Discuss Factors of How Online Music Business Model Influences Traditional Music Industry Based on the Destructive Innovation

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ABSTRACT

As information technology continues improving rapidly, as well as digital convergence and high speed communication network technology develop, multimedia information has brought about various applications. This research mainly focuses on two parts – “Online Music Business Model” and “Destructive Innovation”, taking the successful case of Apple’s iTunes Music Store as the research subject, to analyze how it succeeded and how to create destructive innovation by employing innovation theories. Since digitalization itself will have a chain reaction with the entire information technology environment, many different channel opportunities will be created and thus bring many opportunities of destructive innovation business models. Therefore, this research has found out the factors of how characteristics of digital contents influence the traditional industry are – the change of characteristics and the ability of digitalization, the influence on supply chain after digitalization, cost structure, business model, customer value, pricing, and competitive ability.

Keywords: Business Model, destructive innovation, value chain, Digital Content.

INTRODUCTION

Music had already existed when there was civilization of human being. Development of technology enables music to be shared, listened and retained by more people with memory and media players. Disc had existed as early as the end of 19th century. Up to CD and CD Player came out, access of music content transformed from stimulation form into digital mode. Properties of musical products changed, but sales circulation channel was not impacted at all, no other than the commodities were turned into CD from discs or tapes. However, in recent years, owing to MP3 emerges, which integrates with Internet, circulation channel form of music products has changed obviously. In this stage, circulation channel itself has been also digitalized and accordingly, it also accelerated development of operation mode of online music. The primary one is the operation mode integrating iTunes with iPOD that Apple Company established.

Clayton M. Christensen, Professor of Enterprise Management Department of Harvard Business School, discussed that how a lot of successful companies lost their leading position in the industries when they encountered impacts from new market and new sciences and technologies in his writings published in 1996 (Clayton M. Christensen 1996a,1996b). The main reason is that the decisions that the enterprises have made in the face of innovative sciences and technologies are easy to result in failure.

Therefore, in this research, we stress on two parts, “operation mode of online music” and “Destructive Innovation”. We will try to carry out case study with successful iTunes Music Store of Apple Company and then, with innovation theory, we will analyze the reason of its success and how it produced destructive innovation, how it became the leader in the industry at present and prove the successful operation mode of destructive innovation. We will also discuss how online music impacts traditional music. We hope to discuss that how operation mode influences performance of the enterprise to acquire deeper and wider comprehension concerning that how innovator establish operation mode of destructive spreading industry. This research will be reference for transformation of entity circulation channel in the future.
LITERATURE REVIEW

Profile of Digital Content
In 2003, according to statistics and forecast that Pricewaterhouse Cooper made aiming at Global Entertainment and Media Market, its market scope has reached 113 billion US Dollars. It is estimated that in 2004, this figure will increase to 118 billion US dollars. In corresponding period, scope of global semiconductor industry is estimated to reach 215 billion US Dollars, which is not more than one-fifth of entertainment and media market. It is obvious that scope of industry concerning digital is tremendous. In this report, among the regional markets, American market is the largest, European market is the second largest, but developing most quickly one is Asia and Pacific Region. It is estimated that by 2007, the whole market scope will reach 137 billion US Dollars.

Innovation Theory
Innovation is one of the most important power for enterprise’s growth. The enterprise cannot bring value to the shareholders unless growing up. Base upon the operation system of finance market nowadays, all enterprise managers pursue sustainable and rapid growth. In order to understand substance of innovation, quite a few scholars have brought forward many important theories, including:

Destructive Innovation Theory
Clayton discussed that how a lot of successful companies lost their leading position in the industries when they encountered impacts from new market and new sciences and technologies. The main reason is that the decisions that the enterprises have made in the face of innovative sciences and technologies are easy to result in failure. This theory is called “destructive innovation theory”. Definition of destructive innovation theory refers to that new organization can create growth by respective simple, convenient and low-cost innovation and exceeds the powerful dominator (Clayton M. Christensen 1996a, 1996b, 2003). If competition situation belongs to sustaining innovation, the existing enterprises can probably defeat new newcomers. But almost new enterprises that adopt destructive innovation can always defeat the dominators.

