Distruptive innovation in tech Technology startups: Case study of UBER

CHEMMA Nawal 1

Associate professor
Faculty of Economics and Management, GMFMI Laboratory, University
Ahmed Zabana Of Relizane, Algeria
nawel.chemma@cu-relizane.dz

ARABECHE Zina

Associate professor
Faculty of Economics and Management, LAPDEC Laboratory (Univ. of Mascara), University Ahmed Zabana Of Relizane, Algeria
zina.arabeche@cu-relizane.dz

Received date : 22.02.2021 / Accepted date : 14.04.2021

Abstract

The industry history of is full with success of small, under-resourced startups renovating business by beating powerful incumbents. How is this feasible? There exists one explanation: this business has disrupted the established system. The objective of this paper is to know what insights, can start-ups offer big business. The idea of "disruptive innovation is a way to think about successful companies not just meeting customers' current needs, but anticipating their unstated or future needs.

As entire industries are disrupted by bold tech startups and business models, we analysed the most disruptions in tech technologies and took as an example of disruptive startups Uber that is a ride sharing company that connects riders and drivers through a digital platform. Uber has caused digital disruption in the cab industry, successfully creating a new ecosystem of ride sharing services and a breaching in the otherwise "hard to hack" cab industry.

Further research is needed to study the impact on Uber of the advent of new competition from disruptive startups in the carpooling industry

Keywords: Disruptive Innovation, Startups, Uber, Technology Industry

Jel Classification Codes: O32, O36, O52

-

¹Corresponding Author.: CHEMMA Nawal, E-Mail: nawel.chemma@cu-relizane.dz

Introduction:

Actually, companies and organizations seek innovation not just to be the leader in the business, but also to maintain their continuity and survival. Innovation shall become and shall be recognized as an essential part of any industry, of any sector, of any size (Davis 2018).

Creative thinking and innovation must be fostered in all companies, especially in startups, because innovation in more required in order to maintain an early stage company.

Currently, around the world, numerous initiatives, plans, projects, strategies and similar actions have been implemented to encourage and improve innovation and entrepreneurship which will further allow growth in the private industry and boost economic development. Innovation is now necessary more than ever to create innovative solutions for clients in the continuously and rapidly evolving environment and increasing consumer changes. Some innovations can disrupt the marketplace for competitive goods and services, while some preserve the competitiveness of incumbent companies. Unanticipated disruption occurs when incumbents are caught off guard by the disintegration of their industry through innovation that was originally inferior to the performance characteristics preferred by consumers, but which responded to the desires of some customers in new ways and developed over time to eventually satisfy traditional customers (Christensen, 1997). Nowadays, almost anywhere, both in academic and professional life, we hear about startups. However, not everyone is generally aware of the concept's extensive definition, especially, when it comes to deciding whether or not a certain company falls under the startup category.

Small and Medium Enterprises (SMEs") have been the backbone of economic growth. SMEs have become an important source of employment in most countries, especially for new jobs and a major source of technological innovation and new products, essential for a competitive and efficient market, critical for poverty reduction (Arabeche,Z et Chemma,N,2020). According to Teodoridis,F (2017) Startups hurrying to market highly disruptive innovations have the opportunity to decrease the recorded adverse impact of incentives for private return on scientific advancement. According to Christensen (1997) It has long been believed that startups that commercialize disruptive innovations contribute to the downfall of incumbents. Recently, researchers of innovation marketing strategy have drawn attention to the complicated dynamics of entry decisions by startups in that they're not really the preference of entrepreneurs as definition, but rather the result of discussion between incumbents and newcomers seeking to optimize the performance (Gambardella, 2010).

There is no question that innovation is more common for organizations in the occident countries rather than in developing economies. In this research paper, we will attempt to clarify the main characteristics of disruptive innovation in startups. This is why we will choose to talk about Uber to identify the main orientations of disruptive innovation.

In view of the above, we are faced with the following problem: How has Uber led to the transformation of ride sharing services? What insights, can start-ups offer big business?

Objectives of the paper: This research paper aims to:

• Identify concepts related to Disruptive Innovation (DI) and Startups.

- Know the reality of disruptive innovation in the startups.
- Discuss key features of disruptive innovation at Uber

The importance of the paper: showing the importance of the research through the importance of the issues addressed by:

- The importance of the subject of disruptive innovation
- The importance of the subject of disruptive in a successful startup.

