analyse the music consumption pattern of individuals, several factors are taken in relation to income of the respondent and tested for significance. Music as a good has different attributes when compared to the normal good, and as such its consumption does not increase as income increases. Income is a significant factor in the frequency of listening to music, mode of listening, listening to music while travelling, listening to online music, downloading music and in the awareness of copyright violations and awareness on MP3 being pirated. But in purchasing decisions income is not a significant factor. Kruskal Wallis test is used for analysis.

# Null Hypothesis: Income is not a significant factor influencing the purchase of music.

From analysing the relation between income of the respondent and music consumption it is seen that, there is no significant difference in the purchase of music as income increases. Chi square value is obtained as 3.857 which shows that income is not a significant factor influencing the purchase of music. Purchase of music essentially reflects the tastes and preferences of individuals. So a person with higher income need not necessarily buy more music.

Null Hypothesis	P value	Significance	Chi square	Decision	Interpretation
Frequency of listening is same across categories of income	.011	significant at 5% level	14.801	Reject null hypothesis	Income is a significant factor in frequency of listening to music
Listening to music while travelling is same across income	.011	significant at 5% level	14.902	Reject null hypothesis	Income is a significant factor in listening to music while travelling
Income is not a significant factor influencing mode of listening	.033	significant at 5% level	12.170	Reject null hypothesis	Income is a significant factor influencing mode of listening
Music purchase is same across income of the respondent	.570	Not significant at 5% level	3.857	Retain null hypothesis	Income is not a significant factor affecting music purchase
Type of music purchase is same across income	.455	Not significant at 5% level	4.689	Retain null hypothesis	Income is not a significant factor in type of music purchase
Mode of purchase is the same across categories of monthly income	.335	Not significant at 5% level	4.567	Retain null hypothesis	Income is not a significant factor in mode of music purchase
Use of mobile music is same across categories of income	.596	Not significant at 5% level	3.680	Retain null hypothesis	Income is not a significant factor in use of mobile music
Listening to online music is same across income	.047	significant at 5% level	11.251	Reject null hypothesis	Income is a significant factor in listening to online music
Income is not a significant factor in downloading music	.033	significant at 5% level	12.124	Reject null hypothesis	Income is a significant factor in downloading music
Purchase of online music is same across categories of income	.384	Not significant at 5% level	5.270	Retain null hypothesis	Income is not a significant factor in purchase of online music
Awareness of copyright violation is same across categories of income	.007	significant at 5% level	16.028	Reject null hypothesis	Income is a significant factor in the awareness of copyright violation
Awareness of MP3 being pirated is same across income	.002	significant at 5% level	18.678	Reject null hypothesis	Income is a significant factor in awareness of MP3 being pirated
Purchase of MP3 is same across income	.495	Not significant at 5% level	4.388	Retain null hypothesis	Income is not a significant factor in the purchase of MP3

### Table 5.4.1.6. Music Consumption Pattern Based on income of the Respondent

Source: Sample Survey, 2015

The most surprising result that came out from the primary data is about the relation between income and music purchase. Income is not a significant factor influencing music purchase. As income increases, music purchase should increase since music is a normal good. But, music is a good with special characteristics and the purchase of music by a music lover is governed by extra economic factors and not by income. Income however has a significant influence in the creation of circumstances congenial to enjoying music. With higher income, there is an increase in listening to music while travelling .Better and more efficient ways of listening music could be obtained. Income allows the listener to have better mobile, better Walkman, better iPod, and other accessories needed for music enjoyment. The mode of listening and listening to online music is also impacted by income; here the obvious influencing factor seems to be the ability to purchase the necessary electronic appliances. Income seems to confer certain privileges and a better exposure to awareness of copyright laws. Thus, many of the peripheral factors involved are influenced by income though income is not an influential factor in the purchase of music.

#### 5.4.2 Music Consumption Based on Status of the Respondent

Another category which may affect music consumption pattern is the status of the respondent. There are students, self-employed persons, people in government service, in private service, professionals and house wives among the people surveyed.

Table 5.4.2.1 shows the frequency of listening to music. Clearly this is different for people of different status. Students have more time and inclination to listen to music compared to professionals. Of the 200 people surveyed, 123 people listen to music daily.

		Frequ	uency (	of Listeni	ng To M	Iusic		
Status	Daily	5 - 6 times a week	3 - 4 times a week	Once or twice a week	Less than once a week	Do not listen	More than one	Total
Student	35	10	4	3	2	0	0	54
Self employed	20	11	1	1	0	0	0	33
Govt. Service	25	12	0	4	2	0	0	43
Private service	29	10	1	1	2	0	0	43
Professional	7	2	1	1	0	0	1	12
Housewife	9	4	2	0	0	0	0	15
Total	125	49	9	10	6	0	1	200

Table 5.4.2.1. Frequency of listening to music based on status of the respondent

Table 5.4.2.2 shows that there is no specific time to listen to music. Even people who are working get time to listen to music at all times. This is mainly because people listen to music from mobile phones which are easily accessible.

 Table 5.4.2.2 Time of Listening to Music Based on Status of the

 Respondent

					Tim	ne				
Status	6 am - 8 am	8 am - 10 am	10 am - 1 pm	1 pm - 3 pm	3 pm - 5 pm	5 pm - 8 pm	8 pm - 10 pm	After 10 pm	More than 1	Total
Student	5	2	3	0	7	10	10	8	9	54
Self employed	3	3	1	2	13	5	4	1	1	33
Govt. Service	4	3	2	0	8	10	3	9	4	43
Private service	9	5	1	1	6	10	2	6	3	43
Professional	3	2	0	0	1	2	3	1	0	12
Housewife	0	0	0	3	6	3	1	0	2	15
Total	24	15	7	6	41	40	23	25	19	200

Source: Sample Survey, 2015

Table 5.4.2.3 shows the mode of Listening to Music Based on Status of the Respondent. Music players are available in different forms now, and

also people can listen to music not only from music players but also from TV, mobile phones and radio. 154 of the respondents use different modes to listen to music. But mobile phones are seen as the preferred mode.

	Mode of Listening						
Status	Radio	CD/MP3/DVD player	TV	Mobile	More than 1	All	Total
Student	0	0	1	10	43	0	54
Self employed	3	1	0	3	26	0	33
Govt. Service	2	2	1	5	33	0	43
Private service	0	3	0	5	34	1	43
Professional	1	0	0	0	11	0	12
Housewife	3	3	1	2	6	0	15
Total	9	9	3	25	153	1	200

 Table 5.4.2.3 Mode of Listening to Music Based on Status of the

 Respondent

Source: Sample Survey, 2015

Although people use different types of music players to listen to music, mobile phones seem to be the preferred mode. Mode of listening to music may be different for people of different status.

Analysis shows that mode of listening to music is not the same across categories of status. Depending on the status of individuals the mode of listening to music is different. Chi square value is 12.081.

Table 5.4.2.4 shows the relation between time spent on TV and status of the respondent. Based on the survey taken an interesting fact emerges that, Govt. employees and professionals spent less time in front of TV compared to other working people or students. 41.2 % of the people spent two hours watching TV. 18% of the respondents watch TV for one hour. 26.6% of the respondents spent three hours in front of TV. 10.5% of the respondents watch TV for four hours a day. Only 3.5% of the respondents watch TV for more than four hours a day.

Status	1	2	3	4	More than 4	Total
	hour	hours	hours	hours	hours	
Student	7	25	12	9	1	54
Self employed	7	11	13	0	1	32
Govt. Service	10	19	9	5	0	43
Private service	9	14	14	3	3	43
Professional	2	8	2	0	0	12
Housewife	1	5	3	5	1	15
Total	36	82	53	22	6	199

Table 5.4.2.4 Time Spent on TV Based on Status of the Respondent

Table 5.4.2.5 shows the relation between programmes watched on TV and status of the respondent. Based on the survey conducted, people seem to prefer entertainment channels compared to news channels.

 Table 5.4.2.5 Programme Watched on TV Based on Status of the Respondent

	Programme Watched						
Status	News	Films	Music	Entertainment channels	More than 1	All	Total
Student	2	7	8	8	26	3	54
Self employed	4	1	1	7	17	2	32
Govt. Service	6	4	3	8	20	2	43
Private service	7	4	2	9	17	4	43
Professional	2	1	0	2	6	1	12
Housewife	0	2	0	8	5	0	15
Total	21	19	14	42	91	12	199

Source: Sample Survey, 2015

Table 5.4.2.6 shows the time spent on computer by individuals based on the status of the respondent. It is seen that most people spent less than four hours on computers on a daily basis
Status	1 hour	2 hours	3 hours	4 hours	more than 4 hours	Total
Student	8	7	8	1	1	25
Self employed	3	3	6	0	2	14
Govt. Service	10	8	13	0	2	33
Private service	11	7	8	2	4	32
Professional	2	3	3	0	2	10
Housewife	1	0	2	1	0	4
Total	35	28	40	4	11	118

 Table 5.4.2.6 Time Spent on Computer Based on Status of the Respondent

Table 5.4.2.7 shows internet connection available to the respondent. When it comes to computers, students and working people spent more time on computers compared to other categories.118 of the respondents have computers.109 of the respondents have internet connection.

 Table 5.4.2.7 Internet Connection Based on Status of the Respondent

Status	Internet	Connection	Tatal
Status	Yes	No	Total
Student	22	4	26
Self employed	14	0	14
Govt. Service	31	1	32
Private service	28	4	32
Professional	10	0	10
Housewife	4	0	4
Total	109	7	118

Source: Sample Survey, 2015

Internet usage of the respondents show that irrespective of the status of the respondents, internet is mainly used for communication purposes. Social networking is another use which is popular among the respondents. Even people who do not have internet connection use internet. Table 5.3.2.8 shows that the number of people using internet is 113 out of 200 respondents.

Use of Internet							
Status	Communication	Social net work	Games	Entertainment	More than 1	All	Total
Student	6	3	1	0	8	4	22
Self employed	9	2	0	0	2	1	14
Govt. Service	14	6	1	0	11	0	32
Private service	15	2	0	1	13	0	31
Professional	8	1	0	0	2	0	11
Housewife	2	0	0	0	1	0	3
Total	54	14	2	1	37	5	113

 Table 5.4.2.8 Internet Usage Based on Status of the Respondent

Table 5.4.2.9 shows mobile usage based on status of the respondent. Of the respondents surveyed 12 persons do not have mobile phones. Some of the students and house wives do not have mobile phones. Interestingly enough a person who has given his status as professional also do not use mobile phones.

Status	Μ	Total		
Status	Yes	No	Total	
Student	50	4	54	
Self employed	33	0	33	
Govt. Service	43	0	43	
Private service	40	3	43	
Professional	11	1	12	
Housewife	11	4	15	
Total	188	12	200	

 Table 5.4.2.9. Mobile Usage Based on Status of the Respondent

Source: Sample Survey, 2015

All the people who own mobile phones do not listen to mobile music. But the majority listen to music from mobiles. 89.5 % of the respondents surveyed listen to music from mobile phones. 10.4 % do not listen to mobile music.

Status	Mobile	Total		
Status	Yes	No	IULAI	
Student	49	2	51	
Self employed	28	5	33	
Govt. Service	39	4	43	
Private service	35	7	42	
Professional	11	1	12	
Housewife	10	1	11	
Total	172	20	192	

Table 5.4.2.10. Use of mobile music based on status

Table 5.4.2.11 shows the money spent on mobile ring tones by the respondents. It is mostly students who spent money on purchase of mobile ring tones. Of the 200 respondents surveyed 89 of them purchase mobile ringtones. 33 of them are students. It is seen that people spent less than 100 on the purchase of ring tones. The reason may be that it is the students who indulge mostly in the purchase of ring tones.

Table 5.4.2.11 Money Spent on Mobile Ring Tone

Status	Money S	Tatal				
Status	Below 100	100-200	200-300	300-400	10181	
Student	17	14	1	1	33	
Self	0	2	0	0	11	
employed	7	2	0	0	11	
Govt. Service	11	8	2	0	21	
Private	5	0	2	0	16	
service	5	7	2	0	10	
Professional	4	4	0	0	8	
Total	46	37	5	1	89	

Source: Sample Survey, 2015

Table 5.4.2.12 shows that 87 people listen to online music. Online music can be listened to with the help of computers as well as mobile phones. Interestingly enough it is not only the students who listen to on line music, a large percentage of the working people also listen to online music.

Status	Online M	Total		
Status	Yes	No		
Student	22	25	47	
Self Employed	11	17	28	
Govt. Service	22	17	39	
Private Service	19	21	40	
Professional	9	3	12	
Housewife	4	5	9	
Total	87	88	175	

Table 5.4.2.12 Listening to Online Music Based on Status of theRespondent

Of the 200 respondents surveyed, 87 persons download music. That is 44% of the respondents download music. Table 5.4.2.13 shows that all categories of people download music. Students, housewives, government servants, all download music.

	Downloa		
Status	Yes	No	Total
Student	20	34	54
Self employed	8	25	33
Govt. Service	7	36	43
Private service	8	35	43
Professional	8	4	12
Housewife	5	10	15
Total	56	144	200

 Table 5.4.2.13. Downloading Music Based on Status of the Respondent

Source: Sample Survey, 2015

Downloading music through mobile phones is much more frequent compared to downloading music through internet. 93 of the respondents download music through mobile phones.53.5% of the people do not download music through mobile phones.

	Download I Mobil		
Status	Yes	No	Total
Student	35	19	54
Self employed	11	22	33
Govt. Service	23	20	43
Private service	15	28	43
Professional	8	4	12
Housewife	1	14	15
Total	93	107	200

 Table 5.4.2.14 Download Music through Mobile phones

People spent money on purchase of CD irrespective of status. Of the 200 respondents, 122 of them purchase CD. It is seen that large number of students purchase CDs. It is seen that mostly, people spent below Rs.300 for purchasing CD. Very few people spend more than that.

	Money Spent on CD					
Status	Below 100	100-200	200-300	300-400	Above 400	Total
Student	4	10	8	5	2	29
Self employed	1	12	10	1	0	24
Govt. Service	2	5	10	6	2	25
Private service	4	6	5	3	2	20
Professional	0	1	8	0	1	10
Housewife	0	8	4	2	0	14
Total	11	42	45	17	7	122

 Table 5.4.2.15 Money Spent on CD (Monthly)

Source: Sample Survey, 2015

Table 5.4.2.16 shows the purchase of MP3.People purchase less MP3 compared to CD. But, students purchase more MP3. This may be because MP3are less costly compared to CDs. Also an MP3 has more storage capacity and can store more songs compared to a CD.

Status	Purchase of MP3					
Status	Yes	No	Total			
Student	30	24	54			
Self employed	10	23	33			
Govt. Service	18	25	43			
Private service	17	26	43			
Professional	8	4	12			
Housewife	7	8	15			
Total	90	110	200			

Table 5.4.2.16. Purchase of MP3

Table 5.4.2.17 shows money spent on online music based on the status of the respondent. Though most people listen to online music, very few people spent money on purchase of music through online. Of the 200 people surveyed, 144 of the respondents do not spent money on online music.

	Money Spent Online Music						
Status	Do not purchase	Below 100	100- 200	200- 300	300- 400	Above 400	Total
Student	40	0	5	3	2	4	54
Self employed	25	1	5	1	1	0	33
Govt. Service	30	1	7	4	0	1	43
Private service	30	1	6	4	1	1	43
Professional	7	1	2	2	0	0	12
Housewife	12	0	1	0	2	0	15
Total	144	4	26	14	6	6	200

Table 5.4.2.17. Money Spent Online Music

Source: Sample Survey, 2015

## Null Hypothesis: Listening to online music is same across categories of status.

Kruskal Wallis test is used to test the significance. The test results are not significant. Chi square value is 3.454. The hypothesis can be retained. Listening to online music is the same irrespective of the status of individuals.

Status	N	Mean Rank
Student	54	99.35
Self employed	33	92.95
Govt. Service	43	100.99
Private service	43	98.66
Professional	12	122.50
Housewife	15	107.50
Total	200	

Table 5.4.2.18 Online Music Listening - Kruskal Wallis Test

## Null Hypothesis: Downloading music is same across categories of status.

Table 5.4.2.19 shows the download of music by the respondents. People of different status download music. Kruskal Wallis test is used to examine whether downloading music is same across categories of status .The test results are significant. Chi square value is 18.562. Though people listen to online music irrespective of status, downloading music is different across categories of status.

 Table 5.4.2.19. Downloading Music - Kruskal Wallis Test

Status	Ν	Mean Rank
Student	54	109.70
Self employed	33	80.24
Govt. Service	43	111.81
Private service	43	93.21
Professional	12	131.00
Housewife	15	76.00
Total	200	

Source: Sample Survey, 2015

## Hypothesis: Awareness of MP3 being pirated is same across categories of status.

Kruskal Wallis test is used to test the significance. The test results are significant at 10% level of significance .Chi square value is 10.429 .Awareness of MP3 being pirated is not affected by the status of the respondent. Most of the MP3s sold through shops are pirated. Very few people are aware of this as they confuse MP3 with CDs.

Status	Ν	Mean Rank		
Student	54	84.13		
Self employed	33	96.92		
Govt. Service	43	114.97		
Private service	43	105.66		
Professional	12	104.50		
Housewife	15	107.83		
Total	200			

Table 5.4.2.20 Awareness on MP3 Pirated - Kruskal Wallis Test

## Null Hypothesis: Purchase of on line music is same across categories of status.

Kruskal Wallis test is used to test the significance. The test results are significant at 5% level of significance. Chi square value is 11.866. Though people listen to online music irrespective of status, purchase of online music is different across categories of status.

 Table 5.4.2.21. Purchase Online Music - Kruskal Wallis Test

Status	Ν	Mean rank
Student	54	112.93
Self employed	33	93.06
Govt. Service	43	96.30
Private service	43	98.63
Professional	12	103.67
Housewife	15	87.00
Total	200	

Source: Sample Survey, 2015

# Null Hypothesis: Listening to music while travelling is same across categories of status.

Kruskal Wallis test is used to test the significance. The test results are significant. Chi square value is 14.803. Though people listen to music while travelling it is not same across categories of status. Students listen to music while travelling more than other categories. Housewives and professionals listen to music while travelling less compared to other categories.

Status	Ν	Mean Rank
Student	54	108.89
Self Employed	33	89.70
Govt. Service	43	101.40
Private Service	43	101.40
Professional	12	120.00
Housewife	15	73.33
Total	200	

Table 5.4.2.22. Listening to music while travelling

Table 5.4.2.23. Shift from Physical to Online Shops

Status	Physical To	Total	
Status	No	Yes	Total
Student	40	14	54
Self employed	22	11	33
Govt. Service	23	20	43
Private service	29	14	43
Professional	5	7	12
Housewife	10	5	15
Total	129	71	200

Source: Sample Survey, 2015

71 persons of the 200 people surveyed agree that there is a shift from physical to online shops (Table 5.4.2.23). The shift from physical to online shops is gradually permeating into the music consumption habits of the society. Secondary data from various reports shows that in India digital sales has surpassed physical sales by 2010 itself.

To analyse the music consumption pattern of individuals, several factors are taken in relation to status of the respondent and tested for significance. Status of the respondent does not influence the amount spent on music purchase or type of music purchase or awareness of copyright violation. But it is a significant factor in the mode of listening to music, listening to music while travelling and listening to online music.

