**How Can We Beat Our Most Powerful Competitors?** Managers have long sought ways to predict the outcome of competitive fights based around innovations, but it has, in recent years, become increasingly difficult to do so. It’s not simply a matter of big companies having the resources to stomp out smaller competitors or to bring about incremental changes or innovations that enable them to outlast the competition. It is the circumstances of innovation that often determines whether incumbent industry leaders or upstart companies win a competitive fight. Entrants are more likely to overtake entrenched leaders in disruptive circumstances — when the challenge is to commercialize a simpler, more convenient product that sells for less money and appeals to new customers. Established companies, conversely, can capture disruptive growth (rather than be defeated by it), if they are aware of the circumstances of disruptive innovations and are able to leverage them for their own benefit. ***Three Elements of Disruption*** There are three critical elements of disruption (these were first identified in the book, *The Innovator’s Dilemma* and are illustrated in the chart at right): **A rate of improvement that customers can fully use or absorb.** This is represented by the dotted line. **A rate of improvement that goes beyond what customers can fully use or absorb.** The pace of technological progress almost always outstrips the ability of customers in any given tier of the market to use it, in part because companies keep striving to make better products that they can sell for higher profit margins to their most demanding, high-end customers. This rate of improvement is shown by the two solid lines in the chart. **A distinction between sustaining and disruptive innovation.** A *sustaining* innovation targets those demanding, high-end customers with *better performance* than previously available, whether that performance is an incremental improvement or a breakthrough, leapfrog-over-competitors variety. *Disruptive* innovations do not attempt to bring better products to established customers in existing markets. Instead, they introduce products and services that are *not as good* as existing products, but which are simpler, more convenient, and less expensive than existing items. Disruption often paralyzes industry-leading companies, which are more accustomed to bringing about sustaining innovations. In other words, established companies are motivated to focus on pushing innovations to meet the needs of their high-end customers (it’s hard to turn away from your most profitable customers.) This leaves the door open for new entrants to target your low-end customers. Eventually, however, the new entrant will make improvements and move up-market — now targeting your high-end customers. ***Value Networks*** Disruptions create and exist in value networks—contexts within which companies respond profitably to the common needs of a class of customers through evaluating and establishing appropriate processes and channel partners. Two kinds of disruptions can create new value networks: **New-market disruptions.** These disruptions all but create a need in customers, by virtue of their affordability and simplicity of ownership. Canon’s desktop photocopiers, for example, made photocopying in one’s office (rather than shipping a job out to a print shop) easy, and, as a result, people made a lot more copies. As improvements are made in new-market disruptions, the companies that foster them are able to pull customers out of old, mainstream value networks and into new ones. **Low-end disruptions.** Disruptions that take root at the low end of the original, mainstream value network do not create new markets, but simply feature low-cost models that pick off an established firms’ least attractive customers. **What Products Will Customers Want to Buy?** Marketers often segment markets by product type, price point, or demographics of the individuals or companies that comprise their customer base. This segmentation is often defined by the attributes of products or customers, which reveals correlations between those attributes and outcomes. It does not, however, offer plausible causality — confident assertions of what features, functions, and positioning will cause customers to buy a product. In essence, customers “hire” products to do specific “jobs,” and managers must segment their markets to mirror the way their customers experience life (see Marriott example at right). Companies that target their products at the *circumstances* in which customers find themselves, rather than at the *customers* themselves, are those that can launch predictably successful products. Knowing what job a product gets “hired” to do — and knowing what jobs out there that are not getting done very well — can give innovators a much clearer road map for improving their products to beat the true competition from the customer’s perspective, in every dimension of the job. This segmentation can then be used to gain a disruptive foothold — the initial product or service that is the point of entry for a new-market disruption. The first time that builders of a new-growth business need to assess what the target customers really try to get done is when they are searching for that disruptive foothold. While it may never be possible to get every dimension of a product introduction in a new-market disruption right at the outset, using the “jobs-to-be done” lens can help innovators come to market with an initial product that is much closer to what customers ultimately discover that they value. How does one do this? By observing what people seem to be trying to achieve for themselves, then asking them about it. ***Helping Disruptions Grow*** Exciting growth happens when an innovation improves in ways that allow it to displace incumbent offerings. These are sustaining improvements, relative to the initial innovation—improvements that stretch to meet the needs of more and more profitable customers. With low-end disruptions, it can be easy to determine the right sequence of product improvements in the upmarket march. Target stores, for example, set out to replicate the product line, brands, and ambience previously only available in expensive, full-service department stores. The low-end disruptor’s marketing task is to extend the lower-cost business model up toward products that do the jobs that the more profitable customers are trying to get done. New-market disruptions, conversely, challenge innovators with inventing the upward path, because no one has been up that trajectory before. **Who Are the Best Customers For Our Products?