LINKING INNOVATION TO BUSINESS MODELS: THE CASE OF LEGO

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Abstract: Innovation studies arose as a distinct scientific domain in the 1960s. Since then scholars and researchers worldwide have generated a vast body of literature on innovation as the topic has unceasingly gained in importance. It has been taken as axiomatic the fact that innovation has been a fundamental element of flourishing business models in the last decades because it constitutes one of the most important characteristic associated with success. The aims of our paper are to render in short some theoretical issues about the concepts of innovation and business model, and to illustrate their relationship within a Danish company. The research method was the literature review. Our paper demonstrates that innovation and business model are two tightly interlinked concepts because they are concerned with improving the ability of the organization to become successful in a changing environment.). Innovation is integrated into the business model of a company from idea generation through its departments (e.g., research and development, sales). Only the business models driven by innovation allow companies to thrive in an increasingly disruptive world.

Keywords: innovation, business model, LEGO, company, strategic management

JEL Classification L10, O30

Introduction

Innovation represents an old phenomenon both in the history of humanity and in the economic world. Innovation is present in every aspect of our lives and, therefore, acquires a central place in today's society. In a world characterized by uncertainty and incessant change the "why" of innovation is obvious. On the one hand, innovation is the driver for change. On the other hand, change remains a key driver of innovation. People, organizations and societies have to continuously innovate in order to be prepared for change, to initiate and face change.

Governments worldwide are aware that innovation is important for them in order to cope with global challenges (e.g., sustainable development) and recognize that innovation acts as a growth engine in the current economy. These problems impose the need of "reforming the

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management and funding of public investment in science and research, as well as public support to innovative activity in the private sector" (OECD, 2007, p. 5). Furthermore, "new growth opportunities come from providing new products and services derived from technological breakthroughs, new processes and business models, non-technological innovation and innovation in the services sector, combined with and driven by creativity, flair and talent, or, in other words, from innovation in its broadest sense" (European Commission, 2014, p. 2).

Innovation studies arose as a distinct scientific domain in the 1960s. Since then scholars and researchers worldwide have generated a vast body of literature on innovation as the topic has unceasingly gained in importance. They have focused on various issues such as technological innovation (Chesbrough, 2006; Utterback, 1994), organizational innovation (Erbe, 2014; Poole and Van de Ven, 2004), management innovation (Birkinshaw, Hamel and Mol, 2008; Hamel and Breen, 2007), strategic innovation (Govindaranjan and Trimble, 2005; Hamel, 1998) or process innovation (Tidd, Bessant and Pavitt, 2005; Davenport, 1992). Also, innovation has become one of the most debated subjects in the literature on business models as a key facet of creating competitive advantage (Boons and Lüdeke-Freund, 2013).

The innovation imperative requires significant efforts to be made by companies from all over the world in order to keep the pace of competition. As innovation is a company-wide endeavour (de Jong, Marston and Roth, 2015) that increasingly matters in the business world, it has led to the appearance of different performances between enterprises of all sizes. It has been taken as axiomatic the fact that innovation has been a fundamental element of flourishing business models in the last decades because it constitutes one of the most important characteristic associated with success. In this respect, the speed of designing, developing and implementing new process technologies "increasingly shapes the overall cost, timeliness, and results of new products introductions, and the overall competitive success of the company" (Pisano, 1996, pp. 3-4).

Arising from the above discussion the following question emerges: is there a relationship between the concepts of innovation and business model? In order to obtain data for answering this question we used a methodological approach based on a literature review.

The aims of our paper are to render in short some theoretical issues about the concepts of innovation and business model, and to illustrate their relationship within a Danish company.

The paper is organized as follows. The second chapter of the paper presents the conceptual framework and the research methodology. The case of a toy company, LEGO, is analysed in the third chapter of the paper, which relates to the question that have driven our study. This is followed by conclusions.

Literature review

In order to show the diversity of the theoretical framework regarding the concepts of innovation and business model, we provide several examples of definitions. In the past decades, they have become two highly debated issues in the literature and an important topic of study for various disciplines such as business, strategic management or economics.

