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# Art in the Age of its Digital Reproduction: Organisational Responses to Digital Music in the Classical Music Industry

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## Abstract

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Research Title

Art in the Age of Digital Reproduction: Organisational Response to Digital Music in the Classical Music Industry

Abstract

Technological change results in innovations that can be thought of as either sustaining or disruptive to products and services, firms and industries; such change can be both a creative and destructive force in the growth of enterprise. In the period following a technological disruption, firms, incumbents and new entrants alike, experience a period of uncertainty until a ?dominant design? (a single architecture that establishes dominance in a product class) emerges and equilibrium is restored to the technological regime. How and how successfully incumbents adapt to, and innovate with a disruptive technology in the aftermath of a technological disruption forms the central theme of this research. Specifically, it will examine how performing organisations, such as orchestras and opera theatre companies, are adapting digital technologies to mediate, in new and innovative ways, between composer and audience.

Research Setting

The empirical setting for this project is the classical music industry, a music industry sector that is facing many of the same challenges as larger sectors within the industry, such as rock, pop etc. Currently, I am completing a series of exploratory interviews with senior management at some of the largest classical music organisations primarily here in the UK including the BBC Symphony Orchestra, The London Symphony Orchestra, The Liverpool Philharmonic, The Concertgebouw Orchestra (Amsterdam), EMI Classical, and the Royal Opera House to name but a few. The aim of this field-based work is to determine what the major challenges are for these organisations as they attempt to adapt digital technologies. From the evidence gathered so far it is clear that some organisations, free from resource and routine rigidities, are emerging as early adaptors, for example, the London Symphony Orchestra was one of the first organisations to set up its own record label, a strategy that many other organisations, within the industry, have since imitated. Currently, the Berlin Philharmonic Orchestra, in partnership with Deutsche Bank, is leading the way in the area of online innovation having recently launched a ?digital concert hall?, an online streaming subscription service.

My project will progress in three phases beginning with a population study of approximately 150 performing organisations selected from within, and outside of the UK. In phase two I will use a case-study methodology focusing on three or four similar organisations, for example, three opera companies or three symphony orchestras. The third and final phase of the project will involved some form of quantitative analysis of all the data gathered throughout the first two phases of the project. The aim in this phase of the project will be to augment findings from qualitative work using quantitative methods.

Jelcodes:M21,M21

# Art in the Age of its Digital Reproduction: *Organisational Responses to Digital Music in the Classical Music Industry*

Brian Kavanagh – Imperial College Business School, December 2011

**Abstract**

Technological change results in innovations that can broadly be thought of as either sustaining or disruptive to products and services, firms and industries; such change can simultaneously represent a creative and destructive force in the growth of enterprise. In the period following a technological disruption, firms, incumbents and new entrants alike, experience a period of uncertainty within which fierce competition often ensues, until a 'dominant design' (*a single architecture that establishes dominance in a product class*) emerges and equilibrium is restored to the technological regime. How, and how successfully, incumbents adapt to, and innovate with, a disruptive technology in the aftermath of a technological disruption forms the central theme of this text. Specifically, it will investigate how performing organisations, such as orchestras and opera theatre companies, are currently adopting digital technologies to mediate, in new and innovative ways, between composer and audience.

**Introduction**

Throughout history new technologies have emerged to transform or destroy existing products, services, and occasionally entire industry sectors. Paradoxically, the most radically disruptive technological innovations have the potential to expand established markets whilst making core competences within firms obsolete. The advent of Eastman's Kodak camera and roll-film system in the late 19th Century is a good example of how, through a disruptive innovation, an industry was transformed from a small niche (*and somewhat elite*) market (*professional photography*) to a large mass market (*amateur photography*). More recent developments in digital imaging have further expanded the photography market, destroying the century-old core competencies established by the Eastman Corporation and in so doing relegating analogue photography to a niche market. The compact disc did to the vinyl record what digital imaging did to roll film before audio-file formats, in turn, emerged to threaten the commercial longevity of the CD. Such technological disruptions have the potential to bring about dramatic sectoral transformation in some industries. For example, the sectoral pressure to change and adapt triggered by the Internet is much more dramatic in the music business than in other industries. The question of how organisations, within a given industry, respond

to a major technological disruption is the focus of this paper. Two broad themes, namely the transformative capacity of a new technology to impact a particular industry and the *adaptive plasticity* of organisations faced with such technological disruptions, frame the question presented here

**Theoretical Framework**

I have identified a number of strands of theoretical thought that are relevant in the context of the phenomenon of interest in my research. Initially, I would like to explore the nature of technological evolution, before focusing on some key organisational-level concepts that are intended to help frame my primary research question.

*Technological Evolution – sustaining and disruptive innovations*

Technological innovations represent either radical or incremental change within industries (*Christensen, 1995*). This simple classification distorts the, often difficult, task of determining whether a particular innovation is sustaining or disruptive to products and services or at firm or industry level.

