COEVOLUTION OF FIRM CAPABILITIES AND INDUSTRY COMPETITION:

INVESTIGATING THE MUSIC INDUSTRY 1877-1997

MARC HUYGENS, CHARLES BADEN-FULLER,

FRANS A.J. VAN DEN BOSCH, HENK W. VOLBERDA

ERIM REPORT SERIES *RESEARCH IN MANAGEMENT*	
ERIM Report Series reference number	ERS-2001-61-STR
Publication	October 2001
Number of pages	57
Email address corresponding authors	fbosch@fbk.eur.nl and hvolberda@fbk.eur.nl
Address	Erasmus Research Institute of Management (ERIM) Rotterdam School of Management / Faculteit Bedrijfskunde Erasmus Universiteit Rotterdam P.O.Box 1738 3000 DR Rotterdam, The Netherlands Phone: + 31 10 408 1182 Fax: + 31 10 408 9640 Email: info@erim.eur.nl Internet: www.erim.eur.nl

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BIBLIOGRAPHIC DATA AND CLASSIFICATIONS

Abstract

This paper proposes that rival firms not only search for new capabilities within their organization, but also for those that rest in their competitive environment. An integrated analysis of these search processes at both firm and industry levels of analysis shows how their interaction makes industries and firms coevolve over time. To contribute to an enhanced understanding of the concept of coevolution, a dynamic and integrative framework crossing meso and micro levels of analysis is constructed. This framework is applied to a longitudinal study of the music industry with a time-span of 120 years. The first part, a historical study, covers the period 1877 – 1990. The second part, a multiple-case study, covers the period 1990 – 1997. We conclude that search behavior drives coevolution through competitive dynamics among new entrants and incumbent firms and manifests itself in the simultaneous emergence of new business models and new organizational forms.

Library of Congress Classification (LCC)	5001-6182	Business
	5546-5548.6	Office Organization and Management
	HD 30.28	Strategic planning management
Journal of Economic Literature (JEL)	M	Business Administration and Business Economics
	L 20	Firm Objectives, Organization and Behavior: general
	L 22	Firm organization and market structure
European Business Schools Library Group (EBSLG)	85 A	Business General
	270 A 100 G	Strategic Management Organizational Growth
	270 C	Strategic management (different sectors)
Gemeenschappelijke Onderwerpsontsluiting (GOO)		
Classification GOO	85.00	Bedrijfskunde, Organisatiekunde: algemeen
	85.10	Strategisch beleid
	85.10	Strategisch beleid
Keywords GOO	Bedrijfskunde	
	Strategisch management	
	Coevolutie, Concurrentie, Strategisch Management, Muziekindustrie, 1877-1997	
Free keywords	coevolution, search behavior, capabilities, competitive regimes, multilevel research, strategic renewal, music industry, longitudinal research	

Coevolution of Firm Capabilities and Industry Competition:

Investigating the Music Industry 1877-1997[1]

* *MARC HUYGENS*

+ * *CHARLES BADEN-FULLER*

* *FRANS A.J. VAN DEN BOSCH*

* *HENK W. VOLBERDA*

* Department of Strategic Management and Business Environment

Rotterdam School of Management
Erasmus University Rotterdam
PO Box 1738
3000 DR Rotterdam
The Netherlands
www.strategyaterasmus.net
E-mail: fbosch@fbk.eur.nl; hvolberda@fbk.eur.nl

+ City University Business School
Frobisher Crescent
Barbican, London
EC2Y 8HB
United Kingdom
E-mail: c.baden-fuller@city.ac.uk

Version 12

[1] We gratefully acknowledge the helpful comments of three anonymous referees and the valuable suggestions of the editors, Arie Y. Lewin and Mitchell Koza, of this special issue. Furthermore, we thank Erik J. de Boer of the Rotterdam School of Management for his research assistance. The Erasmus Research Institute of Management has funded this research.

ABSTRACT

This paper proposes that rival firms not only search for new capabilities within their organization, but also for those that rest in their competitive environment. An integrated analysis of these search processes at both firm and industry levels of analysis shows how their interaction makes industries and firms coevolve over time. To contribute to an enhanced understanding of the concept of coevolution, a dynamic and integrative framework crossing meso and micro levels of analysis is constructed. This framework is applied to a longitudinal study of the music industry with a time-span of 120 years. The first part, a historical study, covers the period 1877 – 1990. The second part, a multiple-case study, covers the period 1990 – 1997. We conclude that search behavior drives coevolution through competitive dynamics among new entrants and incumbent firms and manifests itself in the simultaneous emergence of new business models and new organizational forms.

Descriptors: coevolution, search behavior, capabilities, competitive regimes, multilevel research, strategic renewal

INTRODUCTION

Schumpeter (1934) claimed that industrial growth and development is a direct product of the competitive process. It is ‘a force from within’ because discovery is determined by the things that people in organizations do. Although firms disrupt current methods when they force themselves upon their rivals through innovative behavior, they bring new ideas and practices to an industry, triggering its further development. This paper builds on such a perspective and investigates the relationship between capabilities and competition. This is consistent with Henderson and Mitchell (1997), who called for an enhanced understanding of the endogenous and reciprocal relationships between capabilities and competition. They argued that organizational capabilities shape the competitive environment, a process that, in turn, further shapes capability development. These interactions cross multiple levels of analysis and make capabilities and competition coevolve over time.

McKelvey (1997: 360) also argues that the development of capabilities at the firm level is both a cause and an effect of the competitive process at the industry level. In his explanation that “coevolutionary effects take place at multiple levels”, McKelvey (1997: 360) stressed the need for this compound approach to the dynamics within and between firms. He maintained that reciprocal relationships between firms in a competitive environment are coevolutionary in nature and that such a coevolutionary perspective allows for the mutual inclusion of seemingly contradictory assumptions in social science that organizations are either idiosyncratic or uniform in nature. McKelvey (1997: 356) expressed the latter dilemma as one in which “it seems impossible to simultaneously accept the existence of idiosyncratic organizational events while at the same time pursuing the essential elements of justification logic.”

It is clear that the coevolution concept has the potential to integrate the discordance between Schumpeterian streams of ideas and those of the resource-based view. Whereas Schumpeterian theory suggests that firms will converge in their appearance and behavior (as the dynamic of imitation will reduce variety among rival firms), contemporary resource-based theory claims firms are idiosyncratic in what they have and what they do (Barney, 1991; Grant, 1996). Yet, empirical research efforts into coevolving drivers and effects have been limited thus far (Lewin and Volberda, 1999). We have the valuable contributions of Kieser (1989), who narrated how medieval guilds were replaced by mercantilist factories as markets and institutions coevolved. Furthermore, Levinthal and Myatt’s (1994) study of the mutual

fund business confirmed the existence of feedback effects between the firm's ability to sustain market relations and its competitive position.

We respond to the lack of understanding of coevolutionary processes within the field of strategic management and to calls for more studies that synthesize firm- and industry-level perspectives in strategy and organization research (Levinthal, 1995; Lewin and Volberda, 1999). The *purpose of this article* is to gain insights into the coevolution of capabilities and competition within the competitive environment by developing an integrative framework, suggesting several propositions and by illustrating these in a longitudinal analysis of an industry. This is based on the assumption that search behavior drives coevolutionary processes. The framework will be illustrated in a longitudinal study of the music industry and will be divided into two parts. The first part concerns the period 1877-1990, discerns various competitive regimes at industry level, and analyses the capabilities that were founded and proliferated in each regime. The second part contains a multiple-case study covering the period 1990-1997 and focuses at firm level on the interaction between capabilities and competition during a particular competitive regime. The paper closes with a discussion of the findings, limitations, and key issues for future research.

AN INTEGRATIVE FRAMEWORK OF COEVOLUTION

The 'behavioral theory of the firm,' developed by Cyert and March (1963), pays attention to both organizational and competitive behavior, and therefore can be helpful for a coevolutionary analysis of capabilities and competition. This theory assumes that firms have some degree of control over their market environment, and that they adapt to their habitat through learning processes. Learning takes place after feedback loops bring new market knowledge to the organization, which confronts the firm with particular problems. Firms respond to such problems through what is called 'search' behavior by which they pursue new or alternative ways of doing. According to Cyert and March (1963), firms display two basic types of search behavior: They can search in the neighborhood of current practice, or they can search for radically new alternatives. Cyert and March (1963) treated this distinction primarily in organizational terms, but stressed its applicability at the competitive level. Nelson and Winter (1982) also embraced this dichotomy by referring to it as local and distant search. This dual nature of search closely resembles March's (1991) paradox of exploitation versus exploration.

Below, we develop a conceptual framework of coevolution of capabilities and competition where we assume that firms can be involved in different search processes (such as exploitative and explorative search behavior) at both the firm and the industry level. We will theorize on search behavior of rival firms starting with the level of the industry and then at firm levels of analysis. We will suggest a number of propositions, which will combine to form an integrative framework of coevolution. Figure 1 provides a road map, showing where we are going and the position of our propositions. Propositions *1.a*, *1.b* and *1.c* refer primarily to the industry level of analysis, *2.a*, *2.b* and *2.c* to issues at the level of the firm. Proposition 3 captures the reciprocal relationships in the coevolution of new organizational forms at firm level and new business models at industry level.

[Insert Figure 1 about here]

Coevolution from an Industry-Level Perspective

Search behavior leads to capability development (Barnett and Hansen, 1996; Stuart and Podolny, 1996), and we begin by examining industry processes. Firms build capabilities in an industry environment where they compete with other rival firms, each of which employs its bundle of capabilities in the competitive process. Some firms try to create competitive advantages by introducing new capabilities to the industry; in response, others will replicate the capabilities. As more rivals find ways to build the capabilities required for competing under the new rules of the competitive game, the pioneer's advantage disappears. Such interaction patterns of innovation and imitation form the *endogenous drivers* of an industry's evolution (Schumpeter, 1934). It appears that, in a competitive context, many rivals are involved in search behavior to upgrade their capabilities. We will discuss below the upper part of Figure 1, by explaining why search behavior, the foundation and subsequently the proliferation of capabilities and the resulting competitive regime, over time are related to each other.

In a behavioral view of the firm, rival firms are related to each other as each searches for new capabilities to compete in their industry (Cyert and March, 1963). In so-called "ecologies of competition", "the competitive consequences of learning by one organization depend on learning by other organizations" (March, 1991: 81). In other words, actions taken by one company in search of capabilities have implications for the direction of search behavior at its rivals. In their study of local search for

technological positions, Stuart and Podolny (1996: 36) pointed out that "firms do not search in isolation; rather they search as members of a population of simultaneously searching organizations." Companies become rivals not simply because they happen to operate in the same habitat, but because they influence each other's search behavior. As Barnett and Hansen (1996: 141) pointed out: "competition triggers self-reinforcing, reciprocal effects in an ecology of learning organizations". In their search for capabilities, firms not only evolve in their role as competitors, but also activate new search behavior by the other players in a particular industry. The idea that it is the search behavior of players which underlies the competitive dynamics of an industry can be rephrased into the following

Proposition 1.a: Innovation and imitation behavior at industry level drives the search for capabilities.

