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# Transforming value perception in music information systems

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## ABSTRACT

Information systems are changing the way artists and consumers create, use and interact with music. Music experience has become richer and more sophisticated than simply buying and listening to music. New links between IS and music are forging unprecedented levels of creative e-collaboration, innovative music technology development, new music commerce and marketing methods, alongside with the emergence of e-music communities nurturing up-and-coming artists careers. Distinct from non-creative industries, the music industry is at the forefront of technological innovation where the ubiquitous adoption of music downloading, widespread use of personal music systems, and value chain disintermediation has shifted the focus of value delivery towards consumer control. This paper provides new insights into the effect of recent technological change on stakeholders within the music industry value chain, and of music information systems upon creative music products. The paper further explores the stakeholder perceptions of the value added or depleted from music by the technology, and examines the future expectations of information systems amidst the volatility and uncertainty of the music industry.

## Keywords

Value, value chain, Information Systems, Music Industry, online communities, digital music, disintermediation.

## INTRODUCTION

Online distribution of music in digital format and the consequent changes to the music industry have already been widely publicised. Much of the available research focuses on the issues related to the economic aspects of these changes, their effect on sales and the enablement of global business services. However, the matters of interest to this paper, such as the value added to or taken away from music products by information technology as perceived by stakeholders within the new value chains (ARIA, 2009) have been largely unexplored. Furthermore, the majority of models for value chains are predominantly demand-driven focusing on the manufacturing and sale of physical utility and consumer products, which do not adequately support the distribution of supply-driven creative products such as digital music (Frey, 2004, Shread, 2004).

Digital music revolution and its technology driven change is definitely a global phenomenon. The magnitude of the music industry changes and their impact on artists, music intermediaries and consumers is very pronounced. The wide-ranging changes can be observed on every continent and in every country. However, for the convenience of this research, and because of the relative simplicity of the market forces, we have selected the Australian Music Industry as the focus of this study.

Resulting from the introduction of online digital music sales in 2004, Australian Recording Industry Association (ARIA) announced that recorded music sales increased from \$396.8 million in 1999 (Australian Music Association, 1999 p.2) to \$607 million in 2004 (Hayes, 2005 p.1). This translated to an influx of supply but also a parallel increase in consumers demand for more value upon the purchase of music (Baker, 2004). Astonishingly, Australian Prudential Regulation Authority (APRA) revealed that between 2005 and 2006, online music revenue collections alone grew by 158.3%, which mainly comprised of web-casting and ring tones transmissions (APRA/AMCOS, 2006 p.12). Since the availability of digital sales, the income generated from sales of digital music video, mobile ring tones, streams and subscriptions has also consistently surpassed the

sale of physical units (i.e. tangible CDs, DVD Singles, DVD Albums) by \$39 million in 2007 (ARIA, 2008). At the end of 2008, digital sales almost tripled physical sales numbers (ARIA, 2009).

Looking at the breakthroughs in the most recent history of music in action, it is digital formats for recording of music (such as MP3) and music video (such as MP4) that provided consumers with great flexibility in the acquisition and experiencing music (Bockstedt et al., 2006). At the same time digital formats opened the door to inexpensive digital recording equipment that give artists capacity to deliver professional quality recordings without the need for studio work and sound engineering post-processing (Clemons et al., 2003). For example, artists can significantly improve quality of their recordings by using readily accessible software, such as ProTools™ (used in recording and editing of music) and Auto-Tune™ (used in eliminating singer's mistakes).

Another important element in the new music experience is the popularity of social networking sites, e.g. MySpace, Facebook, Twitter and YouTube. Such online social networks allow consumers and musicians to communicate and directly collaborate in various activities. Many artists credit online social sites with the provision of new value, which was lacking in the previous music value chains. For example, music artists are increasingly adopting YouTube to directly promote their new songs or albums by freely distributing low-budget music videos or live concert streams. By embedding the promotion materials into their Facebook or MySpace pages, artists can potentially reach millions of prospective fans, generate significant publicity and positively affect digital sales at little or no cost. Many emerging musicians are in agreement with Judas Priest who claim that online communities have enabled them to access unprecedented numbers of fans (Graff, 2009). Some artists, such as Sick Puppies with their Free Hugs Campaign, have further sought to increase the popularity of their music by initiating viral email and video campaigns (Sydney Morning Herald, 2006). The widespread effect of online music phenomena also enabled an extension of existing media services, including radio where listeners can now download broadcasted songs via the web or mobile phones (Vassou, 2007, Richards, 2007).

