Cost of sustaining a disruptive service: evidence from the Netflix' business model innovation

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Abstract

In this paper we aim to understand the life cycle of the firm on the light of disruptive innovation and business model innovation. The concept of disruptive innovation has generated much interest in innovation and entrepreneurship literature and had a great influence on management practices. On the other hand, it remained rather unexplored in the business model literature. Furthermore, business model innovation has been receiving increasing attention. Our aim in this paper is to relate disruptive innovation to business model innovation encountering the dynamic perspective and trial-and-error learning for business models. Illustrating these with the Netflix case, we discuss and draw conclusions for theory and practice.

1 Introduction

Disruption innovation (Christensen & Raynor, 2003) and business model innovation are a pair (Johnson, 2010). An innovation can be disruptive with the right business model and loose with the wrong one. For instance, in early 2000's several digital music players were available on the market such as products by Rio or Creative Labs, yet Apple succeeded coupling the music player with an online music store to enable buying music directly to the device. While the inferior, low-quality MP3 was available to all firms, the disruption of the music industry started once the right business model was set up. Chesbrough (2010) points out that new ideas and technologies are commercialized through their business models. Chesbrough also emphasizes that the same technology with two different business models can deliver different economic values. This raises questions on how to find the right business model for a potentially disruptive technology.

In this paper, we attempt to relate the disruptive innovation to business model innovation proposing a new framework. In particular we draw on the learning argument for business model innovation and introduce the life cycle of the firm based on explorative and exploitative phases (Sosna et al., 2010). The proposed framework aims to life cycle of a firm on the light of the business model innovation and disruption.

The rest of the paper is structured as follows. The next section briefly reviews the literature on disruptive innovation and business model innovation and introduces the business model innovation process framework. Section 3 illustrates the proposed framework on the Netflix case. Section 4 discusses the issues such as challenges and barriers for business model innovation. Finally, Section 5 draws conclusions for scholars and managers.

2 Literature review

2.1 Disruptive innovation

The term disruptive is first used by Christensen (1997) to explain a certain type of technology, which is inferior and low-performer in the beginning but becomes better and better in time, ultimately favorable to any other alternative. Later, Christensen & Raynor (2003) broaden the term to disruptive innovations allowing service and business model innovation to be disruptive. Since than, be it disruptive technology or disruptive innovation, the concept became rapidly very popular among scholars and managers as well as in press (Wessel &

Christensen, 2012, Dyer et al., 2009, Christensen & Ruggles, 2007). Journal of Product Innovation Management and IEEE Transactions on Engineering Management issued special issues on disruptive innovation. Please consider Yu and Hang (2009) for an extensive review.

Whereas the patterns of disruptive innovation can be traced across industries and businesses, recent studies are focused on what makes an innovation disruptive and how to manage disruption For instance, Raynor (2011) suggests that disruptive innovations arise from technological and business model advantages. Markides and Oyon (2010) propose developing a second business model in the same market as an effective strategy against disruptive business models. Wessel & Christensen (2012) encourages analyzing the strengths of the disruptor's business model as well as the disruptee's. In brief, business models and disruptive innovation are closely tied and business models are often used to analyze or explain the disruptive innovation notion.

2.2 Business models and business model innovation

The business models concept has become popular and received increasing interest in management literature (Amit & Zott, 2001, Johnson et al. 2008, Baden-Fuller & Morgan, 2010). Despite the difference of opinion on the definition of business models yet, there is a growing consensus that business models explain how value is created and delivered (Chesbrough, 2010, Teece, 2010, Zott et al., 2011). In this paper we assume the definition of Johnson et al. (2008), which defines the business model as four elements creating and delivering value: customer value proposition, profit formula, key resources and key processes.

