

Components of A Business Model and Their Influences on a Firm Performance

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Abstract

A firm's business model is critical to gain and maintain a competitive advantage, which means that it is critical to the firm's profitability. The success of a firm's business model depends on the type of value that it offers customers, the type of customers to which it offers, the range of products or services, how it prices products or services, the types of revenue sources, the connected activities that create customer value, the capabilities, and the strategies used to maintain firm's competitive advantage. In designing and implementing a business model, a firm's competitive advantage depends on how it utilizes factors that make the internet impact on the industry. A business model includes values provided, a segmented market, a product or service provided in the segmented market, activities for providing values and capability of performing business activities. This research reviews components of a business model that affect performance of a firm. In this research we present a practical method for building and practicing a business model by analyzing how these elements of a business model are affected by the internet.

Keywords: Business Model, Competitive Advantage, Customer Value, Core Competencies

1. Introduction

A foremost and crucial factor in deciding performance of a firm is a business model. A business model is a means by which a company provides customers with more value than its' competitors and make a profit. A business model means that a company maintains sustainable competitive advantages and achieves excellent performance over competitors in the long term.

A business model includes values provided, a segmented market, a product or service provided in the segmented market, activities for providing values and capability of performing business activities.

This research reviews components of a business model that affect performance of a firm. In this research we present a practical method for building and practicing a business model by analyzing how these elements of a business model are affected by a technology such as the internet.

2. Business Model

A business model is a system in which the operation is determined by not only types of components but also by relationships among the components. Therefore if the value that a company provides was based on low cost, the activities involved should reflect the low cost goal.

A company having correlations among components of a business model have to cope with environmental changes to sustain correlations among components. The environments should be considered as an important factor for business performance. The environments include competitive environments and macro environments.

The competitive environments include competing firms, suppliers, customers, potential entry firms and substitute products. The competing firms have equivalent capability of providing same level of value provided by our firm, and are competing over business operation capability and other resources. Suppliers are business

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partners and competitive forces as well since suppliers' actions make a firm either increase costs or decrease price of a firm's product. Customers can be cooperators and customers' actions can bring about the same results that the competing firms can produce. If the bargaining power of customers were strong, customers would either induce firms to lower prices or require the higher quality of a product than the guaranteed quality. If the entry barrier were low in the existing market, competing firms would face threats of potential entries. Other important factors except competitive environment include information policy, regulations, and economic conditions. Government policies and regulations play important roles in defining competing firms' profits.

Another determinant factor in the performance of a firm is the internet. Internet is an indirect factor rather than direct factor in the industries. The internet factor affects a business model or environment so that affect eventually the profitability of a firm. The internet possesses several potential characteristics that can change competitive conditions and can create new industries. The internet provides an interactive communication method with low cost, and has a characteristic called 'network externality' and reduces information asymmetry as well⁵.

A firm doing business using the internet must have a business model that can make profits using the internet in the long term. If a firm's business model were excellent, the firm would have competitive advantages over the competitors and would make more profits than the competitors.

A firm has to provide the values constantly that the competitors can't do in order to make profits consistently. A firm can make profits consistently when the firm can provide the values that the competitors cannot do.

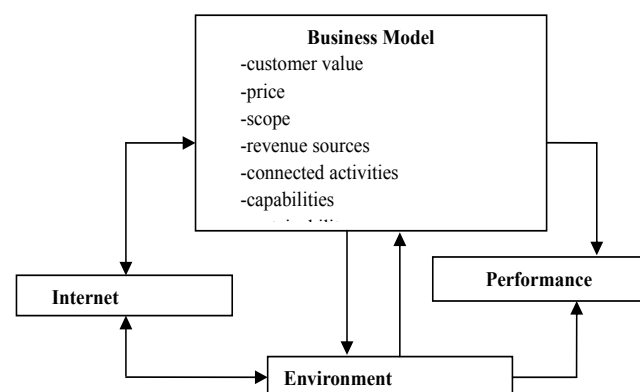


Figure 1. Determinant factors of firm performance.

The customer values a firm present in the market have to be either differentiable from the competitors' products or services or lower than prices of the competitors⁸.