Clayton distinguished technology into sustaining technologies and disruptive technologies. Here, technology refers to a flow that organizes to transform labour force, capital, material and information into products or service with additional value (Clayton M. Christensen 1996a, 1996b, 2003). That is Business Model. Development of majority of sustaining technologies is quicker than growth of market demand on performance of product and gradually accelerates products or services to the stage that exceeds majority of customers. This time, perhaps phenomenon that price is over high will emerge. To many customers who do not need so many functions, perhaps innovation of low-end market comes into being. When performance of the existing products or service cannot satisfy the existing customers or lacks convenience, the newcomers may get new opportunities for market innovation by providing new value.

Value Chain Theory
Porter(1985) has ever brought forward analysis mode of “Value Chain”. He thinks that the elementary tool for understanding competition advantages of the enterprise and pursuing to improve the enterprise is value chain. We will discuss mutual action and influence of many corporate activities relating to manufacturing products or offering service such as design, production, manufacturing, sale and delivery as well as their influences on value chain. And finally, it will produce competition advantage and sense of full chaining. Then the enterprise may choose “Integration Strategy” and performs all or majority of activities. Or the enterprise may also choose specialization or called “standardized structure strategy” and devotes its mind to minority of activities. Other activities on the value chain have to rely on the suppliers and partners.

Value chain theory refers to evaluating whether a company has made a correct choice and decision or organization design. It will influence this company whether it can succeed on competition. According to the theoretic suggestion, the company should control the activities that influence on the products or service performance what the customers are deeply concerned.
Business Mode

Schlachter (1995) analyzed operation form of web station by revenue streams, i.e., distinguishing different virtual enterprises by utilizing existing business income mode of brick and mortar. While according to faults of many researches, Mahadevan (2000) brought forward an operation mode framework that he thought perfect. It should be composed of value stream, revenue stream and logistics stream.

Timmers (1998) thought that to confirm framework of operation mode, we could consider from the angle of integration of value chain and information. The entire consideration process includes 3 steps, de-construction, interaction patterns and re-construction of value chain.

Yves (2002) thought that conception of operation mode of enterprise could help the enterprises to be acquainted with and adapt to the problems of that they must be confronted with. The defined operation mode, a conceptive tool, includes a set of element, which explains their mutual relationship and enables the enterprise to earn profit promptly. He has established a necessary enterprise operation mode from 4 aspects, product, customer, infrastructure and financial view. And then divides the 4 aspects into 9 elements to realize, value orientation, target customer, distribution channel number, customer relationship, value shape, ability, partnership, cost structure and business model.

Destructive Innovation Analysis of Business Mode of Online Music

In recent years, owing to MP3 emerges, which integrates with Internet, circulation channel form of music products has changed obviously. In this stage, circulation channel itself has been also digitalized and accordingly, it also accelerated development of operation mode of online music. The primary one is the operation mode integrating iTunes with iPOD that Apple Company established.

iTunes music store sells digital music by e-commerce web station established by Internet. Despite of sort and length, each melody costs 99 cents. Customers are able to purchase on line with iTunes software, which is provided by iTunes music store. iTunes is free download software. In addition to purchase in a music store online directly, it can also rerecord individual CD into PC and tune in broadcast program. Furthermore, iTunes can also manage and select various playing modes.

Owing to iTunes has music form that APPLE designed and developed independently and offered copyright protection for digital music, the consumers are permitted to copy and use it with limit, so the main American music copyright manufactures are all pleased to authorize iTunes to sell their music products. By integrating online music sale and download service as well as the operation mode with integrated iTune, the application software and iPOD, the hardware platform, Apple has brought large change to current music industry of America. The integration scheme of Apple has promptly changed structure of music industry value chain.

Operation mode of iTunes succeeded owing to the customer value that its operation mode created was different from that of the original rivals. Furthermore, the original market did not fully satisfy the customers’ requirement that product and service coexist. This brought a chance to Apple to bring forward a new idea, i.e., form its new operation mode of online music store with software, hardware and network. The reasons why this operation mode succeeded as below:

Establishing Market Cut-in Point and Customer Value Different from That of Rivals

Apple transformed from a computer manufacturer into a so-called leader of “digital lifestyle” of Steve Jobs. By integrating iTunes and iPOD, it provided seamless experience for the music fans to find, purchase, manage and enjoy music at anywhere.

