UNIVERSITÀ DEGLI STUDI DI PADOVA

DIPARTIMENTO DI SCIENZE ECONOMICHE ED AZIENDALI
"M. FANNO"

CORSO DI LAUREA MAGISTRALE IN
BUSINESS ADMINISTRATION

TESI DI LAUREA

"Business Model Innovation and the disruptive power of E-business: the case of Uber"

RELATORE:

CH.MO PROF. Belussi Fiorenza

LAUREANDO/A: Businaro Elisa

MATRICOLA N. 1189277

ANNO ACCADEMICO 2019 -2020

Il candidato dichiara che il presente lavoro è originale e non è già stato sottoposto, in tutto o in parte, per il conseguimento di un titolo accademico in altre Università italiane o straniere.
Il candidato dichiara altresì che tutti i materiali utilizzati durante la preparazione dell'elaborato sono stati indicati nel testo e nella sezione "Riferimenti bibliografici" e che le eventuali citazioni testuali sono individuabili attraverso l'esplicito richiamo alla pubblicazione originale.

The candidate declares that the present work is original and has not already been submitted, totally or in part, for the purposes of attaining an academic degree in other Italian or foreign universities. The candidate also declares that all the materials used during the preparation of the thesis have been explicitly indicated in the text and in the section "Bibliographical references" and that any textual citations can be identified through an explicit reference to the original publication.

Firma dello studente

Abstract

Business Model Innovation is the main tool to encourage the development of businesses and the reaching of competitive advantages, especially with the introduction of technology and the Internet in companies' reality, transforming the traditional model in E-business model. Starting from a literature review, which underlines the importance of theoretical concepts, the present dissertation has the aim to illustrate the advantages provided by the adoption of business model innovation, especially in transportation sectors, with the analysis of the Uber case and its comparison with the traditional taxi industry.

KEY WORDS: Business Model Innovation, E-business, Taxi industry. Uber taxi.

Contents

Chapter 1

Introduction

"*If I had asked people what they wanted, they would have said faster horses"*. Despite all the current limits of this declaration ascribed to the automobile industry pioneer H. Ford, the concept behind is representative of the starting point of new businesses: invention and innovation. It is well known in fact, how important is to have the proper and innovative idea at the right moment in order to obtain and pursue the success of the company. But having a *good idea* is not enough to face the competition and running the business over the years. Indeed, the U.S. Bureau of Labor Statistics has analyzed the different steps of businesses lifetime from the 1990s to today: 20% of new businesses fail in the first two years of activity and this percentage increases to 45% after five years. Moreover, only 25% of enterprises survive for 15 years or more. The same research also reveals that between March 2018 and March 2019, the number of new businesses was equal to 774,725, but, thanks to the previous results, we can expect that after two years 155,000 of these will fail[1].

These predictions could be avoided with the implementation of the correct business plan, of an "ad hoc" business model, and continuous improvements of strategy, in order to align the way of operating to the company and market needs, by encouraging the enforcement of critical success factors to guarantee a competitive advantage.

Therefore, before starting a new activity, a solid business plan is fundamental: first of all, it is necessary to distinguish what is just an *idea* from an *opportunity*, the latter being always an inspiration but *durable*, *attractive* and *anchored* in a product or service that produces value. Subsequently, the plan continues with an investigation of the industry characteristics and of the market analysis and it is concluded with the financial section. After the first draft of the business plan, addressed particularly to investors, the main point of success is represented by the Business Model that is composed of a set of elements which describe the company activities, logic, and value proposition.

[1] Source: U.S. Bureau of Labor Statistics. Available on https://www.bls.gov/bdm/entrepreneurship/entrepreneurship.htm Date of access October 2020.

The aim of this research concerns the investigation of those measures usually referred to as the implementation of the most correct ways to create value and develop the key activities of each company. In particular, it focuses on the business model concept, which, as stated before, represents *"The system of the interdependent activities that are performed by the firm and by its partners, and the mechanism that links these activities each other"* (Amit et al., 2010). Analyzing a company's business model, through its link with the firm's strategy and the tool of the business model canvas, allows us to have a clear and complete representation of the entire way of operating that affects the relationships with suppliers and customers, underlines the key activities, key partners and value proposition, and specifies the cost and revenue structures and the market section related to distribution channels and customers segments. In that way, it is easy to identify the weaknesses of the company and intervene to resolve them, but, above all, it is a great instrument in order to discover new interactions between different elements, creating new resources of value and competitive advantages. Moreover, the real point of disruption is represented by the innovative business model, that is the introduction of particular elements or the change of synergies between components, which constitutes a "revolution" from the traditional archetype to conduct business. The transformation of the traditional business model into a new one has principally the aim to reach a higher level of efficiency and to attract and maintain new customers. Innovation theme presents different basics but the most common is referred to as the introduction of technology in companies. In fact, the deployment of technology and in particular the introduction of the Internet within companies provide a great improvement of activities, as affirmed also by the president of Alibaba company, Jack Ma, "*If I had 25 years, I would have invested in technology to implement my business, to differentiate myself from the others. It is necessary to believe in the power of technology"*[2]. This process of innovation provided the creation of a new type of business model, called E-business, and characterized by the use of the Internet within the company as one of the main drivers of implementation of activities. This model implies important changes, particularly in products and services and customer relationships: indeed the main key success factors of this model are represented by the possibility to strengthen the strategic position thanks to the introduction of new inventions and the great interconnections guaranteed. Furthermore, Teece (2018) underlines the efficiency of e-business to quick test, discard and replace ideas and business models that do not work.

This work investigates the importance of aforementioned structures concerning the success of new companies rather than the traditional model. In fact, it takes into consideration the analysis

[2] Source: Interview to Jack Ma, Founder of Alibaba, during a panel discussion in Korea in 2016. Available on https://www.youtube.com/watch?v=L1D9e4zvLXo. Date of visualization 20th October 2020.

of Uber taxi company, a technological and transportation firm founded in 2009, which is characterized by a new way to conduct the taxi business, with the help of an application that coordinates the rides and connects customers and drivers.

The present dissertation is structured as follows: chapter 2 investigates, through a literature review, the business model concept, starting from the definition, which is not univocal, until the importance of the concept in order to pursue a business activity successfully, describing the relationships with strategy (they are two different concepts but strictly related and interdependent) and all the elements that constitute the model, based on the nine Osterwalder's block analysis. Instead, chapter 3 continues the discussion by introducing a development of the concept: business model innovation. It addresses the importance of adoption of changes in business models in order to remain competitive, particularly with the introduction of technology and the Internet and the consequential transformation in the so-called E-business. Chapter 4, instead, is dedicated to the analysis of the innovative business model of Uber, a ten-year company, which has increased its expansion and success thanks to the use of technology, disrupting the taxi industry. The chapter investigates all the features of the business model through the illustration of its business model canvas, based on data derived from its website but also from a set of papers that investigated the theme in these years, its key elements and success factors considering also the analysis of the traditional taxi market. Uber is a realty highly spread all over the world, hence, in order to provide a detailed analysis of the situation, the present research focuses only on the United Stated market, highlighting, in particular, the condition of New York City. Despite the strengths described in the fourth chapter, which allowed an incredible growth of the company, Uber still has some weaknesses related to the lack of regulation and concerning the drivers' conditions, the safety of the activities, the data protection and discrimination problems. All these issues, which are analyzed also in comparison with the taxi industry situation, are covered in chapter 5, together with the proposals of solutions and the examination of the feasibility application of Uber business model to other realities, as an ideal model of the future. Chapter 6 concludes.

Chapter 2

Business Model: a literature review

2.1 Introduction

When an entrepreneur starts a new activity, there are different aspects to take into consideration such as planning, strategy definition, marketing analysis and competitor analysis, in order to pursue the company main objective: create and increase value for its shareholders or partners (Boesso et al., 2018).

Planning report is the starting point, which initiates with an original business idea and has to be well formatted: *easy to understand*, *consistent*, *realistic*, r*eliable*, *financial sustainable*, *focus on the market* and *with a unique competitive advantage*. The product of planning activity is a draft that explains the strategic aims of a company related to the initial business vision and mission, the key success factors and the actions carried out to achieve them. Besides, in order to test the feasibility of an idea, the second step is creating a business model which *"highlights the importance of thinking of a business enterprise as a system rather than a collection of parts*" (Fjeldstad et al., 2018).

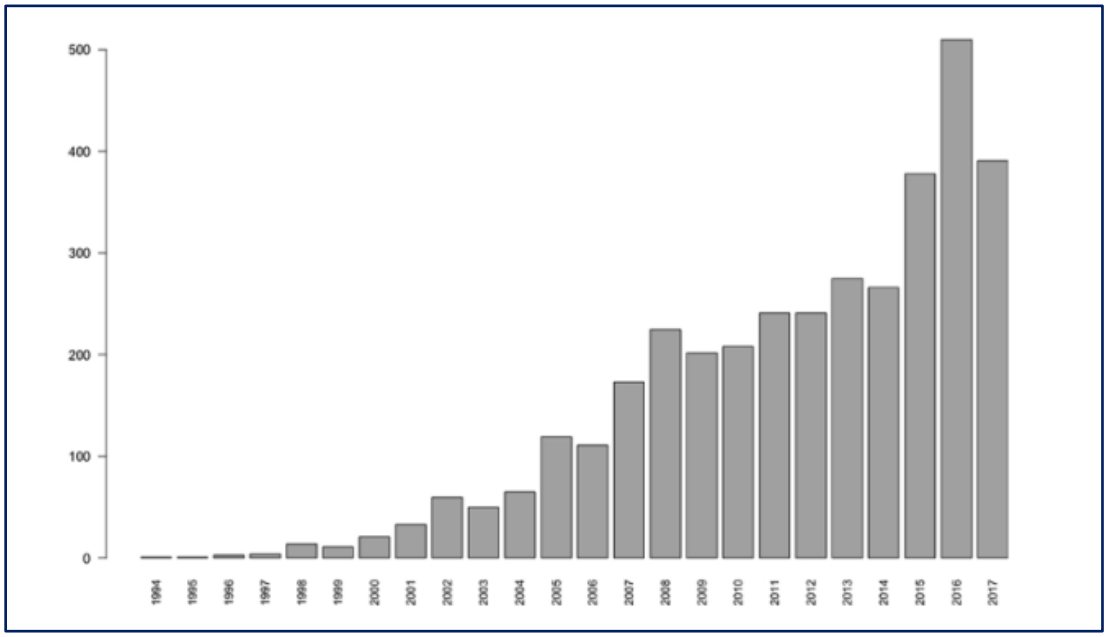
This chapter starts with a literature review about the business model concept in order to continue with the analysis of its relationship with the strategy, its physical representation through the Business Model Canvas and in the end a brief reflection of the importance of business model in the company's life.

2.2 The business model concept

Evolution of the concept

Business Model is a relatively young term (Osterwalder et al., 2005) and widely used in literature especially related to managerial disciplines.
Researches demonstrate (Belussi et al., 2019) that from 1985 to 2017 it was one of the most analyzed term in the business academic publications. Firstly, because of the increase in the use

Figure 1: Number of publications per year, 1994-2017.



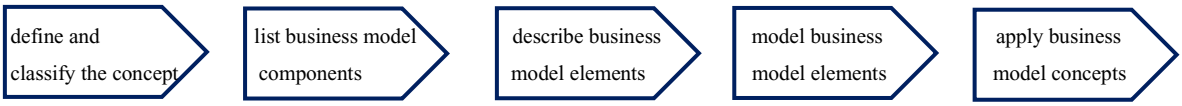
Source: Belussi et al., 2019.

of new technologies and the consequent creation of e-business: in fact, Osterwalder et al. (2005) demonstrated that exists a positive relationship between the appearance of the term in academic article and the rise of the NASDAQ stock market for technology company. Secondly, thanks to the increasing interest towards the importance of themes such as business model innovations, high investments, alliances and eco-social innovation applied also to the tertiary economy.
The figure above (*Figure 1*) shows the increase in the use of the term "business model" in researches and papers published from 1994 to 2017: in particular, the graph concerns the number of publications per year about the business model concept, in the top ten journals (Belussi et al., 2019). This research demonstrates an intense growth in the usage of the expression: from 1994 to 2000 the publications concerned "business model" were around 50

per year, whereas after 2005 the number rapidly increased, until it reached peaks of 500 per year in 2016.

Despite the strong increase in use, however, it is still difficult to find a correct and unanimous definition of what a business model represents. At the beginning of the Internet Era the most used definition was related to *"how to make money"* (Ovans, 2015), but soon it was argued that different meanings depend on how people use the term. Osterwalder et al., (2005) identify three different categories of authors who wrote about business model definition: the first one is referred to authors who interpret business model such as an abstract concept able to describe and explain reality; the second one is related to authors who use abstract types of business models in order to describe a set of businesses with common features. In this case the concepts

Figure 2: Evolution of the business model concept.



Source: Personal elaboration.

are theoretical but display similar attitudes; the last one concerns authors who treated real examples of business models.

The previous categorization illustrates how vast the literature is and based on it, it is possible to track five steps that represent the history and the evolution of the business model concept. As depicted in the scheme above *(Figure 2),* the first phase describes the initial one when the term started to become popular and where the authors tried to define and classify the concept according to theoretical definitions. During the second phase, the abstract definitions assumed a more concrete form: in fact, authors began to describe the different elements that characterized the business model concept but only in the third phase a real and complete description of those components appeared. During the fourth phase the elements of business models are conceptualized, evaluated and tested in order to be applied in the fifth phase, which is more practical, where the theoretical models are applied in management.

A definition

Despite the great increase in the use of the term according to the development of new technologies, the term "business model" appeared for the first time as early as 1954, when Drucker gave it a first definition, answering to some questions which are strictly related to the

more modern definitions. Initially, he focused its attention on the customer, stating that the *"purpose of a business is to create a customer"* and that firm's activity should be driven by the simple question *"what will the customer buy?"* (Fjeldstad et al., 2018), but later he started giving increasing regard on how a firm should modify its resources and materials in order to generate revenues and profits; in other words, on how to deliver value to (rather than pull it out from) the customer.

Particularly during the initial investigations about this theme, business model literature focused its attention on two discourses: one related to operational dimension and on the other hand one associated on dynamic dimension. In the first case, the meaning of business model was connected to how a firm conducts its business, i.e. the products it decides to produce, the resources it has, the final services it offers and the customer it targets. The second one referred on how a firm tends to change and adapt over time, according to the interactions between the different elements of a business model and the environment (Fjeldstad et al., 2018).

The latter premise has anticipated that business models are composed by different elements, which have changed over time and that will be analysed later in this chapter.

Academic literature is rich of different meanings of the term, which tend to define "business model" as a statement (Stewart et al., 2000), a conceptual tool (Osterwalder et al., 2005), a description (Massa et al., 2017) or a representation (Magretta, 2002). *Table 1* summarizes the main business model definitions provided by the literature.

What emerges from this analysis is that researchers disagree in giving a univocal definition to the term, even if some authors have made a fundamental contribution in bringing out crucial aspects of the concept. The studies conducted by Osterwalder et al. (2005) tried to give a complete definition of business model, starting by the semantic meaning of the word and defining a business model like *"a conceptual tool containing a set of objects, concepts and their relationships with the objectives to express the business logic of a specific firm"*. It could be interpreted like a broad definition, but it clearly underlines that a business model is defined in a conceptual view, with the aim to investigate all the aspects and the relationships that describe how a firm conducts its business.

The latter point is also central in the studies of two other authors, Amit and Zott (2001), who define a business model as *"the content, the structure and governance of transaction designed so as to create value through the exploitation of business opportunities"*. Later, they also evolved the definition in "*the system of the interdependent activities that are performed by the firm and by its partners, and the mechanism that link these activities each other*" (Amit et al., 2011). Making long story short, these authors have tried to define the business model concept

through the explanation of three phenomena, i.e. E-business, innovation and technologies management (topics that will be treated in the third chapter of this dissertation), and highlighting the role of the business model as a source of value creation and competitive advantage for the firm.

Furthermore, their articles investigated also other aspects which characterize business model concept, first of all identifying four sources of value creation, i.e. novelty, lock in, complementarities and efficiency, which emphasized the role of business model as potential source of competitive advantage. Secondly, discovering common themes which define the modern conception of the term:

i. business models tend to create value for all the parties involved not only for the firm;
ii. all the activities carried out by the firm, the stakeholders and all the partners are important and equal;

Table 1: Main definitions of business model concept in the literature.

Authors	**Definition of Business Model**	**Paper**
Stewart and Zhao	"A statement of how a firm will make money and sustain its profit firm over time."	"Internet marketing, Business Model and Public Policy",2000. Journal of public and policy & marketing. Volume: 19 issue: 2, page(s): 287-296.
Amit, Zott	"The content, the structure and governance of transaction designed so as to create value through the exploitation of business opportunities." "The system of the interdependent activities that are performed by the firm and by its partners, and the mechanism that links these activities each other."	"Value creation in e-business",2001. Strategic management journal, p.p 493-520. "Business model Design: an active system perspective", 2010. Long Range Planning p.p. 216-226.
Osterwalder, Pigneur, Tucci	"A conceptual tool containing a set of objects, concepts and their relationships with the objectives to express the business logic of a specific firm."	"Clarifying Business Models: origins, present and future of the concept", 2005. Communications of AIS, volume 15.

Chesbrough & Rosenbloom	"The heuristic logic that connects technical potential with the realization of economic value."	"The role of the Business model in capturing value from innovation: evidence from Xerox corporation's technology spin-off companies",2002. Industrial and Corporate Change, Volume 11, Issue 3, June 2002, Pages 529–555.
Magretta	"Stories that explain how enterprises work. A good business model answer to Peter Drucker's questions."	"Why Business Model matters", 2002. Harvard business Review.
Tecee	"A business model articulates the logic, the data and other evidence that support a value proposition for the customer, and a viable structure of revenues and costs for the enterprise delivering that value."	"Business Model, business strategy and innovation", 2010. Long Range planning, p.p. 172-194.

Source: Personal elaboration.

iii. business model has a holistic approach able to describe how a firm conducts its business;
iv. a new level and unit of analysis is represented by business model.

One further step towards a more extensive clarity about the concept came with the contribution of Morris, Schindehutte and Allen (2005). In fact, they focus their attention on another important aspect of the business model, answering to six questions that concern a well formulated archetype. The first question, i.e. *"How will the firm create value?"*, is related to one of the most significant features of the business model: the value created by the firm that consists of products and services offered. "*For whom will the firm create value*?": the second question is linked to the choice and the targeting of customers, whereas the third one is then related to the source of advantage and to identify the internal skills, resources and core competencies of the firms ("*What is the firm's internal source of advantage?"*). Subsequently the attention is posed on *"How will the firm position itself in the marketplace?"*, *"How will the firm makes money?"* and the last one concerns the objectives, the aims and the sizes of the firm and the entrepreneur, i.e. *"What are the entrepreneur's time, scope, and size ambitions?"* (Morris et al., 2005). The clarification and consideration of all these aspects symbolize a

recognition of the business model like source of business value, so taking into consideration these areas in creating a business model is fundamental in order to sustain a competitive advantage for the firm.

Maintaining a competitive advantage is the main objective of companies, as argued by Porter in his works in 1980 and 1985. According to the Resource-Based-View theory (RBV), a firm is considered a bundle of resources and capabilities, like cultural factors, design skills, sourcing network and supplier relations. All these distinct resources do not create value, the competitive advantage is created with the interaction between the different resources and capabilities, which is what is represented by the business model. Moreover, business model represents an evolution of the Resource-Based-View theory, in that it refutes the four founding axioms of the RBV, based on *perfect information*, *unlimited cognitive abilities*, *no externalities* and *competitive advantage as a single source*.

Besides, it is necessary to make a last consideration, which shifts the attention on the narrow relationship between business model and strategy. In fact, it is not correct to define the terms as synonyms but the first one includes some elements of the second one.

2.3 Business model and strategy

Strategy and business model are two elements strongly correlated each other (Morris et al., 2005) and it is not always so easy to distinguish them separately: often, in fact, a definition of strategy includes the term business model and vice-versa (Baden et al., 2010).

According to Porter (1996) definition, strategy represents "*the creation of a unique and valuable position, involving a different set of activities",* but also "*the direction and scope of an organization over the long term"* (Boesso et al., 2018). The essence of the strategy involves the coordination of distinct activities in a different and continuous approach than the competitors, in order to pursue a competitive advantage.

Strategy does not act alone: it interacts regularly with a series of external and internal components, such as "strategic position", one of the main factors which assure strategy to create "*a sustainable difference in the marketplace*" (Porter, 1996), in a way that company can be recognized for its skills and accomplishments. Furthermore, other elements, which allow a company to differentiate from the others and which can also better explain strategy, are constituted by key success factors (KSF) (company specific resources and skills) and "vision" and "mission" concepts, which regard respectively the desired future state and how to accomplish the vision. (Boesso et al., 2018).

In order to define the proper strategy, it is necessary to analyze the surrounding environment. For this reason, PESTEL analysis represents an effective instrument in order to analyze and evaluate the political, economic, social, technological, environmental and legal factors which are able to affect the success or the failure of a strategy. However, the influence exerted by these factors tends to be more significant within the company's competitive space, especially in the sector or in the market. Porter analysis suggests another tool able of assessing the degree of attractiveness of a sector considering five factors: *Industry rivals; Threat of new entry; Threat of substitutes; Bargaining power of supplier; Bargaining power of buyers*. At last, it may be useful to resume all the considerations that emerge from the two previous analysis in order to create an overview of the strategic positioning of the company. SWOT analysis is an accurate device, capable of identify Strengths, Weakness, Opportunities and Threats which could influence the strategy development.

Sustaining a competitive advantage is the aim of strategy and it symbolizes the way a company creates value for itself and its customers. Porter identified three basic strategies that represent three different ways of competing that can prove effective in very different situations (Johnson et al., 2014): *low cost strategy*, *differentiation strategy* and *focus strategy*. The first one tends to maintain low costs of production and to exploit economies of scale and experience; differentiation refers to the offer of something unique to which customers attribute an higher value; while the focus strategy identifies a limited competitive space for the company that will concentrate its activity on meeting the specific needs of a particular market segment.

After this brief introduction of what strategy is and the description of the main elements that characterize it, we take into consideration the difference between the two terms: strategy and business model.

A debate has developed around this theme: on one hand some authors argue that there is not difference between the two concepts, thus they are not interested in exploring business model notion, according to the fact that it does not add anything more.

On the other point of view, some researchers (Zott et al., 2011) sustain that business model and strategy are distinct constructs and emphasizing the fact that business model is a system that regulates different parts of a business while strategy includes only the concept of competition. According to Casadesus, Masanell and Ricart, business model constitutes itself an instrument of competition, but it acts differently from the traditional way to create value, hence it works out of the ordinary than strategy. In particular it is possible to observe three aspects which represent the main differences between the two concepts:

i. Business model creates value from customers or users, and "the value creation comes first". (Massa et al., 2017).
ii. In business model, value is created also by customers and third parties and not only for shareholders as claimed by strategy theory.
iii. Business model theory considers that the knowledge held by the firms, customers and exchange partners is a limited knowledge.

The focal points remain the value creation and the value capture and around these concepts the main theories of differentiation are developed. In fact, strategy tends to emphasize competition, value capture, competitive advantage while business model prefers to focus on cooperation, partnership and joint value creation. (Zott et al., 2011).

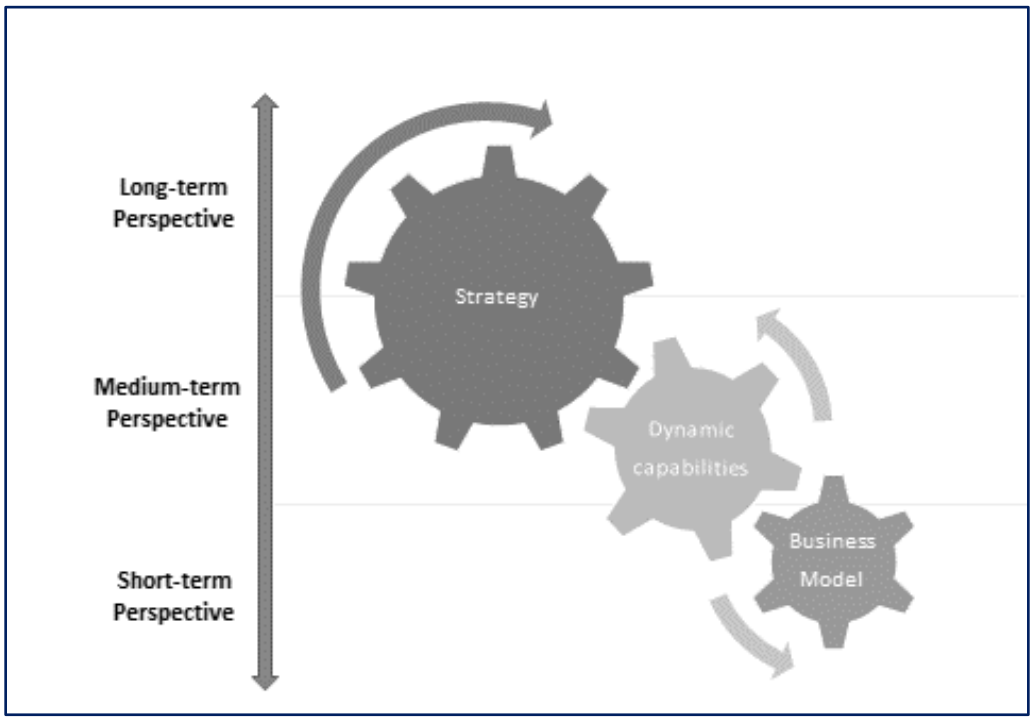
Literature is also rich by other points of differentiation which are focused particularly on three themes:

i. *The nature of value creation*. Value creation is one of the main themes also for scholars, with the clarification that in the business model value creation is not a linear process from supplier to customer (like in strategy) but it is a complex scenario. (Amit et al., 2011).
ii. *The relationship between business model and firm performance*. Business model cannot be interpreted as the automatic response of the internal organization of a firm.
iii. *Distinction between business model and the other strategy concepts*. In fact, it is important to highlight that business model is not a representation of product market strategy or corporate strategy.

Another point of view, which, once again, highlights the difference between the two concepts, comes from Da Silva and Trkman (2014), where strategy is considered the representation of the objectives of a company, the aspirations, the aims, while business model symbolizes what a company is at a given time.

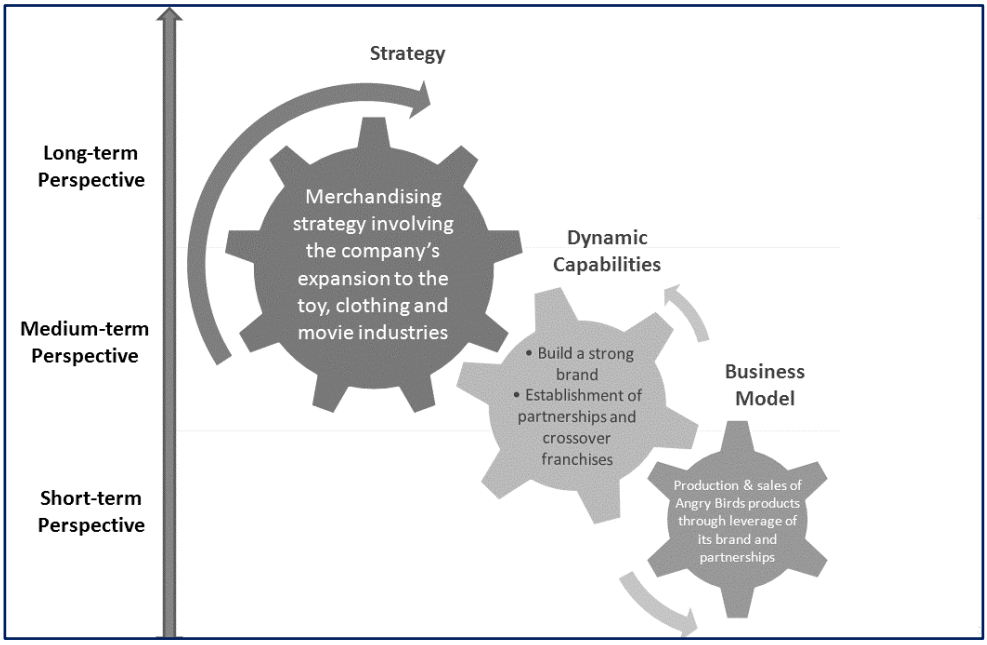
Figure 3 describes in detail the previous concept: strategy operates in a long-time perspective organizing dynamic capabilities (defined by Teece as the capability to anticipate, shape, seize opportunities and avoid threats while maintaining competitiveness), which will respond to the future contingencies through business models. Thus, business model is bounded by the company's dynamic capabilities, that constitute a hard point to replicate because they are built on specific characteristics of firms (Teece 2018). The three concepts are strictly correlated and interdependent, in fact the competitive advantage cannot be obtained and maintained without a right strategy able to modify the existing business model.

Figure 3: Framework of relationships between strategy and business model.



Source: Da Silva et al., 2014.

Figure 4: Framework Applied to the Angry Birds Case.



Source: Da Silva et al., 2014.

Figure 4, instead, provide a practical example of the interaction between the three elements described before, thus it demonstrates the proper functionality of strategy and business model. The figure shows the analysis of "Angry Birds case", a mobile phone game launched by Rovio,

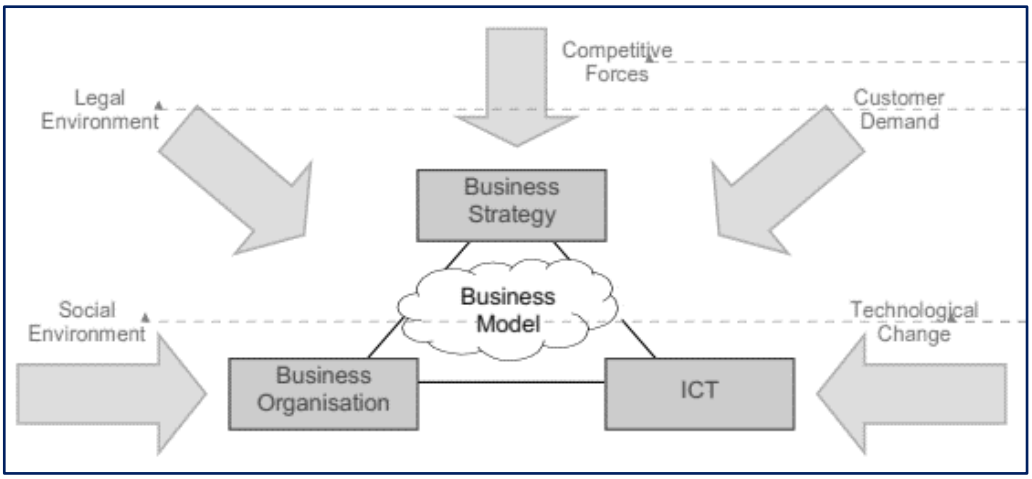
which thanks to the right combination of strategy, capabilities and business model has gained an incredible success in 2012. (Da Silva et al., 2014). The cross-selling strategy, created by complementary products in order to reinforce the brand of the game and increase revenue, characterized the strategy and consequently influenced the business model. The only weakness was that strategy was not created with a long-term perspective: in fact, business model has to apply the components of strategy in order to act and to respond quickly in the short term perspective, while the strategy has to have a wide vision.