Null Hypothesis	P value	Significance	Chi square	Decision	Interpretation
Frequency of listening to music is same across	883	Not significant	1 746	Retain null	Status of the respondent does not influence
status	.005	at 5% level	1.740	hypothesis	frequency of listening to music
Listening to music while travelling is same	011	Significant	1/1 803	Reject null	Status of the respondent is a significant factor
across categories of status	.011	at 5% level	14.805	hypothesis	influencing listening to music while travelling
Mode of listening to music is same across	034	Significant	12 081	Reject null	Status of the respondent is a significant factor
status of the respondent	.034	at 5% level	12.001	hypothesis	affecting mode of listening to music
Amount spent on music purchase is same	218	Not significant	7 031	Retain null	Status of the respondent does not influence amount
across status	.210	at 5% level	7.031	hypothesis	spent on music purchase
Type of music purchase is same across status	851	Not significant	1 087	Retain null	Status of the respondent does not influence type of
Type of music purchase is same across status	.031	at 5% level	1.907	hypothesis	music purchase
Mode of music purchase is some across status	060	Not Significant	0.544	Retain null	Status of the respondent does not influence mode of
wode of music purchase is same across status	.909	at 5% level	0.344	hypothesis	music purchase.
Use of mobile music is some across status	.184	Not significant	7 520	Retain null	Status of the respondent does not influence use of
Use of mobile music is same across status		at 5% level	1.329	hypothesis	mobile music
Listening to online music is same across	630	Not significant	3 151	Retain null	Status of the respondent is not a significant factor
categories of status	.030	at 5% level	5.454	hypothesis	in listening to online music
Downloading music is same across categories	002	Significant	18 562	Reject null	Status of the respondent is a significant factor in
of status	.002	at 5% level	18.302	hypothesis	downloading music
Purchase of on line music is same across	037	Significant	11 866	Reject null	Status of the respondent is a significant factor
categories of status	.037	at 5% level	11.800	hypothesis	influencing purchase of online music
Awareness of copyright violation is same	371	Not significant	5 386	Retain null	Status of the respondent does not influence
across status	.371	at 5% level	5.580	hypothesis	awareness of copyright violation
Awareness of MP3 being pirated is same	064	Significant	10.420	Reject null	Status of the respondent is a significant factor in the
across categories of status	.004	at 10% level	10.429	hypothesis	awareness of MP3 being pirated
Purchase of MP3 is same across status	078	Significant	9.910	Reject null	Status of the respondent is a significant factor
i urenase or wir 5 is same across status	.078	at 10% level	5.510	hypothesis	influencing purchase of MP3

### Table 5.4.2.24. Music Consumption Based on Status of the Respondent

Status does not seem to influence the frequency of listening to music or amount spent in music purchase. The universal dependence on mobile phones and mobile music must be the reason why status of the respondent becomes irrelevant in the time spent in listening to music. Status does not seem to influence awareness of copyright violation as well.

### 5.4.3 Music Consumption Based on Age of the Respondent

Another factor which influences music consumption is the age of the respondent. Age of the respondents is classified into below 20, between 20 to 30, 30 to 40, 40 to 50, and 50 to 60 and above 60. People of all age group purchase music. But people between the age group of 20 to 30 purchase music much more than people of other age groups. Table 5.4.3.1 shows that below the age of 20 and above the age of 50, less number of people purchase music. In the case of people below 20, it may be because they are more into file sharing and downloading than purchasing music from physical shops.

	Purchase of Music								
Age	Do not purchase	Shop	Online stores	Download	More than 1	All	Total		
Under 20	1	13	1	2	0	8	25		
20-30	7	43	5	22	3	16	96		
30-40	1	27	3	4	1	7	43		
40-50	1	15	1	1	0	1	19		
50-60	0	12	1	0	0	0	13		
60 and above	0	3	0	1	0	0	4		
Total	10	113	11	30	4	32	200		

 Table 5.4.3.1. Purchase of Music

Source: Sample Survey, 2015

Table 5.4.3.2 shows that people purchase all types of music formats. MP3s are purchased more by people of younger age group compared to older generation. Records are not readily available in all shops and that may be the reason why less number of people purchase records.

	Type of Music Purchase							
Age	MP3	CD	DVD	Records	chase         More than           cords         1           1         8           1         36           0         18           0         3           0         1           0         0           2         66	Total		
Under 20	4	7	5	1	8	25		
20-30	15	28	16	1	36	96		
30-40	3	8	14	0	18	43		
40-50	1	8	7	0	3	19		
50-60	2	5	5	0	1	13		
60 and above	0	1	3	0	0	4		
Total	25	57	50	2	66	200		
50-60 60 and above Total	2 0 25	5 1 57	5 3 50	0 0 2	1 0 66	1 2 2(		

 Table 5.4.3.2. Type of Music Purchase

Table 5.4.3.3 shows that the amount spent on purchase of music is not influenced by age of the respondent. People who listen to music, who purchase music, does this irrespective of age. Kruskal Wallis test is used to test the significance. The test results are not significant. Chi square value is 8.976. It can be inferred that amount spent on the purchase of music is not influenced by age.

**Amount Spent on Music Purchase** Age No **Below** 100-200-300-Total Above purchase Under 20 20-30 30-40 40-50 50-60 60 and above Total 

 Table 5.4.3.3. Amount Spent On Music Purchase

Source: Sample Survey, 2015

As Table 5.4.3.4 shows, majority of people do not purchase original CDs. Original CDs are comparatively costly. But the quality of music in original CDS are much superior compared to downloaded music or MP3s. MP3s are cheaper, but because music is compressed when converted to MP3, the quality of music often gets distorted.

A go	Purcha	Purchase of CD				
Age	No	Yes	Total			
Under 20	10	15	25			
20-30	28	68	96			
30-40	23	20	43			
40-50	9	10	19			
50-60	7	6	13			
60 and above	1	3	4			
Total	78	122	200			

Table 5.4.3.4. Purchase of CD

Table 5.4.3.5 shows that of the 200 respondents, 144 people do not purchase online music. Of the people who purchase music online, they purchase it for small amounts, majority spent between Rs100 and Rs.200 on online music.

		Money Spent Online Music							
Age	Do not purchase	Below 100	100- 200	200- 300	300- 400	above 400	Total		
Under 20	14	0	3	4	1	3	25		
20-30	71	3	11	5	4	2	96		
30-40	28	1	11	1	1	1	43		
40-50	16	0	1	2	0	0	19		
50-60	12	0	0	1	0	0	13		
60 and above	3	0	0	1	0	0	4		
Total	144	4	26	14	6	6	200		

 Table 5.4.3.5 Money Spent Online Music

Source: Sample Survey, 2015

Table 5.4.3.6 shows the time of listening to music based on age of the respondent. Age of the respondent does not seem to influence the time of listening to music or the frequency of listening to music. Most of the respondents below 20 are students and since they are in educational institutions in the morning hours, their music listening is curtailed. But for people of other age groups they can listen to music at all hours especially with the spread of smart phones.

	Time									
Age	6 am - 8 am	8 am - 10 am	10 am - 1 pm	1 pm - 3 pm	3 pm - 5 pm	5 pm - 8 pm	8 pm - 10 pm	after 10 pm	more than 1	Total
Under 20	3	0	0	0	5	7	4	3	3	25
20-30	8	5	5	0	21	19	14	13	11	96
30-40	5	4	2	1	8	8	4	6	5	43
40-50	5	4	0	2	4	3	0	1	0	19
50-60	2	1	0	3	2	2	1	2	0	13
60 and above	1	1	0	0	1	1	0	0	0	4
Total	24	15	7	6	41	40	23	25	19	200

 Table 5.4.3.6. Time of Music Listening

Table 5.4.3.7 shows the frequency of listening to music based on age of the respondent. Age of the respondents does not seem to influence the frequency of listening to music. Of the 200 people surveyed, 125 of the respondents listen to music daily. That is 62.5% of the respondents listen to music daily.

Table 5.4.3.7.	Frequency	of Listening	To Music
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	Frequency of Listening To Music								
Age	Daily	5 - 6 times a week	3 - 4 times a week	Once or twice a week	Less than once a week	More than one	Total		
Under 20	13	7	2	1	2	0	25		
20-30	68	21	2	4	0	1	96		
30-40	24	11	2	3	3	0	43		
40-50	12	6	1	0	0	0	19		
50-60	6	2	2	2	1	0	13		
60 and above	2	2	0	0	0	0	4		
Total	125	49	9	10	6	1	200		

Source: Sample Survey, 2015

Table 5.4.3.8 shows listening to mobile music based on age of the respondent. People of all age group listen to music from mobile phones. But it is more common among people of younger age group compared to people

of older age group. Among people under the age of 20, 88% listen to mobile music. Of the 200 respondents surveyed, 86% listen to mobile music.

4	Mobile	Mobile Music				
Age	No	Yes	Totai			
Under 20	3	22	25			
20-30	4	92	96			
30-40	4	39	43			
40-50	8	11	19			
50-60	8	5	13			
60 and above	1	3	4			
Total	28	172	200			

Table 5.4.3.8. Listening to mobile music based on age of the respondent

Source: Sample Survey, 2015

Table 5.4.3.9 shows that though people listen to mobile music irrespective of age, when it comes to purchasing mobile ring tones, age is an influencing factor. People above the age of 40 rarely purchase mobile ring tones. Among people who purchase mobile ring tones only 7% are above the age group of 40.

 Table 5.4.3.9. Age and Money Spent on Mobile Ring Tone

1 00	Money S	Total			
Age	<b>Below 100</b>	100-200	200-300	300-400	Total
Under 20	3	8	1	1	13
20-30	30	20	2	0	52
30-40	10	6	1	0	17
40-50	2	3	0	0	5
50-60	0	0	1	0	1
60 and	1	0	0	0	1
above	1	0	0	0	1
Total	46	37	5	1	89

Source: Sample Survey, 2015

Table 5.4.3.10 shows listening to music while travelling based on age of the respondent. People listen to music while travelling. Earlier on this was possible only to people who have music players in their private conveyance. But now with the use of smart phones it is possible to listen to music anywhere and at any time. But age may be a factor influencing the decision to listen to music while travelling.

A	Music Wh	<b>Music While Travel</b>				
Age	No	Yes	Total			
Under 20	5	20	25			
20-30	12	84	96			
30-40	7	36	43			
40-50	8	11	19			
50-60	6	7	13			
60 and above	1	3	4			
Total	39	161	200			

 Table 5.4.3.10.
 Music While Travel

Null Hypothesis: Age of the respondent is not a factor in listening to music while travelling.

Kruskal Wallis test is used .The test results show that it is significant at 5% level of significance. Chi square value is 13.353. It implies that age is a significant factor influencing the decision to listen to music while travelling. People of younger age group listen to music while travelling, compared to people of older age group.

Table 5.4.3.11 shows the awareness regarding copyright violation based on age of the respondent. File sharing, free downloads, copying or use of MP3s involve copy right violation. But of the 200 respondents surveyed only 82 respondents have awareness regarding the implications of copy right violation. People of younger age group and older age group do not seem to be aware of the problems of copy right violation.

1 30	Copyright	Total	
Age	No	Yes	Totai
Under 20	17	8	25
20-30	57	39	96
30-40	17	26	43
40-50	14	5	19
50-60	10	3	13
60 and above	3	1	4
Total	118	82	200

 Table 5.4.3.11. Copyright Violation

Table 5.4.3.12 shows awareness regarding pirated MP3s based on age of the respondent. MP3s sold by retail music shops are mostly pirated. But very few people seem to be aware of this. Of the 200 respondents 46% are aware that MP3s are pirated. Under the age group of 20, only 28% are aware of MP3 being pirated.

	MP3 F		
Age	No	Yes	Total
Under 20	18	7	25
20-30	56	40	96
30-40	15	28	43
40-50	10	9	19
50-60	9	4	13
60 and above	0	4	4
Total	108	92	200

Table 5.4.3.12. Awareness regarding pirated MP3s

Source: Sample Survey, 2015

## Null Hypothesis: Age of the respondent is not a factor influencing awareness regarding pirated MP3s.

Kruskal Wallis test is used. The test results show that it is significant at 5% level of significance. Chi square value is 16.155. This shows that age is a significant factor influencing awareness regarding piracy.

To analyse the music consumption pattern of individuals, several factors are taken in relation to age of the respondent and tested for significance. Kruskal Wallis test is used to test the significance. Age of the respondent does not influence the amount spent on music purchase or type of music purchase or mode of music purchase. But it is a significant factor in the mode of listening to music, listening to music while travelling and listening to mobile music. Age of the respondent is also significant in the awareness regarding copy right violations and awareness regarding pirated MP3s.

Null Hypothesis	P value	Significance	Chi square	Decision	Interpretation
Frequency of listening to music is same	325	Not Significant	5 812	Retain null	Age of the respondent is not a significant
across age	.525	at 5% level	5.012	hypothesis	factor in frequency of listening to music
Listening to music while travelling is same	000	Significant	15 252	Reject null	Age of the respondent is a significant factor
for all age groups	.009	at 5% level	15.555	hypothesis	in listening to music while travelling
Mode of listening is same for all age groups	001	Significant	21 759	Reject null	Age of the respondent is a significant factor
whole of instenting is same for an age groups	.001	at 5% level	21.757	hypothesis	in mode of listening to music
Amount spent on the purchase of music is	110	Not Significant	8 076	Retain null	Age of the respondent is not a significant
same across all age groups	.110	at 5% level	8.970	hypothesis	factor influencing music purchase
Type of music purchase is same across age	255	Not Significant	6 5 6 7	Retain null	Age of the respondent does not influence
Type of music purchase is same across age	.233	at 5% level	0.307	hypothesis	type of music purchase
Mode of music purchase is some across age	040	Not Significant	104	Retain null	Age of the respondent is not a significant
wode of music purchase is same across age	.747	at 5% level	.104	hypothesis	factor in the mode of music purchase
Use of mobile music is same across age	000	Significant	45 620	Reject null	Age of the respondent is a significant factor
Use of mobile music is same across age	.000	at 5% level	45.020	hypothesis	in the use of mobile music
Online music listening is some across age	430	Not Significant	1 883	Retain null	Age of the respondent is not a significant
Online music instenning is same across age	.430	at 5% level	4.005	hypothesis	factor in listening to online music
Downloading music is same for all age	146	Not Significant	Q 1Q/	Retain null	Age of the respondent is not a significant
groups	.140	at 5% level	0.104	hypothesis	factor in downloading music
Purchase of online music is same for all age	152	Not Significant	<u> 9 067</u>	Retain null	Age of the respondent is not a significant
groups	.155	at 5% level	8.007	hypothesis	factor in purchase of online music
Awareness of copy right violation is same	045	Significant	11 264	Reject null	Age of the respondent is a significant factor
across age	.043	at 5% level	11.304	hypothesis	in awareness regarding copyright violation
Awareness regarding pirated MP3s is same	006	Significant	16 155	Reject null	Age of the respondent is a significant factor
for all age groups	.000	at 5% level	10.155	hypothesis	in awareness regarding pirated MP3
Purchase of MP3 is some for all age groups	004	Significant	17 274	Reject null	Age of the respondent is a significant factor
r urchase of wir's is same for an age groups	.004	at 5% level	1/.2/4	hypothesis	in purchasing MP3

### Table 5.4.3.13.Music Consumption Based on Age of the Respondent

Age of the respondent influences factors like listening to music while travelling, use of mobile music and awareness of piracy but do not influence the amount of music purchase.

### 5.4.4. Music Consumption Based on Gender of the Respondent

Music listening and music purchase need not be gender specific. The amount spent on music purchase, mode of listening, type of music purchase, time of listening to music, frequency of listening to music all these reflect personal tastes rather than gender differences.

**Amount Spent on Music Purchase Classes** Sex No 100-200-Above Total Below 100 300-400 purchase 200 300 400 12 Male 4 28 43 13 106 6 4 12 Female 29 31 14 4 94 10 57 74 17 16 26 200 Total

Table 5.4.4.1. Amount Spent on Music Purchase

Source: Sample Survey, 2015

## Null Hypothesis: Gender is not a factor influencing the amount spent on music purchase.

Mann Whitney U test is used .The test results show that the results are not significant at 5% level of significance. Chi square value is 3.615. This shows that gender is not a significant factor influencing the expenditure on music purchase.

Table 5.4.4.2 shows that people purchase music irrespective of their gender. Gender does not influence their choice of purchase. Majority of the people purchase MP3, CD and DVD.

 Table 5.4.4.2. Type of Music Purchase (Monthly)

Sex	MP3	CD	DVD	Records	More than 1	Total
Male	11	24	32	0	39	106
Female	14	33	18	2	27	94
Total	25	57	50	2	66	200

# Null Hypothesis: Gender is not a factor affecting the type of music purchase.

Mann Whitney U test is used. Level of significance is 5%. Test results are not significant. Chi square value is 3.733. It can be inferred that type of music purchase is gender neutral.

With technology changes, there has emerged a large number of devices through which we can enjoy music. People use more than one device to listen to music. While we are travelling we can use Walkman or I pods or now mostly mobile phones for listening to music. When at home people use CD/DVD players or radio or even TV to listen to music. Opportunities for enjoying music are unlimited and this is true of both men and women.

 Table 5.4.4.3.
 Mode of Listening

	Mode of Listening									
Sex	Radio	CD/MP3/DVD player	TV	Mobile	More than 1	All	Total			
Male	4	5	1	12	83	1	106			
Female	5	4	2	13	70	0	94			
Total	9	9	3	25	153	1	200			

Source: Sample Survey, 2015

Both men and women listen to music. There is no gender difference. Time of listening to music and frequency of listening to music depends on interests, availability of time, working conditions etc.

 Table 5.4.4.4. Time of Listening to Music

	Time									
Sex	6 am - 8 am	8 am - 10 am	10 am - 1 pm	1 pm - 3 pm	3 pm - 5 pm	5 pm - 8 pm	8 pm - 10 pm	after 10 pm	more than 1	Total
Male	13	12	4	3	24	22	7	16	5	106
Female	11	3	3	3	17	18	16	9	14	94
Total	24	15	7	6	41	40	23	25	19	200

## Null Hypothesis: Gender is not a factor affecting mode of music purchase.

Table 5.4.4.5 shows the mode of music purchase based on gender. Compared to olden days there are so many avenues open for purchasing music. Physical music as well as virtual music can be purchased. But there appears to be no gender difference. People of both gender purchase music from physical as well as online stores and also download music. Mann Whitney U test is used. Level of significance is 5%. Test results are not significant. Chi square value is 1.013. There is no significant gender difference in the mode of music purchase.

	Purchase of Music								
Sex	No purchase	Shop	Online stores	Download	More than 1	All	Total		
Male	2	68	7	10	2	17	105		
Female	8	45	4	20	2	15	94		
Total	10	113	11	30	4	32	200		

 Table 5.4.4.5. Mode of Purchase

Source: Sample Survey, 2015

## Null Hypothesis: Frequency of listening to music is not influenced by gender.

Mann Whitney U test is used. There is no gender difference. Level of significance is 5%. Test results are not significant. Chi square value is .000. Listening to music reflects a person's taste and preferences. It is not in any way affected by the gender of the respondent.

Table 5.4.4.6. Ranks (Mann Whitney U Test)

	Sex	Ν	Mean Rank
Frequency of listening to music	Male	106	100.44
	Female	94	100.57
	Total	200	

Source: Sample Survey, 2015

Table 5.4.4.7 shows online music listening based on gender. Digital technology is gender neutral, and because of this both men and women can easily access music through internet and mobile phones. This is true in the

case of online music listening also. Listening to online music is not gender specific, it reflects mainly the tastes and preferences of the respondents.

Corr	Online Mus	Tatal	
Sex	No	Yes	Totai
Male	49	57	106
Female	45	49	94
Total	94	106	200

 Table 5.4.4.7. Online Music Listening

Source: Sample Survey, 2015

Of the total respondents, only 13.5% of the people purchase online music. The transition to online music is slow. Though 53% listen to online music only very few purchase it. The fact is that you can enjoy online music without purchasing it. A person with internet connection can access even the latest songs through you tube. Free down load of music is also possible from many sites. So it is natural that very few people purchase online music.

Table 5.4.4.8. Amount Spent on Online Music

	Amount Spent on Online music					
Sex	Below 150	150-200	200-250	250-300	Above 300	Total
Male	1	4	3	15	6	25
Female	2	4	3	11	7	31
Total	3	8	6	26	13	56

Source: Sample Survey, 2015

Listening to music through mobile phones again is not gender specific. The use of smart phones has become wide spread and it is very easy to listen to music through mobile phones. As the table 5.4.4.9 shows people listen to mobile music irrespective of gender.

 Table 5.4.4.9. Listening to music through mobile phones

Sex	Mobile	Total	
	No	Yes	Total
Male	15	91	106
Female	13	81	94
Total	28	172	200

## Null Hypothesis: Gender is not a factor influencing the use of mobile music.

Mann Whitney U test is used .The test results show that the results are not significant at 5% level of significance. Listening to mobile music has become very popular with improved technologies. There is no gender bias in the use of mobile music.

	Sex	Ν	Mean rank
	Male	106	103.67
Mobile Music	Female	94	96.93
	Total	200	

Source: Sample Survey, 2015

Table 5.4.4.11 shows the download of music through mobile phones. With the spread of smart phones, music sharing and downloading has become very easy. Of the 200 respondents surveyed, 46.55% of the respondents download music through mobile phones. Of the respondents who download music through mobile phones, 46.2% are male and 53.7% are female.