A sustaining technological innovation might best be described as a new or improved product, or service, which provides for the needs of existing consumers, and in so doing sustains leading firms in their market position. The recent introduction of High Definition (HD) video recording on digital single reflex cameras (DSLRs) by leading firms, such as Nikon, Canon and more recently Sony, fits this description of a sustaining innovation. In contrast, a disruptive innovation is a new or improved product or service that disrupts a market and in so doing challenges incumbent firms to either ignore or embrace technological change. Such disruptive innovations can initially seem inconsequential, but in time they have the potential to open up new markets, resulting in the destruction of existing markets and the loss of industry position for incumbent firms. For example, Apple's first personal computer, *Apple I*, was initially difficult to use and was only capable of producing uppercase letters. At the time of its release in 1976, few consumers were willing to swap their IBM Selectric typewriters for the *Apple I*. The established technology, in this case the IBM Selectric, typically retains its market share for a period of time following a disruptive innovation; however, if a new technology has real merit, as the *Apple I* did, then it typically enters a period of rapid improvement after its initial launch and soon overtakes the established technology to become a product leader.

A radically disruptive innovation has the potential to completely destroy an existing product, service, or even industry. Edison's electric light resulted in the emergence of a new system for the generation and supply of electricity and its conversion into lighting. This new industry development required the creation of an entirely new infrastructure comprised of` firms

tasked with the responsibility of supplying raw materials and components. Edison's innovation had a radically disruptive effect on the existing market for lighting.

Once a new technological innovation, in the form of a product or service, becomes established it acquires the character of a 'dominant design'. A dominant design might best be described as a product class that wins the allegiance of the marketplace and one that competitors must adhere to if they hope to command a significant market share (*Utterback, 1996*). Once a dominant design emerges in the period that follows a disruptive innovation the focus turns to incremental product improvements and process innovation – improvements in the organisation and/or method of manufacturing that typically result in reduced supply costs. Once again the 'Apple story' provides a good example. In April 2010 the Apple Corporation released, to the technology market, its first iPad, a piece of technology that, unlike the *Apple I* back in 1976, enjoyed instant diffusion in the market. By the time the iPad 2 was launched in March 2011 Apple had sold 15 million iPad devices worldwide. Through a process of incremental change the next product iteration resulted in the following key improvements:

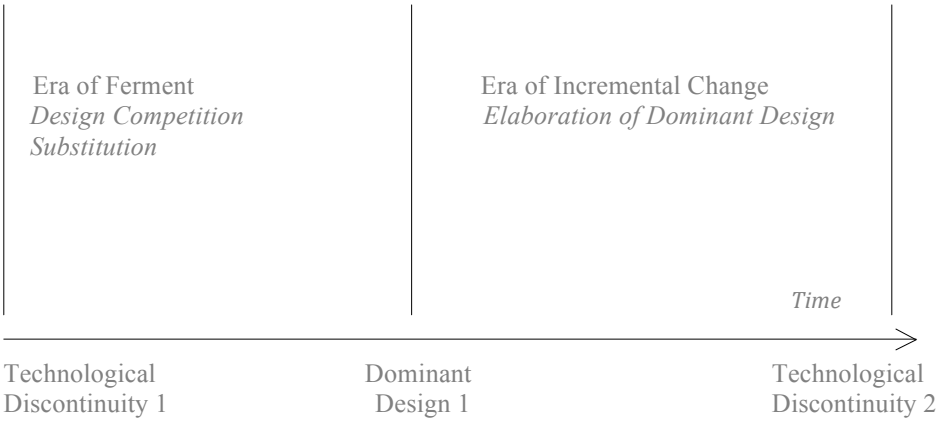
- 33% thinner than its predecessor
- A more powerful processor (the considerably faster dual core Apple A5)
- Front and back cameras supporting the Face Time video calling application and three-axis gyroscope
- Similar pricing scheme

Process innovations can lead to a substantial decrease in production costs and the sale price of a new innovation. For example, following two decades of production, the number of steps required to produce an electric lamp was reduced from 200 to 20 and the labour time required to produce an electric lamp was reduced from 60 minutes to 20 seconds. From the beginning to the end of this period the price of a carbon filament electric lamp fell to less that 20 per cent of its original cost.

*Mapping the technological evolutionary process*

A useful model for mapping the technological evolutionary process is provided by Tushman and Anderson (*1990*). They depict this process as one that involves periods of incremental change, interrupted by technological discontinuities. They describe a cyclical model of technological change, highlighting four recurring phases, namely, technological discontinuity, era of ferment, dominant design, and era of incremental change (*figure 1*):

Figure 1*: technology evolutionary process, Tushman and Anderson (1990)*




In this schema a technological breakthrough instigates a period of intense competition (*ferment*) where variations of the original design compete until a 'dominant design' (*a single architecture that establishes dominance in a product class*) emerges and the era of ferment begins to subside. Following the emergence of a dominant design, order is restored to the technological regime, and further improvements to the product class take the form of incremental changes through relatively long periods of retention (*learning by doing*) until the next discontinuity initiates a new cycle of variation, selection, and retention. This model fits well the previously-mentioned case from the photography industry; the Eastman-instigated roll-film, camera, and printing system represented what, to consumers, was a dominant design until, in the late twentieth century, disruptive technology, in the form of digital imaging, emerged. The 'period of ferment' described in the Tushman and Anderson model describes the state of a number of industries that are currently experiencing disruption as a result of innovations in digital technologies. The film, book, and music industries are all good examples of industries that are struggling to come to terms with digitisation in what is still a period of uncertainty for all three industries. Where this model falls short is in relation to those companies, which because they employ policies of continuous change, do not experience the 'shock', many companies experience with the emergence of a disruptive technology.

