WHAT IS DISRUPTIVE INNOVATION?



Few terms have gripped business consciousness in the Silicon Valley as *Disruptive Innovation*. The term coined by the Harvard Business School professor Clayton M. Christensen in his 1997 book, *The Innovator's Dilemma* demonstrates the ability of startup firms to succeed in underserved markets, ultimately challenging the dominance of incumbents in the high-end, profitable market segments. In recent years, the term has largely been associated with Silicon Valley unicorns making headlines with their highly scalable tech offerings. The likes of Uber, SpaceX and Tesla portrayed as the beacons of disruptive innovation in the modern era may not entirely qualify for definition of the theory proposed by Christensen. A clarification is in order, especially since many emerging startup firms are setting stage to disrupt the industry, solving real problems with business models in accordance with the original Disruptive Innovation Theory.

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Disruptive Innovation Explained

The theory suggests that a small organization with fewer resources has the ability to challenge their larger counterparts by focusing innovative products and services toward the low end of the market, which is often ignored by incumbents as they grow profitable. The new entrants are gradually able to improve their innovation performance to attract the high end of the market, without compromising their original qualities – such as low cost, convenience, access or security, among others – that allowed them to succeed in the underserved market segment. When incumbents fail to identify the market void and realize a small company competing for their mainstream market-

share, the damage is already done and disruption has occurred through the small company's innovation.

Christensen's theory of Disruptive Innovation centers around four key elements:

- 1. Incumbents sustain their innovation trajectory as they introduce new products or feature improvements. This trend is used as a reference for new innovations, their purpose and to determine the disruption potential of new innovations. Consider the case example of Amazon.com in its early years. Established enterprises such as Barnes & Noble had a strong foothold in the bookselling market. The company expanded its brick and mortar business rapidly during the 90's and early 2000's, largely focusing on customers willing to visit the store in person to purchase the literature. With this business model, incumbents in the bookselling industry failed to address the key element of convenience in the customer buying journey.
- 2. Incumbents overlook basic customer needs of the future as they sustain their existing innovation trajectory. Continuing with the earlier example, end-user convenience and ease of access to information, products and services was set to emerge as a priority in the age of the Internet and ecommerce. With increasing adoption of the Internet among mainstream customers in the bookselling market, the ability to purchase a book on the Internet without having to leave the couch was highly regarded as a key value proposition by ecommerce startups such as Amazon.com. At present however, ecommerce and Internet technologies were developing faster than the real-world market demand. A majority of the book purchases occurred at book stores, while ecommerce businesses appeared to underperform for large incumbents to counteract in advance.
- 3. Incumbents acknowledge the innovation and possess the ability to respond but fail to exploit the opportunity with their priority to sustain existing innovation trajectory. Disruptive innovations are typically aimed to scale rapidly in a growing market, with a strong focus on growth instead of immediate profitability. Incumbents see disruptive innovation products as simple, cheap and aimed for insignificant markets. They continue to value their best customers who may not be willing to adopt new innovations immediately. Therefore, the case to pursue disruptive innovation remains weak for incumbents as they fail to make a rational financial decision on shifting their well-performing existing innovation trajectory. This is precisely how the likes of brick and mortar retail giants including Barnes & Nobles behaved while Amazon.com focused on the low profit but highly scalable ecommerce market of literature and media products.
- 4. The final element involves the growth of innovations to a point where mass markets take notice and embrace adoption, paralyzing large incumbents who fail to drive down the cost in attempts to take advantage of the economies of scale. Companies like Amazon.com with their disruptive innovation potential are built specifically to maximize the potential of massive scale economies that exist on the Internet. Amazon had the key advantage of operating a centralized large distribution system, making it easy to ship sales in large volumes across the country. On the other hand, retailers such as Barnes & Noble operated individual shops involving significant legacy costs in adopting the online sale and distribution model. Today, most if not all of the leading tech companies have demonstrated elements of Christensen's Disruptive Innovation theory in their pursuit to multi-billion dollar valuations. Not every large organization started off with disruptive innovations, but eventually adopted innovation strategies to identify new and underserved markets, or scale business in existing market segments with high growth potential.

A Shifting Perspective on Disruptive Innovation

Returning to the arguments against promising unicorns such as SpaceX and Uber not falling under Christensen's definition of disruptive innovations, we have to analyze their growth and innovation trajectory. Both companies didn't necessarily create new markets that were previously underserved. Uber's taxi industry is already considered as a high-end of public transportation system. In fact, San Francisco had a well-established taxi market. National space agencies carrying satellites and astronauts into outer space don't belong to a low-end or massively scalable industry either. Secondly, both companies were being considered as high-tech and innovative before they had to scale and make their mark in competition with existing alternatives.

Disruption through innovative technologies is as much a process, as it is an attribute associated with a business offering. The likes of Google, Microsoft and Amazon maintain their position as industry leaders in a growing number underserved markets. They do so by operating separate and isolated divisions that begin as small-scale experiments and are scaled out with business models vastly different from their own mainstream alternatives. For instance, cloud networking was already a thing, decades before the launch of Amazon Web Services. However, Amazon rolled out its own data center solutions as low-cost subscription-based offerings to SMBs that lacked the resources to deploy and run their own infrastructure. Eventually, this disruptive innovation helped Amazon shift its growth trajectory impacting the global IT infrastructure industry, eventually making Amazon as one of the highest valued company in the stock markets today.