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What do business models do? Innovation devices in technology entrepreneurship

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ABSTRACT

Building on a case study of an entrepreneurial venture, we investigate the role played by business models in the innovation process. Rather than debating their accuracy and efficiency, we adopt a pragmatic approach to business models — we examine them as market devices, focusing on their materiality, use and dynamics. Taking into account the variety of its forms, which range from corporate presentations to business plans, we show that the business model is a narrative and calculative device that allows entrepreneurs to explore a market and plays a performative role by contributing to the construction of the techno-economic network of an innovation.

1. Introduction

Open innovation (Chesbrough, 2003) involves various protagonists who contribute to its funding, generation and commercialization, and it is located in networks rather than in individual firms (Powell et al., 1996). Such techno-economic networks (Callon, 1991) are composed of heterogeneous actors: big firms, entrepreneurs, universities, customers, investors, regulators and the intermediaries that circulate among them. The distributed nature of innovation calls for new modes of coordination and management devices, such as platforms (Robinson et al., 2007). What these devices are and how they manage the tensions inherent in collective innovation are crucial, yet under-researched issues. In this paper, we focus on a specific device that is pervasive in entrepreneurship and that, we contend, embodies the uncertain and distributed nature of innovation: the business model.

Business models are strange entities. On the one hand, since the dotcom explosion and subsequent burst in the 2000s, business models have populated the economic world in an increasingly expansive manner. On the other hand, there is growing scepticism about them being sound depictions of the future prospects of enterprises. Are they operational tools that rationally inform investment decisions in a judicious way? Or are they rituals that fulfil, at best, some symbolic function but lack a genuine economic meaning? What purposes do they serve, if any? These and similar questions about the use, meaning and rationale of business models have been raised in the management literature in recent decades (Baker et al., 1993; Honig and Karlsson, 2004; Magretta, 2002). For instance, in an influential article Porter (2001, p. 73) criticized the "fuzziness" of the business model that he defined as "an invitation for faulty thinking and self–delusion" to blame for the failure of many e-businesses. The dotcom bubble and its aftermath did, somehow, put an end to the interest of management scholars in the business model as a management tool; yet did not halt its use by practitioners. Indeed, it proliferates in daily practices, especially in technology entrepreneurship (Chesbrough and Rosenbloom, 2002; Delmar and Shane, 2003). Puzzlement may arise from the fact that, whilst cogent analysis from management science tends to debunk the calculative power of the business model, investors and entrepreneurs continue to consider it a key ingredient of their economic endeavours.

In this article, we show that business models can be fruitfully analyzed as "market devices" (Callon et al., 2007) — one among the many intermediaries that circulate in the techno-economic networks of innovation. If business models appear to be torn between usefulness and uselessness, it is perhaps because of a failure in the way scholars account for their use and operations. What do business models really do? In order to make sense of this question, we have chosen to depart from a perspective that would consider these artefacts to be transparent vehicles of the representation and appraisal of an entrepreneurial project. Symmetrically, we have avoided a position that would consider their widespread empirical use a symptom of a collective preference for opaqueness. Instead,

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we examine business models as intelligent collective devices in contexts of uncertainty. Our approach is pragmatic. It is opposed to an essentialist view, which considers the business model as a more or less faithful description of an objective reality beyond it, as well as to an instrumental analysis, which defines ex ante functions of the business model and measures its performance relative to them.

Our main argument is that the business model works as both a calculative and a narrative device. It allows entrepreneurs to explore a market and to bring their innovation – a new product, a new venture and the network that supports it – into existence. The business model's function cannot be limited to a reflexive exercise enhancing the rationality of the entrepreneur who is writing a PowerPoint presentation or a business plan. The narrative and the calculation that it performs are indeed addressed to third parties, such as customers or investors. Moving around various actors and coordinating their action, the business model appears to act as a boundary object (Star and Griesemer, 1989). We therefore consider the business model "in action" (Latour, 1987) and follow its trajectory. We argue that the flexible mix of narratives and calculations within the business model enables it to circulate across heterogeneous actors, which, in turn, endows it with a performative role: by circulating, it gradually builds the network of the new venture that it represents.