The foundation and proliferation of capabilities. That competition evolves around the dynamics of innovation and imitation is common knowledge these days. Intuitively, one would think that innovation and imitation of capabilities at the industry level resemble practices of exploration and exploitation respectively: new capabilities are introduced by the innovator, while the imitators take care that the capabilities are further spread throughout the industry. Such reasoning would, however, ignore the notion that imitators "exercise entrepreneurship as much as the innovators themselves" (Jacobson, 1992: 788) because even from the imitator's point of view, the search for new capabilities embodies a highly innovative activity (Winter, 1984).The hard act of detecting and appreciating new questions is characteristic for Schumpeterian entrepreneurs who search for new ways of competing that could make rivals' positions obsolete. Early innovators rarely copy innovations exactly. They reject simplistic ideas such as success being "predetermined by mechanistic formulas" (Baden-Fuller and Stopford, 1994: 26). Pioneering firms that successfully introduce new capabilities to the industry force their rivals to try to imitate those capabilities usually with improvements. During this process, the industry is marked by a period of turmoil in which both innovators and early imitators engage in explorative search for new capabilities. The resulting creative destruction is at the heart of the *foundation* of new capabilities at the industry level which, according to Schumpeter (1934), acts as a disequilibrating force.

Ultimately, the growing prominence of imitation during an industry upheaval represents an equilibrating force that brings rival firms back to an equivalent level of capabilities, strategies and competition (Iwai, 1984). From the moment the industry's rivals have managed to adopt the new competitive rules, they concentrate their subsequent efforts on getting "every ounce" out of them. In other words, competition does not turn into a state of perfect equilibrium once the industry leader's competitive advantage has been eroded through imitation. Instead, competitive behavior of rival firms centers around further modification of the latest competitive recipe, "yet relying on the fundamental designs pioneered by the innovator" (Teece, 1987: 190). Instead of exploring radically new alternatives, rivals are typically involved in exploitative search behavior, which is directed at the stabilization of industry-wide conventional competitive practices over time (Cyert and March, 1963).

Put another way, after the initial phase of exploration, there is a phase of *proliferation* when search behavior is directed at the improvement of current and accepted practice. Although competition is still characterized by the dynamics of innovation and imitation, capabilities tend to disperse more quickly among the population of rivals. Close resemblance in thoughts, capabilities and activities places competitors "in a much better position to imitate or learn and build from each other's work than firms with different strategies and capabilities" (Nelson, 1991: 70). The competitive process of imitation and innovation functions as a context in which rivals display two basic types of search behavior. On the one hand, *explorative search* involves the pursuit of alternative competitive formulas, and results in the foundation of novel capabilities at the industry level. On the other, *exploitative search* involves the hunt for expansion of current competitive recipes, and causes their further proliferation. Rivals interact competitively in both situations, be it that there may be differences in the 'closeness' of competition and the presence of competitive advantages. In sum,

Proposition 1.b: Innovation and early imitation search behavior at industry level provide the foundation for new capabilities while later imitation positively influences their proliferation.

Competitive regimes. The premise that capabilities are proliferated at the industry level once competitors have a shared understanding of the competitive rules has

implications for the industry's evolution. When the search behavior of rival firms in an industry shifts towards exploitation of known capabilities, endless proliferation of capabilities via excessive exploitative search behavior may drive the industry into a downward spiral. In reality, most industries survive and continue to evolve as a result of two possible occurrences. First, there is almost always a basic level of diversity among the industry's constituent firms (Nelson, 1991) resulting in competitive pressures for explorative search and introducing a new strategic innovation to the industry. Secondly, requisite variety may come from outside the industry. After all, the tendency of an industry's incumbents to focus on exploitative search makes them rigid and susceptible to new entrants whose critical attitude towards established practice may return the industry to a state of creative destruction (Levinthal and March, 1993). In both situations, competitive dynamics "comprise powerful countervailing forces to the tendency for experience to eliminate exploration" (March, 1991: 85).

Repeated over time, this dynamic of explorative and exploitative search behavior between incumbents and new entrants represents a principal driving force of industry evolution in which capabilities are founded and proliferated again and again (Hensmans et al., 2001). Often an industry evolves through a sequence of 'competitive regimes' based upon particular competitive rules, business models, industry recipes, and capabilities. Dosi (1982) and Nelson and Winter (1982) coined the term regime and stressed that each period has its own distinctive paradigm of competition. Competitive regimes are characterized by distinct product markets, technologies, and stress particular business models such as those in which external networks and alliances are important for a firm's competitive advantage (Koza and Lewin, 1999). The creative destruction that starts a new competitive regime makes the industry go through a series of discontinuities. Similar patterns of development have been reported in empirical studies on technological innovation (Abernathy and Clark, 1985; Tushman and Anderson, 1986). Thus,

Proposition 1.c: Triggered by the foundation and proliferation of capabilities, the competitive dynamics of the interplay between incumbents and new entrants drive the sequence of competitive regimes over time.

Coevolution from a Firm-Level Perspective

According to Cyert and March (1963), organizational learning is guided by so-called 'standard operation procedures' (SOPs). These SOPs determine the degree and direction of the firm's search behavior as a response to market feedback. Nelson and Winter (1982) translated the notion of SOPs into the concept of routines that are organizational carriers of knowledge and expertise. They argued that such routines influence firms' search for new alternatives. Not only do routines shape the organizational processes underlying capabilities (Winter, 1995), but they are also key to the learning processes by which firms adapt to changes in their environment. This conforms to behavioral theory's idea that organizations have some degree of control over their habitat, and implies a voluntary perspective of firm behavior as opposed to a deterministic one (Child, 1972). In this connection, Hedberg *et al.* (1976) discriminated between adaptive and manipulative (search) actions: whereas adaptation embodies a firm's response to an environmental stimulus, an act of manipulation actually provokes such environmental reactions. More specific, "the adaptor defends, conforms or submits," while the manipulator is "aggressive, proud, perhaps selfish" (1976: 46). Whereas the manipulating firm impresses itself into its competitive environment, the adapting organization maps its competitive environment onto itself. Thus,

Proposition 2.a: Manipulation and adaptation behavior inside rival firms drives the search for capabilities.

Creation and Refinement of Capabilities. Capabilities are difficult to relate to search behavior at the industry level as their origins unavoidable lie at the firm level. Although several definitions of capabilities focus on knowledge as the fundamental component of a firm's capabilities (Grant, 1996) for our purpose more encompassing definitions like the capacity to deploy both tangible and intangible resources, including managerial resources (Penrose 1959), via distinct organizational and managerial processes (cf. Amit and Schoemaker, 1993) are more appropriate. Lado and Wilson (1994) suggest to distinguish four capability categories that allow for the explicit incorporation of search behavior as fundamental to the creation and redefinement of capabilities. These categories are managerial-, input-, transformation- and output-based capabilities. Managerial capabilities point at search behavior

regarding cognitive structures and mental models which underlie a strategic vision. The second category concerns search behavior regarding the acquisition and/or mobilization of specialized and unique assets. The third category involves innovation and organizational learning. The last category refers to physical outputs and to knowledge-based, intangible assets like reputation and relationship networks with e.g. suppliers and clients.

Intraorganizational search behavior of firms is initiated by market feedback loops related to e.g. the value of intangible assets that internalize environmental knowledge into the organization (Cyert and March, 1963). According to Ghemawat and Ricat I Costa (1994: 59), firms can process information and know-how in two ways: "using it to search for improvements within a framework of fixed beliefs about how the environment behaves and responds to organizational actions vs. using it to reconsider the beliefs themselves." Intuitively, one would think that, at the firm level, manipulation of and adaptation to the competitive environment resemble acts of exploration and exploitation respectively: while new practices are explored by manipulators, adapters engage in exploitative search of existing practices. However, this would discount resource-based theory's idea that firms which adapt to changes in their habitat are involved in creative behavior as they dissociate themselves from path dependencies (Teece et al., 1997). Ghemawat (1991) discussed how increasing commitment to existing routines reduces a firm's flexibility in changing environments and raises organizational inertia. Over time, such frictions permeate managerial and technical systems that, together with skills and values, make up the firm's capabilities. When adaptation becomes a prerequisite for survival, firms often tend to stick to these routinized capabilities, turning them into core rigidities (Leonard-Barton, 1992, Tushman and Romanelli, 1985). In spite of inertia, some firms do engage in explorative search, as their organization overcomes obstructions and their management experiments with new alternatives (Volberda, 1996). This is an activity of both manipulators and adapters.

Explorative search within a population of rivals is dedicated to the *creation* of new capabilities. At the industry level, rival companies will show an increasing degree of uniformity in (terms of the competitive outcomes of these) capabilities as more of them manage to adapt to the changed rules. But because individual firms have distinct histories that make them heterogeneous at a basic stratum, the way in which they create new capabilities (as well as their particulars) may differ

considerably (Nelson, 1991). This variety in capability construction increases once the various rival firms have managed to adapt, and start to *refine* the newly created capabilities. This *two-phased process* of capability development (creation and refinement) has been noted by Winter (1995: 51) in his distinction between a firm creative ability "to combine resources in novel ways and establish new activities" and its ability "to amplify the contributions of present resources and expand existing lines of activity." Similarly, Tushman and Romanelli (1985) explained how organizations are often involved in fine-tuning in periods of convergent change, in which existing structures, activities and capabilities are even further exploited. These stages of fine-tuning are punctuated by revolutionary organizational adaptation in which novel strategies, processes and capabilities are explored. Such radical shifts represent "revolutionary changes *of* the system" (1985: 185). Considering the above, we suggest the following proposition:

Proposition 2.b: Manipulative and early adaptive search behavior within firms creates the foundation for new capabilities, while later adaptive search behavior positively influences the refinement of capabilities.

Organizational Change. The premise that capabilities are refined at the firm level once firms have managed to adapt to major changes in their competitive environment has implications for the way that organizations evolve over time. Most firms display a natural tendency to prefer exploitation to exploration (March, 1991), so the danger exists that they fall into so-called 'competence traps' (Levinthal and March, 1993). When the need to adapt to major changes in the competitive environment arises again, such organizational rigidity (Volberda, 1996) and lack of absorptive capacity can preclude the firm's effective adaptation to the new circumstances by not being able to absorb the required new external knowledge (Van den Bosch et al., 1999).

In contrast, some firms may be able to turn their efforts towards explorative search behavior again. This is subscribed by Hedberg *et al.* (1976), who explained that, once the need to adapt has been recognized, a firm initially intensifies its efforts to 'do as before, but more.' This search response represents "a course of action that can be rationalized as an attempt to last out a period of adversity that is perceived or hoped to be temporary" (Nelson and Winter, 1982: 122). At a certain moment, investment postponement, cost cutting and asset reduction shape restructuring policies

to regain financial stability. Unlearning of established routines continues through changes in strategy, personnel and ideology. If the organization moves on, problem solving and exploration of new alternatives gradually build the routines and new capabilities required to pursue the firm's novel strategic course (Baden-Fuller and Stopford, 1994)

Routines seem to play a key role in capability development. This is because capabilities are built on hierarchies of routines, some of which are hidden (Nelson and Winter, 1982). Routines permeate the process of capability building, so that even during the creation of new capabilities inertia starts to penetrate firms' organization structure and processes (Rumelt, 1995). In this connection, Baum and Korn (1999) distinguish between path dependent and path creation processes. In these processes, routines appear to be both a blessing and a curse: they are mandatory in processes of change to create new capabilities, but at the same time obstruct subsequent transformation processes as they increase inertia. Rival firms can therefore be expected to repeat the Hedberg *et al.* (1976) change trajectory over time during which the search for new capabilities at the firm level switches from creation to refinement and back. In other words,

Proposition 2.c: The dynamics between managerial intentionality to create new capabilities and the impact of path dependencies on their refinement propels the emergence of a sequence of organizational changes over time.

