Abstract number: 025-0469

The Changes of the Music Supply Chain Value After the Internet and Music Digitization Era.

Alan Jezovsek Kuhar
Eaesp – Fgv
Sao Paulo, Sao Paulo, Brazil
Email: akuhar@espm.br

POMS 23rd Annual Conference
Chicago, Illinois, U.S.A.
April 20 to 23, 2011

Abstract: Music production has changed. Recording, pressing and distribution were made by record labels. With the Internet and technology development, record companies lost relevance once musicians can record and distribute their own music. Lower barriers of entry may have moved some value in the music supply chain to other members.

Introduction

This article is the first of three that will be developed in coming years to serve as a basis for a doctoral dissertation. The study is based on the new music production system from the viewpoint of the consumer, artist and music industry. This article develops a research with young music consumer with 18 to 25 years old who purchase, listen and distribute music that they listen.

The music industry has changed in the last 10 years since the record companies have their power and influence reduced with the advance of music digitization. The musicians don't need to have a contract or a bound with a record company to record, press, distribute and promote their own music. The existing technology allows anyone to make the whole process of music development in your own home using appropriate software and technologies. Nowadays, there is no need to record music on physical media as a Compact Disc once the digital music can be transferred from computer to computer, reducing the dependence of any artist with a record label.

Part of the production system has changed; it has been improved or innovated. To understand what is a change, innovation will be defined and also how a new business model alters the pattern of an entire industry. Innovation is routine and part of any company that aims to continue to offer products or services that are relevant to the market. Both market and competitors are constantly changing, forcing a company or even consumers to alter their behavior or seek new alternatives that are more convenient for their aims.

Theoretical References: Innovation and Quality

The innovations are projects managed by people with outstanding managerial skills and marketing knowledge, using a participative style that requires the involvement of the company's senior management, fostering integration among the participants of the development areas can help an innovation to have a greater chance of success in the market (THIEME, SONG and SHIN, 2003).

The good use of communication and information technology grows in importance since innovations are usually developed by one or a few members of a company. Convincing colleagues to support them to participate in the implementation of a new idea is one of the first steps to improve an innovative idea. A formal communication mechanism helps an innovative company in an environment of uncertainty to reach objectivity and uniformity in the process of understanding the new ideas and information (DAFT and LENGEL, 1984).

Communication is the link among flexibility in the development of a new process and its success. There is a requirement for flexible organizational processes since companies aim to reach a fine understanding of all the tasks of those that are involved in an innovation. The excess of the formalization process can also be harmful for the innovation development, since small tasks can hide problems and make decision taking speed slower (VON HIPPEL, 1998).

Innovative companies tend to allow that their procedures and routines extend beyond organizational boundaries, both flexibility and communication are part of the supply chain and logistics involved the development of an innovation (PITT and CLARK, 1999).

The planning process is relevant in the innovation process aiming to identify potential risks and also design a contingency plan. One company can anticipate project problems, softening throughout the development, potential difficulties (PITT and CLARK, 1999).

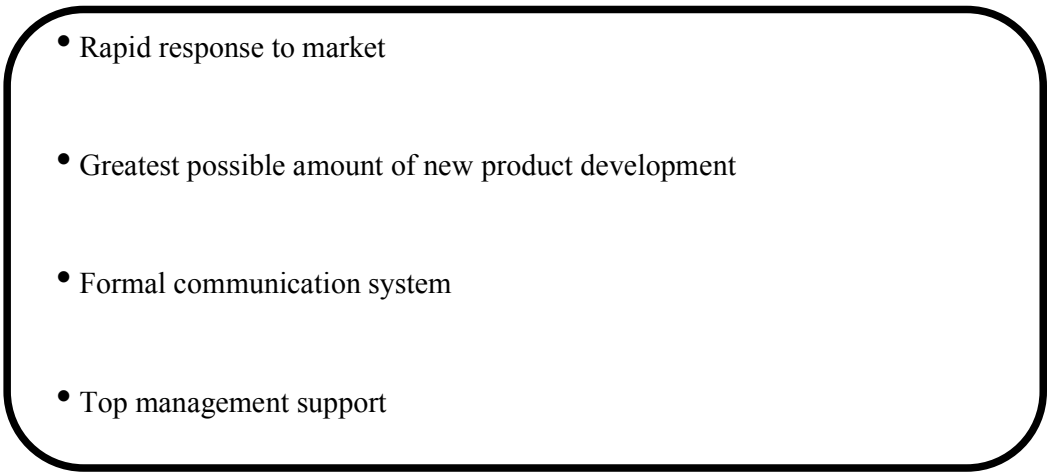
The effects of planning and control in the innovation development, considering that both parameters design competence of the planning activities and the management metrics are used for important prognostic performance of the innovation. The quality of activities and also risk project planning are positively related to the success of the innovation (SALOMO, WEISE and GERMUNDEN, 2007).