** Which initial customers are most likely to become the solid foundation upon which we can build a successful growth business? How can we reach them? It is quite tricky to find new market customers (or “nonconsumers”) in the typical model of disruptive innovation. When only a fraction of a population is using a product, some of the nonconsumption may simply reflect the fact that there just is not a job that needs to be done in the lives of nonconsumers. Thus, a product that purports to help nonconsumers do something that they hadn’t already prioritized in their lives is unlikely to succeed. Another kind of nonconsumption occurs when people try to get a job done but find themselves unable to accomplish it themselves, because the available products are too expensive or too complicated. Hence, they put up with getting it done in an inconvenient, expensive, or unsatisfying way. This type of nonconsumption is a growth opportunity, waiting for a new-market disruption that enables these consumers to begin buying and using a product that helps them do the job for themselves. ***Extracting Growth from Nonconsumption*** There are four elements of a pattern of new-market disruption, which managers can use to find ideal customers and market applications for disruptive innovations. These elements are—The target customers are trying to get a job done, but because they lack money or skill, a simple, inexpensive solution has been beyond reach. These customers will compare the disruptive product to having nothing at all. As a result, they are delighted to buy it, even though it may not be as good as other products available at high prices to current users with deeper expertise in the original value network (in other words, the bar one must scale to delight these customers is quite low). The technology that enables the disruption might be quite sophisticated, but disruptors deploy it to make the purchase and use of the product simple, convenient, and foolproof (enabling people with less money and training to begin consuming). The disruptive innovation creates an entire new value network. The new consumers typically purchase the product through new channels and use the product in new venues. Disruptions that fit this pattern succeed because established competitors view entrants in the emerging market as irrelevant. The mainstream market the established companies sustain is unaffected by the new value network for some time. Incumbents might even think they have sensed a threat and are responding, investing inordinate amounts of money in an attempt to advance the technology enough to please the customers in the existing value network, forcing the disruptive technology to compete on a sustaining basis. This, of course, is the wrong response. **Getting the Scope of Business Right** Decisions about what activities to handle in-house and what to procure from suppliers and partners have a powerful impact on a new-growth venture’s chances for success. Most companies follow the core competency rule—if something fits your core competence, you should do it inside; if it’s not your core competence and another firm can do it better, you should outsource it to that firm. The problem with the core-competence/not-core-competence categorization is that what might seem to be a noncore activity today might become an absolutely crucial competence to have mastered in a proprietary way in the future, and vice versa. Consider, for example, IBM’s decision to outsource the microprocessor for its PC business to Intel, and its operating system to Microsoft. In the 1980s, when IBM made these decisions, it did so in order to focus on what it did best— designing, assembling, and selling computers—and to keep development costs and time at bare minimum. Yet, in the process of outsourcing what was not its core or its competence, IBM helped raise the profile and business stature of the two companies that eventually captured most of the profit in the industry. ***To Integrate or To Outsource—That Is The Question*** The core/noncore categorization can lead to serious and even fatal mistakes. Instead of asking what their company does best today, managers should determine what they need to master today and in the future in order to excel on the trajectory of improvement that customers will define as important. Remember the job-to-be-done approach—customers will not buy your product unless it solves a problem for them. What comprises a solution, however, differs across two circumstances — whether products are not good enough, or more than good enough. The advantage goes to integration when products are not good enough, and to outsourcing when products are more than good enough. ***The Not-Good-Enough World*** When product functionality and reliability are not yet good enough to address the needs of customers in a given tier of the market, companies must compete by making the best possible products. Firms that build their products around proprietary, interdependent architectures (i.e., if one part cannot be created or used independently of another part) enjoy important competitive advantage over competitors whose product architectures are modular (in which the fit and function of all elements are so connected, it doesn’t matter who makes the separate components). Companies that compete with proprietary, interdependent architectures must be integrated—they must control the design and manufacture of every critical component of the system in order to make any piece of the system. ***Trajectory and Modularity*** Once customers’ requirements for functionality and reliability have been met, they redefine what is not good enough, changing the basis of competition in that market. The pressure of competing along this new trajectory of improvement forces a gradual evolution in product architecture, away from the proprietary and interdependent, toward more modular designs in a period of too good performance. Modular architectures enable companies to introduce new products faster because they can upgrade individual pieces of a product without having to create a brand new design. Modularity enables independent, nonintegrated organizations to sell, buy, and assemble components and subsystems. **Avoiding Commoditization** Many executives are resigned to the belief that, regardless of the innovation, the inevitable fate of their products is to be “commoditized.” However, there is some hope for them. Research has found that whenever Commoditization is at work somewhere in a value chain, a reciprocal process—call it “de-commoditization”— is at work somewhere else in the value chain. Whereas the lack of differentiability inherent to commoditization undermines an organization’s ability to capture profits, de-commoditization creates opportunities to create and capture significant wealth. The companies that position themselves at a spot in the value chain where performance is not yet good enough will capture the profit. ***Six Steps of Commoditization*** The natural and inescapable process of commoditization occurs in six steps: 1. As a new market coalesces, a company develops a proprietary product (complete with a proprietary architecture) that, while not good enough, comes closer to satisfying customers’ needs than any of its competitors. 