2.4 The elements of a business model

After an explanation about business model concept, this paragraph takes into consideration business model structure, which is constituted by different elements and, as the strategy concept, it also interacts with external factors, particularly strategy, organization and system. This business triangle is subjected to the external forces, like competitive pressures, technological changes, customer opinions, social changes, and legal environment (Osterwalder et al., 2005), as shown in the figure below (*Figure 5*).

In sum business model can be viewed as a conceptual link between these three elements but at the same time it is correlated to the concrete things, to reality.

Figure 5: The Business Model's Place in the Firm.

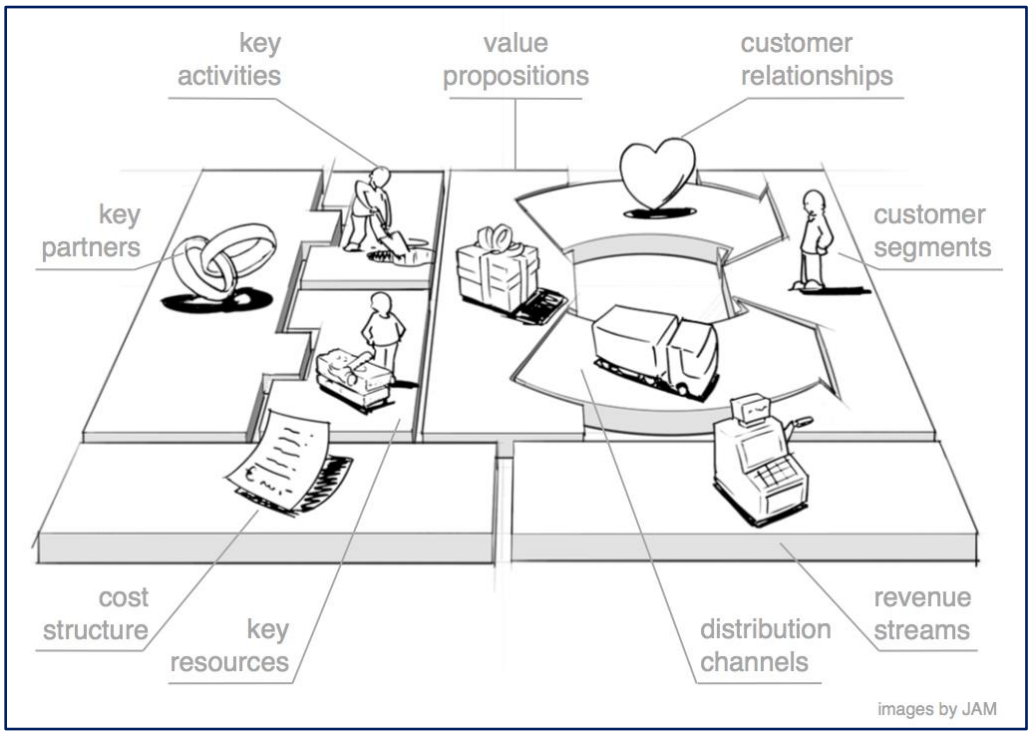


Source: Osterwalder et al., 2005.

Business Model Canvas

Business model can *"describe the rationale of how the organization creates, delivers, and capture value"* (Boesso et al., 2018) through a Business Model Canvas. Drucker in 1954 and later Magretta in 2002, have defined business model not only in relation with the value chain but also like a set of different elements (Ovans, 2015), (Fjeldstad et al., 2018).
Particularly Magretta (2002) in his work describes business model as divided in two parts: one related to the activities associated with *make* something (manufacturing, designing, purchasing raw materials), the other one concerning the activities for *selling* something (distributing products, finding customers, build a relationship with them). This division anticipated the work of Osterwalder, who created the most used Canvas system. This structure describes in nine blocks the logic of how company intends to make money (Osterwalder et al., 2011).

Figure 6: The Business Model Canvas.



Source: Osterwalder et al., 2011.

The nine blocks focus particularly on the main areas of a business: customer, offer, infrastructure and financial viability (Osterwalder et al., 2011). The first set of blocks is centered on value creation in terms of revenue streams and they include *customer segments,*

value proposition, distribution channels, customer relationship, and *revenue streams.* The second one is more oriented on the efficient organization of the company and cover *key resources, key activities, partner network,* and *cost structure.*

Value proposition. The Value Proposition symbolizes the main point of the entire discussion, it represents the reasons why customers choose a company rather than another. It involves a set of products and services which meet the needs and requirements of a specific customer segment, thus basically it helps to focus on create value for customers. Furthermore, this concept is also related to the capacity to obtain a positive EBITDA (calculated by Net sales minus operational expenses). "*Some Value Propositions may be innovative and represent a new or disruptive offer. Others may be similar to existing market offers, but with added features or attributes"* (Osterwalder et al., 2011).

Customer segments. The Customer segment "*block defines the different groups of people or organizations an enterprise aims to serve"* (Osterwalder et al., 2011). Companies tend to divide all customers in different classes, each one characterized by different needs, behaviors and other attributes. This classification is necessary in order to identify the customers groups more adapted for each company and which to ignore. In fact, it is impossible for a firm to fulfill needs and desires of the entire market: for that reason, it has to focus only on the most attractive sector in order to concentrate its resources and maximize its profit.

Distribution channel. Distribution channel block represents how a company communicate with customers and the way it decides to deliver its value proposition. This is a fundamental aspect because it symbolizes the first approach of the company with customers: through distribution channels all the five "A" that constitute the customer's path are represented. *Aware* is the first point of contact with new customers where company needs to attract clients and evolve in the second step: *appeal*. Subsequently channels are fundamental in the *ask* stage, where company must clarify the doubts and curiosities from customers and in the end to the *act* and *advocate* phases: the profitable actions to buy and to promote the brand. Channels include communication, distribution and sales channels.

Customer relationships. Customer relationships is the block which describes how the company empathizes with the different customers segments and how the relationships are built. It constitutes an important element especially in the post-purchase phase: if the relationship is strong company is able to answer to the customer's request so customers, respectively, will play a strategic role in promoting and supporting.

Revenues streams. The last point of the first set is composed by Revenues streams which illustrates how the company earns its revenues from each customers' segment. Different revenues for each distinct segment, following by the questions "*how much a customer is willing*

to pay for this value?", help company to adopt a various pricing mechanism or technique (fixed list prices, bargaining, auctioning, market dependent, volume dependent, or yield management) (Osterwalder et al., 2011).

Key resources. Key Resources "*building block describes the most important assets required to make a business model work"* (Osterwalder et al., 2011).

This is one of the second set of blocks and represents all the physical, financial, intellectual, human resources and assets that build a company and allow it to create a Value proposition, to interact with customers and earn revenues.

Key activities. Key activities play a necessary role for a company because they describe the essential actions that are made in order to allow business model to work. They represent the company capabilities to organize the resources to create and deliver value.

Key Partnership. Companies tend to create relationships with partners, suppliers and other parties especially establishing alliances or joint venture. The reasons are manifold: to reduce risks, to reach new resources and increase competition but also to exploit economies of scale and optimize business model. In fact, Key partnerships "*describes the network of suppliers and partners that make the business model works"* (Osterwalder et al., 2011).

Cost structure. The last block is constituted by *cost structure* which points out all the costs necessary in order to allow a business model to work. It includes the costs related to create and deliver value, to maintain customer relationships, to reach key resources, key activities, and key partnerships.

The main portion is constituted by OPEX, which are costs related to operational activities (particularly "Distribution channels" and "Customer relationships" which generate operational expenses including logistics, communication activities, marketing advertising) but it includes also CAPEX (costs related to Working Capital and Financial Assets).

Shortcomings of Business Model Canvas

Despite the advantages and the positive effects deriving from the use of Business Model Canvas proposed by Osterwalder, which can be summarized in *simplicity*, *practice orientation*, *Plug-and-Play principle* (it means the possibility to start from scratch) (Hong et al., 2013), there are some criticisms highlighted by different authors and reviewed in the following table (*Table 2*), together with some proposal of variations. The main shortcomings concern the tendency of Business Model Canvas to focus particularly on new companies, thus to become a little bit obsolete in case of transformation or innovation of existing firms. Basically, it seems to be an

optimal device in case of starting a new project or business idea, less in case of improve the existent model in order to pursue a competitive advantage. This thesis is supported by the fact that company's vision and mission are not well declared and furthermore the objectives and the purposes of the firms are not entirely considered (as illustrated by Spanz (2012) and Kraaijenbrink, (2012)) (Hong et al., 2013). What is interesting in this analysis is the possibility to use the system, which is a great tool for managers, with some variations: for instance before to complete a canvas, it becomes necessary to analyze not only the existing company's internal and external problems through the key performance indicators, but also all the competitive environment, according to Maurya (2010) (Hong et al., 2013). Besides, another modification could be to adapt the nine blocks to the individual needs of the company adding new sections referred to the issues and possible solutions, reducing blocks if it is a profit or non-profit organization, in other words thinking of a different tool according to the type of company treated, as demonstrated by Kraaijenbrink, (2012) (Hong et al., 2013).

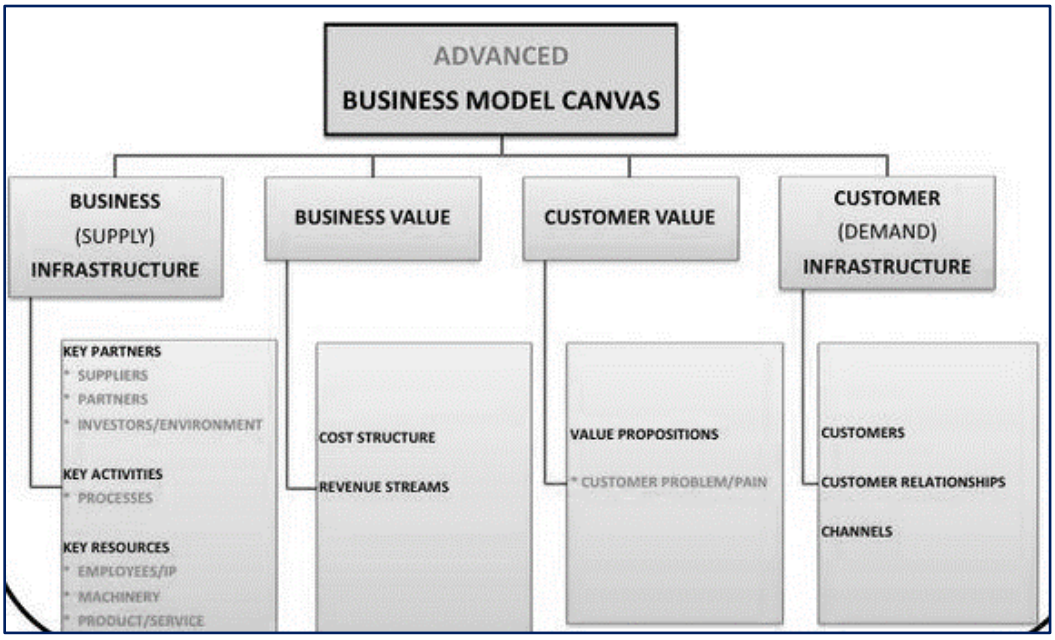
Table 2: Shortcomings of BMC and proposal of variations.

Authors	***Shortcomings***	***BMC proposal of variations***
Spanz, 2012	• No broad analysis of competition; • No taking into consideration potential synergies and competition structures; • No formulating of business goals; • No taking into account the keys performance indicators (KPI) and the keys performance measurement; • Good application for innovation not for transforming of existing models.	
Kraaijenbrink, 2012	• It tends to exclude strategic purposes, strategic objectives, mission and vision;	• Variation is called *"Value Model Canvas";* • BMC also for non-profit and social organizations;

	• No taking into consideration the notion of competition; • Mixing levels of abstraction.	• Eliminated the block "customer relationships" and "channels"; • "Key resources" and "Key activities" are merged in "key competencies".
Maurya, 2010	• Find the real problem before to construct the model; • Need to focus entrepreneur's attention on KPI; • Having a source of competitive advantage.	• Variation is called *"Lean Business Model Canvas";* • "Problem", "solution", "key metrics" and "unfair advantage" blocks replaced respectively "key partners", "key activities" "key resources" and "customer relationships".

Source: Personal elaboration from Hong et al.,2013.

Figure 7: King's Advanced Business Model Canvas.



Source: Hong et al., 2013.

Another significant change in the Business Model Canvas came from King in 2012 (Hong et al., 2013), which added sub-underlines to the traditional blocks of Osterwalder's archetype,

with the aim to facilitate the filling out of the model. Then he also changed the visualization of the Canvas: he reduced the nine blocks in four with the same components but organized in different areas.

Figure 7 shows the King's proposal that seems more organized than the original model, easier to complete and to resume.

2.5 Why business models are useful

After the previous analysis concerning what a business model is, taking into consideration a lot of academic studies and different definitions given by scholars, now it is necessary to focus the attention on the reasons of why business model is so important and useful.

Baden-Fuller and Morgan in their work of 2010, define the strategic importance of the term "model", which demonstrates the function of business model both in a theoretical and practical sense. Model discussion can be carried on through three sections which describe different characteristics that a "model" has to represent in order to be useful.

i. *Business models as Description of "Kinds" in a Taxonomy.* All the different definitions given by authors classified business model as an association of elements organized in order to create and distribute value in a profitable manner. Business model includes both the notions of *scale* model which involve a sort of description of things, and *role* model which represent something to copy. Basically, business model is an "ideal type" which is constructed from the facts of experience to the abstract concepts. Furthermore, the role of business model as descriptor is fundamental in order to classify the different firms revealing different "kinds".

ii. *Business Model as an organism of investigation.* Each study that examine a firm is not for its own sake but it constitutes a type, a model, an instrument of comparison.

iii. *Business Model as "recipe".* The created model represents a set of different elements (resources, capabilities, products, customer, technologies) which combined together create new interactions.

According to the efficacy of the term "model", literature also proposes five categories of function that attempt to explain the role of the business model concept within a company:

i. *Understanding and sharing*. Business model often is useful to graphically visualize and represent the business concept in a company, in order to better understand what the firm is doing and how to identify the complex interconnection between elements.

ii. *Analyzing*. Business model is an optimal instrument to choose the correct tools for measuring, observing and comparing the implementation of strategy.
iii. *Managing*. With the help of the analyzing instruments, business model aims to design or ameliorate, planning and changing the structure of the firm business logic.
iv. *Prospect*. This characteristic allows to think about the future of the company with the aim to innovate, simulate and test the introduction of the new inventions.
v. *Patenting*. It is possible to patent some process and also all the entire business model, especially in e-business company.

Despite the positive impact of business model in the managerial view there are several shortcomings concerned the use of business model concepts, which derived from the variety definitions provided by literature.

The first one is related to the "*unresolved overlap of the business model idea with established concepts, levels of analysis, theories, etc."* (Zott et al., 2013). It is not possible to describe business model with a broadly definition because each research has to give a correct and proper definition on each term, in order to avoid misunderstanding and ambiguities.

"Lack of independence of the concept from other levels of analysis" (Zott et al., 2013). The second point highlights the importance to consider different levels of analysis, in order to define the concept, not only firms and their networks.

"Lack of uniqueness as a level of analysis" (Zott et al., 2013): it is difficult to define business model as a unique model of analysis because of the lack of a global definition and, furthermore, certain definitions include lot of elements, so that it is complicated to define what business model is and what is not.

The fourth point concerns the "*lack of any consistent definition of the term business model"*, while the last one is related to the "*lack of solid empirical support"* because empirical works follow theoretical development. In this sense if there is not a univocal theorical definition, at the same time, it also difficult to find a unique and accurate correspondence in practice.

Some remarks

At the end of all the analysis around the business model concept, it is essential to consider how all the discussions about this theme, provided by a huge number of authors, create several misunderstandings between typical concepts and elements of business environment. For all these reasons, this paragraph tries to make a clarification between the common misinterpretations.

Business model and business concept. According to some authors (Hedman et al., 2003) the terms "business model" and "business concept" are often used like synonyms. While other researchers have different opinions, in fact, Lindman affirms that the two expressions present some peculiarities. The most popular result of the analysis argues that "*the business concept is any conceptualization of business reality, such as the business itself along with a company's strategy and business model*" (Da Silva et al., 2014). Summing up, according to Applegate and School, business concept could be defined in the five following points (Da Silva et al., 2014):

i. business concept like a business market opportunity;
ii. business concept as products and services offered;
iii. business concept like competitive dynamics;
iv. business concept like a strategy to obtain dominant position;
v. business concept as a strategic option for evolving the business.

Revenue model. Business model tends also to be confused with revenue model which represents how a company plans to generate revenue. The details of the revenue model focus on what the company will offer and how it will provide it to customers, what products or services and the method which will be used to generate revenue. It involves revenue sources, their volume and distribution: some examples could be ad-based advertising, production, markup and licensing. Revenue model does not include "*how a company creates value in its entirety, but solely how revenue is appropriated by the firm through the sale of its goods or services"* (Da Silva et al., 2014). For this reason, it cannot be defined as company business model but as an important component of it.

Economic model. Another clarification may be made in relation to the concepts "business model" and "economic model". The latter principle represents an instrument of investigation based on mathematical model which expresses the results of analysis in economic terms. In that sense the most important difference between the two concepts is that business model "*provides a richer logic of the firm and the way it operates within an industry or economy"*, while "*economic model provides an economic and mathematical rational specific to a firm, industry or an economy as a whole"* (Da Silva et al., 2014).

2.6 Conclusions

Business model has not a unique definition, but its fundamental concept can be summarized as the tool which a firm expresses its business logic: the way it creates and delivers value but

particularly how its competitive advantage is maintained. It is useful in order to understand the business concept in a firm, analysing and measuring the instruments employed in order to verify the effectiveness of the strategy adopted.

It is a system composed by internal (strategy, resources and capabilities) and external (competitive forces, customer demand, environment) factors which interact simultaneously.

Business model is not a simple representation of strategy, they act in two different timeframes, but they complete each other's.

Furthermore, business model structure is well represented through business model canvas, an instrument which allows to visualize immediately the entire functioning of a firm and which can be adapted according to the company needs.

Chapter 3

Business model innovation and e-business

3.1 Introduction

There are different elements which are involved in the success of a company: choices about what to offer, firm's vision and mission, strategy and business model. In order to increase and maintain a sustainable competitive advantage, companies are also invited to a continuous renewal of their features with the adoption of new tools.

This chapter investigates two basic themes: innovation and technology which are the main drivers of a business model innovation and the transformation from a classic business model in "e-business". The first part shows an analysis on the importance of innovation to guarantee companies' prosperity, in particular the innovation in the organizational structure, also called: business model innovation.

The second part is focused on the deployment of technology in business as one of the key factors for the business model innovation success, especially the exploitation of the Internet.

3.2 Innovation in organizations

When an organization starts to grow, it is easy to think about two drivers of improvement: diversification and internationalization, themes which are often correlated to alliances strategies and mergers and acquisitions. Nowadays, the business environment is particularly troubled: first of all because of globalization, which enhances competition between a vast scenario of firms, secondly the development of digitalization, which attracts a great number of customers and shortens the distance between companies and clients, making the whole system in continuous evolution. Moreover, it is necessary to consider also the external components, such as economic downturns (for instance 2008-2009 crisis) and the future global recession caused by the pandemic crisis in 2020: for all these reasons maintaining a competitive advantage whilst

reducing costs is one of the main purposes of a company. In order to pursue their objectives, organizations have to take into consideration the underlying aspect: innovation.

Innovation represents "*the process by which organizations use their resources and competences to develop new and improved products or to find better ways to make these new products and thus increase their effectiveness"* (Jones, 2013). Programmed in advance or non-scheduled, innovation can be divided into two typologies: the first one related to *quantum innovation* and the second one referred to the concept of *incremental innovation*. Quantum innovation is connected to the introduction of a new technology which generates a radical change in products or in the production processes. Whilst incremental innovation concerns *"products or operating systems that incorporate refinements of some base technology"* (Jones, 2013).

As described above, innovation is a fundamental aspect in the life of an organization and creativity is the phenomenon that most influences it. According to product-oriented definition, creativity can be described as "*the production of novel and useful ideas by an individual or small group of individuals working together*" (Amabile, 1988). In other words, innovation is characterized by the accomplishment of creative ideas within an organization.

According to Schumpeter's research, the main themes which are involved into the innovation's discussion concern mainly *product innovation, process innovation and organizational innovation* (Casadesus-Masanell et al., 2013). Product innovation regards the ability to improve the existing products and to create new ones in order to quickly respond to the customers' requests. Process innovation is a less immediate modification, which represents the change in how the products are created: it could involve changes not only in the methods but also in raw materials and machines used. Furthermore, it also influences the quality, efficiency and delivery costs of goods and services. The last point concerns the organizational innovation, which includes firm's structure, decision making processes, incentives and training programs (Huse et al., 2005).

Introducing an innovation process within a firm is not an easy task for companies, in fact there are many factors involved in it: the main drivers can be identified into four categories listed below (Bossink, 2004):

i. *Environmental pressure.* It concerns the external forces that influence organizations providing the necessary input to innovate. Several authors, such as Pries and Janszen in 2002 or Arditi et al. in 1997 (Bossink, 2004), investigated the strict correlation between innovation and market forces.

ii. *Technological capabilities.* As argued in the next paragraph, technology plays a fundamental role in the innovation of products and processes, especially in technical changes.

iii. *Knowledge exchange*. This aspect underlines the ability in creating knowledge networks between firms, universities, research institutes, with the aim to share information and improve the innovation activity.

iv. *Boundary spanning.* The last category emphasizes the importance of coordination and collaboration between different departments, organizations and partners.

After a brief explanation of what innovation concept represents for organizations, it is necessary to focus on one of the main aspects: organizational innovation. In fact, it plays an important role in adapting the entire business model structure to face the newness introduced.

3.3 Business model innovation

The concept in literature

The previous paragraph has highlighted how investments in new products and processes should represent a source of innovation, but it has ignored the fact that they clash with the declining revenues and severe pressure on profit margins caused by the factors listed above. At this point, a solution is depicted by business model innovation, which concerns the modification of the organization, in other words, how companies do business that "*often is more important than what they do"* (EIU, 2005).

Together with the concept of business model, that has been analyzed in the first chapter of this dissertation, business model innovation is a very much investigated topic in literature (Casadesus-Masanell et al., 2013), because of its aims to find new methods to create and capture value for company's stakeholders, to generate additional revenues, so basically to re-organized the logic of the company. The main definitions of what business model innovation is, are summarized in the table below *(Table 3).*

It is not an easy task to conceptualize business model innovation within a unique definition because of the disagreements about business model meaning (Foss et al., 2015), but what it is possible to affirm is that business model innovation represents a transformation of a business model, (defined such as a bundle of elements related to each others in order to create value for customers and for the company (Teece, 2010)), in another one more advanced, changing at least two elements of the starting model. Also, it may be described as *"the process of finding a novel*

way of doing business [new business model] *which results in reconfiguring of value creation and value capturing mechanisms"* (Bashir et al., 2017).

Despite many organizations present a gap on this theme (Chesbrough, 2007), the 55 % of the senior managers interviewed stated their preference for the business model as a source of innovation rather than the introduction of new products and services (EIU, 2005)[3], (EIU, 2012)[4] *(Figure 8).* Not just for the possibility to use the existing resources and raw materials but particularly for the difficulty to imitate. Basically, business model innovation represents, first of all, an often underestimated source of value, (not completely costless due to the costs related to the development of new strategies or to the entry into in new partnerships), and an opportunity for value creation through four value drivers: novelty, lock-in, complementarities and efficiency (Amit et al., 2010). These factors, that have already been mentioned in the previous chapter of this paper, constitute the main sources of business model innovation, briefly explained in the table below *(Table 4).* Subsequently, another aspect to consider is that for competitors it is easier to imitate a product or service rather than an entire system, and finally business model innovation is useful in order to identify threats which come from competitors within the same industry.

Table 3. Business Model Innovation definitions.

Authors	**Business Model Innovation definitions**
Osterwalder et al., 2005.	"Specifying a set of business model elements and building blocks, as well as their relationships to one another […] a business model designer […] can experiment with these blocks and create completely new business models, limited only by imagination and the pieces supplied."
Chesbrough 2007.	Business Model Innovation has the objective to "advance [the] business model […] from very basic (and not very valuable) models to far more advanced (and more valuable) models."

[3] Source: EIU 2005.Available on http://graphics.eiu.com/files/ad_pdfs/2005Ereadiness_Ranking_WP.pdf Date of access 13th August 2020.
[4]Source : EIU 2012. Available on https://www.eiu.com/public/topical_report.aspx?campaignid=Industries2012 Date of access 13th August 2020.

Lindgart et al., 2009.	"Innovation becomes BMI [business model innovation] when two or more elements of a business model are reinvented to deliver value in a new way."
Geissdoerfer et al., 2016	"Business model innovation describes either a process of transformation from one business model to another within incumbent companies or after mergers and acquisitions, or the creation of entirely new business models in start-ups."

Source: Geissdoerfer, Vladimirova, Evans, 2018.

Table 4. Brief definitions of main drivers of innovation.

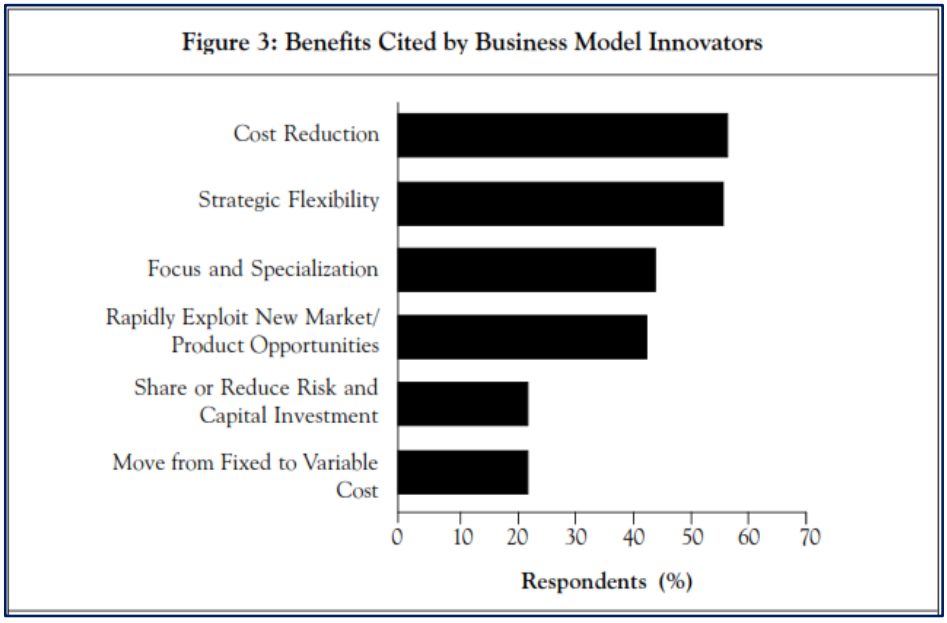
Drivers	**Definitions**
Efficiency	It concerns the first element of innovation and it is referred to the transaction costs theories of Williamson. When the transaction costs decrease, the efficiency increases: reducing information asymmetries and opportunistic behaviors; enhancing economies of scale and the speed of information.
Complementarities	It concerns the opportunity of increase value of two products which are sell together rather than separately and thanks to this bundle they also improve efficiency.
Lock-in	This aspect concerns the importance of "capture" and maintain customers, in order to prevent the migration toward competitors so improve their loyalty through different actions: i.e. building a strong relationship.
Novelty	This factor represents the essence of innovation, in fact it is related to the

	introduction of new elements, the real inventions which can affect the product or the process and which constitute points of differentiation.

Source: personal elaboration.

In order to better clarify the concept, Massa and Tucci (2013) have identified two ways in which business model innovation is defined. One concerns a reconfiguration of the existing business model (which includes industry model, revenue model and enterprise model innovation) and the second one affects the design of three main elements which constitute business model: content, structure and transactions. The latter approach is the most common to the extent that the concept often is defined as the innovation process of the three elements listed above, which by answering the questions respectively *what? how? who?,* tend to discern the concept in its principal factors. *Content* represents the baseline of the activity system, the tasks conducted; the *structure* is a representation of the way in which all the previous activities are linked together with a description of different mechanisms which act among them, whereas *governance* describes who operates for the purpose of accomplishing the activities. These three components are fundamental in order to plan a strategy of innovation of the entire business model, but it is not implying the simultaneous innovation of all the factors, which, conversely, can be modified at different times. In particular, the full understanding of the meaning of the elements could help firms and managers to clarify the objects of the company, to identify the problems and consequently to exploit opportunities for new sources of revenue and competitive advantage. According to the importance of having a clear comprehension about the content, structure and governance of business model, managers have to be careful to the objects of the firm, so *"what perceived needs would be satisfied through the design of a new activity system"* (Amit et al., 2010). Secondly, they have to focus on the possible new activities which can satisfy the needs and the way in which these activities can be related to each others: this point shows the strict relationship between content and structure. In the end, they may concentrate on the organization field: how to manage the new activities implemented and how to regulate the value created.

Figure 8. Benefits by Business Model Innovation.



Source: Bashir and Vermar, 2017.

Innovation Process

As argued in the initial paragraphs of this chapter, business model innovation allows companies to create new opportunities in the market and it may occur in different ways, like adding new activities, changing some parties of those and linking activities in novel ways (Amit et al., 2010). Now it is necessary to clarify the progress of the whole process, list the different phases of the development of innovation.

According to the previous chapter, the business model is constituted by two main elements: the value proposition and the operating model, which concern respectively what offer (i.e. products, services) and to whom (i.e. target segments). Business model innovation is therefore when *"two or more elements of a business model are reinvented to deliver value in a new way"* (Lindgardt et al., 2009), so it is possible to distinguish some activities particularly relevant for the innovation of the business model. First of all, it is necessary *"uncovering opportunities"*, in other words, try to understand the limitations of the current model and the exploitation of new opportunities, customers' preferences and further advantages over competitors. To develop an innovation, does not necessarily means creating something new but rather the progression of ideas that others may have originated: in particular, this approach is adopted when the business model created appears obsolete and the new alternatives have an opposite direction. Subsequently, another critical step is represented by the *"implementation of the new model"*: in fact, the real difficulty is not the creation phase but the introduction and the adaptability of it

in the firm's reality, due to the internal resistance of disruptive changes. Business model innovation is characterized by the interaction between many elements, so the third step is constituted by the creation of a platform in order to manage the process, capabilities and portfolio of experiments.