Salomo, Weise and Germunden (2007) consolidated some authors' concepts introducing the structure of companies that are seeking for greater success in innovation. The innovative companies must:

- Have fast responsiveness to the market (VON HIPPEL, 1998);
- Develop the largest possible amount of new products (NOBLE, 1995);
- Introduce a formal system of communication of the process, reaching the real support of the seniors managers (DAFT and LENGEK, 1986);
- Distinct project areas with a high level of integration (THIEME, SONG and SHIN, 2003).

The Illustration 01 summarizes some characteristics of the innovative companies.

Illustration 01 – Company's features in introducing innovation according to Salomo, Weise and Germunden (2007)



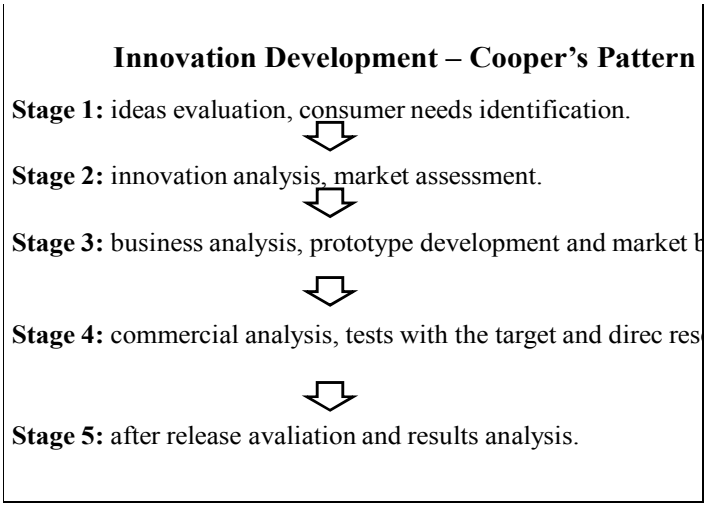
Source: Salomo, Weise and Germunden (2007).

Innovations are important contributors for companies' growth and profitability. However, the belief in the maximum potential of an innovation success is an invitation for the competition attack, which may have a better understanding of consumer behavior and technical product improvements. The new products and services development is a risky activity (CALANTONE, GARCIA and DROGE, 2003).

Companies invest millions dollars in researches and also spend a lot of money testing innovations to reduce the risk of failure. The reasons for a failure of an innovation can be grouped into three categories: innovation did not meet consumer needs, gaps in the demanded characteristics of the innovation, or a weak development planning process (CALANTONE, GARCIA and DROGE, 2003).

The Cooper's model (1980) for the development of an innovation involves both technical and marketing activities in five stages that go through the evaluation of ideas, analysis, preliminary design, business analysis and post-deployment assessment. The Illustration 02 summarizes the model with the main activities to be built up in each of the five stages to develop an innovation.

Illustration 02 – Innovation Development – Cooper's Pattern



Source: Cooper (1980, p.127)

Several studies explain the drivers of the success of innovations. In a meta-analysis, including researches such as Cooper and Kleinschmidt (1987) and Montoya-Weiss and Calantone (1994), Szymanski and Henard (2001) selected 24 factors for the innovation success. The factors with most relevant impact on the innovation success are: advantage of product; marketing orientation, functional communication, synergy among company's departments and technological competence in the development of tasks.

Henard and Szymanski (2001) indicate that the relationship between factors and performance can change dramatically depending on context, as services versus products; Asian market versus the U.S., market high-tech versus low tech.

The Illustration 03 summarizes the 24 determinants mentioned by Henard and Szymanski (2001).

Illustration 03 – Innovation performance determinants

Product	Company's Strategy
- Advantages	- Market synergy
- Meets consumer needing	- Technological synergy
- Price positioning	- Innovation priority
- New technologies	- People dedication
- Innovation development	- Investments in reseach and development

Company's Process	Market
- Structured approach	- Competition speed
- Task skills	- Competition intensity
- Market competence	- Market potential
- Technological proficiency	
- Innovation proficiency	
- Clockspeed reduction	
- Market oriented	
- Customer listener	
- Functional integration	
- Functional communication	
- Top management support	

Source: Henard e Szymanski (2001)

Along the 1980's, many companies began the research efforts related to quality of innovations. Both academic and business sectors were looking up for a definition that would encompass the expectations and perceptions of clients with the organizational strategies (GROONROOS, 1994).