The above implies that successful firms evolve through multiple periods of organizational change or strategic renewal, in each of which capabilities are created and refined. The creation of capabilities is enabled by several attributes of the context-, content- and process dimension of strategic change. The appointment of a new CEO is an important attribute of the context, while a change in the strategic intent and/or market positioning is a key attribute of the content of strategic change. Important attributes of the process dimension are the establishment of new ventures, alliances, and acquisitions including learning new skills and resolving dilemmas supporting the search for new capabilities during strategic change.

Combining Firm and Industry: Coevolution of Business Models and Organizational Forms

From the above analysis, it appeared that the dynamic of explorative and exploitative search behavior drive the evolution of both the firm and the industry over time in a world where capabilities and competition coevolve. At the same time, however, the foregoing made it clear that it can be difficult to split up search behavior distinctively at firm and industry levels of analysis. For instance, the concept of strategic innovation was discussed from an industry-level perspective, but essentially describes individual behavior at the firm. In a similar vein, the interaction between new entrants and incumbents relevant to the firm-level perspective also applies to the industry as well. The search concept appears to be crucial in combining firm and industry perspective of coevolution, as it not only highlights apparent similarities, but also exposes some noteworthy contrasts between the two.

One of these differences concerns the difficulties encountered by rival firms in different dispositions. Explorative search can be more laborious for the innovator than for its imitators, as the latter group of rivals searches for answers to a question already found by the pioneer. But at the same time it has been noted that explorative search is more difficult for adapters than for manipulators as the latter are free from the rigidity arising from established routines. The irony of course is that, in a competitive environment, innovating and imitating do not have an isomorphic correspondence with either the role of manipulator and adaptor respectively or with these of incumbents and new entrants. Instead of adopting a one-sides point of view towards search, an integrative perspective in which both firm and industry levels are taken into account could forestall such biases. Our integrative framework of coevolution of capabilities and competition (summarized in Figure 1) centers around the unifying concept of search behavior.

The firm searches for capabilities to adapt to, or even manipulate its competitive context. But as a collection of rival companies, firms are engaged in the search for capabilities at the more abstract level of competition where the dynamic process of innovation and imitation rules. Obviously, the creation and refinement of capabilities by firms impacts the development of capabilities at the industry level in terms of foundation and proliferation (and vice versa), simply because they coexist in an ecology of competition. Over time, these reciprocal relationships shape both firm and industry evolution as competitive forces make the search for capabilities alternate

between the rejuvenating properties of exploration and the self-destructive tendencies of exploitation. Interorganizational search at the industry level ultimately results in the emergence of new business models. These business models and the manifestation of competitive regimes can be defined by factors such as the nature of customer interaction, asset configuration and knowledge leverage (Venkatraman and Henderson, 1998). In a similar way, intraorganizational search results in the emergence of new organization forms or blue prints, often discussed in the literature (e.g. Daft and Lewin, 1993; Lewin and Volberda, 1999; Lewin *et al.*, 1999; Volberda, 1998). In short, new organization forms emerge alongside new business models in a coevolutionary manner, and so we suggest that:

Proposition 3: Coevolution of firm capabilities and industry competition manifest itself in a reciprocal process between the emergence of new organizational forms at firm level and new business models at industry level.

METHODOLOGY

To illustrate the integrative framework on coevolution developed in this paper, we investigate processes of search and coevolution at two different levels of analysis in the music industry. Covering the period between 1877 and 1990, we detect shifts in competition, i.e. competitive regimes, over time. In contrast, processes of search and coevolution at the firm level are examined via a multiple-case study of individual record companies over the more limited time frame of the period 1990-1997.

The rationale for studying coevolution between capabilities and competition in the music industry is threefold. Ranked second only behind book publishing, music is the oldest software industry with a history that spans more than 100 years, which makes it particularly suitable for the detection of long-term patterns. Furthermore, knowledge is crucial in the performance and survival of record companies, that capabilities are in essence integrated knowledge components (Grant, 1996, De Boer *et al.,* 1999) makes this industry adequate for investigation. Finally, the music industry is one of the so-called cultural industries, which have, until recently, only been of marginal interest to management and organization scholars as objects of empirical research. Although the film industry has gained some ground as a research site (e.g.,

DeFillippi and Arthur, 1998; Miller and Shamsie, 1996), relatively little is known to strategy scholars on organizational and competitive dynamics. The present study aims to fill this gap by means of both a historical study and a multiple-case study of the music industry, of which methodological issues as data collection, analysis and validity are discussed below.

The music industry "is a complex animal" (Malm and Wallis, 1992:5) encompassing a variety of actors. In describing the music industry environment, however, we primarily focus on the issues raised in the proposition on competitors and the competitive environment (micro and meso level of analysis). We exclude discussion of field formation (Anand and Peterson, 2000), important institutional dimensions and extra – institutional influences like social movements (Lewin *et al;* 1999) and management logic (Dijksterhuis *et al;* 1999). We will come back to this limitation in the discussion section.

Historical Study 1877-1990. The historical study of the music industry builds on data that has been disclosed in a variety of articles and books on the music industry outside the boundaries of strategic management research. Malm and Wallis (1992) have pointed out that before the 1970s there were remarkably few relevant studies of the music industry. Because of this, the many secondary sources from which our qualitative data was retrieved stem from the 1970s and can be roughly divided in three streams. First, research publications on the economics of the music industry offered insights into topics of industry organization, musical innovation and structural changes (Peterson and Bergen, 1975; Lopes, 1992; Christianen, 1995). The second domain involved writing about individual firms, and provided intelligence on the activities and organization of record companies as well as the technologies they applied (Peterson and Berger, 1971; Denisoff, 1986; Negus, 1992). Finally, studies in communication supplied information on the relationship between the record business and the media industries (Gronow, 1983; Laing, 1992; Malm and Wallis, 1992). Quantitative data was collected from three respected industry associations: the Recording Industry Association of America (RIAA), the National Music Publishers' Association (NMPA) and the International Federation of the Phonographic Industry (IFPI). The observed diversity in secondary sources enabled a check for data consistency both within and across these streams of cultural studies. In addition to such 'within-method' triangulation (Denzin, 1978), the historical study's reliability

was enhanced by means of 'between-method' triangulation (Jick, 1979). This was achieved via a confrontation of the longitudinal body of qualitative data with the more robust and quantitative data that had been collected at the various industry associations, and covered parts or most of the period under consideration.

In line with previous coevolution studies (Lewin and Volberda, 1999; Pettigrew, 1997), analysis of the organized data set was performed along two related activities: (1) a search for patterns in processes out of a sequence of events, and (2) a search for the underlying mechanisms that shaped these patterns. To illustrate the advanced propositions on coevolution at the industry level, the first of these activities involved the detection of various competitive regimes in terms of distinct product markets (Porter, 1980), organizational value chains (Porter, 1985) and technologies (Tushman and Anderson, 1986). In a similar vein, the second activity concerned the identification of record companies' capabilities around which competition evolved during a particular competitive regime. As mentioned above, these were classified according to one of four capability categories, as proposed by Lado and Wilson (1994): managerial, input-based, transformation-based and output-based capabilities. This particular typology allows for the explicit incorporation of search behavior.

Multiple-Case Study 1990-1997. Whereas the historical study deals with coevolution over various competitive regimes, the multiple-case study is directed at the reciprocities between capabilities and competition during a particular competitive regime. While the focal issue of inquiry at the various case companies was their search for new capabilities, differences in the way these companies searched were of special interest.

Over the years, the significance of the British music industry has increased, both within the UK and to music markets in the rest of the world. With a sales value of over £1 billion, the UK is the world's third largest market, and industry trade association British Phonographic Industry (BPI) even claims that the UK music industry is far more important as an international repertoire provider.

It was acknowledged that different types of record companies operated in the music industry each experiencing different types of organizational change processes: acquired independents, major operating companies, and independents. Our six case companies were chosen (see Table 1) based on the above theoretical classification (Eisenhardt, 1989). In each company, a top manager was contacted and asked to

participate in the research project through two semi-structured, usually tape-recorded, interviews with duration of 60 to 90 minutes. These interviews asked about context and content of capabilities and competition over the period of study. The time-consuming exercise of mining multiple informants throughout the company was traded off for the top manager's position as the most knowledgeable about the (impact of) changes within the firm (Glick *et al.*, 1990). To offset a resulting bias in data collection, further public information on the case companies was accumulated, primarily through the inspection of all issues of two respected industry trade journals, *Music Week* and *Music Business International,* for the period 1990-1997. In addition, all six editions of *The UK Record Industry Annual Survey* (from 1993 to 1998) were consulted to retrieve financial and accounting data on individual record companies.

[Insert Table 1 about here]

For each case company, a 'data collection file' was created in which all longitudinal data was chronologically ordered. The company files came to be the groundwork for our in-depth case descriptions of organizational change at each of the companies, and our tables that outlined the major events during the period of transformation. Both the case descriptions and the event tables were reviewed, corrected and commented upon by the interviewees, and provided a basic input for further analysis. In each case, the three core dimensions of organizational changes as described above were used to illustrate the advanced propositions of coevolution at the firm level. First of all, the *context* of change was analyzed along possible drivers of transformation e.g. new executives or a performance decline. In addition, the *content* of changes at each case company was explored in terms of its vision, scope, positioning and capabilities – in other words, its competitive strategy. Finally, the change *process* was measured in terms of attributes (such as learning new skills, internal ventures and new alliances) as deduced from prominent management literature on strategic change (e.g. Tushman and Romanelli, 1985; Barker and Duhaime, 1997). These inquiries facilitated cross-case analysis on the role of change in record companies' search for capabilities.

The multiple-case study's internal validity concerns verification of the causality between key constructs (Eisenhardt, 1989), and appears to be significant: all the individual case studies displayed how their search for capabilities embodied a

process of organizational change which, in the end, determined their market performance. The multiple-case study's external validity concerns the generalizability of its findings (Yin, 1984) and seems to be high for the music industry: six companies, which together held an average share of 30% of the UK music market over the period 1990-1997, were studied in up to three different types of companies. The multiple-case study's construct validity deals with the question whether the gathered evidence truly supports its findings (Eisenhardt, 1989) and appears to be at an acceptable level: both data sources (private and public) and data collection techniques (executive interviews and article tracking) were subjugated to triangulation, whereas the case descriptions and event tables were reviewed by the interviewees (i.e., the key informants) themselves.