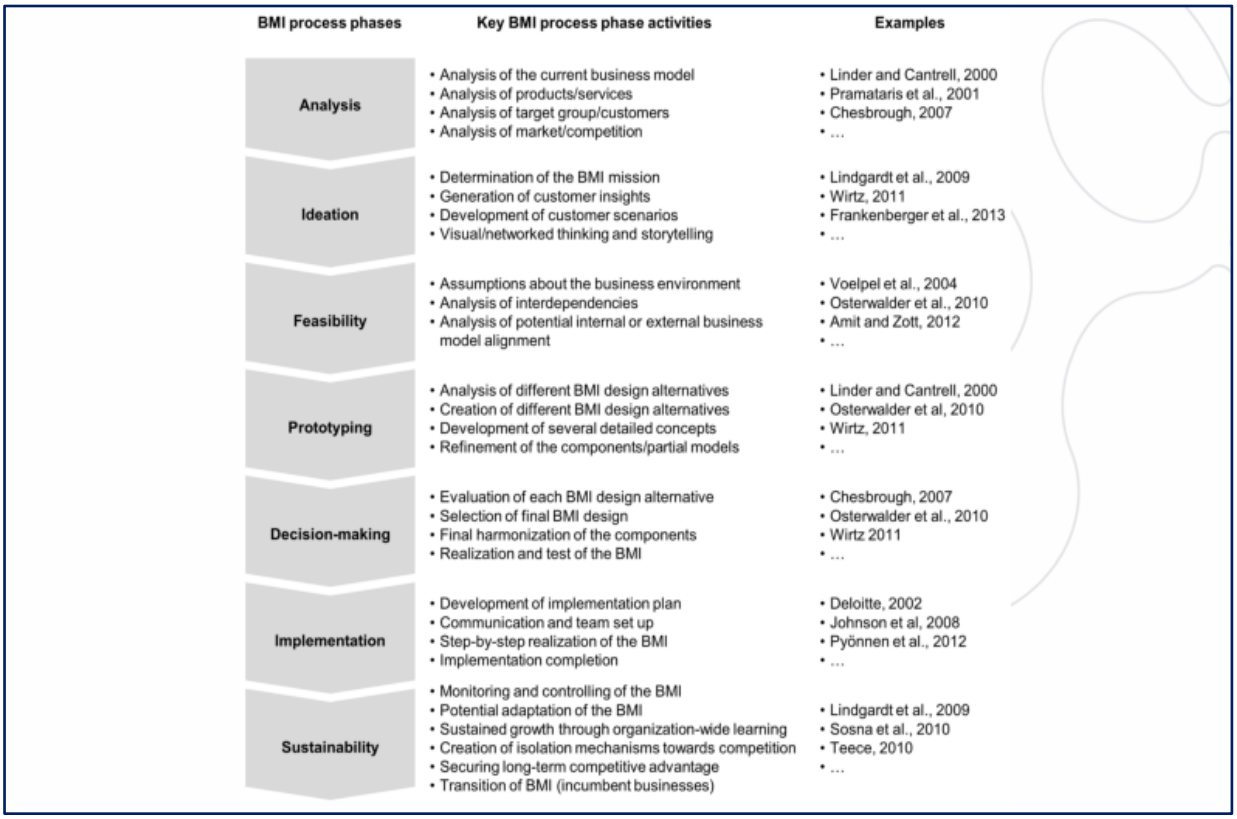
Researches (Wirtz et al., 2018) demonstrate the existence of almost 20 distinctive approaches to business model innovation that present differences in the content, the procedures, the feasibility and implementation of the ideas. The first important difference concerns the various numbers of process steps: some authors in fact, as Pramataris et al. (Wirtz et al., 2018), describe the operation in ten activities whilst others in only three (Lindgardt et al., 2009). The second difference regards the orientation of the process: some focus on design, in other words, this approach suggests the re-configuration of the organizational structure, while others are concentrated on the operations, which means to analyze customer needs, modify the contents, act on the structure/government, checking value creation through novel business model and defining revenue models (Wirtz et al., 2018).

In order to better analyze the different steps of the business model process and to provide managers of guidance to avoid waste of time, effort and value creation potential, it is possible to take into consideration a generic model which summarizes the fundamental aspects of the main theories. The figure below *(Figure 9)* offers a wide overview of the different phases of the process and the respective definition of the different authors.

The first phase is represented by the *analysis* step, which is focused on investigating the business environment in order to have a complete picture of it, including weaknesses, strengths, threats and opportunities. Subsequently, the *ideation* phase covers the creativity of the company in shaping new ideas, stories and scenarios which constitute the point of departure for a business model innovation. The third step is represented by the feasibility which is a sort of first phase analysis with the difference that it evaluates the new planned business model, so it examines particularly the interdependencies between the existing structures and the new ones that have to be implemented. The following points regard the development of the principal ideas and the main alternatives (*prototype* step) which are essential for the next stage (*decision-making* step), where after having analyzed all the possibilities, a decision concerning the further progress is taken. The final phase (*implementation*) is one of the most important because, reflecting the realization of all the previous steps and their approach on the existing models, constitutes the main changes in the company's characters and on how to operate. It exists also a seventh point, related to *sustainability* which assures that the new business model implemented is sustainable but also protected by imitation.

Although the description of different phases is showed in a sort of scheme, the sequence is not standard, hence the distinct points can be anticipated or postponed or repeated, it depends on the chosen approach.

Figure 9: BMI process phases.



BMI process phases	Key BMI process phase activities	Examples
Analysis	• Analysis of the current business model • Analysis of products/services • Analysis of target group/customers • Analysis of market/competition	• Linder and Cantrell, 2000 • Pramataris et al., 2001 • Chesbrough, 2007 • ...
Ideation	• Determination of the BMI mission • Generation of customer insights • Development of customer scenarios • Visual/networked thinking and storytelling	• Lindgardt et al., 2009 • Wirtz, 2011 • Frankenberger et al., 2013 • ...
Feasibility	• Assumptions about the business environment • Analysis of interdependencies • Analysis of potential internal or external business model alignment	• Voelpel et al., 2004 • Osterwalder et al., 2010 • Amit and Zott, 2012 • ...
Prototyping	• Analysis of different BMI design alternatives • Creation of different BMI design alternatives • Development of several detailed concepts • Refinement of the components/partial models	• Linder and Cantrell, 2000 • Osterwalder et al, 2010 • Wirtz, 2011 • ...
Decision-making	• Evaluation of each BMI design alternative • Selection of final BMI design • Final harmonization of the components • Realization and test of the BMI	• Chesbrough, 2007 • Osterwalder et al., 2010 • Wirtz 2011 • ...
Implementation	• Development of implementation plan • Communication and team set up • Step-by-step realization of the BMI • Implementation completion	• Deloitte, 2002 • Johnson et al, 2008 • Pyönnen et al., 2012 • ...
Sustainability	• Monitoring and controlling of the BMI • Potential adaptation of the BMI • Sustained growth through organization-wide learning • Creation of isolation mechanisms towards competition • Securing long-term competitive advantage • Transition of BMI (incumbent businesses)	• Lindgardt et al., 2009 • Sosna et al., 2010 • Teece, 2010 • ...

Source: Wirtz and Daiser, 2018.

Despite all the indications, the process of innovation includes some pitfalls, originated from the continuous interactions between different factors. First of all, the most relevant concern, *"portfolio bloat"* caused by the numerous and uncoordinated initiatives which, in turn, are unable to create an efficient model of innovation. As argued before, the implementation step is a crucial factor, not only for the initial phase but also for the maintenance: in fact, a lack of attention and resources cannot allow the success of the innovation, causing the *failure of scale-up of the business.* Furthermore, there are a series of other elements to pay attention to, such as the *"pet ideas"*, which represent projects without development perspectives but with such a strong attachment to the firm that it is hard to give up on them and at the same time they preclude the improvement of other initiatives. The list is quite long and includes also *isolated effort*, which derives from teams working separately, hence too far from the common object which is often unreachable because of the lack of resources and company cooperation. Another additional aspect is referred to as creativity issue: often, in fact, the only bottleneck to business

model innovation is symbolized by a lack of creativity. Whereas actually some organizations are able to come up with new ideas continuously, the critical point is related to implementation, as illustrated before. In the end, all the innovation process has to be coordinated by "*courageous and visible leadership"* (Lindgardt et al., 2009), in order to positively consider the disruptive ideas and not to be stuck in the past models.

There are different drivers which determine Business Model Innovation, one of the most influential is the development of technology in particular the adoption of Internet within firms. The next paragraph provides an accurate analysis of technology diffusion in the business world and how this aspect has influenced companies' strategies.

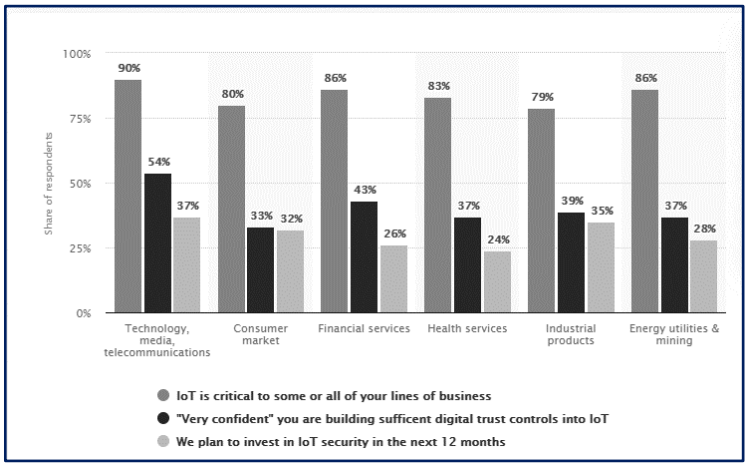
3.4 Technology diffusion in business

The introduction of technology within companies is an event which started around the end of the 80s, followed by an increase, ten years later, thanks to the development of the Internet. In the beginning, the adoption of new technologies, especially in manufacturing industries (i.e. for production scheduling and control), had a function to hasten the processes whilst later became a tool of innovation and transformation (Davenport et al., 1990). With the advent of the Internet, this phenomenon has expanded and nowadays organizations find it necessary to develop a network of communication and cooperation with all the partners they interact. From the start the use of new technologies in business gained great success, in particular, the use of the Internet: indeed, from January 1993 to July 1995 the number of Internet users passed from 1.3 million to 6.6 million all over the world (Kambil, 1995). The phenomenon then continued to have a positive trend, with an estimated expenditure of 200 billion dollars on an electronic business project for U.S. companies in 2002 (Barua et al., 2004), and also in 2018 the 90 percent of respondents of a research *"stated that IoT was crucial to their business as of 2018 and 54 percent stated that they were very confident that their company was building sufficient digital trust controls into their IoT programs"* (Statista, 2020) *(Figure 10).*

The previous data demonstrate not only the complete reliance of companies in the adoption of technologies (particularly information technology) but also how these innovations need a reconfiguration of organization's strategies in order to respond to the advantages provided by them, such as inexpensive communication, lower transaction costs, reduction in profit opportunities (Kambil, 1995). Moreover, the advantages offered by technological deployment include not only specific instruments for planning and scheduling work but also to manage

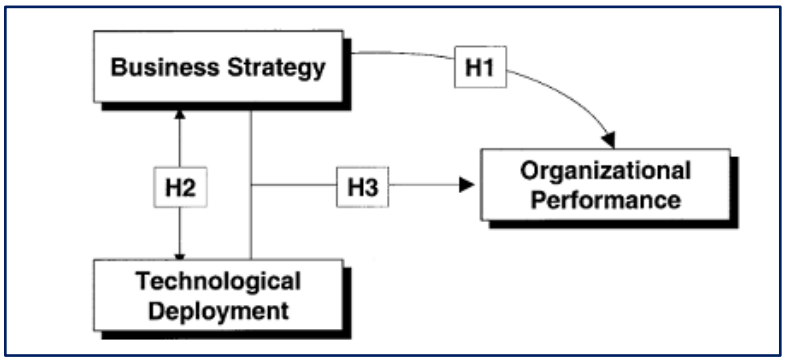
administrative issues and encourage communication between employees: making a long story short, guaranteeing firms' distinctive competencies and enhancing the competitive position.
In order to make the use of technologies strategic, it is important to align the deployment with the organization's business plan, in particular, as already underlined, combined with strategy. The strict relationship between business strategy, organizational performance and technological deployment is depicted by the figure below *(Figure 11)* and shows how each type of strategy needs a particular technological deployment in order to enhance its performance, but the opposite is also true: in fact, each technological innovation has to supported by the right strategy, and the two elements contribute to the overall organizational performance of the company.

Figure 10. Importance of investment plan for IoT in business worldwide 2018, by industry.



Source: Statista 2020.

Figure 11. Interaction between technology, strategy and performance in companies.



Source: Croteau et al., 2001.

According to the previous considerations, the last part of this paragraph has the aim to analyze in detail the strict relationship between strategy and technology development, particularly

focusing on the integration of IT in four aspects: *collusion, governance, competencies and flexibility.*

Collusion. Some market expedients such as industrial concentration and barriers to entry are often applied in order to maintain higher profits than rivals', so large investments in IT allow companies to adjust entry and exit barriers in order to guarantee an industry model which provides positive price-cost margins for all incumbents firms.

Governance. This aspect is one of the fundamental structural points of a firm and concerns the choice between price-mediated market transactions and an authority-based hierarchy structure. IT encourages a constant communication between buyers and suppliers, helping firms to decide what activities to perform inside and which one outside.

Competencies. IT helps companies to increase new digital capabilities which can allow firms to distinguish from competitors and enhance their value proposition.

Flexibility. This feature represents the ability to respond quickly to changes and threats which continually appear: IT helps companies to face them easily and it also provides the right tools to exploit new opportunities.

The vast influence of technology implementation in companies, especially the Internet, has actually changed the organization's concept of the companies itself: in fact, there is a significant advance from the standard business model organization towards something different, such as a new structure managed principally by Internet devices.

3.5 E-business development

Definition and classification

As argued in the first chapter of this dissertation, the business model concept has increased in use with the advent of Internet, during the 1990s. The introduction of Internet but also the simple use of technology in companies' organization, has allowed the development of a new *"way to deliver and create value"* (Zott et al., 2011), a new firm's structure that could be better define through the *e-business* concept rather than the simple business model. In fact, Zott et al. (2011) research stated that considering 49 studies, which clearly defined the concept of business model, almost 25% is referred to e-business. Literature is very wide on this theme: generally, it defines e-business as *"doing business electronically"* (Zott et al., 2011), indicating also different types of e-business models (i.e. e-commerce, e-market, e-shops), while, on the other hand, by distinguishing the main points of the constitution of e-business, (in Tapscott studies,

they could be defined as participants, relationships, and flows), it provides a more complete definition of e-business that, according to Timmers' opinion, appears as *"an architecture for the products, service and information flows, including a description of the various business activities and their roles*" (Hedman et al., 2003).

The latter statement allows us to understand how the e-business framework is composed of different elements: the *products and services offered*, the r*elationships* with customers and *financial aspects* but also the *infrastructure and network* required in order to build and maintain value and relationships. Analyzing these components in detail, it is possible to discover how the use of new technologies in companies, and therefore the use of e-business, modifies and improves their organization and functionalities.

i. *Products and services*. Products and services constitute the main point of a business model because, as stated in the previous chapter, they represent the value proposition of the company, what the organization decides to deliver to customers. The use of new technologies, hence the transformation from the "general" business model to e-business model, plays a significant role in the value proposition, changing not only the products and services offered, (introducing customization which trough IT become easier and tailored for each customer) but also their intrinsic value (for instance reducing costs thanks to dis-intermediation) (Dubosson-Torbay et al., 2002).

   Another theme related to products and services is customer target: this activity is fundamental in order to focus the attention on a particular section of the market to better meet the needs of the most valuable segment. In e-business this investigation is facilitated by the use of technology, which allows an easier differentiation of strategy for different customer and geographical segments.

   The last aspect to consider is related to capabilities as *"the dynamic nature of e-business domain requires* [the ability] *to combine resources in new ways"* (Daniel et al., 2003). Therefore, the company's intrinsic capabilities are viewed as company success factors from which the ability of the firm to create and deliver what it has set out to do depends on. As defined by Eisenhardt and Martin, capabilities represent *"the organizational and strategic routines by which firms achieve new resource configurations"* (Daniel et al., 2003) and respond to the VRIN principles (i.e. valuable, rare, inimitable and non-substitutable). Researches (Daniel et al., 2003) demonstrate that specific capabilities useful in the development of e-business for history, social complexity and causal ambiguity do exist, and that they can be identified in: a rapid cycle of strategy development and implementation; the ability to build commitment to a strategic change both within the organization and with other stakeholders; iterative development of

customer value propositions melding planned and experiential approaches; ability to reconfigure the sales/service process to exploit new channel capabilities; ability to integrate new and existing IT systems without stifling innovation. This list will be explained in detail in the table below according to the definition of Eisenhardt & Martin (2000, p. 1107) and Lawson & Samson (2001), (Daniel et al.,2003) *(Table 5).*

ii. *Customer relationship.* Building a strong and durable relationship with customers should be the purpose of companies which do not focus only on products and services. In fact, keeping a stable relationship with the main users allow to collect necessary information to better improve products and exploit new business opportunities. In other words, if a company is able to understand the main needs of one or more segments of the market, it will develop products and services more efficiently, which will attract an increasing number of customers; while on the other hand, a wide and interactive base of users guarantees a customized offer. Moreover, creating a relationship with customers includes also enhancing the post-sell services. The Internet makes all these activities more efficiently, "*by supplying the customer with a wide range of basic information on products, prices and availability and by offering customized real-time information*" (Dubosson-Torbay et al., 2002) and besides, it increases the knowledge of the brand, which is no longer something static but it has the aim to create emotions, to be more human.

iii. *Financial aspects.* Although it could be considered as the fundamental aspect of the e-business model, it is actually one of its components of that and it exists because of the interdependencies with the other parts. Revenues and costs are the two constituent elements of the financial field and represent, in the first case, "*the ability of the firm to translate the value it offers to its customers into money and therefore generate incoming revenue streams"*(Dubosson-Torbay et al., 2002). In other words, it refers to setting the right price following the value of the product whilst also taking into consideration the customers' willingness to pay, instead costs are basically related to the firms' expenditure in order to create value. IT is extremely important in both of those because it reduces costs in a different field, (i.e. communications, interdependencies, customers relationships), and thus it creates a new range of price mechanism.

iv. *Infrastructure management.* Infrastructures represent the essential mechanism to create value and deliver the value proposition, in order to fulfill the company's main purposes. Particularly it concerns the relationships between internal and external elements, such as resources, assets, activities and network. As already discussed, resources and assets

are the tangible, intangible and human wealth necessary in order to accomplish the firm's aim, while activities and processes represent the working procedure of the assets. In the end, it is important to create a network between all these elements, but particularly with the strategic partners and this is the reason why strategic alliances and joint ventures are created. In e-business all these relationships can be managed in a quicker and costless way thanks to the use of IT.

Basically, the main definitions of e-business emphasize the importance of the *"use of Internet technologies to link customers, suppliers, business partners, and employees"* (Wu et al., 2003), but even literature tends to highlight the existence of different categories of e-business, i.e. Business to Business (B2B), Business to Consumer (B2C), Consumer to Business (C2B), Consumer to Consumer (C2C) etc. Dubosson-Torbay et al. (2002) have identified some useful dimensions for e-business classification, which can be summarized into:

i. *The user role*. This aspect investigates the function of who enters in contact with the firm, if it is a client or a supplier or someone who will provide or need information.
ii. *Interaction pattern*. This second dimension is related to the network within the company, with the aim to underlines how many people or companies are involved in the final process.
iii. *Nature of the offering*. It is interested in the typology of the final offer.
iv. *The degree of innovation.* It involves the different levels of technology applied in the different companies.
v. *The economic control.* This final aspect concerns the organization of the company from the self-organization to the hierarchical.

After having analyzed the meaning of e-business and its classification, the next session provides a brief overview of the determinants behind the e-business diffusion and its key success factors.

Table 5. E-business transformation dynamic capabilities.

Dynamic capabilities	**Relationship with dynamic Capabilities definition – Eisenhardt & Martin (2000, p. 1107)**	**Nature of dynamic capability – Lawson & Samson (2001)**
A rapid cycle of strategy development and implementation.	Speed of resource adoption and reconfiguration.	Innovative (vision and strategy).
The ability to build commitment to a strategic change both within the organization and with other Stakeholders.	Involvement/ commitment to resource reconfiguration.	Innovative (culture and climate).
Iterative development of customer value propositions melding planned and experiential approaches.	Reconfiguration of resources to match market Requirements.	Innovative (organisational intelligence).
Ability to reconfigure the sales/service process to exploit new channel capabilities.	Reconfiguration of resources (distribution channels).	Innovative (creativity and idea management).
Ability to integrate new and existing IT systems without stifling Innovation.	Integration of resources (information systems).	Integrative.

Source : Daniel et al., 2003.

E-business key success factors

In this chapter, the fundamental importance played by the development of technology and, more specifically, by the use of the Internet within a company has been stressed several times. In particular, it has been highlighted how the previous innovations have had a great impact on the organization, to the extend that now, e-business is considered a watershed between successful and failed companies (Phan, 2003). It has been repeated many times in this dissertation that all the innovations adopted by a company, also the introduction of e-business, have had the aim to achieve and maintain a competitive advantage and this aspect can be reach basically in two different ways: by operational efficiency and strategic positioning. In the first case, companies create a network of suppliers, partners and consumers always connected in order to guarantee constant communication and real-time exchange of information: in that way it is easier to accelerate the process and improve quality. In the second case, the creation of distinctive

strategic positioning in the value chain is determined by the ability of the company to keep online relationships with its partners particularly basing the organization on the customer-centric model, (a valid example could be a web site in which each customer has the own reserved space).

E-business model is a concept of business in continuous growth and for that reasons, it is necessary to try to analyze which are the key success factors and the fundamental determinants of its diffusion. Lin et al. (2008) studies demonstrate that the increase in the use of this model depends on the interactions between three main variables within the companies: technological context, organizational context and environmental context. The first one concerns firms' technological infrastructures including physical devices but also experts and technical skills: in fact, according to Lin et al. (2008), firms are more willing to adopt complex technological innovations if they have strong support able to integrate the newness in the system, for that reasons sophisticated infrastructures provide the right and successful implementation of e-business. Organizational context is instead referred to the entire environment within the firm, in fact, the new technological implementations need to be compatible with the pre-existent organization's architecture, value and work practices, otherwise the new implementation would be a failure. The last key determinant to pay attention to is represented by the environmental context which takes into consideration the company's external factors rather than the internal ones. Competitive pressure is the triggering factor to innovation, hence the correct adoption of e-business tends to provide great advantages to the company, especially if they are the first movers (Lin et al.,2008).

Despite the three fundamental determinants listed above, there are other factors that influence the adoption of e-business within a firm and that constitute also an incredible payoff for the organizations, because on one hand they apply new methods to enhance their functionalities and on the other hand they learn how to manage it and maintain continuous improvement. In particular, the strategies adopted concern the maintenance of their distinctive strategic position whilst at the same time continuing the implementation of the existent ways to compete, moreover it is underlined the importance to have a supportive management team who can communicate with technical experts and strategically implement. The table *(Table 6)* below analyzes in detail the main factors in order to have a clear overview of all the previously mentioned effects.

Table 6. Key success factors in e-business development.

Key success factors	Explanation
Building and continuing to strengthen their distinctive strategic position in the market.	The distinctive characteristics which allow companies to distinguish from the others and obtain a better value proposition than competitors need to continuously increase and improve.
Building e-business to complement rather than cannibalize traditional ways of competing.	It is fundamental for a company, on one hand, develop new innovations, introducing technological devices and new ways to improve its value proposition, while on the other hand, keep active the traditional ways to operate.
Support from top management.	A supportive team is necessary in order to successfully involve innovations in the existent system.
Focusing on quality of connections.	Having a stable and strong Internet connection is the main element in order to maintain strong communication between all the company's actors.
Providing worldwide support and customer training.	Companies are invited to provide a sort of education to their partners in order to provide cooperation between them.
Deploying the best security protections.	Assuring the best protection to guarantee the privacy and confidentiality of the costumers and value chain partners is one of the main challenges for companies, especially in a continuous flow of information characteristic of internet communication.

Building and maintaining solid e-business architecture.	Companies' infrastructures have to be robust in order to sustain the innovations and allow them to develop quickly.
Following good e-business project management Strategies.	The last factor to consider is the attention to having clear scopes and objectives. Improve something and test it immediately in order to resolve issues which can preclude the next innovation.

Source: Personal elaboration based on Phan, 2003.

The technology-centric organization model presents also some diversifications, the main being the so-called "M-business", which refers to the use of mobile phones instead of PC in order to increase productivity and efficiency. In other words, this structure is very similar to e-business but with the substitution of the principal technological device.

Both of these approaches are very common and companies such as Amazon, Uber, Tesla, Google and Alibaba, just to mention the most famous, enhance their competitive advantage using these business model innovations, based on technology.

In the next chapters of this dissertation, it will be analyzed one of the previously mentioned companies, Uber, which represents a disruptive business model in the transport industry.

3.6 Conclusion

Innovation in organizations is an incredible tool in order to enhance companies' performances, not only in regard to the introduction of new products and services but specially in the establishment of a new business model. Changing some elements from the old one in order to provide an advanced business model is one of the main drivers of innovation, as it guarantees an incredible source of value difficult to imitate.

Moreover, another of the fundamental factors to consider in innovation topic is the introduction of technologies in organizations, especially the diffusion of the use of the Internet. The velocity of communication and interaction between the different partners together with the cost reduction provide remarkable improvement in companies' structure. In fact, they have introduced a new business model, called "e-business" that well characterize the new way to conduct a firm electronically.

Chapter 4

Uber case: an innovation in the taxi industry

4.1 Introduction

About 50% of residents in the world's metropolies use regularly taxis to move around, for the most disparate reasons: night-time leisure, work, visit friends and family (Darbéra, 2010). During the years, the taxi industry has experienced variations concerning regulations, fares, licenses but the main change in the transportation industry is due to the introduction of new companies: they adopt a revolutionary and innovative business model, characterized by the implementation of technology as the first factor to gain an incredible competitive advantage.
This chapter investigates the key success factors of one of the symbols of disruptive innovation in the transportation industry, Uber, and it tries to compare its performance with those of the traditional taxis, in order to understand how an innovative business model has influenced an entire sector. In the first paragraph, it is possible to find a complete analysis of the Uber company, from its history to its business model and success factors. Subsequently, the chapter is instead dedicated to an analysis of the taxi market in the United States, focusing particularly on the city of New York, treating two aspects, the quantitative but also the regulation system. In conclusion, we examine the main reasons for Uber's success and the weakness of the traditional taxi sector, supported also by a brief survey that includes the preferences and opinions of some Uber's users resident in the U.S.

4.2 Uber: an analysis of an innovative business model

Story of a business

Uber Technology Inc., commonly defined simply Uber, is a service which developed a technology that connects drivers partners and users, when the latter asks for a ride, but it also

includes food delivery service (Uber Eats); freight transportation; packages delivery; couriers; electric bicycle and motorized scooter. As stated on the official website, *"Uber is more than a ride request app: it is a tool that connects billions of people around the world. People with different destinations, different ways of traveling but united by the same technology".*[5]

The company was created in 2009, in San Francisco, from an idea of Travis Kalanick and Garret Camp and became public in 2019. The two friends were inspired when, after a snowy night in Paris, they were not able to find a taxi and they imagined how would have been comfortable to reserve a taxi with their mobile phone. Originally the application provided only the possibility to rent luxury cars, but in 2012 in Chicago it started to supply a cheaper option: the possibility for people, who drive for Uber, to use their personal car. Subsequently, the company added the other segments. (i.e. Uber Eats in 2015, Uber Freight in 2017) and at the same time it continued to expand in other States: in 2011 in New York and Paris, in 2012 in London, in 2013 in South Africa and India and in 2014 in China and Nigeria.

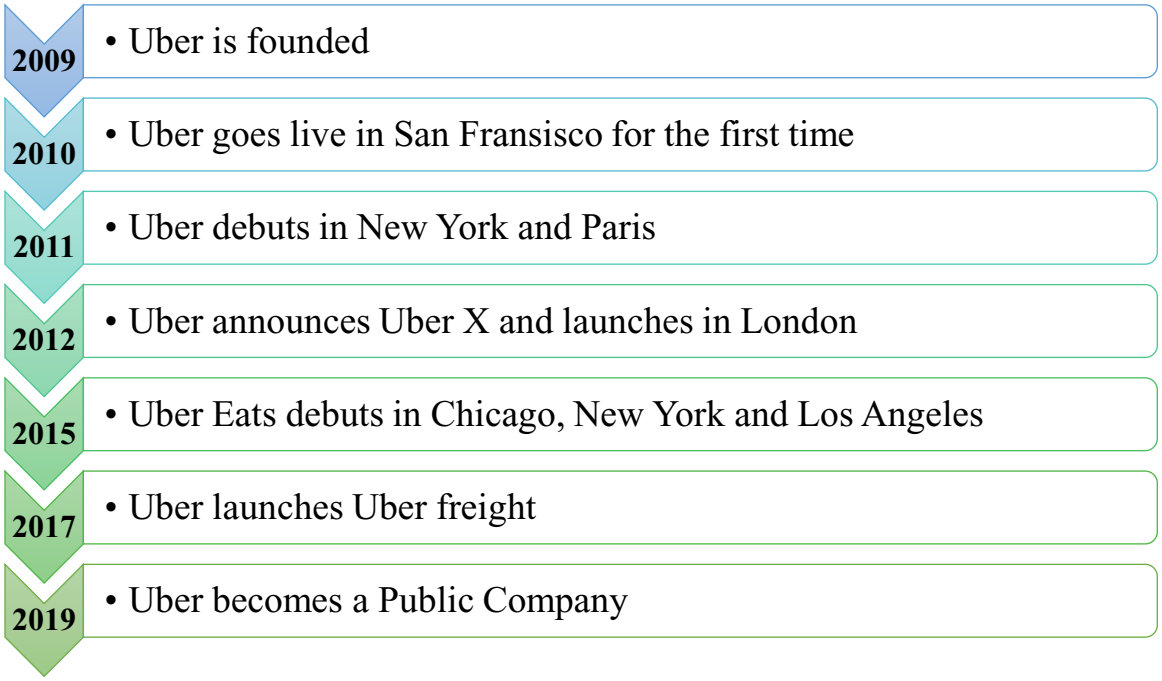
Nowadays, the company, despite the losses that reached the $ 8.5 billion in 2019 (due to different reasons such as large investments and the extraordinary remuneration in securities), enjoys great investors' confidence and it employs (including all segments) 5 million drivers (end of 2019), for a total of 21 million trips per day in 69 countries, around 10000 cities, and involves more than 50 million of users with annual gross booking across all platforms equals to 65 USD billion (December 2019).[6]

The subsequent timeline *(Figure 11)* resumes the most important steps in the development of the company.

[5] Source : Official website of Uber, available on https://www.uber.com/it/en/. Date of access September 2020.

[6] Source: Official website of Uber, available on https://www.uber.com/it/en/ . Data are referred to all the segments of Uber Inc. Date of access September 2020.

Figure 11. Timeline of Uber's history.