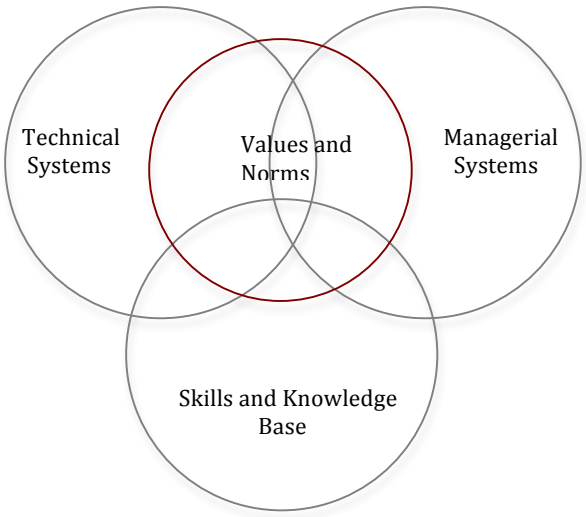
Brown and Eisenhardt (*1997*) have argued that this 'punctuated equilibrium' model does not account for those organisations that promote a policy of continuous change. They suggest that while the punctuated equilibrium model is at the forefront of much academic thought, it is in the background of the experience of many firms (*Brown and Eisenhardt, 1997*). They highlight the fact that many firms compete by continuously changing; and that this ability to continuously change represents a core competence and an innate part of the culture of such organisations. For such firms, change is not the rare phenomenon described in Tushman and

Anderson's punctuated equilibrium model. In constantly changing high-velocity environments, such as the technology industry, the ability to engage in rapid and relentless continuous change is a crucial capability for survival (*Eisenhardt, 1989; D'Aveni, 1994*). Eisenhartd further highlights the fact that much organisational theory was written in the 1970s, when the pace of technological change was a lot slower than it is today. Her research setting, the computer industry, certainly provides a good example of an industry in which firms must continuously change. Technology-based organisations have no choice but to challenge their own current paradigms (*Leonard-Barton, 1992*). Itami goes further and suggests that '[t]he time to search out and develop a new core resource is when the current core is working well' (*Itami, 1982*). From initial field-based empirical work, within the classical music industry, it would appear that, as in other industries, some organisations are more suited to technological adaptation than others. An organisation's ability to adopt, and innovative with, new and radical technologies, such as those emerging in this digital age, has a significant impact on its competitive advantage within changing markets.

*Core Capabilities and Core Rigidities*

Leonard-Barton (1992) provides a useful perspective on core capabilities and core rigidities within firms, exploring the tension that often exists between the need to innovate and the *status quo*, microcosms of the paradoxical organisational struggle to maintain, yet renew or replace, core capabilities (*Barton, 1992*). Teece, Pisano and Shuen define core capabilities as 'a set of skills, complementary assets, and routines that provide the basis for a firm's competitive capacities and sustainable advantage in a particular business'. Leonard-Barton highlights the challenge of creating alignments of new products and process development projects with current core capabilities at a point in time, providing a useful model that clearly defines four dimension of core capability (*Leonard-Barton, 1992*).

Figure 2. *The four dimensions of core capability (Leonard-Barton, 1992)*



The prominence of 'Values and Norms' in this model highlights the importance of various forms of embodied and embedded knowledge within the process of knowledge creation and control. Values often reflect a company's 'philosophy', which is typically established by a company's founders. Such values impact all aspects of an organisation and play an important role in resolving the dissonance between innovation and adherence to core capabilities. This paradoxical organisational struggle to retain core capabilities whilst promoting new and innovative projects can be seen clearly in an organisation, such as the BBC Symphony Orchestra, currently struggling to decide what to do with its extensive video and sound archive.

Before unpacking how performing organisations are innovating within the new digital economy it will be useful to consider Tushman and Anderson's notion of competence-enhancing and competence-destroying technological innovations in the context of the broader music industry.

*Technological discontinuities and the case for the music industry*

Tushman and Anderson (*1986*) characterise technological discontinuities as competence enhancing or competence destroying. A competence-enhancing technological discontinuity extends the know-how embodied in the technology that it replaces. Such innovations represent enhanced performance, building on the existing technological order without making it obsolete. For example, Edison's cement kiln afforded cement makers the opportunity to employ their existing rotary kiln knowledge to make much larger quantities of cement. In contrast to competence-enhancing discontinuities a competence-destroying discontinuity makes products or processes of production obsolete and obviates the expertise required to master the technology that it replaces. For example, the skills of the glass-making artisan were made obsolete with the arrival of the Lubbers machine, invented by John Lubbers early in the twentieth century. The introduction of the DVD player made the VCR obsolete, and online film-rental services such as Netflix and Video on Demand are currently rendering video stores obsolete.

*Audio formats as competence enhancing and competence destroying innovations*

With its arrival as a commercial product in 1982, the compact disc represented a competence-destroying innovation, destroying, as it did, the market for vinyl records; there's a slight irony in the fact that the CD also represented a sustaining technology to the 'record industry'. Here

the Tushman and Anderson classification is seen to be slightly ambiguous; the CD was competence destroying to existing products, vinyl records, yet largely competence enhancing to the overall industry architecture. Christensen's classification of a technology as, potentially, being simultaneously radical and sustaining best describes the CD as a technological innovation.