 Table 5.4.4.11.Download music through mobile phones

Corr	Download Mu	Total	
Sex	No	Yes	Total
Male	63	43	106
Female	44	50	94
Total	107	93	200

Source: Sample Survey, 2015

Table 5.4.4.12 shows purchase of ring tones. Purchase of ring tones is not gender specific. But very few people purchase ring tones. It is very easy to share music through smart phones and music thus shared can be used as ring tones. Of the 200 respondents, only 28% purchase ring tones. Of the people who purchase ring tones 53.5% are males and 46.4% are females.

### Table 5.4.4.12. Purchase Ringtones

Sor	Purchase	Tatal	
Sex	No	Yes	Total
Male	56	50	106
Female	55	39	94
Total	111	89	200

Table 5.4.4.13 shows purchase of online songs. People purchase songs for very small amounts. Songs and ring tones are purchased in the range between Rs 50 to 150. There is not much of a gender difference as both men and women purchase ring tone, but in small amounts.

Sov	Amount	Total				
SEX	Below 50	50-100	100-150	Above 150	Total	
Male	10	5	7	8	30	
Female	9	11	5	1	26	
Total	19	16	12	9	56	

Table 5.4.4.13. Amount of online Song Purchase

Source: Sample Survey, 2015

Table 5.4.4.14 shows listening to music while travelling based on gender. The consumption of music while travelling was enjoyed only by people who had access to private vehicles. Walkman and iPod were used, by a select few, but it was expensive and was not very popular. With the spread of smart phones, listening to music while travelling became easy and enjoyable. There is no gender distinction in listening to music while travelling.

Both men and women listen to music while travelling. It is seen that 84% of women and 77% of men listen to music while travelling.

Sex	Music Wh	Tatal	
	No	Yes	Total
Male	24	82	106
Female	15	79	94
Total	39	161	200

 Table No: 5.4.4.14. Music while travel

Source: Sample Survey, 2015

## Null Hypothesis: Gender is not a factor influencing listening to music while travelling.

Mann Whitney U test is used. The test results show that the results are not significant at 5% level of significance. Chi square value is 1.411. Listening to music while travelling is done irrespective of the gender. The ubiquitous use of mobile phones has made it easy for people to listen to music while travelling.

### Mann Whitney U Test

Table 5.4.4.15. Music while Travelling Based on Gender

	Sex	Ν	Mean Rank
Music while travel	Male	106	97.36
	Female	94	104.04
	Total	200	

Source: Sample Survey, 2015

There is no significant gender difference in the purchase of music or listening to music. When it comes to awareness regarding piracy and copyright violation also there seems to be no significant differences.

43.4% of men are aware of the problems of copyright violation and only 38% women are aware of copyright violations. In the case of use of pirated MP3s also women seem to be less aware of the problem.

 Table 5.4.4.16. Awareness of Copyright Violation

	Copyright		
Sex	No	Yes	Total
Male	60	46	106
Female	58	36	94
Total	118	82	200

Source: Sample Survey, 2015

## Null Hypothesis: Gender is not a factor influencing awareness regarding copyright violation.

Mann Whitney U test is used. Level of significance is taken as 5%. Test results are not statistically significant. Chi square value is .533. It can be inferred that awareness regarding copy right violation is gender neutral.

### Mann Whitney U test

Table 5.3.4.17.Copyright violation					
	Sex	Ν	Mean Rank		
	Male	106	102.90		
Copyright violation	Female	94	97.80		
	Total	200			

To analyse the music consumption pattern of individuals, several factors are taken in relation to gender of the respondent and tested for significance. Mann Whitney U test is used to test the significance. Gender of the respondent does not influence the amount spent on music purchase or type of music purchase or awareness of copyright violation or any of the factors considered. But it is a significant factor in the purchase of MP3. It can be concluded that music consumption is gender neutral. Gender does not influence music consumption patterns.

Null Hypothesis	P value	Significance	Chi square	Decision	Interpretation
Gender is not a factor influencing frequency of listening to music	.985	Not significant at 5% level	.000	Retain null hypothesis	Frequency of listening to music is not influenced by the gender of the respondent
Listening to music while travelling is not gender specific	.235	Not significant at 5% level	1.411	Retain null hypothesis	Listening to music while travelling is not influenced by gender of the respondent
Mode of listening is gender neutral	.366	Not significant at 5% level	.818	Retain null hypothesis	Gender does not influence mode of listening
Gender is not a factor influencing the amount spent on music purchase	.057	Not Significant at 5% level	3.615	Retain null hypothesis	Amount spent on music purchase is not influenced by gender
Gender is not a factor influencing type of music purchase	.053	Not Significant at 5% level	3.733	Retain null hypothesis	Type of music purchase is not influenced by gender
Gender is not a factor influencing mode of music purchase	.370	Not significant at 5% level	1.013	Retain null hypothesis	Mode of music purchase is not influenced by gender
Gender is not a factor influencing the use of mobile music	.948	Not significant at 5% level	3.998	Retain null hypothesis	Use of mobile music is not influenced by the gender of the respondent
Listening to online music is gender neutral	.816	Not significant at 5% level	.054	Retain null hypothesis	Gender does not influence listening to online music
Downloading music is gender neutral	.739	Not significant at 5% level	.111	Retain null hypothesis	Gender does not influence download of music
Purchase of online music is gender neutral	.775	Not significant at 5% level	.081	Retain null hypothesis	Gender does not influence purchase of online music
Awareness regarding piracy and copyright violation is gender neutral.	.465	Not significant at 5% level	.5333	Retain null hypothesis	Gender does not influence awareness regarding copy right violation.
Awareness of MP3 being pirated is gender neutral	.229	Not significant at 5% level	1.445	Retain null hypothesis	Gender does not influence awareness of MP3 being pirated
Purchase of MP3 is gender neutral	.000	significant at 5% level	17.263	Reject null hypothesis	Gender is a significant factor influencing purchase of MP3

### Table 5.4.4.18.Music Consumption Based on Gender of the Respondent

Since technology is gender neutral and there is no difference between men and women in the use of mobiles and other electronic appliances it is understandable that gender does not influence any of the variables taken in primary data. Even with regard to awareness of MP3 being a pirated product, there is no gender difference. Curiously enough, there is a difference in the purchase of pirated MP3. Women seem to be reluctant to purchase pirated product.

### 5.4.5. Music Consumption Based on Education of the Respondent

Music consumption as such depends on tastes and preferences. The amount spent on music consumption may not show significant differences based on education since it is essentially subjective, but the type of music purchase may be different based on education level of the respondent.

		Amo	Amount Spent On Music Purchase					
Education	No	Below	100-	200-	300-	Above	Total	
	purchase	100	200	300	400	400		
Below SSC	0	0	2	3	0	0	5	
SSC	0	1	7	6	1	0	15	
Plus two	0	1	16	17	4	1	39	
Degree	3	8	14	25	11	8	69	
Post graduate	4	4	14	16	6	5	49	
Professional	3	2	4	7	4	3	23	
Total	10	16	57	74	26	17	200	

 Table 5.4.5.1. Amount Spent on Music Purchase (in Rs. / month)

Source: Sample Survey, 2015

It is seen from Table 5.4.5.2 that people use different kinds of music players including mobile phones to listen to music. It is actually less educated people who seem to stick on to traditional music players when compared to more educated people. Mobile phone is seen as the preferred mode for listening to music.

	Mode of Listening						
Education	Radio	CD/MP3/DVD player	TV	Mobile	More than 1	All	Total
Below SSC	0	2	0	0	3	0	5
SSC	2	3	2	2	6	0	15
Plus two	1	1	0	6	31	0	39
Degree	4	3	1	12	48	1	69
Post graduate	1	0	0	3	45	0	49
Professional	1	0	0	2	20	0	23
Total	9	9	3	25	153	1	200
0 0	1 0	2015					

Table 5.4.5.2. Mode of Listening

Music can be purchased in different formats. It is available in the form of MP3, CD, DVD, records and cassettes. Of this MP3, CD and DVD are the products of digital revolution.

Education	Type of Music Purchase					
Education	MP3	CD	DVD	Records	More than 1	Total
Below SSC	1	1	3	0	0	5
SSC	0	9	4	0	2	15
Plus two	1	10	7	0	21	39
Degree	11	12	19	1	26	69
Post graduate	7	17	12	1	12	49
Professional	5	8	5	0	5	23
Total	25	57	50	2	66	200

Table 5.4.5.3. Type of Music Purchase

Source: Sample Survey, 2015

Type of music purchase may vary depending on the level of education.

## Null Hypothesis: Education is not a factor influencing type of music purchase.

Kruskal Wallis test is used. The test results show that it is significant at 5% level of significance. Chi square value is 13.962. This shows that education is a significant factor influencing type of music purchase.

	Education	Ν	Mean Rank
Type of music purchase based on education	Below SSLC	5	77.90
	SSLC	15	83.40
	Plus two	39	123.67
	Degree	69	106.12
	Post graduate	49	90.66
	Professional	23	81.39
	Total	200	

 Table 5.4.5.4. Type of Music Purchase - Kruskal Wallis Test

The wide spread use of smart phones has increased the number of people listening to mobile music. We have seen that income and gender do not significantly affect the use of mobile music

Null Hypothesis: Education is not a factor influencing use of mobile music.

Kruskal Wallis test is used .The test results show that it is significant at 5% level of significance. The hypothesis is rejected. This shows that education is a significant factor influencing use of mobile music. The distribution of mobile music listening is not the same across categories of education.

	Education	Ν	Mean Rank
	Below SSLC	5	74.50
	SSLC	15	54.50
Use of Mobile	Plus two	39	104.24
Music	Degree	69	101.46
Based on education	Post graduate	49	108.38
	Professional	23	110.15
	Total	200	

|--|

Source: Sample Survey, 2015

## Null Hypothesis: Education is not a factor influencing listening to online music.

Kruskal Wallis test is used. The test results show that it is significant at 10% level of significance. Chi square value is 9.751. This shows that education is a significant factor influencing listening to online music. The distribution of online music listening is not the same across categories of education.

	Education	Ν	Mean Rank
Online Music Listening Based on Education	Below SSLC	5	107.50
	SSLC	15	94.17
	Plus two	39	80.83
	Degree	69	102.57
	Post graduate	49	106.68
	Professional	23	117.07
	Total	200	

 Table 5.4.5.6. Online Music Listening - Kruskal-Wallis Test

Source: Sample Survey, 2015

Education plays a positive role in the purchase of online music. It is seen from Table 5.3.5.7 that educated people have more of a tendency to purchase online music. Of the total respondents only 14% purchase online music. People who have education below plus two do not purchase online music at all.

 Table 5.4.5.7. Purchase Online Music

Education	Purchase C	Purchase Online Music			
Education	Yes	No	lotai		
Below SSLC	0	5	5		
SSLC	0	15	15		
Plus two	3	36	39		
Degree	25	44	69		
Post graduate	18	31	49		
Professional	10	13	23		
Total	56	144	200		

Source: Sample Survey, 2015

## Null Hypothesis: Education is not a factor influencing downloading of music.

Kruskal Wallis test is used. The test results show that it is significant at 5% level of significance. Chi square value is 36.529. This shows that education is a significant factor influencing download of music. The distribution of music downloading is not the same across categories of education.

	Education	Ν	Mean Rank
	Below SSLC	5	76.00
Downloading Music	SSLC	15	69.33
	Plus two	39	71.38
	Degree	69	100.93
Dased on Education	Post graduate	49	123.35
	Professional	23	125.57
	Total	200	

Table 5.4.5.8. Downloading Music – Kruskal Wallis Test

MP3 is considered as the product of digital revolution. Large amounts of music can be compressed and stored in MP3s .MP3s are comparatively cheaper compared to CDs. Mp3s are often pirated because any one with computer knowledge can compile songs together and write it to a plain CD. A blank CD costs only Rs.10 whereas MP3s are sold for Rs.60 to 75. Of the respondents surveyed, 61% purchase MP3.

Table 5.4.5.9. Purchase MP3

Education	Purcha	Tatal	
Education	No	Yes	Totai
Below SSLC	2	3	5
SSLC	11	4	15
Plus two	10	29	39
Degree	34	35	69
Post graduate	39	10	49
Professional	14	9	23
Total	110	90	200

Source: Sample Survey, 2015

Educated people have a better understanding of the piracy in music industry (Table 5.4.5.10.). As education increases awareness regarding piracy also increases. A look at the table shows that 46% of the respondents surveyed are aware that MP3s are pirated. But the data shows that even when people know that MP3s are pirated they purchase MP3s.

Education	MP3 H	Tatal	
Euucation	Yes	No	Totai
Below SSLC	2	3	5
SSLC	5	10	15
Plus two	11	28	39
Degree	38	31	69
Post graduate	24	25	49
Professional	12	11	23
Total	92	108	200

Table 5.4.5.10. Purchase of Pirated MP3

## Null Hypothesis: Education is not a factor influencing awareness of copy right violation.

Kruskal Wallis test is used .The test results show that it is significant at 5% level of significance. Chi square value is 16.979. This shows that education is a significant factor influencing awareness of copyright violation. The distribution of awareness of copyright violation is not the same across categories of education.

Education Ν **Mean Rank** Below SSLC 5 79.50 72.83 SSLC 15 Plus two 39 82.58 Copyright Violation Based Degree 69 104.43 on Education 49 Post graduate 110.52 Professional 23 120.37 Total 200

 Table 5.4.5.11. Copyright Violation – Kruskal Wallis Test

Source: Sample Survey, 2015

There is a transition from physical to online shops. People are gradually becoming aware of the spread of online shops. Of the respondents surveyed, 35.5% of the people are aware of the shift from physical to online shops. Educated people seem to have a better understanding of the shift in music industry as shown by Table 5.3.5.12.

	Physical to C		
Education	Yes	No	Total
Below SSLC	2	3	5
SSLC	4	11	15
Plus two	10	29	39
Degree	24	45	69
Post graduate	22	27	49
Professional	9	14	23
Total	71	129	200

Table 5.4.5.12. Physical to Online Shops

To analyse the music consumption pattern of individuals, several factors are taken in relation to education of the respondent and tested for significance. Kruskal Wallis test is used to test the significance. Education of the respondent does not influence the amount spent on music purchase or type of music purchase or mode of music purchase. But it is a significant factor in the mode of listening to music, listening to music while travelling, listening to online music, use of mobile music and awareness regarding copyright violations.

Table 5.4.5.13. Music Consumption Based on E	Education o	of the Resp	ondent	

Null Hypothesis	P value	Significance	Chi square	Decision	Interpretation
Frequency of music listening is same across	006	Significant	1 652	Reject null	Education is a significant factor in
education	.000	at 5 % level	4.035	hypothesis	frequency of listening to music
Listening to music while travelling is same	000	Significant	20 010	Reject null	Education is a significant factor in listening
across education	.000	At 5 % level	20.040	hypothesis	to music while travelling
Mode of listoning is some coross advection	000	Significant	22 602	Reject null	Education is a significant factor influencing
Mode of fistening is same across education	.000	at 5 % level	22.005	hypothesis	mode of listening
Amount spent on music purchase is same across	747	Not Significant	2 605	Retain null	Education is not a significant factor in the
education	./4/	at 5 % level	2.095	hypothesis	amount of music purchase
Education is not a factor influencing the	016	Significant	12.062	Reject null	Education is a significant factor influencing
purchase of different music formats	.010	at 5 % level	15.902	hypothesis	the purchase of different music formats
Mode of music purchase is same across	540	Not Significant	2.052	Retain null	Education is not a significant factor in the
education	.349	at 5 % level	5.055	hypothesis	mode of music purchase
Education is not a factor influencing the use of	000	Significant	22.911	Reject null	Education is a significant factor influencing
mobile music	.000	at 5 % level	55.611	hypothesis	the use of mobile music
Education is not a factor influencing listening to	0.02	Significant	0.751	Reject null	Education is a significant factor influencing
online music	.085	at 10 % level	9.731	hypothesis	listening of online music.
Education is not a factor influencing	000	Significant	26 5 20	Reject null	Education is a significant factor influencing
downloading music	.000	at 5 % level	30.329	hypothesis	the download of music
Purchase of online music is same across	000	Significant	0.568	Reject null	Education is a significant factor in the
education	.000	at 10 % level	9.308	hypothesis	purchase of online music
Education is not a factor influencing awareness	005	Significant	16.070	Reject null	Education is a significant factor influencing
of copy right violation	.005	at 5 % level 10.979	hypothesis	the awareness of copyright violation.	
Awareness of MP3 being pirated is same across	110	Not Significant	Retain null	Education is not a significant factor in the	
education	.110	at 5 % level	0.705	hypothesis	awareness of pirated MP3
Durahasa of MD2 is some corress education	007	Significant	15.056	Reject null	Education is a significant factor in the
Purchase of MP3 is same across education	.007	at 5 % level	13.930	hypothesis	purchase of MP3

Education is a significant factor in downloading music, listening to music online, type of music purchase and awareness of copyright laws. But even educated people do not have an awareness regarding pirated MP3s. The larger the amount of music purchase, greater seem to be the awareness. But education does not influence the awareness of MP3 being pirated.

When music consumption is analysed based on income, status, age, gender and education it can be seen that there are significant differences as regards to type of music purchase, purchase of online music, awareness regarding piracy, purchase of pirated products etc. But music listening, time of listening etc. reflects the tastes and preferences of individuals and are subjective. There is seen to be a shift in music consumption with technology advancement. The shift from physical to online shops among the respondents is analysed based on the data collected.

#### 5.5. Shift from Physical to Online Shops

With the impact of technology there was a shift from physical sale of music to digital sale of music. This change was felt all over the world. Digital sale of music began in 2005. From 2005 onwards, digital sale of music steadily increased while that of physical sales decreased. In the global recorded music market the digital sale of music outpaced physical sales by 2012. In India also the same trend can be seen. Here the rise in digital sales is much faster. By 2010 itself digital sales surpassed physical sales.

With digital revolution there has been a shift in buying music from physical shops to on line shops. Of the two hundred individuals surveyed, 129 respondents replied that there is no shift in music consumption while 71 replied that there is a shift in music consumption.

Shift from Physical to Online Shops	Frequency	Percent
Yes	71	35.5
No	129	64.5
Total	200	100.0

**Table 5.5.1.Shift from Physical to Online Shops**
5.5.1. Shift from Physical to Online Shops – Region as an Influencing Factor

Null Hypothesis: The shift from physical to online shops is not influenced by region.

Test results shows rejection of null hypothesis. So region is a factor influencing the shift from physical to online shops. Cultural differences and music consumption pattern show regional changes.

Kruskal Wallis Test	Region	Ν	Mean Rank
Physical to Online Shops	Kozhikode	40	157.50
	Ernakulum	40	82.50
	Palakkad	40	90.00
	Trivandrum	40	82.50
	Trissur	40	90.00
	Total	200	

Table 5.5.1.1. Physical to Online Shops-Region

Source: Sample Survey, 2015

5.5.2. Shift from Physical to Online Shops – Rural/Urban as influencing Factor

Null Hypothesis: The shift from physical to online shops is not influenced by rural/urban divide.

Mann Whitney U test is used. Results are significant at 5% level. So rural/urban is a factor influencing the shift from physical to online shops. There are rural urban differences in the pattern of music consumption. People in rural areas depend on physical purchase of music rather than online shops or music downloading.

Table 5.5.2.1. Physical to Online Shops-Rural/Urban

Mann-Whitney U test	Residence	Ν	Mean Rank	Sum of Ranks
Physical to Online	Rural	128	94.69	12120.00
	Urban	72	110.83	7980.00
51005	Total	200		

# 5.5.3. Shift from Physical to Online Shops – Age as Influencing Factor Null Hypothesis: The shift from physical to online shops is not influenced by age.

Kruskal Wallis test is used. Chi square value is 9.255. So age is a factor influencing the shift from physical to online shops. People of younger age group adapt more easily to the new technology compared to older generation. Downloading music, file sharing and streaming music is more common among young people. Naturally they gravitate towards online shops.

 Table 5.5.3.1. Physical to Online Shops - Age

Kruskal Wallis Test	Age	Ν	Mean rank
	under 20	25	93.00
	20-30	96	98.33
Physical to Online Shops	30-40	43	113.84
	40-50	19	96.58
	50-60	13	80.38
	60 and above	4	140.00
	Total	200	

Source: Sample Survey, 2015

5.5.4 Shift from Physical to Online Shops – Gender as Influencing Factor

Null Hypothesis: The shift from physical to online shops is not influenced by gender.

Mann Whitney U test is used. Results are not significant at 5% level. So gender is not a factor influencing the shift from physical to online shops. Digital technology can be considered gender neutral. Digital revolution has caused changes which are easily adapted by both men and women. There is nothing in the change itself which makes it inaccessible to women.

