Master Thesis

Copenhagen Business School
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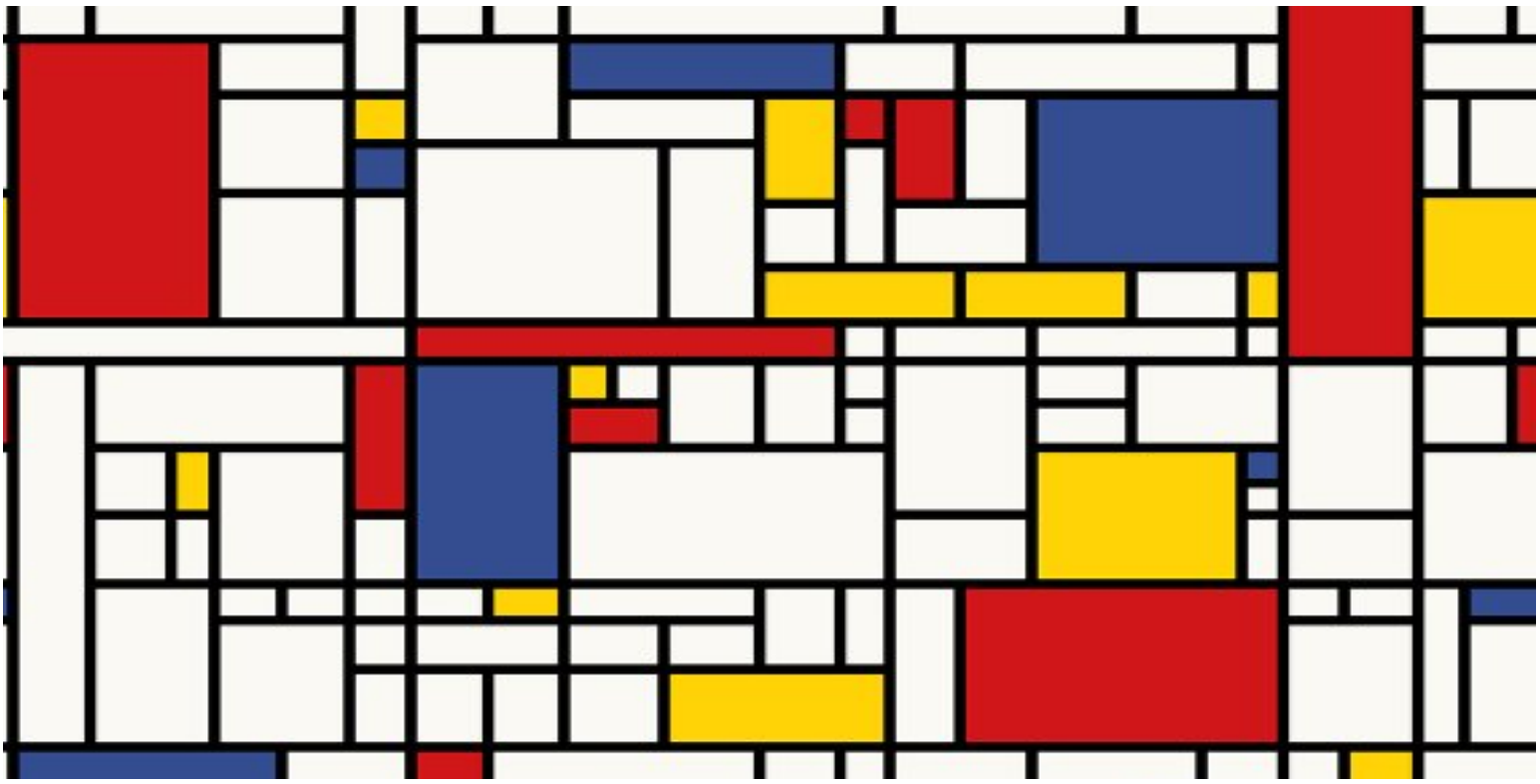
The Ecosystems Business Era: capturing new value from collaborations and transformative experiences



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CHAPTER 1: INTRODUCTION

1.1 Problem statement

In the last decade, the impact of technologies is dramatically changing the way product and services are developed, marketed and purchased.
On one hand, the increasing power of the digital commerce channels has increased the level of global competition; requiring companies to shape new strategies and operations in order to capture new value for the consumers and lower their operational costs. On the other hand, newly technologically empowered buyers can benefit from the globalisation of the markets when researching, comparing, getting peer-to-peer advises, placing orders and getting them delivered at home - just a click away on their smartphones.