These dramatic shifts in the patterns of music creation and its consumption clearly demonstrate the importance of the new music technologies, of the emergence of novel business models to support distribution of the new music formats, and the consequent impact on the growth in the music industry's revenue.

While the monetary benefits of these IS changes have been well publicized (Breidert and Hahsler, 2006), the impact of new music-related technologies has meant that many stakeholders are forced to reassess their role in the revised value chain and need to reconfigure their value-adding function. Often such role and functional changes are done in haste and in an ad-hoc manner, commonly without a good understanding of the impacts of new technologies and business processes on musical products, artists, intermediaries and the consumers. To assist a more systematic approach to change in the Music Industry, and the Australian Music Industry in particular, it is important to understand these impacts and to study them from the vantage point of various stakeholders along the value chain, which is at the focus of this paper.

## VALUE OF MUSIC AND VALUE CHAIN DISINTERMEDIATION

The new forms of music creation, distribution and consumption eventually raised interests of Information Systems researchers. Studies were undertaken into the behaviour of artists (Moloney, 2005), intermediaries (Clarke, 2006) and consumers (Andersson and Rosenqvist, 2006). These studies show that all groups of traditional stakeholders in the music value chain have been significantly affected by the music information technologies and the new music business models. In response to these changes, the very notion of value attached to music products has been considerably transformed; the structure of the value chain has also undergone significant changes. Both issues attracted our research attention, and so, let's explore both in some detail.

First, let's clarify the concept of music value. Value can be defined as "something that is good in some respect" (Vilkkä, 1984, p.11). Value of a product can be derived from its intrinsic and extrinsic properties. Intrinsic value is the value embedded within the raw product whereas extrinsic value could come "from something else" than the object of use (Vilkkä, 1984, p.11). Intrinsic value of a music product can be found in its tune or lyric. Other contributory (intrinsic) value may be attained by the creative use of an instrument, musical interaction of the band members, certain sound characteristics of the venue where the recording took place, natural or engineers ambience of the recording, etc. Much extrinsic value of the music product is added during its production or distribution along the value chain to consumers. For example, as consumers no longer need to purchase a physical CD or DVD to listen to music, the new music delivery vehicle - the music artist's website, WAP site, iTunes Store or MySpace - often becomes a rich source of music extrinsic value, such as information about the artist and music distributor, video clips from concerts, photos, graphics and advertisements of events. Similar details can also be embedded in the music files themselves and later displayed on portable music devices during playback.