The methodology of the work: the formulation of this work was based on the descriptive and analytical approach, in which, the descriptive method in found in the description of the research variables, the analytical method used in the case study.

This study is structured as follows: Part 1 we are going to talk about a literature review of disruptive innovation. A conceptual framework for startups will be presented in part 2, followed by a case study in part 3. A discussion and conclusion will be presented at the end of the work.

1. Disruptive Innovation: Theoretical Development

The creative destruction of Shumpeter mentioned in his book (1942) is considered to be initial point where disruptive innovation's concept was created. Schumpeter clarified that anything new makes the previous redundant, which marks the marketplace's unparalleled changes. In 1995, Bower and Christensen identified the first fully formed 'Disruptive Innovation Theory'. This theory was centered on technological change illustrated through the relations that arise in marketplace between businesses, their goods and consumers.

The idea grew out of the need to consider current trends in the industry. The marketplace had an intriguing trend of business loss, but the underlying causes remain unclear. For smaller and younger companies with far less capital at hand, large existing companies will lose competitively. There has been a great opportunity to explain the impact on markets where competitive dynamics have changed absolutely (Christensen, et al., 2018, p. 1047).

Christensen's definition of DI is that it is "a process by which a product or service takes root, initially in simple applications at the bottom of a market and then relentlessly moves up market, eventually displacing established competitors" (Christensen, 1997). Disruption occurs when mains relates to a technological advances that has both cheaper cost and performance in contrast to current dominant design and operates on a different direction from mainstream technologies on the market (Christensen, 1997).

Bastiaansen,R and Lee ,J identified three principales that are expressed in the proposed définitions, which constitute the basis of disruptive innovation :

- ❖ Market Segment: The market segment refers to the target market at the time of entry of the disruptive good or service.
- ❖ Process: the process identifies the critical factors that are changed by the ID in an industry over time to promote mass acceptance.
- ❖ Business Model: This is the way in which the dynamics and relationships between the stakeholders of a company are changed by a new/different business model.

Sustaining Innovation

Disruptive Innovation

Wikipedia

Wikipedia

Wikipedia

Wikipedia

Wikipedia

Wikipedia

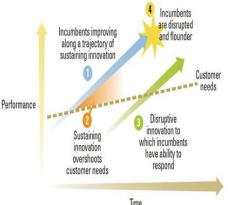
Source : Alaa,K,(2020), https://laptrinhx.com/ (consulted on 02/02 /2021)

The main characteristics of disruptive innovation can be described as : affordability ,simplicity, consequently , sudden substitution of large incumbents by modern, smaller competitors. Taking some examples (see figure 1) include the replacement of: interconnected steel industry with minimills, compact discs with the MP3, silver halide film with digital photography, Larger with smaller disk drivers and many more (Chandra, Y and Yang, Sh, 2012).

Christensen (1997) introduced a descriptive framework for DI consisiting of three main elements. First, in industry sectors, the speed of technological progress outperforms market demand of higher performing technologies. As a consequence, incumbents could over the market by developing more advanced, app products than clients need, leaving a low sales gap between the performance demanded by clients and that presented by companies, and supplying an opening for entrants at the end of the market (See Figure 2).

Figure 2 : disruptive innovation Model Figure 3 : Four elements of the theory of disruptive innovation





Source: Christensen, C. M and al, (2018) (2015)

 $Source: King, \, Andrew \, \, A. \, \, and \, \, Baljir \, \, Baatartog to kh.$

Second, for companies, there is a strategically interesting distinction between different types of technology, innovations or business model that are emerging in the industrial sector . Most are classified as sustainable innovations that enhance products and services all along performance dimensions that popular clients care about and that major markets have traditionally valued.

They allow incumbents to increase sales to their best current clients at better revenues. Other less frequent types of innovations are disruptive innovations. When created, disruptive innovations are originally inferior to the accepted product dimensions in relation to the incumbent products, but represent a new mix of characteristics that apply to margin client groups such as those close to the bottom of the market (Markman and Waldron, 2014). They may, for example, be smaller, more efficient, cheaper or more accessible.

Third, current clients and existing profit models limit the investment of established companies in new technologies, so investments that seem unattractive to incumbents can actually be appealing for competitors who have few (if any) clients and face less competitive investment opportunities. As a result, incumbents are generally not allowed to create their own disruptive technologies that promise

lower costs, target smaller markets and implement lower quality goods and services that cannot be used by their current customers (Christensen, M and al, 2016).

