Discussion of Article and Books

- Article Hambrick & Fredrickson's Are You Sure You Have a Strategy?
- Book Christensen et al's Seeing What's Next
- Book Moore's Crossing the Chasm

Donald C. Hambrick and James W. Fredrickson 2001

Are You Sure You Have a Strategy?

Clayton M. Christensen, Scott D. Anthony, and Erik A. Roth 2004

Seeing What's Next Using Theories of Innovation to Predict Industry Change

The Core Theories of Innovation

- The Disruptive Innovation Theory
 - This theory points to situations in which new organizations can use relatively simple, convenient, low-cost innovations to create growth and triumph over powerful incumbents.
 - The theory holds that existing companies have a high probability of beating entrant attackers when the contest is about sustaining innovations.
 - Sustaining innovations move companies along established improvement trajectories.
 - But established companies almost always lose to attackers armed with disruptive innovations.
 - Disruptive innovations either create new markets or reshape existing markets.

The Core Theories of Innovation (cont'd)

- The Resources, Processes, and Values Theory (RPV)
 - This theory explains why existing companies tend to have such difficulty grappling with disruptive innovations.
 - The theory holds that resources (what a firm has), processes (how a firm does its work), and values (what a firm wants to do) collectively define an organization's strengths as well as its weaknesses and blind spots.
- The Value Chain Evolution Theory (VCE)
 - This theory holds that companies have a choice:
 - They can choose to integrate, executing most of the activities themselves,
 - Or they can choose to specialize and focus on a narrow range of activities, relying on suppliers and partners to provide other elements of value added.

- Alexander Graham Bell did not invent the technology that would become the telephone with the intention of toppling Western Union.
 - He set out to help Western Union to improve its core telegraphy business.
 - Bell offered the patents he had received to Western Union for \$100,000, roughly \$1.7 million in today's dollars.
 - Western Union turned Bell down.
- One way to interpret this mistake the way that people typically explain such mistakes – is to point to management myopia.

- In declining to purchase the innovation, Western Union's president famously said, "What use could this company make of an electrical toy?"
- Spurned by Western Union, Bell and his backers chose to commercialize the technology with a licensing business model.
 - The first telephone company appeared in New Haven, Connecticut in 1878.
 - Although the technology could carry the telephone signal for a few miles at the outset, a new market emerged.
- Bell licenses in geographically exclusive areas emerged to provide simple point-to-point services.
 - In return, they gave Bell a portion of the revenue stream.
- The first adopters were local businesses that saw the technology as a way to improve communications within offices and between nearby offices.

- By 1879, users had purchased more than 17,000 phones. By 1900, the number of users swelled past 1 million.
- At first, the telephone's growth had little impact on Western Union's core business because only local calls were possible.
 - By 1900, only 3% of daily calls were "long" distance.
- But even by 1900, it was clear that Western Union had made a colossal mistake.
 - That year, Western Union reported annual income of \$6 million whereas the Bell companies reported \$10 million.
- By 1910, the consolidated Bell companies (now called AT&T) acquired a controlling interest in Western Union.
 - Although the government eventually forced AT&T to divest its share of Western Union.

- Was Western Union's management incompetent?
- Consider these facts:
 - Western Union's management somehow was smart enough to create what historians call the "first nationwide multiunit modern business enterprise."
 - Yes, they did discount the telephone, but so did Bell who initially presented it as a novelty rather than a communications device capable of challenging Western Union.
 - In fact, Bell even patented his device under the name "Improvements in Telegraphy."

