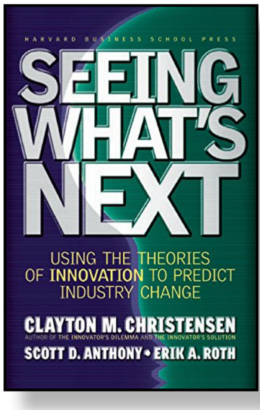

Seeing What's Next

Using the Theories of Innovation to Predict Industry Change

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

Will that hot new startup fail or succeed? Which emerging technologies are consumers likely to embrace? Are a company's managers making wise decisions? Which companies will come out on top? Whether you are an investor, an analyst, or an executive, your success is directly tied to your ability to accurately answer questions like these.

In *Seeing What's Next*, internationally renowned innovation expert Clayton M. Christensen and his research partners Scott Anthony and Eric Ross present a powerful method for predicting industry change and seeing which companies will likely rise to the top.

More specifically, *Seeing What's Next* provides a three part process that allows you to:

- Identify firms that are ahead of the curve, long before markets or experts recognize that changes are coming.
- Predict winners and losers in head-to-head competitive battles.
- Evaluate a company's strategic choices to determine their chances for success.

Seeing What's Next is based on the proven theories of innovation described in two of Christensen's landmark books, The Innovator's Dilemma which explained why successful companies are often unseated by disruptive innovations, and The Innovator's Solution which outlined a process innovators can use to launch disruptive innovations. Now Christensen takes us on a path that allows us to look around the corner of future events and capitalize on what we find.

The Signals of Change

The first step in seeing what's next in an industry is to look for signals of change. In this section we'll look at the signals that indicate an innovation will lead to the emergence of new companies or business models that can create major changes in an industry.

The core of the "signals of change" analysis involves evaluating three customer groups:

1. *Non-consumers*: These are people who aren't having important needs fulfilled by current offerings.
2. *Undershot customers*: These people consume a product but are frustrated with its limitations and are willing to pay for enhancements.

Overshot customers: This group consists of people who consume a product that provides more than they need and therefore aren't willing to pay for further improvements.

Let's look at each group, and the opportunity they present.

Non-consumers

Interestingly, the first group of people that Christensen looks at in an industry is people who are not consuming. Non-consumers exist in every market. Even people consuming a product in a certain market can be considered non-consumers.

For example, in the telephone market of the1980s everyone was using phones in their homes and offices but they rarely used phones outside this environment such as pay phones. The industry had mainly non-consumers outside the home and office. These people were eventually turned into consumers with a new- market disruptive innovation, the cellular telephone.

Cell phones made it easier for people to do important jobs such as making their commute more productive and contacting help in emergency situations.

The authors write: "When consumers buy a product, they are really hiring the product to get the job done for themselves. Understanding those jobs that are not adequately satisfied by current products provides deep insight into what are and what will be the truly innovative products that delight existing customers and attract new customers from the sidelines of non-consumption."

New-market disruptive innovations such as cell phones have the greatest potential for long-term industry change but are the hardest innovations to identify.

What are the signals that a company is creating new-market disruptive growth?

One clear signal is a high and increasing rate of growth in a new market. Identifying these new markets will allow you to spot important developments while they are still in their infancy.

Another signal is action in certain customer segments such as teenagers, college students, small business owners and people in developing countries. These groups typically embrace new products (new-market disruptions) when the product or service makes it easy for them to do something they could not do before...even if the product has initial imperfections.

Undershot Customers

Consumers can be divided into two groups, undershot customers, people who want more from existing products and overshot customers, for whom existing products are more than adequate.

Wherever you see markets where customers are consistently willing to pay premium prices to trade up to higher-performing products you are seeing a market with undershot customers.

Undershot customers create opportunities for existing firms to profitably introduce up-market innovations. These innovations make good products better. In this context, companies can safely offer improved services at more attractive prices to their most important customers.

There are many signals that indicate under-shot customers exist in an industry. Customers expressing frustration and product reviews highlighting industry-wide limitations point to under-shot customers, but the most telling signs are markets in which customers are consistently willing to pay premium prices to trade up to new higher performing products.

Overshot Customers

As companies introduce up-market innovations and improve their products and services, they eventually overshoot the performance that many of their customers can use.

So what can innovators in industries with overshot customers do? They can create new growth companies by using low-end disruptive innovations to establish a beachhead among the incumbents' least demanding customers.

When functionality and reliability of products overshoot customer needs, then convenience, customization, and low prices become what are "not good enough" and present interesting new opportunities.

A prime signal of change in an industry with overshot customers is when a company introduces a new product or business model that adds convenience, customization or lower prices.

For example, Dell introduced new levels of convenience and customization to the personal computer market. Dell created a direct ordering system that allowed it to rapidly create customized PCs at a very competitive price while making it more convenient for customers to purchase them.