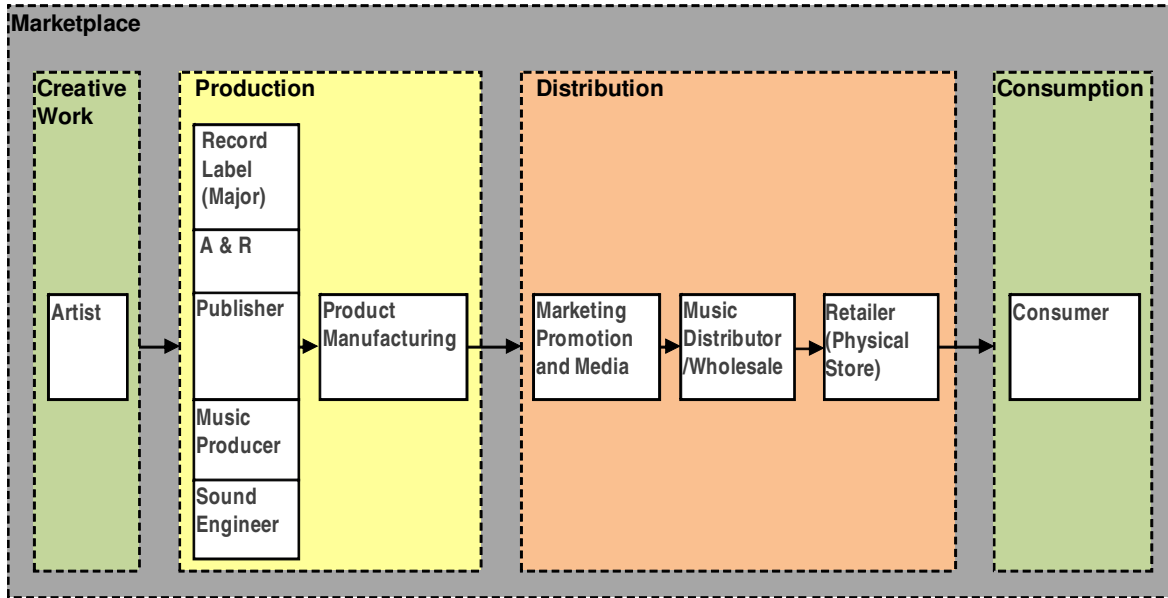


Figure 1. Value added in the traditional music value chain

Secondly, let's explore the issues of a music value chain. A value chain is commonly understood as a series of business activities along a supply chain that are undertaken to assign value to a product (Porter, 1985). A traditional music value chain includes (see Figure 1) artists, several intermediaries such as recording studios and music producers, distributors and marketers, retailers, and ending with a consumer. In the new music industry, the opportunities of direct engagement between artists and consumers via the web and mobile technology, contributed to the disintermediation of the traditional value chain (Bockstedt et al., 2006, Andersson and Rosenqvist, 2006). In addition, the availability and low cost of information technology useful in the production and distribution of music products effectively reduced the artist and consumer reliance on music intermediaries. The disintermediation of major industry supply chains, such as those organised by international media groups involved in the sales of physical music products, has also been credited to the intermediary transparency, acceptance of e-markets introduced by online services/product distribution and increased access to information via the Internet (Litan and Rivlin, 2001). At the same time, however, technology advancements in music industry present not only benefits to the value chain and its stakeholders but also some serious challenges that impede the effective redesign of a traditional value chain. The redesigned value chain needs to embrace not only the new music formats, but also, the rich and networked communication between all value chain stakeholders. The increased use of information systems to facilitate music production, marketing, distribution and consumption has impacted upon business practices, music stakeholder roles and the creative process for developing music. Where a supply or value chain exists to directly deliver music in digital format to consumers, it is unclear whether the exclusion of the stakeholders due to disintermediation results in the subsequent omission of existing value or creation of new value.

Music information systems, or music technology, can also be seen as disruptive technology. Disruptive technology can be defined as a new technology that emerges and replaces an established technology in a market or industry sector (Danneels, 2004). Danneels' argumentative research (2004) specifically advocated further research about factors behind the uptake or rejection of disruptive technology by different stakeholders. In order to effectively research the potentially disruptive music technology and value derived from the use of this technology in music production and delivery, as well as, the perception of this value by all value chain stakeholders, the following research question has been posed: *What are the perceived impacts of the emerging music technology on the music industry stakeholders and the value of the creative end product?*

The following section discusses the chosen approach to our research inquiry.

**RESEARCH APPROACH: PHENOMENOLOGY**

An understanding of perception, value, and creative pursuits was at the focus of our study. The reflective and subjective nature of the experienced phenomena (Dibblee, 1924, Lewis, 1969) resulted in our decision to adopt phenomenological approach to the research enquiry (Denzin and Lincoln, 2003). The chosen approach relied on the collection of rich qualitative

Code	Employment Role	Value Chain	Location
AL	Music Retailer	Traditional	VIC
BC	Industry Body	Traditional	NSW
BS	A & R / Distributor	Traditional	VIC
CF	Event Management	Traditional	VIC
DB	Record Label Owner/ Promoter	e-Value	NSW
DM	Publisher / Music Artist	Traditional	VIC
GW	Music Artist	e-Value	VIC
JL	Broadcast Radio	e-Value	VIC
MA	Record Label/ Distributor	e-Value	VIC
NS	Media Publishing / Music Artist	e-Value	VIC
PC	Industry / Event Management	Traditional	VIC
PF	Studio Manager / Music Producer	e-Value	VIC
PM	Venue Promoter/ Broadcast Radio	Traditional	VIC
PS	Music Artist/ Music Producer	e-Value	VIC
RS	Broadcast Radio / Music Artist	e-Value	NSW
SB	Music Retailer	Traditional	VIC
SG	Industry Body	Traditional	VIC
SP	Studio Mgr/ Recording Eng. / Booking Agent / Promoter	Traditional	VIC
TH	Music Artist / Producer	e-Value	VIC

**Table 1. Research participants**

narratives (Creswell, 1998) from multiple participants, use of interpretivist methodology (Gadamer, 1975) and inductive theory formation (Patton, 2002).