HISTORICAL STUDY OF THE MUSIC INDUSTRY

Starting near the end of the nineteenth century, the following section presents a longitudinal study into more than hundred years of co-evolution of capabilities and competition in the music industry. On the basis of the proposed integrative framework, in the following pages we describe and analyze the history of the music industry from 1877. Table 2 classifies the competitive regimes that existed in the music industry from 1877-1990, which will be described below. Table 3 summarizes our analysis which links capabilities foundations to competitive regimes. Table 2 and 3 are related to the industry level, the upper part of the integrative framework, see Figure 1. Table 4 captures our findings about the connection between changing business models at industry level and new organizational forms at firm level as is indicated by proposition 3.

[Insert Tables 2-3-4 about here]

Competition for Hardware Technology: 1877 to 1914, Edison, Berliner, Colombia

Today's music industry with its global presence and worldwide sales of more than 40 billion US$ has its foundations in the vision and determination of two individuals. The first was Thomas Edison who invented the phonograph in 1877. Edison was convinced that the most important applications of his new machine lay in the reproduction of speech for purposes of dictation and education, as was reflected in the

name of his enterprise: the Edison Speaking Company (Schicke, 1974). There was a short supply of recordings and a lack of an acceptable degree of fidelity, which limited consumers' adoption. Although companies such as the North American Phonograph Company and the Dictaphone Corporation acquired licenses and marketed the dictating machines, it was the license from Colombia Phonograph Corporation that saw the real commercial value of the phonograph to be in the entertainment sector (Frith, 1992). It noticed how its machine's sound-provoking characteristics attracted public attention at penny arcades, fairs and amusement centers.

In 1887, Berliner patented a rivaling phonograph that reproduced sound through a horizontal movement of the stylus over a flat disc that rotated on a turntable rather than Edison's drums. Berliner recognized that his gramophone's commercial value was to bring entertainment - especially music - right into people's homes (Frith, 1992). Seeing that a supply of high-quality sound recordings was a prerequisite to make his product attractive to the consumer market, he developed a system for the efficient manufacturing of high-fidelity recordings by using a zinc plate as master record. By separating the recording process from the reproduction stage, Berliner was able to make more duplicates at less cost with easier distribution and higher quality (Jones, 1992).

The United States Gramophone Company introduced Berliner's gramophone on the market for home entertainment in 1895. This new competition forced Edison to respond fast. He improved his product by developing a spring-motor driven phonograph and joined with Colombia to sell the phonograph in the home entertainment market (Jones, 1992). Over the next five years, rivalry between disc and cylinder manufacturers was governed by fights over patent rights and a stream of minor technological innovations (Negus, 1992). For instance, Edison developed a molding process to 'mass produce' his pre-recorded wax cylinders, whilst Berliner joined up with Eldridge Johnson, who had talents in organization and finance, to form the Victor Talking Machine Company in 1901.

Johnson, who had managed to create a structured organization out of Berliner's chaotic laboratory, licensed Victor's technology to new and existing firms such as Colombia and British Gramophone. By 1907, it was clear Victor had won the 'standardization battle' between disc and cylinder (Schicke, 1974). Victor cemented its victory taking up a 50% stake in British Gramophone and split up the world into

various territories (Gronow, 1983). Victor took care of the United States and established agencies in Central and South American countries, as well as in China, Japan and the Philippines. British Gramophone set up plants in Russia, India and the main countries of Europe, from which smaller countries and colonies Africa, Southeast Asia and the Middle East were managed through agencies.

Competition for Software: 1914 to 1930s, New Entry by Content Providers

When Victor's basic patents expired in 1914, more firms entered to supply machines and several major companies were involved in pressing discs for not just their own label, but also third parties (Jones, 1992). In addition, entrepreneurs established small recording companies to market their own products, recorded and pressed by larger companies, on a private label (Gronow, 1983). These business practices emphasized the distinction between selling gramophones and making & trading recordings. It became clear that selling recordings in large quantities was very profitable. Most of the record corporations recognized this switch from hardware to software, and aimed to capture the biggest piece of the newer market (Gronow, 1983). The common approach was to provide a broad range recognizing themes such as dancing, jazz and ragtime. Variety did not always give rise to high unit volumes. Sales of a few thousand records per title were typical and economies of scale could not be realized, even though the overall market was large.

During these years, recording companies were managed and (partially) owned by engineers, supported mainly by technicians (Frith, 1992). The emphasis in the firm's policies was therefore largely technological in character: resources were primarily directed at a gradual improvement of the manufacturing and recording processes. At the same time, technically skilled managers decided on what was to be released on record, but they were only to a minor degree interested in the music itself.

The continuing work on product and process innovation at the technologically oriented recording companies after the First World War further reduced the costs of machines (Jones, 1992). By 1929, about 50% of all US households owned a machine, and firms simulated sales of machines by introducing market segmentation policies. Gramophone models that featured electric motors were introduced in relatively small numbers at high prices; newly developed portable wind-up gramophones were manufactured and sold at low prices in huge quantities (Gronow, 1983). This increase

in machine sales stimulated the growth of record sales. In 1929, more than 150 million records were sold in the US, an increase of 50% over the 1921 figure.

During the 1920s, this stress on technology-related issues impacted the content of record companies' release policies. The leading firms came to compete for a limited number of well-known and very popular theatre and opera performers, often releasing exactly the same songs or new versions of those recordings. These imitative policies were even further amplified through low-cost recordings of popular songs or concerts by anonymous studio performers and symphony orchestras (Frith, 1992). Instead of pursuing a more entrepreneurial policy of promoting and releasing new and promising artists, major record companies kept doing the same over and over again.

Competition for Markets

1930s – Radio's competition – Decca's Entry – The New Star System. Due to the Great Depression and the success of radio broadcasting as a substitute form of entertainment, record sales fell from 150 million units in 1929 to 25 million in 1935, forcing many small recording firms and a few big ones out of the business (Gronow, 1983). The success of radio pointed to the need for new strategy and this came from an entrant not an incumbent. Decca Records, incorporated in the United States in 1934 by Jack Kapp and Ted Lewis, was the first record company that created economies of scale in an industry characterized by high initial costs of recording and relatively low reproduction costs (Sanjek, 1991). Kapp realized that he needed to sell massive amounts of only a few releases in order to make his business extremely profitable. Instead of investing his partner's $250, 000 in gramophone manufacturing, Kapp dedicated his resources solely to records. On top of that, he developed the 'star system', a new business concept that was based on his ability to discover fresh market opportunities and to design new marketing techniques.

Kapp created a compact artist roster of stars such as the Dorsey Brothers and Bing Crosby, whom he had lured away from Brunswick Records, his previous employer. In addition, he developed intensive aggressive marketing and promotion campaigns (Frith, 1992). Kapp also exploited the emerging market for coin-operated machines, and obtained a substantial market share in the profitable jukebox market (Sanjek, 1991).

By 1939, the market had recovered somewhat, as consumers regained confidence (Gronow, 1983). RCA-Victor, Colombia and Decca were the three largest

firms. In 1939, Decca sold more than 13 million records, while its share of the jukebox market rose to 90%. However, it was not long before RCA-Victor and CBS-Colombia targeted the jukebox market segment in response to Decca's success (CBS bought Colombia from American in 1938). The entrance of these established major record companies triggered a rapid growth of the jukebox business segment, which by then accounted for approximately 60% of all record sales. While responding to Decca's successful strategy, the major record companies changed their organizations in fundamental ways. A business-orientated CEO replaced the technically skilled inventor, who had traditionally headed recording firms in the pre-recession years, with a strong personality. The domination of technical staff was reduced as technological research activities were disconnected from record business operations and transferred to parent companies (Negus, 1992). Furthermore, brand-new departments were installed with large marketing and promoting staffs. In the end, the established record companies managed to imitate Decca's highly profitable market strategy. The immediate result was that both the amount and variety of new releases declined considerably, but that the quantity produced of each release was enormous (Sanjek, 1991). Record sales in 1938 had an estimated value of $26 million compared to $6 million in 1933, the bottom year of the depression.

1930s and early 1940s– New Strategies – Radio moves from competitor to collaborator. Profits in 1938 were still just a third of what they had been in 1929, and radio was still the record industry's main competitor. This forced the major firms to reshape their strategy again in the early 1940s (Frith, 1992). They shifted their focus from established but expensive celebrities, to developing and building new (but relatively cheap) recording stars. This created new musical market segments. Whereas the public used to buy recordings by popular artists known from the theatre or concert hall, they now bought music from previously unknown company-created stars. As a consequence, live performances became replications of recordings instead of the other way around.

This new relationship between records, artists and markets coincided with new promotion techniques. Up to the moment, firms had used billboards and newspapers but the market coverage of these tools was limited. Radio with its extensive broadcasting networks and nation-wide coverage became the new outlet to promote the new unknown artists (Sanjek, 1991). In the past a competitor, radio now co-

evolved to became collaborator. Radio stations presented record companies the opportunity to promote their newly developed stars who, on their turn provided radio with a cheap form of programming. Secure links were established between the rival industries. In 1929, the RCA corporation with its NBC radio had purchased Victor network industry, and in this way new stars were exploited on three fronts: film, radio and records. This was the time of Bing Crosby, Benny Goodman and Glenn Miller, and the start of a new era in which music such as jazz and big band came to dominate companies' classical repertoire. Record sales rose: 1940 revenues doubled those of 1938. And in 1940, 100 million records were sold. The Second World War not only triggered American sales but also increased companies' international revenues. Worldwide popularity of US-based music flourished as American soldiers, functioning as exporters, liberated many overseas countries (Gronow, 1983).

Arrival of Alternative Music: Late 1940s & 1950s

During the first ten years after the war, major record firms were focused on the production of classical music on the one hand, and jazz and big band as alternative forms of popular music on the other. In 1948, a new entrant called Atlantic Records stepped into the R&B (rhythm and blues) segment of the market (Gillett, 1988). It was followed by other small independent, but highly entrepreneurial labels such as Imperial, Dot, Sun and Chess. Atlantic and other small independent record labels co-operated with local radio stations, as both realized that the consumer really wanted more variety in music styles (Peterson and Berger, 1975). This made it possible for small independents to get their records played on air by a large number of radio stations.

But the new radio competitive environment in the United States was not the only factor in the emerging success of independent labels that searched for new musical styles. The cost advantages of tape recording and the mobility of its equipment enabled small record companies to create their own studio and recordings at acceptable cost (Jones, 1992). The new editing possibilities of tape recording, enhanced by the development of the two-track system and the invention of 'stereo' in 1958, also contributed to the development of new musical styles as artists and producers experimented with tape's new opportunities. In addition, invention of the microgroove record had made it possible to distribute more records at far less costs. As a consequence, a host of distribution companies were born, functioning as the

minor record companies' lifeline to the retail market (Peterson, 1990). Independents mainly released individual songs on singles, and these 45-rpm records took far less storage space and handling time than the larger 331/3 LPs. Moreover, the number of different places where one could buy a record expanded as a result of new distribution channels. Next to the traditional retailers, records were now sold at departments of warehouses or other specialty stores, and even by mail via record clubs (Mittlestaedt and Stassen, 1994).

After 1955, a host of small but entrepreneurial record labels was responsible for a significant increase in both the variety and number of new releases. In these years, artists like Elvis Presley, Jerry Lee Lewis, Chuck Berry and Little Richard achieved tremendous success. The independent sector flourished. Whereas the big four owned approximately 75% of the $277 million US record market in 1955, by 1959 their share tumbled to 34% of a growing market that reached a value of $603 million.