The development and diffusion of this new network system can be mainly related to the emergence of technologies such as *digital platforms.*
Platforms, indeed, today can be considered the most powerful tool in the hands of consumers along all the shopping phases; at the moment of purchase, such as Amazon and Alibaba and before/after the purchase, such as the price comparison, such as Trivago, Momondo, Price Runner, Price Grabber, Google Shopping, or on-line and off-line experience reviewers, such as Trustpilot, GoodGuide, Tripadvisor.
As platforms are changing the way consumers demand and experience products or services, they, therefore, represent a threat for the traditional companies.
On this regard, it can be argued that the possibility of purchasing items from digital stores and digital platforms, has increased the overall market competitiveness; lowering goods and services prices while keeping organisational internal costs of research and development untouched.

Digital platforms, though, do not only represent a threat to traditional companies' profitability.
Many digitally-born companies, such as Google, Facebook and Uber, have been highly benefitting from this new way of doing business.
Enabled by the possibility of networking, yesterdays' start-ups and today trillion-dollar companies (i.e., Apple and Amazon) have been exponentially growing empowered by the capability of sharing

knowledge, resources and other strategic assets through collaborative spaces and *ecosystems*, such as the Silicon-Valley.

The outputs of this ecosystemic processes can be found in the enterprise organisational and operational models, but they are also quite evident in the value of the products and services they deliver to customers.

Many researches have today recognised this new dimension of value. Merz and Vargo (2009), for example, stress how value today is the result of complex networks that are part of dynamic service ecosystems, comprising not only firms and customers but their contextual communities and other stakeholders.
As also stressed by the Marketing Science Institute (2016-2018), it is a priority today to arrive to understand the evolving consumer decision process in order to deliver integrated, real-time and relevant experiences in context[1]

However, despite some brief statements, Marketing Science researchers have missed to develop consolidated and in-depth theories about the role of business ecosystems in today's economic scenario.
In contrast to the academic world, the topic is exploding among professionals and managerial-oriented consultants who have been directly experiencing these new business trends and, as well, the incapability of many executives and traditionally governed enterprises to adapt and leverage on these new methods for value creation.

This master thesis, therefore, on one hand, aims to combine the most recent, highly fragmented non-academic literature (McKinsey, Accenture, Deloitte) and the scarce academic contributions about business *ecosystems* (Moore 1993; Peltoniemi, 2005; Iansiti & Levien, 2004).
On the other, this project will be focusing on the value that ecosystems can generate in relation to the creation of powerful brand experiences and shopping journeys.

[1] Marketing Science Institute report 2016-2018. Research priorities number 2 and 3.

In this new technological and innovative scenario, indeed, the way companies build their experiences and generate value for their customers is not the same anymore.

On this regard, many researchers, in the last years, have been focusing on investigating the organisational capabilities that are required when building engaging, compelling and holistic customer journey and *experiences* (Borowski, 2015; Richardson, 2010; Rawson et al., 2013; Edelman & Singer, 2015).
In order to sustain this journey-centric approach, they all underlined the importance of moving from siloed-functions and top-down innovation to cross-functional processes and bottom-up innovation (Rawson et al., 2013).
Transforming complex and fragmented purchases paths into compelling and simplified journey, indeed, requires the integration of different organisational department and capabilities; converting the organisation into a synchronised *orchestra* under the direction of the Marketing department (Edelman, 2010; Perkins & Fenech, 2014).

However, these approaches missed to include in their analysis the impact of company external elements, such as business partners and technological infrastructures, such as digital platform.

Today it is possible to observe, the ongoing trend of traditional marketing processes shifting towards business models, where platform-enabled connected interactions are the centre of the value creation. It is therefore crucial to understand the main capabilities that companies need to master in order to catch the full potential of ecosystems.

1.2 Why ecosystems are relevant today

As modern society started liquefying with the advent of modern consumerism (Bauman, 2000), many pillars and boundaries melted down; creating new great opportunities, as well as, requiring new levels of efficiency when running businesses.
The traditional way of running businesses were in some way *limiting*, yet they provided solid anchors of meaning in society and established stability when defining and measuring most of the key elements in business strategy.