While providing the basis for the investigation of some research area, a phenomenological method details “processes through which awareness, understanding, and knowledge are derived” (Moustakas, 1994 p.41), recommending a structure from which a researcher may guide the synthesis of highly subjective data. Within this study, a phenomenological method was strictly followed by analysing multiple sources of evidence and applying phenomenological interpretation methods to develop and refine this understanding of artists and stakeholders’ perceptions and ideas. The first step in analysis was to segment the data (Burns, 1997 p.319), which in phenomenology involves epoché (self-reflection), then listing and grouping of interesting notions, followed by reduction and elimination, clustering and thematising, as well as, imaginative variation of concepts and ideas of relevance to the research issues (Moustakas, 1994).

Hermeneutic methods of data analysis were adopted as a mode of inquiry focusing on in-depth understanding of the text of collected narratives. Hermeneutic techniques can be used to effectively code and simplify the textual representation of meaning, reflection on the time-spatial-contextual distance that may exist between the investigator and the author of the text (interviewed participant), fusion and re-interpretation of understandings as new insights and narratives become available, as well as, development of an inventory of colloquial terms or potentially hidden meanings conveyed by research participants (Ricoeur, 1975, Thompson, 1981).

The combined assessment of research objectives and philosophical underpinnings of the research question led to the application of hermeneutic phenomenology (Ricoeur, 1975) as the research method of choice for this study. The following section demonstrates how the methodology shaped the research design and the data instrumentation with which the research was undertaken.

For the purpose of this study, long interviews were used to elicit narrative data from nineteen (19) music industry stakeholders within the domain of the Australian music industry (see Table 1, with pseudonyms used to protect the research participants’ identities). The data was subsequently analysed using hermeneutic-phenomenological techniques. The interview participants were sourced from various types and sizes of music industry organisations, ranging from artists, contracting individuals and independent companies to national organisations and Australian governing bodies. Similarly to other phenomenological studies, our analysis made use of purposeful sampling undertaken from “the logic of attempting to understand this specific phenomenon from the perspective of this particular group” (Smith and Osborn, 2004 p.231). Purposeful sampling allowed us gain wide-ranging insights into the essence of the investigated phenomenon (Creswell, 1998, van Manen, 1998). While a phenomenological study cannot generalize its findings, the method employed in our study focused on validation of the collected data and ensured confirmability of findings across the sample of opinions. The study offered indicative results from the extended answers of participants whom are experts in the value delivery process working within the music industry (McBurney, 1998). The study further contrasted its findings against well publicised industry trends

and the widely available professional literature to confirm a global span of insights emerging from the research participants set in the Australian context. These global implications will be clear in the following sections where the participants themselves remark on the artists, events, tools and phenomena drawn from the global theatre of the music industry.

## RESULTS AND DISCUSSION

Throughout the interviews conducted in this study, the participants provided their first-hand insights into the technologies used to record CDs/MP3's, produce, market and distribute their music, and reflections on how using digital equipment has impacted the recording and distribution process. Although our analysis focuses on the experiences and perceptions of the Australian research participants, findings should be understood within the global context of the online music market.

### Production - Digital recording software convenience and production cost reduction

At the 'Production' end of the music value chain, artists and music producers are adjusting to the impact of ProTools™ and other types of digital recording software that have recently overtaken analogue recording technologies. The feelings and emotions transpired through the interviews with music stakeholders who reflected upon the new technology's convenience for artists, recorded music producers and sound engineers. Music producer PS effectively summarized the sentiments of a number of stakeholders towards digital recording technologies, explaining the conveniences of adopting ProTools™ software: *"Data and recordings are easier to edit, faster, it's a lot cheaper than what tape costs are"* (PS- Music Producer, St. ID 3). Readily transportable to any conceivable location, sound engineer PF and music producer TS both judged this digital equipment portability as having an impact on their role and translating into a larger, more widespread clientele.