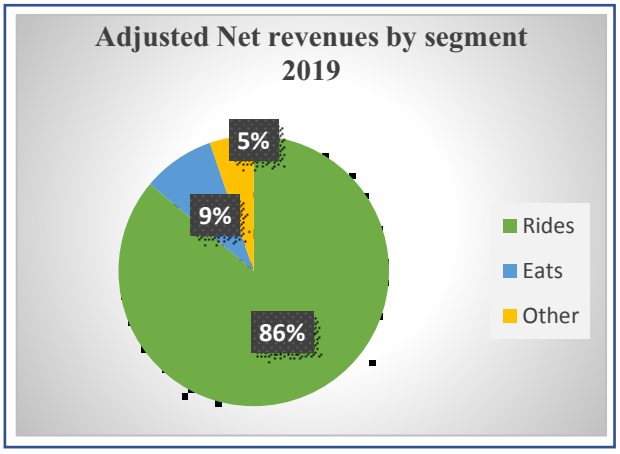
Source: Personal elaboration from Uber website.

Analysis of the strategy

As stated above, Uber technology Inc. has different segments, such as rides, eats, freight, advanced technologies group but the most profitable remains rides segment which represented the 90% of the total revenues in 2018 and the 86% in 2019[7] *(Figure 12).* For this reason, this case study focuses only on ride sector.

[7] Source: Uber Technologies Inc. Annual Report 2019. Available in https://www.uber.com/it/en.

Figure 12. Uber adjusted net revenues by segment 2019.



Source: Personal elaboration of data from Uber website.

Mission, vision, core values

The mission and vision statements are the two elements that characterize the purposes, the goals and the value of a company. In particular, the vision represents the future position of an organization, which for Uber stated: *"We ignite opportunity by setting the world in motion".* [8] The company has the ambition to offer a great service to customers, in order to allow them to move around the world easily and faster so that they cannot miss their best opportunities.[9]
Mission, instead, represents the company's business, its objectives and its approach to reach those objectives, like in Uber, which promises *"Transportation as reliable as running water, everywhere for everyone".*[10] This statement focuses on realizing all the customers' desires and guaranteeing a complete service, thanks to the variety of products offered.
Core values of an organization depict the fundamental beliefs of the company, which perform the entire work and conduct the everyday actions. In Uber the core values are defined by the following statement *"we build globally, we live locally, we customer obsessed, we celebrate differences, we do the right thing, we act like owners, we persevere, we value ideas over hierarchy, we make big bold bets"*[11], which means, in other words, how the company focuses

[8] Source : Official website of Uber, available on https://www.uber.com/it/en/. Date of access September 2020.

[9] Source: Agency that investigates mission and vision statements of main companies available on https://mission-statement.com/uber/. Date of access 4th September 2020.

[10] Source : Official website of Uber, available on https://www.uber.com/it/en/. Date of access September 2020.

[11] Source : Official website of Uber, available on https://www.uber.com/it/en/. Date of access September 2020.

on customers in order to meet their needs in developing new services, maintaining competitive prices and a rating system.

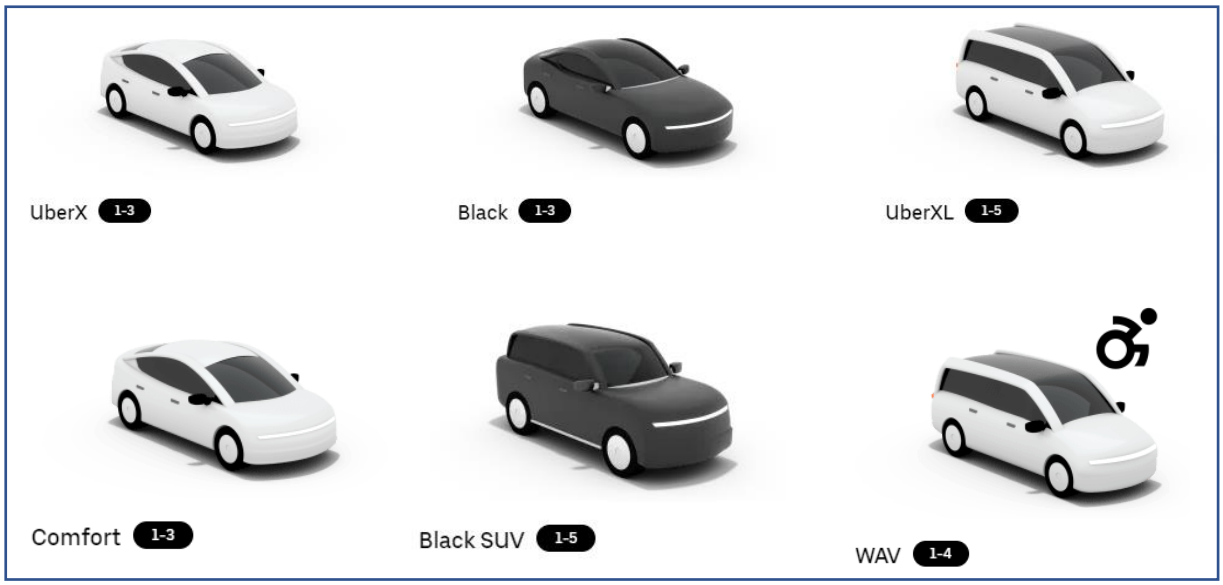
Strategic approach

In the second chapter *(2.3 Business model and strategy)*, this dissertation explains how the choice of the right strategy is fundamental for companies in order to pursue their competitive advantage and gain a considerable position in the marketplace. Moreover, the strategy allows to have a long-term perspective on the firm's purposes and modify the interdependencies of capabilities in order to adapt the business model to the current situation. Following Porter's classification, we stated that the main strategies concern differentiation, low cost and focus strategy. Despite that Uber's strategy focuses on different elements, like flexibility, immediacy, differentiation of services offered and particular attention to customers, it principally enters in the market with a low-cost strategy, which is supported mainly by the reduction of driver's costs that allows the implementation of competitive prices with respect to traditional taxis. As analyzed later in the next chapter of this paper, Uber drivers are independent workers who drive their own car, thus they are charged by each type of cost (i.e. car maintenance, car insurance, fuel costs, driving license). In this way the company gains an incredible advantage not only because it does not pay a fixed salary but also for all the workers benefits that it can avoid, investing those revenues in the improvement of technologies or diversification of activities. This system allows Uber to enter the market with an incredible advantage, over other companies: not only because it can maintain low prices and guaranteeing the same service, but also because it has more availability to improve the products offered which will prove to be at the forefront of the sector.

Products and services offered

Uber does not offer only a simple taxi or limousine service as the traditional companies, but it diversifies by offering several choices, in order to meet the clients' needs. The customers can choose between a common and low-cost car, called "UberX" with competitive fares, a "Black" car for luxury travels or a "Uber XL", a van for a group up to 5 people. In addition, it is possible to find other premium services, such as "comfort cars" with an extra-legroom and top-rated drivers, "Black SUV" that means a luxury van, or electric cars. Moreover, there are taxicabs equipped with car seats or adapted for wheelchairs.

Figure 13. Types of Uber's cars.

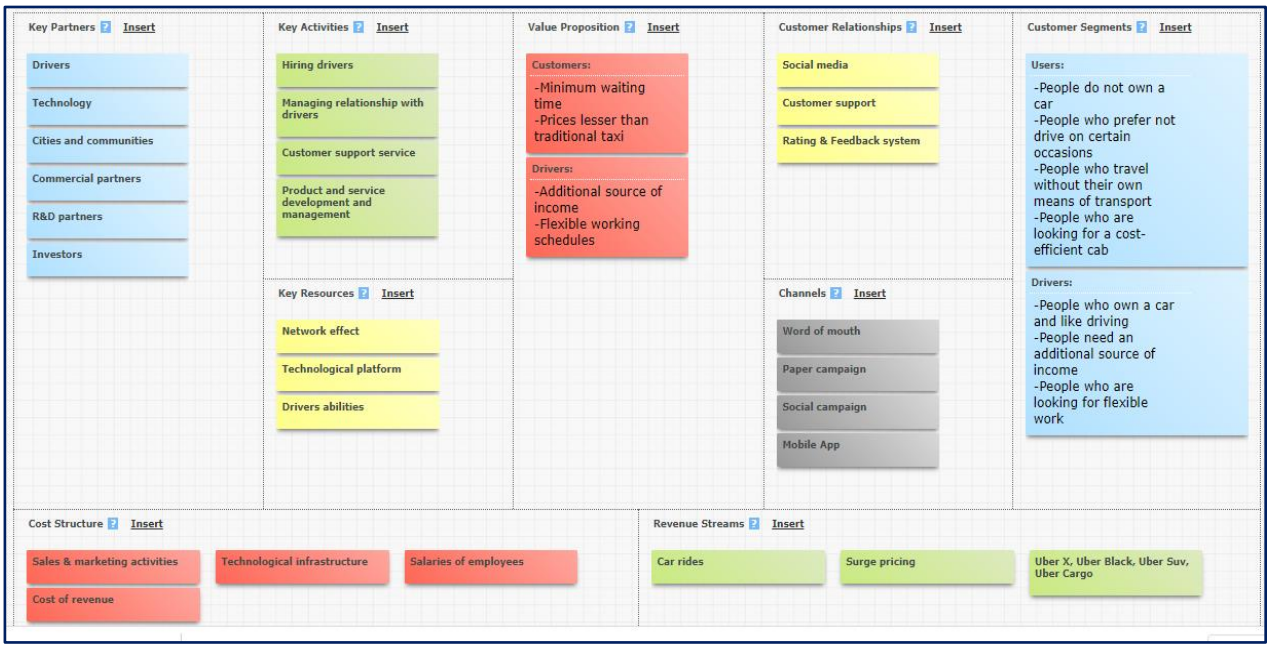


Source: Uber website.

Business Model Canvas

The previous paragraph has introduced the main feature of Uber's strategy but in order to illustrate, in details, how a company creates, delivers and captures value, we need to explore its business model canvas. As underlined in the first chapter of this work, the nine blocks of Osterwalder's structure provide us a complete description of how Uber works, concerning: value proposition, customer segments, distribution channels, customer relationship, revenue streams, key resources, key activities, partner network and cost structure.

Figure 14. Uber's Business Model Canvas.



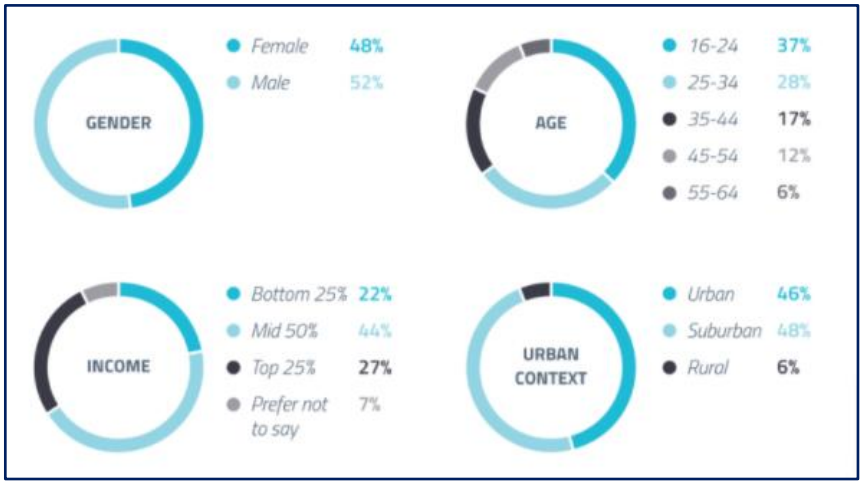
Source: Personal elaboration

- *Value proposition*. The starting point is constituted by the Value proposition, which represents the focal point of a business model and the motivations why a customer chooses a firm rather than another. Uber is a multi-sided platform, thus for that reason its value proposition has a double side: it represents both the customers' point of view and the drivers' point of view. The first one is related to the continuous availability of rides and it involves the lack of long waits for a taxi; reliable transport because the drivers are registered and controlled; prices more convenient than normal taxies (surge pricing model) and some discounts on certain occasions. The second one concerns drivers for whom Uber represents an additional source of income. Furthermore, it has flexible working schedules and the payment is simple and online.
- *Customer segments*. Customer segments have the aim to analyze the different groups of people that the organization serves in order to better focus on the needs of its market. Uber's customers are travelers without a car, people who do not own a car (in particular in big cities) or who do not want to drive on certain occasions. Besides, Uber offers a wide selection of services, ranging from Uber Kids (that takes care of driving children to school) to Uber for Senior Citizens, passing through Uber Taxi, Uber Black (luxury car), Uber Suv (for more than 4 people). On the driver's side, it is possible to identify people who own a car, love driving and particularly need an additional source of

income. In order to create a more precise segmentation and offer customized service, it is possible to divide the two categories by following the major segmentation factors: geographical (which includes urban/rural sites, home location, frequent destinations); demographic (i.e. age, gender, occupation); behavioral (it tends to underline the features of customers, if they are first or regular users, loyal to a brand or if switch towards another); psychograph (it analyzes social classes).

In detail, it is possible to observe that the main Uber adopters are the 16-34 age group, with a great percentage (37%) among 16-24 age-group, which represent the main users of mobile phone and also people with a high necessity to move around, often low income and without a driving license or a car. On the other hand, the age group between 55-64 are the fewer adopters, nearly 6%, because they do not often have a continuous approach with technological devices, so they tend to adopt traditional tools to move (i.e. own cars, traditional Taxi, public transportation). Furthermore, the service is more developed in urban centers rather than in a rural context *(Figure 15).*[12]

Figure 15. Uber's US users.



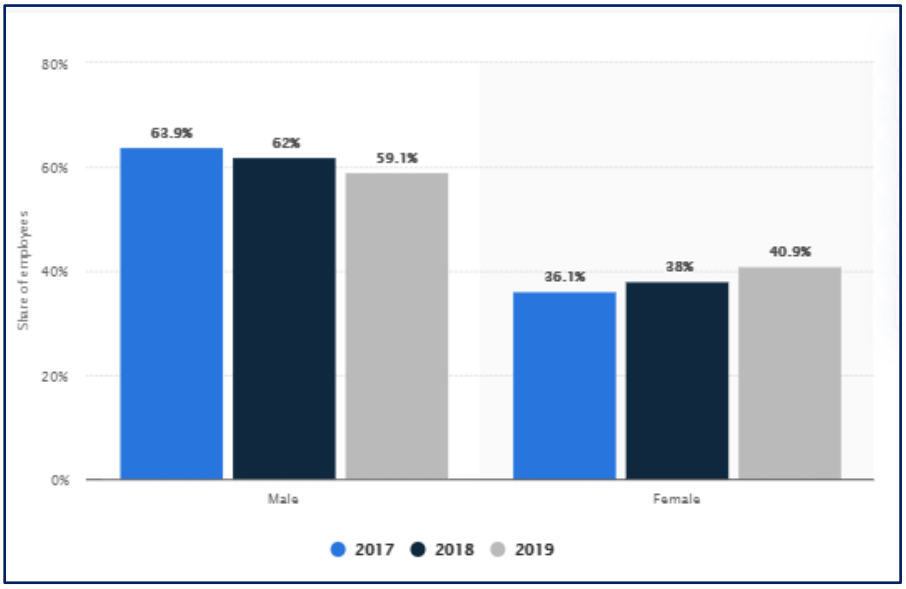
Source: globalwebindex

From the driver's point of view, it can be seen that drivers belong to different generations as well as different ethnicities. When it comes to gender, instead, as in 2017 the great majority of drivers were men (63.9% male 36.1% female), in 2019 there was an increase of women (40.9% female, 59.1% male) *(Figure 16).* About half of them are married or have children, so Uber represents a flexible and additional source of revenue in order to support them. Another feature of drivers is represented by level of education: in fact, 48%

[12] Source: McGrath F., *Demographics of Uber's users, 2017*, GlobalWebIndex. Available on https://blog.globalwebindex.com/chart-of-the-day/uber-demographics. Date of access 21st August 2020.

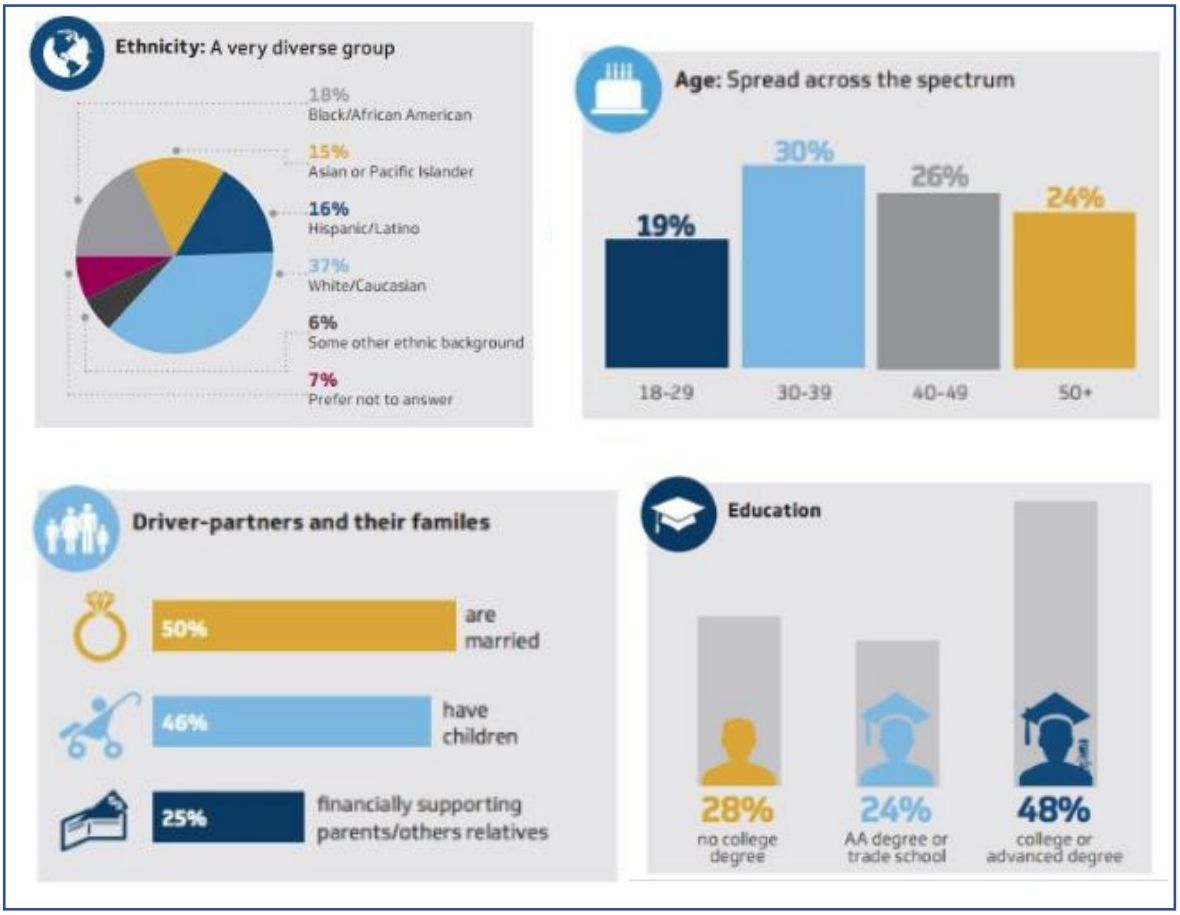
have a college education or advanced degree against 28% who do not have a qualification *(Figure 17).*

Figure 16. Distribution of Uber's employees worldwide.



Source: Statista 2020.

Figure 17. Uber's drivers overview.



Source: Businessofapps elaborated data from Uber website.

- *Customer relationship.* This block aims to describe how the organization empathizes with different customer segments. In fact, maintaining positive and continuous relationships with consumers, drivers, cities and legislators is one of the main objectives of the company, especially after the numerous controversies and restrictions (analyzed later in the next chapter) which do not allow the full swing of its activity in different countries. In particular with consumers, relationships are developed in different ways: first of all, through social media where the company tends to advertise its services, and also with the app where it is possible to find continuous customers' assistance. Furthermore, Uber has developed a rating and feedback system which involves not only users but also drivers: both can give an evaluation of the person, that, especially for drivers, is very important because it could compromise future rides.
- *Channels.* Channel is a fundamental block because it describes how a firm decides to communicate with customers in order to deliver its value proposition. Among the main channels for the initial awareness, it is possible to identify *Word of mouth* (personal recommendations by friends or family) that constitutes one of the strong drivers, following by *paper campaigns* (such as free vouchers when Uber enters a new city) and *social campaigns* (Uber has a large number of followers in the main social media: Youtube - 400k views; Twitter - 1m followers; Facebook - 22m likes; LinkedIn - 1.6m followers Pinterest - 450k viewer/month).[13] Furthermore, it is possible to include also the company's App (available in Ios stores and Android) and the partnerships with hotels, airline programs, malls that represent a great channel to acquire new customers.
- *Key activities.* Key activities describe the essential actions that are made in order to allow a business model to work. Uber has different aims which concern three types of activities: i) reaching operational excellence; ii) continuing the expansions to new cities and countries; iii) improve its value proposition. In order to accomplish the three objectives Uber tends to create good relationships both with customers and with drivers. First of all, increasing the rating and feedback system in order to provide an excellent and safe service and also to provide a customer's service assistance. Then it tries to focus on hiring a consistent number of drivers (in order to have a great availability of rides) and provides them the right payoff and protection. In the end, Uber tends to constantly improve its products and services, with the technology researches regarding cars and application.
- *Key resources/assets.* This block represents the main assets and resources that the company needs in order to create value. The main key resources are represented on one hand by

[13] Source: official Uber profiles in Youtube, Twitter, Facebook, LinkedIn, Pinterest.

technology, which is the cornerstone of the company, and on the other hand, by the network effects that the company tries to create between drivers and customers and that can mitigate the negative customers' experience. (Negative advocacy transforms silent advocators in positive ones) (Kotler et al., 2016). Also, customers' data and preferences that are reached through the App are fundamental in order to provide customized service, together with the ability of drivers.

- *Key Partners.* Establishing positive relationships with partners is fundamental in order to obtain advantages related to the supplying of resources, costs reduction and exploitation of new opportunities. The key partners are many and each of them plays a different and important role in the deployment of Uber's activities.

  Drivers. Drivers are the major partners because they offer the service but at the same time, they can leave whenever they want. Thus, it is essential to always have the right number of drivers and cars available. Moreover, they are classified as independent workers, hence they do not represent a cost for the company: they do not have many workers protections or benefits and at the same time they are charged by the cost of the cars, fuel and insurance. The treatment of drivers in Uber is a controversial aspect, because on one hand they are the central point of the company's strategy but on the other one they constitute the main cause of debate. The complexity of the issue will be treated in the fifth chapter of this dissertation.

  Technology. There are two types of technology: the crucial technology, which concerns the main partners who provide the essential technology for the uniqueness of the value proposition, (including R&D area like autonomous vehicles) and the second, which concerns widely available and non-essential technology for the deployment of activities (i.e. maps, GPS, payment, Cloud services). Furthermore, what is important, it is to have a strict relationship with the application's developers.

  Cities and communities. Cities and communities constitute the key elements due to the fact that maintaining a relationship with them is necessary in order to guarantee the deployment of the service because of legal barriers.

  Commercial partners. These partners are essential in order to promote the brand and to reach new customers. They could be flyer program providers, malls or other attractions, restaurants but also product/service providers for drivers.

  R&D partners. Research partners are important in the development of the major App functionalities but also in other Uber's project such as autonomous vehicles.

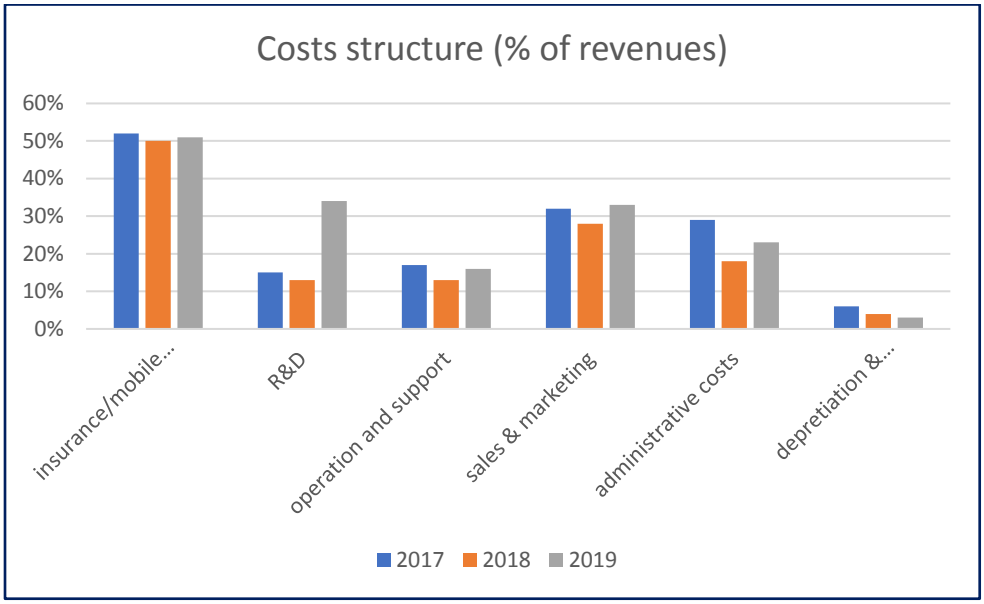
  Investors. Investors are essential in raising funds in order to accomplish company's activities, in particular in R&D field.

Other partners. Other partners are involved in non-core value proposition or supporting activities such as: hire car partners or insurance partners.

- *Cost structure.* This part contains all the costs necessary in order to allow a business model to work, including costs related to operational activities and costs referred to working capital and financial assets. Traditionally, entering in the taxi industry have moderate costs, related to license, purchase price of the car, regular maintenance, insurance and radio tools (Dempsey 1996). Uber is not a traditional taxicab company but it defines itself as a technology company, hence as for many online platforms, the major costs for Uber are represented by customer acquisition costs. In fact, despite the great percentage of costs is related to insurance expenses, mobile devices, service expenses and credit card processing fees, [14] 33% of costs of revenues concerning sales and marketing activities, i.e. advertising, discounts and promotions. Furthermore, there are also costs related to R&D, nearly 34% of revenues in 2019, which includes product development, compensation expenses for engineering and expenses associated with the improvement and maintenance of the technology platform. The 23% is instead composed of general and administrative expenses, such as compensation for executive management and administrative employees. There are also costs related to depreciation (only 3% of revenues because the greatest number of cars are owned by drivers) and the rest 7% is referred to other costs including interest expense. The table below, which depicts the distribution of Uber costs from 2017 to 2019, shows a different distribution of costs in the last three years. Generally the proportion of costs related to insurance, mobile devices and service expenses, depreciation / amortization and sales and marketing remain more or less the same, but it is possible to note a reduction in administrative costs and particularly an increase in research and development. It means that Uber has already achieved a vast number of consumers and now is more focused on improving its service in order to better satisfy customers' needs and exploit new sources of revenues.

[14] Source: Uber Technologies Inc. Annual Report 2019. Available in https://www.uber.com/it/en/.

Figure 18: Uber costs structure.



Source: Personal elaboration of data from Uber Annual report 2019.

- *Revenue streams.* The last block illustrates how the company earns its revenues from different customer segments. We have already seen that Uber technology Inc. owns different sets of activities such as Rides, Eats, Freight, E-bike and Scooter and Other technology programs, from where it derives its revenues; in particular, the revenues' structure of the company is based on fees paid by users: drivers, restaurants or customers. Concerning the Rides sector, Uber charges a 25% service fee on drivers (on total fares) but the compensation is not standard due to the different prices depending on the typology of service required, (i.e. Uber Black, Uber SUV, Uber cargo, etc.). The Eats sector is based on restaurants' fees whilst the riders are paid with respect to the length and the time of each itinerary. The revenues of the Freight division are represented by the fees charged to the shippers for the service offered, those relating to the E-bikes and Scooters are depicted by contracts of single users with the company and in the end, the revenues of Other technology Programs are referred to collaboration agreements. The table below *(Table 7)* illustrates the company's revenues disaggregated by offering segments. It is possible to observe as the Rides sector (together with revenues referred to car leasing and different types of cars) is the most profitable division of the company, with a result of $ 7,278 million in 2017 until $ 10,475 million in 2019, derived by approximately 25% of fee on total gain. The Eats sector has considerably increased its profit in the last three years, from $ 587 million in 2017 to 2,510 million in 2019, whilst the Freight division has risen from $67 million to $731 million.

In the end, the new technology programs are referred only to one year because they were implemented in 2019, with a profit equals to $ 42 million.

The following graphs *(Figure 19A,19B,19C)* depict how rides constitute the main source of revenues for Uber company rather than Uber Eats and other services. In fact, analyzing the first quarter of three years (2018,2019,2020), it is possible to observe how this trend continues to remain positive.

Table 7. Revenues for segments for three years (in millions).

Segments	**2017**	**2018**	**2019**
Rides	$ 6,888	$ 9,182	$ 10,612
Vehicle Solution Revenue	$ 345	$ 143	$ 21
Other Revenue	$ 45	$ 112	$ 112
Total Rides revenue	$ 7,278	$9,437	$ 10,745
Eats revenue	$ 587	$ 1,460	$ 2,510
Freight revenue	$ 67	$ 356	$ 731
Other Bets revenue	-	$ 17	$ 119
Other technology programs	-	-	$ 42
Total revenue	$ 7,932	$ 11,270	$ 14,147

Source: Uber Annual Report 2019.

Figure 19A- 19B- 19C. Uber's adjusted net revenues by segment.