Table 5.5.4.1. Physical to Online Shops- Gender

Mann-Whitney U Test	Sex	Ν	Mean Rank	Sum of Ranks
Physical to Online Shops	Male	106	104.62	11090.00
	Female	94	95.85	9010.00
	Total	200		

# 5.5.5. Shift from Physical to Online Shops – Status as Influencing Factor

Null Hypothesis: The shift from physical to online shops is not influenced by status.

Kruskal Wallis test is used. Chi square value is 7.395. Test results show that it is not significant at 5% level. So status is not a factor influencing the shift from physical to online shops. The spread of digital technology is pervasive and people from different strata of society find it equally accessible. Housewives, professionals and students are equally able to download music and move from physical to digital shop.

 Table 5.5.5.1. Physical to Online Shops - Status

Kruskal Wallis Test	Status	Ν	Mean Rank
	Student	54	90.93
	Self employed	33	98.33
Physical to Online Shops	Govt. Service	43	111.51
	Private service	43	97.56
	Professional	12	123.33
	Housewife	15	98.33
	Total	200	

Source: Sample Survey, 2015

5.5.6. Shift from Physical to Online Shops – Income as Influencing Factor

# Null Hypothesis: The shift from physical to online shops is not influenced by income.

Test result shows it is significant at 5% level. Kruskal Wallis test is used. Chi square value is 20.9.So income is a factor influencing the shift from physical to online shops. People with higher income have more access to the products of digital revolution and as such can cause a change in the move from physical to digital shops.

Kruskal Wallis Test	Monthly Income	Ν	Mean Rank
	Below 10000	39	93.21
	10000 - 20000	104	90.96
	20000 - 30000	31	116.61
Physical to Online Shops	30000 - 40000	9	142.78
	40000 - 50000	5	145.00
	50000 and above	12	115.00
	Total	200	

Table No: 5.5.6.1 Physical to Online Shops - Income

## 5.5.7. Shift from Physical to Online Shops – Education as Influencing Factor

Null Hypothesis: The shift from physical to online shops is not influenced by education.

Kruskal Wallis test is used. Chi square value is 4.228. The test results are not significant at 5% level. So education is not a factor influencing the shift from physical to online shops. Technology is user friendly and education is not a constraint in accessing the benefits of technological revolution.

Table 5.5.7.1. Physical to Online Shops – Education

Kruskal Wallis Test	Education	Ν	Mean Rank
	Below SSC	5	105.00
	SSC	15	91.67
	Plus two	39	90.64
Physical to Online Shops	Degree	69	99.78
	Post graduate	49	109.90
	Professional	23	104.13
	Total	200	

Source: Sample Survey, 2015

## 5.5.8. Shift from Physical to Online Shops – Own Computer as

### **Influencing Factor**

Null Hypothesis: The shift from physical to online shops is not influenced ownership of computer.

Mann Whitney U test is used. Results are significant at 5% level. So ownership of computer is a factor influencing the shift from physical to online shops. People who own computer can easily access online shops through internet connectivity. Though it is possible to visit online shops through internet cafe, mostly people use it for communication purposes rather than online shopping.

Mann-Whitney U Own Test computer		N	Mean Rank	Sum of Ranks	
Physical to Online Shops	No	82	75.98	6230.00	
	Yes	118	117.54	13870.00	
	Total	200			

Table 5.5.8.1. Physical to Online Shops – Own computer

Source: Sample Survey, 2015

#### 5.5.9. Shift from Physical to Online Shops –Internet Connection

Null Hypothesis: The shift from physical to online shops is not influenced by internet connection.

Mann Whitney U test is used. Results are significant at 5% level. So internet connection is a factor influencing the shift from physical to online shops. People who have internet connection find it much easier to switch to online music compared to people who do not have internet connectivity.

 Table 5.5.9.1. Physical to Online Shops – Internet Connection

Mann-Whitney U Test	Internet connection	Ν	Mean Rank	Sum of Ranks
Physical to Online Shops	No	91	77.09	7015.00
	Yes	109	120.05	13085.00
	Total	200		

Source: Sample Survey, 2015

To analyse the shift in music consumption of individuals, from physical to online shops, several factors are tested for significance. Kruskal Wallis and Mann Whitney tests are used for analysis. Income, age, region, rural /urban differences are all significant factors in the shift from physical to online shops. But education, status and gender does not influence the decision to move from physical to online shops. Ownership of computer and internet connectivity are significant factors in the shift from physical to online shops.

Null Hypothesis	Test	P value	Significance	Chi square	Decision	Interpretation
Shift from physical to online shops is	Kruskal	001	Significant at	20.0	Reject the null	Income is a significant factor in the
not influenced by income	Wallis test	.001	5% level	20.9	hypothesis	shift from physical to digital shops
Shift from physical to online shops is not influenced by education	Kruskal Wallis test	.517	Not Significant at 5% level	4.228	Retain the null hypothesis	Education is not a significant factor in the shift from physical to digital shops
Shift from physical to online shops is not influenced by status	Kruskal Wallis test	.193	Not Significant at 5% level	7.395	Retain the null hypothesis	Status is not a significant factor in the shift from physical to digital shops
Shift from physical to online shops is not influenced by gender	Mann Whitney U test	.197	Not Significant at 5% level		Retain the null hypothesis	Gender is not a significant factor in the shift from physical to digital shops
Shift from physical to online shops is not influenced by age	Kruskal Wallis test	.099	Significant at 10% level	9.255	Reject the null hypothesis	Age is a significant factor in the shift from physical to digital shops
Shift from physical to online shops is not influenced by rural /urban divide	Mann Whitney U test	.022	Significant at 5% level		Reject the null hypothesis	Rural /urban differences is a significant factor influencing the shift from physical to on-line shops
Shift from physical to online shops is not influenced by region	Kruskal Wallis test	.000	Significant at 5% level	71.570	Reject the null hypothesis	Region is a significant factor in the shift from physical to digital shops
Shift from physical to online shops is not influenced by ownership of computer	Mann Whitney U test	.000	Significant at 5% level		Reject the null hypothesis	Own computer is a significant factor in the shift from physical to digital shops
Shift from physical to online shops is not influenced by internet connection	Mann Whitney U test	.000	Significant at 5% level		Reject the null hypothesis	Internet connection is a significant factor in the shift from physical to digital shops

Table 5.5.9.2. Shift in Music Consumption from Physical to Online Shops

#### 5.6. Conclusion

Music industry has witnessed dynamic changes in the past two decades. In India, in the beginning of the eighties, cassettes practically dominated the music industry. By the latter half of the 1980s, India became the second largest player in the production and sale of music cassettes. The advent of digital technology caused cassettes to be phased out and replaced by CDs, DVDs and MP3s. Cassettes which reigned supreme till the end of 1990s were ousted by its contemporary music formats. The emergence of MP3s sounded the death knell for the cassette industry. MP3s have a larger storage space and use compression technology. Though the quality of music was compromised, large number of songs could be stored in an MP3, and also it was less expensive. MP3s are often pirated as it is very easy to make copies at a minimum cost. Piracy became rampant as copy right laws became inadequate.

Another important change was the use and spread of mobile phones. The ubiquitous use of smart phones made listening to music easy. Large number of songs can be downloaded and stored in smart phones. It made other music players redundant. CD players and MP3 players lost their popularity. Walkman and iPods were replaced by smart phones. Sale of mobile ring tones and songs became the largest source of revenue for the music industry.

The spread of internet has made listening to music online, easier and cheaper. Peer to peer networks and file sharing has made music streaming and downloading easier. You tube and other online music platforms have made available to the public, a large store house of music. The shift from physical to digital music was gradual, and music consumption habits have changed significantly. All these factors have caused radical changes in the pattern of music consumption.

### CHAPTER - 6 SALE OF MUSIC THROUGH RETAIL OUTLETS

Music industry has transformed itself with the onset of digitalization. The previous chapter makes an analysis of music consumption under the onslaught of technological change. Digitalization has caused shifts in music buying and music listening. It has also made shifts in music selling. The pattern of sale of different music formats and different music genres in retail music shops is analysed in this chapter.

With the advent of digital revolution, the sale of music has fallen all over the world. Worldwide trend shows that, the sale of physical music has fallen and the sale of virtual music has increased. Secondary data shows that in India the sale of virtual music has surpassed that of physical music. This has happened mainly through the spread of smart phones and download of music through smart phones.

As long as music goods were delivered in the analog form, firms marketing musical products were able to treat their products as assets which are not easily transformable. Sharing of music through internet was difficult because it involved movement of bulk data. Manipulation of the contents in such cases requires considerable skill and expense and even then the possibilities of making modifications are limited. But the shift from analog to digital platform has made the distribution of music easy. Once a text, song or film is converted into bits, those bits can be copied, changed, recombined and morphed to produce new works.

Cultural goods differ from the conventional good in the structure of their costs. Producing a cultural good is costly but reproduction is relatively cheap. The cost of producing a film runs into crores of rupees but it is possible to make near perfect copies of the first print at negligible costs. This is true of music also. These goods have relatively high fixed costs of production but their marginal cost is equal to zero. If the marginal cost is equal to zero, then pricing based on the marginal cost principle is not

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feasible. A firm that sets its price at marginal cost will not be able to recover its fixed cost.

With the emergence of MP3 formats, music sharing has become easy. A consumer can select and view the music he likes on you tube; he can convert it to mp3 format, using for example ,vidtomp3 format ,then download it to mobile from where it can be copied and share it to as many consumers as you like. The cost of the whole procedure is limited to the additional internet usage for one or two minutes. The marginal cost of a piece of music has become zero or near zero (Kauffman).Music in its physical format rapidly lost attraction. People gradually shifted from physical to virtual music. The sale of music began to fall. It is against this back ground the sale of music formats through retail music shops is analysed. The study focuses on the trend in sales of different music formats and of the different music genres.

Primary Data were collected from retail cassette shops in Trivandrum, Ernakulum, Kozhikode, Palakkad and Guruvayoor (pilgrim centre) in Thrissur through interview schedules. There is no correct data available, regarding the number of music shops in the State. Also music is sold not only through music shops, they are sold by street vendors, CDs and MP3s are sold in buses and trains by vendors, they are also sold via counters in super markets. The universe is not clearly defined. 25 music shops each were randomly selected from the selected districts. A total of 125 samples were collected.

#### 6.1. Sale of Different Genres of Music

The different genres of music are classified as Devotional (D), Classical(C), Hindustani (H), Film songs (FS), Album songs (AS), Western music (WM), Instrumental music (IM) and others (OTH). Table 6.1.1 shows the sale of different genres of music through retail outlets for the period 2010 to 2014. It can be seen that the total music sales has fallen over the years. Except for a slight increase in the sale of Hindustani, Western music and instrumental music all other genres show a fall in sales. Only select consumers buy these specialized genres and their purchase seems not to be affected by the general trend. There are regional variations in music sales. Overall music sales has fallen in all regions except in Trivandrum, where there is a slight increase in sales. Percentage share of each genre in the total sale of respective genres is shown. Over the years the percentage share of devotional music, classical music, film songs and album, songs have fallen. But there is a rise in the share of instrumental music, western music etc. The growth rate calculated for the period 2010 to 2014 shows that for most of the genres there is falling growth in sales.

Table 6.1.2 shows the market share of the sale of different genres of music. The market share of the sale of different genres of music shows that the shares of film songs, Western music and instrumental music have increased in the period from 2010 to 2014. Album songs were not very popular in India. Indian music industry was largely dependent on film industry and film songs. But in the Western world, Albums are popular. The linkage between film industry and music industry is not very strong in the West. The reason for the increasing album sales in India music industry. Increased sale of Western music and instrumental music also bear testimony to this.

Year	D	С	H	FS	AS	WM	IM	OTH	Total
2010	63687	43585	7203	68281	46191	29447	27399	477	286270
(% share)	(24.42)	(22.61)	(19.16)	(20)	(22.41)	(18.50)	(17.44)	(17.89)	280270
2011	58027	41828	7319	66300	44719	30489	29235	551	278168
(% share)	(22.25)	(21.70)	(19.47)	(19.41)	(21.69)	(19.15)	(18.60)	(20.66)	278408
2012	51794	40371	6973	76104	41096	30852	314.11	618	270210
(% share)	(19.86)	(20.94)	(18.55)	(22.28)	(19.94)	(19.38)	(19.99)	(23.18)	279219
2013	47215	36168	8726	65184	37335	33051	33315	449	261442
(% share)	(18.10)	(18.76)	(23.22)	(19.09)	(18.11)	(20.76)	(21.20)	(16.84)	201443
2014	40023	30797	7356	65573	36745	35292	35744	571	252101
(% share)	(15.34)	(15.97)	(19.57)	(19.20)	(17.82)	(22.18)	(22.75)	(21.41)	232101
Total	260746	192749	37577	341442	206086	159131	157104	2666	1357501
GR	-37.15	-29.34	2.12	-3.96	-20.44	19.84	30.45	19.7	-11.93

 Table6.1.1. Sale of different genres of music (in numbers)

Year	D	С	Η	FS	AS	WM	IM	OTH	Total
2010	22.24	15.22	2.51	23.85	16.1	10.28	9.57	0.16	100
2011	20.83	15.02	2.62	23.8	16.05	10.94	10.94	0.19	100
2012	18.54	14.45	2.49	27.25	14.71	11.04	11.24	0.22	100
2013	18.05	13.8	3.33	24.93	14.28	12.64	12.74	0.17	100
2014	15.87	12.21	2.91	26.01	14.57	13.99	14.17	0.22	100

 Table 6.1.2. Market share of different genres of music (%)

Figure 6.1.2.1.Sale of different genres of music in selected districts - (2010-2014)



Source: Sample Survey, 2015

Table 6.1.3 shows the sale of different genres of music in Calicut. In the sale of different genres also, there seems to be regional differences. Sale of devotional, Hindustani, album songs and classical music seems to increase in Calicut but overall music sales has fallen with a GR of-2.39. Growth rate shows a positive increase in the case of sale of classical, Hindustani and album songs. Sale of all other genres shows negative growth. The cultural heritage of Calicut indicates a love of Hindustani music and classical music which the data corroborates.

Year	D	С	Н	FS	AS	WM	IM	ОТН	Total
2010	5524	2685	2304	14035	2861	4248	5435	128	07000
(%	(19.18)	(19.17)	(19.16)	(20.79)	(18.41)	(20.60)	(21.90)	(0.01)	37220
share)		. ,		. ,			. ,	. ,	
2011	5802	2876	2401	14153	3320	4345	5450	205	
(%	(20.14)	(20.53)	(19.96)	(20.96)	(21.36)	(21.07)	(21.96)	(0.02)	38552
share)				· · · ·	× /	· · · ·	````		
2012	6060	2897	2385	13392	2808	4229	4803	165	0.6700
(%	(21.04)	(20.68)	(19.83)	(19.83)	(18.07)	(20.51)	(19.35)	(0.01)	36739
share)		· · ·		× ,	× ,	× ,	、 <i>、</i> /	× ,	
2013	5913	2800	2364	12287	3440	3833	4459	141	
(%	(20.53)	(19.99)	(19.65)	(18.20)	(22.13)	(18.59)	(17.96)	(0.01)	35237
share)		. ,		. ,			. ,		
2014	5497	2746	2571	13637	3109	3957	4670	143	
(%	(19.08)	(19.60)	(21.38)	(20.20)	(20.00)	(19.19)	(18.81)	(0.01)	36330
share)		· · ·	× ,	× ,	~ /	× ,	、 <i>、</i> /	× /	
Total	28796	14004	12025	67504	15538	20612	24817	782	184078
GR	-0.48	2.27	11.58	-2.83	8.66	-6.85	-14.07	11.71	-2.39

 Table 6.1.3. Sale of different genres in Calicut (in numbers)

Table 6.1.4 shows the market share of different genres of music in Calicut. The market share of the sale of different genres of music shows that the share of Hindustani music, devotional music, classical music and album songs shows a slight increase in the period from 2010 to 2014. Market share of all other genres shows a decline during the period 2010 to 2014.

 Table 6.1.4. Market share of different genres in Calicut (%)

	Market Share of Different Genres in Calicut (%)														
Year	D C H FS AS WM IM OTH Total														
2010	14.84	7.21	6.19	37.7	7.68	11.41	14.6	0.34	100						
2011	15.04	7.46	6.22	36.71	8.61	11.27	14.13	0.53	100						
2012	16.49	7.88	6.49	36.45	7.64	11.51	13.07	0.44	100						
2013	16.78	7.94	6.7	34.86	9.76	10.87	12.65	0.4	100						
2014	15.13	7.55	7.06	37.53	8.55	10.89	12.85	0.39	100						



Figure 6.1.4.1.Sale of different genres in Calicut



Table 6.1.5 shows the sale of different genres of music in Ernakulum. In Ernakulum, overall music sales have fallen with a GR of -27 per cent. Sale of all other genres including Hindustani, classical, album songs show negative growth. Only the sale of instrumental music shows a slight increase. Physical sale of music has definitely declined in Ernakulum, as primary data from retail cassette shops show.

Table 6.1.5 Sale of different genres of music in Ernakulum (in numbers)

Year	D	С	Н	FS	AS	WM	IM	ОТН	Total
2010 (% share)	15300 (26.28)	12700 (24.56)	500 (27.77)	14700 (22.89)	8600 (20.67)	7100 (22.10)	5900 (18.73)	0	64800
2011 (% share)	14100 (24.22)	11800 (22.82)	500 (27.77)	12600 (19.62)	9600 (23.07)	6200 (19.31)	5900 (18.73)	0	60700
2012 (% share)	11000 (18.90)	10900 (21.08)	300 (16.66)	13200 (20.56)	9100 (21.87)	5700 (17.75)	6200 (19.68)	0	56400
2013 (% share)	9700 (16.66)	8900 (17.21)	300 (16.66)	12100 (18.84)	7900 (18.90)	6300 (19.62)	6700 (21.26)	0	51900
2014 (% share)	8100 (13.91)	7400 (14.31)	200 (11.11)	11600(1 8.06)	6400 (15.38)	6800 (21.18)	6800 (21.58)	0	47300
Total	58200	51700	1800	64200	41600	32100	31500	0	281100
GR	-47.05	-41.73	-60	-21.08	-25.58	-4.22	15.25	0	-27

Market share of different genres of music in Ernakulum shows that the share of film songs, Western music and instrumental music shows an increase, the market share of classical music, Hindustani music and devotional songs have fallen. Global trends in music sales can be seen in Ernakulum which has a cosmopolitan culture, the increased sale of western music and instrumental music bears testimony to this.

Year	D	C	Η	FS	AS	WM	IM	OTH	Total
2010	22.61	19.59	0.77	22.68	13.27	10.95	9.1	0	100
2011	23.22	19.43	0.82	20.75	15.81	10.21	9.71	0	100
2012	19.5	19.32	0.53	23.4	16.13	10.1	10.99	0	100
2013	18.68	17.14	0.57	23.31	15.22	12.13	12.9	0	100
2014	17.12	15.64	0.42	24.52	13.5	14.37	14.37	0	100

 Table 6.1.6.Market Share of Different Genres in Ernakulum (%)

Source: Sample Survey, 2015





#### Source: Sample Survey, 2015

Table 6.1.7 shows the sale of different genres of music in Palakkad. In Palakkad, overall music sales have fallen with a GR of -9.93. The sale of instrumental music, film songs and Western music shows a slight increase. Sale of all other genres show a negative growth rate. Sale of film songs is highest in Palakkad.

Year	D	С	Н	FS	AS	WM	IM	ОТН	Total
2010 (% share)	18000 (26.35)	13250 (24.8)	600 (23.52)	16750 (17.27)	17300 (26.51)	6650	6450 (13.81)	0	79000
2011 (% share)	15350 (22.47)	11680 (21.85)	600 (23.52)	17105 (17.64)	14415 (22.09)	8450	7850 (17.54)	0	75450
2012 (% share)	13600 (19.91)	11375 (21.27)	500 (19.60)	25800 (26.61)	12880 (19.74)	9850	9000 (19.52)	0	83005
2013 (% share)	11650 (17.05)	9450 (17.67)	400 (15.68)	18050 (18.61)	11150 (17.08)	10900	10550 (22.88)	0	72150
2014 (% share)	9700 (14.20)	7700 (14.40)	450 (17.64)	19250 (19.85)	9500 (14.56)	12300	12250 (26.57)	0	71150
Total	68300	53455	2550	96955	65245	48150	46100	0	380755
GR	-46.11	-41.88	-25	14.92	-45.08	84.96	89.92	0	-9.93

 Table 6.1.7. Sale of different genres of music in Palakkad (in numbers)

Table 6.1.8 shows the market share of different genres of music in Palakkad. The market share of film songs, western music and instrumental music shows a slight increase, but the share of all other genres of music has declined.