2. As the company strives to keep ahead of its direct competitors, it eventually overshoots the functionality and reliability that customers in lower tiers of the market can use. 3. This precipitates a change in the basis of competition in those tiers. 4. The change in basis of competition precipitates an evolution toward modular architectures. 5. That evolution facilitates the disintegration of the industry. 6. It becomes difficult to differentiate the performance or costs of the product versus those of competitors, who have access to the same components and assemble according to the same standards. ***De-commoditization*** Attractive profits of the future are often to be earned elsewhere in the value chain, in different stages or layers of added value. This de-commoditization occurs in places in the value chain where attractive profits were hard to maintain in the past—in the formerly modular and undifferentiable processes, components, or subsystems. Modular disruptors can only keep profits healthy if they carry low-cost business models up-market as quickly as possible. This enables them to keep competing against higher-cost makers of proprietary products. Competitive forces compel suppliers of these modular products to create architectures that, within modular subsystems, are increasingly interdependent and proprietary. The performance-defining subsystems then become de-commoditized as the result of the end-use products becoming modular and commoditized. ***The Value of Brands*** Executives who seek to avoid commoditization often rely on the strength of their brands to sustain profitability, without considering that brands themselves, too, become commoditized and de-commoditized. When things aren’t good enough yet in the value chain, and customers are not certain whether a product’s performance will be satisfactory, a well-crafted brand can close some of the gap between what customers need and what they fear they might get if they buy from an unknown supplier. The migration of branding power in a market that is composed of multiple tiers is a process, not an event. Brands of companies with proprietary products typically create value as they attract customers who are not satisfied with the functionality or reliability of the best available products. When one deals with more modular products and a greater emphasis on speed and convenience, the power to create profitable brands migrates more toward subsystems and the channel used. **Is Your Organization Capable Of Disruptive Growth?** A surprising number of innovations fail because responsibility to build these businesses is given to managers or organizations whose capabilities are not up to the task. Indeed, an organization’s capabilities become disabilities when disruption is afoot. The concept of such capabilities can be unpacked into three classes or sets of factors that define what an organization can and cannot accomplish— its resources, its processes, and its values. ***Resources*** (people, technology, information, cash, etc.) are the most tangible of the three factors, because they can be hired and fired, bought and sold, depreciated or built. They are often visible and measurable, and can be easily transported across the boundaries of an organization. Typically (and unfortunately), the wrong people are chosen to lead a disruptive venture. Why is that? Those with the right stuff are usually the wrong people. When hiring potential managers, corporations often focus on attributes—“good communicator,” “decisive,” “good people skills” — that do not necessarily lend themselves to disruptive successes. Rather than focus on categories, companies should consider focusing on prior experiences that show appropriate intuition and management skills for the disruptive environment of a new-growth business venture. What sorts of problems have they wrestled with in the past? Have they learned enough to meet similar challenges head-on in a new environment? Can they learn and bounce back from failure? ***Processes*** Organizations create value as employees transform inputs of resources (the work of people, equipment, technology, etc.) into products and services of greater worth. The patterns through which these transformations are accomplished—the processes at work— include ways products are developed and made, and the methods by which procurement, research, budgeting, compensation, resource allocation, and more are accomplished. Processes are defined or evolve to address specific tasks, and the efficiency of a given process is determined by how well these tasks are performed. Processes that define capabilities in executing certain tasks concurrently define disabilities in executing others. Consistency is key — processes are not as flexible as resources, and must be applied in a consistent manner, time after time. In addition, some processes are difficult to observe, and it can therefore be difficult to judge whether a process will facilitate or impede a new-growth business. ***Values*** An organization’s values are the standards by which employees make prioritization decisions—those by which they judge whether an order is attractive or unattractive, whether a customer is more or less important than another, etc. Whereas resources and processes are often enablers that define what an organization can do, values often represent constraints that define what it cannot do. If, for example, the structure of a company’s overhead costs requires it to achieve gross profit margins of 40 percent, a powerful value will likely evolve that will nix any idea that promises gross margins below 40 percent. Such an organization