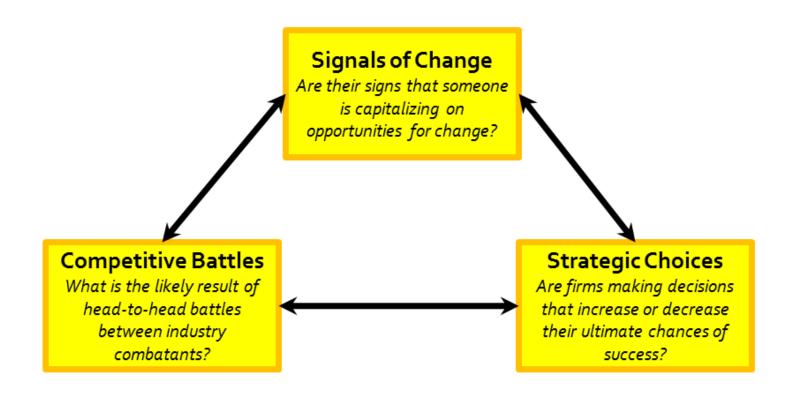
- A more upbeat assessment grants the intelligence of Western Union's management team and curses the randomness of the process of innovation and competition.
 - As one historian notes, "Neither telephone nor telegraph industry leaders could conceive of a world in which ordinary people would pick up a telephone just to chat with friends and relatives."

- And what's more, Western Union didn't miss the signs indicating the telephone was important.
 - In fact, it aggressively attempted to enter the telephone industry, hiring Thomas Edison to develop a competing system.
- But Western Union's heart was not in the fight.
 It decided to cede the local telephone market to Bell.
- Western Union's "failure" was not to ignore the telephone, but to focus on its highly profitable core business.

- So why did Western Union make decisions that history would deem short-sighted?
 - The telephone was a new-market disruptive innovation. Although initially users could communicate for only a few miles, speaking was easier than learning telegraphy and telephoning was a lot easier than travelling. Early growth provided funds for investment and improvement.
 - Western Union's resources, processes, and values meant that what ultimately became the right course appeared to be unattractive at the outset. Western Union passed on the telephone because it sensibly prioritized investing in its core market. Western Union's overwhelming focus on long-distance communications for the railroads, newspapers, and financial brokerage houses was highly profitable.

- Western Union saw entrants improving. However, investments in the core business kept trumping investments in the new business. Initially, the telephone market was just too small to materially affect Western Union's financial position.
- 4. By the time the right course was clear, it was too late. By the time telephone service was good enough to begin affecting Western Union materially, the company lacked the ability to respond. It would have been as difficult for Western Union to beat back the telephone companies in the early 1900's as it would have been for the telephone companies to take on Western Union in the 1870's.
- In short, Western Union passed on the telephone for predicable reasons, and the telephone grew predictably. And Western Union couldn't respond.
- Success wasn't due to good management nor was failure due to bad management. The management teams made appropriate profit-oriented decisions given the starting positions in which the firms found themselves.

Process to Predict Industry Change



Process to Predict Industry Change

"Undershot" Customers

Signs that companies are introducing "up-market" sustaining innovations.

Non-consumers

Signs that companies are introducing new-market disruptive innovations.

Signals of Change

Are their signs that someone is capitalizing on opportunities for change?

"Overshot" Customers

Signs that companies are introducing low-end disruptions, displacements, or moving closer to consumers.

Non-Market Contexts

Signs that non-market players are taking action to increase or decrease barriers to innovation.

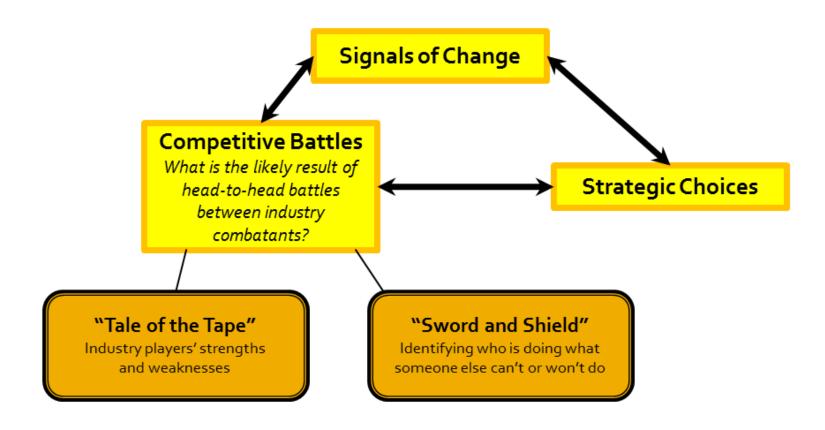
Competitive Battles

Strategic Choices

Definition of Terms

- "Undershot" customers Consumers who use a product, but are frustrated by its limitations.
- "Overshot" customers Customers who stop paying for further improvements in performance.
- Non-consumers Non-consumers exist when characteristics of existing products limit use to people who have significant financial resources or specialized skills or training.
- Non-market contexts Notably government and its regulatory agencies.

