Disruptive Innovations and Deep Market Penetration with Respect to Timing

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ABSTRACT

This research analyses the impact of 'timing' on the success of disruptive technologies' deep market penetration. The essential components to view a firm as a disruptive innovation, as well as aspects associated with it, are the main subjects of this study. This paper also includes the definition of the term "timing" in relation to disruptive innovations. This study focuses on such examples of disruptive innovations in distinct markets: 1) Tesla and 2) Urban Company. Both of these will serve as a depiction of the real-life situations on how 'timing' aided them in breaking into their respective sectors. Finally, the research examines the many underlying variables that aided each disruptive company's establishment.

Introduction

Disruptive innovation is a term used frequently in recent times with the development of companies that are wiping their competitors out of the market with their new technologies and immense problem-solving abilities.[1] Typically, the idea that usually comes to mind on hearing the term disruptive innovation is something that happened overnight and suddenly had a boom in its sales. This is completely incorrect to assume, and it's mostly not true in almost all cases.

Disruption is a process; The term disruptive innovation is misleading when it is used to refer to a product or a service rather than to the evolution of that product or service over time. So, if they haven't just boomed up in one day how do these disruptive innovations originate?

Low-end or new-market footholds are where disruptive innovations emerge. They are enabled by the fact that they begin in one of two sorts of marketplaces that the incumbents overlook: a) Low-end footholds, b) Newmarket footholds.

As incumbents often aim to supply the most profitable and demanding consumers with ever-improving products and services, low-end footholds exist. They pay less attention to customers who aren't as demanding. The incumbents' offerings frequently exceed the latter's performance standards.

This opens the door to a disruptor (at least at initially) focused on selling "good enough" products to low-end clients.

New Market Foothold disruptors establish a market where there was formerly none. Simply said, they discover a means to convert non-consumers into buyers.

For instance, in the early days of photocopying technology, Xerox targeted major organizations and paid high costs to meet their needs. Small clients, such as school libraries and bowling league operators, were priced out of the market and forced to rely on carbon paper or mimeograph machines which were much less effective.

Then, in the 1970s, new rivals developed personal copiers, which provided an inexpensive alternative for people and small businesses, resulting in the birth of a 'New Market.' Personal photocopying markets grew from a small beginning to a significant share of the mainstream photocopier market, which Xerox valued.

What Is Disruptive Innovation?

Since Clayton Christensen introduced the term in the mid-1990s to describe how new entrants in a market may disrupt incumbent firms, disruptive innovation has become a catchphrase. [2] In the last two decades, firms like Tesla, Spotify, Zomato, Netflix, Airbnb, and a slew of other startups have developed with the goal of disrupting their respective sectors.

- Disruptive innovation theory was originally published by Christensen.[3] He defined it as "a product or service that displaces an incumbent product or service".
- Danneels defined disruptive innovation as "A Technology that changes the bases of competition, changing the performance metrics along which firms compete".
- The most recent definition was by Gilbert who defines it as "A new technology that unexpectedly displaces an established one".

The most diversified and broad-based definition will be achieved by connecting by the latest 2 definitions, which encompass the use of new or creation of new technology relating to disruptive innovation.

Features of Disruptive Innovations - Debugging Myths:

- Disruptive innovation is a process- When used to refer to a product or service rather than the evolution of that product or service over time, the phrase disruptive innovation is deceptive.[4]
- Disruptive technologies do not gain traction with mainstream customers unless quality meets their expectations.
- In most of the new market entry cases, disruptive innovations are more priced than current technologies, and while the new technology would be less advanced than the incumbent, it will have additional value characteristics.

But how exactly do Disruptive Innovations originate?

Disruptive innovations will initially fill niches at the top of the market, then spread down into the more competitive mass market. As a result, disruptive ideas begin in areas that are unappealing to incumbent enterprises.
These markets are unappealing primarily because of the limited volume sales potential and the requirement for specialist items that cannot be supplied at a profit.
As there would be no current competition, disruptive innovation will have an easier time entering these industries. In most cases, new technologies are not perceived as a threat to incumbents in these domains.
Incumbents don't respond to the new entrant extensively, continuing to focus on their more profitable segments.[6] Entrepreneurs gradually rise through the ranks by providing solutions that appeal to the competitor's "mainstream" clients. Hence, with time customers gain attraction with the disruptors and switch their products/ services to the disruptors.