Parasuraman, Zeithaml and Berry (1985, 1988) indicated other studies that developed strategies for quality contribution to increase the market share and returns on investment.

Parasuraman, Zeithaml and Berry (1985, 1988) described the difficulty of understanding the quality of services, seeking to refer to quality products. Many services can't be counted, measured, inventoried, tested or verified at the moment of sale to ensure quality.

In consequence of the intangibility, the service provider has some difficulties to understand how consumers perceive and evaluate the quality of the service (ZEITHAML, PARASURAMAN and BERRY, 1990).

Another relevant question appears when there are some doubts about the heterogeneous quality of the offered service. Services quality and perception can vary from producer to producer, from clients and from customers along the relationship with the service provider. There is a different sense once the customer quality perception of a provided service is not necessary the same quality as the supplier proposed to offer. The consumption of the service happens simultaneous; it means that once someone buys a service, it will be used instantly (PARASURAMAN, ZEITHAML and BERRY, 1985).

Parasuraman, Zeithaml and Berry (1985) summarize the topic in three points:

- Service quality is more difficult to be assessed by the consumer that the product quality;
- The perception of service quality is the result of comparison of consumer expectations and current service performance;
- The quality of service is not only evaluated by the delivered service, but also by the process of the delivered service.

Parasuraman, Zeithaml and Berry (1985) also argue that when someone buy products, the tangible elements such as style, durability, color, shape, packaging allow for quality perception. Services have few tangible elements, so the consumer needs to assess other aspects of quality as the process of the service.

Chesbrough (2003) indicates that quality is related to the possibility of an experience to satisfy a need or a desire. Parasuraman, Zeithaml and Berry, they cite other authors, as Sasser, Olsen and Wyckoff (1978) that propose three dimensions for the performance of services: material, features and customizations. This implies that the quality of services goes beyond the service itself. It means that costumers assess the service analyzing how it is offered.

Hypothesis

The innovation development in consumer goods and services companies is a feature that enhances the chances of business success in the future, since one company is seeking to meet the demands of a market and also consumer trends.

Each company has a proprietary process to develop innovations, from simple concepts to the availability of the innovation on store shelves or even an Internet site which sells information and services as music. It is noteworthy that no company should stagnate in the same innovation system. These systems need to be constantly revised and adjusted to give greater dynamic to the process of developing new products and services.

With an appropriate dynamic, the greater is the possibility of gain speed to response to market demands, independent if the demand came from consumers, distributors, producers or even a demand from the company itself.

It is necessary to note that the faster is the company response for a market segment that meets objectively the behavior of a group demand, probably the greater the chance of success of this company to deliver innovations to the market segment which it serves.

Alongside the music industry had to restructure since the business model (production, distribution, promotion and sales) changed in the last 10-15 years, modifying the way that consumers interact and seek to acquire the music, possibly changing the distribution of value in the production chain and also his own music production system.

Method

There are two approaches to scientific research: quantitative, which has a broader perspective and qualitative, which has a more specific point of view. Eisenhardt (1989) introduce the quantitative approach arises from a given theory, which seeks to formulate explanations of some aspect of reality through specific hypotheses to be tested.

Bryman (1989) complements the quantitative approach in many aspects, it refers to the generation of data to test hypotheses, reflecting a belief in the primacy of the use of systemic data collection.

The methodological approach used was the quantitative, allowing the analysis of aspects of the processes, systems and practices of organizations by analyzing data collected with people aged between 18 and 25 years, consumers of music. The sample was selected due to having a higher propensity to consume music.

Research

It had been selected young people aged 18 to 25 years, both men and women, independent of stratum, who are music consumers in the city of Sao Paulo, Brazil. 208 questionnaires were answered and 167 questionnaires were considered valid for research, representing 80.2% of the applied questionnaires.

The questionnaires were developed with two sections. The first section has 5 open questions to identify the profile of the respondents (gender, age, stratum, portable digital music equipment user, people who consume music at least once per month). The second section has 15 multiple choice questions to be answered by a 7-point Likert scale, with a corresponding 1 point strongly disagree and 7 points corresponding to totally agree.