N	Market Share of Different Genres in Palakkad (%)													
Year	YearDCHFSASWMIMOTH													
2010	22.78	16.77	0.75	21.2	21.89	8.41	8.16	0	100					
2011	20.34	15.48	0.79	22.67	19.1	11.19	10.4	0	100					
2012	16.38	13.7	0.6	31.08	15.51	11.86	10.84	0	100					
2013	16.14	13.09	0.55	25.01	15.45	15.1	14.62	0	100					
2014	13.63	10.82	0.63	27.05	13.35	17.28	17.21	0	100					

Table 6.1.8. Market share of different genres in Palakkad (%)



Figure 6.1.8.1. Sale of different genres of music in Palakkad

Source: Sample Survey, 2015

Table 6.1.9 shows the sale of different genres of music in Trivandrum. In Trivandrum, overall music sales have risen with a GR of 2.03. Only the sale of film songs shows a slight fall. In the case of all other genres of music, there is a growth in sales. The percentage change over the years is shown in brackets.

Table 6.1.9. Sale of different genres of music in Trivandrum (in numbers)

Year	D	С	Н	FS	AS	WM	IM	ОТН	Total
2010 (% share)	6442 (18.74)	4243 (18.59)	3702 (17.82)	8284 (21.25)	4976 (19.40)	4522 (17.56)	3902 (21.91)	349 (18.52)	36420
2011 (% share)	6647 (19.34)	4760 (20.85)	3719 (17.90)	7325 (18.79)	5621 (21.19)	5464 (21.22)	2960 (16.62)	346 (18.36)	36842
2012 (% share)	7007 (20.39)	4178 (18.30)	3703 (17.83)	8197 (21.02)	4730 (18.44)	5139 (19.95)	3420 (19.21)	453 (24.04)	36827
2013 (% share)	7811 (22.736)	5206 (22.81)	5585 (26.89)	7820 (20.06)	4868 (18.98)	5659 (21.97)	3505 (19.68)	308 (16.34)	40762
2014 (% share)	6452 (18.77)	4436 (19.43)	4056 (19.53)	7356 (18.87)	5453 (21.26)	4964 (19.27)	4016 (25.55)	428 (22.71)	37161
Total	34359	22823	20765	38982	25648	25748	17803	1884	188012
GR	0.15	4.54	9.56	-11.2	9.58	9.77	2.91	22.63	2.03

Table 6.1.10 shows the market share of different genres of music in Trivandrum. The share of devotional songs, film songs, album songs and Western music has increased. But the market share of classical music and Hindustani music has slightly decreased.

Μ	larket S	hare of	<sup>°</sup> Differe	ent Gen	res in T	[ rivand	rum (%	<b>()</b>	
Year	D	С	Η	FS	AS	WM	IM	OTH	Total
2010	17.68	11.94	10.16	22.74	13.66	12.41	10.71	0.95	100
2011	18.04	12.92	10.09	19.88	15.25	14.83	8.03	0.93	100
2012	19.02	11.34	10.05	22.25	12.84	13.95	9.28	1.23	100
2013	19.16	12.77	13.7	19.18	11.94	13.88	8.59	0.75	100
2014	17.36	11.93	10.91	19.79	14.67	13.35	10.8	1.15	100

Table 6.1.10. Market share of different genres in Trivandrum (%)

Source: Sample Survey, 2015

Figure 6.1.10.1. Sale of different genres of music in Trivandrum



Source: Sample Survey, 2015

Table 6.1.11 shows the sale of different genres of music in Thrissur. The total sale has fallen with a negative growth of -12.5.The sale of Western music and instrumental music shows slight rise in sales where as in all other categories there is a fall in sales. The sale of devotional music, classical music, film songs all show negative growth for the period 2010 to 2014.

Year	D	С	Н	FS	AS	WM	IM	OTH	Total
2010	18421	10707	97	14512	12454	6927	5712	_	
(% share)	(25.91)	(21.09)	(22.19)	(19.66)	(21.45)	(21.30)	(15.48)	0	68830
2011	16128	10712	99	15117	11763	6030	7075	0	6 6 9 4
(% share)	(22.68)	(21.1)	(22.65)	(20.21)	(20.26)	(18.54)	(19.18)	0	66924
2012	14127	11021	85	15515	11578	5934	7988	0	<b>6 6 9</b> 4 0
(% share)	(19.87)	(21.70)	(19.45)	(21.02)	(19.94)	(18.24)	(21.65)	0	66248
2013	12141	9812	77	14927	9977	6359	8101		
(% share)	(17.07)	(19.32)	(17.62)	(20.22)	(17.18)	(19.55)	(21.96)	0	61394
2014	10274	8515	79	13730	12283	7271	8008	0	
(% share)	(14.45)	(16.77)	(18.07)	(18.60)	(21.15)	(22.35)	(21.71)	0	60160
Total	71091	50767	437	73801	58055	32521	36884	0	323556
GR	-44.22	-20.47	-18.55	-5.38	-1.37	4.96	40.19	0	-12.59

Table 6.1.11. Sale of different genres of music in Thrissur (in numbers)

Table 6.1.12shows the market share of different genres of music in Thrissur. Market share of film songs, album songs and western music has increased during the period 2010 to 2014. The market share of devotional songs and classical music has consistently declined over the years.

Year	D	С	Η	FS	AS	WM	IM	OTH	Total
2010	26.76	15.55	0.14	21.08	18.09	10.06	8.29	0	100
2011	24.09	16	0.14	22.58	17.57	9.01	10.57	0	100
2012	21.32	16.63	0.12	23.41	17.47	8.95	12.05	0	100
2013	19.77	15.98	0.12	24.31	16.25	10.35	13.19	0	100
2014	17.07	14.15	0.13	22.82	20.41	12.08	13.31	0	100

 Table 6.1.12. Market share of different genres in Thrissur (%)



Figure 6.1.12.1. Sale of different genres of music in Thrissur

Source: Sample Survey, 2015

The total sale of different genres of music during the five year period of 2010-2014 is compiled. Regional variations can be identified. The sale of devotional music is highest in Thrissur. In Thrissur the largest number of music shops are located in Guruvayoor, a Pilgrim Centre. This may be the reason why the sale of devotional songs is highest in Thrissur. In the sale of Hindustani music, Kozhikode and Trivandrum shows the highest sales. With regards to all other genres including film songs and classical music, Palakkad has the highest sales.

Region	D	С	Н	FS	AS	WM	IM	OTH
Kozhikode	28796	14004	12025	67504	15538	20612	24817	782
(% share)	(11.04)	(7.26)	(32.00)	(19.77)	(7.53)	(12.95)	(15.79)	(29.33)
Ernakulum	58200	51700	1800	64200	41600	32100	31500	0
(% share)	(22.32)	(26.82)	(4.79)	(18.80)	(20.18)	(20.17)	(20.05)	0
Palakkad	68300	53455	2550	96955	65245	48150	46100	0
(% share)	(26.19)	(27.73)	(6.78)	(28.39)	(31.65)	(30.25)	(29.34)	0
Thrissur	71091	50767	437	73801	58055	32521	36884	0
(% share)	(27.26)	(26.33)	(1.16)	(21.61)	(28.17)	(20.43)	(23.47)	0
Trivandrum	34359	22823	20765	38982	25648	25748	17803	1884
(% share)	(13.17)	(11.84)	(55.25)	(11.41)	(12.44)	(12.44)	(11.33)	(70.66)
Total	260746	192749	37577	341442	206086	159131	157104	2666

Table 6.1.13. Total Sale of different genres of music 2010-2014 (InNumbers)

Table 6.1.14 shows the market share of different genres of music. The market share of film songs is high in all the sample districts taken. In Kozhikode film songs, devotional music and instrumental music has a high market share. In Ernakulum, film songs, album songs and devotional songs have high market share. The percentage market share of film songs, devotional songs and album songs are high in Palakkad. In Thrissur also the percentage market share is high in the case of film songs, devotional songs and album songs. Generally it can be seen that there is a higher demand for film songs, devotional music and album songs among other genres of music.

 Table 6.1.14. Market Share of Different Genres (%)

Region	D	С	Η	FS	AS	WM	IM	ОТН	Total
Kozhikode	15.64	7.6	6.53	36.67	8.44	11.19	13.48	0.42	100
Ernakulum	20.7	18.39	0.64	22.83	14.79	11.41	11.2	0	100
Palakkad	17.93	14.03	0.66	25.46	17.13	12.64	12.64	0	100
Thrissur	21.97	15.69	0.13	22.8	17.94	10.05	10.05	0	100
Trivandrum	18.27	12.13	11.04	20.73	13.64	13.69	13.69	1	100



Figure 6.1.14.1. Sale of Different Genres of Music 2010-2014

To analyse the pattern of music sale, average sale of different genres of music are taken in relation to region and tested for significance. Kruskal Wallis test is used to test the significance. It is seen that region is a significant factor influencing the sale of devotional music, classical music, Hindustani music, western music, album music, film songs, instrumental music and others. There are regional differences in the sale of different genres of music.

Null Hypothesis	Test	P value	Significance	Chi square value	Decision	Interpretation
Region is not a factor influencing average sale of devotional music	Kruskal Wallis test	.000	Significant at 5% level	74.989	Reject null hypothesis	Region is a significant factor affecting average sale of devotional music
Region is not a factor influencing average sale of classical music	Kruskal Wallis test	.000	Significant at 5% level	70.255	Reject null hypothesis	Region is a significant factor affecting average sale of classical music
Region is not a factor influencing average sale of Hindustani music	Kruskal Wallis test	.000	Significant at 5% level	90.346	Reject null hypothesis	Region is a significant factor affecting average sale of Hindustani music
Region is not a factor influencing average sale of film songs	Kruskal Wallis test	.000	Significant at 5% level	44.343	Reject null hypothesis	Region is a significant factor affecting average sale of film songs
Region is not a factor influencing average sale of album songs	Kruskal Wallis test	.000	Significant at 5% level	70.360	Reject null hypothesis	Region is a significant factor affecting average sale of album songs
Region is not a factor influencing average sale of western music	Kruskal Wallis test	.000	Significant at 5% level	34.252	Reject null hypothesis	Region is a significant factor affecting average sale of western music
Region is not a factor influencing average sale of instrumental music	Kruskal Wallis test	.000	Significant at 5% level	46.866	Reject null hypothesis	Region is a significant factor affecting average sale of instrumental music

 Table 6.1.15. Average music sales of different genres based on region

#### **6.2. Sale of Different Music Formats**

The physical sales of music are mainly in the formats of MP3, CD, DVD, Cassettes and Records. Of these Cassettes and records are stocked in very few shops. Cassettes have almost completely been replaced by other music formats. Records are available in select shops and are viewed as collectors' items. Sale of music formats show that MP3 has the highest sales though music sales as a whole have fallen.

Table 6.2.1 shows the sale of different music formats during the period 2010 to 2014. Total sales have fallen with a growth rate of - 16.1. There is 82% fall in the sale of cassettes. The sale of records has fallen by 23 per cent. Sale of MP3s has fallen by 9.5 per cent. CDs have shown a negative growth of -8.03 per cent. Only the sale of DVDs has shown an increase with a growth of 19.26 per cent.

Year	MP3	CD	DVD	Cassettes	Records	Total	
2010	47366	35476	295.83	23923	8349	144607	
(% share)	(20.96)	(20.88)	(16.92)	(46.01)	(23.04)	144097	
2011	47966	35176	38683	11164	7649	1/0628	
(% share)	(21.22)	(20.71)	(22.13)	(21.47)	(21.11)	140038	
2012	44326	33296	35318	7564	7129	127622	
(% share)	(19.21)	(19.60)	(20.20)	(14.54)	(19.67)	12/033	
2013	43426	33251	35898	5128	6699	124402	
(% share)	(19.21)	(19.57)	(20.54)	(9.86)	(18.49)	124402	
2014	42866	32626	35283	4214	6399	121288	
(% share)	(18.97)	(19.21)	(20.18)	(8.10)	(17.66)	121388	
Total	225950	169825	174765	51993	36225	658758	
GR	-9.5	-8.03	19.26	-82.38	-23.35	-16.1	

 Table No: 6.2.1.Sale of different music formats (in numbers)

Source: Sample Survey, 2015

Table 6.2.2 shows the market share of different music formats. The market share of MP3s, CDs and DVDs has increased over the period 2010 to 2014. Market share of cassettes and records have fallen steadily. In 2010, the share of cassettes in the total sales was 16.53 percent. It decreased to 3.47 percent in 2014.

Year	MP3	CD	DVD	Cassettes	Records	Total
2010	32.73	24.51	20.44	16.53	5.76	100
2011	34.1	25.01	27.5	7.93	5.43	100
2012	34.72	26.08	27.63	5.92	5.58	100
2013	34.9	26.72	28.85	4.12	5.38	100
2014	35.31	26.87	29.06	3.47	5.27	100

 Table 6.2.2. Market share of different music formats (%)

Figure 6.2.2.1. Sale of different music formats



Source: Sample Survey, 2015

Table 6.2.3 shows the sale of different music formats in Kozhikode. Over the years 2010-2014, the sale of MP3 and CD has shown slight increase while that of DVD and cassettes has declined. The sale of MP3s and CDs have remained almost steady. There is a fall in the total number of sales.

Year	MP3	CD	DVD	Cassettes	Records	Total
2010	4550	4220	5470	6320	4134	24604
(%share)	(20.14)	(19.60)	(18.86)	(33.89)	(20.01)	24694
2011	4380	4370	6970	2870	4134	22724
(%share)	(19.38)	(20.30)	(24.04)	(15.39)	(20.01)	22724
2012	4550	4320	5470	4320	4114	22774
(%share)	(20.14)	(20.07)	(19.35)	(23.17)	(19.91)	22774
2013	4560	4390	5610	2714	4139	21/12
(%share)	(20.18)	(20.39)	(18.86)	(14.55)	(19.91)	21415
2014	4550	4220	5470	2420	4134	20704
(%share)	(20.14)	(19.60)	(18.86)	(12.98)	(20.03)	20794
Total	22590	21520	28990	18644	20655	112399

 Table 6.2.3. Sale of different music formats in Kozhikode (in numbers)

Table 6.2.4 shows the market share of different music formats. The share of MP3s, CDs, DVDs and records has increased while that of cassettes has fallen. But Kozhikode is one of the regions where cassettes are still sold. Records are more popular here than in other regions. Music lovers who collect music in the form of records and cassettes are seen here. There are also old worldly music shops stocking antique music players and old records.

Year	MP3	CD	DVD	Cassettes	Records	Total
2010	18.42	17.08	22.15	25.59	16.74	100
2011	19.27	19.23	30.67	12.62	18.19	100
2012	19.97	18.96	24.01	18.96	18.06	100
2013	21.29	20.5	26.19	12.67	19.32	100
2014	21.88	20.29	26.3	11.63	19.88	100

Table 6.2.4. Market share of different music formats in Kozhikode (%)

Source: Sample Survey, 2015



Figure 6.2.4.1. Sale of different music formats in Kozhikode

Source: Sample Survey, 2015

Table 6.2.5 shows the sale of different music formats in Thrissur. Over the years 2010-2014, the sale of MP3 and CD, cassettes and records has shown a decrease while that of DVD has increased. There is still a demand for records and cassettes in Thrissur.

Year	MP3	CD	DVD	Cassettes	Records	Total	
2010	15160	9710	5350	3300	570	34000	
(% share)	(21.95)	(21.11)	(15.50)	(56.89)	(30.48)	34090	
2011	13860	9360	7650	1500	490	32860	
(% share)	(20.07)	(20.35)	(22.16)	(25.86)	(26.20)	52800	
2012	13860	9260	7150	800	470	21540	
(% share)	(20.07)	(20.13)	(20.70)	(13.79)	(25.13)	51540	
2013	13210	8890	7210	100	170	20580	
(% share)	(19.13)	(19.33)	(20.89)	(1.72)	(9.09)	29380	
2014	12960	8760	7150	100	170	20140	
(% share)	(18.76)	(19.05)	(20.71)	(1.72)	(9.09)	29140	
Total	69050	45980	34510	5800	1870	157210	
GR	-14.51	-9.78	33.64	-96.96	-70.17	-14.52	

Table 6.2.5. Sale of different music formats in Thrissur (in numbers)

Source: Sample Survey, 2015

Table 6.2.6 shows the market share of different music formats in Thrissur. The share of cassettes and records has fallen. The share of MP3s has remained almost steady and that of CDs have slightly increased. The market share of DVDs has considerably increased.

Table 6.2.6. Market share of different music formats in Thrissur (%)

Year	MP3	CD	DVD	Cassettes	Records	Total
2010	44.47	28.48	15.69	9.68	1.67	100
2011	42.17	28.48	23.28	4.56	1.49	100
2012	43.94	29.35	22.66	2.53	1.49	100
2013	44.65	30.05	24.37	0.33	0.57	100
2014	44.47	30.06	24.53	0.34	0.58	100



Figure 6.2.6.1. Sale of different music formats in Thrissur

There are regional differences in the sale of music formats. Table 6.2.7 shows the sale of different music formats in Ernakulum. Over the years 2010-2014, the sale of MP3 and CD, cassettes and records has shown a decrease while that of DVD has increased. Cassettes and records sales have completely disappeared by 2014. Total music sales have decreased by - 17 per cent.

Year	MP3	CD	DVD	Cassettes	Records	Total	
2010	10000	8750	5000	5980	750	30480	
(% share)	(19.04)	(22.53)	(14.20)	(61.45)	(53.57)		
2011	12500	7500	7500	3200	500	31200	
(% share)	(23.80)	(19.31)	(21.30)	(32.88)	(35.71)	51200	
2012	10000	7500	7500	350	150	25500	
(% share)	(19.04)	(19.31)	(21.30)	(3.59)	(10.71)		
2013	10000	7570	7710	200	0	25490	
(% share)	(19.04)	(19.50)	(21.89)	(2.05)	0	23480	
2014	10000	7500	7500	0	0	25000	
(% share)	(19.04)	(19.31)	(21.30)	0	0	25000	
Total	52500	38820	35210	9730	1400	137660	
GR	0	-14.28	50	-100	-100	-17.97	

 Table 6.2.7. Sale of different music formats in Ernakulum (in numbers)

Source: Sample Survey, 2015

Table 6.2.8 shows the market share of different music formats in Ernakulum. The market share of all music formats have decreased. It has almost stagnant in the past three years for MP3 and CD. In Ernakulum the

fall in physical sales is quite visible. The spread of internet and increased use of mobile phones have shifted music listening to digital platforms which may account for the steep fall in music sales.

Year	MP3	CD	DVD	Cassettes	Records	Total
2010	32.8	28.7	16.4	19.61	2.46	100
2011	40.06	24.03	24.03	10.25	1.6	100
2012	39.21	29.41	29.41	1.37	0.58	100
2013	39.24	29.7	30.25	0.78	0	100
2014	40	30	30	0	0	100

Table 6.2.8.Market share of different music formats in Ernakulum (%)

Source: Sample Survey, 2015





Source: Sample Survey, 2015

Table 6.2.9 shows the sale of different music formats in Palakkad. Over the years 2010-2014, the sale of MP3 and CD, cassettes and records has shown a decrease while that of DVD has increased. Total music sales have decreased showing a negative growth of -20.11.Cassettes and records sales in Palakkad have completely stopped by 2014 as per the sample.

Year	MP3	CD	DVD	Cassettes	Records	Total
2010 (% share)	13000 (22.84)	7800 (20.8)	8550 (17.72)	4600 (65.71)	600 (60)	34550
2011 (% share)	12400 (21.79)	8050 (21.46)	10250 (21.25)	1600 (22.85)	200 (20)	32500
2012 (% share)	10100 (17.75)	7150 (19.06)	9750 (20.21)	400 (5.71)	100 (10)	27500
2013 (% share)	10700 (18.80)	7350 (19.6)	9925 (20.58)	400 (5.71)	100 (10)	28475
2014 (% share)	10700 (18.80)	7150 (19.06)	9750 (20.21)	0	0	27600
Total	56900	37500	48225	7000	1000	150625
GR	-17.69	-8.33	14.03	-100	-100	-20.11

 Table 6.2.9.Sale of different music formats in Palakkad (in numbers)

Table 6.2.10 shows the market share of sale of different music formats in Palakkad. The market share of DVDs has increased and there is a slight increase in the share of CDs and of MP3 also. But the market share of cassettes and records has fallen steadily. By 2014 the share of cassettes and records has become zero.