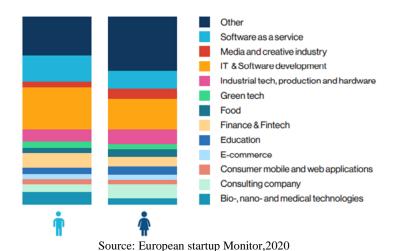
2. Management of innovation in startups

Nowadays, almost anywhere, both in academic and professional life, we hear about startups. However, not everyone is generally aware of the concept's extensive definition, especially, when it comes to deciding whether or not a certain company falls under the startup category.

The small tech firms known as startups have been researched by Carmel (1994), noticing that they were very creative and original. Tung et al. (2013) conclude that a strategy of startup promotion has become a significant way to sustaining the economy's momentum and effectiveness, and is a mode of doing and thinking about new goods and new values. According to Puhtila,J (2017) a start-up business is an entrepreneurial project that is usually a fast-growing, newly developed company that seeks to meet the needs of a market by creating a successful business model around a creative product, service, process or platform. The strength of R&D and the valuation of intangible assets have been identified by startups companies. A technology startup is considered a source of employment in that it usually creates innovative goods and services that can contribute to a new market and highly skilled labor that new jobs need to fulfill. (Choi,S and al,2020).

According to the European Startup Monitor (2020), there is no official definition of the term "start-up", so the following criteria were used by researchers. The company must be less than 10 years old. It must have product /service/business model that is innovative. The objective of the start-up is to grow (the goal is to attract potential employees and/or the markets in which they work). These are the most remarkable (figure n°4) software development projects and service technologies created by female and male entrepreneurs. Then industrial technology and consulting services (European startup Monitor,2020).

Figure 4: Total Distrubution Of Male And Female Founders Among Sectors



Numerous researches and experts identify and interpret the startup lifecycle differently, there is definitely no one clear and correct approach to describing the various phases of the startup lifecycle. Kraus (2017) discusses a startup's five stages of development: Beginning with an initial stage, going next to an investment stage, setting up the company and pursuing growth, being mature in the company and finally getting acquired. The startup development phase structure (figure n°5) developed by Startup Commons is another useful method for startup lifecycle (2019). This structure is an open standard to aid establish a shared image of the various stages that startup undergo during their lifecycle.



Figure n° 5: startups development phases

Source: Startups commons (2019): www.startupcommons.org (consulted on 29/01/2021)

3. Disruptive Innovation In Startups

Today, any organization is looking to use the entrepreneurial-based innovation management available in start-ups by working with them through several means, for example, venture capital and incubation to develop their innovation activities and increase their market share. (Weiblen and Chesbrough 2015, 70-71). In general, innovations presented in startups are observed as disruptive innovations. This type of innovation can disrupt existing markets by redefining them or creating new ones.

Disruptive innovation is based on three fundamental principles: overcoming, breaking the rules, and inventing business models. Start-ups bring unique solutions to markets that often exceed consumer expectations and break the rules.

The function of business models should also not be neglected in the creation of disruptive innovation, because disruptive innovation is not only about products and their attributes, but also about how business models are used and how these relevant profit models are formed (Anthony et al. 2008) Moreover, disruptive innovation is characterized by its simplicity and does not require large amounts of capital, making it suitable for start-ups (Christensen et al. 2015.) According to Assink (2006), disruptive innovation most often appears through technology and/or innovative business models. This does not mean that other types of innovation are unviable or insignificant.

Disruptive innovation seems relevant for new companies entering the market. This type of innovation presents for all executives, managers and entrepreneurs a

simple, practical, easy and affordable solution that changes the rules of the game and disrupts the markets (Anthony et al. 2008).

However, disruptive innovation is weak in terms of investment as well as in terms of performance, it is capable of satisfying the expectations and needs of specific segments that are ignored and it is able to develop gradually. In contrast, sustainable innovation focuses on profitable customer segments with high prices and important characteristics (Anthony et al. 2008).

According to Den Hertog et al. (2010), innovations in startups have the characteristics of disruptive and radical innovation, because startups that are active in service are generally characterized by dispersion, intangibility, and inhomogeneity with a strong involvement of customer interaction. Innovation management in startups presents a very important challenge. The process of innovation requires identifying the dilemmas of innovation, the elements that limit and/or motivate them, as well as exploiting strategies to overcome them.