How does Timing Relate to the Disruptive Innovations and/or Innovators? What are the misunderstandings about the term timing?

Although entry time is an important factor to consider in competitive strategy, little is known about it. Adoption and dissemination are influenced by timing, which is frequently used to explain the performance of disruptive innovation organizations. [5]

Firstly,

a. To begin, the 'Innovators' response to investment uncertainty causes them to self-select into moving early or late, and they align other components of their innovation strategy to reflect this, prioritizing either breadth or selectiveness.
b. In the entry-timing literature, purposeful alignment with innovation strategy is a likely source of unobserved exogenous variables.

Secondly,

c. The study provides a clearer understanding of the process through which both early and late movers may attain high performance by revealing the link between entrance time and innovation strategy.
d. The potential of such performance equifinality explains the disparities in previous studies' findings and emphasizes the necessity for a contingency view of the performance advantages of entrance time.

Timing in Relation with Disruptive Innovations:

Timing is not ‘exogenous’, which is perhaps even more essential. As a result, it's challenging to precisely link time to performance. Innovators may choose when to enter the market when it is most favorable to the company. There's evidence that entrance speed differs depending on a company's capability base's closeness to the new product market and the sorts of items it generally offers.

Such diversity is most likely the result of purposeful decision-making, with innovators evaluating whether early or late entrance is better for their company's unique circumstances. Rather than attempting to deduce an elusive timing-performance link, a more useful line of investigation may be the circumstances under which a specific entry-timing position is predicted to yield performance benefits.

Recurring occurrences of timing judgments are not only easier to compare and analyze, but they are also easier to compare and study. For example, since feature-entry selections are made repeatedly, it's possible that innovators would follow overall techniques that apply to several succeeding entries.

Methods

Practically, not all disruptive inventions succeed in entirely disrupting the market to which they belong. A lot of it depends on the conditions and the product/service they are selling in the market at the time. "It's all about perfecting the time," a popular catchphrase. But what percentage of this is accurate? The study will be classified in the following method to confirm the reliability of the above-mentioned question. A case study of two disruptive ideas will be presented. 1) Tesla 2) The Urban Company. Both firms in each set are part of a diversified industry where their product or service has effectively disrupted the whole market.

Secondary data sources will indeed be employed in both situations since there are a great number of inferences to be drawn from the history of these organizations establishing themselves and evolving through time to study their development and disruption.

Why only Tesla and Urban Company? What do they depict as a company/firm?

For a variety of factors, the research has classified Tesla and the Urban business. Tesla and Musk completely shifted the narrative on electric vehicles and considerably accelerated their acceptance by demonstrating that electric vehicles could compete directly with traditional internal combustion engines at the highest levels of performance. Tesla, in some ways, fits Christensen's paradigm rather well. The company determined that there was significant potential demand for an electric sports vehicle and was successful in developing a less expensive alternative to a Ferrari and established itself in this market. Furthermore, Urban Clap has shattered that paradigm by eliminating the intermediaries and allowing those with the necessary skills to register directly with them. This allows the technicians to keep the majority of their earnings for themselves, and they are only paid a fee of between 5% and 25%, depending on which of their services they use.

Figure 1. How the Introduction of Tesla Model 3 Disrupted the USA Automobile Market Completely

Tesla – A complete Breakdown of Growth and Disruptions

Tesla did not invent the electric automobile (Scottish inventor Robert Anderson did in 1832), but since the company's foundation in 2003, Tesla has popularized, pioneered, and pushed the electric car. Tesla made electric vehicles chic in 2008 with its theatrical introduction of the world's first premium electric car, the Tesla Roadster.[7]

Vision:

Tesla's vision since its inception in 2003 has been to produce mass-market battery electric vehicles (EVs) with a compelling customer value proposition that included long-range and recharging flexibility, energy efficiency, low cost of ownership, and high performance without sacrificing design or functionality.