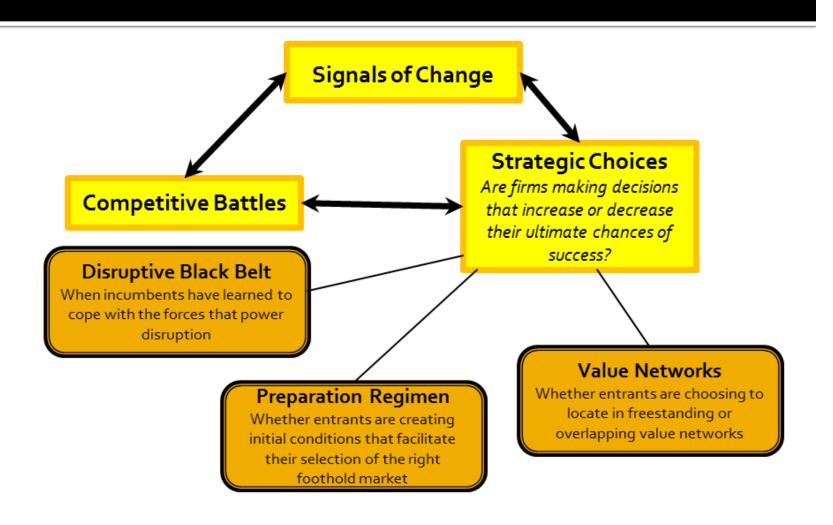
Process to Predict Industry Change



Definition of Terms

- "Tale of the Tape" Predicting who will win competitive battles requires evaluating combatants' strengths and weaknesses. ("Tale of the tape" is an analogy to boxing where two boxer's heights, weights, reach, historical records, etc. are used to predict the favorite to win the boxing match.)
- "Sword and Shield" Companies have asymmetries important differences in motivation or skills. Swords are strengths on offensive, and shields are strengths on defense. Weaknesses can be on offense or defense. On defense, weaknesses provide opportunities for the opponent's sword to penetrate. On offense, weakness makes a company unable to exploit a weakness in the opponent's defenses.

Process to Predict Industry Change



Definition of Terms

- Disruptive Black Belt Companies can learn strategies that allow them to control disruptive forces. Specifically, they can set up separate organizations to launch disruptive counterattacks or develop internal capabilities to create disruptive growth.
- Preparation Regimen Finding the wrong entry point or foothold can quickly put entrants at a disadvantage. Developing new products is hard; finding new markets is harder.
- Value Networks All companies reside in a value network, which includes its upstream suppliers; downstream distributors, retailers and customers; and its partners and ancillary industry players (e.g., consultants and other experts). Overlapping value networks can limit a new entrant's success when, for example, suppliers pressure the new entrant to create something that does not harm their customer, the existing company in the industry.

Conclusion

- This book detailed a way to use the theories of innovation to predict industry change.
- Four critical lessons are:
 - Disruption is a process, not an event.
 - Disruption is relative. What is disruptive to one company may be sustaining to another company.
 - Different or radical technology does not equal disruptive.
 - 4. Disruptive innovations are not limited to high-tech.

