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Managerial cognition and the value chain in the digital music industry

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ABSTRACT

Do entrepreneurs construct new cognitive frameworks or adapt existing ones in unstable, transforming industry contexts, and what importance do existing mental models, in particular the value chain, take on for them? The official discourses, mission and vision statements of the 21 most visible online music ventures were analyzed using mixed methods to capture the representations of the digital music industry of the entrepreneurs at their helm. The managerial cognition of digital music entrepreneurs challenges all the dominant logics and industry recipes of the traditional music industry and encounters no cognitive barriers. The cognitive frame of the value chain remains prevalent however in the representations of digital music entrepreneurs, and restrains them from embracing the specificities of the creative industries.

1. Introduction

In recent years, digitalization and the Internet have had a profound impact on music and other creative industries. They have caused a declining industry of reference, the traditional music industry, to evolve to better address the needs of its actors and consumers. The digital music industry is transforming and characterized by an extraordinary entrepreneurial rush, with a proliferation of new ventures credited with substantial headways in audience appeal and online visibility, measured through capitalization, catalog, media impact, and other such indicators [1–3]. According to IFPI (International Federation of the Phonographic Industry) and BPI (British Recorded Music Industry) reference data, peer-to-peer music sharing practices have already led to a 40 to 50% decrease in revenue for the music industry as a whole, and digital music revenue outstripped the sale of physical CDs for the first time in 2011 in the USA with a total of 52% of all music sales [2] and in the first quarter of 2012 in the UK with a total of 55.5% of all music sales [4].

The impact of peer-to-peer music sharing practices has also been demonstrated to range from a decrease of up to 30% in the probability of purchasing music [5] to an actual decrease of 20 to 25% in music CD sales [6]. Each music album illegally downloaded has been estimated to reduce music purchases by 0.2 albums [7] or 0.42 albums [8]. Essentially, peer-to-peer music downloads both complement CD album purchases when downloads are used to 'sample' before purchase, and substitute for them when music albums are perceived to be overpriced [9]. These two effects end up canceling each other out, and unveil unprecedented market opportunities for new and existing labels and artists willing to experiment with novel technologies and modes of music production, distribution and consumption in order to "adopt to the evolving music preferences or tastes and the new ways music users prefer their music to be delivered and consumed." (Andersen and Frenz, 2010: 735 [9]). A focus on the disassembly and reassembly of existing mental models in the digital music industry resonates with this insight, as digital music entrepreneurs, investors, and consumers seem to have all joined forces to break down physical constraints and to storm the economic and cognitive models of the traditional music industry.

Managers develop cognitive mental models that both enable and structure their understanding of their organization

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and competitive environment. Such cognitive representations condition managerial decisions and actions [10–13], which are consequently often driven by simplified representations based on implicit theories of the world [14,15]. Managerial cognition has become a prime target of investigation in the search for explanations of the cognitive microstructure of strategy, competition and markets. In particular, the way established competitors develop and consolidate cognitive frameworks in stable, mature or declining industries has attracted much attention [12,16–18]. In such settings, dominant logics [19,20] filter managers' understanding and interpretation of data. Industry recipes, which consist in an industry's patterns of managerial belief [21,22] related to the logic of the economic, competitive, and institutional environment and their effect on the focal firm [21], also go against the idea that managers may be defined as entrepreneurs able to come up with new solutions to the uncertainties they are confronted with [22].[1] Blind spots, defined as: "areas where a competitor will either not see the significance of events at all, will perceive them incorrectly, or will perceive them very slowly" (Porter, 1980: 59 [23]), and cognitive barriers, defined as the routing into or filtering out of information from corporate decision processes [24], may also emerge and hinder innovation.