According to Christensen (2008) it is essential that companies devote a lot of effort, means and resources to different types of innovation in order to know how to manage them afterwards. Implementing adequate measures of innovation is often an essential phase of innovation management and should not be neglected as it is the means of knowing the real impact of the innovations adopted.

4. Methods and Material

This paper aims to study the impact of the Disruptive Startups in tech technology has had on the existing industry. In less than a decade, startups in tech technology has transformed all sector not only the in the United States of America but throughout the world. The research conducted in this study is secondary in nature. The methodology used in this paper is a case-based approach, where the disruptive companies in tech industry and specifically the journey of Uber Technologies Inc. is studied in depth. This study focuses on Uber's initial period as a start-up in the United States and India only, from 2009 to 2021. Uber started as a start-up in San Francisco, U.S.A., in 2009.

Having established a stable business, it expanded into other territories with improvised business models based on learning.

5. Findings

5.1 Disruptive innovation and data

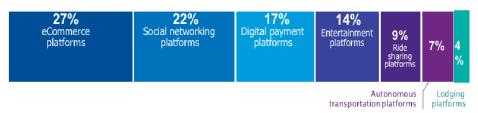
5.1.1. The most disruptive sectors

Table 1: Inventory of the most innovative disruptions in tech industry

The most disruptive business sectors	The most disruptive companies	Favorite disruptive apps
eCommerce platforms	Amazon	Google
Social networking platforms	Apple	Facebook
	Alibaba	Instagram

Source: KPMG (2019).

Fig.5: Most disruptive business models



Source : KPMG (2019).

According to KPMG's Technology Industry Innovation Survey (2019), social networking, Internet of Things, 5G, blockchain, Artificial intelligence (AI), eCommerce, cloud, and other emerging technologies are being leveraged to blur the lines between sectors, inventing new business models and converging industries. Manufacturing plants are converting into robotic clean rooms, computerized. Traditional automobiles are transforming into electrified, autonomous infotainment centers. And the list is a long one. While the term of a "technology business" develops, a lot of companies are repositioning themselves as such and generously utilising the descriptor in their corporate profiles, press releases, and financial statements.

As shown in Fig. 5, eCommerce emerged the first most disruptive business model. As per to global players in the high-tech world, for the next three years eCommerce technologies will be the most disruptive business models. It also came first in last year's survey and global eCommerce spending is expected to increase from \$3.5 trillion in 2019 to \$6.5 trillion in 2023 (Lipsman, 2019). AI, speech recognition, drones, and autonomous vehicles and other eCommerce giants are pioneering the utilisation of emerging technologies, and we often hear about the extension of their reach and the disruption to other industries like, healthcare food delivery, energy and prescription drugs, insurance. In this year's survey, the slightly gap with e-commerce platforms has been closed by social networking which is again ranked as the second most disruptive business model. As e-commerce companies, with new offerings like exclusive and original content, live sporting events, augmented/virtual reality, educational services, and cryptocurrencies, the social media firmes are striving to capture an ever-increasing percentage of client mind share and wallet.

As a direct consequence of emerging technologies some sectors are more likely to be disrupted than others. Within the coming three years, these industries expect to have the biggest change: Telecommunications; Industrial manufacturing; Healthcare/Life sciences; Aerospace and defence; Financial services (KPMG, 2019).

5.1.2. The most disruptive companies

As eCommerce classified as the most disruptive business model (table 1), in that space it apparent that leading firms play an important role. These firms also tend to stimulate innovation in many industries, which by default will be disruptive to many other companies but also result in great utility and benefits.

As Fig. 6 illustrates, Alibaba is the most disruptive company, just behind Amazon and Apple. Baidu, Tencent, Didi and Xiaomi were also cited among the most disruptive.

Google Netflix Airbnb 6% Baidu 4% DЛ Facebook Samsung Google 4% 2% DЛ Tesla Lyft Microsoft 2% Alibaba Amazon Apple

Fig. 6: The most disruptive companies in tech industry

Source: KPMG (2019).

5.1.3. The most disruptive tech app

As shown in Fig. 7, in the tech industry the most disruptive favorite app was Social media apps witch tops the list. Social networking platforms is ranked as a very disruptive business model overall. It certainly shows the growing reach, expanded offers and the impact that social media platforms have in our daily lives. More than three billion people were using social media on mobile devices at the beginning of 2019, an increase of more than ten percent over the previous year (Kemp, 2019). In 2018, digital consumers worldwide spent an average of 2 hours and 22 minutes per day on social networks, an increase of 49 percent over the average of 1 hour and 35 minutes five years earlier in 2013 (Trendstream, 2018).