A firm must have segmented markets as targets because specific customer value is not meaningful to all sorts of customers. The scopes of the market and the product a firm provides customers with are crucial. Firms must put appropriate prices on the products or services they present in the market. Firms must execute some activities that are supporting the values. Firms must have excellent capability of exercising businesses in order for them to be able create value added activities. We have to consider the profit sources in determining the components of a business model. Although a business model is capable of making profits, it is a successful only when the firm maintains competitive advantages consistently over the competitors.

3. Components of a Business Model and Their Linkages

3.1 Theoretical Background

We will explore those elements that are common to all business models and on which a firm makes profit. For a firm to keep making profit, it must keep offering customers values that competitors cannot offer⁸. Customer value can take the form of differentiated or low-cost products. Such a firm must also target the right market segments with products or services that have the appropriate value mix since not all customer value is meant for all customers. That is, market and product scope are also important. Offering the right customers the right value is only part of the equation. The firm must put price properly on the product. To offer value to customers, firms must perform the activities that support the value. These activities must be carried out by people who have to be managed well. How well firms perform the value added activities depends on their capabilities. If a firm has more than one revenue source and should take all sources into consideration as it decides what value to offer customers, how to price it, what activities to perform. A well conceived business model with all these components can be profitable. Once a firm starts making profit, competitors usually copy a piece of the action. A firm with such an advantage must worry about sustainability of profits. It must find out the ways to keep making profit.

3.2 Customer Value

Customers would buy a product from a firm only if the product offers them something that competitors cannot offer⁶. A firm can offer a value to customers by differentiating the product or by lowering the price of the product.

3.3 Differentiation

A product is differentiated if customers perceive it to have any value that other products do not have. A firm can differentiate its product in several different ways: product features, timing, location, service, product mix, linkage between functions, linkage with other firms, and reputation.

- Product Features

A firm can differentiate its product or service by offering features that competitors products or services do not offer. For instance, a memory chip manufacturer can differentiate its chip by reducing the processing time of their chips. Distinctive features are the most popular form of product differentiation, and better coordination of activities using the internet can result in better product features for customers. The internet can offers personalized and customized products or services.

- Timing

A firm can differentiate a product by being the first to introduce it into the market. Since such a product is the only product on the market, it is differential in default. For example, two personal computers with same physical features-processing speed, main memory capacity, hard disk capacity, operating system and the number of applications running on it-are seen as differentiated if one was produced in 1990 and the other in 2000. Compaq differentiated its IBM PCs by introducing the personal computers employing the latest version of Intel microprocessors on the market for the first time. The internet helps product developers reduce the lead times of their products. A manufacturer improves coordination using the internet and designs the product faster and brings the product to the market earlier than it might otherwise have done.

- Location

Two products with the identical features can be differentiated by their location. One differentiating feature may be the accessibility to the products. For

instance, if an Internet Service Provider in Beijing offers identical service to that of another Internet Service Provider in Shanghai, the two services are differentiated because a customer in Beijing does not have access to the services in Shanghai. However, the universality feature of the internet means that the internet may take away advantages of location from many products and services. The most popular example is the online and offline bookstore whose differentiating feature was its location. Customers can order books from anywhere in the world. In digital products or services such as music, videos, books or services like insurance, banks and brokerage firms, location is not a differentiator.

- Service

Users of complex system products such as the automobile can exchange information on how to get services of their cars. The larger the user group, the better the service will be since the chances that someone in the group can solve a problem and share the knowledge with other members of the group.

- Product Mix

The mix of products that a firm sells can be a source of product differentiation. The customers who prefer one-stop shopping or variety would find product mixes as valuable. Virtual stores offer a great deal of choice. For example, the Amazon.com offered 16 million items on its online store in May 1999, differentiating it from other retailers.

- Linkages

Linkages with another firm can be a source of differentiation. Internet firm or offline firm associated with America Online (AOL) obtain some credibility among many customers who perceive the AOL as reputable. As the network externality feature suggests, the greater the web community, the more valuable the membership, which differentiate the community from the others.

- Brand Reputation

A firm's brand reputation can play an important role in getting the customers to perceive that its products are different. The internet offers one channel to establish brand reputations.

