EMBEDDING INNOVATION IN BUSINESS MODELS: THE CASE OF HONDA MOTOR COMPANY

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Abstract
Today's companies are competing in a turbulent global business world dominated by accelerating disruption, uncertainty and risk. The coexistence of a free open-source market and a proprietary market allows companies all over the world to dispose of more possibilities about designing their business models. However, by concentrating on innovation, they can obtain long-term growth and sustainable competitive advantage. This paper aims to illustrate the connection between innovation and business model at Honda Motor Company. The research method is based on a case study. This study demonstrates that that there is a relationship between the concepts of innovation and business model. Also, it shows that Honda succeeded in embedding innovation in its business model.

Keywords: innovation, business model, Honda Motor, company, Soichiro Honda

JEL Classification: M1, O30

Introduction

In a turbulent global business world dominated by accelerating disruption, uncertainty and risk, knowledge represents the fundamental source of lasting competitive advantage. Today's successful companies are knowledge-creating companies that put innovation in the center of their business models (Nonaka, 2008). The coexistence of a free open-source market and a proprietary market at a global scale allows companies to dispose of more possibilities about configuring their business models (Greenberg, Hirt and Smit, 2017), but by concentrating on innovation, they can obtain long-term growth, sustainable competitive advantage, better competitive positioning and deliver higher customer satisfaction (ATKearney, 2008; Gerybadze et al., 2010; Jiménez-Jiménez and Sanz-Valle, 2011; PricewaterhouseCoopers, 2013).

Research and development (R&D) represents one of the main sources of innovation (Markovich, 2012). Strategies and business models based on innovation and focused on R&D are generating growth (Kinkel, Lay and Wengel, 2005; OECD, 2015a). In this respect, Honda Motor Company (HMC) has been ranked among the world's biggest R&D spenders and most innovative companies in the world (PricewaterhouseCoopers, 2014;

Boston Consulting Group, 2017). Entrepreneurship (e.g., the first Japanese company who set up a motorcycle plant in the United States in 1978) and innovation (e.g., the establishment of Honda R&D that became independent in 1960) are at the heart of Honda's business model (Mito, 2012).
The paper aims to illustrate the relationship between innovation and business model at HMC. As case study covers a broad variety of themes (Gerring, 2007), such as business and strategic management, the authors select it as the proper research method. The next section sets the theoretical framework of the paper. It follows the research methodology. Thereafter, the case of HMC is presented. The paper ends with conclusions.

Review of the literature

There is a variety of ways in which the topics of innovation and business models have been addressed in the business literature in the past decades. Innovation has to do with "putting new or significantly improved products on the market or finding better ways (through new or significantly improved processes and methods) of getting products to the market" (OECD, 2015b, p. 60). Thus, from an epistemological point of view, innovation has the meaning of making something new (Tidd, Bessant and Pavitt, 2005). Innovation can be defined as "a mindset, a pervasive attitude, or a way of thinking focused beyond the present into the future vision" (Kuczmarski, 2003, p. 536), "the channeling of creativity so as to produce a creative idea and/or product that people can and wish to use" (Sternberg, Pretz and Kaufman, 2003, p. 158), "the management of all activities involved in the process of idea generation, technology development, manufacturing and marketing of a new (or improved) product or manufacturing process or equipment" (Trott, 2008, p. 15) or refers to "the development of new products, new processes, new sources of supply, but also to the exploitation of new markets and the development of new ways to organize business" (Szirmai, Naudé and Goedhuys, 2011, p. 5).
There are two types of innovation output (Andrew, DeRocco and Taylor, 2009): tangible outcomes (e.g., new products, formulas, designs and expertise) and intangible outcomes (e.g., new processes or ways of doing business). The tangible outcomes can be easily quantified and legally protected whereas intangible outcomes cannot.
The context is characterized by both the internal and external environment and highly determines innovation effectiveness (Drăgușin et al., 2015). The internal context features encompasses the number of employees, employee competencies, profits, sales, location, market share, organizational culture, strategic orientation, business strategy, aspects of the innovation strategy etc., and the external context characteristics include the type of industry, market turbulence, competitive intensity, intellectual property protection, technology intensity, new business models etc. (Huizingh, 2011).
In order to consider the way business models are related to innovation it would be beneficial to enumerate the main forms of innovation. In this respect, innovation refers to (Johnson, 2001):

- the creation of new product and/or service;
- new usages of a current product/service;
- any changes in markets exploited;
- any changes in the original operational and logistical design;
- any changes in the current business model of an organization.

A business model innovation can emerge in different ways such as adding new activities, changing the association of activities or replacing one or more parties that accomplish the

activities (Amit and Zott, 2012). Also, it can reshape not only companies, but also entire industries or economies.