Brand Idea - Description:

According to Tesla's brand motto, it describes its product as the electric car of the future, with astonishingly high performance and fashionable looks.[9] Tesla hired a warehouse in Silicon Valley that was only big enough to build a few prototype cars after Elon Musk invested $6.5 million in the firm. Musk became interested in the electric vehicle area after noticing that businesses like General Motors were not developing them as effectively as they might. "There's so much change happening that the automakers are trying to make sure they're as successful in the next era as they were in the past," Loh, the editor in chief, said.

Entrepreneurs, on the other hand, are capable of bringing items to market that no one else has thought of. The single most significant macro problem that humanity confronts this century is resolving the sustainable energy dilemma, or the sustainable production and use of energy. Rather than waiting for a solution, Musk developed it with innovation. Although electric automobiles do not always cut fossil fuel usage or emissions, they have the potential to do so, especially if lower-emission power sources such as nuclear become more extensively used.

Tesla's Unique Selling Point:

- The car industry is not impervious to change and innovation, but it does adapt slowly. However, this has recently altered substantially, owing in large part to Tesla's market disruption. Tesla seems to have a "cool factor" that established automakers lack, and its electric vehicles have created an enthusiasm that other brands, such as the Nissan Leaf, have not.[11]
- Tesla's Autopilot, which employs artificial intelligence to drive a Tesla vehicle for you with some modest help, has sparked controversy, with some customers abusing the system and damaging their cars while using it. Other manufacturers are following Tesla's example and developing semi-autonomous or completely driverless vehicles, which has stirred debate in Washington as legislators strive to balance safety concerns with automakers' desire for innovation.

Why exactly is Tesla doing its best in comparison to its competitors:

Tesla has taken advantage of the current environmental trend. Tesla has done so well because it has a single-minded concentration on electric vehicles, whereas every other automaker treats them as an afterthought. I liken it to a vegan ordering a salad at a steakhouse. Vegans would much rather eat at a place that caters to their views. Being ecological is a lifestyle decision, not an option, for Tesla. Electric cars are seen as an afterthought by traditional automobile manufacturers. Who offer it like - we also have it in electric for an extra $20,000.[8]

Tesla- What it has taken from Apple's Steve Jobs?

A typical automobile engine has 2,000 components.[6] The Tesla engine, on the other hand, has only 20 pieces. Furthermore, Tesla treats its vehicles as if they were pieces of technology. Tesla may get greater cost control, as Apple has done with fewer parts. Tesla treats their vehicles as if they were pieces of technology. They create software for their autos in the same way that Apple does for its iPhone. Essentially, this allows Tesla to modify its car engine software every few weeks in order to improve the customer experience. Designs that are fashionable. Tesla, like Apple, places a premium on style, which adds to the appeal. Tesla recognizes that an expensive automobile must be appealing, whether it costs $55,000 or $110,000.

Tesla's Journey:

- Tesla began with a mission to change the automotive market away from gas-powered vehicles and toward electric vehicles (vision).[8] While most other electric car firms have failed, Tesla automobiles stand out because of their performance and beauty (focus). Tesla recognized an opportunity to challenge the conventional wisdom that energy efficiency meant being unsightly, sluggish, and continually requiring a charge (identified opportunity).
- Tesla has established a movement by capitalizing on the consumer's desire to do something positive for the environment. As a result, Tesla developed a unique strategy. They began at the top to arouse great yearning for their exquisite automobiles. Then they moved down to make room for the crowds (market impact).

Urban Company

Brand statement and Unique Selling Point:

- The company's brand statement identifies the company's ultimate objective and values. The brand statement of Urban Company aims to give clients with rapid access to dependable and inexpensive services. It is the exact core of the work they have done thus far, as well as their plans for the future.
- The ambitions of this business, which are adaptable and dynamic, are the primary cause of its rapid growth. It primarily focuses on integrating unstructured services into a structured style and offering them from the convenience of one's own home.

Evolving and Diversifying:

- Urban Beauty, Urban Spa, Urban Painting, Urban Grooming, Urban Repairs, and Urban Cleaning are the six sub-brands that the Urban Company just unveiled. According to the corporation, it wants a worldwide recognized brand name.
- Urban Company used to be just a search and locate a tool for services, but now it lists professionals for services, trains them if necessary, and then links the best professionals to clients in real-time.