As the term "innovation" has been studied in many domains and analysed from different point of views, it has proved to be rather ambiguous and led to a lack of a common definition. However, innovation can be defined as:

- “a new product or process that can be exactly repeatable by anyone” (Howkins, 2013, p. 5).
- “the conversion of a new idea into revenues and profits” (Lafley and Charan, 2008, p. 21).
- “the development of new products or new ways of selling” (Collin, 2007, p. 208).
- “the creation of new knowledge and ideas to facilitate new business outcomes, aimed at improving internal business processes and structures and to create market driven products and services” (Plessis, 2007, p. 21).
- “a means of changing an organization, either as a response to changes in the external environment or as a pre-emptive action to influence the environment” (Damanpour, 1996, p. 694).

The notion of innovation is therefore described from different perspectives. In essence, it means the application of new ideas or concepts to the products, services or processes of an organization that lead to the increase of its value.

On its turn, the term “business model” has been interpreted in different ways that gave rise to a multitude of definitions. In spite of the ubiquity of the term, it can be defined as:

- “the clarification of how the organization fundamentally manages its core business activities” (Witcher and Chau, 2010, p. 316).
- “how a firm organises itself to create and distribute value in a profitable manner” (Baden-Fuller and Morgan, 2010, p. 157).
- “a tool for understanding the dynamic process through which actors seek to articulate how value might be extracted from highly uncertain and often ambiguous technologies ” (Perkmann and Spicer, 2010, p. 5).
- “a conceptual tool containing a set of objects, concepts and their relationships with the objective to express the business logic of a specific firm ” (Osterwalder, Pigneur and Tucci, 2005, p. 5).
- “a representation of a firm’s underlying core logic and strategic choices for creating and capturing value within a value network” (Shafer, Smith and Linder, 2005, p. 202).

Thus, the concept of business model has also various meanings for different authors. Being related to the strategic management of a company, the business model shows the business logic of a company, the way it creates and delivers value.

Research methodology

The research method was the literature review. A literature review represents “a systematic synthesis and evaluation of a body of information that can provide an efficient overview of the information on a particular topic” (Lapan and Quartaroli, 2009, p. 20). The purposes of our literature review were to define the concepts of innovation and business model, and to demonstrate their relationship.

Our literature review process comprised several successive steps. Firstly, we selected innovation and business model as the review topic. Secondly, we carried out a search within the business literature, by reviewing books, studies and articles published mostly after the year 2000. Thirdly, we gathered, read and analysed the data from the literature. Also, we established the conceptual framework, “a representation, either graphically or in narrative form, of the main concepts or variables, and their presumed relationship with each other" (Punch, 2005, p. 53). Finally, we wrote the review and selected the references.

Results and discussion

Today, both theoreticians and practitioners accept the idea that innovation and business models are closely related at a micro level. Business organizations, especially multinational and transnational corporations, use innovation as a competitive tool. Thus, their management is forced by market factors to "support innovative activity systematically and substantially" (Baumol, 2004, p. ix) and to "invest in a wider range of intangible assets, such as data, software, patents, designs, new organizational processes and firm-specific skills" (OECD, 2013, p. 17). As a consequence, innovation management has emerged as a process of managing innovation in connection with the specific business model of a company. Management innovation is "anything that substantially alters the way in which the work of management is carried out, or significantly modifies customary organizational forms, and, by so doing, advances organizational goals" (Hamel and Breen, 2007, p. 19) or "the invention and implementation of a management practice, process, structure, or technique that is new to the state of the art and is intended to further organizational goals" (Birkinshaw, Hamel and Mol, 2008, p. 825). This is why "the systematization of the management innovation process is an important challenge facing companies today" (Mol and Birkinshaw, 2008, p. 144).

In fact, "success in innovation appears to depend upon two key ingredients- resources (people, equipment, knowledge, money, etc.) and the capabilities in the organization to manage them" (Bessant and Tidd, 2007, p. 10). An innovation makes progress within a business organization by means of managerial decisions. Strategic management, in general, and business model, in particular, has therefore become central to innovation in any company. On the other hand, innovation plays a key role in creating the context for successfully managing the business organizations in a strategic manner. Innovation introduces novelty within a company, leads to structural changes of the business model, and explains the differences in performance between companies. This means that strategic management needs innovation.

The above discussion demonstrates that innovation and business model are two tightly interlinked concepts (Fig. no. 1) because they are concerned with improving the ability of the organization to become successful in a changing environment. It is obvious that "a firm does not innovate in isolation, but depends on extensive interaction with its environment" (Fagerberg, Mowery and Nelson, 2006, p. 20). Innovation is integrated into the business model of a company from idea generation through its departments (e.g., research and development, sales). In this respect, we have presented the case of LEGO in the next pages.