Marketing wise, for instance, these changes can be reflected in the new blurring definition of roles in the relationship between producers-consumers (1), or, the blurring definition of spaces, such as physical-digital (2).

In regards to the first point, consumers, in the last decades, went from being passive recipients of companies' inputs to active participant and, in some cases, brands' values and product co-creators (Vargo & Lusch, 2004).
On this regard, as mentioned before, the increased choice and new technologies empowered customers in the marketplace, pushing companies to shift from marketing strategies of persuasion to inclusion and participation.

In regard to the second point, the advent of Internet and other innovations (such as automating technologies) increased the speed, scope, and scale, of the goods moving around the world.
As a result, the boundary separating *brick and mortar* from e-commerce came less; converging in what is today defined the *omni-channel*. Examples regarding the dissolution of roles in the marketplace are much more than the two above-mentioned. However, it is not the aim of this section to talk about. On the contrary, it is important to highlight these examples in order to understand why it is relevant for marketers today to realise that the old way of measuring objectives, setting KPIs, or, simply structuring organisations internally must be reflecting the profound changes of the external environment. To this, it is necessary for companies to embrace new strategies and point of views that see the market as a unique ecosystem.

Translated in managerial terms, it means that businesses need to innovate according to the request of business partners and consumers' new demands for getting *more* for the same price.
Leveraging on ecosystems, firms can aim to create breakthrough innovation and stop the process that is eroding companies' profitability. Moreover, they can seize opportunities coming from the new digital platforms and *networks* and gain new resources and capabilities that firms do not own.
Adopting ecosystems, though, requires companies to create new organisational structures due to the impact of Internet in globalising markets (raising number of market players, and therefore, competition with consequent decrease of overall prices).

Thus, it is crucial that while pursuing disruptive growth through an ecosystem initiative, marketers first get a few things right: make the right plays, find the right partners and think outside of traditional boundaries.

1.3 Research gap

This project, therefore, aims to contribute to the academic research by offering an explorative research about ecosystems and how they impact (negatively and positively) on companies' operations. This thesis, therefore, aims to address this academic gap by exploring and gathering together the extremely fragmented[2] and scarce literature about ecosystems from both the perspective of business innovation and new marketing processes.

Consequently, it is here aimed to find the pillars that enable companies to create knowledge networks, interconnect with other strategic partners and provide their customers with holistic services.

Hence, this paper, in the first part, will approach the formation of ecosystems from the business innovation process point of view. In the second part, a new marketing *ecosystemic* paradigm is investigated. On this regard, main skills and capabilities will be gathered together from the existing, but scarce, literature about customer experience ecosystems.

Overall, the final objective of the research will focus on arriving to a better understanding of ecosystems and their impact on companies' operations:

What are the main elements of business ecosystems?

What are the main elements of customer experience ecosystems?

How can business ecosystem impact on companies' operations?

[2] Professionals have been writing their opinions about ecosystems on single web-pages or sectorial digital newspapers. A coherent and united vision about ecosystems in today business landscape is still missing.

In order to arrive to answer these questions, it is important to gain more insights in regard to business and CX ecosystems.
The thesis aims to understand what the main pillars that sustain their formation and survival is.
Secondly, it will be investigated through the observation of Airbnb case, how ecosystems can be beneficial to companies' overall performances.

1.4 Philosophy of science

This part of the thesis will now focus on explaining the whole research philosophies in order to answer the thesis's problem statement. The research philosophy helps to understand how the researcher interprets the world (Saunders et al., 2009), thus has influence on the choice of methodological approaches in answering the thesis's problem statement.

1.4.1 Ontology and epistemology

Within the research philosophy it is important to take the term epistemology into consideration, which is the philosophy of how the researcher comes to knowledge (Carson et al., 2001), and ontology, which is about how the world is constructed (Hudson and Ozanne, 1988). The choice of epistemological and ontological approach will influence how the world is interpreted and which methods that are used in order to investigate the research questions. There exist two central paradigms, *interpretivist* and *positivism*. The interpretivist paradigm states that the world around us cannot be observed objectively as reality and knowledge is socially constructed by the meaning of people (Carson et al., 2001), thus the ontology and epistemology is believed to be that the reality is multiple and relative (Hudson and Ozanne, 1988). The aim of this paradigm is to understand and interpret the meanings in social context in relation to a phenomenon and not to generalize and predict as it is the case for the positivist paradigm. The positivist paradigm is mostly related to quantitative research and states that there is an objective reality that can be observed; hypotheses can be tested and quantified (Guba, 1990).