Geoffrey A. Moore 2002

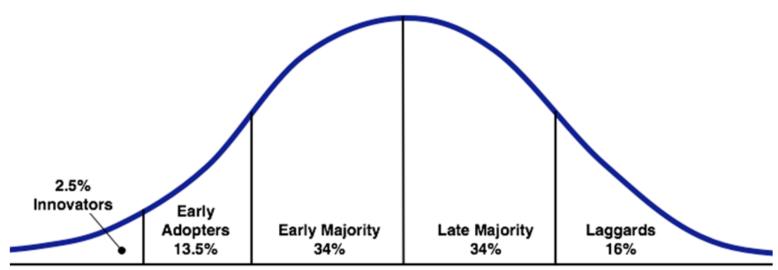
Crossing the Chasm

Marketing and Selling Disruptive Products to Mainstream Customers

The Technology Adoption Cycle An Example

- Consider the newly introduced electric car. When are you going to buy one?
 - If you say, "Not until hell freezes over," you are probably a very late adopter of technology, which we call a laggard.
 - If you say, "When I have seen electric cars prove themselves and when there are enough service stations on the road," you might be a member of the early majority.
 - If you say, "Not until most people have made the switch and it becomes really inconvenient to have a gasoline car, you are probably part of the late majority.
 - If, on the other hand, you want to be the first one on your block to own an electric car, you are apt to be an innovator or an early adopter.
- See the diagram on the next slide.

The Technology Adoption Cycle



Source: Everett Rogers (Musicin of Innovations model

The Technology Adoption Cycle

- The Technology Adoption Cycle is a bell curve.
 - The early majority and late majority fall within one standard deviation of the mean.
 - The early adopters and the laggards are within two standard deviations.
 - The innovators are about three standard deviations of the mean.
- The groups are distinguished from each other by their characteristic response to a new technology innovation.
 - Each group represents a unique psychographic profile
 a combination of psychology and demographics.

The Psychographics of the Groups

Innovators

- Are technologists intrigued by new technologies.
- Like to be the first one to have it.

Early adopters

- Are not technologists, but are imaginative and appreciate the benefits of new technologies.
- Without well-established references, they rely on their own intuition when making purchases.

Early majority

- Share some of the early adopters interest in technology.
- Ultimately, are driven by practicality and will wait-and-see.

Late majority

 Share concerns of early majority, but wait until the technology has become an established standard.

Laggards

 Simply do not want anything to do with new technology for a variety of reasons, some personal and some economic.

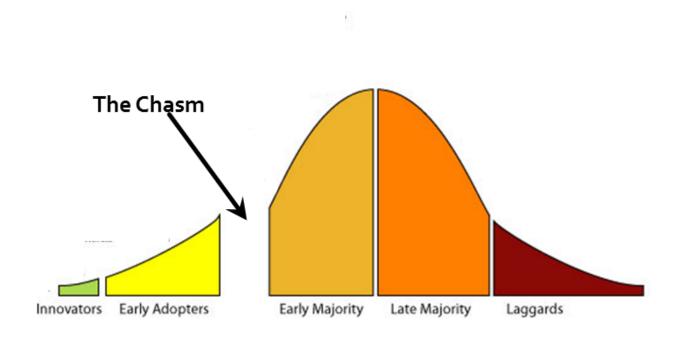
Problems with the Technology Adoption Cycle for High-Tech

- There are cracks in the bell curve for high-tech products.
 - There are small gaps between each of the psychographic groups due to a dissociation between the two adjoining groups.
 - That is, the gaps represent the difficulty that any group will have in accepting a new technology if it was presented in the way it was to the preceding group.
- The major gap (or Chasm), however, is between the Early Adopters and the Early Majority.

Problems with the Technology Adoption Cycle for High-Tech (cont'd)

- The Chasm results from differences in the buying goals of each group that borders on the Chasm (next slide).
- The Early Adopter is buying something that they perceive to be a change agent, which will make significant changes to their capabilities and set them apart from others.
- The Early Majority is buying something that will make a productivity improvement to their existing operations.
 - They want evolution, not revolution.
 - They do not want to debug a product, but will only buy it when it works properly.

Revised Technology Adoption Cycle



Crossing the Chasm The Challenge

- The Catch-22
 - The Early Majority is cautious and wants good references before buying the product.
 - To the Early Majority, the Early Adopters are not good references.
 - But, the only good reference for someone in the Early Majority is another member of the Early Majority.
- To successfully cross the Chasm requires an approach that is analogous to the D-Day invasion of France; it must be a well-planned and massive effort.

Crossing the Chasm

The Approach

- Trying to cross the Chasm without a niche approach is like trying to light a fire without kindling.
- The consequences of being sales-driven during the Chasm crossing are, to put it simply, fatal.
 - The goal of the company during this period must be to secure a few beachheads in the mainstream market.
- Having secured a few niches (which can provide references for the others), the technology will be adopted by the Early Majority and the Chasm crossed.