A well-known company in the global business world, LEGO is a Danish toy manufacturer. Ole Kirk Christiansen, a master carpenter, founded the company in Billund (Denmark) in 1932. He launched his business by making wooden toys and expanded later to producing plastic toys. In the late 1940s, LEGO began manufacturing the interlocking bricks. In the mid 1950s, Godtfred, his son, thought that it would be better to create a LEGO system of play. He identified six features under the name of "Principles of Play" that might define a viable universal system and issued to every employee of the company (e.g., limited in size without setting limitations for imagination, affordable, for girls, for boys, fun for every age). Starting with the late 1950s, LEGO bricks have remained compatible with current ones. Today's bricks still interlock with those made 55 years ago. In our times, LEGO

embodies “two distinct yet related underlying logics of material culture: atomism, which conceives of and treats objects as assemblages, and plasticity, a mythos of unbounded creativity and mastery over objects” (Lee, 2014, p. 96).
The name of the company can be interpreted as “I assemble” in Latin and represents a combination of two Danish words: “leg godt” or “play well’. The motto of the company is “det bedste er ikke for godt” or “only the best is good enough”, expressing its desire to obtain exceptional performance. Created by Christiansen, this motto inspires the employees to be innovative at their workplace and encourages them not to skimp on quality. Six fundamental principles have guided the company since its appearance (Table no. 1).

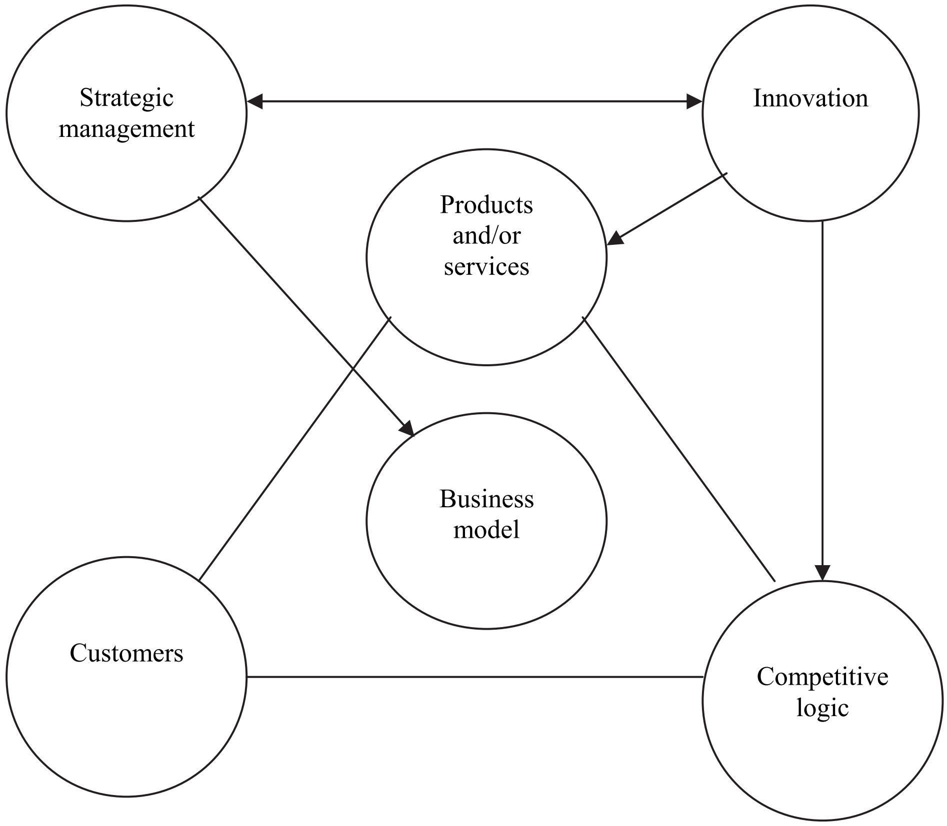

Fig. no. 1 The connection between innovation and business model

Researchers have showed that “the use of Lego bricks and minifigures as artefacts to facilitate knowledge and ideas generation channels individual and collective strategic thinking and creativity” (Hadida, 2013, p. 3). As strategic thinking and creativity give rise to innovation through the combination of its resources (e.g., ideas, processes, products), the management of the Danish company has made significant efforts to boost innovation.
Why did LEGO put innovation on the top of its strategic management agenda? The main reason was the fact that at the end of the 1990s its business model did not work anymore. In 1998, the company reported the first loss in its business history. In order to face the challenges of a media-driven entertainment society LEGO has embraced the innovation

imperative. Therefore, the company designed and implemented a new business model, driven by innovation.