Industry participants viewed the introduction of digital recording as breaking down barriers for low-budget artists and their attempts at entrepreneurialism. Participant GW- Music Artist- highlighted the benefits she encountered using ProTools™ music software in a digitally equipped studio: *"The best thing about digital recording is that it is accessible to everyone so a lot of people now have the opportunity to perform with a similar professional sound"* (GW- Artist, St ID 12). Additionally stakeholders identified benefits of digital recording technologies, which included professional quality recordings available to independent and entrepreneurial artists. Not only does the new technology break a cycle of dependence on major record labels to produce high quality CD and digital releases, but it derives its accessibility via the low cost of purchasing digital recording software and equipment. Plus, the ease of use of the software, rapid editing cycles and the ability to transform an inexpensive laptop into a high quality music recording device, are features that seem to have swayed a number of music stakeholders over from analogue technologies (PF – Music Producer, NS – Media Publishing/Artist, JL – Broadcast Radio).

### Distribution and Consumption – Distribution convenience, accessibility, engagement and rich information

With the reduction of various intermediaries and popularity of the social networks of fans and music consumers, the distribution and consumption of music become rather blurry. First, the participants noted a significant cost reduction involved in the placement of physical promotions via print, press, TV and radio. For examples, Producer TS and Digital Sound Technician PF highlighted the greater level of accessibility to professional digital recording equipment, which is now highly portable, low cost, and widely distributed. The widespread use of online channels to distribute music has allowed artists to provide free excerpts of their digital music on their websites, in a try-before-you-buy type incentive for customers who are unsure of the value of their online purchase, previously unavailable via traditional distribution channels (GW - Artist, AL - Retailer). Many stakeholders perceived the impacts of music technology (digital music format and recording technology) as adding value to music products.

Further down the value chain, technology and new music information systems are having a profound impact upon traditional promotion mechanisms for artists, music promoters and marketers, through the capabilities of online promotion for music artists via their websites and public forums. The online promotion and distribution of music appeared throughout the transcripts as an overlapping theme impacting the traditional value chains and enhancing existing e-Value chains within the Australian music industry. A number of participants argued strongly for the use of online music distribution, with GW providing an example of its effectiveness in raising a music artist's profile: *"It's international obviously, there are no barriers. It's a free promotion that is accessible to anyone anywhere as long as they're dialectic to it"* (GW - Artist, St ID 35).

Not only artists and their promoters, but also music consumers may play a role in the viral marketing and distribution of digital music products at retail websites, such as iTunes and Amazon.com. According to music industry stakeholders (JL, TS, DM), this increased accessibility to music has increased the awareness of artists to the customers receiving online promotion material, enabled greater diversity for obscure niche artists. Numerous artists (and other stakeholders) considered the use of online promotion by means of artist's personal websites and major distribution websites (JL, TS, PS). The proliferation of

online promotion has altered the role of traditional value chain promoters and publishers, who now enjoy the convenience of web sites able to distribute music and other materials in a digital format directly to consumers (DM, GW, NS). From the consumer's perspective, extrinsic value is added through rich information embedded in the digital music product, such as artist and band details, lyrics, photos, visual effects, reviews and useful links.

#### **Social music experience - Networking, sharing and building sense of community**

The technology has expanded the music value chain by amplifying the social music experience. MySpace.com, an online social networking community, has provided a forum where music artists, stakeholders and consumers may interact, promote and access music directly. Users of MySpace are able to add and view photos, video clips and music files, thus providing the ideal and preferred exchange of communication between artists and fans. According to participants NS, DB, TS, DM, MySpace was perceived by a number of participants as being a catalyst for changing the way consumers source artist information, music samples and communicate directly with artists, giving a sense of belonging to a community, and creating extrinsic value. Anticipating changes in consumer culture, Record Label Owner/Promoter DB actively utilised MySpace's to engage with music communities created and maintained by music artists and consumers, whereby a consumer may actively seek out, comment and share information about a music genre or artist using Internet search engines, online magazines and MySpace.com as a facilitator for pursuing music. Through such social networking sites, digital music products are experienced in many different new ways. MySpace's multimedia mechanisms, which allow users to embed a song on their page and link it back to the artist, enabled legal sharing of music and digital music distribution. This mechanism was perceived by participants as enhancing value for both artist and music consumer (JL, Radio Broadcaster, GW artist).