Audio-specific file formats, which emerged throughout the last decade of the twentieth century, also represent a competence-destroying innovation to the record industry and are likely, in time, to do to the CD what the CD did to vinyl records, making this early 'champion' of digital music obsolete or resigning it to a niche market. Unlike the CD, audio file formats have been anything but sustaining to the record industry. Tushman and Anderson (*1990*) highlight the fact that technological discontinuities affect either underlying processes or product; however, audio file formats undermine the very notion of recorded music as product, offering, as they do, the potential for consumers to access music in virtual forms. Audio file formats might best be described as a revolutionary technological innovation, clearly competence destroying to products and processes within the record industry. Revolutionary innovations are typically crude and experimental when first introduced, announcing a period of experimentation in which organisations attempt to absorb, or destroy, the new technological innovation. Record industry executives certainly responded to the threat posed by audio file formats by attempting to destroy this new innovation, promoting, as they did, the single theory that file-sharing accounted for the ingrained problems of an antiquated business regime reaching the end of its life cycle (*Kusek and Leonhard, 2005*). While the record labels pursued a policy of suing their own customers for copyright infringement, the Apple Corporation was planning its entry into the recorded music market. Many commentators continue to explore the question of why the record labels lost market share in such a dramatic fashion in the first decade of the twenty-first century. Perhaps it simply came down to the fact that the Apple Corporation had, as part of its core capabilities, the ability to continuously change at a time when incumbents were struggling to 'free' themselves from their core resource and routine rigidities?

Organisational inertia, resource and routine rigidity (*Gilbert 2005*), core capabilities (*Barton, 1992*), and managerial cognition (*Tripsas and Gavetti, 2000*) are key variables that warrant further consideration in the context of the current investigation.

*Organisational Response to Technological Discontinuities*

Christensen (*1997*) argues that because disruptive technologies are initially non-threatening to the most profitable customers in a market, senior management are unlikely to respond, strategically, to such innovations. Firms, typically, have systems in place to ensure that ideas that don't appear to be attractive to their current customer-base are ignored. It is only when a disruptive technology evolves to a point where it is strategically positioned in the market that a firm becomes fully aware of the threat it poses. In response to this threat the firm must take radical action in an attempt to retain its market position. In many cases, by the time a firm identifies the nature of the technological threat, and lead customers begin to demand new innovative products, their market share has already begun to erode. The irony of this scenario is that systems intended to protect a firm's market share often contribute to the firm's downfall in the period following the emergence of a competence-destroying innovation.

The inability of incumbent firms to overcome organisational inertia, when faced with discontinuous technological change, has been well documented. Gilbert (*2005*) goes further to exploit a gap in the literature by differentiating between resource and routine rigidity; routines are defined here as repeated patterns of response involving interdependent activities that become reinforced through structural embedding and repeated use (*Nelson & Winter, 1982*). Gilbert hypothesises that *threat perception* is a key interpretive force that affects how a firm responds to discontinuous technological change. He further emphasises the fact that this influence differs when one considers two discrete forms of inertia: resource rigidity and routine rigidity. Gilbert advances the idea that a strong perception of threat helps overcome resource rigidity whilst simultaneously amplifying routine rigidity. This is an important distinction highlighting the fact that by simply committing resources to the issue there is no guarantee that incumbent firms will survive the turbulent period of uncertainty that follows a competence-destroying innovation. Tripsas and Gavetti (*2000*) highlight the impact of inherited strategies (*routine rigidities*) by examining the processes that resulted in Polaroid's failure to make the transition to digital imaging despite the fact that they demonstrated a lack of resource rigidity by committing huge resources to developing digital imaging capabilities. This case warrants some attention.

*Resource and routine rigidity – the case of Polaroid*

In the early 1980s senior management at Polaroid made a strategic decision to invest heavily in digital imaging. By the early 1990s Polaroid had developed sophisticated sensor technology and by 1992 they had produced their first prototype, the PDC-200 megapixel camera. Despite this investment in digital imaging research and development, Polaroid failed

to get a digital camera to market until 1996, making fundamental errors in both marketing and distribution. By the time they did get to market there were over 40 digital cameras competing for market space. Polaroid abandoned their digital camera in the late 1990s.

Tripsas and Gavetti (*2000*) highlight the fact that Polaroid employed a strategy that involved delaying getting their digital camera to market so they could continue to search for alternative solutions that were compatible with the company's traditional business model, the so called "razor/razor blades model". In keeping with this model Polaroid sold its traditional analogue cameras cheaply to promote the sale of its film-roll, which retailed at a high price and so was extremely profitable for the company. The notion that you don't make money on the actual camera worked well in the context of Polaroid's analogue technologies; however, this model did not transfer well to the digital domain, as Polaroid found out to their detriment. Tripsas and Gavetti (*2000*) attempt to understand the role managerial cognition plays in the adaptive intelligence of organisations. However, Polaroid's failure to make the transition to the digital domain can only be partly explained by managerial cognition; it was largely due to the well-established routines embedded in the culture of the organisation that made it difficult for the Polaroid Corporation to make a successful transition to digital technologies. In summary, although Polaroid did not suffer from resource rigidity they did suffer from routine rigidity, which played a key role in their failed attempt to make a successful entry into the digital imaging market.

Consistent with Tripsas and Gavetti, Nelson and Winter (*2002*) pose a question that is relevant in the context of this paper:

'*How can the same organisations be so impressively competent from one perspective and yet so strikingly "bounded" in their rationality*?

Framed within evolutionary theories of economics, of particular interest here is the exploration of behavioural continuity in terms of skills, routines, learning, and cognition.