The second part of the questionnaire consisted of 15 multiple choice questions are based on three constructs:

1) Use of traditional music source such as radio, television and CD.

2) Use of digital music source as "Apple Store", exchange of digital files, Internet.

3) Amount spent on the music purchase.

The intent of these three constructs is to evaluate which of them is more relevant for young people. To evaluate the questionnaire, the aspects of clarity and consistency was achieved with a pre-test sample with college students. After validating the pre-test, questionnaires were sent by mail and personally made in Sao Paulo among November and December of 2011.

Results

The general data on the population's profile have brought the following information:

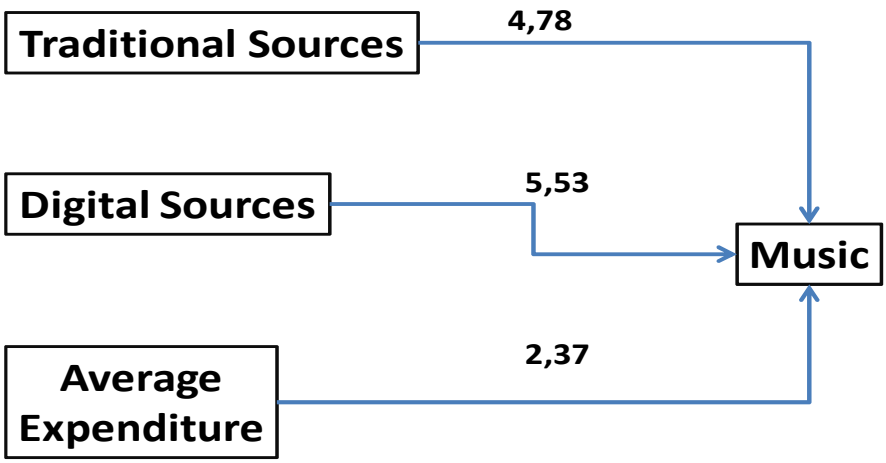
1) Gender: 54% women and 46% men.
2) Average age: 22 years.
3) Average income: AB = 48%; C = 41%; DE = 11%.
4) Portable musical equipment users: 100%.
5) Music consumers (once a month): 87%.

Analyzing the data on the profile of respondents is possible to infer that everyone has a portable electronic device that plays music, could be a mobile phone, an iPod, an mp3 player. Everyone somehow have a device in the pocket that allow to listen to music in any place, anytime.

Also worth highlighting a number of people that at least one time per month consume music, can be buying, sharing, or even getting the electronic file in a non-legal way. Music is a product that continues to be routinely demanded probably because the amount of releases that occur every other week by thousands of artists.

In evaluating the grades given by the studied sample, the research reached to the following values in the three constructs:

Illustration 04: Research results



Source: developed by the author

It can be observed on the results the proportional use of digital sources is higher than the use of traditional sources of music consumption, but it also can be observed that the traditional sources still have significant impact on the music consumption, mainly the habit of listen to the radio. The digital sources have become the main alternative that the general young public seeks to relate to music, mainly for ease of storage and the facility of digital music dissemination and distribution.

The most relevant construct rated in the studied sample is the use of digital sources, consisting of Internet, virtual stores, artists' websites and files shared with friends. This construct reached the average score of 5.53, with the highest preference of the assessed constructs.

It should also be observed that the construct “traditional sources” reached the average 4.78 points in the Likert scale, remaining relevant in the studied sample, probably showing that the radio, television and traditional music media will continue to be a source of the disclosure and presentation of musicians and their music. The Compact Disc probably loses its relevance since this sample searches for portability and free or very cheap music exchange.

The average expenditure reached only 2.37 average points in the Likert scale, which may signalize a lower inclination of the researched sample to expend some money to get a diverse repertoire of music into their sound equipment. The free and easy exchange of files between friends and even available free music in the Internet may show a lower willingness to pay to increase their music collection.

Conclusions

Everyone who participated in the survey have some type of portable device that allows the execution of digital music. The device can be an mp3 player, mobile phone and even modern iPods. The cost of equipment that allows the execution of digital music starts at affordable prices; enabling young people from all stratums to buy a device that allow them to listen to digital music files.

The average scores attributed to the habit of using digital sources were 15.7% higher than the average scores from traditional sources such as radio, television and traditional music stores. It can be observed that the studied sample use digital sources to find and consume music, but does not discard or disregard the use of traditional sources to know and consume music.