Consumer interaction via online social music networks can also add extrinsic value to artists. Such value can be derived from reviews of songs, videos, live concerts, as well as, fans discussions via online blogs, wikis and forums. Participants TS (Producer), AL (Music Retailer) and PC (Event Manager) all mentioned the impact of MySpace's amplifying the support of music fans who add their favourite band as MySpace 'Friends' and effectively use this to demonstrate their fan base in order to obtain a major recording contract. Citing artists such as Lily Allen and Arctic Monkeys who have accomplished widespread success as a result of their MySpace presence, a number of participants, including musicians and publishers, recognised new opportunities for value creation at social networking sites in effectively marketing.

#### **Online Marketplace - Internet markets for online music products**

Internet markets have also contributed to the technological impact on the music value chain, providing opportunities for music consumers to search internationally for artists and communicate with other likeminded music consumers. Major online retailers and distributors have expanded the use of their information systems to incorporate feedback on consumer's purchases and cater more appropriately to consumers needs (MA, BS). In turn, this shift in music supply has transformed into a demand driven value chain, providing music consumers with the added value of being able to influence major record labels into catering more effectively to a mass market.

Several participants indicated a clear preference for digital downloading, with many focusing on the opportunity to use the Internet as a mechanism for music distribution and sales (JL, RS, SG, MA and DB). Providing fans and online visitors with added value, e.g. a 'bio' of an artist's career, and snippets of songs in digital format, artists GW and DB used their web presence as a virtual storefront for the retail of her CDs with digital content available for paid download. This study also found negative connotations and judgments of the technological impact of music information systems such as reduced physical sales, removal of physical music products from the value chain, and the trivialisation of the music experience. Retailers SB and AL perceived the online market to be value depleting to the end creative (music) product. These traditional 'bricks-and-mortar' retailers acknowledged the potentially devastating impact of online marketplace on their roles and livelihoods. Participant SB - Retailer- expressed concern that the value of the stakeholders' efforts may be diminished in the eyes of consumers: "*With technology, a lot of people can lose sight of just how much talent goes into making a record, and writing songs, and playing and performing*" (SB - Retailer, St ID 24). Stressing that the online distribution of music may lessen the impact of music to consumers, SB felt that the technology may trivialize the consumer experience of purchasing or listening to music or perhaps reduce the value perceived by consumers. While it is important to note such perceptions, especially by those whose role was superseded by technology, on larger scale these adverse impacts of music IS are far outweighed by the vitality that music technology has brought to the Australian music industry. BC, a music governing organization manager stated: "*As technology increases, and telecommunications technology and the means by which music can be disseminated, expands- the important role that we (Industry Bodies) play becomes even more important*" (BC - Governing Industry Org, St ID 3). Several participants judged that the Australian music industry is increasingly regaining a balance between commercial and creative values, due to the influx of accessible music development and creation enabling technologies lowering the cost of music market entrance (MA – Record Label, PS - Artist, DM - Publisher, BS- A&R). The