A business model creates, captures and delivers value, and embodies the following four interconnected elements: customer value proposition (e.g., target customer), profit formula (e.g., cost structure), key resources (e.g., people), and key processes (e.g., product development) (Johnson, Christensen and Kagermann, 2008). In other words, the business model of a company can be described through its resources and competencies, its organizational structure, and its value proposition (Demil and Lecocq, 2010). A business model is a "concise representation of how an interrelated set of decision variables in the areas of venture strategy, architecture, and economics are addressed to create sustainable competitive advantage in defined markets" (Morris, Schindehutte and Allen, 2005, p. 727) and articulates "the logic, the data and other evidence that support a value proposition for the customer, and a viable structure of revenues and costs for the enterprise delivering that value" (Teece, 2010, p. 179).

In essence, the concepts of innovation and business model are connected with value creation and significantly contribute to achieving business performance.

Research methodology

The research employs the case study method. As an empirical investigation (Farquhar, 2012), the case study enables to study the Honda phenomenon over a period of time, but especially in a contemporary context. The case study uses secondary data that were collected through a desk research based on an appreciable literature review. The sources were books, reports and journal articles from the domains of management, business, operations and production management, manufacturing and innovation, and were found in several libraries and electronic databases (e.g., Emerald Insight, Springer).

Innovation and Honda's business model

Soichiro Honda (1906-1991), the founder of HMC, was born in a small village outside of Hamamatsu, in Shizuoka Prefecture. In his early childhood, he helped his father, Gihei, a blacksmith, to repair bicycles. Soichiro did not prove to be interested in formal education, but he was fascinated by the mechanics of mobility and enchanted by the smell of motor oil (Rothfeder, 2015). He was very impressed when he saw a Ford Model T on the roads of his village and decided to invent machines.

At age fifteen, Soichiro dropped out of school, left home and headed to Tokyo to seek a job. He became an apprentice at Art Shokai, a repair shop. His innate technical expertise was rapidly pointed out by the Art Shokai's owner. In a relatively short period of time, Soichiro turned into an experienced mechanic, repairing both automobiles and motorcycles. Later, he moved back home and opened a branch of Art Shokai there.

In the late 1920s Soichiro invented and produced a wheel with cast-iron spokes, which improved comfort and safety. Thus, he became a rich man and started to enjoy life a lot. In 1936, he established the Art Piston Ring Research Institute. In spite of his enthusiasm and technical talent, the piston rings produced were rejected by Toyota due to poor quality.

Soichiro learned from failure and decided to enroll at the Hamamatsu School of Technology in order to learn more about machining techniques and manufacturing. After obtaining enough knowledge, he founded a new company, Tokai Seiki Heavy Industry that became the sole supplier to Toyota and Nakajima Aircraft Company. Self-confidence,

courage, intelligence, perseverance and creativity were among the most important qualities that led Soichiro to business success.

After the Second World War, he established the Honda Technical Research Institute and started to produce motorized bicycles. The new bicycle with the A-Type engine was an instant hit and was followed by the D-Type, a true motorcycle. In 1948, the HMC was incorporated and opened up a small factory with 34 employees in Hamamatsu.

Later, Soichiro hired Takeo Fujisawa (1910-1988), an expert in sales and an advocate of the principle "Always tell your clients the truth", who greatly helped the business to expand (Sato, 2006). They set up the Honda philosophy that consists of the fundamental beliefs (e.g., respect for individual), the company principle/mission statement and its management policies (e.g., "Proceed always with ambition and youthfulness") (HMC, 2016). Also, fueled by Soichiro, the entrepreneurial spirit of HMC has been cultivated through a specific managerial approach that is both creative and destructive. The so-called "Hondaism" has been built on three fundamental rules as follows (Mito, 2012):

- Be original. Soichiro's desire for originality found expression in its continuous search for developing Honda's own technology. Unlike the other Japanese motorcycle companies that had prospered by imitating foreign brands, Honda avoided the temptation of copying and put accent on the pride of creation and original products.
- Do not rely on government. Honda's management has understood that in order to become internationally competitive the company should not have to rely on government help.
- Work for your own sake. Honda's management has always promoted an action-orientated attitude.

Last year, Honda Group encompassed HMC, 368 consolidated subsidiaries and 83 affiliate companies (HMC, 2016). Its principal businesses are motorcycles, automobiles, aircraft and aircraft engines, and power products. The last period witnessed good performances for HMC. Thus, the sales revenue grew continuously from 7,948,095 million yen in 2012 to 14,601,151 million yen in 2016 and the operating profit grew from 231,364 million yen in 2012 to 503,376 million yen in 2016 (HMC, 2016).