There had been already many hardware players being sold in the market with remarkable scope before iPOD came out, but there was short of interfaces that can simpler add music content into hardware platform. To the rivals who have only hardware or just sell online music, no other than Apple integrates iPOD and iTunes successfully, thus disabled the other rivals to compare with it. Therefore, the conveniences that the customers can enjoy while any other manufacturers cannot provide refer to the Table 1.
Table 1: Value Cycle of Operation Mode of iTunes

| Value Creation: iPod provides the consumers with Make It Personal service for laser carving specially. | Value Purchase: iTunes provides chance for trial listening and enables the consumers to determine whether to buy or not after tasting the goods. It also provides rich music knowledge to assist the consumers to comprehend. Various sound products are available, such as music, sound book etc. | Value Use: iTunes enables the consumers to arrange melody management mode according to their preferences. Music can be shared with limitation without need to pay copyright expense. Perfect integration with iPod hardware player enables music to be carried for hearing. | Value Renewal: For iTunes Software, no expense must be paid. Additionally, it can be updated to up to date version. | Value Transfer: The product presents strong fashionable sense. It provides memorable machine sort hardware with collective value. Among information equipment with short lifetime, it is one of few products with ability of value preservation. |

Establishing Convenient Sales Channel

The consumers can simply find the commodities what they need in online shop of iTunes. On convenience of circulation, the consumers can find rank and be conscious of what music is the most popular commodity. The consumers can try to listen online immediately so long as they have interest in purchase. Entity sale provides trying to listen too, but it is limited by equipment, so the consumers can hardly select abundant music for trial listening at will. But in network, there is no such limit.

Integrating Favourable Factors of Exterior Environment

Under the circumstance of no copyright, the market cannot attract the enterprises that intend to establish efficient service system and constantly improve its service system to invest. However, in addition to regarding P2P as the mode of illegal pirated music, American government applied legal sanctions to the end consumers. Such action brought a slim chance of survival to development of online music afterward.

Solution for Legality of Copyright

Worry about no effective protection to copyright prevents the music copyright from developing online music. The consumers’ demand to buy all kinds of music contents at one time also disabled the single music copyright to operate in this way alone. By successful integration on music market, Apple brought forward operation mode, iTunes integrates with iPod, which is the most successful by far. Furthermore, software copyright protection technology that Apple developed independently integrates with hardware. By adopting digital right management (DRM) technology, copy time of users’ archives is limited so that illegal copy action is held back.

Fix A Reasonable Price

Price fixing strategy also damages entity circulation channel, a music CD costs about 10 to 20 US Dollars. But difference exists between the price that consumers would like to pay and the extent of their favourite. Under entity circulation channel, there is no way to unseal the CD before selling, but consumers of iTunes may buy no more than what they need. This is destructibility, i.e. its own property after the product is digitalized.

Selecting Diversified Customer Mass

The initial customers who had purchased Apple Computer accepted iPod earliest. These customers originally accepted design style and convenience of Apple products. This customer mass was not only willing to pay comparatively high price to buy well-designed goods, but also accepted the conception of payment for copyright. Thus
they are good customer to iTunes. It is important that they are originally the rooted royal customer mass of Apple, other rivals have little interest in them, so it will not result in strong counterattack of the original market leaders. Thus Apple has chance to gradually occupy a place and then grow up.

**The Development Strategy Integrating Software and Hardware Platform**

Although Apple has not earned so much business income in music authorization, income of iPOD is the main source of profit in initial stages. This business income can bring enough power to enable Apple to carry out the next stage, which conforms to the theory of innovation mode. When the initial business income of innovation mode is enough to support their survival, they will begin to extend the market and cut in towards the main market of precursor after gradually tend to saturation.

**SUGGESTION**

From the case of iTunes Music Store, we can comprehend change of music to adapt MP3. At the very start, it was no more than change of media form, but because digitalization itself will carry out chain reaction with entire environment of information technology, various channels will come into being and accordingly bring many chances of destructive innovation operation mode. Therefore, it is necessary to deeply comprehend how digitalized commodity impacts channel. By doing so, the enterprises will not consider product digitalization to be over simplified. The factors concerned are explained as below:

**Capabilities and Cost of Product Digitalization**

After music memory media is transformed from disc into CD, the most important property should be transformed from simulation into digital, but the factor promoting mass transformation is transformation capability and cost. Music is quickly transformed to be MP3 form and is spread all round by Internet. When product is fully under the environment of digitalization, environment of e-commerce is very attractive to operation mode creating digital commodities. With development and improvement of money flow, many online deal is much more convenient than purchasing by traditional music sales channel. Furthermore, by comparison, purchasing digitalized product can be fully finished with virtual channel and has no requirement on quality or delivery service. To traditional channel, it is a kind of new operation mode with extremely high substitution property. The main reason that the original market cannot form is that the copyright owner cannot receive the profit what they should earn. iTunes has settled intelligent property protection system and has remarkable persuasion, so it let all the main copyright manufacturers support this change. Hereby, a new channel came into being.