Figure 19A

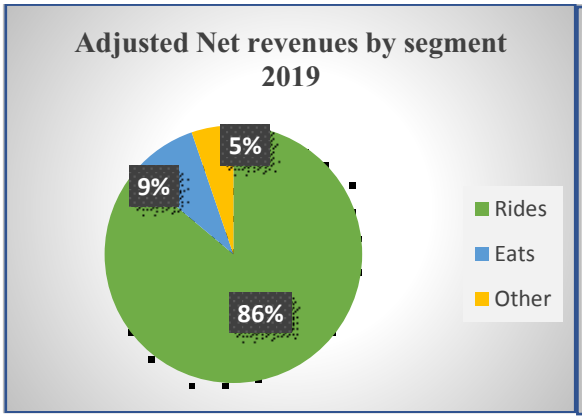


Figure 19B

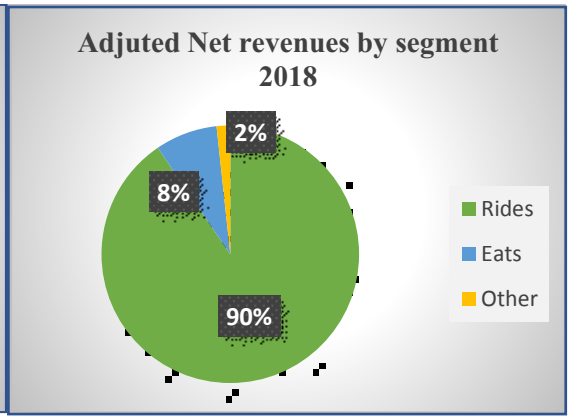
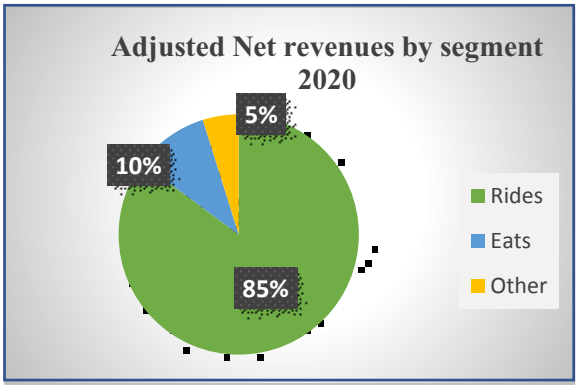


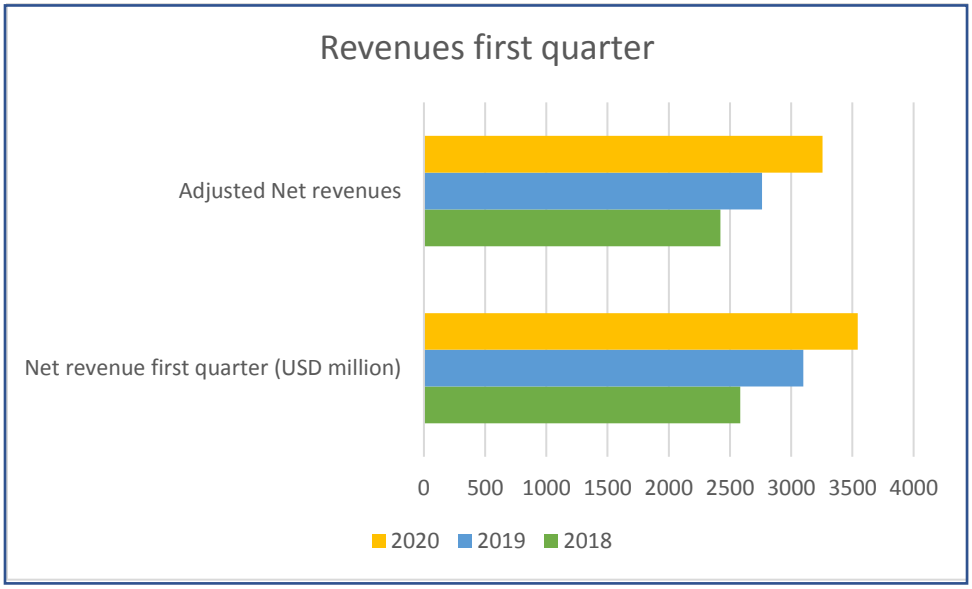
Figure 19C



Source: Personal elaboration of data from Uber website.

The next graph *(Figure 20)* shows instead the Net revenues and the Adjusted Net revenues of the first quarter of 2018, 2019, 2020. The most important fact to note is that revenues are in continuous increase in the last three years.

Figure 20. Uber revenues for the first quarter of 2018,2019,2020.



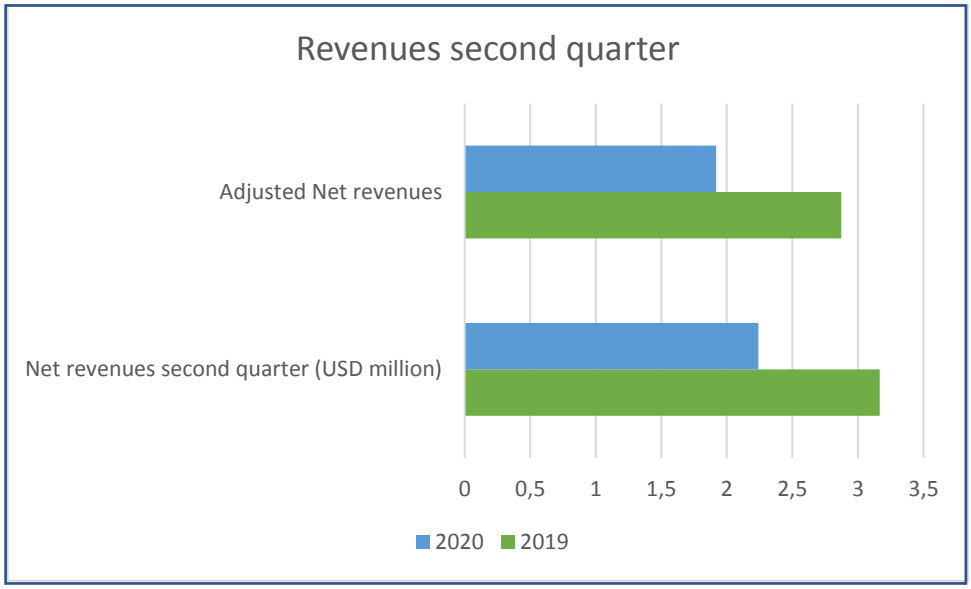
Source: personal elaboration of data from Uber website.

The previous analysis takes into consideration the first quarter of three years in order to have an equal comparison. Now the report focuses also on the second quarter of 2020, influenced by the pandemic crisis and the subsequent lockdown, hence the comparison with the second quarter of 2019 is biased. In fact, it is possible to note a decline in gross bookings of 35% from 15,756 million of the second quarter of 2019 to 10,224 million of the second quarter of 2020[15]. An

[15] Source: Uber Technologies Inc. Annual Report 2019. Available in https://www.uber.com/it/en/.

incredible decrease is also registered in Net revenues (minus 29%) and Adjusted Net revenues (minus 33%): in fact, in the second quarter of 2019, Net revenues were equal to 3,166 million and Adjusted Net revenues equals to 2,873, while in the second quarter of 2020 the values registered are equal respectively to 2,241 million and 1,918 million.[16]

Figure 21. Uber revenues for the first quarter of 2019,2020.



Source: personal elaboration of data from Uber website.

Swot analysis

The business model is not a static representation, it is constantly evolving in relation to the environmental context. For this reason, it is important that a firm have a clear framework of the political, economic, social, technological, environmental and legal factors, which are able to affect the success or the failure of a strategy. Swot analysis can also help in order to have a complete picture of the company by focusing on strengths, weaknesses, threats and opportunities, to better face changes and adapt the most successful business model *(Figure 22).*

Strengths. They represent the first point of the analysis and include the main characteristics of the company, its core value: the flexibility of work, the low operating costs, the dynamic pricing model and the use of technology (Internet, smartphone application). The possibility to be an independent contractor, allows drivers to use it as an additional source of income together with other jobs, thanks to the lack of fixed hours. On the other hand, as shown before, this constitutes also an advantage for the company, which can decrease its operation costs and use a dynamic

[16] Source : Official website of Uber, available on https://www.uber.com/it/en/. Date of access September 2020.

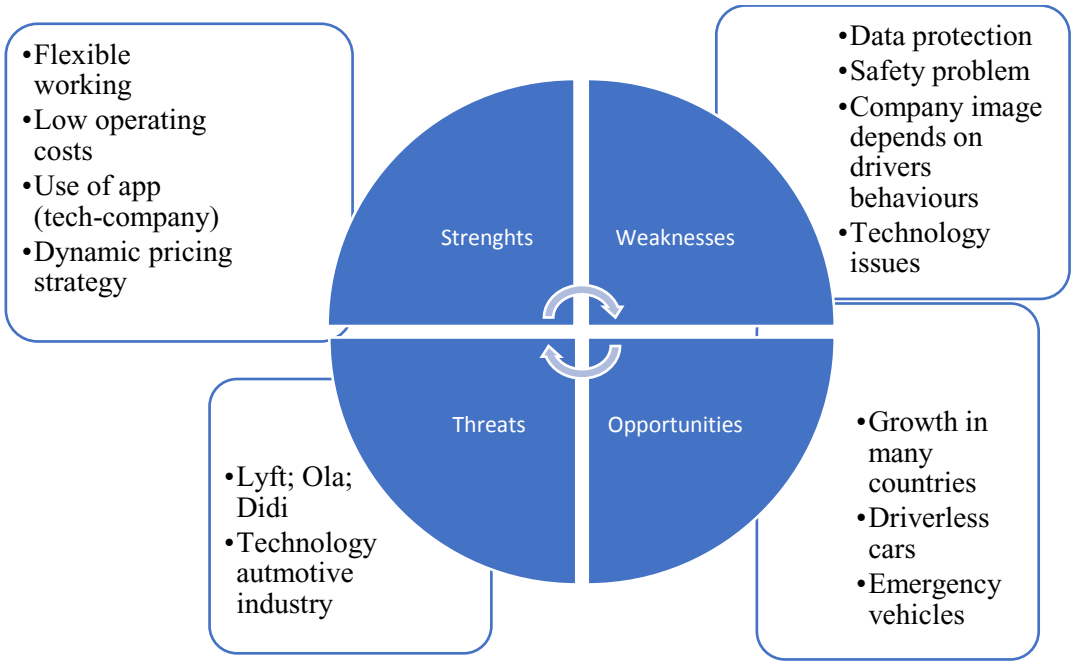
pricing model: in fact, Uber's fares are not fixed, they are based on demand, thus they are higher during peak hours (up to a maximum of 2.8 times the normal fares) and very inexpensive in other time frames. The use of technology and in particular the smartphone application represents the disruptive innovation of the company as opposed to the traditional industry because it becomes easy to reserve a ride, to check where the cab is and also to pay.

Weaknesses. Together with the issues related to the workers conditions and States' regulations, there are other points of weakness in Uber business model. Even though the use of technology represents, on one hand, a "revolution", on the other, it brings with itself the problem of personal data conservation and privacy, an important aspect that constitutes a cost for the company. Moreover, the Internet connection does not cover all areas in each country or not each person, especially the underprivileged or the senior citizens who do not have all the instruments to log into this service. In the end, there are other two fundamental issues: the safety problem related to the car conditions and insurance and the image of the company, which depends principally on the driver's behaviors, thus it does not have complete control of its brand.

Opportunities. Uber has the possibility to expand its business in each country, especially in Asia where cities are very populated and taxis is one of the main transportations. Furthermore, Uber has the purpose to investigate other aspects of the automotive industry, especially the introduction of driverless cars or it focuses on other types of means of transportation, such as emergency vehicles.

Threats. The main threats are represented by direct competitors, in other word companies that offer the same products and services, (i.e. Lyft, Ola, Didi), and for that reasons Uber tends to explore new alternatives and opportunities. But even in the new sectors there are competitors, especially in the automotive industry: Tesla is one of the main companies that is implementing studies in order to improve driverless cars or technology vehicles.

Figure 22. Uber Swot analysis.



Source: Personal elaboration.

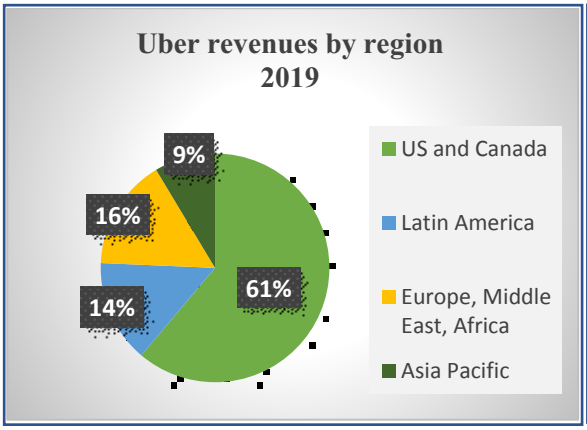
How Uber works

Requiring a ride with Uber is easy and fast: it is possible to access to the service through a mobile phone application or browser and this constitutes the first key success factor, the use of technology. After registration with personal data, during which it is possible to add also a family profile with more users, and the inserting of a predefined payment method, the following step allows customers to choose a destination and reserve the ride. Uber matches in a few seconds the customers with the closest driver (the speed to respond to the request is another feature of its business model) , thanks to the use of online Maps, and after the acceptance of the ride by the driver, the customer can meet her/him. Before confirming a ride, customers and drivers can also have access to the valuation by previous users, so they can see especially how the driver is, which car he has, and on the other hand the driver can verify the honesty of the clients. The payment methods are different and they depend on the place: generally, it is possible to pay on cash, credit card linked to the site or Uber cash account. The last step is constituted by a valuation of both parties, that allows Uber to improve their service continuously.

According to its website, Uber is available in more than 69 countries: the largest market is represented by U.S. with 41.8 million users in March 2018 and a market share of 71% in January

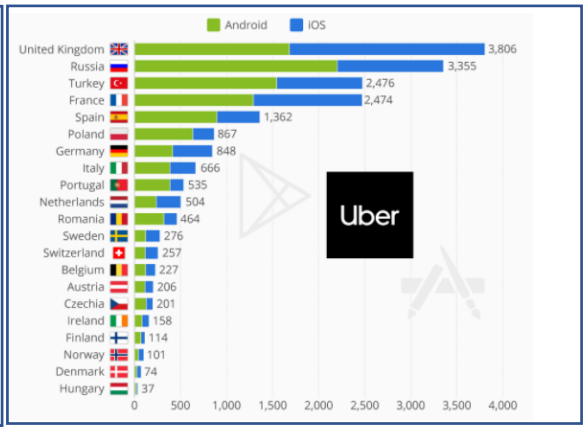
of the same year.[17] The second biggest market is Brazil with 17 million users, whilst in Europe the biggest market is U.K. with London that counts 3.5 million users, albeit, in the other European States Uber finds many restrictions to enter *(Figures 23-24)*. For this reason, the current research focuses particularly on U.S market and tries to analyze how the Uber business model influences the transport market, the restrictions of taxi industry and the market share gained by traditional taxi and Uber.

Figure 23. Uber revenues by region 2019.



Source: Uber website.

Figure 24. Number of downloads o the Uber App in Europe in 2018.



Source: Statista 2020.

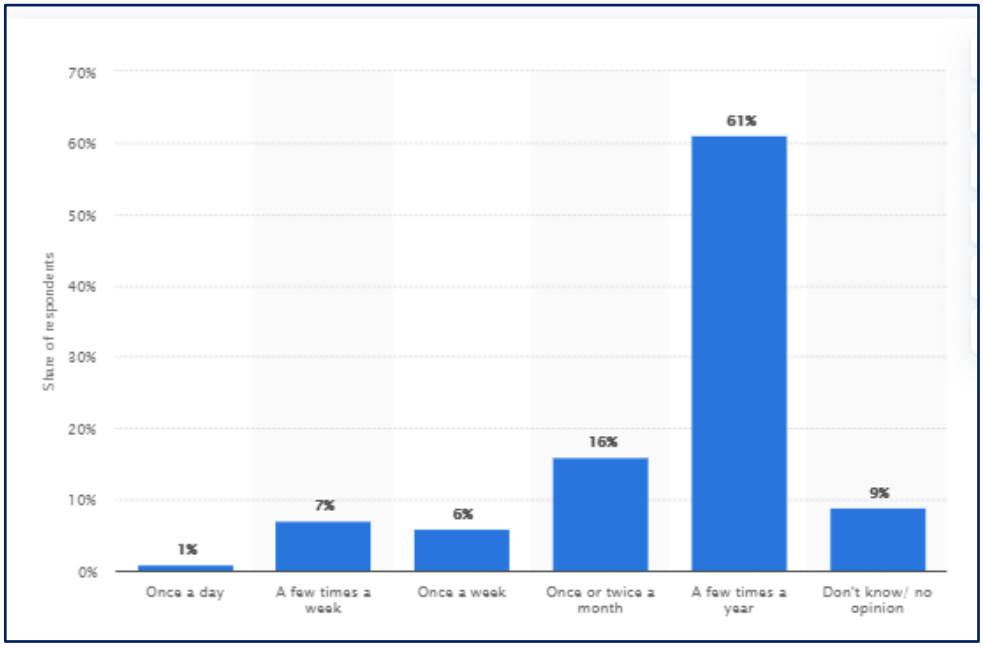
4.3 Taxi Market in U.S

With the term "Taxi", we commonly referred to a traditional Taxicab that you can request directly on the street or by calling the company dispatcher (Conway et al., 2018).

Generally, the Taxi market is a regulated market but with some differences amongst different countries, particularly related to the limited accesses to the market or to the licenses required. This paragraph focuses on the U.S. taxi market, which is the frame of reference of the Uber investigation reported in this dissertation. In particular, taxi market in the United States is a wide market: in fact, statistics demonstrate that the 61% of adult in 2018 have used a taxicab at least once a year and the 16% once or twice a month *(Figure 25),* whilst in May 2018 there were 207,920 drivers and chauffeurs. (Statista 2020).

[17] Source: Mansoor I., August 2020, *Investigation about Uber company*, Business of Apps. Available on https://www.businessofapps.com/data/uber-statistics/. Date of access September 2020.

Figure 25. Frequency of taxicab usage in the United States as of September 2018.



Source: Statista 2020.

A regulated market

The history of taxi regulation in the U.S. started with the Great Depression in 1929, when many unemployed workers entered in the taxi industry irregularly, causing not only an incredible increase of supply rather than demand and the consequent collapse of fares, but also creating an unsafe market because they owned dangerous cars. This condition has penalized considerably the entire sector, thus in 1935 the Interstate Commerce Act settled a state control on taxi prices. Furthermore, in 1937, the city of New York was prohibited from granting new authorization, freezing the taxi number (Harding et al, 2016) which, according to Cummings (2009), dropped from 21,000 in 1931 to 11,000 in 1947.

The standard regulatory model of the taxi industry is defined by three elements, called "QQE", (quality, quantity, economic). The quality control is dedicated to checking the vehicle age, appearance and safety; the quantity control is referred to the number of taxis available according to the analysis of demand; whilst the third point, economic control concerns the regulation of stable prices, costs and revenues.

However, during the 70s and 80s, according to the free-market theories, the taxi industry was considered a great example of how State regulation does not allow competition and innovation. For these reasons, the taxi market began to be deregulated by allowing each jurisdiction to set its own policies, creating big differences between states and cities.

Generally, it is possible to identify four types of regulatory system (Schaller, 2007), commonly defined as Type A, B, C and D. The first one is characterized by open entry to all people (individual drivers or companies) who satisfied basic requirements (i.e. background checks, vehicle insurance and periodic vehicle inspections). Type C also allows the access of individual drivers but it limits the number of vehicle licenses (called "medallions"), which become transferable often at substantial values (In New York the value is higher than $100,000) (Gwilliam, 2005). On the other hand, types B and D concern the availability to enter in taxi market only for companies that meet certain requirements (i.e. meeting service standards, high levels of auto insurance, maintaining a central place of business, minimum fleet sizes, control on the reliability of drivers). Besides, in type D the accesses are limited. Market deregulation and in particular the open access, provided by type A and adopted in certain cities such as Washington DC, Orange City or Phoenix, does not represent an instrument of improvement of the taxi industry (Schaller, 2007). In fact, the number of taxis, especially individual drivers, increased considerably causing a less efficient model of work: more time between two rides for each driver, fewer revenues, lack of control causing the increase of unsafe rides. Hence, other cities, which are representative of type B and C, introduced new entry restrictions, for instance, New York City, Chicago, Boston, which improved the quality of the service. These restrictions allow the entry in the market of new drivers following the increase of demand: for instance in medallion cities, the number of medallions or vehicle permitted has increased consistently in recent years, (i.e. New York has increased the number from 10% to 15%, Chicago by over 40%) (Schaller, 2007). Restrictions regarding the number of licenses is one of the most important decisions that regulators make and it is directed by three principal approaches. The basic one concerns the freezing of the numbers of taxis and it is the first method adopted since the 1930s. The second is referred to the principle of demonstrating the "public convenience and necessity" (regularly updated) in order to increase the taxi sector whilst the third approach regard the analysis of population data, trips volumes and other factors in order to decide the right number of licenses.

To summarize, it is possible to identify five principal pillars of taxi regulation listed below:

i. Limitation of the number of licenses in order to control the entry.
ii. Uniform fares in order to avoid competition.
iii. Health and safety regulations to protect customers (i.e. checks on the vehicles, insurances).
iv. Protection of drivers: workers' insurance, protection measures of economic interests.
v. Universal service requirements.

Innovation in taxi industry

Despite the great regulation of the transportation sector, Information Technologies developed also in this field causing disruptive innovation with the introduction of a new system to travel and to move, called "ride-hailing". As argued in the third chapter of this dissertation, the implementation of technology in a business model allows reaching key success factors, such as distinct position in the market, a great competitive advantage but also a strict network with customers. Ride-hailing is a service similar to taxi but with some elements of differentiation, such as the use of the application for reservation and payment and the use of private vehicles, without specific markings (Conway et al., 2018). Companies like Uber, Lyft, Ola or Didi offer this service. This innovation is something hybrid: in fact, first of all, these companies have not a sector well defined (i.e. are they technology companies or transportation one?) (Collier et al., 2018), secondly, they enter in a market excluding the basic regulatory regime of that (i.e. driver registrations, licenses, fixed fares, insurance), but despite all, they met an unexpected success. Indeed, in only one year from 2014 to 2015, the percentage of Uber market share, shifted from 9% to 21% in New York, from 23% to 49% in Los Angeles and from 8% to 25% in Chicago (Chiaroni et al., 2015).

Cities reacted in the most disparate ways: the progressive cities, such as San Francisco, accepted the innovation positively with a tech-friendly approach and without regulation for these virtual companies. Other cities (i.e. New York, Philadelphia, Chicago), characterized by a more regulated system organized by agencies, tried to adopt the same rules and provisions required for the traditional taxis. The great majority of U.S. cities implemented protection measures in order to regulate the "tech-transportation companies", but sometimes certain decisions, considered by companies too much restrictive and narrow for the normal deployment of their activity, met strong opposition. A curious fact is represented by States that have a strict regulation but prove to be more friendly with the innovative companies, introducing lighter directives as opposed to other States, such as California, that generally does not have a rigorous taxi regulation but instead imposed stringent conditions to new companies, (i.e. customer protection, insurance requirements, fingerprint check). Despite the continuous improvement of legislation, there are many aspects, which concern particularly the protection of workers or the safety of rides, that need to be dealt with and that will be treated later in the next chapter of this dissertation.

Taking into consideration the city of New York, Uber and Lyft, which are two of the main innovative companies that offer taxi service through an online application, accepted many regulation rules, the same imposed on the taxi industry, except for the control of number of

cabs. Furthermore, also traditional taxis are allowed to be requested through the use of mobile application: thus, the introduction of technology in an old and historical industry has been necessary to contrast the competition.

4.4 Taxi Market in New York City

Description

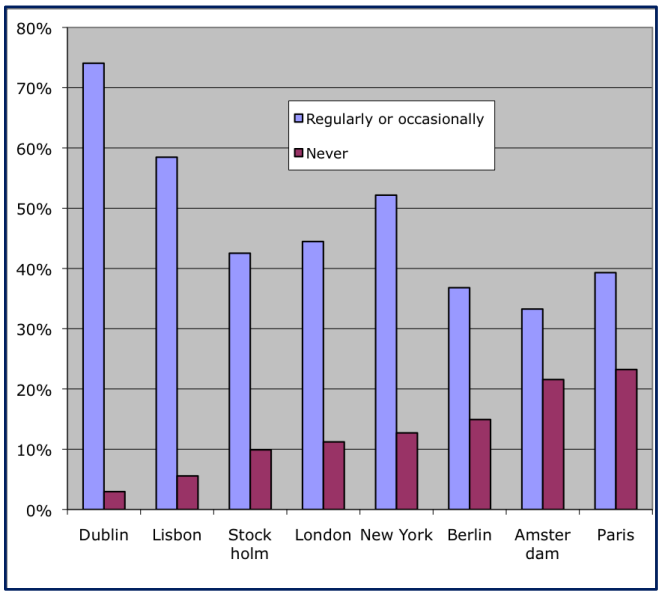
New York is one of the city in the world where, despite the low proportion between population and number of taxis (1.63 for every 1000 inhabitants, while in Paris the number of taxis available is 2.63 and in Dublin 10.58 per 1000 inhabitants) (Darbéra, 2010), this service is widely used and popular, as opposed to other main cities all over the world *(Figure 26),* and citizens use it frequently because it is faster and easy to use (Darbéra, 2010). For this reason, this paragraph focuses on the analysis of the market in this city, which represents a great example in order to investigate how the advent of Uber has influenced the entire taxi industry.
Imported in the first year of the twentieth century, taxicabs are a distinct element of the city of New York. The taxicabs' market is regulated by New York City Taxi and Limousine Commission (TLC), a government agency that controls not only the "classic and iconic" taxis but also for-hire-vehicles (FHV), commuter vans and paratransit vehicles, described below in details.
Yellow taxicabs. Traditional cabs are allowed to pick up passengers directly on the street anywhere in the city, but nowadays thanks to the introduction of the Internet devices, it is possible to reserve them through a dedicated application. Their number is regulated and the access in this market is limited: thus, in order to drive a yellow taxicab, it is necessary to have a license, called "medallions". Besides, there could be different situations: in fact, these vehicles are often owned by a company and drivers pay the lease for cab and license, while in other cases drivers are the owners of the work tools and they would lease them to other drivers when they do not work. The fares are set by the TLC and they depend on distance, time, surcharges added to the basic and initial charge.
Green taxicabs. This type of taxi is allowed from 2013 and can circulate only in certain areas (i.e. they have a low presence in the city center). They are checked twice a year and drivers have to pass a driver education course, whilst the fares remained fixed by TLC.
For-Hire-Vehicles (FHV). Together with traditional taxis, there are also other possibilities that consist on hiring a vehicle, generally a luxury car, pre-reserved through a smartphone

application. For-Hire-Vehicles can be divided into traditional and High Volume FHV that count more than 10,000 trips a day and are affiliated with one of the four main TLC-FHV companies in New York: Uber, Lyft, Juno and Via.

Commuter Van. Generally, they operate in areas where there is a lack of public transport and they follow all the rules provided for the traditional taxis.

Paratransit vehicles. They can transit only with authorization by a paratransit base and only for medical aims.

Figure 26. Frequency of use of taxi service in eight cities.



Source: Darbéra, 2010.

Analysis

After a brief introduction that underlines the strict relationships between New York and taxicabs, this section will investigate the volume of the taxi industry, in order to examine the changes introduced by the innovative companies, in particular Uber.

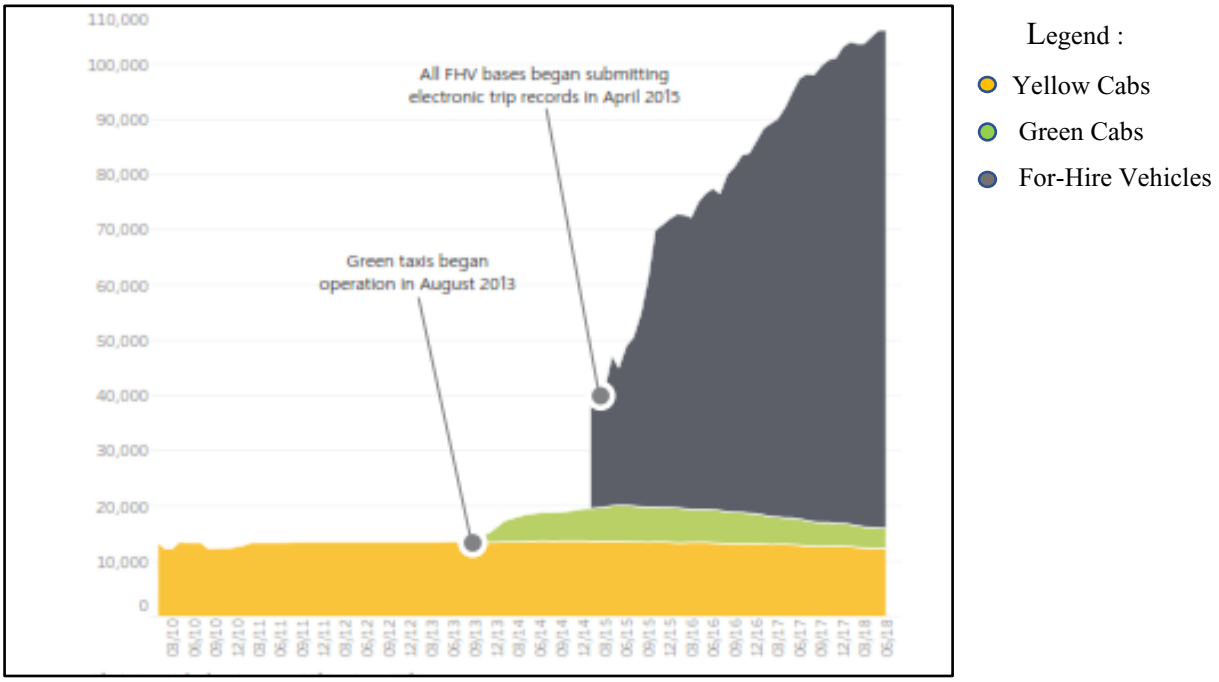
According to the data of NYC TLC, the licensed vehicles (cabs in a good state and that are allowed to operate) are more than 125,000, whilst the number of licensed drivers is around 185,000.[18]

At the moment of the expansion of FHV high volume, in 2015, the number of active vehicles incredible increased: from 19,000 in 2015 to more than 90,000 in 2018. On the other hand, the

[18] Source: Taxi, N. Y. C., & Limousine Commission, 2018. TLC Factbook.

vehicles of yellow cabs remained constant around 10,000 per day, whilst the green taxicabs slightly decreased *(Figure 27).*

Figure 27. Active vehicles in New York from 2018 to 2018.

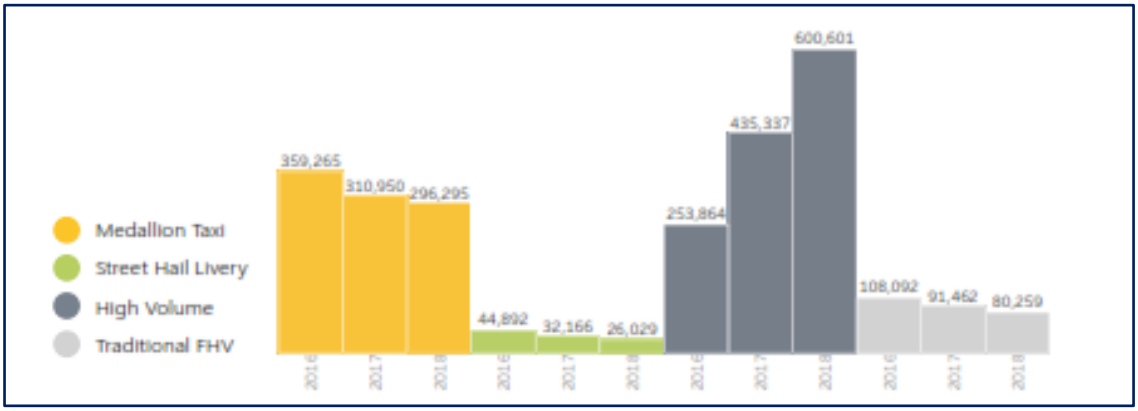


Source: NYC TLC factbook, 2018.