While the business models are understood to classify businesses, operate as sites for scientific investigations and act as recipes for managers (Baden-Fuller & Morgan, 2010), they are treated as sources of innovation as well. For instance Teece (2010) claims that technological innovation often requires a business model innovation to capture value and emphasizes the role of discovery, learning and adaptation. McGrath (2010) also discusses the importance of the discovery driven approach for business models stressing the experimentation and learning argument. Furthermore, Sosna et al. (2010) show evidence for business model innovation and propose a new framework crafted by organizational learning literature.

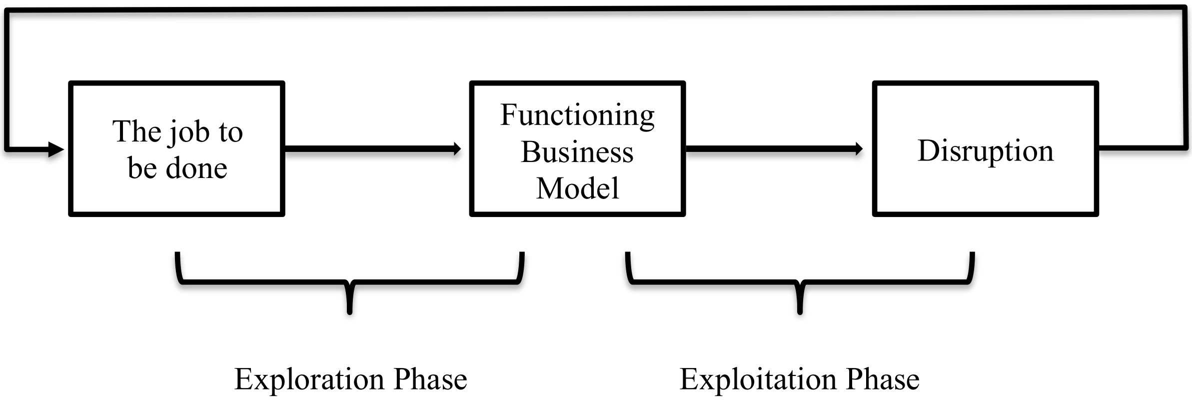

Figure 1 Life cycle of the firm as a business model innovation process

Inspired by these recent ideas on business model innovation we propose a new framework (see Figure 1) to shed light on the life cycle of firms from a business model innovation point of view. In this paper, we use and aim to extend the framework of Sosna et al. (2010) on three levels:

(i) We define the beginning of the business model innovation process: the job to be done. Christensen & Raynor (2003) explain the concept jobs as the utility customers want. Therefore, they suggest that market segmentation should be done based on the job rather than on the product or service.

(ii) We elaborate the termination of the business model innovation with the disruption as a threat or opportunity (Johnson 2010). Firms will refine their business model until they face disruption.

(iii) Finally, we conceptualize the learning model as a cycle. Firms facing the threat of disruption can fail or start searching for another business model to survive. Therefore, we claim that managing with disruption is possible when firms implement a continuous business model innovation process.

3 Case Netflix

Following the suggestions of Siggelkow (2007), we employ the method of case study in this paper. We used several sources for data collection including Netflix SEC filings, press articles, teaching cases published by Harvard Business School or within Harvard Business Publishing domain, company reports (McKinsey, 2012) and academic papers (Teece, 2010, Markides & Oyon, 2010). Our purpose is then not to uncover the antecedents of business model innovation process, but rather to illustrate the proposed framework with the prototypical example of Netflix' history. Netflix, in this regard, is a precious case in several terms: (1) Netflix as an entrant disrupted Blockbuster, the largest incumbent of the videotape rental industry and as a result of that has become an incumbent itself. (2) Netflix successfully executed a business model innovation until the DVD rental service became disruptive and (3) sustain its service with utilizing the next disruptive technology by continuing innovating its business model.

3.1 Company overview

Netflix is founded in 1997 to offer online DVD movie rentals. As opposed to retail video rental, Netflix provided an online store and a subscription-based membership. In 2002 the IPO took place and ten years after, the stock price has increased more than %450. Today, it is the largest movie rental subscription service in United States with more than 30 million users. In 2012, the company is expected to generate revenues of over $3 billion.