The rigid organizational structures of the major corporations appeared to be one of the factors that inhibited a timely response to new market conditions (Peterson, 1990). The person responsible for A&R (artist and repertoire) at the independent record firm was the entrepreneur (Gillett, 1988) who usually had a feeling for what kind of music or artist could be successful in the future. Furthermore, he (or she) was an expert on all aspects of the business, from producer to promoter, and was often in charge of the firm.

The significance of the A&R role and the key position of radio disc jockeys as gatekeepers were not immediately recognized by the lagging major companies. Initially, these firms aimed to recapture lost market share by directing their attention towards the LP instead of the single, and by offering discounts to most of the country's distributors. By 1964 the big four realized that the music styles of R&B and rock 'n' roll were not just passing fads. The market had continued to grow in these turmoil years, and this growth was a direct consequence of the independent record firms' discovery that these new music styles strongly appealed to the youth part of the market (Frith, 1992). The majors had never really addressed this younger generation (Denisoff, 1986).

The major companies that had been so successful in the first decade after the war were not only being hurt by a host of successful independents, but were also under attack from foreign companies that entered their home market. In 1955, EMI

had acquired Capitol, one of the four majors, while Philips' record division Phonogram had purchased full-grown independent Mercury to enter the American market only six years later. Unlike their US counterparts, these European firms were deeply involved in the development of local music and artists.

Eventually, the US firms reorganized their companies and altered their traditional market strategies. Emphasis was now placed on the discovering and developing new talent in the popular music field, and special A&R departments were created (Peterson and Berger, 1975). They also invested heavily to intensify their relationships with radio and the newly emerging TV. Recording stars not only had their own typical style of music, but also propagated a unique and eccentric image; it was in these turbulent years that sound and image became inseparable (Frith, 1992).

By 1964, Colombia and Capitol showed that they had been able to adjust to the changing market conditions when their newly incorporated A&R departments achieved success with the discovery of hot acts like the Beach Boys and Bob Dylan (Peterson and Berger, 1975). RCA failed to establish itself in the market for popular music. It tumbled from the first to the very last position in America's top ten record companies within ten years. It survived through its superior position in classical music and its highly profitable but coincidental contract with Elvis Presley (Gillett, 1988). Even Decca, once prominent entrepreneurial records company and pioneer of the star system, was not able to retain its competitive position as its rivals released hit after hit.

Competition for Labels – 1960s & 1970s – Warner's entry and the Federal System

The most remarkable new entrant during the 1960s was Warner, a diversified firm that achieved success by introducing a new way to build and structure a record company organization. The big movie corporation Warner Brothers had noticed the ease with which independent labels had ruined the dominance of the major record companies (Sanjek, 1991). This prompted Warner to create Warner Records and buy Frank Sinatra's Reprise Records in 1963. When Steve Ross, president of Kinney Corporation, gained financial control of Warner Seven Arts (the holding company), he reconfigured Warner's music assets, and acquired three of America's most successful independent record labels; Atlantic, Elektra and Asylum (Sanjek, 1991).

Steve Ross' innovation was the 'label federation' concept, in which individual labels continued to operate in a relatively autonomous manner. Under the Warner umbrella, separate divisions were created according to music genre: middle-of-the-road (Warner and Reprise), rock (Elektra and Asylum), and R&B and soul (Atlantic). This formula enabled the labels to maintain their innovative character in accordance with the specific characteristics of their particular target markets (Denisoff, 1986). At the same time, the parent company reaped synergistic benefits as it created a company-wide manufacturing and distribution set-up called WEA to exploit economies of scale (Lopes, 1992). As the first record company with a multi-divisional organizational structure, Warner became the leader of the US record industry with a 15% market share in 1969 only ten years after its diversification into recorded music.

Warner became a role model and others replicated its radically new organizational approach. In 1969, Colombia purchased Bell Records, renamed it Arista and placed the label in a separate and semi-autonomous division. The Music Corporation of America (MCA), originally a talent agency, stepped into the record business by creating its own label, and in 1967 acquired Decca. To expand its interest in the American record industry, PolyGram (created in 1972 by merging Phonogram and Polydor) purchased RSO Records in 1975 and invested in Casablanca Records. All of these companies adopted divisionalized structure. As consequence, the number of successful independent labels declined, while the US returned to an oligopolistic setting with the old names dominating the industry (Lopes, 1992).

For many firms, maximization of album sales became the prime objective, and it was in this era that new marketing and promotion tools such as cover graphics, radio and TV advertising, live concerts, press interviews and photo sessions were developed and refined (Denisoff, 1986). Whereas the success of an established artist could be predicted without too much difficulty, forecasting whether a newcomer's album will be a hit was more difficult. This uncertainty had much to do with the uncertainty about of consumers' taste.

During the 1970s, the majors started to cope with this market uncertainty by spreading their risks (Denisoff, 1986). As the average chance of success for a newly developed act was even less than 10 percent, major corporations began to release an enormous amount of new products. Coincidentally, the industry experienced a sales growth from $2.0 million in 1973 to $4.1 billion in 1978 and there was a rise in prominence of international players such as EMI and PolyGram. With cassette as

medium, CBS being present on an international level was finally recognized by the American giants. CBS and Warner increased the activities in Europe in these years (Laing, 1992). Next to selling US-based records, their European units became more and more involved with the development of local acts and the creation of national artist rosters. Likewise, they built company-owned distribution channels in most of the countries on the European continent.

The 1980s - Competition for Catalogues – Profits from Intellectual Property Rights

In 1978, the global record industry flourished like it had never done before. But this sunny situation was severely clouded when the industry went into a painful recession during the final months of 1979. Market sales tumbled between 1979 and 1983 (Denisoff, 1986). In response, the major companies restructured their organizations: marketing and promotion budgets were minimized, new talent inflow came to a halt, and artist development was restricted. All remaining resources were directed at the cultivation of superstars. Thousands of employees, especially within A&R and marketing functions, were fired. But consumer interest into music was revived as a result of the introduction of MTV and the development of the compact disc by Philips (Burnett, 1996). CD companies were still modest in the early eighties compared to LP and cassette sales. Prices for CD players fell rapidly, enabling the average customer to buy this new audio equipment, but the record industry maintained it original price levels for the compact disc. The new format's compactness and solidity made easier shipping, cutting distribution costs which more than compensated for higher recording costs. Profits on compact discs were considerably higher than profit margins on LPs and cassettes had ever been.

Pleased with the enhanced quality of the CD system, consumers replaced their existing LP collections with a new assortment of compact discs. This demand for old music on new material was quickly recognized by the major record companies, which re-released their existing catalogue on CD (Burnett, 1996). The enthusiasm with which consumers purchased CDs containing 'old' music material made the major record companies aware of the importance of owning a large inventory of music from the past. The profit in the business shifted from the physical manufacturing and distribution of music products to the exploitation of copyrights attached to old recordings (Qualen, 1985). Revenues could not only be generated through sales of

music released on a particular format, but could also be collected by exploiting the rights connected to that piece of music.

Inspired by rising sales and bright forecasts, the major record firms looked for new avenues to exploit their rights on a larger scale, and intensified their international approach to the music market by increasing foreign investment (Wallis and Malm, 1984). An international structure of operating companies made local artist development possible, while multinational distribution networks supported the multi-country release of records. Moreover, the major companies could cultivate their existing catalogues in new countries to new consumers. The expanding possibilities surrounding the exploitation of their copyrights made record companies jump into the business of music publishing during the second half of the eighties (Wallis and Malm, 1984). As the majors recognized the significance of a large back catalogue, they turned their attention to independent-publishing companies and they began to purchase small and local publishing houses (Burnett, 1996). According to the NMPA, music-publishing revenues on a worldwide level grew 10% a year from 1982 onwards to more than $3.5 million by 1990, more than 20% of which was accounted for by the US.

The sudden emphasis on this secondary source of income also changed record companies' attitude towards the value of television broadcasting and global advertising (Malm and Wallis, 1992). Company revenues were increasingly through licensing fees from media companies that created films, books, magazines, videos, and other consumer products. However, the opportunities to cultivate rights across a wide range of media did not escape the attention of corporations operating in other entertainment industries. These firms recognized the central role of music within different forms of entertainment, and were attracted by the increase in music sales and music's potential to link these segments in a synergistic way (Laing, 1992). Ownership structures within the music industry also changed radically as major record companies came under the control of multinational corporations in the multi-media & publishing and consumer electronics industries. Warner Music had become part of Time-Warner, while Japanese conglomerates Sony and Matsushita had incorporated CBS and MCA. Thorn, Philips and Germany's Bertelsmann owned EMI, PolyGram, and RCA respectively. At the start of the 1990s, these six companies dominated almost 80% of the global record industry.

MULTIPLE-CASE STUDY OF 1990S

The period described above has focused on the co-evolution between streams of new entrants and incumbent firms, and on strands of technology and on radio versus record companies between 1877 & 1990. The next section presents a finer grained study that covers an eight-year period (1990-1997) of co-evolution of capabilities and competition in the British music industry. It describes and analyses co-evolution from a firm level perspective as described in the lower part of the integrative framework in Figure 1. Below we describe and analyze how six record companies created and refined capabilities during a particular competitive regime in which the rules of the game were again redefined. Furthermore, we highlight the context, content and process of organizational change of these companies. In discussing the content of organizational change, we pay attention to the creation and refinement of capabilities.

EMI & POLYGRAM introduce New Competitive Rules after Acquiring Former Independents

During the start of the nineties, UK record sales declined bringing a sudden halt to the UK industry's successful path of development. At the same time, the joint market share of British independent labels began to erode when the most celebrated of these companies were attached by major record corporations. In their search for record catalogues and publishing rights, EMI and PolyGram purchased in the period 1989 - 1992, Chrysalis Records, Virgin Music, Island Records and A&M Records, the four biggest independent record companies, raising their combined market share from 29% to 45%. Because independent record companies were traditionally regarded as the engine of musical innovation, this merging of majors and "indies" was not favorably received. In the press, many said that it would obstruct the symbiotic process between other groups and therefore block a renewal of artists and music, which the industry so badly needed now that it was perceived to be in a state of depression. However, an unexpected and constructive side effect would emerge out of these take-overs.

The 1989 acquisition of Island Records by PolyGram triggered organizational change (see Table 5). We will pay attention to the context, content and process of this change process. Although Island Records had experienced an average 3.6% market share between 1984 and 1988, its market performance had suddenly declined. In the year of its take-over, Island Records had a 0.8percentage market share, due to a

departure of its superstars. PolyGram appointed a new managing director (MD) who noticed a new opportunity for his company around the exploitation of existing catalogues and the development acts into mainstream pop music. According to interviews with the company, this MD developed a new vision in which the label's successful music history could be merged with the commercial demands of the future. His primary aim was to lift Island to a situation in which it introduced new alternative artists as well as new musical genres to the market, but to a much larger audience than was previously thought possible. Traditionally the record industry held that innovation in music and the commercial market were mutually exclusive opposites, and as the 1990s progressed they became integrated. The cases described in this section show this process of integration within and between firms. But the MD based his change program on a different perception of the business, and positioned Island as a commercially alternative record label among it rivals. To be successful, Island needed to create new capabilities to realize it novel strategy. Its dormant A&R capabilities had to be awoken, while capabilities in marketing had to be bred considering the near absence of marketing skills within the company.