Interestingly, although digital payment platforms were ranked as the third most disruptive business model for the next three years, payment applications were not named as the favourite applications, which suggests that overall market adoption and consumer confidence is still far from being achieved. Messaging and entertainment applications made up most of the rest.

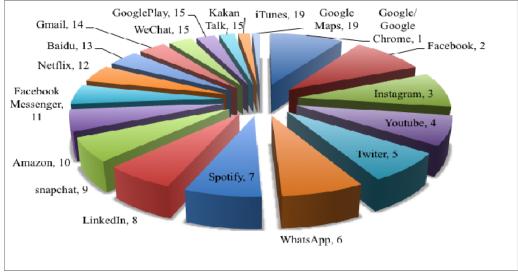


Fig. 7: Ranking of the most disruptive favorite apps in the tech industry

Sources: KPMG (2019).

5.2. Startups: disruptive by default

Start-ups are at the forefront of innovation. They disrupt the market and represent everything big business isn't. Start-ups embrace failure as they take on risks as a matter of course.

By the fact that there are many similarities between SMEs and startups, we have take the example of SMEs, where the survey data show that a significant proportion of SMEs engage in all forms of innovation, especially in higher-income countries (Figure 8) and that even the smallest employer enterprises (i.e. less than 10 workers) can reach productivity levels above the large-company average (OECD, 2017).

Product or process & marketing or organisational innovation Product or process innovation only Marketing or organisational innovation only Product or process innovation only Product or process & marketing or organisational innovation Marketing or organisational innovation only 100 \$ 75 50 25 0 £ -25 B-50 -75 你好你好你好你好 45 38 343 Cly 43 43 43 Source: OECD (2018).

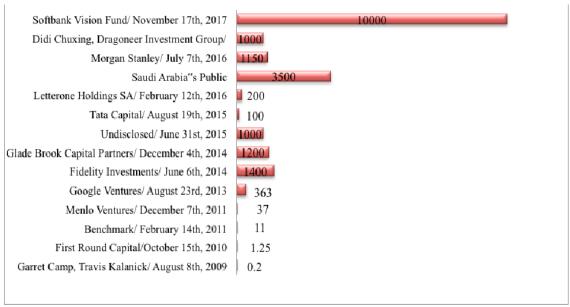
Fig. 8. Innovation types by firm size, percentage values of firms within the scope of national innovation surveys in 2018.

Incumbents seek to take lessons from start-ups – frequently using strategic alliances,— with some success. Because many are often find it difficult to innovate. Many of them are not good at turning ideas into meaningful business propositions,

especially those that are disruptive and "game-changing".

5.2.1. Case study of Uber

Fig.9: Funds received by Uber from various investors (million \$)



Source: Pandya (2019)

Uber is a disruptive startup that has grown with extraordinary speed, is founded in 2009, is the world's largest personal transport provider. With its

headquarters in San Francisco, California, Uber operates in 65 countries, covering over 600 cities (Uber Technologies Inc, 2018). The effective peer-to-peer business model employed by Uber connects those who need the service, in this case transportation, with those who can provide the service. The service is digitally provided, where in, A taxi can be summoned via an Uber App available both on Android and IOS. With a valuation of 72 billion dollars (Salinas, 2018; Schleifer, 2018), Uber completes over 15 million trips daily and provides employment to over 16000 people (Uber Technologies Inc, 2018).

The core goal of Uber was to enhance asset utilization. In order to decrease the time spent per client and to make the model more sustainable, it was needed to expand the number of chauffeurs and cabs. The only way to increase demand will be by making the system more reliable. The firm disposes of a business plan and IT infrastructure support, but to scale up the model, financing is needed. Google Venture and many other investors helped fund the firm. above is the list of investors.

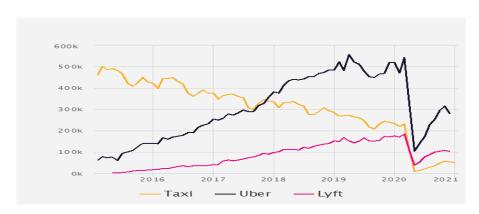


Fig. 10. New York City Daily Trips: Taxi, Uber, and Lyft.