High levels of competence are attainable in an environment where skills and routines can be learned and perfected through practice. This form of learning, which depends largely on routines, does not accommodate sophisticated foresight, logically structured deliberating and/or the improvisation of novel action patterns (*Nelson and Winter 2002*). Routines result in firms behaving in the future according to the routines they have developed in the past. Furthermore, whilst measuring a firm's competence, observers tend to frame their comparison against the standards of the past or in a context in which competition is weak. Organisations tend not to stray far from routines as this can result in heightened anxiety and exposure to

risk. Most of this analysis is applicable to firms operating within the record industry, who demonstrated an unwillingness, or inability, to improvise solutions when faced with a competence-destroying innovation and who doggedly stuck to well-established routines, even when threat perception was high and a more radical set of strategies was required. Threat perception results in three intermediate behaviours that augment routine rigidity: the tightening of authority, reduced experimentation, and focus on existing resources (*Gilbert 2005*).

*Implications for the Music Industry*

When the record industry perceived the threat posed by new digital auditory technologies the major labels responded by contracting authority, offering fewer 'freebies' (*free promotional goods*) to company employees, giving less autonomy to record store managers, and stipulating leaner recording contracts for artists. Experimentation was never the domain of the record industry, mainly because the industry enjoyed enviable stability for over eight decades and was well served by the tried and trusted routines embedded in the industry culture. Consequently, in the period of ferment that followed the emergence of audio-file formats, the major record labels were unable to respond creatively to the threat posed by these new digital formats and the online platforms that accommodated the peer-to-peer sharing of music content. Instead they responded in the only way they could, focusing existing resources on enhancing their current product range in an attempt to remain competitive; the 'enhanced CD', offering video content and links to web resources, is one example of how record labels attempted to make their products more attractive in the new dynamic digital economy. This inability of the major record labels to adapt to digitisation is summed up well by Chaz Jenkins, head of LSO live (*London Symphony Orchestra Live, record label*) in response to the question: ('*what might the major record labels have done to prevent the destruction of the record industry?*') '*They (the labels) would have prevented the destruction of the industry if some executives had woken up to digital and moved earlier…*'

As the major record labels struggled to free themselves from embedded routines, other organisations within the broader music industry, less constrained by resource and routine rigidity, were in a position to alter their business models to take advantage of the new technological landscape. For example, many symphony orchestras, which once relied on the record labels for the production, dissemination, and distribution of their recorded performances, have established their own internal record labels. Examples can be found at the London Symphony Orchestra, Glyndebourne Opera, The Liverpool Philharmonic Orchestra, and the Royal Concertgebouw Orchestra to name but a few. These orchestras have become

new entrants to the record industry, taking control of what is still an important part of their overall business. Such a move has huge implications for an organisation such as the London Symphony Orchestra, resulting, for example, in the re-working of contracts with orchestral players and the responsibility of managing and controlling copyright. Some symphony orchestras are taking advantage of digital media to reach out to new audiences, for example, the Liverpool Philharmonic Orchestra has experimented with 'Second Life', and the Berlin Philharmonic Orchestra launched a 'digital concert hall' in June 2009, a move that is being watched closely by other players in the industry.

**Empirical Research Setting**

The music industry provides a strong empirical setting for a study of organisational response to disruptive technologies, since that industry has undergone a dramatic, and at times traumatic, transformation following the emergence of the digital music market, beginning with the introduction of the Compact Disc in October 1982. As a competence-enhancing innovation (*Anderson and Tushman, 1986*) the compact disc resulted in unprecedented profits for the record industry; however, as profits from CD sales soared throughout the 1990s, so too did the level of inertia within the major record labels. In the words of the current director of EMI Classical Global – Andrew Cordall – "*somewhere in the mid 80s/early 90s, in the CD boom, everyone thought, CD? That's it*". However, audio file formats, coupled with advances in information and communications technologies (ICT), specifically the capabilities of computers to store, play, and transmit audio content, over the Internet, transformed the primary consumer processes associated with the consumption of music. The story of the destruction of the traditional music recording industry has been well documented and is not the focus of this text. However, it does demonstrate an important industry development sending, as it did, shockwaves through an industry largely reliant on the physical recorded artefact as a means of content/brand dissemination and profit making. For an orchestra such as the London Symphony Orchestra (LSO), often referred to as 'the most recorded orchestra in the world', the destruction of the traditional recording industry resulted in reduced opportunities in the recording studio and fewer opportunities to work with the 'major' record labels. In response to this situation the LSO took the bold step of setting up its own record label – LSO Live, an innovative move that would, in time, prove influential within the broader classical music sector.

The transformative capacity of digital technologies must be considered in the context of a particular industry; although it is clear that the emergence of digital technologies has resulted in the transformation of the broader music industry, in a relatively short period of time, it is not so clear if digitisation is having a significant impact in the relatively small classical music sector. In an attempt to analyse the disruptive nature of digitisation on the classical music industry I have undertaken a series of ongoing exploratory interviews with senior management at high-profile organisations operating in the classical music field. The aim of these interviews is to identify the key challenges facing such organisations in this uncertain period of transition from an analogue to digital technological paradigm.

**Empirical Fieldwork –** exploratory interviews

*Selecting research sites and informants*

Informants are selected from organisations operating in key areas within the classical music industry (*Orchestras, Opera Companies, Record Labels, Arts Administration, Music Publishing etc.*) ensuring a broad array of perspectives, critical at this early stage of the project. Furthermore, informants represent a wide range of positions across organisations (*general managers, directors, digital managers etc*.).