would be incapable of succeeding in low-margin businesses, because one cannot succeed with an endeavor that cannot be prioritized. A different organization with a different cost structure might accord a high priority to a similar project. These differences create the asymmetries of motivation that exist between disruptors and “disruptees.” ***The Right Organizational Home for Disruptive Businesses*** Incumbent leaders in an industry almost always emerge victorious in sustaining-technology battles, whereas historically they have almost always lost battles of disruption. Industry leaders develop and introduce sustaining technologies over and over again—they develop a capability for sustaining innovation that resides in their processes. Sustaining-technology investments also fit the values of the leading companies, because they promise improved profit margins from better or cost-reduced products. Conversely, disruptive innovations occur so intermittently that no company has a practiced process for handling them. Disruptive products typically promise lower profit margins per unit sold and cannot be used by the best customers, rendering disruptions inconsistent with many companies’ values. They have the resources required to succeed, but their processes and values are disabilities in their pursuit of disruptive innovation. Smaller, disruptive companies are actually more capable of pursuing emerging growth markets. They might lack resources, but their values can embrace small markets and their cost structures can accommodate lower margins per unit sold. These advantages can add up to enormous opportunity for the organization whose processes will facilitate what needs to be done and whose values can prioritize those activities. **Disruptive Growth Starts At the Top** Senior executives of companies that repeatedly seek to create disruptive growth have three jobs: They must personally stand astride the interface between disruptive growth businesses and the mainstream businesses, to determine through judgment which of the corporations’ resources and processes should be imposed on the new business. They must shepherd the creation of a process that can be called a “disruptive growth engine,” which capably and repeatedly launches successful growth businesses. They must perpetually sense when the circumstances are changing, and keep teaching others to recognize these signals. Senior executives need to look to the horizon (the low end of the market, or in nonconsumption) for signs that the basis for competition is changing. They must then initiate projects to ensure the company properly responds to the circumstance as an opportunity, not a threat. To succeed in disruptive business endeavors, CEOs must be intimately involved. Because the processes and values of mainstream business by their very nature are meant to manage sustaining innovation, there is no alternative at the outset to the CEO or someone with comparable power assuming oversight responsibility for disruptive growth. ***Disruption as Part of the Process*** Launching a single successful disruptive business can create years of profitable growth—just ask General Electric (which launched GE Capital), Johnson & Johnson (for their medical devices and diagnostics group), or Hewlett-Packard (whose disruptive ink-jet printer is now the company’s primary profit driver). Launching a sequence of growth businesses requires leaders to repeatedly use sound theories to make solid key business-building decisions. From these activities, a predictable, repeatable process for identifying, shaping, and launching successful growth can coalesce. Such an engine would have four critical components. ***Step 1: Start Before You Need To*** The best time to invest for growth is when the company is growing. To build what will be a respectable growth business in five years’ time, you must start now, adding new units to your portfolio of growth businesses as dictated by the growth needs of the corporation five years hence. This gives your businesses the opportunity to grow under the radar, away from the glare of Wall Street, giving each disruptive endeavor the time it requires to achieve viability and take off. Wal-Mart today is a $220 billion business, but it took 12 years for it to make its first billion—it was a disruption that needed a longer runway before it took off. ***Step 2: Put a Senior Manager in Charge*** Creating a successful disruptive growth engine requires the careful coaching of the CEO or another senior manager with the confidence and power to exempt a venture from an established corporate process, to declare when different processes need to be created, and to ensure that the criteria being used in resource allocation are appropriate to the circumstance of each venture and the needs of the company. He or she must be well versed in disruptive innovation theory, capable of discerning ideas with disruptive potential from those best deployed as sustaining endeavors, and able to maximize the success prospects of disruptive ideas by feeding them into a nurturing business process. ***Step 3: Create an Expert Team of Movers and Shapers*** Ideas often lose their disruptive growth potential in the shaping process that they go through in order to get funded. The challenge here is to create a separately operating process through which ideas can be shaped into high-potential disruptions. Senior management should create a core team that is responsible for collecting disruptive innovation ideas and molding them into propositions that have the greatest chance for success. This core shaping group cannot use the company’s standard planning and budgeting processes when launching disruptive businesses, because they will not know, at the outset, the full dimensions of growth strategy that will ultimately prove successful. ***Step 4: Train the Troops*** Sales, marketing, and engineering employees are best positioned to encounter disruptive growth ideas, and thus should be among the first of the company’s “troops” to be trained in the language of sustaining and disruptive innovation. It is crucial that they come to know what kinds of ideas they should channel into the sustaining processes of established business units, and which should be directed into disruptive channels. These people have direct contact with markets and technologies that can yield ideas for new-growth businesses; with training, they can develop intuition on these matters that far outstrip any kind of analyst-laden corporate strategy.