As the main aim of this study is to understand and explore the phenomenon of business ecosystems and their impact on new patterns of consumption, there is an interest in interpreting (Hudson and Ozanne, 1988) how people consume in this new context; thus, the appropriate paradigm to apply is

the interpretivist paradigm.

Moreover, as the field of research is a new and complex social phenomenon where it is difficult to generalize knowledge, it might be essential to develop and adjust the insights obtained from the observation. As this paradigm is less formal, structured and more flexible, it is appropriate for this purpose (Carson et al., 2001).

1.5 The research model

1.5.1 Exploratory research

To investigate the role of ecosystems over business process and consumers' decision, an exploratory research will take place. This is about the attempt to "*develop and initial, or understanding some phenomenon*" (Blaikie, 2009). Thus, this approach does not intend to give a final answer or evidence, but to explore the research questions in order to get a deeper understanding of the problem. As stated by McGivern, the exploratory research approach should be applied by the researcher that wants to identify a problem (McGivern, 2006). In the field of research in this study, there is little existing research. Researchers have previously identified the two theoretical areas separately (ecosystems and customer experience), but there is still the need for additional research that links these concepts to each other. This makes it clear that an exploratory research design is appropriate, as it is about investigating an issue where there is minimal previous research (Blaikie, 2009).

The aim of this study is to obtain a deeper understanding on the new context (company and customer sphere), as well as to give suggestions for further research (Malhotra, 1996). Thus, by applying this research approach it is possible to explore the relatively unexplored gap in research, generate insights within the field of interest, problematize the conflict and eventually to understand and clarify the problems.

1.6 The research approach

1.6.1 Inductive or deductive

Two research approaches can be used and applied when conducting a study. The inductive approach is the concept that states that the theory is the result of the research (Bryman & Bell, 2011). This approach starts with the observations and the theories are developed as a result of the observations

(Goddard & Melville, 2004). Thus, this approach can be understood as the concept of the research that improves the theory based on the empirical findings (Ghauri & Grønhaug, 2005). Furthermore, there is the deductive approach which is about making a hypothesis based on existing literature (Bryman & Bell, 2011). This approach is the concept of investigating existing literature in order to formulate a hypothesis. Depending on the empirical findings, the hypothesis can either be rejected or accepted.

In this study, the collection of empirical data is based on existing literature, as well as observation of companies' case studies. Due to the lack of specific literature about the topic, hypothesises are made in order to investigating the research gaps. Thus, it is very clear that both a inductive and a deductive approach is applied throughout this study.

1.6.2 Theoretical framework

In order to conduct a useful theoretical framework and be able to identify the research questions, the first step of this paper was to undertake a literature review about the field of interest where two main concepts are identified and discussed: business ecosystems and customer experience ecosystems.

Firstly, the concept of ecosystems is presented and discussed to get a deeper theoretical understanding of the topic and its relevance in today marketing scenario. Secondly, it is taken into consideration the consumer sphere. On this regard, main individuated capabilities for enabling innovations are individuated. The literature review aims to show the correlation between the concepts in order to arrive to close the research gap.