Figure 3: *Research participants (organisation, sector, position)*

| **Organisation** | **Sector** | **Position** |
|---|---|---|
| Soundlounge | Music Consultants | Artistic Director |
| Orchestra of the Age of Enlightenment | Orchestral Organisation | Communications Director |
| BBC Symphony | Orchestral Organisation | General Manager |
| Eaton Publishing | Music Publishing | Consultant |
| London Symphony Orchestra | Orchestral Organisation | Head of LSO |
| Onyx Classics | Music Recording | General Manager |
| Halle Orchestra | Orchestral Organisation | Digital Manager |
| Liverpool Philharmonic Orchestra | Orchestral Organisation | Executive Director – Marketing |
| London Philharmonia | Orchestral Organisation | Head of Digital |
| EMI Classics Global | Music Recording | Vice President Artists & Repertoire |
| Royal Opera House | Opera Company | Chief Technology Officer |
| Glyndebourne Opera | Opera Company | Digital Media Coordinator |
| Royal Concertgebouw Orchestra | Orchestral Organisation | Orchestral Manager |
| London Philharmonic Orchestra | Orchestral Organisation | Digital Projects Manager |
| Arts Council of England | Arts Administration | Head of Music |
| Britten Sinfonia | Orchestral Organisation | Director of Music |
| English National Opera | Opera Company | Head of Digital |
| Berlin Philharmonic Orchestra | Orchestral Organisation | Directing of Marketing and Communications |
| Bournemouth Symphony Orchestra | Orchestral Organisation | Head of Marketing |
| Association of British Orchestras | Arts Administration | Director |

*Designing the Interview Questions*

Interview questions have been designed to accommodate semi-structured interviews. It proved critical that questions be broad and 'open-ended' in nature, encouraging respondents to '*take the lead*' in the conversation. To ensure consistency across all interview sessions interview participants are asked exactly the same questions. As the interview sessions have progressed, some questions have proved more critical in extracting useful information from

respondents, most notably questions related to digitally induced innovations and concerns about the impact of digitisation within organisations. Some questions, for example, those concerned with the destruction of the traditional recording industry, serve to confirm what is already largely understood.

Figure 4*: Exploratory Interview questions*

1. Digital technologies have had a huge impact on the music industry. What, in your view, have been the positive and negative outcomes for the classical music industry?
2. Does your organisation have any concerns regarding the impact of digitisation on the classical music industry?
3. Is there a particular innovation, either relating to a process or a piece of technology, that your organisation has instigated since the emergence of digital music in the early 1980s?
4. Why did the major record labels fail to retain their market share when confronted by digital music in audio-specific file formats?
   4a. What might the major record labels have done to prevent the destruction of the record industry?
   4b. Do the record labels still have a role to play in the classical music industry?
5. Has the new digital paradigm been favourable to individual musicians; i.e. is the rank and file violinist in a more advantageous position in terms of negotiating contacts, making profit etc.?
6. In summary, who are the winners and losers in this new digital paradigm?
7. What will the classical music industry look like in ten years time?
8. Do you have any further comments or observations that you would like to share with me?

*Empirical Findings*

The following analysis outlines the key findings extrapolated from my dataset to date. This work is ongoing with a number of additional interviews arranged for the first quarter of 2012.

In response to the opening interview question (‘*What have been the positive and negative outcomes for the classical music industry since the emergence of digital music since the early 1980s?’*) all respondents cited increased accessibility as a positive development. Whilst some informants emphasised the advantages of giving consumers access to music content online others focused on organisational accessibility to digital tools and platforms for the production and dissemination of music content. David Bazen, my conatct at the Amsterdam-based Royal Concertgebouw Orchestra, sums up well how access to digital tools and platforms has resulted in increased control of content production and dissemination within organisations, such as the Concertgebouw. *‘Of course digitisation has made recording and distribution a lot more accessible for companies the size of our orchestra or even smaller orchestras…Because of the democratisation of recording and distribution we are much more in control of what’s happening and that is a big plus. Whereas in the past we were requested for recording by a major company and then we were marketed in a certain way by that company. We now have to do it ourselves and we feel that because of that we are much more in control and it also*

*helps to build our brand etc. and that of course works best for organisation who are already at a certain level and have a certain brand and quality name that has been established in the traditional industry…'* Bazen tempers this view by highlighting the fact that access to tools of content production and dissemination results in a fragmented market, as the old industry hierarchy crumbles and more organisations compete for valuable digital market space. He further cautions that there is a *'difficultly to market internationally by a smaller organisation…Major record labels can still influence the front page of iTunes, we can't',* echoing what many informants noted, namely, that the major record labels still have a role to play in the classical music industry.

