

SCRIPT: STRATEGIES BASED ON RADICAL INNOVATIONS

Introduction

This mini lecture examines strategies based on radical innovations, that is, innovations that prove to be revolutionary or disruptive in their industries.

What is an Innovation?

An innovation is a new product or service that comes from a creative idea. An innovation needs to be: a) novel, b) useful, and c) successfully implemented in order to help companies succeed. While there are several types of innovation, this mini-lecture focuses on strategies based upon more radical innovations. These are innovations that draw on different knowledge bases to create value in truly unique ways. Strategies that draw on radical innovations often use new technologies or employ fundamentally different business models than rivals, that is, they deliver customer value through very different activities. Innovative strategies are often called “disruptive” innovations because incumbents find the innovation so disruptive that they can no longer do business as usual.

To illustrate, Blockbuster dominated the home video rental market by building 5500 stores around the country where they offered more than 1000 different movie options. Blockbuster made a huge investment in stores and in DVDs. But Blockbuster didn't make money from the videos sitting on the shelves, so it needed to get customers to rent the DVD and return it as quickly as possible. To encourage customers to return the DVDs quickly, Blockbuster charged late fees. These fees were unpopular, but Blockbuster couldn't make money if it didn't get DVDs back quickly. This strategy worked extremely well... until Netflix entered the movie rental business. Instead of building stores, Netflix shipped DVDs directly to customers' homes. The downside of renting movies online was that you had to plan ahead – no impulse movie watching. But the upside was the ability to access over 90,000 movies in the Netflix library.

Additionally, Netflix made money when customers *didn't* watch their DVDs. As long as customers held the DVDs, Netflix didn't have to pay return postage or mail out the next DVD. Note that this is exactly the opposite of Blockbuster – it made money by getting DVDs back quickly. Moreover, because Netflix didn't have to build stores, hire sales clerks, or buy inventories for every store, it had more than a 30 percent cost advantage over Blockbuster. Not surprisingly, by 2010 Blockbuster had filed for bankruptcy and Netflix's market value was over \$3 billion. Netflix defeated Blockbuster by deploying an innovative strategy that used a fundamentally different business model.

It's difficult to provide a full list of different kinds of strategies based on radical innovation because new innovative strategies are constantly emerging – change is a natural part of innovation. Indeed, a firm's strategy must be dynamic due to changes in competitive offerings and in customer needs. However, strategists have identified several types of radical innovations, and these types may provide a useful guide for how to develop a strategy based on radical innovation.

1. Eliminate Activities in the Value Chain

One type of innovative strategy eliminates or reconfigures activities in the value chain. The most typical pattern is to eliminate a step in the channel to the customer, such as a store, which also eliminates the need for salespeople and inventory. This allows the innovating company to offer similar products and services at much lower prices. This is how Netflix gained a cost advantage over Blockbuster. Similarly, Amazon offered lower prices than Barnes & Noble by eliminating the brick and mortar bookstore and shipping directly to customers. Rather than eliminating stores, Southwest airlines eliminated meals, seat reservations, and luggage transfers in order to lower total costs.

2. Low End Disruptive Innovations

Rather than eliminating activities in the value chain, some companies use different technologies than rivals to produce low cost products or services. Harvard professor Clayton Christensen observed a pattern in a number of industries where a firm leverages new technologies to launch a product at the “low end” – the most price-sensitive segment of the market – and then gradually moves upmarket as it improves its technology and processes. He called these “low end disruptive innovations.” For example, Nucor used this approach to disrupt integrated steel producers like U.S. Steel. Nucor pioneered a new way to create steel products using small electric arc furnaces to melt scrap metal in mini-mills. This process was much simpler and cheaper than the traditional method of melting iron ore in enormous blast furnaces. Initially, mini-mill product quality was poor, so they could only make rebar – material used to reinforce concrete. This was a low-margin market that the big steel makers were happy to abandon. But as Nucor’s mini-mills improved their quality, their cost advantage enabled them to trounce the integrated producers in higher margin products such as angle iron, structural beams, and sheet steel.