[Insert Table 5 about here]

According to interviews with company executives, as a prelude to the mandatory restructuring of Island's organizational processes, its video division was streamlined, while the art department was terminated. In addition, 40% of the company's staff was discharged to make room for new people from outside the firm with experience and skills in both A&R and marketing. The new MD structured Island's organizational processes to conform to the designs he had observed at individual labels of major record companies. This enabled him to place managers with a 'corporate' history at top positions and put staff with working experience at "indies" in front-line positions. The heightened awareness of commercial aspects also required the launch of a new legal and business affairs department that would keep track of the label's property rights and contractual relationships. The original founder's influence on the label's direction was eroded. Finally, new skills were learned as new acts and music styles were marketed on a broad consumer market. In the end, Island Records managed to resolve the dilemma between innovation in, and commercialization of,

music. The actions transformed Island's financial performance, evidenced by growth of turnover and profits during the first half of the nineties.

Virgin Records also experienced a successful turnaround. As a fast follower to Island's strategic innovation (be it that Virgin pursued a more pronounced international strategy), Virgin managed to triple its turnover and to double its profits during the first five years after the label had been acquired by Thorn-EMI in 1992. According to interviews in Virgin, the internal organization was structured as a company-owned network of small satellite labels, which were categorized into three broader music divisions (pop, alternative, and dance). This new organizational set-up facilitated the development of specific A&R and marketing capabilities at the front-line level where creativity was key, while the company's more general A&R and marketing course was planned at top level. All this cumulated in Virgin's ability to resolve the dilemma between diversity in artist development and targeted marketing at the global level.

Majors BMG and Warner respond

In contrast to EMI and PolyGram, which relied on acquisition, BMG UK (part of Bertelsmann) built its strategy on a comprehensive approach to collaboration. Because the firm had its roots in RCA, the American records company that once had been one of the 'big four' companies until mid-1950s, BMG's repertoire had been primarily US-based. But as British music was important to the company's International group, the UK company had to create a sound base of local repertoire. Table 6 displays the findings of company interviews that revealed the context, content and process of organizational change, and summarizes BMG's search for capabilities in a changing competitive environment. In contrast to the cases of Island and Virgin, there was no change of ownership to trigger the change process. Although RCA had been acquired by multi-media conglomerate Bertelsmann AG, this had already happened in 1986. While RCA's US-based musical focus was indirectly responsible for the changes that were about to take place, a time lag of some six years makes it difficult to assume the presence of a direct causality. Although no executive replacements occurred at the highest managerial level within BMG UK, the appointment of a new Managing Director at the RCA label level was an important catalyst for the firm's transformation.

There was an obvious trigger to change from poor performance. During the period 1986-1988 BMG UK had experienced a significant market share decline from 8.2% to 5.2% by 1991. The increasing emphasis on local content in the world's music markets provided an opportunity for BMG to recover. Bertelsmann made BMG UK the overall group's main source of repertoire. This meant that the UK had to deliver commercially attractive music not only to the local market, but also to other parts of the world covered by the International group. But with almost no experience in local A&R, BMG had to create new capabilities to meet such a deficit in British artist development.

[Insert Table 6 about here]

The interviews revealed that the reorganization of BMG's internal processes essentially happened at two different levels within the company (see Table 6). On the one hand, the creation of separate departments and project-based structures enabled a focused approach to A&R and marketing at BMG's front-line labels. On the other hand, more strategic concerns that surpassed individual labels and other cross-label issues were made manageable through the formation of a new Music Division at the corporate level. Whereas the labels used to operate autonomously from each other, more emphasis was given to the coordination and leveraging of skills across the company's front-line labels. The creation of a network of license deals, joint ventures and satellite labels took place at both the label and corporate levels within the company. In addition, the BMG Classics label was strengthened via the purchase of independent Conifer Records, while a new business venture was launched to enter the TV compilation albums market. In the process of developing such an elaborate organizational structure, BMG created distinct skills in managing its interface with the creative community, and its evolving label infrastructure enabled BMG UK to both access and internalize creative resources. The company's performance improved rapidly from 1992 onwards, when operating losses were turned into substantial profits.

Warner Music UK had also noted a shift in consumer preferences from US-based music to local artists. The interviews at Warner revealed that like BMG, it also aimed to create new capabilities by means of an organizational change trajectory (see Table 6). Warner's strategic renewal was largely a corporate issue; first in terms of

the creation of separate label groupings, and later through the launch of "Warner.esp" a new division focused on compilation albums, which acted as integrator and central intelligence unit. During this second stage, new skills were developed to share knowledge across label groupings, which enhanced both label groupings' appreciation for a more scientific approach to market research. Furthermore, the move into compilations introduced Warner to cooperative venturing with other major record companies. Warner Music UK thus managed to achieve integration between innovation and commercialization both within the firm and across its boundaries. As a result, both turnover and profits increased at a rapid pace between 1992 and 1996.

Independents' Response to the New Rules

While the four major companies intensified operations to meet local independent competitors, independent labels began to pay more attention to international market opportunities. One independent company that had already developed an international perspective in the second half of the eighties was Roadrunner Records. It was a small label specialized in metal music with its home base in the Netherlands, that had expanded its scope towards surrounding countries (France, Germany and the UK), after which it set up overseas units during the nineties (Brazil, Japan and Australia). These foreign affiliates were primarily responsible for marketing Roadrunner's largely US-based repertoire, which the label extracted from its office in New York.

Our interviews revealed that the appointment of a new A&R manager and Managing Director at the UK company, as well as a new Strategic MD at the International office were important catalysts to organizational change, see Table 7. The chairman of the company spotted an opportunity to increase Roadrunner's base of international repertoire. A sudden success of one of the label's dance acts in 1995 and the rising popularity of British music made him develop a vision in which Roadrunner Record's historical strength in personal A&R could be combined with a move into other market segments. His primary aim was to convert Roadrunner into an international record company that would also be active in various non-metal styles of music with a British accent to its US-dominated repertoire. However, the company had to realize this new strategy. First, new A&R capabilities had to be developed. Second, new capabilities were needed to increase efficiency and coordination at the International unit level. The process of change simultaneously took place at two

distinct but related levels within the overall company: at the UK subsidiary and within Roadrunner International.

At the UK office, reorganization took place in which new marketing and promotion staff was hired and the administrative function was brought in-house. In the Netherlands, there were new information systems that enhanced the flow of intra-company information, and increased speed in administrative procedures. In addition, these departments were made responsible for the development of skills that involved intellectual property rights protection and cross-subsidiary coordination. The distribution deal with PolyGram in the UK not only assisted sales but also showed an increasing commitment towards a more rational business approach. At the time of completing our case, Roadrunner Records appeared to have made a promising start in integrating innovation and commercial market entry.

[Insert Table 7 about here]

Another internationalizing company in the independent category was Independiente. It aimed to create new capabilities fundamental to a new and international approach to its business (see Table 7). It made an international licensing deal with Sony Music providing access to Sony's global distribution and marketing capability. At the same time, organizational processes were structured along project-based company lines where expertise and skills crossed functional boundaries. Formal and informal meetings were blended to create effective vehicles for communication and increase the organization's operational efficiency. Creative action could thus take place within the company without obstructing a more rational business approach. In the end, Independiente became successful with respect to managing creativity in music and creativity in business at the very same time.

Discussion and Conclusions

The empirical analysis illustrates the basic premise that search behavior drives coevolution. The first part of our empirical study of the music industry, the period 1877-1990, displays how interorganizational search for capabilities at innovative record companies like Victor, Decca, Atlantic and Warner resulted in a competitive struggle at the industry level. This stimulated the search behavior of rivals that was

directed at the imitation of previously unknown capabilities. In addition, the multiple-case study for the period 1990-1997 shows the firm-level point of view. It highlights the challenges each firm faced in trying to increase its capabilities in the two dimensions of commercialization and creativity. In Figure 2 we depict how the case companies moved towards one another as followers adapted to changes in their competitive environment. Independiente, for example, was originally positioned in the upper left corner, but moved further on the commercial business capability dimension by creating new capabilities in a.o. organizational coordination. As is illustrated in Figure 2, Island's search behavior was essentially manipulative in character as it forced other rival firms to adapt to the resulting change in their competitive environment, and to search for new capabilities as well. These findings illustrate proposition *1.a* and proposition *2.a* on how search behavior is connected among firms. Innovation and imitation appears to be an important force.

[Insert Figure 2 about here]

Next, the description and analysis of the music industry suggests how exploration at the industry level was a matter of explorative search for distinct capabilities by innovators and early imitators. This was observable during the six regimes in Table 3. Although the data presented in the historical study does not reveal in-depth knowledge on the search behavior of imitators, it does indicate that early imitators (at least) are also involved in explorative search behavior when trying to replicate the innovator's new capabilities base. This can be observed in the fact that it took rival record companies (such as Decca) several years before they had managed to erode the innovator's competitive advantage, which reflects the strenuous nature of their search behavior.

The multiple-case study is more informative in this respect. It shows how both manipulators and adapters were engaged in explorative search as the studied record firms created new capabilities and dissociated themselves from established practice. Table 8 provides ample evidence to support the idea that exploration at the firm level was in fact the creative search for new capabilities by both manipulators and adapters. It focuses on the capability of A&R in the companies of Island, Virgin, BMG, and Warner, and on internationalization in RoadRunner and Independiente. Moreover, the multi-case study shows the interplay between early movers and later followers. For

example, Island Records appears to have been a manipulator of its environment where as most of the other firms in our study were early adapters. In sum, our findings echo the propositions *1.b* and *2.b*, about innovative and early imitative behavior.

[Insert Table 8 about here]

Our story of manipulation and adaptation is not replicated across all sectors of the economy. For example, it is well known that in microcomputers successive waves of entry have displaced incumbents (D'Aveni, 1994). In contrast, incumbents in industries such as financial services (Hensmans et al., 2001) and in particular water (Baden-Fuller and Dean, 1999) overcome inertia and adapt. The co-evolution story of the music industry seems closer to the latter industries than the former. Whilst we do not give reasons as to why this is the case, our research adds a new dimension to the work of Henderson and Clark (1990). Although they examine technological trajectories, we investigate a much wider set of forces, showing a more complex picture.

How is that the incumbents survive? Rival firms appear to be engaged in a sequence of organizational change trajectories (Craig, 1996) or strategic renewal journeys (Volberda et al., 2001), rather than single punctuated change processes as examined by Tushman and Romanelli (1985) and others. The history of the music industry gives many examples of this, some of which are captured in the column titled transformational capabilities in Table 3. For example, the text refers to the fact that Edison's National Phonograph Company joined with Columbia records and undertook many kinds of innovations to survive Berliner's onslaught. Another example was the challenge of the independents in the mid-1950s, when RCA and Decca were not able to conform to the new rules of the competitive game. It was only when both companies were acquired by Bertelsmann and Matsushita, respectively, and undertook a sequence of activities that they were able to regain their strength.