In emphasising the negative impact of digitisation on the classical music industry all informants, to varying degrees, made reference to the complex issue of copyright control. Paul Hughes, manager of the BBC Symphony Orchestra points to the paradoxical nature of digital media, which by facilitating almost limitless access to music content, exposes the copyright laws which are supposed to protect it. '*The positive outcomes are that the music that we make is now available to more people in more ways, in more formats, than could ever have been imagined twenty years ago. The downside of that is controlling it, monetising it and ensuring that the relationship [with] intellectual copyright is preserved and royalties and rights are protected when it's going into a digital world that is almost uncontrollable.*'

There seems to be a general acceptance within the classical music industry, and increasingly in the broader music industry, that an exhaustive monitoring of copyright infringement is not a realistic strategy in an era of peer-to-peer data sharing. Most of the informants with whom I spoke now welcome the free publicity that platforms such as YouTube and Spotify facilitate. My contact at Glyndebourne, George Bruell (*Head of Media Development*), captures the general mood among organisations in relation to the controlling of content on platforms such as YouTube. 'Our view towards control of our content has evolved over the last few years from initially believing all content needs to reside on glyndebourne.com to moving towards finding selected partners with whom we share and disseminate elements of our content. Finding where the audiences are is important for Glyndebourne and providing / permitting 'sample' type material so that audiences can learn more about Glyndebourne on, for example, YouTube leading some viewers to come to us to get the full, higher quality version.'

For organisations such as Glyndebourne Opera, the focus is now on developing new and innovative ways to embrace digital platforms, which allow companies to engage with existing audiences, whilst also developing pathways to new ones? The live streaming of two operas in

collaboration with the Guardian Newspaper Group in the summer of 2011 is the latest in a series of 'Glyndebourne on Screen' innovations, resulting in record-levels of viewership and new forms of audience engagement, primarily through the social media platform, Twitter; in the past Glyndebourne depended on the BBC or one of the major record labels to manage such high profile live broadcasts. Similarly, the self-governing London-based Philharmonia Orchestra has been hugely innovative in developing a business model that embraces collaboration beyond the confines of the classical music world. The recent performance of Bartok's opera 'Bluebeard's Castle' (*Royal Festival Hall, November 2011*) was billed as a semi-staging, and Nick Hillel's production incorporated visuals (*by Rite Digital in collaboration with Yeast Culture*); this is a good example of the kinds of project the Philharmonia are now engaging in. Having established a digital media division within the organisation the orchestra is determined to take music beyond the concert hall to reach out to new audiences; in his first season as the Philharmonia's Principal Conductor in 2008/09, Esa-Pekka Salonen devised and led the City of Dreams project, a nine-month multi-art form exploration of the music and culture of Vienna between 1900 and 1935, which travelled to 18 European cities. As privately operated organisations, Glyndebourne Opera and the Philharmonia Orchestra have, arguably, more flexibility to engage in collaborations with organisations outside the classical music industry than publicly-funded organisations such as the BBC, who currently face important decisions regarding their massive archive of audio and video content. Aside from the potential cost of digitising such a large body of data, there is also the question of whether the BBC should charge consumers for viewing/listening to such content online, considering that the public paid for the creation of this content in the first place through a TV licence fee.

Having established a general view of how actors within the classical music sector perceive the impact of digital technologies on the classical music industry, I am keen to explore how performing organisations are innovating, or intending to innovate, with digital tools and platforms. To this end I posed, to my informants, the question: '*Is there a particular innovation, either relating to a process or a piece of technology, which your organisation has instigated since the emergence of digital technologies?*' This question provoked a broad array of diverse responses and raised some interesting questions, many of which might best be framed within a discourse on resource and routine rigidities. A quick sample of abbreviated responses to this question demonstrates the diverse nature of innovations within the organisation that have, to date, taken part in this research.

*Figure 5: Technology-driven innovations within organisations (sample)*

| **Organisation** | **Innovation** |
|---|---|
| London Symphony Orchestra | LSO Live (*record label*) |
| Glyndebourne Opera | Live opera stream (most recently *in partnership with the Guardian Newspaper*) |
| EMI | Respondent was not in a position to respond to this question |
| Royal Concertgebouw Orchestra | Record label, leading to an inclusive media deal with members of the orchestra (*one off deal with profit share*) |
| Berlin Philharmonic Orchestra | Digital Concert Hall |
| Halle Symphony Orchestra | Orchestra Website |
| Liverpool Philharmonic | Concert in Second Life, whiteboard widget (*in conjunction with the TSB*) for use in Schools to prepare children for the first live classical music concert. |
| Philharmonia Orchestra | Various multi-art form projects |

Perhaps not surprisingly, the organisations with the highest profiles (*the biggest brands*), for example, the London Symphony Orchestra and Berlin Philharmonic, have proven to be industry leaders when it comes to innovating with digital media. The LSO, ranked fourth-best orchestra in the world by Gramophone magazine in 2010, did not delay in setting up their own record label (LSO Live) when it became clear that the major record labels could no longer provide what had been an important revenue stream. Other orchestras soon followed their lead, most notably the Royal Concertgebouw Orchestra, interestingly nominated best orchestra in the world by Gramophone magazine in 2010. The Berlin Philharmonic Orchestra, the biggest brand name in the classical music world, have had a long history of technological adaptation; the record label Deutsche Grammophon pioneered the introduction of the compact disc to the mass market, debuting classical music performed by Herbert Von Karajan and the Berlin Philharmonic for sale in 1983, the first recording being Richard Strauss' Eine Alpensinfonie (*An Alpine Symphony*). In 2008 the Berlin Philharmonic Orchestra, in conjunction with Deutsche Bank, launched its so called 'digital concert hall', an online subscription service delivering high-definition video and audio, in the form of live concerts and an archive of video content. As of writing this online service has attracted just over 7,000 subscribers, each of whom pay an annual fee of €149.00 for a 12-month 'ticket'. Considering the orchestra's huge worldwide fan base these numbers seem disappointing, raising questions about the challenges of monetising music content in the classical sector through online platforms. In speaking with Tobies Moller, Director of Managing and Communications at the