Year	MP3	CD	DVD	Cassettes	Records	Total
2010	37.62	22.57	24.74	13.31	1.73	100
2011	38.15	24.76	31.53	4.96	0.61	100
2012	36.72	26	35.45	1.45	0.36	100
2013	37.57	25.81	34.85	1.4	0.35	100
2014	38.76	25.9	35.32	0	0	100

Table 6.2.10.Market share of different music formats in Palakkad (%)



Figure 6.2.10.1.Sale of different music formats in Palakkad

Source: Sample Survey, 2015

Table 6.2.11 shows the sale of different music formats in Trivandrum. Over the years 2010-2014, the sale of MP3 has slightly increased while that of CD, DVD and cassettes has decreased. But cassettes and records are still being sold in select shops in Trivandrum. The sale of MP3s has almost remained steady. The sale of CDs has shown an increase while that of cassettes, records and DVDs have fallen. The total music sales have fallen showing a negative growth.

Table 6.2.11.Sale of Different music formats in Trivandrum (in numbers)

Year	MP3	CD	DVD	Cassettes	Records	Total
2010	4656	4996	5213	3723	2295	20883
(% share)	(18.81)	(19.21)	(18.73)	(34.41)	(20.30)	20883
2011	4656	5896	6313	1994	2325	21184
(% share)	(18.81)	(22.67)	(22.68)	(18.43)	(20.57)	21104
2012	5816	5066	5448	1694	2295	20310
(% share)	(23.50)	(19.48)	(19.57)	(15.65)	(20.30)	20319
2013	4956	5051	5443	1714	2290	10/5/
(% share)	(20.03)	(19.42)	(19.55)	(15.84)	(20.26)	17454
2014	4656	4996	5413	1694	2095	1885/
(% share)	(18.81)	(19.21)	(19.45)	(15.65)	(18.53)	10034
Total	24740	26005	27830	10819	11300	100694
GR	0	3.83	-54.49	-8.71	-9.71	

Table 6.2.12 shows the market share of different music formats in Trivandrum. The market share of MP3, CD and DVD has increased. The share of cassettes shows a steep fall. There are a select few people who still enjoy listening to records and the market share of records have remained almost steady.

Year	MP3	CD	DVD	Cassettes	Records	Total
2010	22.29	23.92	24.96	17.82	10.98	100
2011	21.97	27.83	29.8	9.41	10.97	100
2012	28.62	24.93	26.81	8.33	11.29	100
2013	25.47	25.96	27.97	8.81	11.77	100
2014	24.69	26.49	28.71	8.98	11.11	100

Table 6.2.12. Market share of different music formats in Trivandrum(%)

Source: Sample Survey, 2015

Figure 6.2.12.1 Sale of different music formats in Trivandrum



Source: Sample Survey, 2015

Table 6.2.13 shows the total sale of different music formats in the period 2010 to 2014 in the sample districts. Total sale of MP3 is higher compared to other music formats. The sale of MP3 is highest in Thrissur, Palakkad and Ernakulum. The share of cassettes and records sales are high in Kozhikode compared to other regions. The sale of CDs and DVDs are high in Ernakulum, Thrissur and Palakkad.

Region	MP3	CD	DVD	Cassettes	Records	Total	
Kozhikode	22590	21520	28990	18644	20655	112200	
(% share)	(10.00)	(12.67)	(16.58)	(35.85)	(57.01)	112399	
Trivandrum	24740	26005	27830	10819	11300	100604	
(% share)	(10.95)	(15.31)	(15.92)	(20.80)	(31.19)	100094	
Palakkad	56900	37500	48225	7000	1000	150625	
(% share)	(25.20)	(22.08)	(27.59)	(13.46)	(2.76)	130023	
Thrissur	69050	45980	34510	5800	1870	157210	
(% share)	(30.58)	(27.07)	(19.74)	(11.15)	(5.16)	137210	
Ernakulum	52500	38820	35210	9730	1400	137660	
(% share)	(23.25)	(22.85)	(20.14)	(18.71)	(18.71) (3.86)		
Total	225780	169825	174765	51993	36225	658588	

Table6.2.13.Sale of different music formats 2010-2014 (in numbers)

Table 6.2.14 shows the market share of different music formats in the selected sample districts from 2010 to 2014. The market share of MP3 and CDs is highest in Thrissur. The market share of DVDs is highest in Palakkad. In the case of cassettes and records Kozhikode has the highest market share.

 Table 6.2.14. Market Share of Different Music Formats 2010-2014 (%)

Region	MP3	CD	DVD	Cassettes	Records	Total
Kozhikode	20.09	19.14	25.79	16.58	18.37	100
Trivandrum	24.56	25.82	27.63	10.74	11.22	100
Palakkad	37.77	24.89	32.01	4.64	0.66	100
Thrissur	43.92	29.24	21.95	3.68	1.18	100
Ernakulum	38.13	28.19	25.57	7.06	1.01	100



Figure 6.2.14.1.Sale of different music formats 2010-2014

Source: Sample Survey, 2015

Average sale of different music formats with respect to different locations are tested. The location of music shops are classified into rural, urban and pilgrim centre. Level of significance is 5%. Kruskal Wallis test is used to test the significance. To analyse the pattern of music sale, average sale of different music formats are taken in relation to region and tested for significance. It is seen that there are regional differences in the sale of different music formats. Region is a significant factor influencing the sale of different music formats.

Null Hypothesis	Test	P value	Significance	Chi square value	Decision	Interpretation
Region is not a factor influencing average sale of MP3	Kruskal Wallis test	.000	Significant at 5% level	38.074	Reject null hypothesis	Region is a significant factor affecting average sale of MP3
Region is not a factor influencing average sale of CD	Kruskal Wallis test	.000	Significant at 5% level	20.014	Reject null hypothesis	Region is a significant factor affecting average sale of CD
Region is not a factor influencing average sale of DVD	Kruskal Wallis test	.062	Significant at 10% level	5.555	Reject null hypothesis	Region is a significant factor affecting average sale of DVD
Region is not a factor influencing average sale of Cassettes	Kruskal Wallis test	.028	Significant at 5% level	7.167	Reject null hypothesis	Region is a significant factor affecting average sale of Cassettes
Region is not a factor influencing average sale of records	Kruskal Wallis test	.003	Significant at 5% level	66.603	Reject null hypothesis	Region is a significant factor affecting average sale of records

 Table 6.2.15. Average music sale of different music formats based on region

Table 6.2.16 shows the sales revenue from different music formats with respect to region. Though total sales are higher for MP3, sales revenue is higher for DVD, since it is more costly. There are regional differences. Sale of cassettes and records are only there in Kozhikode, Trivandrum and Thrissur. Sales revenue from MP3 is highest in Thrissur and Palakkad. Highest sales revenue from cassettes and records is in Kozhikode.

Sales Sales Sales Sales Sales Revenue Revenue Region Revenue Revenue Revenue Cassette Records **MP3 (Rs.)** CD (Rs.) DVD (Rs.) (**Rs.**) (**Rs.**) 738900 Kozhikode 734200 1210000 159500 482937 (% share) (17.92%)(25.68%)(26.83%)(51.77%)(55.01%)Ernakulum 800000 450000 750000 0 0 (% share) (19.40%)(15.74%)(16.63%)Palakkad 838500 440000 992000 0 0 (% share) (20.33%)(15.39%)(22.00%)675795 143580 376250 Trivandrum 706475 826695 (% share) (17.13%)(23.64%)(18.33%)(46.60%)(42.85%)1039200 18700 Thrissur 558000 730000 5000 (% share) (25.20%)(19.52%)(16.19%)(1.62%)(21.30%)2857995 877887 Total 4123075 4508695 308080

Table 6.2.16. Sales revenue from different music formats

Source: Sample Survey, 2015

Figure 6.2.16.1. Sales revenue from different music formats


Table 6.2.17 shows the profit obtained from the sale of different music formats from music shops region wise. There is a fall in profit in the case of all the different music formats. There seems to be no profit from the sale of cassettes and records from Palakkad, Thrissur and Ernakulum.

Region	MP3	CD	DVD	Cassette	Records	
Kozhikode	480900	401200	679800	14690	61227	
(% share)	(30.94)	(52.52)	(47.09)	(28.60)	(24.75)	
Ernakulum	200000	0	173460	0	0	
(% share)	(12.87)	0	(12.01)	0	0	
Palakkad	191500	11000	152500	0	0	
(% share)	(12.32)	(1.44)	(10.56)	0	0	
Trivandrum	419885	323285	293810	36656	186100	
(% share)	(27.02)	(42.32)	(20.35)	(71.39)	(75.24)	
Thrissur	261600	28400	143750	0	0	
(% share)	(16.83)	(3.71)	(9.95)	0	0	
Total	1553885	763885	1443320	51346	247327	

Table 6.2.17. Profit from sale of different music formats (Total Profit in Rs.)

Source: Sample Survey, 2015

Figure 6.2.17.1. Profit from sale of different music formats



Source: Sample Survey, 2015

As the physical sale of music began to decline, many music shops shifted from exclusive music shops to shops selling other goods also, like mobile phones, film CDs, electronic equipment, recharge cards etc. Of the 125 music shops surveyed, 72.8 per cent sell film CDs, mobile recharge cards, and mobile accessories other than music.

Goods sold	Frequency	Percent
Film CDs	31	24.8
Mobile Recharge Cards	2	1.6
Mobile Accessories	1	0.8
All	91	72.8
Total	125	100.0

Table 6.2.18. Goods sold other than music

Source: Sample Survey, 2015

Of the 125 music shops surveyed, only 22 shops were exclusive music shops.103 shops were music shops in name, but sold other goods also. Most shops sold apart from music goods, film CDs, mobile recharge cards, ear phones, electronic equipment etc.

Table 6.2.19. Number of exclusive music shops

	Frequency	Percent
No	103	82.4
Yes	22	17.6
Total	125	100.0

Source: Sample Survey, 2015

Does this shift from music to other goods cause a change in the average profit of music shops. This is tested for significance. Mann Whitney U test is used. Average profit does not change with shift from music to other goods is taken as the null hypothesis. Level of significance is 5%.Test results are statistically significant. Hypothesis is rejected. Average profit of music shops changes with the shift from music to other goods.

Table 6.2.20. Shift from music to other goods- Mann Whitney U test

	Shift from Music to other Goods	N	Mean Rank	Sum of Ranks
	No	100	55.68	5568.00
Average Profit	Yes	25	92.28	2307.00
	Total	125		

Source: Sample Survey, 2015

Only 20 per cent of the shops sell virtual music, that is, 26 shops out of 125 surveyed sell virtual music. People depend on mobile phones to listen to music online and also to download music. Streaming and downloading is possible through mobile phones. Shops selling virtual music are few in number compared to the shops selling physical music.

Sale of Virtual Music	Frequency	Percent
No	99	79.2
Yes	26	20.8
Total	125	100.0

 Table 6.2.21. Sale of virtual music

Source: Sample Survey, 2015

The average profit of shops selling virtual music is tested. Average profit does not change is taken as the null hypothesis. Mann Whitney U test is used. Level of significance is 5%.Test results are statistically significant. P value is .000. Hypothesis can be rejected. Average profit of shops changes with the sale of virtual music.

Table 6.2.22. Average profit - Mann-Whitney U Test

	Sale of Virtual Music	N	Mean Rank	Sum of Ranks
	No	99	53.39	5286.00
Average	Yes	26	99.58	2589.00
FIOIII	Total	125		

Source: Sample Survey, 2015

Sales revenue of music shops does not change with respect to region is taken as the null hypothesis. Kruskal Wallis test is used. Level of significance is 5%.Chi square value is 50.432.Test results are significant. Hypothesis is rejected. It can be inferred that sales revenue differs with respect to region.

Table 6.2.23. Sales Revenue - Kruskal Wallis Test

	Region	Ν	Mean Rank
	Kozhikode	25	101.08
	Ernakulum	25	30.00
Salas Davanua	Palakkad	25	67.68
Sales Revenue	Trivandrum	25	59.64
	Thrissur	25	56.60
	Total	125	

Source: Sample Survey, 2015

Respondents were asked to rank their perception of the reason for the loss of revenue in music industry. The weighted mean rank method is used to analyse the response of the respondents. The weighted mean rank is computed from the ranks assigned by the respondents.

Mean rank was found by giving due weightage to different groups. Majority of the people ranked piracy as the chief reason for loss in revenue. Piracy has a mean rank of 6.76 followed by spread of online music with a mean rank of 5.464 and music from mobile phones with a mean rank of 4.856. The formula used for ranking the different modes of entertainment is  $\sum wx / \sum w$  (w is the weight assigned). In this case, w stands for number of respondents. X stands for the number of observations. X takes the value depending on the rank assigned by the respondent to a particular mode of entertainment. The values assigned to ranks are in descending order, i.e. as we move from rank 1 to rank 5, the value assigned falls from 5 to 1.

	1	2	3	4	5	6	7	Total score	Mean rank score	Rank position
Piracy	107	8	9	0	1	0	0	845	6.76	1
Online music	10	46	61	8	0	0	0	683	5.464	2
Radio	3	37	14	40	7	24	0	542	4.336	4
Mobile	5	34	38	35	12	1	0	607	4.856	3
Shift in interest	0	0	2	39	69	15	0	403	3.224	5
Low quality	0	0	1	3	35	81	5	289	2.312	6
Other	0	0	0	0	1	4	120	131	1.048	7

Table 6.2.24. Mean Rank -Reason for revenue loss in music industry

Source: Sample Survey, 2015

Respondents were asked about their take on the medium of music access which has led to the decline of music industry. Weighted mean rank is computed from the response of the respondents. TV, Radio, mobile phones, computer and iPod were the medium of access considered for finding the mean rank. Majority of people ranked use of mobile phones to hear music as the main reason. The mean rank score is 4.272.

	1	2	3	4	5	Total score	Mean Rank score	Rank position
Radio	1	19	68	3	34	325	2.6	4
TV	63	18	8	33	3	480	3.84	2
Mobile	57	50	14	3	1	534	4.272	1
Computer	4	37	1	73	10	327	2.616	3
iPod	0	1	34	13	77	209	1.672	5

 Table 6.2.25. Mean Rank -Medium of music access causing decline in sales

Source: Sample Survey, 2015

Respondents were asked to rank their perception of the reason for the decline in sales in music industry. The weighted mean rank method is used to analyse the response of the respondents. The weighted mean rank is computed from the ranks assigned by the respondents. Piracy is given as the main reason by the majority of respondents with a mean rank score of 6.744.

	1	2	3	4	5	6	7	Total score	Mean Rank score	Rank position
Piracy	107	9	6	1	2	0	0	843	6.744	1
Online Music	11	49	56	9	0	0	0	687	5.496	2
Radio	1	32	20	40	7	25	0	530	4.24	4
Mobile	6	34	40	35	9	1	0	615	4.92	3
Shift In Interest	0	1	1	34	71	18	0	396	3.168	5
Low Quality	0	0	1	5	35	77	7	291	2.328	6
Other	0	0	1	1	1	4	118	138	1.104	7

 Table 6.2.26. Mean Rank -Reason for decreasing trend in sales

Source: Sample Survey, 2015

#### **6.3. FACTOR ANALYSIS**

The study used the technique of multivariate factor analysis to identify and analyse the problems faced by music industry. Factor analysis attempts to identify underlying variables that explain the pattern of correlations within a set of observed variables. It is often used in data reduction to identify a small number of factors that explain most of the variance observed in a large number of variables.

Principal component analysis is used for factor extraction. PCA seeks to find out the first linear combination of variables which accounts for the largest amount of variation in the sample; the second for the next largest amount of variance in a dimension independent of the first, and so on. Successive components explain smaller and smaller portions of the total variance and are independent of one another. In each solution, there are as many components as there are original variables. The variances of the components are commonly known as Eigen value. The size of the Eigen values describes the dispersion for each variable.

Usually the initial factor extraction does not give interpretable factors. Therefore we attempt for rotation of the factors. One of the purposes of rotation is to obtain factors that can be named and interpreted.

The study examines the problems faced by music industry based on information collected from shop owners .125 samples were collected. Information was collected by framing statements. They were asked to rate the following statements from strongly agree to strongly disagree. Values were given from 5 to 1.

Twenty five statements were given.

- 1. Music piracy has increased recently
- 2. Spread of digital technology has increased music piracy
- 3. Music piracy is the reason for decline in sales
- 4. Music buying has decreased because of spread of you tube.
- 5. Music releases has decreased recently

- 6. Release of film songs has decreased
- 7. Sale of film songs has decreased
- 8. Number of songs in films has decreased
- 9. Release of albums has increased
- 10. Sale of albums has increased in recent years
- 11. Release of devotional songs has increased
- 12. Sale of devotional songs has increased
- 13. People below the age of 20 do not buy music
- 14. Devotional music is purchased by people above the age of 20
- 15. Album songs are purchased by people below the age of 20
- 16. Film songs are purchased by all age groups
- 17. Consumers purchase more MP3 than CDs
- Music shops are now selling other goods like film CDs, mobile phones, recharge cards, etc.
- 19. Many music shops have converted into mobile shops
- 20. Number of music shops has reduced drastically
- 21. Shop selling exclusive music products has become very rare
- 22. Music sales have reduced in recent years
- 23. Music buying has reduced in recent years
- 24. Music industry is facing a crisis
- 25. Digital revolution has led to a crisis in music industry

	Ν	Minimum	Maximum	Mean	Std. Deviation
Music Piracy Has Increased Recently	125	4	5	4.66	.477
Spread of Digital Technology	125	3	5	4.18	.422
Piracy Fall in Sales	125	1	3	1.72	.485
Music Buying Decreased	125	1	4	1.50	.577
Music Releases Decreased	125	1	4	1.69	.640
Release of Film Songs Decreased	125	1	4	2.15	.730
Sale of Film Songs Decreased	125	1	4	1.71	.670
Number of Songs Decreased	125	1	4	2.02	.523
Purchase More MP3	125	2	5	4.29	.682
Music Shops to Mobile	125	2	5	4.50	.563
Number of Music Shops Decreased	125	1	5	1.76	.574
Exclusive Music Shops Rare	125	1	4	1.72	.576
Music Sales Fallen	125	1	4	2.03	.581
Music Buying Fallen	125	1	3	1.51	.518
Digital Revolution Crisis	125	3	5	4.15	.476
People Below 20 Don't Buy Music	125	1	4	1.67	.749
Valid N (List Wise)	125				

### Table 6.3.1. Descriptive Statistics

Source: Sample Survey, 2015

Bartlett's measure tests the null hypothesis that the original correlation matrix is an identity matrix. For factor analysis to work we need some relationship between variables and if the R-matrix were an identity matrix then all correlation coefficients would be zero. Therefore, we want this test to be significant (i.e. to have a significance value of less than 0.05). A significant test tells us that the R-matrix is not an identity matrix; therefore, there are some relationships between the variables we hope to include in the analysis. For these data, Bartlett's test is significance at zero percent level, and therefore factor analysis is appropriate.

KMO and Bartlett's test indicate adequate sampling.0.7% is considered adequate.

Kaiser-Meyer-Olkin Measure of	.747	
	Approx. Chi-Square	741.660
Bartlett's Test of Sphericity	df	105
	Sig.	.000

Table 6.3.2. KMO and Bartlett's Test

Source: Sample Survey, 2015

The following shows communalities before and after extraction. Communalities are the proportions of common variance within a variable. Principal component analysis works on the initial assumption that all variance is common; therefore, before extraction the communalities are all 1. In effect, all of the variances associated with a variable is assumed to be common variance. Once factors have been extracted, we have a better idea of how much variance is, in reality, common.

	Initial	Extraction
Music Piracy Has Increased Recently	1.000	.633
Spread Of Digital Technology	1.000	.422
Piracy Fall In Sales	1.000	.588
Music Buying Decreased	1.000	.641
Music Releases Decreased	1.000	.729
Release Of Film Songs Decreased	1.000	.738
Sale Of Film Songs Decreased	1.000	.741
Number Of Songs Decreased	1.000	.693
Purchase More MP3	1.000	.692
Number Of Music Shops Decreased	1.000	.643
Exclusive Music Shops Rare	1.000	.710
Music Sales Fallen	1.000	.612
Music Buying Fallen	1.000	.704
Digital Revolution Crisis	1.000	.450
People Below 20 Don't Buy Music	1.000	.612
Extraction Method: Principal Component	t Analysis.	