There is a low average proportional score about the average expenditure for the purchase of music, regardless of the media in which these young people consume music (digital or traditional). It can be inferred that the easiness of digital file exchanges helped to spread the acquisition of free music as well as Internet sites that allow anyone to exchange files or even download music for free.

It can also be inferred that these young people are not concerned with the quality of the songs execution. Digital files compress the original recording; in consequence there is loss of quality. It is possible more interesting to have a wide variety of music at low cost that probably will be heard a few times, since there is no physical media. Modern iPods can store up to 20,000 tracks, the equivalent of nearly 2,000 CDs.

Record labels and innovation: it can be considered that the traditional record labels didn't keep up with the new consumer habits. Young people do not regard about a fancy box with a nice cover. Young people do not go anymore to stores to buy music. Young people don't want to expend money to have access to music. Once the record label companies lose the market orientation and behavior, they now have a real challenge to redefine their own business aiming to keep their companies alive.

Limitations and Future Researches

The first limitation of this research is the restriction of age and region where the research was conducted. There is room to do this same research with other age groups as well as in other Brazilian regions, and other countries.

For the future there is room for more technical issues and other segment which works with music as musicians, producers and record labels to get more information in order to build a better understanding of the productive music chain in today's digital model that no longer needs support a record label and recording its structure, pressing, distribution, promotion and sales.

References

BRYMAN, A. *Research methods and organization studies*. London: Routledge, 1989. 283p.

CALANTONE, R. J.; GARCIA, R.; DROGE, C. The effects of environmental turbulence on new product development strategy planning. *The Journal of Product Innovation Management,* v. 20, p. 90-103, 2003.

CHESBROUGH, H. The Era of Open Innovation. *Sloan Management Review*, v. 44, 3 (Spring): p. 35-41, 2003.

COOPER, R.; KLEINSCHMIDT, E. New Products: What separates winners from losers. *Journal of Product Innovation Management,* v. 4, n. 3, p. 151-181, 1987.

COOPER, R. *Project newprod*: what makes a new product a winner? Montreal: Centre Québecois d`Innovation Industrielle, 1980. 239p.

DAFT, R.; LENGEL, R. Information richness: a new approach to managerial behavior and organizational design. *Organizational Behavior,* v. 6, p.191-233, 1984.

EISENHARDT, K. Building theories from case study research. *Academy of Management Review,* v. 14, p. 532-550, 1989.

GROONROOS, C. From scientific management to service management: a management perspective for the age of service competition. *International Journal of Service Industry Management*, v. 5, p. 5-20, 1994.

HENARD, D. H.; SZYMANSKI, D. M. Why some new products are more successful than others. *Journal of Marketing Research,* v. 38, n. 3, p. 362-375, 2001.

MONTOYA-WEISS, M.; CALANTONE, R. Determinants of new product performance: a review and meta-analysis. *Journal of Product Innovation Management,* v. 11, n. 11, p. 397-417, 1994.

NOBLE, M. Manufacturing Strategy: Testing the cumulative model in a multiple country context. *Decision Sciences,* v. 26, p. 693-721, 1995.

PARASURAMAN, A.; ZEITHAML, A. and BERRY, L. A conceptual model of service quality and implications for future research. *Journal of Marketing*, V. 49, p. 41-50, 1985.

PARASURAMAN, A.; ZEITHAML, A. and BERRY, L. SERVQUAL: a multiple-item scale for measuring consumer perceptions of service quality. *Journal of Retailing*, p. 12-40, 1988.

PITT, M.; CLARK, K. Competing on competence: a knowledge perspective on the management of strategic innovation. *Technology Analysis and Strategic Management,* v. 11, p. 301-316, 1999.

SALOMO, S.; WEISE, J.; GEMUNDEN, H. G., NPD planning activities and innovation performance: the mediating role of process management and the moderating effect of product innovativeness. *The Journal of Product Innovation Management,* v. 24, p. 285-302, 2007.

SASSER, W.; OLSEN, P., and WYCKOFF, D. Management of Service Operations: Text and Cases, Boston: Allyn & Bacon, 1978.

THIEME, R. J.; SONG, X. M.; SHIN, G. Project management characteristics and new product survival. *The Journal of Product Innovation Management,* v. 20, p. 104-119, 2003.

VON HIPPEL, E. Sticky information and the locus of problem solving: implications for innovation. *The dynamic firm: the role of technology, strategy, organization, and*

ZEITHAML, A.; PARASURAMAN, A. and BERRY, L. Delivering Quality Service. Free Press, New York, NY, 1990.