Table no. 1 The founding principles at LEGO

No.	Principle	Summary
1.	Values are priceless.	Every company, at its beginning, has a purpose and a set of values that emanate from the founder. LEGO makes no exception.
2.	Relentless experimentation begets breakthrough innovation.	Game-changing comes from persistent experimentation.
3.	Not a product, but a system.	The LEGO universe expands gradually with the launch of each new toy.
4.	Tighter focus leads to more profitable innovation.	"Less is more" is a principle that companies must not forget.
5.	Make it authentic.	LEGO always continued to make its toys very close to the real live.
6.	First the store, then the kids.	The stores rank first among LEGO's priorities.

Source: Robertson and Breen, 2013

By embarking on that ambitious initiative LEGO oriented its efforts around the so-called 'seven truths of innovation' (Fig. no. 2). In this respect, the new business model was built on an innovation organizational culture. That is why its culture valued and celebrated creativity as the most important thing. Firstly, LEGO understood the need to recruit creative people and attract talents from all over the world.

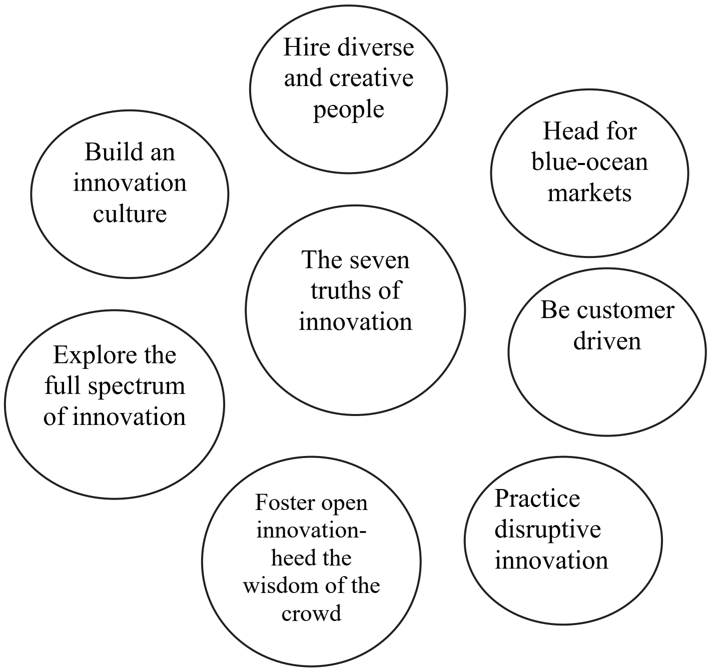

Fig. no. 2 The seven truths of innovation at LEGO

Secondly, LEGO took a decisive turn by putting the kid's point of view and imagination on the first place. Thirdly, the company hired software specialists in order to create a computerized LEGO construction system and transform bricks into bits. For example, the success of LEGO's Bionicle has been explained by the fact that "turning a toy into a story greatly increased emotional bonding to the product" (Fonnesbaek and Andersen, 2005, p. 31). By introducing a story-telling element and developing a new visual universe LEGO changed its business model in order to compete against rivals from computer games to film industry and sports. Bionicle greatly outperformed other toys and games especially due to the innovative approach of the company: marketing a toy as a movie.

Conclusions

Academics and researchers have devoted significant amounts of time to provide the theoretical framework for the concepts of innovation and business model. Moreover, they have found that innovation represents a key element of an effective strategic management of a company. Today the turbulent environmental conditions exert a great pressure on business organizations. A ferocious race among companies in order to better face the challenges of a hypercompetitive business environment has imposed innovation both as an imperative and a useful tool. Innovation has proved to constitute a fundamental factor that separate successful companies from the rest of the companies. That is why they have implemented innovation into their business models.

Our paper shows that innovation and business model are two interconnected concepts that are of interest to both theoreticians and practitioners across a range of various business domains. Only the business models driven by innovation allow companies to thrive in an increasingly disruptive world.

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