In this paper, then, we investigate the role of business models through the case study of a new venture. Combining interviews with the analysis of internal and publicly available corporate documents and presentations, we identify the specificities of the business model as a market device that, as we argue, enable the management of the tensions inherent to the entrepreneurial process. The first section of this paper is devoted to a review of three different approaches to business models: the essentialist and the functionalist views that prevail in the extant literature, and the pragmatic stance that we propose here, building on the recent stream of research on market devices. After a presentation of our methodology, we study the case of a French entrepreneurial venture by analyzing different documents that describe its business model and by following their circulation in space and time. We show that the narrative and calculative techniques implemented in these documents enable the business model to act as a boundary object and to manage the tension between framing and overflowing (Callon, 1998a) inherent to the explorative nature of entrepreneurship. We then discuss the conditions of possibility and implications of business models acting as boundary objects. The paper closes with some reflexions on the performative roles of business models.

2. From an essentialist and functionalist view towards a pragmatic approach of business models

2.1. On the truthfulness and usefulness of business models

The extensive use of business models by practitioners since the 1990s (Shafer et al., 2005) has increasingly drawn the attention of scholars. The reputation of business models has followed the rise and fall of their best known users: internet start-ups. The failure of dotcoms has been sometimes associated with the ambiguity of the business model which "seems to refer to a loose conception of how a company does business and generates revenue" (Porter, 2001, p. 73) and lacks a shared and precise definition in the management literature (Alt and Zimmermann, 2001). In response to such criticism, scholars have attempted to stabilize the business model by fixing a definition thereof.

Some authors define the business model broadly as a description of a company's logic of value creation (Ghaziani and Ventresca, 2005). It "spells out how a company makes money by specifying where it is positioned in the value chain" (Chesbrough and Rosenbloom, 2002, p. 533) and "depicts the design of transaction content, structure and governance so as to create value through the exploitation of business opportunities" (Amit and Zott, 2001, pp. 494–495). It answers managerial questions such as: "who is the customer?", "what does the customer value?", "how do we make money in this business?", "what is the underlying economic logic that explains how we can deliver value to customers at an appropriate cost?" (Magretta, 2002, p. 4). Then, this broad definition is sometimes detailed through the identification of the components of the business model, which can be grouped into three building blocks. First, the value proposition clarifies what value is embedded in the offerings of the firm (e.g. Afuah and Tucci, 2001; Dubosson-Torbay et al., 2002; Magretta, 2002). Second, the architecture of value lists the partners and channels through which value is produced and delivered (e.g. Afuah and Tucci, 2001; Hamel, 2000; Hedman and Kalling, 2003; Timmers, 1998; Weill and Vitale, 2001). Finally, the revenue model is the bottom line of the business model: it translates the two former dimensions in costs and revenue flows (e.g. Dubosson-Torbay et al., 2002; Magretta, 2002; Weill and Vitale, 2001).

All of these definitions share a common view of the business model as a description, or representation, of a reality that exists beyond it: the firm. Such an essentialist view of what a business model is and how it could provide an accurate depiction of the underlying logic of value creation of a firm fails to answer the criticisms raised by strategy scholars such as Porter (2001). Instead of reducing the vagueness of the concept, it centres discussions back on the issue of the truthfulness of the description made by business models. The essentialist view is even more problematic when new ventures are considered, for the reality beyond the model has yet to happen. Thus, entrepreneurship scholars have approached business models in a different manner. The question that they address is not "what are business models?", but "what do business models do?". The business models crafted by entrepreneurs are prospective; they envisage a future venture and the value creation logic that it will entail. Hence, they are part of a planning activity that relies mainly on the writing of business plans. The business model of a new venture describes "how [the firm] plans to make money long-term" (Afuah and Tucci, 2001, p. 4). Scholars in entrepreneurship have therefore shifted from a view of the business model as a depiction of an objective reality to a functionalist, or instrumental, perspective. The business model has become "the method of doing business by which a company can sustain itself" (Rappa, 2001, p. 1)[1] by articulating the value proposition, identifying the market segment, estimating the cost structure and profit potential, etc. (e.g. Afuah and Tucci, 2001; Chesbrough and Rosenbloom, 2002; Dubosson-Torbay et al., 2002). In entrepreneurship, the relevance of the business model no longer lies in its ability to faithfully describe the firm. Rather, its usefulness stems from its explicative and predictive power in regard to the value created by a new venture (Amit and Zott, 2001). Nevertheless, by focusing on its instrumental efficiency, scholars bring back into the debate the question of the performance of the business model: do modelling and planning make the new venture more robust or more profitable?

In that matter, business plans have been widely studied in the literature on entrepreneurship. They have been considered an internal management tool or an instrument for finding partners. Delmar and Shane (2003) argue that business planning helps firm founders anticipate problems and information needs, turn

[1] Rappa, Business Models of the Web, [Accessed: April 2006]http://digitalenterprise.org/models/models.html.