Source: TLC summary data (2021); Schneider (2021)

The behaviour of consumers has changed fairly quickly. Uber moved to New York City in the middle of 2011, and in just seven years (six, if Lyft is included) surpassed the current cab service in terms of rides per day (Fig. 10). The most recent data shows yellow taxis provided 49,826 fewer trips per day in January 2021 compared to one year earlier, while Uber provided 278,768 more trips per day over the same time horizon.

The fact that this growth in market share is not limited to New York, as shown in Fig. 11 although the Uber statistics do not begin until 2016, if we look back to 2010, it is more evident that yellow taxes are declining in market share, illustrating the share of business travelers' ground transportation that is reimbursed by their employers across the U.S. (Figure 10).

Three facts are striking about the Fig. 12: first, the speed at which Uber and other ride-hailing apps such as Lyft overtook both taxi service and car rentals. Second, the total market for ground transportation in NYC increased dramatically during this period of growth of Ridehailing market (Uber, Lyft and others) from 60,357 rides per day in January 2015 to about 375,000 in January of 2021. Third,

this rapid technological substitution is not only happening in the personal ridesharing business, but in the business segment as well.

100%
Via
Juno
Lyft

80%

Uber

20%

2016
2017
2018
2019
2020

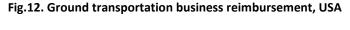
Uber

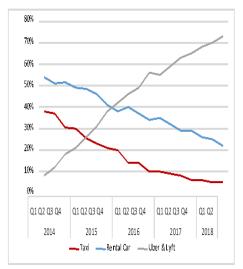
Uber

Juno
Via

Fig. 11. Ridehailing market share New York City

Source: TLC summary data (2021).





Source: Richter & Street (2018).

Competing producers, aka taxis, are suffering the full brunt. Observe Table 2 that depicts the decline in revenues per vehicle, and consequently the price of a taxi permit ("medallion") in New York City in a five-year period, from Q1 of 2014 to Q1 of 2019. Similar scenarios are unfolding in other major cities such as Boston, San Francisco, and Chicago (Channick, 2018; Graham, 2018), constituting a full-blown crisis at the taxi driver level that has led to numerous foreclosures and even several suicides (Fitzsimmons, 2018). In addition, as Fig. 8 shows, this is happening in the personal as well as the business sectors, and thus the decline is fast and across the board.

 Quarter
 Average monthly fare per medallion
 Average medallion price

 2014, Q1
 \$13.832
 \$1.053.410

 2019, Q1
 \$9914
 \$188.642

 Decline (%)
 28 %
 82%

Table 2: Average monthly fares and medallion prices in NYC.

Source: NYC (2021), Richter & Street (2018).

6. Discussion and agenda for future actions

The decline of Kodak is a salient example. Once a global powerhouse of technology and innovation, and the original developer of the digital camera, Kodak is the often cited example of how a business can fail to effectively innovate and respond to disruptive technology.

Many studies confirm that, despite the fact that Incumbents compete due to strong asset bases, well established brands, along with deep and longstanding relationships with customers and other stakeholders, but they have not the same level of agility or innovation of the startups. Startups compete by being agile, innovative, and active experimenters. Unencumbered by legacy systems and heavy bureaucracies, they adapt and move quickly.

Start-ups rapidly winning in the traditional fields of strength of incumbent companies, thanks to their innovation and flexibility advantages. According to research by the Harvard Business School, at least 75 percent of all start-ups fail. Yet failure is integral to the success of those that survive. By accepting the risk of failure, start-ups are truly free to innovate. The question is, what insights, if any, can start-ups offer big business, which avoid the very notion of risk? It is important to note that a start-up is not a small version of a large company. Start-ups, and more broadly entrepreneurs, embody the fundamental principles of innovation to achieve real business results. Start-ups embrace failure and risk-taking, a fundamental requirement for successful innovation. Start-ups regularly "rotate" the commercial offer to best meet market demand. Thanks to their agility, they can easily respond to challenges and opportunities as they arise. According to the recent Startup Aus Crossroads report and The Economist, the start-up sector is one of the fastest growing industries in the world. Never has it been easiest for an owner to dream up an idea, form a team, build a disruptive service or product, and then sell it for a billion dollars (the Instagram story). Lower costs and accessibility to the basics needed to launch technology start-ups mean that more entrepreneurs are tackling multi-billion dollar markets than at any other time in history (Crossroads, 2020).