#### **Table 6.3.3. Communalities**

Source: Computed based on survey data, 2015

In the next step, factor loadings are estimated. For estimating them, the Principal Component Analysis (PCA) was selected as the extracting method. The results were rotated to get better results. The results of the rotated factor analysis contain the following Tables.

Table 6.3.4 shows the Total Variance Explained. This table shows statistics for each factor before and after the components are extracted. For principal components, initial and extraction statistics are always the same. In the column labelled Total, the eigen values for the multivariate space of the original variables are ordered by size. Each value is the total variance explained by a factor. The percentage of the total variance attributable to each factor is displayed in the column labelled % of variance.

	Initia	l Eigen	values	Ext Squ	raction Su 1ared Loa	ıms of dings	Rotation Sums of Squared Loadings			
Comp onent	Total	% of Varia nce	Cumul ative %	Total	% of Varianc e	Cumula tive %	Total	% of Varian ce	Cumula tive %	
1	4.429	29.52	29.527	4.429	29.527	29.527	3.552	23.678	23.678	
2	2.470	16.46	45.995	2.470	16.468	45.995	2.458	16.390	40.067	
3	1.479	9.863	55.858	1.479	9.863	55.858	1.870	12.464	52.531	
4	1.229	8.196	64.054	1.229	8.196	64.054	1.728	11.523	64.054	
5	.970	6.469	70.523							
6	.769	5.124	75.647							
7	.675	4.501	80.148							
8	.616	4.107	84.255							
9	.507	3.379	87.634							
10	.497	3.316	90.950							
11	.395	2.633	93.583							
12	.308	2.053	95.636							
13	.266	1.773	97.409							
14	.215	1.432	98.841							
15	.174	1.159	100.00							
Extrac	tion M	ethod:	Principa	al Com	ponent A	nalysis.				

 Table 6.3.4. Total Variance Explained

Source: Computed based on survey data, 2015

After rotation, the first factor accounts for 23.678 per cent of the variance, the second accounts for 16.39 per cent, the third accounts for 12.464 per cent and the fourth factor accounts for 11.523 per cent of the variation. Together, the first four factors account for 64.054 per cent of the model.

Figure No: 6.3.4.1. Scree Plot



	Component							
	1	2	3	4				
Music Piracy Has			600					
Increased Recently			.000					
Spread of Digital				624				
Technology				.024				
Piracy Fall In Sales		.619						
Music Buying Decreased	.671							
Music Releases Decreased	.715							
Release of Film Songs		729						
Decreased		.738						
Sale of Film Songs	500							
Decreased	.300							
Number of Songs		804						
Decreased		.804						
Purchase More MP3	765							
Number of Music Shops			776					
Decreased			.770					
Exclusive Music Shops	772							
Rare	.775							
Music Sales Fallen				537				
Music Buying Fallen	.749							
Digital Revolution Crisis				.608				
People Below 20 Don't				516				
Buy Music				.540				
Extraction Method: Principa	al Compone	nt Analysis.						
Rotation Method: Varimax	with Kaiser	Normalizat	ion.					
a. Rotation converged in 11	iterations.							

## Table 6.3.5. Rotated Component Matrix<sup>a</sup>

Source: Computed based on survey data, 2015

The problems faced by music industry can be identified into four factors.

- 1. Factor 1- Impact of Technology
- 2. Factor 2 –Decline in music sales
- 3. Factor 3- Music piracy
- 4. Factor 4- Crisis in Music industry

# 6.3.1 Factor 1- Impact of Technology

Statements which are identified with factor one are 1) music buying has decreased with the spread of You Tube, 2) music releases has decreased 3) sale of film songs decreased, 4) shops selling exclusive music products have become very rare, 5) music buying has reduced in recent years. All these statements are positively correlated to factor 1. Change in technology has caused people to shift from physical to virtual music. Music can be heard on line, it can be downloaded, shared and copied and can be accessed easily through mobile phones. This has led to fall in music sales. Spread of internet and availability of online music has caused people to shift to virtual music. Spread of you tube and the ease with which music can be down loaded from you tube has caused music buying to fall. As a result, music releases has decreased, release of film songs has decreased, Sale of film songs has decreased and number of songs in films itself has decreased. Shops selling music products found that it is no longer viable to sell music alone. They gradually began to sell other products besides music. Exclusive music shops became rare. All this can be seen as the impact of technology. A statement which is negatively correlated to factor 1 is that, consumers purchase more MP3 than CDs. This may be because very few people purchase music with the advent of digital technology, and those who still purchase music are very particular about the quality of music. In the case of MP3 the quality of music is severely undermined by the compression technologies used. So people who still purchase music may give more importance to the quality of music than its cost.

#### **6.3.2 Factor 2- Decline in Music Sales**

Statements which are identified with factor 2 are 1) music piracy is the reason for decline in sales, 2) release of film songs has decreased 3) number of songs in films has decreased. All these factors are positively correlated to factor 2. The spread of digital revolution caused a shift in music consumption. People began to prefer online music either through internet via you tube or through mobile phones. Virtual music was preferred to physical formats. This caused a fall in music sales. In India music industry is linked to film industry. Film songs form the largest part of music sales. So when music sales decreased it directly affected the sale of film songs. Release of film songs decreased as a result and even the number of songs in a film decreased. All this can be associated with the shift in music consumption and fall in music sales.

### 6.3.3 Actor 3- Piracy

Statements which are identified with factor 3 are 1) music piracy increased recently and 2) number of music shops has reduced. These factors are positively correlated to the problem of piracy. Because of piracy many music shops suffered losses and had to go out of business. Many shops converted into mobile shops and shops selling electronic equipment. Reduction in the number of music shops can be directly linked to piracy.

### 6.3.4 Factor 4 – Crisis in Music Industry

Statements which are associated with factor 4 are 1) spread of digital technology has increased piracy, 2) digital revolution has led to a crisis in music industry 3) music sales has decreased and 4)People below the age of 20 do not buy music. Statements 1, 2 and 4 are positively correlated to factor 3.Statement 3 is negatively correlated to factor 3.The spread of digital technology has increased the problem of piracy. The existing copyright laws are not adequate to accommodate the changes which has taken place as a result of digital revolution. This has led to a crisis in the music industry. Younger people do not buy music. They download music or listen to it online rather than purchase music from shops. This again is the result of digital revolution. Though physical sales of music has fallen, total music sales has not fallen because of the sale of virtual music. So piracy has not caused a fall in overall music sales and overall music sales has not fallen as a result of digital revolution

#### **6.4. Regression of Factors**

Regression can be carried out to test how the factors extracted using principal component analysis affect the important variables in music industry. The extracted factors -1. Factor 1- Impact of Technology, 2. Factor 2 –Decline in music sales, 3. Factor 3- Music piracy and 4. Factor 4- Crisis in Music industry are taken as the independent variables. In Table 6.4.1, Sales revenue is taken as the dependent variable. Durbin Watson test is used to check for auto

correlation. R square value is 0.133. The factors explain 13 % of the model. VIF is 1 showing that there is no multi collinearity. Impact of factor 2 and factor 3 on sales revenue is significant at 5% level and impact of factor 4 on sales revenue is significant at 10% level. Impact of factor 1 is not significant. Sales revenue is negatively correlated to all the factors. Music piracy and crisis in the music industry has all led to a fall in sales revenue.

## Table 6.4.1. R Square Value

Model	R	R Square	Adjusted R St Square th		Durbin- Watson				
1 .365 <sup>a</sup> .133 .104 .45442 1.400									
a. Predictors: (Constant), REGR factor score 4 for analysis 1, REGR factor score 3 for analysis 1, REGR factor score 2 for analysis 1, REGR factor score 1 for analysis 1									
b. Dependent Variable: sales revenue									

Table ( 1 )	Decreation	of To stama	an Calar	Darrana
<b>1</b> able 0.4.2.	Regression	OF FACIORS	on Sales	Kevenne
1 4010 01 1141	Itegression	of i accord	on Daios	nevenue

		Unstand	lardized	Standardized			Collinea	Collinearity		
N	lodol	Coeff	icients	Coefficients	+	Sig	Statisti	ics		
10.	louei	В	Std. Error	Beta	l	Sig.	Tolerance	VIF		
	(Constant)	12.139	.041		298.675	.000				
	REGR factor									
	score 1 for	025	.041	051	605	.546	1.000	1.000		
	analysis 1									
1	REGR factor score 2 for analysis 1	129	.041	269	-3.168	.002	1.000	1.000		
	REGR factor score 3 for analysis 1	087	.041	182	-2.140	.034	1.000	1.000		
	REGR factor score 4 for analysis 1	076	.041	158	-1.854	.066	1.000	1.000		
a.	Dependent	Variable:	sales rev	renue						

Source: Computed based on survey data, 2015

Using the extracted factors, regression is carried out. The dependent variable is taken as the number of units sold. R square value shows that 30% of the model is explained using the extracted factors. Factors 2 and 3 are significant at 5% level and factor 4 is significant at 10% level. Number of units sold has a negative correlation to factors 1, 2 and four. Number of units sold has fallen as a result of shift in technology, decline in sales and the crisis in music industry. Factor 3 has a positive correlation to number of units sold. With piracy, sale of MP3 has increased, which is easy to duplicate at minimum cost. So total sale of units as a result of piracy increased even though sales revenue has fallen.

 Table 6.4.3.R Square Value

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin- Watson				
1	.549ª	.301	.278	.46041	1.894				
a. Predictors: (Constant), REGR factor score 4 for analysis 1, REGR									
factor s	core 3 for	analysis 1,	REGR factor se	core 2 for anal	ysis 1, REGR				
factor score 1 for analysis 1									
b. Dependent Variable: number of sales									

м	املوا	Unstandardized Coefficients		Standardized Coefficients	ŧ	Sig	Collinearity Statistics		
IVI	louei	В	Std. Error	Beta	L	Sig.	Tolerance	VIF	
	(Constant)	7.329	.041		177.973	.000			
	REGR factor score 1 for analysis 1	051	.041	095	-1.241	.217	1.000	1.000	
1	REGR factor score 2 for analysis 1	240	.041	442	-5.794	.000	1.000	1.000	
	REGR factor score 3 for analysis 1	.153	.041	.282	3.690	.000	1.000	1.000	
	REGR factor score 4 for analysis 1	071	.041	131	-1.715	.089	1.000	1.000	
a.	Dependent	Variable	: numb	er of sales					

**Table 6.4.4. Regression of Factors on Number of Sales** 

Source: Computed based on survey data, 2015

The dependent variable is taken as the number of units of MP3 sold. The extracted factors are taken as independent variables. R square value shows that 46.3% of the model is explained by the factors. Factors 1, 2 and 3 have a significant impact at 5% level of significance. Factor 4 is not significant. Factors 1, 2 and four have negative correlation with number of units of MP3 sold. That is, shift in technology, decline in sales and crisis in the music industry has all led to a fall in Mp3 sales. But the impact of piracy has caused MP3 sales to increase which is again consistent with the previous result. There exists a positive correlation between sale of MP3 and piracy.

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin- Watson				
1	.680 <sup>a</sup>	.680 <sup>a</sup> .463 .445 .43031		1.199					
a. Predictors: (Constant), REGR factor score 4 for analysis 1, REGR									
factor s	core 3 for	analysis 1,	REGR factor s	core 2 for anal	ysis 1, REGR				
factor score 1 for analysis 1									
b. Depe	ndent Vari	able: lnmp3	Bsold						

.Table 6.4.5.R Square Value

Table	6.4.6	.Regressio	n of	f Factors	on ]	Number	of	Units	of 1	MP3	Sol	d

		Unstan	dardized	Standardized			Collinea	rity
		Coeff	icients	Coefficients			Statist	ics
			Std.					
Μ	lodel	В	Error	Beta	t	Sig.	Tolerance	VIF
1	(Constant)	5.685	.038		147.714	.000		
	REGR							
	factor							
	score 1	113	.039	196	-2.922	.004	1.000	1.000
	for							
	analysis 1							
	REGR							
	factor							
	score 2	269	.039	466	-6.967	.000	1.000	1.000
	for							
	analysis 1							
	REGR							
	factor							
	score 3	.259	.039	.448	6.690	.000	1.000	1.000
	for							
	analysis 1							
	REGR							
	factor							
	score 4	048	.039	083	-1.245	.216	1.000	1.000
	for							
	analysis 1							
a.	Dependent '	Variable	: lnmp3s	old				

Source: Computed based on survey data, 2015

Using the extracted factors as independent variables, regression is carried out. The dependent variable is taken as the sales revenue of CD sold. R square value explains 12.5% of the model. The results are significant only for factor 3.There is negative correlation. As piracy increases sales revenue from CDs fall. It can be inferred that with piracy, sale of MP3 increases but that of CDs fall.

 Table 6.4.7. R Square Value

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin- Watson					
1	.353ª	.125	.095	.44896	1.186					
a. Predictors: (Constant), REGR factor score 4 for analysis 1, REGR										
factor s	core 1 for	analysis 1,	REGR factor s	core 2 for anal	ysis 1, REGR					
factor score 3 for analysis 1										
b. Depe	b. Dependent Variable: Insrcd									

 Table 6.4.8. Regression of factors on sales revenue of CD

Model		Unstandardized Coefficients		Standardized Coefficients	4	Sia	Collinearity Statistics	
		В	Std. Error	Beta	t	51g.	Tolerance	VIF
1	(Constant)	9.938	.040		246.462	.000		
	REGR factor score 1 for analysis 1	018	.040	039	451	.653	1.000	1.000
	REGR factor score 2 for analysis 1	055	.040	117	-1.363	.176	1.000	1.000
	REGR factor score 3 for analysis 1	147	.041	310	-3.619	.000	1.000	1.000
	REGR factor score 4 for analysis 1	054	.041	113	-1.322	.189	1.000	1.000
a. Dependent Variable: Insrcd								

Source: Computed based on survey data, 2015

### 6.5. Conclusion

An analysis of the sale of music in different regions in Kerala shows that overall sales of music is falling. Sale of different music formats show that the sale of cassettes and records have fallen drastically. The sale of MP3 has increased over the years. There are regional differences in the sale of music. In the sale of different genres of music also there are regional variations. It is seen from the data that as physical sales declined, music shops transformed from exclusive music shops to shops selling other goods also. Factor analysis shows that the spread of digital technology and the rising problem of piracy have transformed the structure of music industry.

#### CHAPTER – 7

### SUMMARY, CONCLUSION AND POLICY IMPLICATIONS

### 7.1 Introduction

Digital revolution has fundamentally changed the structure and functioning of music industry in India. The industry is in transition, moving from a physical to digital platform. The technological changes, resulting in the digitalization of music has been happening, all over the world and problems of piracy, changes in copyright laws, disappearance of some industries and the emergence of others are all reflections of global trends and patterns. All over the world digital sales of music is fast out pacing physical sales. By 2012 in the world music market, physical sales and digital sales have become equal. But in the case of India the shift from physical to digital is much faster, with digital sales out pacing digital sales by 2010. Recording companies are focusing on new developing markets where digital infrastructure is fast developing. The study analyses the structure of music industry in terms of its markets, distribution and trade using secondary data sources. The trends and patterns in music consumption and sales is examined with the help of primary data.

The objectives of the study are

- To analyse the structure of music industry in terms of its markets, distribution and trade.
- To examine the shift in consumption of music as a result of technological change
- To examine the changing trends in the sale of different music formats through retail outlets during the period 2010 to 2014.
- To study the impact of technological changes in music industry.

Evolution of Music Industry is examined using the frame work of Cultural Economics. Theories relating to cultural economics including the pioneering studies of Baumol and Bowen are discussed in chapter two. It discusses how digitalization has impacted culture industries and how cultural products have adapted themselves to the technological changes.

The present study focuses, on the dynamic changes that have taken place in the music industry as a result of digital revolution. The ideal framework for the dynamic changes in the music industry seems to be the Schumpeterian model of creative destruction. Innovations and the spread of digital technology have caused massive changes in music industry. There have been many transformations, from the period of vinyl records to the present day world of MP3's and peer to peer networks. Schumpeter's analysis of creative destruction have been used as a frame work to analyze the transformation in music industry.

History of music and evolution of music industry is discussed in chapter 3. Music industry has come a long way, right from the period of sheet music to the modern day world of digital music. Developments in the music industry have been many and varied and have kept pace with the technological changes happening all over the world. It is seen that copy right laws in many countries including India have not adapted effectively to the digital changes in music industry. The operative inefficiency of copyright laws have increased the problem of piracy.

Entertainment industry, of which music industry is a part, is going through a transition from physical to digital platform. The global changes that have occurred in the entertainment market can be witnessed in the entertainment market and music industry in India. Digital revolution has brought about significant changes in all entertainment goods especially music .Structural changes that have taken place in music markets, and its distribution and trade has been analysed with the help of secondary data.

Trends and patterns of music consumption was analysed with the help of primary data. Primary data were collected from people who listen to music. A survey was conducted to analyse consumer preferences regarding music buying and music listening habits. Samples were randomly collected by selecting individuals who purchase music and listen to music. A total of 200 samples were taken from the selected districts, 40 each from Trivandrum, Ernakulum, Calicut, Thrissur and Palakkad districts using interview schedules.

To analyse the pattern of music sales in retail outlets, data were collected randomly from retail cassette shops from selected cities in Kerala using interview schedules. Data were randomly collected from music shops in Trivandrum, Ernakulum, Calicut, Thrissur and Palakkad, using interview schedule. A total of 125 samples were collected, 25each from the selected districts. Problems faced by music industry is examined on the basis of responses collected from shop owners using likert scale.

Technological changes have brought about significant shift in music industry from physical to digital format which is examined on the basis of both primary and secondary data.

### 7.2 FINDINGS

- The Global recorded music market has increased from 35,670 million dollars to 51,124 million dollars in the period from 2004 to 2012showing an increase of 43%. In all the countries, the sale of music has shown an increasing trend. This is mainly because digital sales of music is fast growing. The decline in physical sales is compensated by the increase of digital sales. A look at the global recorded music market from 2005 to 2014 shows that the physical sales of recorded music market is gradually declining. It has fallen from 32,398 million dollars to 10,885 million dollars. The digital sales has increased from 2,127 million dollars to 16,988million dollars.
- The Indian entertainment and media market has shown an overall growth of 20 per cent. In the total entertainment and media industry of 965 million dollars, Music industry has contributed about 13 million dollars in 2012. The market share of entertainment industry as a percentage of GDP is 1.11 in 2004. The share of entertainment

market is consistent throughout the years .The market share is 1.35 per cent in 2012.

- The Music industry in India, shows a revenue of 13.1 billion Rs in 2012 as compared to 6.7 billion Rs in 2004. More than 50% increase can be seen in the total sales. But there is a shift in sales from physical to digital components. Sale of cassettes and records is the traditional source of income for music companies and constitutes the physical component of sales. It fell from 6.7 billion Rs in 2004 to 2.3 billion Rs in 2012,a fall of 65%.Digital sale of music began in 2005.It increased from 0.5 billion Rs in 2005 to 10.8 billion Rs in 2012. In 2010 there was a structural shift from the physical to digital. Digital sales outpaced physical sales.
- Top ten entertainment markets are identified. India is one among the top markets. CAGR calculated for the period 2004 to 2012 shows that Brazil has the highest growth with 14.21 per cent. Followed by China (13.07), India (11.53) and Australia (8.37). A look at the top entertainment markets show that there is a very high growth in music exports in Japan, China , India and US in the period 2004 to 2012.From 2004 to 2012 Indian music exports grew from 168.1 million dollars to 1106.4 million dollars. The period 2004 to 2012 shows high growth in music imports in China, France and India. During this period Indian music imports grew from 33.6 million dollars to 1042 million dollars
- Music consumption is examined on the basis of primary data. Music consumption of individuals is analysed based on their income, status, age, gender and education. Mean rank was calculated for finding the preferred mode of entertainment of the respondents. Majority preferred music as the means of entertainment. Music has a mean rank of 3.975 followed by TV with a mean rank of 3.765 and movies with a mean rank of 2.825.