Another aspect to analyze concerns the number of daily trips. The graphs *(Figure 28-29)* depict that traditional yellow cabs, from January 2016 to June 2018 decreased the number of daily average trips from 359,265 to 296,295. The same decreasing trend is shown for green taxicab and Traditional FHV, which registered a decrease respectively of 18,863 trips and 27,833 trips in two years. A positive increase is instead registered by High volume FHV, with daily average trips equal to 600.601 in 2018 and 253.864 in 2016.

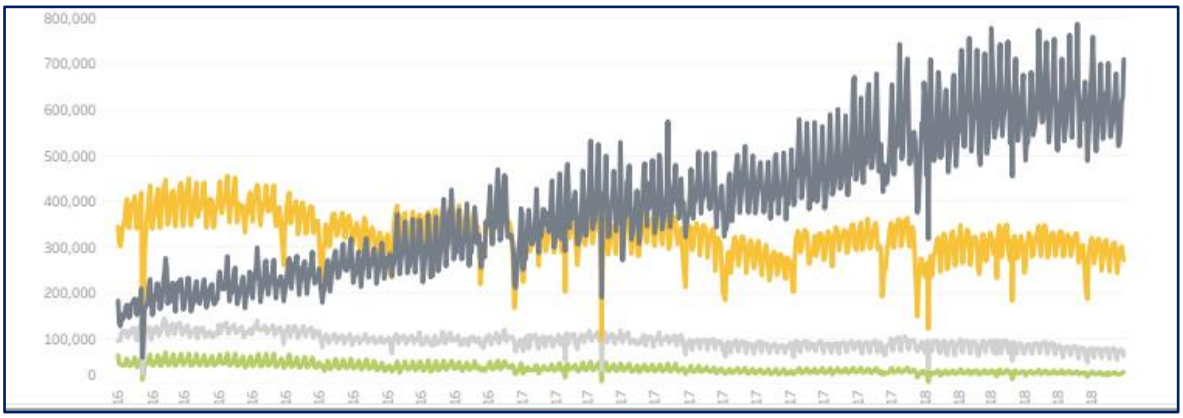
The same proportion is maintained also for total daily trips: TLC vehicles complete nearly 780 million trips each day with an increase of 137% of High Volume for FHV.

Figure 28. Daily average trips from 2016 to 2018.



Source: NYC TLC factbook, 2018.

Figure 29. Daily total trips.



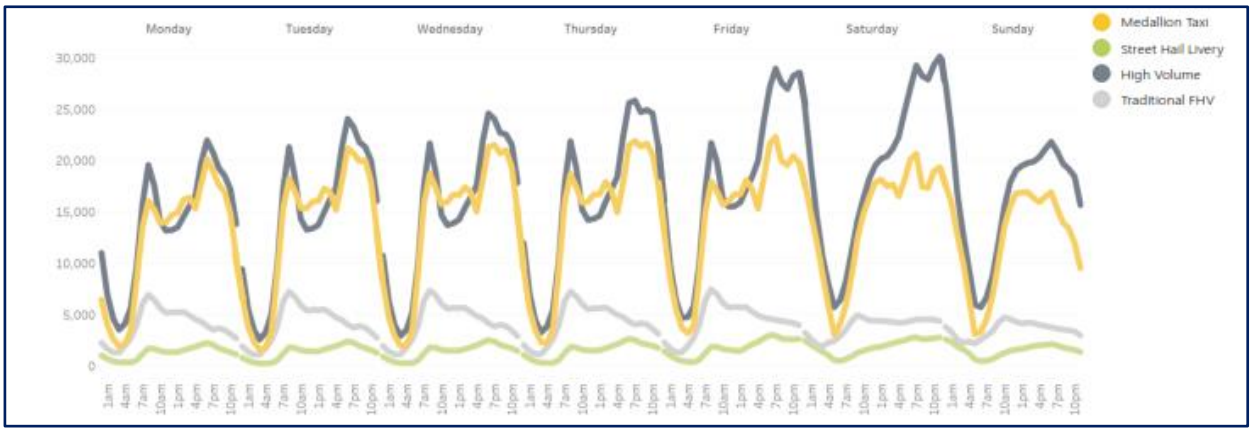
Source: NYC TLC factbook, 2018.

The analysis continues with a focus on trip time and distance. It is possible to observe *(Figure 30)* that the main requests of taxis are during morning and evening (7 a.m and 7p.m), whilst during the night (from 1 a.m to 4 a.m.) the peak decreases very steeply. Saturday and Sunday register the highest peak of requests, in particular during Saturday the trips request is constant during the day. The graph confirms the positive trend of high volume FHV and yellow taxicabs which register the large percentage of trips in the city taxi industry.

The different types of taxicabs do not are available in each area of the city: the research underlines in fact *(Figure 31),* that yellow cabs are very common in Manhattan (92% of trips) whilst in other boroughs are almost zero (i.e. Staten island). Green taxicabs are popular particularly in Brooklyn (36.1% rather than yellow cabs that have only 1.5%) but reach a high percentage also in Manhattan (30.8%) and Queens (28.4%). High Volume FHV instead has half of the services distributed in Manhattan (52.8%) and the other higher percentage in Brooklyn

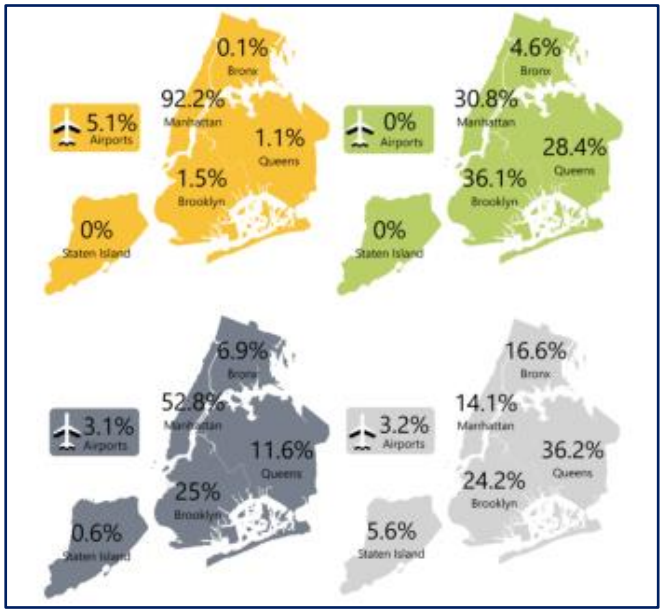
(25%) and Queens (11.6%). Traditional FHV, on the opposite, does not serve the city center but it is concentrated especially in Brooklyn (24.2%) and Queens (36.2%).

Figure 30. Daily average trips by time and day.



Source: NYC TLC factbook, 2018.

Figure 31. Distribution on trips by borough.



Source: NYC TLC factbook, 2018.

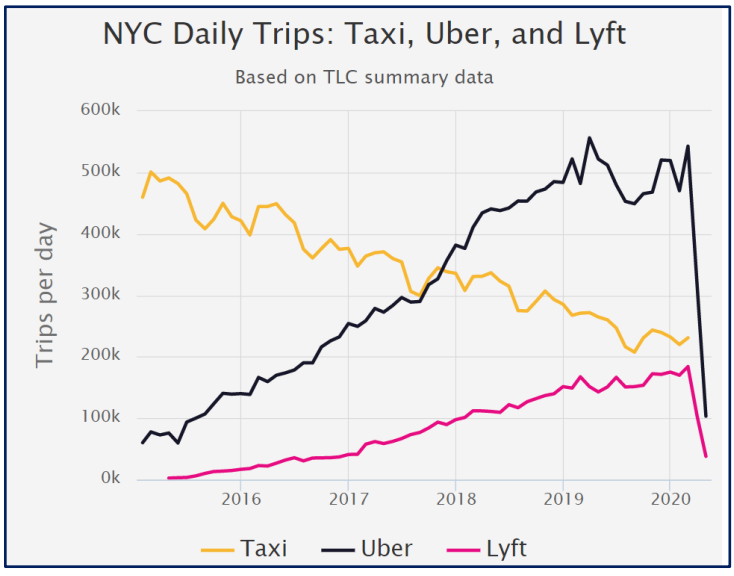
The previous results demonstrate how, from the advent of companies that implemented technology in their business model, the number of traditional taxicabs, booked directly on the street or by radio, has dramatically decreased. This is probably due to the great number of vehicles that these new companies employed but also because they have a different and more competitive approach with consumers.

The data analyzed before concerned all the companies that offer a for-hire-vehicles: now, it is interesting to observe only the numbers related to Uber company.

Uber In New York City

As depicted in the previous paragraph the taxi market in New York is divided principally in Traditional taxis (yellow cabs and green cabs) and the private ones, which adopt only the online service to reserve a ride. Between the main innovative companies Uber and Lyft play the most important role, thus now it is interesting to know their popularity and the number of trips they perform each day. The graph below *(Figure 32)* shows an analysis of daily trips of the three companies between 2016 and the first semester of 2020. If we do not take into consideration the data referred to 2020 biased by the pandemic effect and the consequent lockdown, it is possible to observe that from 2016 to 2019 Uber has significantly increased its daily trips, passing from less than 100,000 trips in 2016 to more than 500,000 in 2019. On the other hand, traditional taxis depict an opposite trend, passing from 500,000 daily trips in 2016 to 200,000 in 2019. Also, Lyft shows a positive increase of trips in the last four years, but it did not reach the same numbers as Uber, in fact it performed less than 200,000 daily trips in 2019.

Figure 32. Daily trips: taxi, Uber and Lyft



Source: BusinessofApps

4.5 Reasons to the success of Uber

The data show how Uber is gaining a large market share and it represents the main competitor of the traditional taxis. This paragraph has the aim to investigate the main drivers of the competitive advantage of Uber business model, focusing particularly on the main success factors and the weaknesses of the taxi industry.

When Uber started its activity in 2009, the taxi market in the main states of the U.S. (as described in the previous paragraph) was an old and static market, stuck between many regulations that did not allow the industry to quickly respond to the arrival of a new and competitive company (Dempsey, 1996). Below it is possible to identify some principal features of the traditional taxi industry before the introduction of Uber: after its advent, many States tried to regulate the new platform or improve the transportation industry (as depicted above) in order to try to compete with new companies, but the difficulties still exist due to the low-technology level of taxi industry and the limited technology experience of workers (Teece 2018).

i. *Not competitive market*. Generally, the taxi market was characterized by a low competition: in order to prevent a wide competition, fares were decided by the government or societies with the power to control the industry, and the access was limited (control of the number of licenses and vehicles).

ii. *Imperfect information and transaction costs.* The traditional taxi market was imbued with imperfect information and transaction costs, which are caused by the non-competition. The fixed prices and equality within the sector did not allow customers to make more advantageous choices. This less attention to customers was represented also by the difficulty to find a taxicab in certain areas, despite the radio service, because of their large aggregation in places where the demand was higher (i.e. near the airports or train stations). In that way, customers were charged by the search and the inefficiency costs.

iii. *Externalities.* As all the economic activities also taxi industry produces some externalities, especially the negative ones, related to the congestion of traffic and pollution. The rides prices consider and include these aspects, so customers are also charged for the negative effects produced.

iv. *Cross Subsidies.* In some cases, taxis were considered by the government as subsidies of public transport, thus they had to offer their service in areas where there was a public lack of service, with low prices and low possibilities to increase drivers income, letting the areas with high demand without a vehicle available.

Uber represents a disruptive innovation in the taxi industry: in other words, it describes a deep change in the competitive environment of an industry, thanks to the introduction of new products and services (Urbinati et al., 2018). First of all, Uber introduces the use of technology in its business model allowing the immediacy of the service, always available, anywhere and at any time (Smith, 2016). The use of GPS, Internet connection and smartphone application represent the point of differentiation compared to traditional taxi companies, which allows the change in how the same business is conducted and the gain in advantage. The second aspect is merely related to legislation: as specified in the previous paragraphs of this chapter, the taxi industry in the U.S. tends to be strictly regulated, whilst Uber, because of its not well defined activity, continues to operate in a sort of "legal void". Furthermore, Uber classifies its drivers as independent contractors, not as employees, and this is one of the main factors of low-cost strategy of the company, described above in the paragraph dedicated. In the end, social and economic conditions influence the introduction of new activities, in fact, it is demonstrated that the success of Uber also depends on the external environment.

Technological devices. The adoption of technology in transportation activity represents the first factor in the success of Uber. In fact, thanks to the Internet connection, smartphone application and GPS system, it is possible to match passengers with drivers more efficiently and quickly than the radio systems typical of traditional taxis. Besides, Uber has the ability to create a network system between its customers, particularly offering promotions through its website and newsletter, thus assuring customers loyalty and advocacy. The company also applies a system of double rating, where customers and drivers can vote how the ride was: this functionality allows to facilitate the matching between customers and drivers and also make the entire system safer. The adoption of a technological system is able to control the fluctuation of demand and adjust the fares in "real time" adopting the "dynamic pricing model". In fact, the company analyzes the demand for each time slot and adapts the number of vehicles and the price, which tends to be higher during the night and the weekend (Isaac et al., 2014).

Legal void. Uber has not a proper classification: the company defines itself as a "technology company" whilst on the other hand the taxi industry states that it is a "transportation company". The lack of clarity allows Uber to avoid the legal restrictions provided for the taxi industry, such as driver qualification, quality regulation, safety measures, restrictions to entry and fixed fares. The first effect of the legal void is represented by the number of Uber's vehicles active: in January 2019, only in New York City, Uber had 79,000 vehicles available whilst the number of yellow taxicabs reached only the 15,000 vehicles in the same period.[19] Furthermore,

[19] Source: Taxi, N. Y. C., & Limousine Commission, 2018. TLC Factbook.

traditional taxis could have some limitations of the areas where they can circulate, whilst Uber can pick up passengers everywhere in the city.

Being a "digital matchmaker" (Isaac et al., 2014), Uber does not have to take into account the regulations provided for employees of the transportation industry. In fact, Uber's drivers are independent contractors, not employees, and this classification excludes them from many workers' protection and at the same time makes them responsible for the cost of gas, car maintenance and accidents or vehicles unsafety. On the other hand, being independent workers, the drivers have a flexible additional source of revenue, which they can manage in complete freedom. Because of these features many workers are attracted, guaranteeing a wide availability of drivers and vehicles.

Economic and social conditions. Uber developed in a particular socio-economical context which, thanks to its features, allows the success of its business model. The 2008 economic recession caused a depressed labor market, where many full-time jobs were replaced with part-time jobs, hundreds of thousand people saw their real wages being reduced (Isaac et al., 2014): this where Uber comes in as it offers them a possibility to obtain an additional income with flexible conditions. Moreover, the crisis situation and the lack of stable work, permits the spread of non-regulated and less protective jobs.

This table *(Table 8)* sums up the main difference between the service offered by Uber and traditional taxis in New York City from the customer point of view, but also highlighting the process to become a taxi driver.

Table 8. Main difference between medallion taxi and Uber.

Service	***Traditional Taxi (yellow and green cabs)***	***Uber***
Reserve a cab	-Directly on the street - With a call from a dispatch -Recently through a smartphone application	-Through a smartphone application -On the website
Availability	- It depends from the area: yellow cabs are available in the Manhattan, while green cabs in Brooklyn. - The number of yellow vehicles is around 15,000 (January 2019).	- It can offer its service everywhere in the city. - the number of vehicles is around 79,000 (January 2019).

Ride's cost	-The base fare is $2.50 plus $0.50 for each 1.5 mile or each 60 seconds if the taxi is stuck in traffic or stopped. The fare is also charged by the night or special surplus (destination). (NYC TLC, 2020).	-The cost is calculated on min/per mile, also charged following the peak of demand until a maximum of 2.8x. The base fare is $ 2.55 (for regular cars) plus $1.75 for each mile, with a minimum fare of $7.00. (uber.com).
Become a driver	-Buy or lease a car and a medallion. (In order to obtain the license, the wannabe driver has to fulfill requirements of safety of the car, driving license, insurance). -Work for a taxi society. -Often full-time work.	- Having a car. -Subscribe on the website and pass the check of aptitude (having a driving license and a safe car). -Flexible work.
Driver income per hour	-It is not easy to calculate the driver income for an hour, because it depends on different States but also if drivers own the cars and license or if they lease them. The income is nearly $14.00-15.00 per hour (gross) (National Conference of States Legislators)	-The price differentiation of Uber drivers is determined of the type of vehicle. In order to make a comparison with Taxi, we take into consideration UberX drivers, who gain on average from $ 10.00 to 19.99 per hour (gross). (Businessofapps.com) -Avoid paying medallion. (Wyman, 2017)

Source: Personal elaboration

4.6 The research project

The previous paragraphs have analyzed the importance of the business model concept in companies' structure, in particular underlying the comparison between the business model of Uber and the traditional Taxi industry.

The paper demonstrates the success of the Uber business model, corroborated by the fact that technology companies are characterized by the immediacy of the service, the quick match between company and customers and the rating system to evaluate the quality of the service and suggest some improvements.

The present research aspires, once more, to support the same thesis, demonstrating the wide use of the platform thanks to the advantages provided by technology. The current investigation is represented by an online survey, divided into three different sections: the first one concerns basic interviews related to the gender, the age and the medium income of respondents, the second one regards the use of Uber, the frequency, the reasons and the way customers meet the company for the first time, whilst the third section concerns the advantages and disadvantages of Uber taxi.

The method

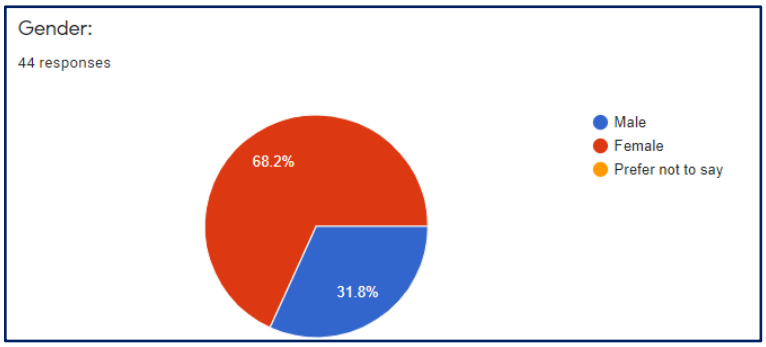
The investigation's method consists of the submission of an online survey by e-mail to a sample of 80 people of different ages (range between 18 and 50+), resident in the United States of America. This type of survey was selected because of the large number of advantages, such as the possibility to reach people all over the world without to know everyone, the speed of interviews, thus people do not need to spend much time to answer to the questions and they are enticed to complete the survey, and the simplicity to collect data with low administrative costs (Evans, 2005). On the other hand, the method presents also some disadvantages, related in particular to the perception of the mail as "junk mails", the misunderstanding about the aim of the survey, the limitation of the sample and the low response rate. Indeed, the sample considered in this case is very narrow to represent the entire population of the U.S., despite it tries to provide a complete overview of gender, ages and income ranges. Initially the people chosen were young people who were asked to diffuse the survey to their family and friends in order to obtain more contacts. Moreover, 70 days after the send, the results collected concern 44 responses, approximately 50% of the interviewed, a positive result despite the limitation of the sample. The lack of feedbacks of the other 50% is probably due to the absence of interest in the research, the lack of the right explanation about the scope of the study or the inefficiency of the instruments used: probably, certain people prefer paper questionnaires rather than on-line ones, especially older people.

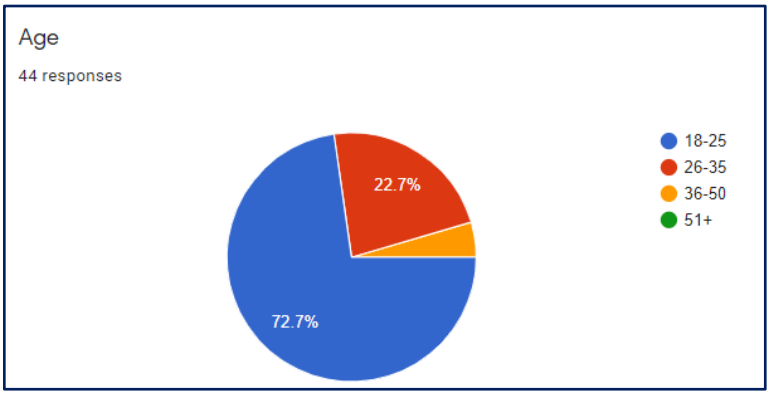
Despite the previous reflections, it is possible to analyze the results obtained, in order to observe the degree of appreciation of Uber company in users 'opinions.

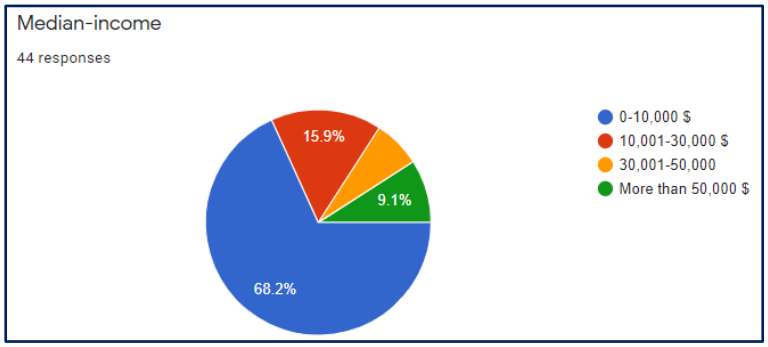
Data analysis

The first section of the survey concerns a basic overview of the gender, age and range of income of the respondents. We can observe that on 44 interviewed 68.2% are female whilst the remaining 31.8% are male. Besides, the majority of the sample (72.7%) belongs to the 18-25 age group, the second segment with the higher percentage (22.7%) includes people who are part of the 26-35 age group and the other 4.6% is referred to people with an age between 36 to 50 years old. Anyone of the respondents has an age higher than 51 years old so the sample does not include all the age groups of the population.

The most popular income bracket is $ 0-10,000 which 68.2 % of respondents belong, followed by the range $ 10,001-30,000 (15.9%), more than 50,000 (9.1%) and in the end 30,001-50,000 (6.8%). Basically, the majority of respondents are young people, in particular females, with an age from 18 to 25 and a medium income from $ 0 to $10,000, probably students or employed in a first job.

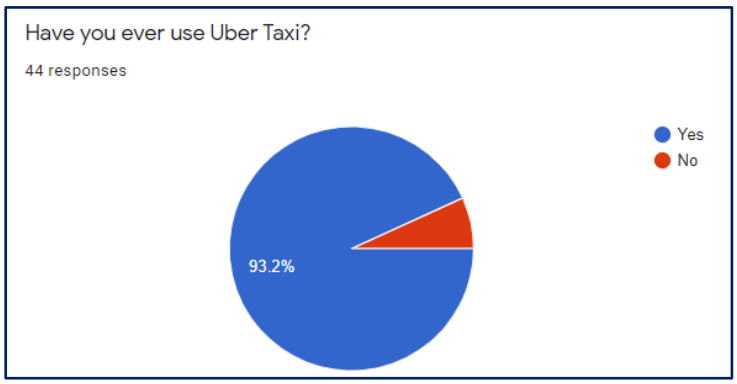


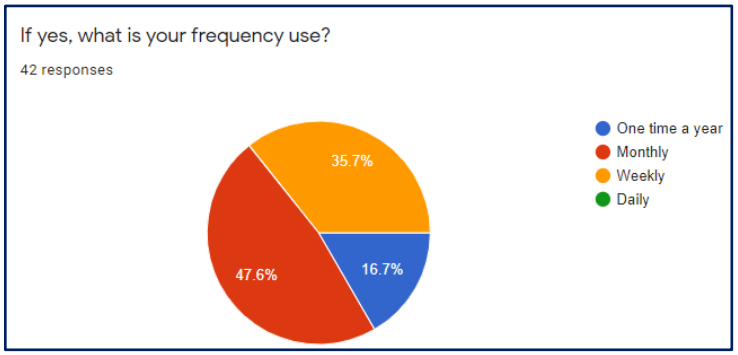


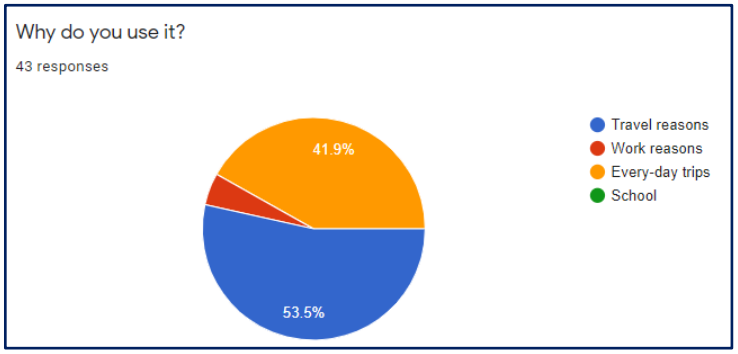


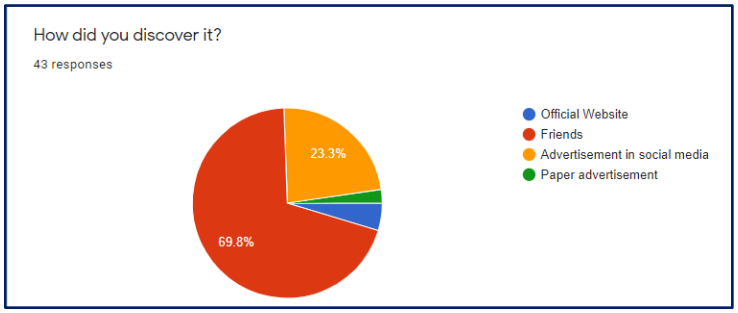
The second section offers an analysis of the use of Uber taxi rather than the traditional one. First of all, the great majority of respondents (93.2%) used Uber at least once and this is a confirmation of the widespread of the company in American cities, despite the sample is biased. Moreover, another important variable concerns the frequency of use of Uber, which for the majority of users (approximately 47.6%) is monthly but a great percentage uses the service weekly (35.7%). Only 16.7% at least one time a year. On average the main reason to use this service is travel reasons (53.5%) or every-day trips (41.9%), for instance, commissions or shopping, whilst the use for work reasons is very rarely (4.6%) and zero as concerns school trips. Basically, Uber is a perfect substitute for the traditional taxis, in fact, they are often used on occasions where people do not have a personal car (i.e. during travel) or when there is not a wide availability of public transports.

In the end, the main source of marketing for the company is constituted by the word of mouth of friends (69.8%) and advertisement in social media (23.3%), whilst the paper advertisements and official website are less popular.





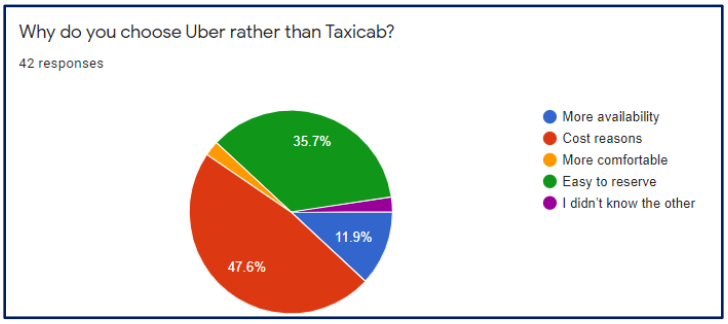


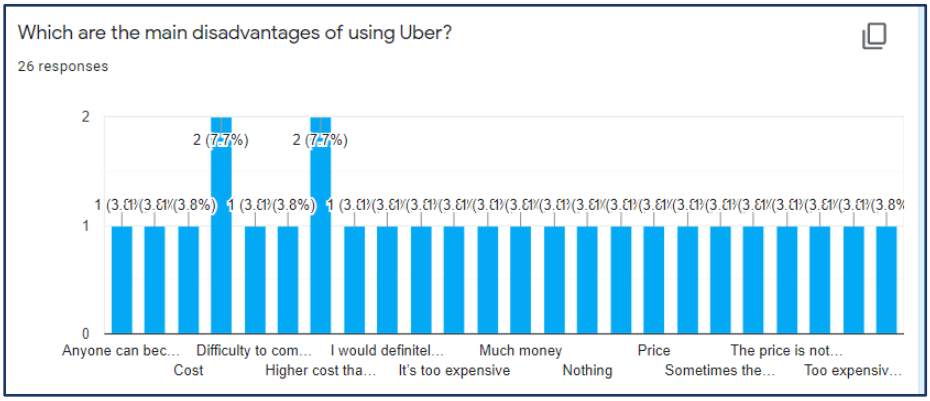


The third section has the aim to discover the reasons why customers prefer Uber service than the traditional taxi but also tends to underline the weaknesses of the company.

The first graph depicts that 47.6% of users choose Uber for cost reasons, because it has a competitive and low price than taxis, but also for the easiness to reserve (35.7%), in fact, the application is a fast method to make a reservation and offers the possibility to check the position of the vehicles and the ratings of the drivers. Furthermore, 11.9% of customers consider higher availability of cabs than traditional taxis.

Despite the advantages, customers underline also some weaknesses of the company, in particular, related to the price and safety: in fact, users (13 respondents on 26) complain about the cost that is higher than public transports and variable according to the peak hours. Furthermore, another important fact is referred to the safety, in fact, they highlight that anyone can become a driver and the risk to meet a "wrong" driver is high.





To conclude, this survey, despite its limitation, offers an additional confirmation about the main target of Uber users, young people (especially from 18-25, probably without an own car and high economic possibility) with great availability of technology who tend to use it monthly or weekly for travel reasons or every-day commissions. Besides, they prefer to use it rather than traditional taxis because of the cost reasons, the easiness to reserve and the more availability of vehicles, as to confirm by the business model of the company, which has the aim to guarantee the service rapidly and with competitive prices. In the end, the weaknesses of the company are the same that will be analyzed in the next chapter of this dissertation, especially the safety of vehicles and also the different prices, higher than public transports and depending on peak hours.

4.7 Conclusion

The deployment of technology in a business model and the consequent innovation of this from the static and old approaches assure a competitive advantage and an increase in revenues. In fact, ride-hailing companies, like Uber, do not act only as "taxi companies" but they offer more: they connect people who require a service with those that offer that service, they respond

immediately to requests, offer a flexible work without need a license to drivers, apply not fixed and competitive prices. The company, founded in 2009, nowadays counts more than 5 million drivers, and especially in the U.S, particularly in New York city, the number of its rides has passed greatly the number of traditional taxis. In fact, from 2016 to 2019 Uber registered an increase from 100,000 rides to 500,000 whilst the traditional taxis decreased from 500,000 to 200,000. The causes are manifold: the main is related to the high regulation of the taxi sectors, which include the control of entry, the uniform fares and health and safety regulation referred both to customers and to drivers. These measures, created to protect the market, caused, at the same time, a non-competitive situation, an imperfect information, high transaction costs and lots of externalities. Because of all these inefficiencies, the Uber model found a "fertile soil" to operate and develop its business. These facts are supported also by the results of the survey, which investigates the habits of a sample resident in the U.S., underlying their preference to use Uber than taxis, monthly or weekly, for the competitive prices and the easiness to reserve a ride. This system has caused a revolution in the taxi sector but the same key factors, which allows its success, are also big issues for Uber company, as evidenced also in the survey.