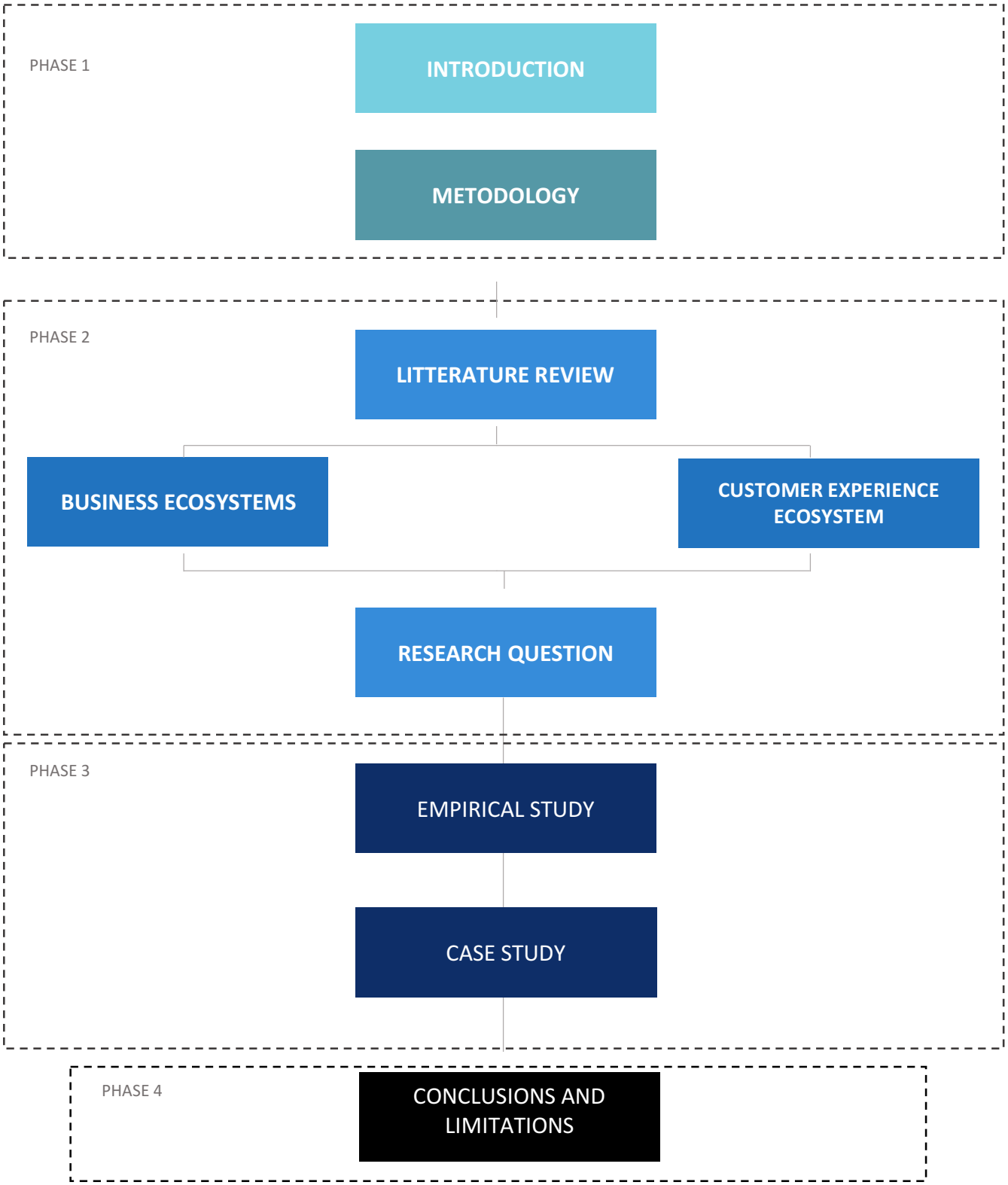
1.7 The case study

In order to provide a valid support from the knowledge summarised in the literature, a case study in the area of ecosystems will take place.
The main goal of case study is to gain more insights and understanding about the complex issue of ecosystems.

The reason behind the choice of the case study for the empirical validation of the research is related to the novelty of the topic treated in this project. Looking at what a world top company is doing to leverage on platform technologies and ecosystems, it is considered to be relevant and insightful.

1.8 Graphical depiction

Below, it is illustrated the graphical depiction of the four phases that are forming the research proposal.



CHAPTER 2: THE FRAMEWORK[3]