In a similar manner, the multiple-case study clearly shows how record companies also managed to adopt a strategic choice perspective (Child 1972). As Table 8 shows, this enabled them to shake off old habits and routines, and to renew their search for novel capabilities through radical processes of organizational change, eventually resulting in new organization forms and business models. We again refer to Tables 5, 6, and 7 that describe some of the multiple steps that organizations took

internally. We suggest that this co-evolutionary perspective sheds new light on industry development. Entrepreneurial record companies with different capabilities introduced new competitive practices that replaced the existing business models and rules of the game. This not only induced explorative search at rival companies, but also took the industry to a next round of development or, in other words, to a new competitive regime. All these empirical observations illustrate propositions 1.c and 2.c, thus suggesting that capabilities and competition coevolve over multiple competitive regimes and trajectories of organizational change.

By following an industry and some of its key players we were able to see how new business models tracked new organizational forms, the issue highlighted in proposition 3. Table 4 shows two aspects of this dynamic based on our industry-evolution study. On the one side we see the input and output dimensions of the business model, and on the other side we see the new organization forms. The macro perspective gives a general view, but does not take into account the variation between (and within) firms. Here, the case studies fill the gap. Tables 5 to 8 highlight aspects of the development of the six firms. Aspects of the changing business model are captured by the three dimensions of organizational changes. We suggest that the juxtaposition of new business models and new organizational forms is no accident, but rather another co-evolutionary theme. Our findings echo other work such as Djelic and Ainamo (1999), Koza and Lewin (1999), Webb and Pettigrew (1999), and Whittington *et al.* (1999), all empirical studies in the *Organization Science* special issue on Coevolution.

Of course, we realize that our conceptual framework and empirical analysis have several important *limitations*. Although we discuss the co-evolutionary effects of external influences such as radio and the changing importance of intellectual property rights, we do not emphasize the institutional features of government, the structure of the capital markets, and national culture. These attributes may influence various relationships in the proposed framework. For example, Lewin *et al.* (1999) argue that specific institutional arrangements tend to enable and restrict strategic and organization adaptation options and will impact our framework. Like wise, Dijksterhuis *et al.* (1999) observe the importance of extra institutional environmental factors such as demographics, social movements, and management logic. There are other limitations, highlighted in our text, such as the lack of depth concerning managerial and organizational processes. In future research, the multi-case study

could focus on cognitive interaction and interpersonal networks of the top management of the firms involved. To enable such an analysis, however, additional data are needed regarding the professional background of managers and their networks. Moreover, the focus of attention in our framework and empirical analysis was on what type of capabilities are developed at firms, with only limited insight into how these capabilities are actually generated and refined over time. Insight into the refinement of capabilities is especially important since such behavior can culminate in the rise of core rigidities or competence traps.

Another important issue for future research is to investigate why some new capabilities and organizational changes have an impact on the industry triggering changes in the prevailing competitive regime while others are not successful. A more extensive analysis of the context of the creation of new capabilities and of organizational change, taking into account the impact of e.g. network externalities or market power on the likelihood of successfully triggering changes in the existing competitive regime, seems a fruitful approach to further explore the reciprocal relationships between firm and industry levels of analysis. Related to the enabling impact of network externalities, a final issue for future research is undoubtedly the emergence of the new entrants in the music industry. Examples are Napster (in which Bertelsmann through BMG recently acquired a stake), Gnutella and Duet (a recently announced joint venture of Vivendi-Universal and Sony) that allow their users to swap music files for free via their Internet service. According to the Economist (2001, p.68) at present Napster users "constitute the largest community of music-lovers on earth", numbering over 50 million registered users. These new entrants not only challenge incumbent firms in the music industry (the incumbents started a lawsuit against Napster) but might trigger new capabilities, a new competitive regime including new business models and new organizational forms in which for the first time in the history of the music industry as we have described here the consumers become really powerful.

Notwithstanding these limitations, we think our study highlights two important aspects of the coevolution of capabilities and competition. First, combining the results of the historical study with those of the multiple-case study allows us to see how rival firms in a competitive environment can be both different and similar to one another in terms of their capability bases at the same time. The industry history, focusing primarily at the meso-level, emphasizes similarities. It stresses the new

capabilities that were founded (and later on proliferated) during each competitive regime, and how rival firms move towards uniformity as they copied and proliferated capabilities tied to the extraction, development and commercialization of creative resources. At the same time, the multiple-case study, focusing primarily at the micro level, showed how different record companies displayed a significant degree of diversity. For example, while all of the studied companies were similar in their aim to converge creative music with commercial business (in line with the new competitive rules as initially pioneered by one of them), each of them pursued a different search route. The basic features of the organizational change trajectories followed by the case companies show substantial variation in terms of market positioning, capability development, organizational realignment, and the learning of new skills. As time passed, these initial differences were amplified through exploitative search, which increased individual firm idiosyncrasy (McKelvey, 1997). Thus, based upon historical and multiple-case research into the music industry, and in line with the integrative framework, this suggests that coevolution of capabilities and competition embodies multi-level but counter-moving patterns of firm uniformity and idiosyncrasy.

Secondly, we would like to point out that interaction patterns among rivals and path dependencies at individual firms can have both a positive and a negative impact on the development of new capabilities. Interactive behavior through acquisitions, joint ventures and strategic alliances among record companies speeded up the capability development process at these firms. Although this was beneficial to the individual firms in their struggle to conform to the new competitive rules, it also pushed the industry into more intense levels of competition. In a similar vein, the existence of path dependencies due to long-term commitments and excessive learning effects slowed, but did not stop, processes of change in times of competitive turbulence. Our firms were able to break free from competence traps and even profited from their unique history by retaining its positive virtues and integrating them into new entrepreneurial actions. In sum, coevolution stems from endogenous interaction patterns, between the search for capabilities and competition, and displays alternating forces of maturity and rejuvenation at firm and industry.

To conclude, we think this study fits within Lewin and Volberda's suggested Prolegomena on Coevolution (1999). Although they argued that populations of organizations undergoing discontinuous change should become the focal object of coevolutionary studies (e.g. retailing, financial services, biotechnology, and

multimedia), we think our study of the music industry shows some interesting dynamics. The co-evolutionary perspective allowed us to both integrate old streams of ideas, and to thread new ones, that seems ideal for application to complex industries. Old ideas such as evolution of capabilities and competition were enhanced by the co-evolutionary approach. New ideas such as the co-development of organizational form and business model, still in their infancy in the literature, were brought on further. Messy industries such as music, vitally important in the knowledge-based economy, are we suggest excellent platforms relevant for further exploration.

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TABLE 1: CASE STUDY RECORD COMPANIES

	Case Category	**Formal Owner**	**Date of Incorporation**	**Number of Employees**	**UK Market Share**
Island Records	Acquired independent	PolyGram	1962	62	2.0 (1.4-2.6)
Virgin Records	Acquired independent	EMI	1973	161	8.5 (6.4-10.7)
BMG International UK	Major operating company	Bertelsmann	1980	303	6.4 (4.7-8.3)
Warner Music UK	Major operating company	Time-Warner	1970	330	10.4 (7.2-12.6)
Roadrunner Records	Independent	Private	1987	7 (120)	0.1 (0.1-0.2)
Independiente	Independent	Private	1983/1996	17 (19)	0.9 (0.2-1.5)

Notes:

1. *Incorporation refers to date of establishment in the UK.*
2. *UK Market Share refers to the annual averages for the period 1990-1997; figures between brackets are highest and lowest values in this period.*
3. *The figures between brackets in the Employees column are worldwide ones.*
4. *In May 1998, Philips sold PolyGram for an amount of $10.4 billion to Seagram that aimed to integrate the company with Universal.*
5. *Independiente was formerly known as Go! Discs (which explains for the two dates of incorporation); UK market shares therefore concern the Go! Discs label in the period 1990-1996.*

TABLE 2: CLASSIFYING COMPETITIVE REGIMES IN THE MUSIC INDUSTRY: 1877-1990

Regime	Basic Product	Target Market	Company Value Point	Carrier Technology
Technology logic (early 1900s)	Gramophone cabinets	Market for home entertainment	Separate recording and manufacturing	Drums/Disc system
Software shift (mid 1910s)	Gramophone records	Market for musical variety	Batch-based capacity production	Disc system
Star system (mid 1930s)	Music recorded by celebrity artists	Market for mass entertainment	Scale-based marketing and distribution	Radio
Alternative music (mid 1950s)	Music recorded by alternative artists	Youth market segments	A & R integrated with flexible distribution	Vinyl record Tape recording
Federal system (late 1960s)	Music as social awareness	Multi-market segments	Label autonomy and HQ control	Tape cassette
Rights shifts (mid 1980s)	Music as property right	Global multi-media markets	Chain cooperation and publishing	Compact disc

Source: Huygens (1999)

TABLE 3 COMPETITIVE REGIMES AND THEIR RELEVANT CAPABILITIES FOUNDATION

Competitive regime	Managerial Capabilities	Input-Based Capabilities	Transformation-Based Capabilities	Output-Based Capabilities
Technology logic	• Market for home entertainment • Availability of minimum software • High fidelity of recordings	• Horizontal disc technology • Zinc masterplate for recording • Financial and technological knowledge	• Structured firm organization • Efficient manufacturing plant • Separate recording and production	• Quality gramophone disc • Technology license agreements • International strategic alliance
Software shift	• Market for music recordings • Availability of minimum hardware	• Theatre and opera performers • Technological skills and experience	• Innovation in recording/manufacturing • Capacity-based production	• High release variety in recordings • High technological status
Star system	• Consumer preference for celebrities • Manipulation of consumer taste	• Compact roster of celebrities • Marketing and promotion budgets	• Avant-garde marketing campaigns • Economic rationale of costs vs. revenues	• Network of distribution channels • Network of jukebox contracts
Alternative music	• Upcoming popular youth market • Continuous generation of new music • High market responsiveness	• Roster of unproven and popular artists • Low-cost recording studios • All-round skills of owner/manager	• Talent discovery and development • Entrepreneurial management • Label culture of musical innovation	• Independent distribution network • Network of local radio contacts • Label reputation
Federal system	• Multiple market coverage • Synergy across focused labels	• Collection of acquired record labels • Headquarters' corporate knowledge	• Label autonomy in A&R and marketing • Shared administration and P&D set-up	• High musical variety in album releases • Popular corporate image
Rights shift	• Cultivation of music property rights • Multiple-time buyers of music	• Multinational distribution networks • Scale-based CD manufacturing plants	• Cooperation within value chain • Specialization of artist development	• Expansion of record catalogues • Network of deals with independents

Source: Huygens (1999)

TABLE 4: COMPETITIVE REGIMES, BUSINESS MODELS & NEW ORGANIZATIONAL FORMS

Competitive regime	**Changing Industry Business models**		**Changing Organizational Forms**
	Input-Market Activities	**Output-Market Activities**	
Technology logic	-	-	-
Software shift	From theatre artists to anonymous performers	From standard cabinets to target models	From technology start-up to record company
Star system	From contracting artists to developing stars	From billboard to radio and movie promotion	From small company to corporate bureaucracy
Alternative music	From artist discovery to image building	From local to network radio & TV promotion	From A&R individuals to A&R departments
Federal system	From artist variety to overproduction	From sales promotion to elaborated marketing	From multiple labels to foreign subsidiaries
Rights shift	From music artists to entertainment stars	From local to global multi-media networks	From record company to music company