**How Digitalized Product Influences Supply Chain**

Digitalization has changed properties of product, in alteration of commodity digitalization that the enterprises are confronted with, channel has been provided with the form of digitalized channel (e-commerce), so if the product can be digitalized, it is simple to be sold and delivered by network channel. This is remarkable difference, even changed the entire supply chain and consumption action.

**Influences on Cost Structure**

After products are digitized, their cost structure is quite inequable comparing with the production cost of the original solid, because the production cost of machinery equipments is greatly reduced, the application of raw materials is also reduced and even completely needn’t it. The production quantity of commodities has almost nothing to do with the production cost, and these products almost needn’t the inventory cost (excluding the storage cost of hardwares); the relevant profits has also an opportunity to improve or the sale prices can have great changes.
The digital commodity with number channels has an obvious advantage. The solid structure is quite inequable comparing with the cost structure of virtual channels, and the different channel talent supports the different operational process, all of which is the great alterative factor in the cost structure.

Influences on Business Model

The complete digital products (such as, music and video) have many opportunities to create the new operational model, faster changing the market face through the R&D Conference of digital household appliances, and the published commodities have also the same lesser changes on operational model due to the limit of use habits and the indefinite existing technology. At the same time, chain channel merchants still have opportunities to use cases of music model to newly analyze operational model. It can occur to the complete different operational model between purchasing commodities by customers themselves and delivering information to customers for choices by workers, which is complete different after commodities are digitized.

Influences on Value of Customers

Because of the digital relationship for the model of products and channels, we can create new values for customers that mainly come from the new function brought by the new technology or the software & hardware. Once customers accept the new value, they would like to purchase and abandon the existing channel or commodity habits, so the core of the innovative operational model is to provide customers with values. If we have no method to create the acceptable values for customers, whatever commodities or digital channels, even expensive software & hardware, which cannot exist in markets. The future electronic books can create any new values, which must be the first research subject for present leading people.

Influences on Prices

The price of digital products may have some differences with that of solid commodities; the digital products can be sold by dividing which affects prices, but in the solid world, prices of different companies or music CDs are not the same. The establishment of the prices also has tremendous differences. Digital commodities are newly deconstructing the formed type of prices for original products, with the mature development of a few significant successful operational models, digital industries will redefine game rules of markets.

Influences on Competitiveness

Digital industries provide destructive & innovative opportunities for advancers; both opportunities and threats exist together for original advancers of markets, but having leading opportunities or not depend on the operational model of values that customers accept which is the key factor of successes. To the traditional music channel, sale models for music online finally can result in great changes on solid channels. It is visible that the income of online musics increasingly grows up, and the income of digital channels fast increases but solid channels is gradually reducing which is the truth that solid channel manufacturers have to accept. In the competition of these digital industries, we should learn to how to distribute in the market, and the degree of competitiveness mainly relies on the choice of customers while convenience that digital channel brought and advantage of digital aggregation, we believe digital products will become the winner at last through the virtual channel.

CONCLUSION

iTunes music store successfully established sale operation mode of new online music. This action encouraged many new rivals to launch into creating new mode in succession. To entity circulation channel owners, they are confronted with severe challenge in the future. Technology brings chances, but the crucial factor for success is to comprehend that whether operation mode is destructive. Generally speaking, the unitary advantage is unendurable. Consumers’ demand will constantly change so that the better rivals will get more business opportunities.
Commodity digitalization is not the crucial factor of alteration of industry, but digitalization of channel and property of commodity digitalization has surely brought wonderful creation chances. If the existed leader has no way to master these properties or settle the consumers’ problems, the rivals have chance to cut in the market. Furthermore, this campaign will certainly take place more promptly and threaten more severely to slowly operation zoology of traditional large-scale enterprises.

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