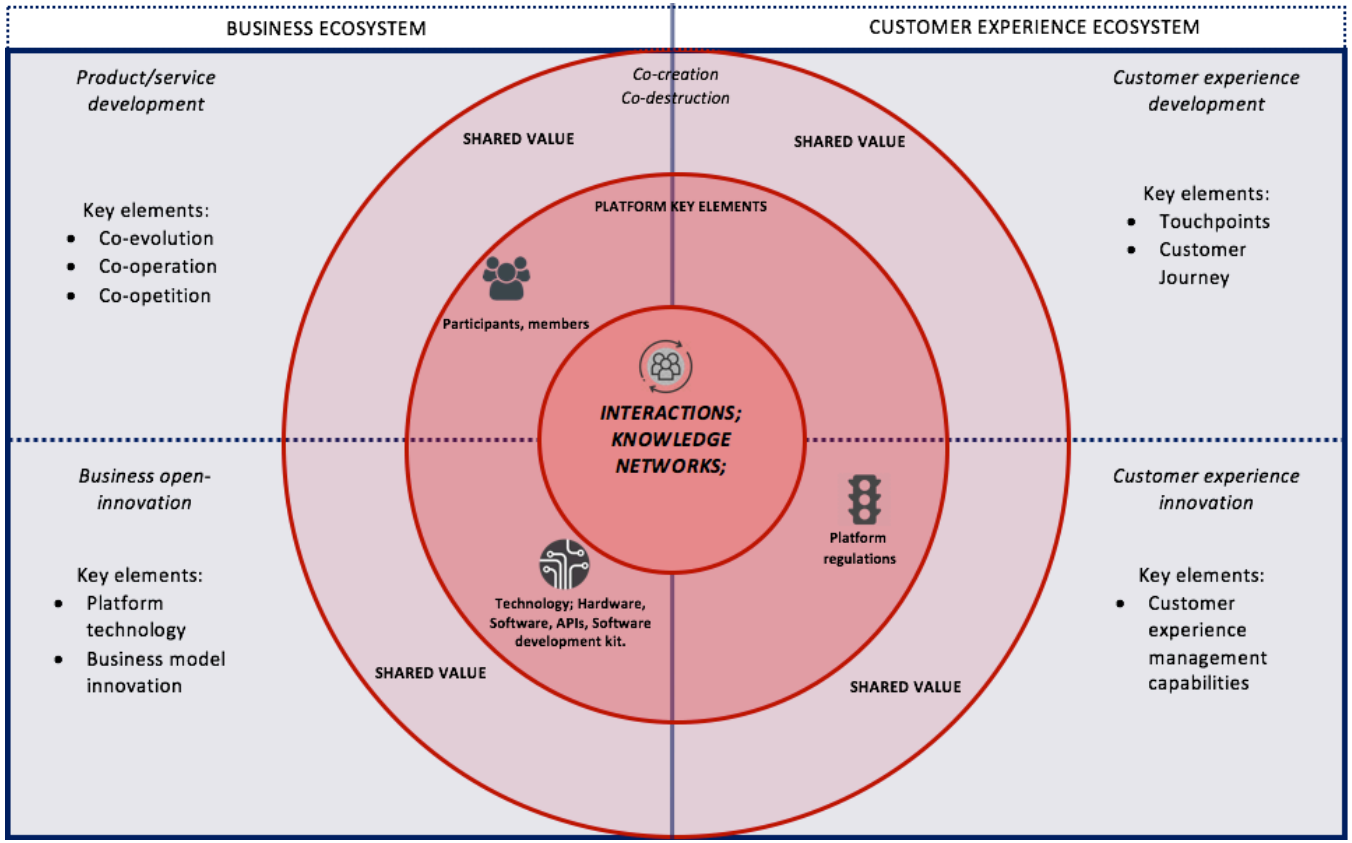


Fig. 2.1: Master thesis framework. Own representation.

[3] Blue areas correspond to the internal organisation and to *inside-out* innovation processes.
Red areas correspond to the platform and to *outside-in* innovation processes.

As anticipated in the introduction, this master thesis aim to explore the potential of leveraging on platforms and external participant into the firms' innovation (1) and customer value creation (2) processes in order to reduce costs of production and increase overall profitability.

The project will, therefore, firstly analyse the existing literature about the impact of collaborations and knowledge networks on the innovation process (left side of the framework). Secondly, it will analyse the impact of platforms and knowledge networks on customer experience in order to understand the value gaps on which companies can build a new economic value (right side of the framework).

Business ecosystems

In this part, it is investigated todays' importance of interactions when companies decide to develop a new product or service for the market.
On this regard, it is important to highlight the new emerging processes of collaborations enabled by platform technologies: co-evolution, co-operation and co-opetition.
The second part of the first section will be focusing on the impact of the above-mentioned collaboration processes on company's innovation.
It is therefore taken into analysis the concept of open-innovation and the key elements that form its skeleton in strategical and operational terms.
Lastly, in the empirical part, it is discussed the possible impact of open-innovation on the company operational cost structure.

Customer experience ecosystems

In the second part, this master thesis aims to investigate the concept of customer experience as the result of an *ecosystemic* process where internal and external to the organisation actors collaborate to generate greater value along the customer journey.
On this regard, customer experience will be analysed in order to find the principle elements that *bridge* the relationship between the company and its customers.