This is an example of the Disruptive Innovation Theory in action. It refers to how new entrants to an industry can use relatively simple, convenient, low-cost innovations to create growth and triumph over powerful incumbents.

Before we move on to the second part of the process, here are three questions that will help you see the signals of change:

1. Are customers not served, overshot, or undershot by current offerings?
2. Where are new business models emerging? Is there growth in fringe
3. markets?
4. What role does the government or its regulatory bodies play in enhancing or inhibiting innovation?

Competitive Battles: How to Size Up Competitors

So what happens when a new company (an entrant) steps into the field of an established industry leader (the incumbent) and how can we tell who is likely to win the battle? This section will show you how to identify a company's strengths and weaknesses so you will know if you should bet on the entrant or the incumbent.

It is very difficult to predict what specific innovations will move a disruptive firm up-

market but when it happens a battle is usually not too far off. Predicting who will win these battles requires evaluating combatants' strengths and weaknesses.

The Resources, Processes and Values Theory (RPV) provides a broad view of what comprises a firm's strong and weak areas. The theory holds that beyond a company's resources, its processes and values define its strengths. Firms succeed at opportunities that fit its resources, processes, and values - and struggle with opportunities that run counter to those strengths.

Assessing a company's RPV requires answering three questions:

1. Does it have, or can it marshal, the resources it needs to take advantage of an opportunity?
2. Do its processes allow it to do what needs to be done, effectively and efficiently?
3. Do the firm's values allow it to prioritize one opportunity over the others it can target?

Resources

Many resources are easy to identify, such as a company's technology, products and cash. It's also easy to make an educated guess about its less visible resources, such as its human capital, accumulated knowledge or brand. However, it's a much more difficult task to understand a firm's processes.

Processes

Processes are the patterns of interaction, communication and decision-making employees use to create products, services, and other resources of greater value. The best way to determine a company's processes is to imagine the kinds of problems it must have repeatedly solved in order to succeed. When companies must solve the same problem repeatedly, they develop processes to address the task every time it arises. This also means that if a company has never confronted a particular problem or task before, an optimized process to complete that task does not exist.

Values

A company's values create the framework within which strategic decisions are made, such as which opportunities the company will pursue and which it will not.

So how do you identify a company's values? One method is to look at key areas and metrics of the company. By looking at the company's revenue mix, cost structure, customers, and past investment decisions you will get insights into the type of strategies and investments that management believe to be profitable, i.e. the ones they will value.

Asymmetries

After resources, processes and values have been identified you will have a lot of excellent information to size up the competitors' strengths and weaknesses.

But there are other factors that come into play such as motivation and skills. Is the entrant really motivated to win and does the incumbent even care to engage the entrant?

The most interesting scenarios occur when there are asymmetries - important differences of motivation or skills. Asymmetries of motivation occur when one firm wants to do something that another firm specifically does not want to do and asymmetries of skills occur when one company's strength is another one's weakness. Asymmetries are the fuel that powers the process of disruption.

Where do you see asymmetric motivation in action? When companies take completely different actions that make sense to both of them or when one firm calls an industry "unprofitable," while another calls that market "critical" asymmetries are at work. For example, in the 1990s, Cisco raced to capture more of the networking equipment market while IBM sought to leave networking equipment to focus on higher-margin services.

The author's believe that an entrant's strategy shouldn't be to shoot for an established corporation's high-value customers. Why? Because the incumbent will be strongly motivated to fight the entrant head-on.

However, if the entrant goes after the incumbent's least desirable customers it may not choose to do battle. And if the entrant targets a consumer base that isn't even on the incumbent's radar screen it is free to grow without interference.

The authors use the telecommunications industry to illustrate these points. When Western Union learned of Alexander Graham Bell's invention of the telephone in the 1870s, they dismissed it as nothing more than "a toy". Although Bell's invention thrilled businesses and residents, it only allowed people to communicate in a limited radius and wasn't widely available. As such, this innovation was thought to be of no consequence to the long-distance telegraph giant.

That disinterest allowed Bell to develop and expand his technologies and grow revenue. Western Union recognized the threat far too late and despite its massive financial resources Western Union lost the battle.

Asymmetries power the natural course of disruption. The winners of battles are always doing something the other company either does not care to do or cannot do. Entrants grow with asymmetric motivation and create powerful and unique skills leading to asymmetries of skills. If an incumbent ever decides to challenge the entrant, they are at a huge disadvantage because the entrant usually has a superior skill set.

Five key questions to consider when analyzing competitive battles are:

1. What are the industry players' business models? What are their motivations and skills?

1. How do industry players compare to one another, and to the needs of the market? Where are there symmetries and asymmetries?