The goal at the beginning:

The founders of the Urban Company focused on developing their value addition rather than basic growth measures like the number of listed service providers or active consumers in the early stages. The founder's major objective at this point was to diversify services and become the top choice for all services necessary for a comfortable urban existence.

Value Proposition:

- Unlike other organizations that used to employ an aggregator, Urban Company links its consumers to specialists that are the finest at what they do.[12] The firm works directly with professionals, providing leads and assisting them in becoming micro-entrepreneurs.
- The jobs of the laborers were solely reliant on word of mouth and middlemen. Many good experts and their services would not have come to light if it weren't for this site.

Opportunities for Future/ Growth in the future:

The company's primary objective at the moment is to expand globally, and this change comes at a time when the demand for horizontal gigs is increasing. As freelancing takes center stage, these gig markets are likely to become the new thing. The approach Urban Company has chosen has the ability to fully exploit this emerging new market trend. The firm is rapidly ascending to greater heights. It has not only become the most popular home services app in India and the go-to for all Indians, but it has also begun to expand its wings to other nations with promising potential, such as Dubai, where it has lately been striving to deliver efficient services to clients.

Main problem statement- 'Without any middlemen'

- Many other websites or apps include phone numbers for local carpenters, plumbers, beauticians, and technicians, but what sets UrbanClap apart? According to Abhiraj Bhal, a co-founder, these sites contain a list of intermediaries that pass on the task to the appropriate service providers in exchange for a fee, leaving a very small amount of money for the actual employees. This company, on the other hand, allows experts to register directly with them and delivers service to customers directly.

- UrbanClap acts as a conduit between clients and professionals, who charge a fee ranging from 5% to 25%, depending on the service they provide.[13] This is all done as a basic business concept that is put into action by an autonomous location-based matchmaking algorithm. This business also does a background check on new employees, including a police check, to ensure total client satisfaction, which is the primary cause for their increasing income.

- In India, finding skilled service providers has always been a challenge. This was partly due to the unstructured nature of the industry, which relied only on word of mouth for survival. UC, on the other hand, took it upon itself to bring order to the market for domestic services. The initial step was to handpick pros and bring them together on a single platform. As a result, ensuring the safety of both consumers and partners was a key concern for Urban Company. They also wanted to make sure that once the project was allocated to the partner, there was as little disturbance as possible.

Rebranding:

Urban Clap recently renamed itself as The Urban Company, with the goal of having an easy-to-remember name and being regarded as a company that works with people of all ages. This is a corporation that seeks to make city living easier, according to the new brand name. With the number of freelance tasks growing by the day, the Urban Company has emerged at the perfect time. They've also included the ability to communicate with their service provider to make it more user-friendly.

Evolving Diversifying – Where did Kodak go wrong?

Films and printing sheets were eventually phased out as technology advanced. This was owing to the 1975 introduction of digital cameras. However, Kodak disregarded the digital camera's possibilities and declined to take action. Steven Sasson, the creator of the digital camera, worked for Kodak as an electrical engineer when he created the technology.

"That's cute, but don't tell anyone about it," Steven's supervisors at Kodak said when he informed them about his idea. However, he was highly criticized for this idea and was actually told that this was like putting a foot in your mouth. With the introduction of digital cameras and other technology, Kodak gradually lost its appeal. This is the polar opposite of what Tesla and Urban Clap adopted in terms of evolving with technologies coming up as time passed.