Uber is an example of startup that has made a high disruptive impact. Capitalizing its strength in tech technologies and specifically IT applications, the new system developed by Uber has enabled to exploit the full value of the assets (cars), leading to reduced cost and increased revenues, thus benefiting both clients and drivers. The new ecosystem of carpooling services created by Uber has managed to make a dent in the otherwise "hard-to-break" cab industry. Uber has universally transformed the cab industry.

The company was successful in restoring consumer confidence in carpooling services. Uber has changed the dynamics of the whole by making digital cab control possible. Uber has certainly caused a digital disruption, but thanks to the quality of the services provided from the early stages and to its target customers.

We, therefore, highlight some actions that incumbent and leaders should consider regarding disruption include:

- Regularly assess the threats and opportunities that emerging technologies and business models are creating in the market.
- Perform an in-depth review of the current strategy (including people, process, technology, and third party strategies). Assess its flexibility to adapt to disruption and maintain relevance to the future market.
- Stress tests the current strategy against competitive threats and market disruption.
- Be agile and conduct a skills assessment to ensure the organization has the expertise and agility to execute the business strategy. An agile approach is key to successful disruption, as it enables constant testing and reiterating. Often these innovations involve creating new markets or products; therefore much of the process relies on trusting the unknown. There will be no available pre-existing research or information to enable data-driven decisions, so intuition and creative discovery will be the necessary alternatives.
- Rethinking the business model that exploits new technologies, creates new value propositions and gains competitive advantages.
- Make it a priority to adopt new technologies that will allow the company to capitalize on long-term value.
- Take risk, the very nature of disruption that it is a bit turbulent, it's not always successful. However, testing a series of innovations that are not fully successful sets the stage for a new business model that will prove profitable in the long-term.
- Redesign the agenda of the Board of Directors to maintain the focus on disruption, recalibration of strategy, change management and execution.

All in all, according to our analysis, startups are maintaining their agility edge to disrupt the market tanks to easier access to tech technology, witch allowed a rapid customer acquisition. As a result, in many industries incumbent are under threat of digital disruption, like financial services, telecommunications, retail, and technology...etc.

Nevertheless, the road ahead should not be dark for incumbents. For now, many are finding it difficult to take advantage of the benefits usually reserved for startups, like being flexible and creative. However, under the model of new market disruption, if an incumbent and a startup started in a new market at the same time, the incumbent would dominate with their greater resources, which will allow us to say that, if incumbents are able to improve their sensing capability for tech disruption threats and opportunities, their digitization of products, services, and processes, and their speed of execution, then they should be well placed to compete with disruptive startups (Chemma and Arabeche, 2018).

7. Concluding remarks

Disruptive innovation is the best competitive strategy to keep businesses profitable.

Uber, Skype, iZettle and Spotify are some of the most famous examples of disruptive start-up innovation. Despite the fact that these disruptions caused the demise of major companies, but they also contributed to the growth of numerous start-ups and to the development of new products and services in a nimble way. Rewarding employees with entrepreneurial and risk-takingskills, Adapting the latest technologies and innovative models to existing models, and altering generic business models in companies with structured operations are some of the ways to keep a business profitable in light of disruptive innovation.

Continuously improving and updating your business with the latest innovations is the only sure way to keep you in the game. Stay in touch with customers, continue to look for customer signals, and use the information available to provide an enjoyable customer experience.

As ever, "No product remains relevant and successful indefinitely. No strategy remains good indefinitely". Undertaking a small intelligent and calculated risk with a disruptive innovation, may be just as safe, if not safer, than staying out of the way and not undertaking the initiative to disrupt.

References:

Arabeche,Z et Chemma,N,(2020), "Entrepreneurship and Business Performance: case of Algeria ",Economic and Management Research Journal n4,vol 14.

Bastiaansen,R and Lee ,J, (2018), « Disruptive innovation : a study on the approach to opportunity recognition by ventures with disruptive characteristics » , Lund university

Crossroads report, (2020). [Online]. Available: http://startupaus.org/crossroads/

Christensen, C. M., McDonald, R., Altman, E. J. & Palmer, J. E., (2018). Disruptive Innovation: An Intellectual History and Directions for Future Research. Journal of Management Studies, 55(7), pp. 10443-1078

Christensen, C. M., Raynor, M. E. & McDonald, R., (2015). What Is Disruptive Innovation?. Harvard Business Review, pp. 44-53.