Indeed, its main potential and advantage is due to the legal void. First of all, it does not respect all the restrictions of the taxi industry, in particular the fixed number of licenses and the provisions concerned safety of cars and insurance. Secondly, the company classifies its workers as independent contractors, in order to guarantee them the maximum flexibility but also reduce operating costs, leaving them without regulations and protections.

These themes, if not solved, could be unfavorable in the long term, hence they need a solution, for this reason the topic will be treated in the next chapter.

Chapter 5

Weaknesses and proposals for Uber business model

5.1 Introduction

This dissertation investigates the innovation in business model especially through the introduction of Internet, examining the case of Uber. Indeed, in the fourth chapter of the present work, it is possible to observe the analysis of the Uber business model, which emphasizes the main features and the key success factors. But the structure depicts also some weaknesses concerning drivers' conditions, car safety, the privacy of information, discrimination and the regulation of the entire company.

This chapter has the purpose to investigate, in detail, all these issues, whose common denominator is the lack of regulation, a conundrum that we will try to unravel by proposing some solutions.

The first paragraph analyzes all the main weaknesses typical of the Uber business model and focuses in particular on drivers' conditions and on their hourly wages, compared with the taxi income. In the second paragraph some solutions are proposed to the lack of regulation and also the analysis of some critical points referred to the same solutions proposed, whilst the last paragraph tries to examine if the platform business model, adopted by Uber, is a sustainable method to operate and could be applied in different realities nowadays.

5.2 Uber's weaknesses

As stated in the previous chapter, the Uber business model exhibits points of innovation and success that can become also weaknesses and issues to resolve.

One of the main points of interest concerns *drivers' condition*: they represent the first key success factor of the company, for the flexible work and the immediacy to respond to requests but also for their classification as independent workers, which allows a reduction of operating costs. But on the other hand, these conditions express a lack of regulations and protections for the "employees".

The second point of discussion is constituted by *safety problems*, which concerns not only the check of vehicles but also the insurance for the third parties. Moreover, the company has to face the problem of *privacy* regarding all the data acquired by the application and its conservation.

Last but not least, there is another issue related to the rating system: in fact, many drivers risk being *discriminated* against for their ethnicity or vehicle or they discriminate passengers for the same reasons, and at the same time, the company reputation is strictly correlated to driver's behaviours.

This paragraph has the aim to analyze, in detail, the issues listed above, in order to better understand Uber's weaknesses and try to resolve them.

Drivers' conditions analysis

The fourth chapter of this dissertation examines Uber's business model *(4.2 Business model canvas)* introducing a first study about drivers *(Figure 17)*. In particular, it is possible to observe the variety of ethnicity of drivers (a great majority, 37%, are White Caucasian, following by 18% Black/ African American, 15% Asian or Pacific Islander, 16% Hispanic/ Latino, 6% other ethnical minority and 7% unknown). Furthermore, more than half of drivers are between the ages of 30 and 49 (56% of interviewed) whilst the remaining percentage is split into over 50 (24%) and 18-29 range (19%). This analysis underlines also the aspect referred to the level of education: in fact, 48% of drivers have a college or advance degree and 24% a degree or trade school.[20]

The previous study offers a first overview of driver's classification that in this paragraph will be completed by considering other aspects, including monthly earnings, the average stay in the company and the measures of protection of workers.

[20] Source : Official website of Uber, available on https://www.uber.com/it/en/. Date of access October 2020.

The first point of interest concerns the monthly earnings, which is not easy to identify because it depends on many factors: the types of service offered (standard taxi service or luxury), the locations, the working hours, the degree of experience of drivers and their age.

In fact, Uber provides different solutions at different prices: UberX, which is the cheapest service, has a minimum fare of 7.20$ whilst the Uber Black's minimum price is double (15 $)[21]. Furthermore, the prices based on time and miles changes in relation to different cities, as shown in tables below *(Figure 34)* but the price varies also in relation to the timeframes: peak hours or night time have a higher fare than other times of day, hence drivers tend to develop the ability to work only in certain periods of the day, the most profitable. Drivers' experience includes the liberty to decide when to work but also the ability to offer a great trip: a driver with more than 25000 lifetime trips completed earns 14% more than a driver who has completed fewer than 100 trips (Cook et al., 2018). The last aspect concerns the age of drivers, in fact, it has been observed that younger drivers gain more than older: ones drivers from 18-30 years old earn about 17.98 $ per hour whilst the over 60 only 14.56$, although this fact could depend on the hours of rides as younger drivers probably prefer to work during the night since it is more lucrative[22].

According to some researches[23] the 75% of Uber drivers provide Uber X service, which is the cheapest and the most comparable with the traditional taxi, thus in the next observations, this paper, will take into consideration only this service.

Among the main factors, listed above, on which the average income of the drivers depends, the two most relevant are represented by *flexibility* and *working experience*. Indeed drivers have not fixed hours, they can decide when to start, when to finish, whether to work full time or part time, during the day or night, whilst *working experience* represents not only the ability of drivers but also the more lucrative time frames and locations in which workers could drive (i.e. during the night or weekend). It is estimated that drivers working more than 30 hours per week earn 7% less per hour than drivers who work 10 hours per week, because they are able to choose more profitable times to work than full time drivers (Cook et al., 2018).

In order to estimate the monthly earnings of Uber drivers, it is necessary to start from the hourly gain, analyzing the price of a single ride and the related costs. Many studies tried to define the driver's earning, basing on interviews (Hall et al., 2018), aggregate statistics (Angrist et al.,

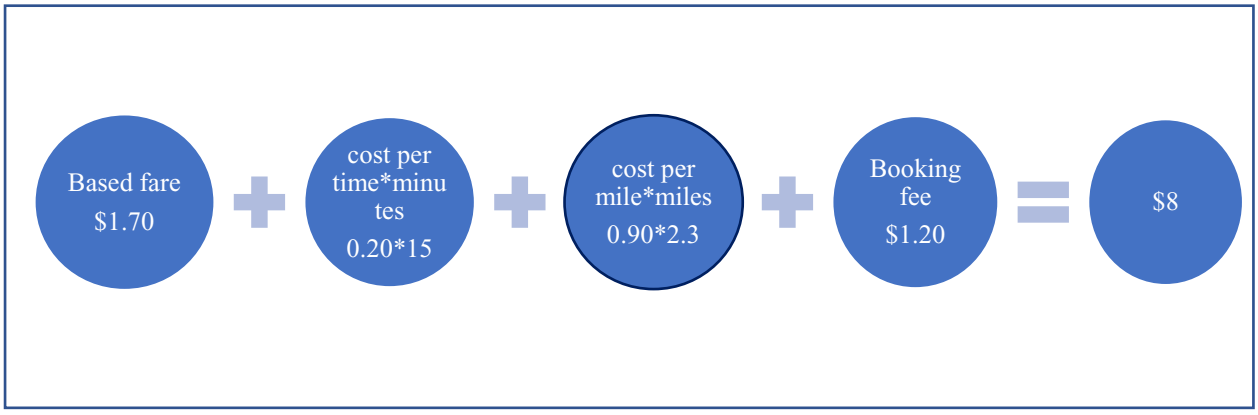
[21] Source: Official website of Uber, available on https://www.uber.com/us/en/price-estimate/. Date of access October 2020.
[22] Source: New C., March 2020, *Analysis of the sharing economies*, Earnest. Available on https://www.earnest.com/blog/sharing-economy-income-data/. Date of access September 2020.
[23] Source: Halling B., Sept. 17th 2020, Ridester. Available on https://www.ridester.com/. Date of access 24th September 2020.

2017), or directly from the administrative records of the platform (Hyman et al., 2020)[24] thus the results are different and depend on the reliability of data collection and statistical tool, and the willingness of workers to respond correctly. This work takes into consideration the results of the papers mentioned above, in order to obtain the most correct approximation.

The Uber fare is calculated by the sum from base fare plus cost per time, cost per mile and eventually the booking fee. But this is not the drivers' net gain due to the costs they have to face, i.e. insurance, car lease payment, gas, vehicle maintenance which approximate around the 20% of the income, and, in particular, the Uber fee that amounts to 25% of the total fare[25] (Hall et al., 2018). In order to better understand the structure of costs and incomes, we take into consideration the example of Uber Chicago, despite each city has its own fixed fare and regulation concerning the minimum wage.

Drivers Gross Income in Chicago is equal to: Base fixed fare + (Cost per time*minutes) + (Cost per mile * miles) + booking fee. If we assume that a trip is long 2.3 miles and takes 15 minutes, the minimum gain from this ride is 8$[26], according also to the minimum fare of Uber X provides by Uber that is equal to 7.20$.[27]

Figure 33. Uber fare in Chicago.



Source: elaboration from data of Ridester

If we suppose two rides per hour (Hall et al., 2018) the gross income for an hour is approximately 16$. The above costs must be subtracted from this amount: 25% of Uber fee and 20% of general costs, thus the net driver gain is equal to 8.8 $.

[24] Source: Halling B., Sept. 17th, 2020, Ridester. Available on https://www.ridester.com/. Date of access 24th September 2020.
[25] Source : Official website of Uber, available on https://www.uber.com/it/en/. Date of access October 2020.
[26] Source: Halling B., Sept. 17th, 2020, Ridester. Available on https://www.ridester.com/. Date of access 24th September 2020.
[27] Source : Official website of Uber, available on https://www.uber.com/it/en/. Date of access October 2020.

As stated above, the hourly earnings of Uber X driver partners are not identical in each country and city. This paper focuses its attention on the United States of America but also within them there are significant differences. The table below *(Figure 34)* summarizes the gross earnings in the main cities of the U.S in 2015, underling the divergences between cities and working time. In fact, if we examine the first line, related to Boston city, drivers who work from 1 to 15 hours a week gain around $20.27 hourly, whilst those who drive over 50 hours gain $19.87. The same situation occurs in Chicago city, where those who drive from 35 to 49 hours gain 16.05$ hourly against the 15.82$ of whom drives over 50 hours, and the scheme is replicated in Los Angeles, New York and San Francisco.

Figure 34. Uber gross earnings in the main cities of U.S. in 2015

	1 to 15 hours/week		16 to 34		35 to 49		Over 50	
	Percent of driver-partners	Earnings per hour	Percent of driver-partners	Earnings per hour	Percent of driver-partners	Earnings per hour	Percent of driver-partners	Earnings per hour
BOS	51%	$20.27	32%	$20.64	12%	$20.51	5%	$19.87
CHI	58%	$15.48	29%	$15.94	9%	$16.05	4%	$15.82
DC	52%	$17.71	31%	$18.27	12%	$18.21	5%	$17.57
LA	55%	$18.09	30%	$18.09	10%	$17.57	5%	$16.46
NY	24%	$23.13	32%	$24.46	27%	$24.48	17%	$23.86
SF	53%	$22.53	31%	$23.86	11%	$24.02	4%	$23.75

Source: Hall et al., 2017.

The factors to consider in order to calculate the monthly earnings of Uber drivers are disparate and, as listed before, concerning the location, the city regulation but also if the drivers work full time or only a few hours in a month. For that reason, the average monthly income equal to 364$, provided by some researches[28], is not completely representative. Studies[29] demonstrate that 45% of drivers gain less than 99$, 39% between 100$ and 499$, 11% from 1,000$ to 1,499$ and only 2% earns from 1,500$ and 1,999$. The monthly wage is not the correct evaluation tool because of the flexibility of work, hence this research tries to consider only the hourly earnings.

[28] Source: New C., March 2020, *Analysis of the sharing economies*, Earnest. Available on https://www.earnest.com/blog/sharing-economy-income-data/. Date of access September 2020.
[29] Source: New C., March 2020, *Analysis of the sharing economies*, Earnest. Available on https://www.earnest.com/blog/sharing-economy-income-data/. Date of access September 2020.

The first consideration about Uber drivers' earnings concerns the comparison with the taxi drivers: despite the Uber costs, drivers who work for this company seem to gain more than the traditional taxi, whose wages range from 11$ to 16$ (this amount is referred to employees because for independent workers data are not reliable) (Hyman et al., 2020), and this fact is due to the lack of regulations about the numbers of vehicles and licenses, which constitute the main point of differentiation of Uber company. But Uber costs are variable thus this consideration is not always true but depends on the location and regulation of each state, as demonstrated below. The table *(Figure 35)* illustrates the earnings of the two drivers' categories in the main U.S. cities (Uber earnings are net on Uber fees but not cars' costs), always in 2015, and highlights the great difference of income.

Figure 35. Uber and taxi drivers' earnings in 2015.

	Earnings Per Hour or Hourly Wages	
	Uber Drivers-partners (Net Earnings Per Hour)	OES Taxi Drivers and Chauffeurs (Hourly Wages)
BOS	$20.86	$12.96
CHI	$16.23	$12.54
DC	$18.45	$14.26
LA	$18.43	$14.53
NY	$23.69	$15.74
SF	$23.87	$13.92

Source: Hall et al., 2017.

From the previous table *(Figure 35)* is easy to note how in certain cities the earning per hour of Uber is different and also very high: in 2019 New York has registered on average a gain of 26.24$[30] (gross) per hour, according to the federal minimum wage of 15 $ per hour.[31] But in other states, the hourly earnings do not reach the minimum provided by law: the State of Illinois increased the minimum hourly wage from 11$ to 15$[32], but we have seen from the example before that in Chicago drivers gained about 8.8$ net, thus this constitutes a great issue for Uber. Another aspect to observe concerns the gender gap: it is estimated that men earn roughly 7% more per hour than women (Cook et al., 2018). This fact could have the same reasons for the

[30] Source: Halling B., Sept. 17th 2020, Ridester. Available on https://www.ridester.com/. Date of access 24th September 2020.
[31] Source: National Conference of States legislators, available on https://www.ncsl.org/research/labor-and-employment/state-minimum-wage-chart.aspx. Date of access 22nd September 2020.
[32] Source: National Conference of States legislators, available on https://www.ncsl.org/research/labor-and-employment/state-minimum-wage-chart.aspx. Date of access 22nd September 2020.

differences in age and it depends always on the two main factors, differentiation of locations and degree of experience. Probably men tend to work more during the night than women hence they work in more lucrative situations and at the same time they gather driving experience.

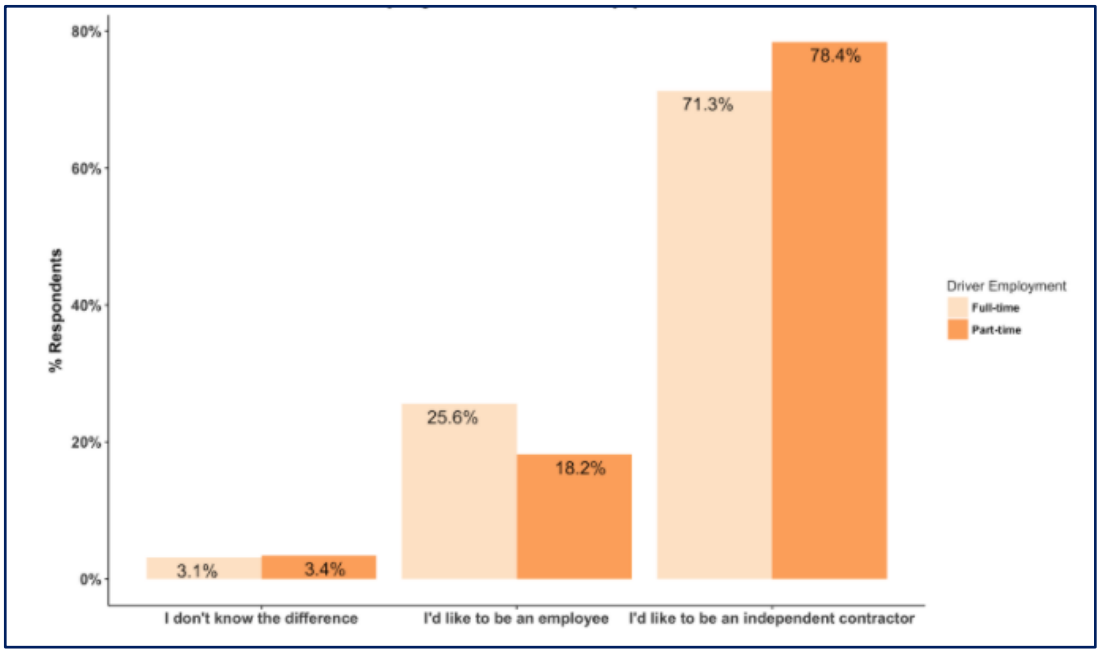
As declared many times in this dissertation, Uber constitutes a disruptive innovation in the transportation industry, and working for this platform allows to obtain significant advantages over the traditional taxi. First of all, Uber drivers' earnings tend to be higher than taxi employees and this aspect represents the main reason for the choice of platform (55.2%)[33]whilst, subsequently, the flexibility option constitutes the second element of success of the company, in fact a great number of drivers prefer to work less than 10 hours a week (Hall et al.,2017). All these characteristics are possible because drivers are classified as independent contractors and according to researches[34] around 70% of respondents desire to maintain this status, rather than only 26% who declared that they would prefer to be employees *(Figure 36)* (there are no significant differences from full time and part time workers). The preference to be regulated as independent workers remained stable also after the 2020 pandemic crisis, with a slight decrease from 81.47% to 71.39%. The reasons for this choice can be found, above all, on the tendency to remain within the company for brief periods, on average the 68% of drivers leave after six months[35], thus they are interested particularly in maximizing their revenues in the short time without thinking about other protection measures.

[33] Source: Mansoor I., *Investigation about Uber company*, August 2020, Business of Apps. Available on https://www.businessofapps.com/data/uber-statistics/. Date of access September 2020.

[34] Source: Campbell H., therideshareguy. Reports based on survey that was sent out via e-mail to nearly 70,000 Rideshare Guy subscribers between 8/16/19-9/11/19. Available on https://therideshareguy.com/uber-driver-survey/. Date of access September 2020.

[35] Source: Campbell H., therideshareguy. Reports based on survey that was sent out via e-mail to nearly 70,000 Rideshare Guy subscribers between 8/16/19-9/11/19. Available on https://therideshareguy.com/uber-driver-survey/. Date of access September 2020.

Figure 36. Drivers preferences about contracts



Source: therideshareguy

The differences between employees and independent contractors do not concern only the advantages offered by Uber: in fact, taxi drivers as employees have other benefits such as unemployment insurance, minimum workers compensation, retirement plan and health insurance, included in their contract. These measures are at the basis of workers' rights, thus the issue become more complex and a question arises: does maintaining the status of independent drivers mean to not observe basic workers' rights or, on the contrary, introducing a strict regulation will hurt the innovative business model of the company?

This question summarizes one of the big issues about the Uber business model and how he operates, which this chapter will attempt to resolve, providing some solutions. But first this paragraph continues to analyze the other weaknesses concerning the company business model.

Safety issue

Safety is another concern about Uber deployment of activity, first of all because of the lack of tight controls during the recruitment of drivers and subsequently for the inadequacy of protection measures (i.e. passenger insurance).

As depicted in the official website[36], becoming an Uber driver is quite simple, after registration, drivers are subjected to a screening online in order to check their driving record and criminal history (this, together with a car insurance certificate and a profile photo, are the only controls). Despite that more than one million potential drivers were excluded during these checks in 2017-2018, according to Uber safety report[37], in the same year in the U.S., 3,045 sexual assaults have occurred, 9 murders and 58 deaths from accidents. In order to improve the safety of trips, Uber has expanded the continuous driver screening, focusing especially on monitor new criminal offenses, and due to this further control 40,000 drivers have been removed from the app in 2018[38].Worries about unsafe cars is supported also by the fact that 40% of drivers still do not have rideshare insurance because of the prohibitive cost[39], thus in case of car accident passengers or third parties are not protected by compensation for damages. It is pretty remarkable the fact of the murder of a young girl in San Francisco in 2014, while Uber driver was distracted by Uber's app. His insurance did not cover third parties' damages but at the same time Uber company was not responsible because he was not carrying a passenger but the driver was waiting for a client (Rogers, 2015).

The lack of safety does not involve only customers but also drivers: in fact, they do not know the identity of the passengers (who do not have registration requirements), their cars are not provided by the glass between seats (as traditional taxis) and also they are not encouraged to refuse rides because it hurts their rating, and drivers with low rates work less and do not have access to Uber benefits and bonus. The company has improved the safety system in order to guarantee a secure workplace for drivers, implementing an emergency button that is connected directly with the 911, a GPS system to follow the ride and localize the car and the possibility to call the passenger maintaining the number anonymous, but, despite all these measures, the 53% of drivers declare that they need more safety and this phenomenon is one of the causes of scarce employment of women in this work[40].

[36] Source : Official website of Uber, available on https://www.uber.com/it/en/. Date of access October 2020.
[37] Source: Uber safety report 2017-2018, available on https://www.uber-assets.com/image/upload/v1575580686/Documents/Safety/UberUSSafetyReport_201718_FullReport.pdf
[38] Source: Uber safety report 2017-2018, available on https://www.uber-assets.com/image/upload/v1575580686/Documents/Safety/UberUSSafetyReport_201718_FullReport.pdf
[39] Source: Campbell, H., therideshareguy. Reports are based on survey that was sent out via e-mail to nearly 70,000 Rideshare Guy subscribers between 8/16/19-9/11/19. Available on https://therideshareguy.com/uber-driver-survey/. Date of access September 2020.
[40] Source: Campbell, H., therideshareguy. Reports are based on survey that was sent out via e-mail to nearly 70,000 Rideshare Guy subscribers between 8/16/19-9/11/19. Available on https://therideshareguy.com/uber-driver-survey/. Date of access September 2020.

Discrimination

The feedback system, which is one of the points of innovation of Uber platform with respect to traditional taxis, brings with itself some issues, like discrimination. In fact, both the parties (drivers and passengers) can have the access to previous evaluations and can decide to accept or refuse the rides: based on those, the problem is particularly evident in the case of bad reviews to racial-minority drivers or, on the other hand, drivers who do not accept passengers from the suburban neighborhood.

Discrimination in the taxi industry is not a recent event as the nature of this occupation is to connect different people, which allows a wide exposure to detrimental social experiences, including biases towards certain ethnicity/race or immigrant status. Even though it is difficult to avoid and limit the problem on the customers' side, a solution could be adopted on the driver's side, in particular thanks to the provisions adopted by digital platforms, which can reduce discrimination since they can control what drivers know about the passengers prior to pick them up (Ge et al., 2016).

Uber, even if it does not have a great power to intervene because drivers are independent contractors, hence its responsibility is marginal, tries to avoid and limit this problem by encouraging the possibility to obtain bonuses with high rates: in this case, drivers are recommended to not refuse any rides and also to establish a pleasant conversation with customers. In this way, the company increases its degree of client satisfaction because of the presence of excellent drivers: thus, the company adopts some initiatives of compensation also to maintain a respectable image due to the fact that the brand depends mostly on drivers' behaviors.

Privacy

The protection of personal data is one of the main issues that concern all companies in these years because data describe all customers preferences, where they live and the activities they do. It is a theme that has to be dealt with a lot of attention, especially in the digital era, where the data are incredible easily accessible. Many are the discussions around this matter, in particular when it is referred to giant companies like Google or Facebook, but also Uber possesses a large number of personal information, distinguishable into two categories: information provided directly by customers and the others collected through the use of the application. At the moment of registration customers are aware to provide some data such as name, e-mail address, phone numbers, postal address, payment method and profile picture,

whilst other information are recorded during the use of service, like location details, customers contacts, transaction made and also device information (i.e. hardware model, software or operating system used). According to Uber regulation (Hayes et al., 2017), the main data collected concern the travel patterns, thanks to the use of GPS system, which allow not only to identify the routes more frequented and the peak hours in order to increase the availability of vehicles, but also to monitor the competitors' rides. In fact, the system is activated five minutes before a ride and operates until five minutes after the end of the ride: thus, *"they are collecting geolocation data when the app is not being used for a ride and, more interestingly, is being used to monitor rides with competing services"* (Hayes et al., 2017). The set of information collected is very sensitive: it could be used not only in order to improve the company efficiency and defeat competitors with customized marketing campaigns but also could be treated "externally", for instance for political purposes. For all these reasons they need to be managed with particular attention by the company, in order to maintain its credibility and reliability.

5.3 Solutions proposed

The previous paragraph investigates the main issues related to the Uber business model: questions that risk undermining the entire success of the platform and for these reasons need to be resolved. The present section has the aim to analyze the measures already adopted by the company and the subsequent proposals in order to improve its system and way to operate.

With regard to the privacy issue, the company needs to adopt continuously high measures in order to protect customers and driver's data, informing about the treatment within the firm and with third parties.

Moreover Uber has to face discrimination problems, which, has already been demonstrated, it tries to resolve rewarding drivers with gratuities in cash or improving the number of their rides, if they do not refuse any rides in any neighborhood or from any type of customers.

The two main issues, which are referred basically to the lack of regulation of Uber company, concern the safety and driver's condition problem (a question of significant importance considering that the percentage of workers employed in alternative arrangements rose from 10.1% in 2005 to 15.8% in 2015) (Davidov, 2016). Complex aspects that involve not only the single provisions within the company, but also cities, states and the same workers.

Uber company: need for regulation

Classified as a hybrid structure, between provider of a platform and a transportation company, Uber does not follow a well-defined regulation, and its activity is administrated differently according to the various States and cities. Companies like that, which have developed technological platforms in order to bring together demand and offer, are defined in different ways such as sharing economy, gig economy, platform economy, but the most common is the on-demand economy, thus in this paragraph it will be classified in this way.

As demonstrated from taxi industry experience (Dempsey, 1996), deregulation does not represent a great point of advantage, in fact, lighter provisions of the 1960s, in the U.S., increased the number of taxis by up to 50% (in Phoenix), causing the market saturation, decreasing of fares, low barriers to entry and also scarce controls and safety. For this reason, Uber needs to be regulated, in particular for two main motivations:

1) The app-dispatches and traditional transportation are substitutes; thus, it is not legal that the first avoid complying with regulations to which the second is subject to.
2) Traditional taxis and e-hailed should be regulated to address market failures, in particular if there is a public reason. The taxi market is an inefficient market, characterized by the presence of natural monopoly, large sunk costs, information asymmetries and negative externalities.

Wyman (2017) suggests a concrete method to regulate both the on-demand companies but also the traditional one, because the existing taxi companies need to face the competition of platform firms. The approach consists of restructuring all the five pillars, in different dimensions:

-*Limited entry*. Limitation of the number of vehicles is a measure provided by the majority of states in the U.S. for two main reasons: to avoid an incredible number of taxis available with a consequent decrease of fares, income and the presence of low barriers to entry and, subsequently limiting the problem of congestion. E-hailing service is a substitute of traditional taxis since it is available on street at the same time and at the same rapidity as normal cabs, hence if it is impossible to limit the number of vehicles of a private company, it is vain also to limit the number of traditional taxis, because they are efficiently substituted. Nowadays, with innovative tools it is possible to think of a different plan and regulation of the taxi industry, indeed if during the 70s and 80s the liberalization of the number of vehicles caused inefficiency, today it could be resolved. A correct method to avoid a concentration of cabs only in certain areas or in certain times, is determined not by the control of licenses but by the use of

applications and platforms, which provide an indication of the more lucrative places and hours to work, charging different prices. In this way, all taxis are tempted to use this technological method and affiliate to a similar company, providing an improvement for the entire market, according to the preferences of customers. Managing only few companies rather than a large number of independent contractors allows the government to easily control their activities and the adoption of safety measures.

- *Taxi fare.* Many governments impose their control on taxi fare with the consideration that customers have not complete information when they look for a taxi on the street, both in terms of price and availability. On the opposite, if they reserve a taxi by phone or by the app, they have the possibility to compare the costs and the hours, for this reason a control on fares is not necessary, especially nowadays in which, with the advent of technology, the information are easily accessible directly on the phone. Fixed fares should be useful in case of monopoly, but Uber is not yet a monopoly in the sector, it could be overcome by new more advanced companies. In particular, due to its high losses[41], it risks being overtaken by other technologic and similar companies like Lyft.

-*Customers protection.* Clients need to travel in a safety cab, with a trustworthy driver, covered by insurance in case of accidents, for these reasons law has to prefix the safety standards that have to be applied both by the traditional taxi and private companies. Uber, as demonstrated above, applies different checks on the vehicles and on the drivers in order to assure the protection of customers and the reliability of the firm. The main lack concerns the low standard of insurance: being independent contractors, drivers do not have the possibility to pay high insurances for passengers and third parties, thus customers are not sufficiently protected. Government has to regulate the company in order to force it to provide its drivers with complete protection and guarantee safety rides for all the parties.

-*Universal service requirements.* As claimed in the previous paragraph, unfortunately the taxi sector is a market where discrimination is very popular. Companies like Uber are trying to limit this fact, from the drivers' side, encouraging drivers to not refuse any rides, in order to avoid low ratings. In fact, drivers are matched with customers without knowing their destination or view customer's profile: in this way they cannot refuse rides for the racial or neighborhood reasons, guaranteeing their service in each area of the city and for all citizens.

-*Drivers' protections.* Drivers' condition is the main issue concerned Uber company and the starting point is referred to as the difficulty of classification of workers as independent contractors or employees. Traditional taxis are both employees or independent contractors (for

[41] Source: Uber Technologies Inc. Annual Report 2019. Available in https://www.uber.com/it/en.

instance yellow cabs) but they have requirements to comply with, like the property of a license. Generally, an employee is *"any individual employed by an employer"* (Means et al., 2014) whilst on the other hand independent contractors are characterized by the concept of flexibility and the deployment of their own capital.

There are six critical factors, elaborated by the court, which have the purpose to clarify the categorization of workers:

1) The level of control of the employer over the work.
2) The opportunity for profit and losses on the workers 'hands.
3) The amount of capital investment the worker puts into the process.
4) Degree of skills owned by workers.
5) Whether the performance of the job is integral to the operating business.
6) The permanency of the relationship between the worker and the employer.

If the previous indications constitute some classification parameters, the distinction is not so marked. Workers in Uber are hired as independent contractors, because the company claims that it provides only an online platform, but actually, the corporation chooses and selects drivers according to the selection's measures provided on the website, monitors their performance (rating and feedback system), imposes their standards. Moreover, despite the flexibility, Uber, not only decides rides' fares, but also sends notes about peak hours, events like shows or matches, and other occasions in which many taxis are required, thus in the end workers operate when the company prefers. Basically, despite the official classification of the company, Uber's drivers resemble more employees rather than independents workers, thus they need to be regulated and deserve the benefit and protection measures of the traditional employees' workers. On the other hand, we have to take into consideration that on-demand companies constitute a hybrid situation, hence they do not fit exactly the requirements provided by both the categories (employees and independent). Indeed, it is not possible to extend the same level of coverage to all workers, in order to avoid offering much less than what workers in need of protection might need (Davidov, 2016). A right solution could be the creation of a third group, in the middle of the two pre-existent categories, able to include workers who share only some features of employees but who need to be regulated and protected. This solution is defined by Davidov (2016) as a purposive approach, a method which do not use traditional materials and tests but uses external and innovative solutions. In this way, on-demand workers would be classified within a specific category with "ad hoc" regulation and protection measures.

