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, broadcasters, 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 into 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 non-profit 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 monotonous 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.
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 3.5 to 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 the 1960’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 exceptionalism 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 standpoint, 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 de-concentration 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 discourse 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.

Wikstrom 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 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 landmark 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 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 highlights 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.
Access cannot be confined to those who pay. There is the problem of non-excludability 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
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 pre-recorded 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 firm’s 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—consumers—teenagers. 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 interactive 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 viewpoint 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 determine 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
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.
Patakos 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 programs. 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.
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 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 post-industrial 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 copyright 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. Unauthorized 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.

Unauthorized 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
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 sound 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
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 Napster 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 copyrights when the new intermediary is introduced. Either artist ownership becomes 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 ownership 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. Anti-piracy 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 to 1850. 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. in 1709. 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 in 1870. 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 copyright 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 hold up 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 a 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 pre-recorded 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, 25 each 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 $\frac{\sum wx}{\sum w}$ 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

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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.