3.4 Low Cost

Low cost means that it costs the firm less to offer customers the product or service, the firm passes some of the cost savings on to customers. Reduction in information asymmetry means savings in transaction costs. The distribution channel effect means cost savings and better way of distributing a firm's output. For example, a software developer or a musician can save on distribution, packaging, and transaction costs, by posting his or her products on the internet. Better coordination of activities means lower costs for producers. Benefits of savings can be passed on to customers.

3.5 Scope

While the customer value is related to low cost or differentiation, the scope is about the market segments or geographical areas to which the value should be offered as well as how many products that embody several aspects of customer value should be sold.

There are different industries within the business market. There are different size of firms and different technical sophistication of firms within each of these industries. Households consist of many segments that are function of demographics, lifestyles, and incomes. The iVillage is targeted to women. A firm has to decide what value should be offered in each segmented market. The universality feature of the internet makes it possible for a firm to expand the geographical region and makes it easy for a firm to collect information on the segmented market.

A firm's task of decision making on scope is not limited to the choice of market segment. A firm must also decide how much of the needs of the segment it can serve⁹. For example, a firm doing business in the teenagers' market has to decide to satisfy diverse needs on the market. A firm may provide teenagers only with basic telephone access service and chatting service or provide contents such as movies mathematics tutoring. A firm may also decide to provide those services to all demographic groups.

3.6 Price

An important part of making profit from the value that firms offer customers is to put a price on the product. A bad pricing strategy not only makes the firm lose money, but also kills the product or lowers the possibility of success. Most products and services in the Knowledge-based economy are well knowledge-based². Knowledge-based

products require higher initial investment costs than variable costs of manufacturing and offering products to the customers. For example, a software developer may spend a few million dollars in developing the software while the variable cost of copying and selling the software is almost zero. The America Online (AOL) spends a few millions of dollars in building software, hardware, brand-name, and subscriber base. Once the initial investment costs are spent, the cost of maintaining a member is comparably small.

3.7 Connected Activities

A firm must perform necessary activities to deliver the values to different customers. In the manufacturing industry, a firm has to perform activities such as purchasing, inventory and production management activities, and sales and marketing activities. A set of these connected activities is called a value chain because value is added to materials or knowledge as it moves up the chain. A firm must choose which activities it performs and when it performs them.

The activities should be consistent with the value that the firm offers. If a firm takes a low cost strategy or a differentiation strategy, the activities should be consistent with that strategy. For example, if a PC manufacturer wants to offer its value to customers by reducing the gap between the time PC manufactured and the time PC delivered, the firm should have an appropriate customer service system and an excellent logistic system to support.

The activities should take advantages of the industry success factors that have the most impact on cost or differentiation. For example, Dell's success in 1990s is often credited to the firm's decision to sell directly to customers instead of going through distributors. The success of the decision is due to two key characteristics of the PC industry. The first is that the speed of technology advancements is very fast, so PCs that are in the distributors' warehouse can be obsolete if not sold quickly. The second is that the prices of PCs drop so fast that the more the PCs are stored in distributors, the less the PC manufacturers will get when they are sold.

The activities should take advantage of any capabilities a firm has. For example, One of Wal-Mart's core capabilities is logistics, thus it would make sense for Wal-Mart to perform logistic activities.

It is critical for a firm to decide when it performs activities. The activities that firms perform in an industry depend on the position where the technology is in the industry's life cycle. In the emerging phase, firms must

decide how they are going to adopt the technology and what role they see that technology playing in their revenue streams. In the growth phase, firms must decide what the basis for their competitive technological advantage should be and invest according to this basis.

3.8 Capabilities

Firms need resources to perform the activities that support customer value. These resources can be grouped into tangible, intangible, and human. Tangible resources are physical and financial. Tangible resources are identified and accounted as assets in financial statements. Plants, equipment, and cash reserves are classified as tangible resources. Intangible resources are the nonphysical and nonfinancial assets that are not usually accounted for in financial statements. Patents, copyrights, reputation, brands, relationships with customers, relationships between employees, and knowledge embedded in firm's database are identified as intangible resources. Human resources are the skills, knowledge and experience that employees carry with them.

Resources do not make customer value and profits. Customers would not like a firm because the firm has great plants, excellent human resources. Resources must be converted something that customers want. The ability or capacity of a firm to turn its resources into customer value and profits is a capability or competence⁴. Hamel and Prahalad⁴ argued that a firm's capabilities or competences are core when they meet three criteria: customer value, competitor differentiation, and extendibility. The customer value criterion requires that a core competence must take a high contribution to the customer value. A competence is extendable if it is used in more than one product.