Honda's success has been based on its business model, a model driven by innovation. HMC represents one of the most innovative companies as it was ranked no. 12 in 2007, no. 18 in 2013 and no. 48 in 2016 in the world (Boston Consulting Group, 2017). There are several main reasons that explain the fact that innovation is placed in the centre of Honda's business model as follows:

- As an innovative leader, S. Honda promoted an entrepreneurial spirit that has found its reflection in Honda's corporate motto, „The Power of Dreams". This motto expresses „mobility, creativity, individual empowerment, and passion for work and play" (Rothfeder, 2015, p. 39).
- The organization of HMC is characterized by „innovation, devolution of responsibility, and individualism" (Mair, 1998, p. 287). For example, Honda has created a global flexifactory network. A flexifactory constitutes a factory „capable of changing the product makes with relative ease, at low cost and with great rapidity" (Mair, 1994, p. 6).
- Honda's employees appreciate the harmonious working atmosphere, consider that they are members of a clan/tribe and, therefore, are stimulated to be innovative (Herbig and Jacobs, 1997). A good example is given by the so-called *waigaya,* unplanned meetings that allows the free flows of idea and promotes creativity.

- In the period 2012-2014, HMC was ranked among the biggest R&D spenders in the world (Table no. 1). R&D enhances Honda's ability to assimilate and use the existing knowledge, generates new knowledge, and stimulates its general innovative potential (Paton and Karunaratne, 2009).

Table no. 1: The top R&D spenders in the period 2012-2014

2014 Rank	Company	2013 Rank	Company	2012 Rank	Company
1	Volkswagen (Germany)	1	Volkswagen (Germany)	1	Volkswagen (Germany)
2	Samsung (South Korea)	2	Samsung (South Korea)	2	Toyota (Japan)
3	Intel (USA)	3	Roche (Switzerland)	3	Novartis (Switzerland)
4	Microsoft (USA)	4	Intel (USA)	4	Roche (Switzerland)
5	Roche (Switzerland)	5	Microsoft (USA)	5	Pfizer (USA)
6	Novartis (Switzerland)	6	Toyota (Japan)	6	Microsoft (USA)
7	Toyota (Japan)	7	Novartis (Switzerland)	7	Samsung (South Korea)
8	Johnson&Johnson (USA)	8	Merck (USA)	8	Merck (USA)
9	Google (USA)	9	Pfizer (USA)	9	Intel (USA)
10	Merck (USA)	10	Johnson & Johnson (USA)	10	GM (USA)
11	GM (USA)	11	GM (USA)	11	Nokia (Finland)
12	Daimler (Germany)	12	Google (USA)	12	Johnson & Johnson (USA)
13	Pfizer (USA)	13	Honda (Japan)	13	Daimler (Germany)
14	Amazon (USA)	14	Daimler (Germany)	14	Sanofi-Aventis (France)
15	Ford (USA)	15	Sanofi-Aventis (France)	15	Panasonic (Japan)
16	Sanofi-Aventis (France)	16	IBM (USA)	16	Honda (Japan)
17	Honda (Japan)	17	GlaxoSmithKline (United Kingdom)	17	GlaxoSmithKline (United Kingdom)
18	IBM (USA)	18	Nokia (Finland)	18	IBM (USA)
19	GlaxoSmithKline (United Kingdom)	19	Panasonic (Japan)	19	Cisco (USA)
20	Cisco (USA)	20	Sony (Japan)	20	AstraZeneca (United Kingdom)

Source: PricewaterhouseCoopers, 2014

- Since its establishment, HMC has designed and developed an innovation culture and climate (Ahmed, 1998). This is why Honda became an „industry innovator" (Cooper, 2005).
- R&D and innovation encourage collaboration between companies through strategic alliances (e.g., Honda-Rover) and, therefore, facilitate the access to wider markets (Pilkington, 1999).
- The Japanese economy is a knowledge-driven economy that enhances the possibilities to innovate. In the period 2016-2017, Japan has been one of the most innovative economies of the world (Table no. 2).

Table no. 2: The world's most innovative economies in the period 2016-2017

2017 Rank	2016 Rank	Country	R&D intensity	Total score
1	1	South Korea	1	89.00
2	3	Sweden	5	83.98
3	2	Germany	9	83.92
4	5	Switzerland	8	83.64
5	7	Finland	4	83.26
6	6	Singapore	14	83.22
7	4	Japan	3	82.64
8	9	Denmark	6	81.93
9	8	USA	10	81.44
10	11	Israel	2	81.23

Source: Jamrisko and Lu, 2017

In sum, HMC succeeded in embedding innovation in its business model. In fact, innovation is to be found everywhere at Honda, either in organization (e.g., flexifactories) or in products (e.g., robots).

Conclusions

In today's global business world innovation represents a challenging attempt for any company. Placing innovation at the heart of their business models still remains one of the most difficult endeavors for companies around the world.

This study aims to make two contributions both from a theoretical and practical point of view. Firstly, it shows that the concepts of innovation and business model are connected through the concept of value creation. Secondly, the research reveals that HMC constitutes a valuable case study in which the Japanese company demonstrates its full commitment towards embedding innovation not only in its business model, but also in its business philosophy.

Future researches may identify other relationships between innovation and business models or expand the analysis to other companies.

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