Similarly, Apple and IBM’s first micro-computers were inferior to the mini-computers sold by DEC and Data General. But over time their performance improved enough that companies dumped mini-computers for the micro-computers that became good enough to do the job. Skype’s cheap – and often free – phone service is gradually moving upmarket as the quality of calls improves and as the technology allows for video conferencing and other higher end business services.

3. High End Disruptive Innovations

A third category of disruptive innovation is “high end” or “top down” disruption. In stark contrast to the low end disruptions we just discussed, high end disruptive innovations actually outperform existing products when they’re introduced, and they sell for a premium price. History provides several examples: Apple iPod outplay’s Sony Walkman, Starbuck’s beans and atmosphere drowns coffee shops, and FlashDrives zip past floppy disks and zip drives. These products typically rely on “radical” or leapfrog technologies are quite expensive initially. However, the costs gradually decline as companies make improvements in production technology.

A high end disruptive innovation may serve a specialized, high-end niche of a market for years before it finally trickles down to mainstream markets. Such was the case with Electronic Fuel Injection (EFI), a technology that first replaced carburetors in high performance racing cars before finally making its way to Detroit. These innovations slowly penetrate from above until they become practical and affordable in mainstream markets. When they do, consumers flock to the new offering. Cell phones, which originally cost \$3995, followed a similar pattern. As the price (and size) of the phones dropped, the phones became accessible to a much larger segment of the market. In 2012, almost 30 percent of homes were “wireless only” households.

4. Design the Value Chain for Mass Customization

A fourth category is “mass customization.” Mass customization is a bit of an oxymoron in business because usually firms either mass produce OR customize, but not both. However, new technologies and processes have allowed for the mass production of individually customized goods or services. Take Build a Bear Workshop for example. Customers essentially build their own Teddy Bear by choosing from a large variety of body styles after which the animal is stuffed at the store to the customer’s liking. Some like it squishy – some puffy. The customer can also add a heart or music box. After the animal is stuffed, the customer dresses their furry friend in the shirt, pants, skirt, hat, or even shoes of their choosing. In short, the components of the teddy bear are mass produced but put together in a customized way.

Dell used a similar strategy when it successfully launched its PC business using the “Dell Direct model.” Dell sold directly to customers and allowed them to choose the components that mattered most to them; they then custom built and shipped the PC to the customer within 48 hours. Dell’s ability to mass produce customized PC’s required a very flexible and responsive assembly system and supply chain which other PC makers didn’t have.

5. Create New Markets by Targeting Non-Consumption

Insead professors Chan Kim and Renee Mauborgne identify a fifth category, called “blue ocean strategy.” They argue that a company can best succeed by creating new demand in an uncontested market space. Sharks competing for the same scarce food create a “Red Ocean” of blood due to intense rivalry. Blue Ocean success relies on swimming to empty water; in other words, offering value that is *very* different from anything on the market. When Cirque de Soleil opened its first show it was nothing like a Ringling Brothers circus. A Cirque de Soleil show combines elements of a traditional circus, acrobatic troupe, street performers, and Broadway show to offer an entertainment experience that is like no other. Cirque created an offering that was so unique that there was no direct competition. Moreover, it pulled in a whole new group of customers who were willing to pay several times the price of a conventional circus ticket for a unique entertainment experience.

As companies try to create new demand, they sometimes target “non-consumption” with an offering that might induce consumption. For example, more than 70 percent of households in India do not have a refrigerator because they are large, expensive,

and require continuous electricity to run. So, appliance maker Godrej created a small refrigerator targeted at non-consumption – those 125 million households without a fridge. Using battery technology and solid state thermo electric cooling, they created a \$49 cooler size refrigerator – called ChotuKool – that is bringing refrigeration to everyone in India.

Conclusion

In summary, there are many different ways to utilize radical innovations in strategy. A company's ability to deliver value in innovative ways is limited only by the creativity of its people. But success requires radical, rule-breaking ideas that are effectively implemented as part of an innovative strategy.