The following two sub-sections illustrate the business model innovation process Netflix has undergone. Netflix' search for the right business model started in 1997 and lasted up to 2000 when the customer value proposition was finalized. From 2000 to 2007, the company refined its business model and enjoyed high growth, international expansion and magnified stock prices. In 2007 Netflix announced its new video streaming service providing in the same subscription package with the DVD rentals. This started the search/exploration for the right business model for streaming, the next disruptive technology in video rentals.

3.2 Phase 1: Exploration - Initial business model design and pivoting

In 1997 when Reed Hastings and Marc Randolph co-founded Netflix, it began as an online platform for movie lovers and provided home delivery DVD movie rentals through the U.S. postal service. The target customers were early adopters of DVD players. The profit formula was similar to the competitors: charging for each rental including the potential late fee. However, the rapid adoption and availability of DVD's in rental and at retails weakened Netflix's customer value proposition quickly. Customers had to wait longer to receive the DVD by paying the same fee.

Therefore, in 1999, Netflix launched the prepaid subscription service, offering first four movies at a time and later changed it to unlimited rentals. This allowed customers to have always a movie at home. While this has strengthened the customer value proposition, it created new challenges for the business model. The demand for new release movies was high and movie acquisition was costly, particularly for blockbuster movies. This required shifting the revenues from blockbuster movies to lessor known ones.

To solve this problem Netflix launched the personalized movie recommendation system in 2000. The recommender used Netflix members' ratings to propose movies, which were available in inventory. This enabled Netflix to control the demand towards blockbuster movies and at the same providing added value to customers. Indeed, the feedback from the customers was positive. The customer value proposition "always a movie at home" became a threat for retail video rentals.

3.3 Phase 2: Exploitation – Optimization of the functioning business model

While customers were enjoying unlimited watching and discovering new movies based on the recommendation system, Netflix started taking operational measures to optimize its key processes. For instance, Netflix partnered with U.S. Postal Service to provide overnight service and rapidly expanded the regional distribution centers.

Besides, catalog and smaller titles have been receiving increasing frequency of rentals. To supply the lower-profile and independent movies, Netflix developed special distribution channels and improved its delivery of customer value proposition. Ultimately, Netflix made it easier for customers to leave and come back allowing more flexibility to cancel membership.