In contrast, the cognitive challenges encountered by established managers and entrepreneurs in hypercompetitive industries characterized by rapid changes in environmental factors, relative ease of entry and exit, and ambiguous consumer demand are still mostly unknown [25–27]. In emerging or transforming industries, in opposition to mature or declining industries, cognitive configurations and categories are under development and unstable. Competition is in a state of flux and industry clusters and strategic groups are being organized or reorganized. Schumpeterian entrepreneurs act to construct the value of new technologies and impose their vision of this value, and to build their institutional landscape [27,28]. In doing so, whether they create new mental models or implement existing ones remains unclear.

Understanding the complex relationship between technologies, categories, and actors' interests as they emerge and co-evolve has become a crucial objective in managerial cognition research [16]. Our study purports to do so by moving away from the previous focus of managerial cognition on clusters of industry insiders and traditional competitors in stable, mature, or declining industries. In the wake of the research agenda set forth by Porac, Thomas and Baden-Fuller (2011), we seek to understand how a transforming industry is socially constructed via the managerial cognition of entrepreneurs, and the existence (or lack thereof) of industry recipes [21], cognitive barriers [24], and tension between competitive isomorphism and differentiation as the industry transforms [18]. By focusing on the mental models involved in the reconfiguration of the digital music industry, we also aim to shed new light on the challenges of the digital revolution for industrial and organizational restructuring in the creative industries [29,30].

The cognitive frameworks developed by new digital music ventures focus on the upheaval of all the dominant logics and industry recipes, and adopt a discourse of liberation from all the cognitive blind spots and barriers of the traditional music industry. One of these existing mental models, however, seems to resist the overthrow, and therefore invites particular attention. The value chain [31], due to its simplicity, versatility and comprehensiveness, has succeeded in imposing itself as a pervasive cognitive framework. The present study aims to better understand the managerial cognition of entrepreneurs in a transforming industry by answering two questions. First, do entrepreneurial newcomers construct new cognitive frameworks or adapt existing ones in unstable, transforming industry contexts? Second, what importance do existing mental models, in particular the value chain, take on for entrepreneurs in a transforming industry?

The article is structured in the following fashion. The following section (Section 2) reviews the managerial cognition literature, and introduces the general management concept of the value chain as a mental model suited for use at different levels of analysis in most industries. Section 3 of the article presents digital music as our industry setting and discusses our methodology. Our empirical analysis focuses on the 21 most visible music websites at the time of data collection. Results are presented in Section 4. Section 5 discusses an apparent paradox: at organization and industry level, digital music entrepreneurs reject all the dominant logics and industry recipes of the traditional music industry, and do not seem to be hindered by cognitive barriers. However, they are still defined by the value chain, which they apply regardless of industry structure and particulars. Section 5 defines the value chain as a pervasive cognitive frame, and discusses potential limitations of the research. General conclusions and paths for further research are provided in Section 6.

2. Literature review

2.1. Managerial cognition and mental models

Interest in managerial cognition and in the influence of managers' perceptions on decision-making in organizations has grown consistently over the past two decades. Porac, Thomas, and Baden-Fuller's (1989) seminal article on the role played by managerial cognition in shaping strategies blazed the trail for subsequent research on the way managers envision their industry and competitors and develop strategies [16–18]. The managerial cognition approach builds on research on bounded rationality. It establishes the importance of cognitive representations in managerial action [10–13,32], as managers' behaviors are often driven by simplified representations based on implicit theories of the world [14,15]. Managers may follow one of two cognitive logics [33]. In the experiential logic, action leads to learning (backward-looking wisdom), and experience influences the formation of "sensemaking" cognitive frameworks [34]. In the cognitive logic, action derives from a model (forward-looking wisdom). The cognitive logic forms the focus of the managerial cognition approach.

Pioneering research on managerial cognition looked into managers' perception of intra-industry stratification or "strategic groups" [16–18]. Strategic groups illustrate inter-firm strategic and performance heterogeneity within the same industry [35], and emanate first and foremost from managers' subjective perceptions. The essence of strategic groups is

[1] Even so, industry recipes are dynamic: they capture managers' experience and learning, and allow reorientation through both innovation and imitation [22].

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