Berlin Philharmonic, it was interesting to note that the organisation currently has over 250,000 followers on Facebook, many of whom contribute constructive and useful feedback to the organisation. The orchestras YouTube channel facilitates the most comprehensive and useful feedback; Moller points out that the level of knowledge from some of the YouTube subscribers is '*amazing'*. Interestingly, at the time of its inception the role of social media was not deemed to be especially significant in relation to the digital concert hall. And yet, in time, social media has become an important feature of the overall digital strategy. In the worlds of Tobies Moller, ' *It (digital concert hall) has also enabled us to create a more comprehensive digital strategy around it, especially the social media channels we use (YouTube, Twitter, Facebook); it would not be possible of course without the digital concert hall, this was something we didn't have in our minds before at all... At the beginning these channels (twitter etc.) were of course used as marketing tools for the digital concerts but now we understand that it works the other way as well. The digital concert hall serves these channels and these channels give us a stronger presence on the Internet.*

The digital concert hall is a long-term project and any assessment must consider a number of variables, not least the fact that the target audience (*classical music enthusiasts*) represents a relatively small niche market in the context of the larger music industry. Another consideration is the fact that, in general, consumers do not feel they should pay for streamed online content in an era when much online content is free. Lastly, there is the issue of hardware; how many consumers have a large HD screens on which to view a concert, broadband speed that can deliver (*uninterrupted*) HD audio and visual content, and a sound system that can do justice to the dynamic range that is so central to classical music performances? There is a huge distinction to be made between experiencing a live transmission of an opera in a cinema, with the advanced audio and visual infrastructure in place, and watching a performance on a laptop with poor audio output. With this in mind it is no surprise that the Berlin Philharmonic are working closely with both Sony and Samsung, both leaders in the production of high-definition Internet-enabled televisions.

**Discussion**

The question that interview informants found most difficult to respond to, not surprisingly, was the question of what the classical music industry will look like in ten years time; unpredictability is an innate characteristic of the digital paradigm. Who could have predicted the emergence, and rapid diffusion, of platforms such as Facebook YouTube, Spotify, and iTunes? What is clear is that the consumer is the real 'winner' in an era of almost unlimited

access to digital music content in both data and metadata form; the big 'losers' have undoubtedly been the major record labels.

Performing organisations (*large and small*), the main focus of this research, generally demonstrate a high level of *adaptive plasticity* with regard to technological adaptation. Even smaller organisations, such as the Cambridge-based Britten Sinfonia, have been quick to utilise social media and in so doing have transformed their marketing strategy. Digital tools are clearly offering new marketing opportunities for performing organisations; however, how digital technologies might aid the monetisation of music content is yet to be determined. In the meantime attendance at classical music concerts is generally on the increase; perhaps in an age of over-saturation of recorded music, the live music experience is taking on new meaning and significance?

Having completed over twenty exploratory interviews with performing organisations operating in the classical music industry, it has become clear that, without exception, all of these organisations are keen to take advantage of digital platforms to disseminate information, distribute products (*tickets, CDs, mp3 files etc*.), offer educational resources, and engage with their audience/consumers in new ways. The potential to communicate and share information to consumers instantly, without the high costs of printing promotional information (*many organisations are phasing out promotional print material in favour of online promotions*), is the most obvious advantage of digital platforms to performing organisations. The ease with which a consumer can find a concert event, select a seat in the concert hall, and buy a ticket from the comfort of his or her home, or increasingly from a smart phone, is surely contributing to the current healthy state of classical music concert ticket sales. Beyond mere marketing concerns, organisations are faced with the challenge of knowing how best to monetise their product. Most classical music organisations now own their own online ticketing application, which they host on their websites, bypassing the need to pay a commission to a third-party technology company. Interestingly, most of the smaller organisations do not offer the purchase of recorded music (*CDs, mp3s etc*.) on their websites, relying instead on platforms such as iTunes. Whilst bigger organisations such as the LSO and the Berlin Philharmonic subscribe to iTunes and other similar platforms, they also host ecommerce modules on their web applications.

In 2006, the Metropolitan Opera (*New York*) began live satellite radio and Internet broadcasts, as well as live high-definition video transmissions presented in cinemas throughout the world. The transmission of opera into cinemas has proven hugely successful and many other organizations (*The Royal Opera House, Berlin Philharmonic etc*.) have followed the Met's

model. How successfully opera companies and symphony orchestras can monetise the streaming (*audio and video*) of live concerts online is unclear at this point in time. In the orchestral sector the Berlin Philharmonic are leading the way in establishing a digital concert hall that, although not yet generating profit, represents a potentially strong platform on which to build a successful business model for the streaming of online music content, in the future. Whether or not this particular application will emerge as a 'dominant design' from which other organisations will take the lead remains to be seen. The iTunes system remains the clear contender for the title of 'dominant design' in relation to music content sales. And yet many interview respondents highlighted the fact that this particular model is not well suited to classical music; very few classical music consumers are likely to download a single movement of a symphony; but more to the point the sound quality of the compressed audio data currently offered on iTunes does not do justice, arguably, to the dynamic range typically present in classical music. It will be interesting to observe how consumer's usage of platforms such as iTunes, Spotify, Amazon Cloud Drive etc. will evolve. More especially, and in the context of this research, it will be interesting to see how performing organisations utilise these channels, and develop their own channels, to mediate in new and innovative ways between composer [musician] and audience.

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