A firm's core competencies allow it to have a competitive advantage because they allow the firm to offer its customers better value than competitors. The extent to which this advantage is sustainable is a function of how inimitable and difficult to substitute the capabilities are. There are three reasons that it is difficult for firms to replicate the capabilities. First, it is difficult to replicate the historical context in which the capabilities were developed. Caterpillar's worldwide service network has its root in World War II, when its machines were from Allied countries. After the war, servicemen who returned to their country's civilian workforces had the skills and knowledge to service Caterpillar equipment. A firm would find it very difficult to build an identical network. Second, it takes time to develop these capabilities. Merck's ability

to get its drugs through clinical testing and approval is outstanding. It requires the relationships with physicians, research centers, and hospitals, which the Merck has created over the years, and technology.

3.9 Sustainability

If a firm's business model enables it to gain competitive advantage, there are chances that its competitors can catch up it. What can a firm do to maintain its competitive advantage? The sustainability of a firm's competitive advantage depends on its capabilities, environment, and technology. There are three strategies to sustain a firm's competitive advantage: block, run, and team-up.

In the block strategy, a firm tries to build barriers around its business model to prevent competitors from imitating it. A firm can block in two ways. First, if its capabilities in any of the components of the business model are inimitable and distinctive enough to offer customers unique value, the firm can limit access to them and thereby keep out competitors. That would be the case when a firm has intellectual property that can be protected from potential imitators. Second, if all firms are equally capable of performing these activities, incumbents may prevent entry by signaling that post-entry costs will be low. For example, Priceline.com got a patent on its reverse auction model to prevent competitors from copying its business model.

The run strategy admits that a protection is not always perfect. Sitting behind barriers gives competitors time to catch up. The innovator must run; it must keep innovating its business model. Running can give a firm many first-mover advantages, including the ability to control parts of its own environment. In an age of rapid technological change, the run strategy becomes extremely important because blocking is more difficult.

In the team-up strategy, a firm can pool other firms' resources to reinforce its business model. Teaming up allows a firm to share in resources that it does not possess. Teaming up has its disadvantages too. It is not easy for a firm to protect its technology or other aspects of its business model. Users who accessed AOL's service in the 1990s often found that they had to wait longer than they would expect. Since AOL wanted to provide its customers with fast access, it teamed with the Time Warner to provide its customers with fast access service.

Attaining and maintaining a competitive advantage often requires some combination of the above three strategies. Two factors influence the choice of strategy. First,

the choice depends on what it takes for a firm to build a profitable business model. It depends on what determines profitability in the face of the technology in question. Second, the timing is essential. The strategy pursued is a function of the stage of evolution of the technology. The internet is the technology in our case.

4. Conclusion

A firm's business model is critical to gain and maintain a competitive advantage, which means that it is critical to the firm's profitability. The success of a firm's business model depends on the type of value that it offers customers, the type of customers to which it offers, the range of products or services, how it prices products or services, the types of revenue sources, the connected activities that create customer value, the capabilities, and the strategies used to maintain firm's competitive advantage.

If a firm offers a product with differentiable value to its customers, it can charge a premium price for its product. Pricing is a necessary to ensure that a firm gets paid for the value that it offers customers. Pricing can be used to gain a large market share early and build switching costs at customers.

Business models are not static. The technology on which they rest and the environments in which they operate continually changes. The firms and competitors who design them initiate or react to change. To sustain or attain a competitive advantage, a firm can use a combination of three generic strategies: block in which the firm prevents competitors from imitating its business model; run in which the firm keeps innovating or reinventing its business model; and team-up in which the firm enters into alliances, acquires another firm. Which strategy is appropriate

and when is a function of the type of technology and the importance and availability of contemporary assets.

In designing and implementing a business model, a firm's competitive advantage depends on how it utilizes factors that make the internet impact on the industry.

Appraising a business model helps a firm to make decisions. It tells a firm how good its business model is compared to that of competitors or how good alternative business models under different scenarios can be. More importantly, it enables a firm to understand which components of its business model are strong or weak compared to those of competitors. With such this information, a firm can continue to evolve a better business model.

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