Source: Adapted from Huygens (1999)

TABLE 5: CONTEXT, CONTENT AND PROCESS OF ORGANIZATIONAL CHANGE AT ACQUIRED INDEPENDENTS

	Island Records	**Virgin Records**
Context		
New executives	Appointment of a new Managing Director	Formation of new three-headed management team
New ownership	PolyGram's £272 million acquisition of Island	Thorn-EMI's £560 million acquisition of Virgin
Threat/opportunity	Competition focused on catalogue and mainstream pop	No competition for new music on a global level
Performance decline	Rapid decrease of company market share over 1989	Sudden decrease of company market share in 1991
Content		
Vision	Merge Island's musical past with future commercial demands	Merge Virgin's entrepreneurial past with future global demands
Scope	Introduce new music/artists to a wide audience	Deliver new music/artists to a worldwide audience
Positioning	Island as a commercially alternative record label	Virgin as an internationally focused record company
Capabilities	Rebirth/formation of A&R and marketing caps	Convergence of new A&R and marketing capabilities
Process		
New philosophy	Discover high-quality repertoire with commercial potential	Discover alternative repertoire with global potential
Reorganization	Structure with new A&R and marketing staff at top and front-line positions	Internal network of divisionalized sub labels
Internal ventures	Launch of internal legal and business affairs department	Launch of alternative and dance departments
New alliances	-	-
Status re-evaluation	Declining influence of founder Blackwell on label strategy	Increasing attention to research-based marketing
Learning new skills	Marketing new and alternative music (genres)	Coordinating creative and planning functions
Resolving dilemmas	Innovation in and commercialisation of music	Diversity in A&R and targeted marketing

Source: Huygens (1999)

TABLE 6: CONTEXT, CONTENT AND PROCESS OF ORGANIZATIONAL CHANGE AT MAJORS

	BMG International UK	**Warner Music UK**
Context		
New executives	Appointment of a new RCA Managing Director	Appointment of new WEA MD and new Warner.esp GM
New ownership	-	-
Threat/opportunity	Increase in consumer attention for local content	Increase in consumer attention for local content
Performance decline	Significant decrease of company market share 1989-1991	-
Content		
Vision	Merge Bertelsmann's management ethos with local market demands	Merge Warner's traditional marketing approach with local market demands
Scope	Deliver commercial artists to international audience	Deliver commercial artists to UK audience
Positioning	BMG UK as internationally-oriented local record corporation	Warner UK as locally-oriented American record corporation
Capabilities	Incorporation of local A&R capabilities	Coordination and development of A&R capabilities
Process		
New philosophy	Build local repertoire to be leveraged internationally	Build local repertoire to be leverage via catalogue exploitation
Reorganization	Music Division at corporate level; projects and departments at label level	Separate label groupings (WEA and East West) and Warner.esp
Internal ventures	Launch of satellite labels and Global TV	Launch of TV compilations division
New alliances	Various license deals and joint ventures	Various license deals and JVs at labels; compilation alliances
Status re-evaluation	Increasing attention to cross-label coordination	Increasing attention to systematic market analysis
Learning new skills	Managing a network of interfaces with the creative community	Sharing of company knowledge across label groupings
Resolving dilemmas	Access to and internalisation of creative resources	Competition and cooperation at intra- and inter-firm levels

Source: Huygens (1999)

TABLE 7: CONTEXT, CONTENT AND PROCESS OF ORGANIZATIONAL CHANGE AT INDEPENDENTS

	Roadrunner Records	**Independiente**
Context		
New executives	Appointment of a new MD and A&R manager at UK; new Strat. MD at International	-
New ownership	-	PolyGram's estimated £20 million purchase of 51% of Go! Discs
Threat/opportunity	Increase in consumer attention for British music	Increase in consumer attention for innovative music on an international level
Performance decline	-	-
Content		
Vision	Merge Roadrunner's traditional A&R approach with diverse market demands	Merge Go! Discs A&R history with international alternative market demands
Scope	Deliver UK artists to international audience	Deliver creative artists to international audience
Positioning	Roadrunner as internationally-oriented diversified record label	Independiente internationally alternative record label
Capabilities	Creation of A&R and coordination capabilities	Incorporation of international and commercial capabilities
Process		
New philosophy	Build diverse repertoire to be leveraged internationally	Discover high-quality repertoire with international potential
Reorganization	Staff reshuffle in UK office; new IT systems at International	Temporary and cross-functional project teams
Internal ventures	-	Launch of New York office
New alliances	UK distribution agreement with PolyGram	UK distribution and international licensing deal with Sony
Status re-evaluation	Increasing status of administrative and legal affairs departments	Increasing appreciation for creative action within a business setting
Learning new skills	Intra-company knowledge sharing; property rights protection	Effective and efficient communication via meetings
Resolving dilemmas	Local A&R and international coordination	Creativity in music and creativity in business

Source: Huygens (1999)

TABLE 8: NEW CAPABILITIES AND ORGANIZATIONAL CHANGE

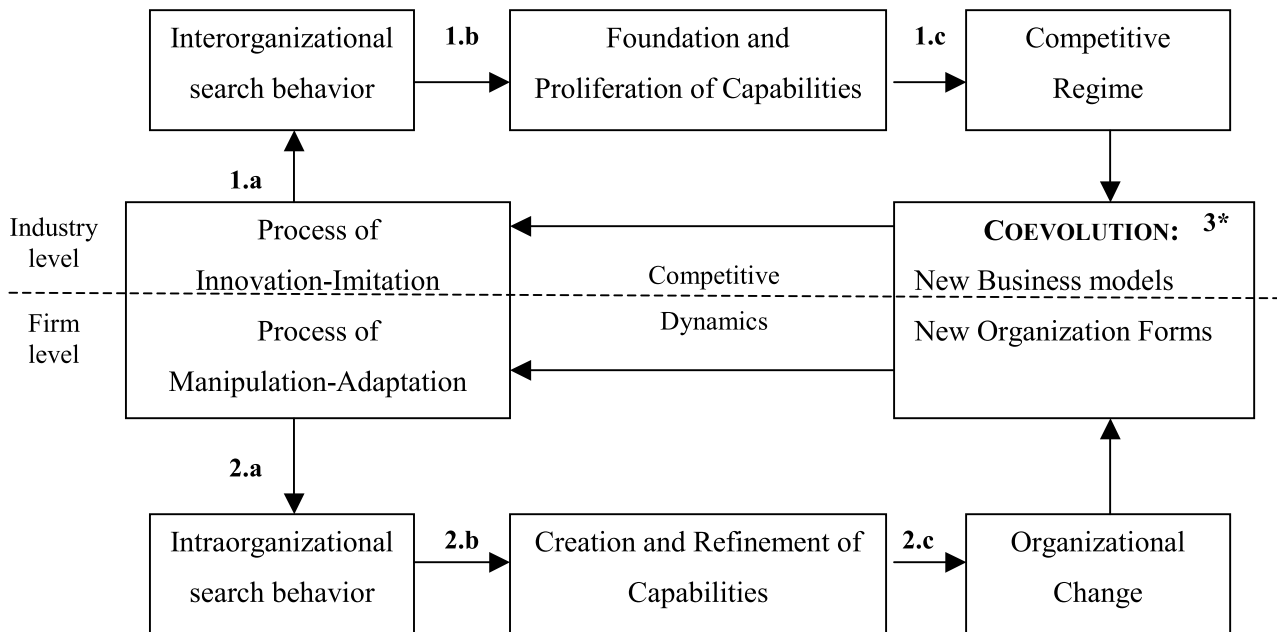
	Capabilities *	**Organizational change ****
Island	Formation of A&R and marketing	Major vs indie staff at top vs front-line positions
Virgin	Convergence of A&R and marketing	Internal network of divisionalized sub labels
BMG	Incorporation of local A&R	Music division of project-based frontline labels
Warner	Formation and coordination of A&R	Central division between separate label groupings
Roadrunner	Creation of multinational coordination	IT-oriented headquarters with local units
Independiente	Development of international base	Temporary and cross-functional project teams

Source: Table 5,6 and 7

*) This column provides examples of new capabilities stemming from several capability categories. See for a more complete description Tables 5 – 7.

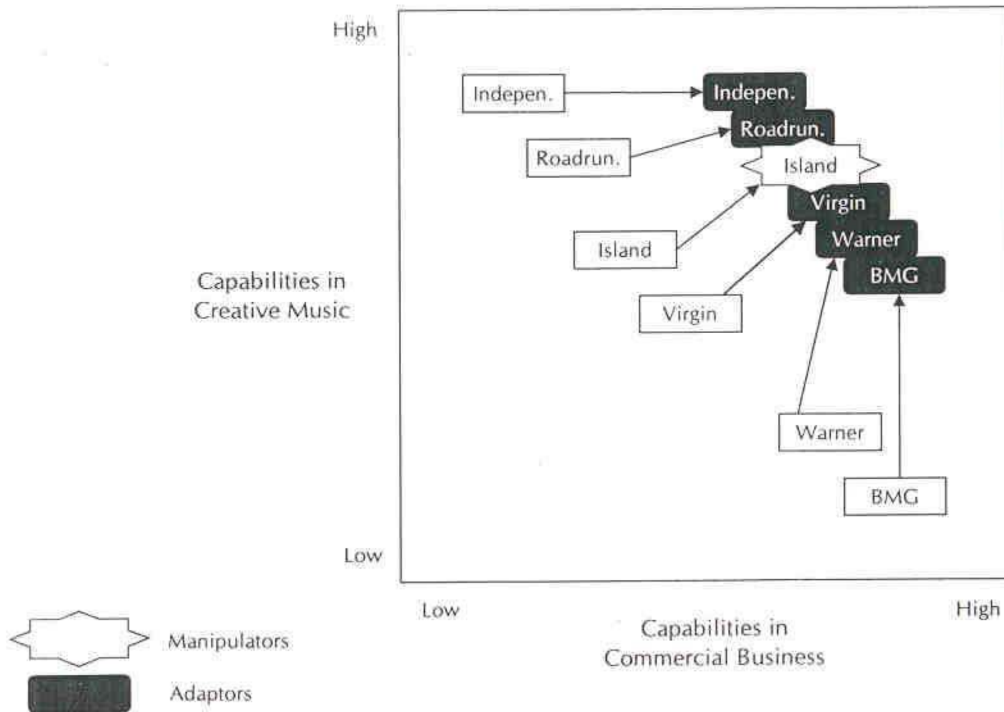
**) This column summarizes only one attribute of the process dimension of organizational change. See for other attributes Tables 5 – 7.

FIGURE 1: AN INTEGRATIVE FRAMEWORK OF COEVOLUTION OF CAPABILITIES AND COMPETITION



*) The numbers 1.a-1.c, 2.a-2.c and 3 refer to the corresponding propositions, see the text.

FIGURE 2: THE DYNAMIC OF MANIPULATION AND ADAPTATION, 1990-1997



Source: Huygens (1999)

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