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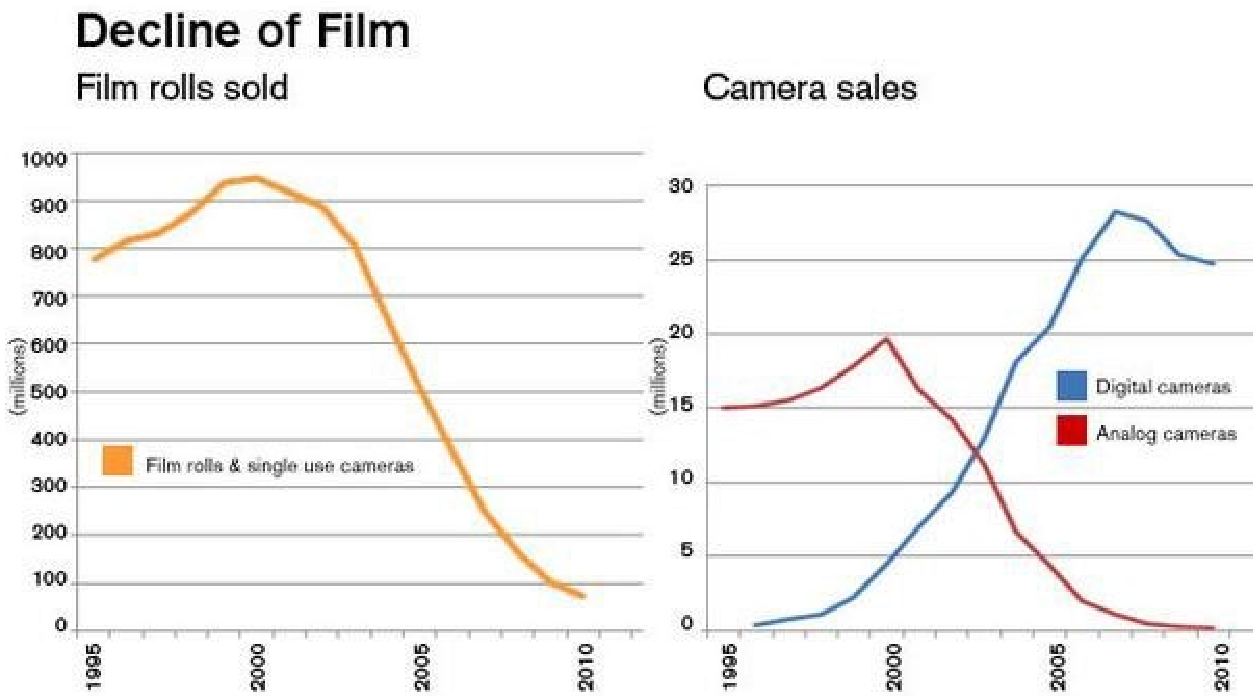

Figure 2. How Kodak went wrong, non-adaptive demise of the fastest growing company.

Results

As observed above, the three companies discussed; Tesla, Urban Company and lastly Kodak depicted the example of disruptive innovations and the adaptive nature of the first two and how the demise of Kodak, the latter, was due to its disregarding of inclusion of a revolutionary technological development.

Tesla, even though failed initially due to lack of vast and development customer segment, adept technology, diversified, and rebranded after its launch disrupted the entire market with its Model 3 Series.

Furthermore, Urban Clap, with introduction of household cleaning services and other additional features has gained vast customer base and created a sense of necessity than a need, exactly what Facebook aims to do. Rebranding, diversifying has worked like a miracle for this firm.

Kodak, for example, failed miserably by continuing with its approach and struggling to gauge and identify the development of this new technology and disruption.

Discussion

To connect all of this to timing, taking into account that the company's idea, or core value, stayed similar in each case, but it developed over time as technology advanced, concentrating more on the element of innovation and solving issues that arose day by day among customers.

The most important aspect to take note is that no matter what, with the passage of time, here referring to the technological and scientific developments, sociological and geopolitical situations the value proposition remained constant, and they evolved and diversified opening up new domains that are their most selling products/services and are helping them to thrive even today in a strong ‘competitor rich’ market.

Conclusion

The impact of time on the success of disruptive technologies' deep market penetration was investigated in this research. Furthermore, incorporating ties into the company's plans and policies has aided in the development of their ideas into something that has entirely revolutionized the industry, making them the first option that consumers choose. This study also included the meaning of the concept "timing" in the context of disruptive breakthroughs. In terms of the nature of innovation, there is still room for greater research on this issue. With the notion of technological businesses and corporations, this article has examined the major components of disruption and timeliness. This is far more diversified and knowing "good timing" is critical for disruptive success.

Limitations

As previously stated, there is still room for more research on this topic. This study examined the impact of Disruptive Innovations only in terms of 'Timing.' This necessitated a thorough examination of the company's history, launch, and market developments. Other factors, such as market pricing, competitive analysis, and critical issues such as brand and imaging, which are required for these disruptive challenges, must be thoroughly researched, and far more controlled variables from the companies is considered necessary for this analysis.

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