- Income is a significant factor affecting a) frequency of listening to music b) listening to music while travelling c) mode of listening d) listening to online music e) downloading music f) awareness of copyright violation g) awareness of MP3 being pirated
- Income is not a significant factor a) affecting amount of music purchase b) type of music purchase c) mode of music purchase d) use of mobile music e) purchase of online music f) purchase of MP3.
- Status of the respondent is a significant factor influencing a) mode of listening to music b) downloading music c) the awareness of MP3 being pirated d) purchase of online music e) Listening to music while travelling f) purchase of MP3.
- Status of the respondent is not a significant factor in a) frequency of listening to music b) amount spent on music purchase c) type of music purchase d) use of mobile music e) listening to online music f) awareness of copyright violation.
- Age of the respondent is a significant factor in a) listening to music while travelling b) mode of listening to music c) use of mobile music
  d) awareness regarding copyright violation e) awareness regarding MP3 being pirated f)purchase of MP3.
- Age of the respondent is not a significant factor influencing a) amount of music purchase b) frequency of listening to music c) type of music purchase d) mode of music purchase e) listening to online music f) downloading music g) purchase of online music.
- Gender is a significant factor affecting purchase of MP3.
- Gender is not a significant factor influencing a) amount of music purchase b) type of music purchase c) Mode of music purchase d) frequency of listening to music e) use of mobile music

f) Listening to music while travelling g) awareness regarding copy right violation g) mode of listening h) listening to onlinei) downloading music j) purchase of online music k) awareness of MP3 being pirated.

- Education is a significant factor influencing a) purchase of different music formats b) use of mobile music c) listening to online music.
  d) download of music e) awareness of copyright violation
  f) frequency of listening to music g) listening to music while travelling h) mode of listening i) type of music purchase j) purchase of online music k) purchase of MP3.
- Education is not a significant factor influencing a) amount spent on music purchase b) mode of music purchase c) awareness of MP3being pirated.
- The shift from physical to digital sales can also be witnessed in the analysis of primary data. Income of the respondent, age of the respondent, rural /urban differences, region, ownership of computer and access to internet connection are found to be significant factors in the shift from physical to online shops. Education of the respondent, status of the respondent and gender of the respondent are not significant factors influencing the shift from physical to digital sales.
- Primary data of music sales for the period 2010 to 2014 is taken. Music sales has fallen. Overall music sales has fallen in all regions except in Trivandrum.
- In the sale of different genres of music, there are regional variations. The sale of devotional music is highest in Thrissur. Kozhikode and Trivandrum shows the highest sales in Hindustani music. In classical music and film songs Palakkad has the highest sales. Region is found

to be a significant factor influencing the sale of different genres of music.

- Sale of different music formats over a period 2010 to 2014 shows that overall sales of music has fallen. The sale of MP3 has increased. The sale of cassettes and records have fallen. Region is found to be a significant factor influencing the sale of different music formats.
- As physical sales declined music shops transformed from exclusive music shops to shops selling other goods also. Of the 125 music shops surveyed, 72.8% sell film CD's, mobile recharge cards, and mobile accessories other than music. Average profit of music shops changes with the shift from music to other goods. Shift from music to other goods is found to be a significant factor affecting average sales. Sale of virtual music is found to be a significant factor affecting average sales. Region is found to be a significant factor affecting sales revenue.
- The opinion of the shop owners regarding the reason for the loss of revenue in music industry was collected. Mean rank was found. Majority of the people ranked piracy as the chief reason for loss. Piracy has a mean rank of 6.76 followed by spread of online music with a mean rank of 5.464 and music from mobile phones with a mean rank of 4.856.
- Shop owners were asked about their opinion on the medium of music listening which has led to the decline in sales of music industry. Majority of people ranked use of mobile phones to hear music as the main reason. The mean rank of mobile phones is 4.272.Followed by TV which has a mean rank of 3.84.
- Mean rank was found to examine the reason for the decreasing trend in sales. Piracy has the highest mean rank of 6.74 followed by spread

of online music with a mean rank of 5.496 and mobile music with a mean rank of 4.92.

 Factor analysis was carried out to examine the problems faced by music industry. Factors identified are 1) impact of technology 2)
 Decline in music sales 3) music piracy and 4) crisis in music industry. Regression on extracted factors show that decline in music sales, music piracy and crisis in the music industry has all led to a fall in sales revenue. As piracy increases, sales revenue from MP3 increases but sales revenue from CD's fall.

#### 7.3 Limitations

The chief limitation of the study is that it analyses only one aspect of music industry .The study focuses on the music recording industry and consumption and sale of pre-recorded music goods. The rationale is that almost all major studies treat music industry as synonymous with recording industry. But music industry also comprise of musical instruments industry, radio industry and live performances. These are not included in the study.

The non-availability of data from recording companies was a serious limitation. Production and Cost structure of the companies could not be ascertained. Study focused mainly on pre-recorded music markets, music consumption, music sales and trade in pre-recorded music goods.

#### 7.4 Policy Implications.

Music Industry is facing crisis as the recording companies find it difficult to move in tune with the technological revolution. Physical formats of music are replaced by digital ones. Once music becomes digital, it exhibits public good properties which makes exclusion difficult. Peer to peer networks and free downloads have made music into a quasi-public good. Music companies are closing down. Music shops are gradually disappearing. Problem of piracy is rampant. Copy right laws at present are not effective to curb piracy. Government should take adequate steps to modify copyright laws to cover digital changes. If copyright laws are not made stringent enough to prevent free downloading and illegal file sharing, it will be the death knell of music industry as it is presently configured. Government should take necessary steps to eradicate piracy and the laws against piracy should be made more inclusive, to ensure the survival of music industry.

## 7.5 Contribution of the Researcher

Cultural economics is an area with untapped research potential. There are very few studies relating to cultural Economics in India. The present study on Music industry in India, can be considered as one of the early studies using the frame work of cultural economics. Though there are studies relating to music, a study on the business aspect of music using the tools of Economics is rarely seen. The researcher has tried to develop an area of study which has hitherto remained relatively unexplored.

### 7.6 Recommendation for future Research

Entertainment industry, especially music industry, is an untapped area of research. The present study has focussed on pre-recorded music industry. There are other areas in music industry relating to Music instruments industry, live performances, radio industry, recording industry, music production, revenue and cost of music production, employment opportunities in the music business - all of which needs in depth research. Other related areas are copyright laws and the problem of piracy in music industry.

#### 7.7 Conclusion

Music industry has undergone tremendous changes, from the period of sheet music and vinyl records to audio tapes and to CD's and now to digital distribution of music. All over the world physical sales of music have fallen and digital sales of music have increased. This is especially true in the case of India where digital sale of music has surpassed physical sales. India is one among the top entertainment markets of the World, and as such plays an important role in trade in music goods.

Analysis of the secondary data and information gathered from primary data both indicate that the changes in Indian music industry is a reflection of the changes occurring all over the world .Music industry in Kerala and India are facing the problems faced by the rest of the world and consumers of music are responding to these changes in the same manner. The findings of the primary data mostly corroborate our own observations and intuitive understanding of the changes that are happening in consumer behaviour and market response to that behaviour in the music industry.

Music industry is a harbinger of change signalling change in similar industries. What has happened and what is happening in the music industry today will happen in other industries in a greater or lesser degree in the near future. Film industry is already feeling the pinch of piracy. Book publishing industry is impacted in different ways, e-books and e-reading are slowly gaining ground. Although mammoth companies like, Amazon, imaginatively make use of the change, many retailers in the publishing chain are closing down and cutting their losses. Music industry, to survive in the digital world, has to redefine itself to accommodate the technological revolution that is taking place globally.

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# APPENDIX

### Appendix - I

#### **Interview schedule 1**

1. Personal details

Name:										
Address & Ph	one N	0:								_
Mobile No:				- En	nail					
2. Place	of Res	sidence:	Rur	al [ ] ]	Urban []					
3. Age:	[ ] uno	der 20 [	] 2	0-30	[] 30-40	) []40-5	50 []50	)-60[]	60 &a	bove
4. Sex: [	] Mal	e []Fe	mal	e.						
5. Religi	ion: Hi	indu [ ] N	Aus	lim []	] Christia	n [] Othe	rs [ ]			
6. Status	s: []S	Student [	] Se	elf-em	ployed [	] Govt. Se	ervice []	Priva	te Serv	ice [
] Prof	ession	al [] Ho	usev	wife [	].					
7. Are ye	ou: []	Single		[]]	Married.					
8. Montl	hly inc	come:[]]	Belo	ow 10	000 []H	Rs 10000-	20000	[] Rs	20000-	
30000	00[]	Rs 3000	0-4	00000	) [ ] Rs 40	000-5000	00 []H	Rs 500	<b>%000</b>	
above	[]									
9. Educa	tion: 1	1) Below	SS	C[]S	SSC []pl	us two[]	(2) Degr	ee []	(3)	
Postg	raduat	e [] 4.Pr	ofes	ssiona	1[]					
10. What	are yo	our mode	s of	enter	tainment	(please ra	nk in oro	ler of	prefere	nce)
Mode	Lister	ning to		Wate	hing	Watchin	g Read	ling	Game	es
	music	С		Movi	ies in	TV				
Vour				theat	re					
rank										
11. How i	much	money d	o vo	ou spe	nd for the	e followin	g in a m	onth		
Mode		Music	Ör	nline	Copied	Movies	Movie	Mob	oile	
		CD /	mı	usic	music	in	CD /	Ring	gtones	
		DVD				theatre	DVD			
Expend	liture									
per mor	nth									

12. How do you buy these

Music: From shop / from online stores / download Movies: From shop / from online stores / download

- 13. How often do you listen to music?
  1. Daily [] ‰2. Five to six times a week ‰[]‰3. Three to four times a week [] ‰4. Once or twice a week []
  5. Less than once a week []‰6. Do not listen []
- 14. When do you usually listen to Music?

#### 1) 6-8 AM [ ]%‰2) 8-10 AM [ ] ‰3) 10-1 PM [ ]‰4) 1-3 PM 5) 3-5 PM [ ] 6) 5-8 PM [ ]‰7) 8-10 PM [ ] 8)after 10 PM [ ]

15. Among different musical genres which do you listen:

Devoti	Class	Hindu	Film songs			alb	Weste	Instr	Any	
onal	ical	stani				um	rn	ume	other	
			Μ	Та	Hi	Oth	son	Music	ntal	
			al	mil	ndi	ers	gs			

16. Is there a shift in interest in music listening as you grow older? Yes [] No []

17. Is there a conflict in interest in music listening between family members? Yes [] No []

18. How do you listen to music?

1)RADIO[] 2) RECORD PLAYER [] 3)TAPE RECORDER [] 4)CD/MP3/DVD PLAYER[] 5)TV[] 6)MOBILE[] 7)I pod []

19. Music players owned by the Household: 1) RADIO [] 2) RECORD PLAYER [] 3) TAPE RECORDER [] 4) CD/MP3/DVD PLAYER [] 5) I pod []

20. From where did you purchase the music player:1) Music shop []2)Electronics shop []3) Online shops []

21. What was the price of the music player at the time of purchase?

Туре	RADIO	RECORD	TAPE	CD/MP3	DVD	Ι	
of		PLAYER	RECORDER	PLAYER	PLAYER	POD	
music							
player							
Price							

22. Do you listen to music while travelling: Yes [] No []

23. Do you use music player in your car or other vehicles you own: Yes [] No []

24. Do you think quality of music has improved with technological changes: Yes [] No []

25. Do you have a Mobile: Yes [] No []

26. Does your Mobile Phone have a Radio? Yes [] No []

27. Do you listen to music from your mobile? Yes [] No []

28. Do you download music to your mobile? Yes [] No []

29. Do you purchase ring tones or songs to your mobile? Yes [] No []

30. If yes, how much do you spend on purchasing songs and ringtones in a month?

31. Do you own a TV? %Yes [] No []

32. If yes, do you have a cable or DTH connection? %a) Cable []%2)DTH[]

33. How much time do you spend on watching TV?

1)One hour[ ]2) Two hours[ ] 3)Three hours[ ] 4)Four hours[ ] 5)More than four hours[ ]

34. What do you watch on TV?

1) NEWS [] 2) FILMS [] 3) MUSIC [] 4) Entertainment

35. Do you own a Radio %Yes [] No []

36. If yes, does it have FM/MW/SW Band? %d) FM [] 2) MW [] 3) SW []

37. Do you listen to radio?

38. How often do you listen to radio?

%1. Daily [] %2. Five to six times a week % []%3. Three to four times a week []
%4. Once or twice a week [] 5. Less than once a week []%6. Do not listen []

39. Do you have a computer? Yes [] No []

40. How much time do you spend on computer?

1)One hour[] 2) Two hour[] 3)Three hour[] 4)Four hour[] 5)More than four hours []

41. Does your computer have Internet Connection? Yes [] No []

42. If yes, what do you use it for?

1) Communications [] 2) social networks []3) Games [] 4) Entertainment []

43. Do you listen to music on line? Yes [] No []

44. Do you download Music: Yes [] No []

45. Do you consider downloading music a violation of copyright act: Yes [] No []

46. Do you purchase music from shops? Yes [] No []

47. What type of music goods do you purchase?

1)MP3 []2)CD []3)DVD[]4)Cassettes []5)Records[]

48. How much do you spend on purchasing music goods in a month?

- 49. Do you purchase original CD'S of songs? Yes [] No []
- 50. Do you purchase MP3 Songs? Yes [] No []
- 51. Are you aware MP3'S are often pirated? Yes [] No []
- 52. Do you purchase music online? Yes [] No []
- 53. If yes, how much do you spend on purchasing music on line in a month?
- 54. How do you purchase online music?
- 1) Per song 2) Per film 3) CD Collections 4) selected bundle of songs
- 56. From which online music store do you purchase?
- 57. Have you shifted your purchase of music from physical shops to online shops?Yes [] No []

\*\*\*\*\*\*\*\*

## Appendix II

#### **Interview schedule 2**

- 1. Name and Address of the shop: \_\_\_\_\_
- 2. Name of the proprietor: \_\_\_\_\_

Address & Phone No:

- 3. Year of establishment: \_\_\_\_\_
- 4. Location of the shop: RURAL/URBAN / Pilgrim Centre/Others
- 5. Type of musical goods sold in last year (2014):

	MP	CD	DVD	Cassett	Record	CD	DVD	Any
	3	(Musi	(Musi	es	S	(Movie	(Movie	othe
		c)	c)			s)	s)	r
Numb								
er sold								
Price								
per								
unit								

- 6. Number of employees:
- 8. Sales of different musical genres

		Number	of units sold		
	2010	2011	2012	2013	2014
Devotional					
Classical					
Hindustani					
film songs					
album songs					
Western Music					
Instrumental					
Any other					

9. Is there a seasonal demand to music sales:

If yes when:

What are the reasons:

10. What is the number of new music releases in past five years?

2010	2011	2012	2013	2014

11. Number of new music releases sold in past five years?

2010	2011	2012	2013	2014

12. Which are the major music companies releasing music in the past five years?

13. Did new music companies emerge in last five years?

14. If so the number of new music companies?

2010	2011	2012	2013	2014

15. How many Music releases on an average are profitable in a year?

16. The number of different genres of music released in last five years?

YEA	Fil	Devotio	Classi	Hindust	Weste	Instrume	Albu	Othe
R	m	nal	cal	ani	rn	ntal	ms	rs
	son	music			Music			
	gs							
2010								
2011								
2012								
2013								
2014								

17. From where do you purchase music: Recording Company/ whole sale shops/Others

18. What is the purchase cost per music unit?

MP3	CD	DVD	Cassettes	Records

19. Is the shop making profit? Yes /No

20. What is the profit per year?

2010	2011	2012	2013	2014
21. Is the shop suffering losses: yes /no

Reaso	Musi	Availabilit	Popularit	Using	Interest	Qualit	Other
n	c	y of	y of	Mobile	of the	y of	Reason
	pirac	Online	Radio	s to	consumer	music	S
	у	music		hear	s have	is low	
				songs	changed		
Rank							

22. If so what is the reason for loss: (Please rank)

23. Is there a decreasing trend in music sales? Yes /No

24. If so what is the reason: (Please rank)

Reaso	Musi	Availabilit	Popularit	Using	Interest	Qualit	Other
n	c	y of	y of	Mobile	of the	y of	Reason
	pirac	Online	Radio	s to	consumer	music	S
	у	music		hear	s have	is low	
				songs	changed		
Rank							

25. Rank the Medium of music access which has caused a decline in music sales:

Reason	Radio	TV	Mobile	Computer/Internet	I Pods
			phones		
Rank					

26. Do your shop sell virtual music (music downloads)?

27. If so do you sell individual songs or albums?

28. What is the price charged per music download?

29. Does your shop sell any good other than music: film CDs / Mobile phones recharge cards, /mobile accessories,/ electronic equipment/ others

- 30. Did the shop start as an exclusive music shop? Yes /No
- 31. Is there a shift from music to other goods in recent years? Yes /No
- 32. If so what is the reason?
- 34. Age group of customers purchasing Music:

Below 20, 20-40, 40-60, 60 Above

35. Age group of customers purchasing virtual music downloads (if applicable)

Below 20, 20-40, 40-60, 60 Above

36. Age group of customers purchasing film songs

Below 20, 20-40, 40-60, 60 Above

37. Age group of customers purchasing devotional songs

Below 20, 20-40, 40-60, 60 Above

38. Age group of customers purchasing album songs

Below 20, 20-40, 40-60, 60 Above

39. Age group of customers purchasing other music genres

Below 20, 20-40, 40-60, 60 Above

40. In your opinion what are the challenges faced by this industry.

## Part II

1. Music piracy has increased recently Strongly Agree /Agree/Neither Agree nor Disagree /Disagree/Strongly Disagree

2. Spread of Digital Technology has increased Music piracy Strongly Agree /Agree/Neither Agree nor Disagree /Disagree/Strongly Disagree

3. Music piracy is the reason for decline in sales Strongly Agree /Agree/Neither Agree nor Disagree /Disagree/Strongly Disagree

4. Music buying has decreased because of spread of You tube / internet downloads/FM Radio.

Strongly Agree /Agree/Neither Agree nor Disagree /Disagree/Strongly Disagree

5. Music releases has decreased recently

Strongly Agree /Agree/Neither Agree nor Disagree /Disagree/Strongly Disagree

6. Release of film songs has decreased

Strongly Agree /Agree/Neither Agree nor Disagree /Disagree/Strongly Disagree

7. Sale of film songs has decreased

Strongly Agree /Agree/Neither Agree nor Disagree /Disagree/Strongly Disagree

8. Number of songs in films has decreased

Strongly Agree /Agree/Neither Agree nor Disagree /Disagree/Strongly Disagree

9. Release of albums has increased

Strongly Agree /Agree/Neither Agree nor Disagree /Disagree/Strongly Disagree

10. Sale of albums has increased in recent years.

Strongly Agree /Agree/Neither Agree nor Disagree /Disagree/Strongly Disagree

11. Release of devotional songs has increased

Strongly Agree /Agree/Neither Agree nor Disagree /Disagree/Strongly Disagree

12. Sale of devotional songs has increased

Strongly Agree /Agree/Neither Agree nor Disagree /Disagree/Strongly Disagree

13. People below the age of 20 do not buy music

Strongly Agree /Agree/Neither Agree nor Disagree /Disagree/Strongly Disagree

14. Devotional music is purchased by people above the age of 20

Strongly Agree /Agree/Neither Agree nor Disagree /Disagree/Strongly Disagree

15. Album songs are purchased by people below 20

Strongly Agree /Agree/Neither Agree nor Disagree /Disagree/Strongly Disagree

16. Film songs are purchased by all age groups

Strongly Agree /Agree/Neither Agree nor Disagree /Disagree/Strongly Disagree

17. Consumers purchase more MP3 than CDs

Strongly Agree /Agree/Neither Agree nor Disagree /Disagree/Strongly Disagree

18. Music shops are now selling other goods like film CD's mobile phones, recharge cards etc.

Strongly Agree /Agree/Neither Agree nor Disagree /Disagree/Strongly Disagree

19. Many music shops have converted into mobile shops

Strongly Agree /Agree/Neither Agree nor Disagree /Disagree/Strongly Disagree

20. Number of music shops has reduced drastically.

Strongly Agree /Agree/Neither Agree nor Disagree /Disagree/Strongly Disagree

21. Shops selling exclusively music products have become very rare.

Strongly Agree /Agree/Neither Agree nor Disagree /Disagree/Strongly Disagree

22. Music sales have reduced in recent years.

Strongly Agree /Agree/Neither Agree nor Disagree /Disagree/Strongly Disagree

23. Music buying has decreased in recent years.

Strongly Agree /Agree/Neither Agree nor Disagree /Disagree/Strongly Disagree

24. Music industry is facing a crisis.

Strongly Agree /Agree/Neither Agree nor Disagree /Disagree/Strongly Disagree

25. Digital revolution has led to a crisis in music industry.

Strongly Agree /Agree/Neither Agree nor Disagree /Disagree/Strongly Disagree