The protection of drivers does not concern only the regulation of their contracts but also safety during their work. The previous paragraph (*5.2 Uber's weaknesses*) underlines the scarcity of

measures of protection of workers such as the lack of defense glass or the unknown identity of passengers. In order to reduce the risk, Uber has introduced an emergency button that allows calling directly the emergency number, the possibility to monitor the rides and the period in which the vehicles stop for a long time, and the anonymization of their phone number if they call he passengers[42]. But these measures need to be implemented, for instance with the introduction of a mobile glass or the mandatory creation of a customer's profile in order to verify the passenger's identity.

Some critical points

The proposition of a more narrow regulation of the entire company and in particular of drivers conditions, is interpreted, by the company but also by many workers, as an impediment of innovation: indeed, the main feature of Uber firm is characterized by flexibility and the possibility for drivers to work part-time or in their free time, thus they do not need protection measures, retirement plans and other benefits accessible only with the employees status, and they argue that regulation constitutes only a limitation of their activity. Moreover, many drivers work not only for Uber but also for other companies, hence they spread the risk in different activities and act in total freedom, thus they fight against these provisions to be treated as employees because they want to maintain their status of independence.
It is impossible to introduce a company in the market without the respect of basic rules, first of all because of competition: if traditional taxis respect some restrictions related to public safety, a new company cannot avoid them. Secondly, because a complete regulation is not only necessary to guarantee workers' rights, but also the safety of the workplace and the third parties who enter in contact with them. Regulating the company and oblige it to respect some standards mean the possibility to introduce protection measures of vehicles, accident insurance and more control of drivers' personalities. On the other hand, the creation of a new category in which identify on-demand workers, provides them the possibility to maintain a certain level of independence, hence workers who decide to have a part time job with the company or to work only in their free time, can continue to do it, whist a different treatment can be reserved to full time workers, who need more protection measures including health insurance and plan retirements. Especially as concerns this last point, workers can have access to individual national plans, plans provided by States or municipals (which include also Black Car Fund

[42]Source: Uber safety report 2017-2018, available on https://www.uber-assets.com/image/upload/v1575580686/Documents/Safety/UberUSSafetyReport_201718_FullReport.pdf

Model, a fund reserved for taxi drivers) and private plans. The most adopted is the local plans, in particular the so-called ERISA (Employee Retirement Income Security Act of 1974), which offers not only a protection for the future but also health insurance and does not require specific identification of contractor as employee, for this reason it can be the solution for platform workers (Secunda, 2017).

5.4 Uber business model: economy of the future?

The advent of technology and its deployment in companies switched the space dedicated to exchanging activities from market to platform, an idealized place of encounter for buyers and sellers, demand and supply. This innovative way to conduct the business characterized by the use of technological tools, known as "e-business" and introduced in the third chapter of this dissertation *(3.5 E-business development)*, has revolutionized all the traditional activities.
Companies like Uber, Airbnb, Etzy or Amazon have started their innovation thanks to the advent of the Internet, which together with algorithms, represents the building blocks of the business model, the basis of the digital platforms. As depicted in the previous chapters of this work, these business model innovations, based on technological instruments, present four main characteristics:

i. *Infrastructure.* The innovation is symbolized from the introduction of new technological tools, first of all, Internet and cloud systems, instruments that, reducing costs, allow the immediate connection between sellers and consumers, obtaining customers' information and offering the products in the shortest possible times.
ii. *Training & Skills.* New tools imply new abilities and constant investments in training in order to prepare workers to face everyday situations in a better way.
iii. *Social protectors.* This point constitutes one of the main issues for platform economies because it is not clear if they guarantee to their workers all protection measures, such as health and safety insurance, retirement plans and other benefits or if all these provisions are a limitation of flexibility, one of the dominant feature of these businesses (Cohen, 2017).
iv. *Regulatory transition.* The traditional rules and laws that regulate market and companies are not completely available for the new realities, like platform economies, and tend to create conflicts and debates: digital firms need a new regulation created *ad hoc* for all that they represent.

Many technological revolutions happened over the years: the most famous cases concern the changes in the production of the goods during the early years of the 20th century, such as the automotive industry marked by the innovation of Ford and Toyota, but also other sectors explored a new method to do business in the same period, for instance mail orders and delivery in Sears company. The innovative way to conduct traditional activities, if on one hand bring with them worries and fears for the unknown, on the other hand try to evolve and improve the market: indeed, the examples above mentioned change the entire concept of their industry (Kenney et al., 2015).

The introduction of novelties needs a particular economic situation and environment, for instance, a crisis and uncertain period or a saturated or inefficient market. Nowadays, in this situation of economic deadlock, in particular during and after pandemic lockdown, many companies have discovered the power of the Internet and the deployment of e-business[43], for these reasons the model applied by platform or on-demand companies, can represent a revolution and a new way to develop pre-existent activities, generating new opportunities of profit. In fact, they perfectly embody the current needs: the desire for immediacy, the flexibility of work and a strict and direct relationship between customers and firms. Moreover, firms grow up by the community consensus (bottom up) and reputation is tracking by ratings (Smith, 2016).

The vast deployment of these types of activities seems ineluctable but it brings with itself some important issues related to companies 'regulation. In fact, as previously claimed, they need special directives because they cannot be considered on par with traditional firms that offer the same service. They cannot be defined as technological companies because they do no to provide only a tool but they offer a service, thus they represent a hybrid category, a new legal construct that needs to be regulated. In sum, the model adopted by the pioneer, i.e. Uber in the transportation industry, Airbnb in the hotel and apartments industry, Etzy and Amazon in the

[43]Source: According to Data Report research, over 300 million more people used the Internet in the last 12 months: 4.57 billion surfers (out of a total of about 7.77 billion people), with an increase of 7% compared to April 2019. Menichini R., April 30th 2020, available on: https://www.repubblica.it/tecnologia/socialnetwork/2020/04/30/news/lockdown_covid19_boom_di_smartphone_e_social_e_twitter_offre_i_suoi_dati_alla_ricerca-255286215/ (Date of access October 2020).
During the lockdown, in Italy, the 82,3% of companies interviewed used technological tools (22,2% for the first time) to contact their customers or to manage their company. https://www.confartigianatovicenza.it/e-commerce-social-network-messaggistica-durante-il-lock-down-indagine-confartigianato-boom-dei-social-per-le-impresa-artigiane-anche-in-chiave-post-emergenza/) (Date of access October 2020).

marketplace, constitute a model extremely replicable in other sectors, with the above mentioned conditions, and in compliance with *ad hoc* regulation.

5.5 Conclusion

This last chapter concludes the analysis of the Uber case, taking into consideration the weaknesses of the company, focusing in particular on drivers' status, the safety of the trips and privacy and discrimination issues. We have observed how Uber is making effort especially to resolve the last two points, encouraging drivers to not discriminate against passengers with rewards or bonuses and informing customers about the use of their data reaching by the app.
Instead, the situation is more complicated with regard to the drivers' conditions and safety issues, which are related to the lack of regulation of the company. After an analysis about drivers' status, that are placed in the middle between independent contractors and employees, it was found the necessity to collocate them into a new category of workers, in order to guarantee more protection concerning benefits as of right compensation (according to the minimum salary), health insurance and retirement plan, but at the same time the same degree of independence and flexibility that characterize the work in the platform.
A complete regulation allows also to increase safety during the trips because drivers need to be covered by insurance for themselves but also for passengers and third parties.
The business model introduced by Uber, classified as e-business model and corroborated by the use of the Internet and the application, represents a revolution for the future, which with the right precautions and regulations could be applied in different realities and companies.

Chapter 6

Conclusion

The implication of the business model concept in the companies' life, as the tool of expression of their business logic, offers significant advantages. Firstly, because its main purpose is encouraging a new level of analysis of the firms, secondly because it provides a holistic approach able to describe how a firm conducts its business. In particular, it is employed the Osterwalder nine blocks' structure (in some cases modified in order to better adapt to different circumstances), that summarizes and describes the main elements of a business, which need to be continuously improved and adjusted together with the strategy. Despite the difficulty in defining within a univocal definition the concept of business model, it can be resumed as an association of different factors (internal and external) with the aim to investigate, improve and create value not only for the company but for all the parties involved.

The business model constitutes a great point of advantage over competitors not only because it is a product or a service that can be easily replicable, but also because it is created by a set of elements that interact with each other. Hence a continuous improvement in its construction could provide a high source of profit. In order to allow that, a constant innovation of the business model, through the introduction of new elements or the change of interdependencies between them, is necessary but the main innovation is afforded by the introduction of technology and in particular of the Internet within firms. Indeed, the latter provide a great velocity of communication and interactions between different elements, enhance the relationship between customers and significantly reduce the waiting time. This specific business model innovation, driven by the use of the Internet, has originated a new model, called E-business and referred to the ability to conduct business electronically. This system, which represents a point of disruption over the past and the traditional business model, has obtained a remarkable success in different sectors, such as the transportation one, where the traditional taxi market has been revolutionized by the advent of digital companies like Uber.

Uber Taxi does not act as a traditional transportation firm but, thanks to the adoption of technology and Internet connection, it is able to efficiently link people who require a service with those who offer it. Thus, while on one hand it provides a rapid service maintaining

competitive prices, on the other hand it also offers an additional source of revenues to people, without any particular restriction. Analyzing the case of the United States, it is possible to observe that since its introduction in 2009, Uber has obtained a great success over the traditional taxis (with an increase from 9% of the market share to 25% or even to 49% in certain cities in only one year). Taking into consideration the city of New York, the number of Uber rides has passed from 100,000 in 2016 to 500,000 in 2019, whilst those of the traditional taxis decreased from 500,000 to 200,000 in the same period. The determinants of this success are manifold and concern not only the features of the business model but also the inefficiency of the existent market, which has allowed new companies to enter successfully. First of all, the taxi market is characterized by some restrictions, such as the control of entry, the uniform fares and health and safety regulation referred both to customers and to drivers, that are not required to Uber company, because of the difficulty to classify it as transportation company or technological firm. But the same provisions originated also a non-competitive situation, imperfect information, high transaction costs and lots of externalities, inefficiencies that hence allow Uber to develop its business greatly.

Despite its unquestionable success however, the Uber business model also presents some weaknesses, mostly related to its principal source of advantage. In fact, eluding the same restrictions of the taxi industry implies a dramatic decrease in safety of cars and a lack of insurance. Furthermore, in order to guarantee flexibility as one of the success factors of the company and reduce operating costs, Uber classifies its workers as independent contractors, with the consequence that they are not provided by regulations and protections. Besides, other issues are also those connected to the privacy of customers and discrimination.

Although Uber is making effort especially to resolve the last two points, encouraging drivers to not discriminate against passengers with rewards or bonuses and informing customers about the use of their data reached by the app, the situation is more difficult for the other problems. In order to guarantee high protection to workers maintaining at the same time an equal degree of flexibility, it is necessary to classify them in a new category, a sort of hybrid between the employees' and the independent workers' status. In this way, they could have access to minimum wage and protection measures (such as health insurance or retirement plans) and also the company could offer a better safety concerning the vehicles conditions and insurance, and especially protection for customers and third parties that now rely only on drivers' private insurance, which is often too low to cover damages.

In conclusion, the adoption of technology and Internet within the business model of companies, with the consequential creation of E-businesses (like Uber, Airbnb, Amazon), offer a series of advantages not only for companies but also for customers: for this reasons this model represents

a revolution for the future, a system that can be applied in other sectors, according to the right regulations and protection measures.

Bibliography

AMABILE, T. M.,1988. A model of creativity and innovation in organizations. *Research in organizational behavior*, *10*(1), 123-167.

AMIT, R., ZOTT, C., 2001. Value creation in e-business. *Strategic management journal*, *22*(6-7), 493-520.

AMIT, R., ZOTT, C., 2010. Business model innovation: Creating value in times of change.

ANGRIST, J. D., CALDWELL, S., HALL, J. V., 2017. *Uber vs. taxi: A driver's eye view* (No. w23891). National Bureau of Economic Research.

BADEN-FULLER, C., MORGAN, M. S., 2010. Business models as models. *Long range planning*, *43*(2-3), 156-171.

BARUA, A., KONANA, P., WHINSTON, A. B., YIN, F., 2004. Assessing internet enabled business value: An exploratory investigation. *MIS Quarterly*, *28*(4), 585-620.

BASHIR, M., VERMA, R., 2017. Why business model innovation is the new competitive advantage. *IUP Journal of Business Strategy*, *14*(1), 7.

BEKKEN, J. T., LONGVA, F., 2003. Impact of taxi market regulation. *TOI Report*.

BELUSSI, F., ORSI, L., & SAVARESE, M., 2019. Mapping business model research: a document bibliometric analysis. *Scandinavian Journal of Management*, *35*(3), 101048.

BERGER, T., CHEN, C., FREY, C. B., 2018. Drivers of disruption? Estimating the Uber effect. *European Economic Review*, *110*, 197-210.

BOESSO, G, PASTEGA, L., 2018. Strategic & Business planning. E-book. Wolters Kluwer, Milano.

BOSSINK, B. A., 2004. Managing drivers of innovation in construction networks. *Journal of construction engineering and management*, *130*(3), 337-345.

BRUNO, R., 2008. Driven into poverty: A comprehensive study of the Chicago taxicab industry. *Chicago: School of Labor and Employment Relations, University of Illinois at Chicago*.

CASADESUS-MASANELL, R., ZHU, F., 2013. Business model innovation and competitive imitation: The case of sponsor-based business models. *Strategic management journal*, *34*(4), 464-482.

CHESBROUGH, H., 2007. Business model innovation: it's not just about technology anymore. *Strategy & leadership*.

CHESBROUGH, H., 2010. Business model innovation: opportunities and barriers. *Long range planning*, *43*(2-3), 354-363.

CHESBROUGH, H., ROSENBLOOM, R. S., 2002. The role of the business model in capturing value from innovation: evidence from Xerox Corporation's technology spin-off companies. *Industrial and corporate change*, *11*(3), 529-555.

CHIARONI, D., CHIESA, M., CHIESA, V., FRANZÒ, S., FRATTINI, F., URBINATI, A., 2015. From radical to disruptive innovation: the relevance of the context factors.

COHEN, J. E., 2017. Law for the platform economy. *UCDL Rev.*, *51*, 133.

COLLIER, R. B., DUBAL, V. B., CARTER, C. L., 2018. Disrupting regulation, regulating disruption: The politics of Uber in the United States. *Perspectives on Politics*, *16*(4), 919-937.

CONWAY, M. W., SALON, D., KING, D. A., 2018. Trends in taxi use and the advent of ridehailing, 1995–2017: Evidence from the US National Household Travel Survey. *Urban Science*, *2*(3), 79.

COOK, C., DIAMOND, R., HALL, J., LIST, J. A., OYER, P., 2018. *The gender earnings gap in the gig economy: Evidence from over a million rideshare drivers* (No. w24732). National Bureau of Economic Research.

CRAMER, J., KRUEGER, A. B., 2016. Disruptive change in the taxi business: The case of Uber. *American Economic Review*, *106*(5), 177-82.

CROTEAU, A. M., BERGERON, F., 2001. An information technology trilogy: business strategy, technological deployment and organizational performance. *The journal of strategic information systems*, *10*(2), 77-99.

CUMMINGS, D., 2009. Why has the price of taxi medallions increased so dramatically? an analysis of the taxi medallion market. *The Park Place Economist*, *17*(1), 9.

DANIEL, E. M., WILSON, H. N., 2003. The role of dynamic capabilities in e-business transformation. *European Journal of Information Systems*, *12*(4), 282-296.

DARBÉRA, R., 2010. Taxicab regulation and urban residents' use and perception of taxi services: a survey in eight cities.

DASILVA, C. M., & TRKMAN, P., 2014. Business model: What it is and what it is not. *Long range planning*, *47*(6), 379-389.

DAVENPORT, T. H., SHORT, J. E., 1990. The new industrial engineering: information technology and business process redesign.

DAVIDOV, G., 2016. The status of Uber drivers: A purposive approach. *Spanish Labour Law and Employment Relations Journal (2017), Forthcoming*, 17-7.

DEMPSEY, P. S., 1996. Taxi industry regulation, deregulation & (and) reregulation: The paradox of market failure. *Transp. LJ*, *24*, 73.

DUBOSSON-TORBAY, M., OSTERWALDER, A., PIGNEUR, Y., 2002. E-business model design, classification, and measurements. *Thunderbird International Business Review*, *44*(1), 5-23.

EVANS, J. R., MATHUR, A., 2005. The value of online surveys. *Internet research*.

FJELDSTAD, Ø. D., SNOW, C. C., 2018. Business models and organization design. *Long Range Planning*, *51*(1), 32-39.

FOSS, N. J., SAEBI, T. (eds.)., 2015. *Business model innovation: The organizational dimension*. OUP Oxford.

GE, Y., KNITTEL, C. R., MACKENZIE, D., & ZOEPF, S., 2016. *Racial and gender discrimination in transportation network companies* (No. w22776). National Bureau of Economic Research.

GEISSDOERFER, M., SAVAGET, P., EVANS, S., 2017. The Cambridge business model innovation process. *Procedia Manufacturing*, *8*, 262-269.

GEISSDOERFER, M., VLADIMIROVA D., EVANS, S., 2018. Sustainable business model innovation: A review. *Journal of cleaner production*, *198*, 401-416.

GWILLIAM, K. M., 2005. Regulation of taxi markets in developing countries: issues and options.

HALL, J. V., KRUEGER, A. B., 2018. An analysis of the labor market for Uber's driver-partners in the United States. *ILR Review*, *71*(3), 705-732.

HARDING, S., KANDLIKAR, M., GULATI, S., 2016. Taxi apps, regulation, and the market for taxi journeys. *Transportation Research Part A: Policy and Practice*, *88*, 15-25.

HAYES, D. R., SNOW, C., ALTUWAYJIRI, S., 2017. Geolocation Tracking and Privacy Issues Associated with the Uber Mobile Application. In *Proceedings of the Conference on Information Systems Applied Research ISSN* (Vol. 2167, p. 1508).

HEDMAN, J., KALLING, T., 2003. The business model concept: theoretical underpinnings and empirical illustrations. *European journal of information systems*, *12*(1), 49-59.

HONG, Y. C., FAUVEL, C., 2013. Criticisms, variations and experiences with business model canvas.

HUSE M., NEUBAUM, D. O., GABRIELSSON, J., 2005. Corporate innovation and competitive environment. *The International Entrepreneurship and Management Journal*, *1*(3), 313-333.

HYMAN, L., GROSHEN, E. L., LITWIN, A. S., WELLS, M. T., THOMPSON, K. P., CHERNYSHOV, K., 2020. Platform Driving In Seattle.

ISAAC, E., DAVIS, U. C., 2014. *Disruptive innovation: Risk-shifting and precarity in the age of Uber* (p. 7). Berkeley Roundtable on the International Economy [University of California, Berkeley].

JOHNSON, G., WHITTINGTON, R., SCHOLES, K., 2014. Strategia Aziendale. Pearson, Milano-Torino.

JONES, G.R., 2013. "Organizational Theory, Design and Change". Pearson Education Limited.

KAMBIL, A., 1995. Electronic commerce: implications of the Internet for business practice and strategy. *Business Economics*, 27-33.

KENNEY, M., ZYSMAN, J., 2015, June. Choosing a future in the platform economy: the implications and consequences of digital platforms. In *Kauffman Foundation New Entrepreneurial Growth Conference* (Vol. 156160).

KING, A.,1993. Innovation in organizations. *International review of industrial and organizational psychology*, *7*, 1l34.

KOTLER, P., KARTAJAYA, H., SETIAWAN, I., 2016. *Marketing 4.0: Moving from traditional to digital*. John Wiley & Sons.

LIANG, T. P., HUANG, C. W., YEH, Y. H., LIN, B., 2007. Adoption of mobile technology in business: a fit-viability model. *Industrial management & data systems*.

LIN, H. F., LIN, S. M., 2008. Determinants of e-business diffusion: A test of the technology diffusion perspective. *Technovation*, *28*(3), 135-145.

LINDGARDT, Z., REEVES, M., STALK, G., DEIMLER, M. S., 2009. Business model innovation. *When the Game Gets Tough, Change the Game, The Boston Consulting Group, Boston, MA*.

MAGRETTA, J., 2002. Why business models matter.

MASSA, L., TUCCI, C. L., & AFUAH, A., 2017. A critical assessment of business model research. *Academy of Management Annals*, *11*(1), 73-104.

MASSA, L., TUCCI, C. L., 2013. Business model innovation. *The Oxford handbook of innovation management*, *20*(18), 420-441.

MEANS, B., SEINER, J. A., 2015. Navigating the Uber economy. *UCDL Rev.*, *49*, 1511.

MORRIS, M., SCHINDEHUTTE, M., ALLEN, J., 2005. The entrepreneur's business model: toward a unified perspective. *Journal of business research*, *58*(6), 726-735.

OSTERWALDER, A., PIGNEUR, Y., TUCCI, C. L., 2005. Clarifying business models: Origins, present, and future of the concept. *Communications of the association for Information Systems*, *16*(1), 1.

OSTERWALDER, A., PIGNEUR, Y., 2011. Aligning Profit and Purpose Through Business Model Innovation. *Responsible management practices for the 21st century, 61-75*.

OVANS, A., 2015. What is a business model. *Harvard business review*, *23*, 1-7.

PHAN, D. D., 2003. E-business development for competitive advantages: a case study. *Information & Management*, *40*(6), 581-590.

PORTER, M. E., 1996. What is strategy?. *Harvard business review*, *74*(6), 61-78.

ROGERS, B., 2015. The social costs of Uber. *U. Chi. L. Rev. Dialogue*, *82*, 85.

SCHALLER, B., 2005. A regression model of the number of taxicabs in US cities. *Journal of Public Transportation*, *8*(5), 4.

SCHALLER, B., 2007. Entry controls in taxi regulation: Implications of US and Canadian experience for taxi regulation and deregulation. *Transport policy*, *14*(6), 490-506.

SECUNDA, P. M., 2017. Uber Retirement. *U. Chi. Legal F.*, 435.

SEDDON, P., LEWIS, G., 2003. Strategy and business models: what's the difference? *PACIS 2003 Proceedings*, 17.

SMITH, J. W., 2016. The Uber-all economy of the future. *The Independent Review*, *20*(3), 383-390.

STEWART, D. W., & ZHAO, Q., 2000. Internet marketing, business models, and public policy. *Journal of public policy & marketing*, *19*(2), 287-296.

TEECE, D. J., 2010. Business models, business strategy and innovation. *Long range planning*, *43*(2-3), 172-194.

TEECE, D. J., 2018. Business models and dynamic capabilities. *Long range planning*, *51*(1), 40-49.

URBINATI, A., CHIARONI, D., CHIESA, V., FRANZÒ, S., FRATTINI, F., 2018. An exploratory analysis on the contextual factors that influence disruptive innovation: the case of Uber. *International journal of innovation and technology management*, *15*(03), 1850024.

WALLSTEN, S., 2015. The competitive effects of the sharing economy: how is Uber changing taxis. *Technology Policy Institute*, *22*, 1-21.

WIRTZ, B., DAISER, P., 2018. Business model innovation processes: A systematic literature review. *Journal of Business Models*, *6*(1), 40-58.

WU, F., MAHAJAN, V., BALASUBRAMANIAN, S., 2003. An analysis of e-business adoption and its impact on business performance. *Journal of the Academy of Marketing science*, *31*(4), 425-447.

WYMAN, K. M., 2017. Taxi regulation in the age of Uber. *NYUJ Legis. & Pub. Pol'y*, *20*, 1.

ZOTT, C., AMIT, R., MASSA, L., 2011. The business model: recent developments and future research. *Journal of management*, *37*(4), 1019-1042.

ZOTT, C., & AMIT, R., 2013. The business model: A theoretically anchored robust construct for strategic analysis. *Strategic Organization*, *11*(4), 403-411.

ZOTT, C., AMIT, R., 2015. Business model innovation: Toward a process perspective. *The Oxford handbook of creativity, innovation, and entrepreneurship*, *395*.

Sitography

CAMPBELL, H., Rideshareguy reports based on survey that was sent out via e-mail to nearly 70,000 Rideshare Guy subscribers between 8/16/19-9/11/19, available on **https://theridesharegu y.com/uber-driver-survey/.** [Date of access September 2020].

DE BEST, R., number of downloads of the Uber app in Europe, Mar. 1st, 2019, available on **https://www.statista.com/chart/17209/uber-app-downloads-in-europe/** [Date of access 22 August 2020].

HALLING, B., Sept. 17th, 2020, Ridester provides tailored content about the on-demand transportation industry. Their publications are quoted in Forbes, The New York Times, The Guardian, CNBC**.** Available on **https://www.ridester.com/** [Date of access 24 September 2020].

HOLST, A., *the importance of and investment plan for IoT in business worldwide 2018, by Industry*, Mar. 2, 2020. Available on Statista **https://www.statista.com/statistics/945058/worldwide-iot-importance-digital-trust-industry/#statisticContainer** [Date of access 17 August 2020].

MANSOOR, I., *investigation about Uber company*, Aug.2020, available on Business of Apps **https://www.businessofapps.com/data/uber-statistics/** [Date of access September 2020].

MAZAREANU, E., *Gender's diversity of Uber's employees,* Oct. 23rd, 2019. Available on Statista **https://www.statista.com/statistics/693807/uber-employee-gender-global/** [Date of access 21 August 2020].

MAZARENU, E., *the frequency of taxicab usage in the U.S. in 2018,* Oct. 8th 2019, available on Statista **https://www.statista.com/statistics/936422/taxi-cab-usage-frequency-united-states/** [Date of access 25 August 2020].

MCGRATH, F. *demographics of Uber's users,* 2017. Available on GlobalWebIndex **https://blog.globalwebindex.com/chart-of-the-day/uber-demographics/** [Date of access 21st August 2020].

MENICHINI, R., April 30th, 2020, available on Repubblica.it-Italian daily newspaper **https://www.repubblica.it/tecnologia/social-**

network/2020/04/30/news/lockdown_covid19_boom_di_smartphone_e_social_e_twitter_offre_i_suoi_dati_alla_ricerca-255286215/ [Date of access October 2020].

NEW, C., *analysis of sharing economies*, Mar. 2020. Available on Earnest **https://www.earnest.com/blog/sharing-economy-income-data/** [Date of access September 2020].

http://graphics.eiu.com/files/ad_pdfs/2005Ereadiness_Ranking_WP.pdf [economist intelligence unit 2005]. [Date of access 13th August 2020].

https://www.eiu.com/public/topical_report.aspx?campaignid=Industries2012 [economist intelligence unit 2012]. [Date of access 13th August 2020].

https://www.uber.com/it/en/ [Official website of Uber company]. [Date of access August/September/October 2020].

https://www.uber.com/en-IT/blog/search/drivers/ [Uber conducted driver's research in December 2017]. [Date of access August 2020].

https://mission-statement.com/uber/ [Agency that investigates mission and vision statements of main companies] [Date of access 4th September 2020]

https://secondmeasure.com/datapoints/rideshare-industry-overview/ [Second Measure is technology company that provides analysis on companies' performance and consumer behavior. It analyzed the Uber and Lyft share market from 2017 to 2019] [Date of access August/September 2020]

https://www.ncsl.org/research/labor-and-employment/state-minimum-wage-chart.aspx [National Conference of States legislators]. [Date of access 22nd September 2020].

https://www.bls.gov/oes/2017/may/oes533041.htm [U.S Bureau of Labor Statistics] [Date of access 28th September 2020].

https://www.bls.gov/bdm/entrepreneurship/entrepreneurship.htm [U.S. Bureau of Labor Statistics] [Date of access October 2020].

https://www.uberassets.com/image/upload/v1575580686/Documents/Safety/UberUSSafetyReport_201718_FullReport.pdf [Uber safety report 2017-2018]. [Date of access 30th September 2020].

https://www.confartigianatovicenza.it/e-commerce-social-network-messaggistica-durante-il-lock-down-indagine-confartigianato-boom-dei-social-per-le-impresa-artigiane-anche-in-chiave-post-emergenza/ [Confartigianato Vicenza]. [Date of access October 2020].

https://www.youtube.com/watch?v=L1D9e4zvLXo [Interview to Jack Ma, Founder of Alibaba.com, during a panel discussion in Korea in 2016]. [Date of visualization 20thOctober 2020].

Taxi, N. Y. C., & Limousine Commission, 2018. TLC Factbook. Available on **https://www1.nyc.gov/site/tlc/about/fact-book.page.** [Date of access September 2020].

Uber Technologies Inc. Annual Report 2019. Available on **https://investor.uber.com/financials/default.aspx**. [Date of access August and September 2020].

Ringraziamenti

Arrivata alla fine di questo incredibile percorso alcuni ringraziamenti sono doverosi.
Innanzitutto, ringrazio di cuore i miei genitori, Maria Grazia e Gianluigi, per non avermi mai fatto mancare il loro supporto, per aver gioito insieme a me dei miei successi ed avermi preso per mano e accompagnato durante i momenti più difficili. Grazie per avermi insegnato a non arrendermi davanti alle difficoltà, ad affrontare e a superare le mie paure e per l'esempio che continuate ad essere per me.

Un ringraziamento speciale a Simone per la vicinanza e il supporto, grazie per essere entrato nella mia vita ed essere per me costante fonte d'ispirazione e miglioramento.

Ringrazio tutti i miei amici, quelli di sempre, con cui sono cresciuta e con i quali condivido la mia quotidianità, in particolare grazie a Giorgia, Ilenia, Francesca, Gioia, Antea, Elena, Niccolò, Andrea: siete speciali e la vostra compagnia è davvero preziosa.
Grazie alle amiche della triennale, Benedetta, Valentina, Manuela e Federica, che nonostante la distanza e le diverse strade che abbiamo intrapreso sento sempre vicine. Soprattutto grazie a Benedetta per il tempo dedicatomi in questi mesi.
Grazie agli amici conosciuti in questi due anni di magistrale, Anna, Paola, Mariam, Sole, Jessica ed Elia, con i quali si è instaurata da subito una forte complicità, in modo particolare un grazie ad Anna per i caffè al "tre scalini" e le videochiamate durante il lockdown: grazie per essere l'amica che sei.
Ringrazio la bella compagnia di amici conosciuta in Erasmus, specialmente Sofia, la miglior compagna di avventure in assoluto. Grazie per aver condiviso letteralmente 24 ore su 24 con me per quattro fantastici mesi, per i lavori di gruppo fino a notte inoltrata, per i viaggi in Flixbus tra Francia e Belgio e per le merende della domenica pomeriggio. Senza di te nulla sarebbe stato lo stesso.

Infine, un sentito ringraziamento alla Professoressa Fiorenza Belussi per la disponibilità e cortesia dimostrata in questi mesi ma soprattutto per gli interessanti spunti di riflessione proposti.

Grazie di cuore a tutte le persone che ho incontrato in questi anni, grazie per avermi insegnato sempre qualcosa e per aver fatto parte della mia vita.

Elisa