2. Do the asymmetries tilt in favor of the attacker or the incumbent?

3. Does the innovation naturally fit its target market?

4. Are there signs that a company is ceding a low-end market and trying to move up?

Strategic Choices: Which Choices Matter

Are companies making decisions that increase or decrease their ultimate chance of success?

If you wanted to determine a fighter's strengths and weaknesses, you'd need to do more than just look at him to determine his strength or speed. You'd need to know the regimen that he used to get ready for the fight because that would give you real insights into the fighter's strength, endurance and speed.

This also holds true when evaluating a company's strengths and weaknesses. Does the company have a preparation regimen that will make it a powerful adversary? An effective preparation regimen requires a powerful strategy process and a process for hiring the right people.

A Powerful Strategy Process

Managers can either dictate strategy from above in a deliberate fashion, or allow strategy to bubble up in an emergent manner. It's very important that the company gives itself the freedom to encourage emerging forces.

How can you tell when a firm is employing an emergent strategy process? One way is to interview senior management. You can also tell by looking at a firm's actions. Has it built a business that can learn and adapt rather than assume and act? Are initial product designs flexible and configurable so the company can adapt to emergent forces?

Watch what managers say, and what they do. Do you hear, "This will be a billion-dollar market in seven years"? Or do they say, "If X and Y happen, this will be a billion dollar market in seven years. Here is how we're going to test whether X and Y will happen"?

Do they invest in stages, investing one chunk of money, but not investing more until real progress is made?

The key is that firms need to develop a strategy that allows them to test core assumptions and change their business models if necessary.

After the 1996 Telecommunications Reform Act many companies tried to break into the local telephony market. Investors poured billions into business plans promising rapid growth. Almost all of these entrants failed, often quite spectacularly. An untested assumption was that these companies would be able to easily use the local phone company's network elements. Had investors worked backward from the projections in the business plans, they might have pushed companies to test this assumption.

A method of testing that assumption would be to use the Value Chain Evolution or VCE theory which suggests that companies ought to control any activity or combination of activities within the value chain that drives performance in ways that matter most to customers, and to outsource other activities. Using VCE, investors could have uncovered faulty assumptions behind many of these business plans including the belief that they could use the local phone company's existing network elements as is.

Hiring the Right People

What do you need to look for when hiring a management team? *The Innovators Solution* described a theory developed by Professor Morgan McCall called "schools of experience" to help guide hiring decisions. The theory states that managers are made more than they are born and people have a higher probability of being successful if they have wrestled with a challenge, or attended a "school of experience" in the past that is similar to a challenge they will face in the future. To tackle the challenges that disruptive companies face, managers should have at least some of these experiences:

1. Operated in environments with high degrees of uncertainty.
2. Developed plans to unearth seemingly unattainable knowledge.
3. Experimented and found unanticipated customers for a product or service.
4. Resourcefully solved problems without spending much money.
5. Shown experience in fending off certain corporate processes to get the right things done quickly.

People who have confronted at least some of these problems should be well-positioned to manage disruptive innovations.

A Process for Disruptive Growth

Entrants aren't the only ones who can disrupt an industry. Incumbents can also earn their disruptive black belts. For a company to become a serial disruptor it must have a separate process to nurture disruptive growth. The process must be managed separately from the core business and it has to have a specific set of criteria that determine whether an innovation is actually disruptive to the main business.

Ideally, a powerful senior manager must oversee the process and don't expect the company to develop competency in disruption just because money is thrown at it. In fact, throwing money at the problem is often exactly what isn't needed. Only a robust repeatable process separated from the core business can create wave after wave of disruptive growth that can shift the advantage back to the incumbent.

The following guidelines from The Innovator's Solution will help set up processes that create disruptive innovations again and again. The company should;

- Start before it needs to.
- Appoint a senior executive to shepherd ideas into the appropriate shaping and resource allocation process.
- Create a team and a process for shaping ideas.
- Train the troops to identify disruptive ideas.

Here are some important questions to ask when analyzing strategic choices:

1. Is the firm giving itself the freedom to encourage emerging forces?
2. Have managers wrestled with problems they are likely to face again? Have they shown the capacity to learn?

3. Is the company giving the group handling disruptive innovations the autonomy needed to create new products or services?

Conclusion

In Seeing What's Next the authors have explored a powerful process to predict industry change. This process involves three steps:

- Looking for signals of change in an industry.
- Seeing who is likely to win the competitive battles by evaluating the
- combatants' strengths and weaknesses.
- Watching a firm's strategic choices to determine its chances of
- successfully handling the process of disruption.

With its unique perspective on industry change Seeing What's Next will help anyone with a stake in a company's success see the future more clearly and apply the predictive power of innovation theory in their own work. Now it's your turn to apply Christensen's insights and see what's next for your industry.