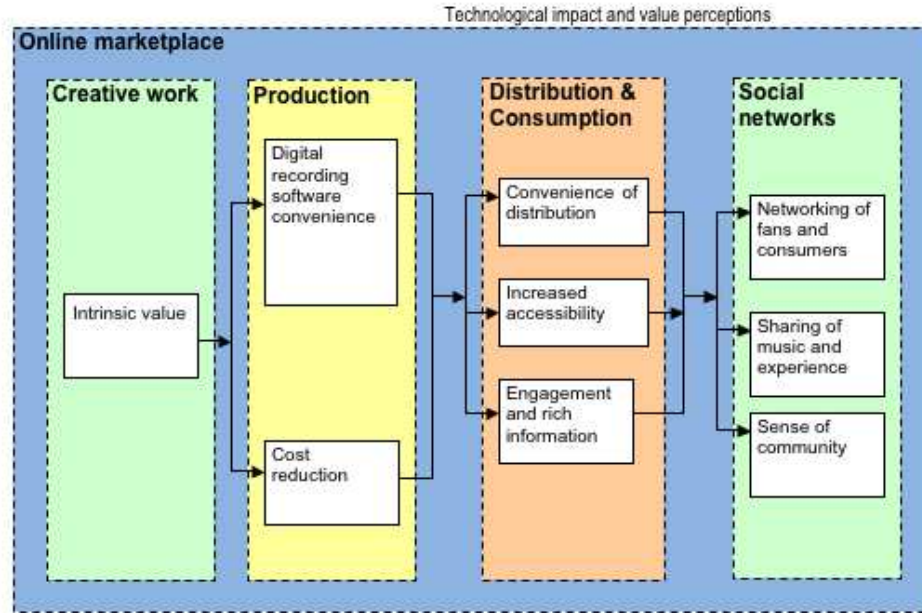


Figure 2. Value added in the new technology-intensive music value chain

participating music retailers and artists perceived the need to maintain a unique angle of perceived value and sustain a competitive advantage amongst international markets. Among the judgment of value added to music products, customer social engagement and recommendations, music accessibility, music experience sharing, and the convenience of online distribution were factors widely considered by participants as contributing to the value of the end creative product- music. Such factors were highlighted by a number of the participants as paving the way for a new form of e-value chain.

**CONCLUSION AND FUTURE RESEARCH**

This phenomenological study was conducted with a view to understanding the perceived impacts of the emerging music technology on the music industry stakeholders and the value of the creative end product. The findings point out several impacts on various stages in the music value chain (cf. previous sections and the summary in Figure 2). While the traditional value chain (refer back to Figure 1) stressed the cross-institutional relationships between value providers, the new disintermediated value chain emphasises the value added in the technology-intensive process (often) enacted directly by the artist and the consumer. Production convenience and cost reduction are perceived as impacts of recording technologies. Convenience, increased accessibility, engagement and availability of rich information can be seen as having positive impact on the distribution and consumption of digital music products. Shared social experiences and processes are viewed as a significant expansion of the music value chain. Many online music communities and social networking sites lead to the creation and dissemination of rich information to music consumers. More interestingly, direct users (artists and consumers) create and maintain their own social networks. The growing ubiquitous and pervasive online music marketplace is perceived as new opportunities as well as challenges. Opportunities manifest through added value, such as customer recommendations, music accessibility, and the convenience of online distribution. Challenges manifest through value depletion, such as the reduction of physical sales, the shift of value toward consumer demands, the balance/imbalance between creative and commercial value of music products.

Stakeholders’ perceptions of digital music product go beyond intrinsic value of music, and beyond the monetary value created in downstream or upstream channels of the value chain, i.e. in the production, distribution and consumption of physical products. Technologies lead to different forms of extrinsic value and transformed the value chain. Social experiences and processes as well as the ubiquitous and pervasive e-marketplace play important roles in the new music value chain.

The music industry is also at the forefront of technological change where the ubiquitous adoption of personal music systems and value chain disintermediation has shifted the focus of value delivery towards consumer dictations (Frey, 2004, Shread, 2004). As brought to light by this research, building information systems now requires a better understanding of the customer sense of value. Moreover, such systems will also need facilities for active and continuous probing and capture of the ever-changing perceptions of value. The paper provides insight into the nature of such perceptions; in particular, the stakeholders’



perception of the emerging music information systems, as well as, their perception of music technologies impacting on their work and on the value they add to the creative end product. The paper also highlights and discusses a number of emerging technological trends in the creation and distribution of music, and a brief insight into the effect of these trends on music stakeholders. The paper, therefore, confirms that customer-orientation plays an important role in the update of music industry along the value chain. Further, our findings also explain and extend various merits to harness the power of disruptive technology (Danneels, 2004) through lens of value and value chain.

Perhaps more noteworthy is the paper's suggestion that the Australian music industry, as well as the global music industry, is breaking ground for the future of IS. Music is changing. The way artists and consumers play, produce, access and use music is constantly changing with each new technological advance emerging within the music information systems domain. Their perception of value is being manipulated by IS technology. Music industry stakeholders are now forced to look at innovative ways of adding value to their information systems and deliver that value onto customers. In their search, music industry stakeholders are realizing the importance of utilizing music information systems to maintain competitiveness. The music industry, once firmly guided by record label companies, is now largely independent, increasingly accessible and consumer demand driven. As earlier noted by Clarke (2006), a philosophical shift is required to conduct business-with-consumer rather than doing business-to-consumer. The voice of the music consumer is increasingly louder: "We buy. We download. We use. We socialise. We demand". Consumers are becoming not only the users but also an integral part of the new music information systems, and so their experiences and perception of value must be taken into account whilst designing new music distribution systems and new value chains thus enabled by these systems.

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