Chandra,Y and Yang,Sh,(2012). Managing disruptive innovation: entrepreneurial strategies and tournaments for corporate longevity. Journal of general management, vol 37 N2

Chemma, N. et Arabeche, Z. (2018). Mutations et mouvements : quelles stratégie gagnante dans un environnement turbulent? Une analyse de deux acteurs algériens installés à la lumière de leurs comportements et attitudes, *Revue Marocaine de recherche en management et marketing*, N°18, Juillet-Décembre, 78-98.

Christensen,M and al,(2016). Disruptive innovation: intellectual History and Future paths. Harvard Business school,working paper, 17-057

Choi,S and al,(2020), « how does technology startups increase innovative performance? the study of technology startups on innovation focusing on employment change in Korea », sustainbility 12,551

Channick, R. (2018), With nearly half of Chicago cabs in foreclosure or idled, cabbies' hopes riding on New York-style ride-share limits, Chicago tribune. [Online]. Available: https://www.chicagotribune.com/business/ct-biz-chicago-taxis-ride-share-limits-20180823-story.html Fabricio,R and al,(2015). Strengthening of open innovation model :using startups and technology parks. Ifac papers online, elsevier

Fitzsimmons, E. G. (2018), Why Are Taxi Drivers in New York Killing Themselves? the New York times, [Online]. Available: https://www.nytimes.com/2018/12/02/nyregion/taxi-drivers-suicide-nyc.html

Graham, J. (2018), Competition hacks taxi business, Boston Herald [Online]. Available: https://www.bostonherald.com/2018/10/21/competition-hacks-taxi-business/

King, Andrew A. and Baljir Baatartogtokh. (2015). "How useful is the theoryof disruptive innovation?", MIT Sloan Management Review Vol. 57 No. 1. [Reprint #57114; Massachussetts Institute of Technology.]

KPMG, (2019), Disruptive companies and business models, Technology Industry Innovation Survey. **Kemp S.**, (2019), "Digital 2019: Global Internet Use Accelerates," We Are Social and Hootsuite, January 30.

Lipsman A., (2019), "Global Ecommerce 2019," eMarketer.

NYC.gov, (2021), aggregated reports, [Online]. Available:

https://www1.nyc.gov/site/tlc/about/aggregated-reports.page

OECD, 2018, Promoting innovation in established SMEs, Ministerial Conference on Small and Medium-sized Enterprises, 22-23 February, Mexico.

OECD, (2017), "Enhancing Productivity in SMEs: Interim Report", OECD Working Party on SMEs and Entrepreneurship.

Pandya K., (2019), "Insights Into The Uber Business Model, The NYCREPTED blog. [Online]. Available: https://www.ncrypted.net/blog/how-uber-works-insights-into-business-model-canvas-revenue-analysis

Puhtila, J., (2017), « startup Manual », Interreg and European union

Richter, W. Street W. (2018), Uber and Lyft are gaining even more market share over taxis and rentals, business insider. [Online]. Available: https://www.businessinsider.com/uber-lyft-are-gaining-even-more-market-share-over-taxis-and-rentals-2018-7

Salinas, S. (2018), "Toyota is investing \$500 million in Uber at a valuation reported at \$72 billion," Tech drivers. [Online]. Available: https://www.cnbc.com/2018/08/27/toyota-to-invest-500-million-in-uber-at-a-valuation-of-72b-wsj.html.

Schleifer, T. (2018), "Uber" s latest valuation: \$72 billion," recode. [Online]. Available: https://www.vox.com/2018/2/9/16996834/uber-latest-valuation-72-billion-waymo-lawsuit-settlement.

Schneider, T.W. (2021), Taxi, Uber, and Lyft Usage in New York City [Online]. Available: https://toddwschneider.com/posts/taxi-uber-lyft-usage-new-york-city/

TLC summary data (2021), aggregated reports.

Trendstream Limited, (2018), "GlobalWebIndex Social Media Flagship Report".

Teodoridis ,F, (2017), « Startup commercialization strategies of disruptive technologies : implications for the rate of scientific discovery », SSRN electronic journal.

Uber Technologies Inc., (2018), "Newsroom: Company Info," Uber Technologies Inc.,. [Online]. Available: https://www.uber.com/newsroom/company-info/.