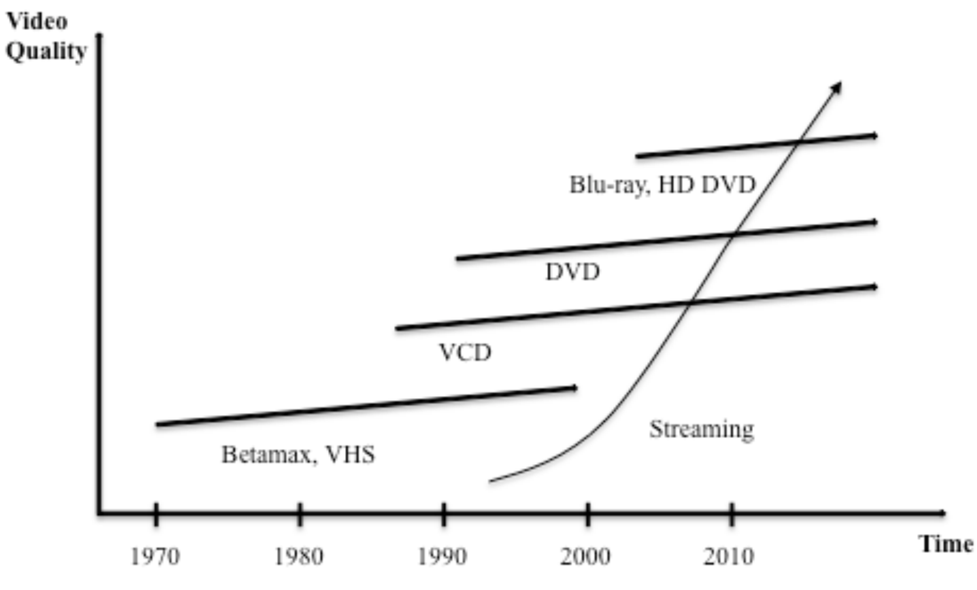

Figure 2 The Progress of Streaming Technology

3.4 Phase 3: Exploration – Managing disruption

In 2007 Netflix introduced streaming. Streaming technology was introduced in early 1990s and improved almost jointly with the development of the Internet bandwidth. In mid 2000, the quality of streaming was similar to the quality of DVD in terms of video resolution (see Figure 2). Netflix had the vision that the DVD-by-mail service will fade away and be gradually substituted with video streaming, the next disruptive technology in video rentals.

When introduced, the streaming option was included in the same membership fee. This means customers could rent movies in DVDs but also they could instantly watch them on their personal computers if the movie was available in streaming. This new subscription required a huge shift in terms of key resources. Netflix had to invest significantly in IT structures and partnerships to deliver the same content as reliably and efficiently as in the DVD.

Indeed, in the following years, Netflix started partnering with other consumer electronic firms to expand the availability of streaming on different platforms. For instance, in 2008 Netflix streaming was available on the Xbox 360, Blu-ray disc players, TV set-top boxes and the Apple Macintosh computer, in 2009 on the PS3 and Internet connected TVs, in 2010 on the Apple iPad, iPhone and iPod Touch, the Nintendo Wii, and other Internet connected devices. The new partnerships were not only channels to new customers but strengthened the Netflix brand. In 2010, an average U.S. family had ten Netflix enabled devices at home.

Furthermore in this phase, Netflix started expanding internationally. In 2010, for instance, Netflix launched streaming in Canada, in 2011 throughout Latin America and the Caribbean, in 2012 in the United Kingdom, Ireland and the Nordics. The Netflix brand has become global.

2011 was a crucial year for Netflix. In the summer of 2011, Netflix announced the separation of its DVD rental and video streaming service introducing new pricing for each service. The proposed new business model was that Netflix would continue the streaming under Netflix whereas DVD rental will be operated by its new sister company “Qwikster”. What Netflix did not take into account was the loosening of the customer value proposition. Many old movies were not available at streaming but were complemented by the DVD rental. The separation of the coupled services meant to have two subscriptions to keep the same customer value proposition paying %60 more than before.

Customers were unhappy with the result. Over 80,000 comments are posted on Facebook and Twitter damaging Netflix' reputation heavily. Following this, Netflix announced to drop Qwikster and will continue the DVD rental service under the Netflix brand. Yet, the cost for introducing Qwikster was high. 800,000 customers canceled their membership in the third quarter of 2011. Stock prices fell from $300 to below $70 in the last quarter of 2011. On the other hand, Netflix was right with the vision that the once disruptive DVD-by-mail service will fade away and be gradually substituted with video streaming. As expected the number of DVD subscriptions reduced significantly after the break-up from close to 14 million to roughly 9 million in less than a year while the numbers for streaming grow continuously (see Figure 3).

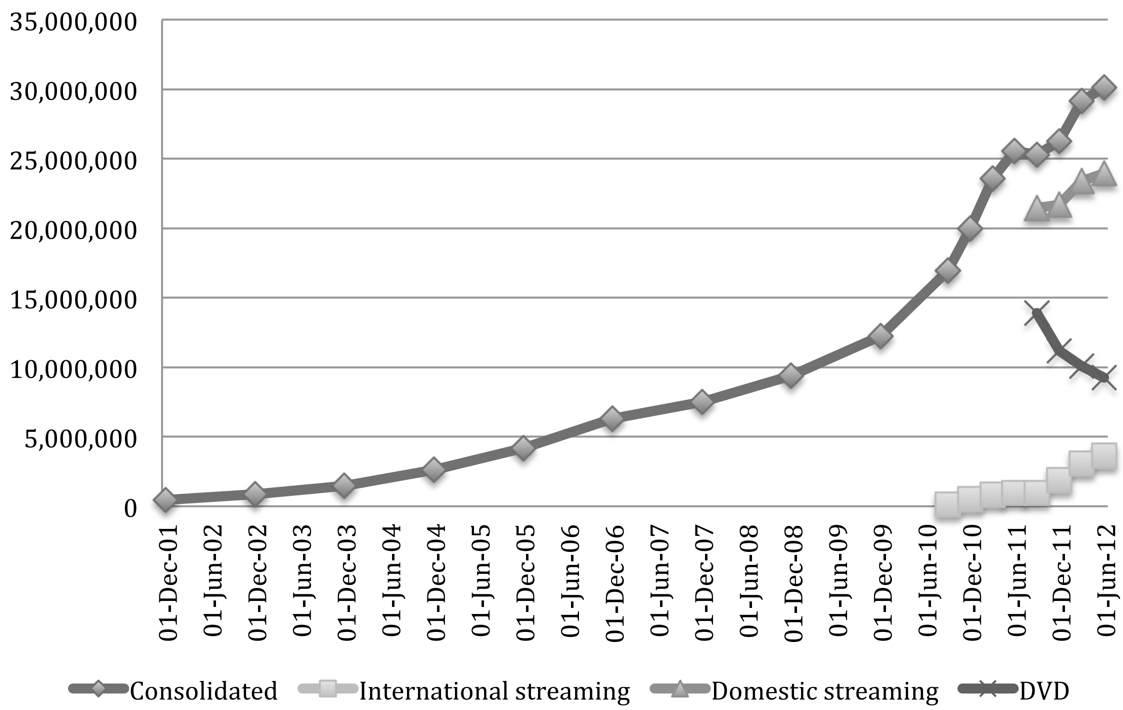

Figure 3 Total number of subscriptions

4 Discussion: challenges of managing disruptive innovation and cost of business model innovation

Altogether Netflix has been through three stages of innovating the business model: (1) exploration and experimentation with different business models, (2) exploitation of the functioning business model and (3) once again experimentation to find the right business model for streaming.

One fair question would be which the criteria are to call a learning process business model innovation. We assumed that every time one of the four components of the business model (Johnson et al., 2008) had a significant change, it would count as a change in the business model. But overall business model innovation is a process rather than a single event. This implies that business model innovation happens through a number of business model changes and is continuous.

Why did Netflix fail miserably when innovating the business model? Christensen et al. (2009) point out that disruptive innovations have usually three enablers: a simplifying technology, a new value network and a business model innovation. While the technological enablers and alternative value networks are available to many firms, a few can actually do the business model innovation right. Especially for incumbent firms, business model innovation is challenging because managers take decisions on short-term profits and changing the business model requires reorganizing the value network of a firm. Reorganizing the value network leads the firm to a new competition environment, which in turn demands the firm's strategy to adapt or change. Despite the long-term benefits, business model innovation can be costly, is risky, to some extent too venturous for incumbent firms to initiate and surrounded with barriers (Chesbrough, 2010). Perhaps the right question is: how is it possible that Netflix survived the disruption and is still operating? As we illustrated in this paper, the key to managing disruption is through business model innovation.

5 Conclusion

The discussions around the business model concept gained speed especially after the adoption of e-commerce and alternative businesses to summarize the essential features of a business. While the academic value of business models is still debated by several scholars, our focus was on understanding the life cycle of the firm from a business model innovation perspective. In this regard, disruptive innovation serves as a threat or an opportunity, which triggers the firm to experiment and innovate their business model to survive. By doing so, we encounter the dynamic and learning argument for business models and seek to contribute to the business model literature as well as for the acknowledgement of the business model concept.

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