Following this part, it will be investigated the main capabilities that nowadays organisations need to master in order to enhance the customer relationship and foster engagement across the digital customer decision journey.
Finally, in the empirical part, it is discussed the influence of platform generated experiences on consumers' decision making and, consequentially, company' s profitability.

Project references

Lastly, before starting with the analysis of the literature review, it is very important to set up a premise in regards to the sources of this project.

As the concept of ecosystems within the field of business and Marketing has recently emerged from the work of managerial-oriented researchers and consultant, the topic still misses to be consolidated and researched from an academic perspective.
As a result, since most of the sources used to construct the narrative of this written-product have not found academic validity yet, this project acknowledges both the need for future academic investigation and the explorative intentions of the project itself.

Despite parts of the following literature review need to be academically endorsed, the following presented analysis must also be considered as an added value itself as it aims to create an oriented vision out of the extremely fragmented sources of knowledge; hopefully creating the base for further academic researches.

CHAPTER 3: BUSINESS ECOSYSTEMS

3.1 Introduction

Todays' most profitable enterprises (Alphabet Google, Amazon, Alibaba, Netflix, Linkedin) were almost non-existing a couple of decades ago.

During this time, new patterns of creating value have been emerging everywhere in the form of *highly-dense* and richer networks of interactions, co-operation, and interdependence: the so-called ecosystems.

The *ecosystemic* business model main characteristic can be individuated in the transition from traditional value-chain and assets owning, to the idea that company value is generated through interactions and knowledge exchange (see fig. 3.1).

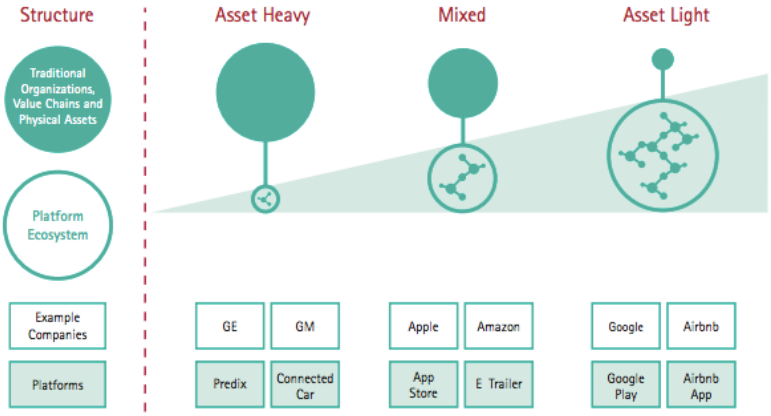


Fig. 3.1: *Capturing growth in the digital economy with platform business models.* Source: (Daugherty et al., 2016)

Due to the failure of previous adopted strategies and the extreme level of competition, business ecosystems are, therefore, today chosen by many executives as the main source of innovation to respond to consumers' demands for more value for their money (Lyman et al., 2018).

The explosion of platform economies represents a big challenge to the overall firms' profitability (consumers have more possibility to get information and change service providers), yet they also represent a big opportunity to innovate the value creation process through the use of ecosystems and new economies of scale (lowering the COGS while stimulating a new demand).

For example, Google *ecosystemic* offer enable the company to extend their operations on different kind of sectors (e.g., translations, maps, office software and interconnectivity tool). All these products, while being supported by the same Google technology and platform are also able to give consumers more valuable reasons to prefer Google to another service provider.

Although the way seems clear for managers, companies are still struggling to adapt to the new business models; mainly because siloed organisational structures are still not ready to integrate new capabilities and skills offered by ecosystem cutting-edge innovations.

Through the next paragraphs, business ecosystems key elements and pillars are investigated with the aim of understanding how companies can best integrate them in their strategies and operations.

3.2 The concept of ecosystem

The term ecosystem comes by Natural Sciences studies. The expression was coined in the 30s by British botanist Arthur Tansley to indicate a "*localized group of living organisms co-operating with each other and their specific environment of air, water, mineral soil and other elements. These organisms influence each other, and their terrain; they compete and work together, share and generate resources, and coevolve; moreover, they are inevitably subject to external disruptions, to which they adapt together.*"

Spotting increasing similarities, business strategist James Moore introduced the notion to the gradually vibrant and interconnected economic world. In 1993 he wrote an article stating that: *"Successful businesses are those that evolve rapidly and effectively. Yet innovative businesses can't evolve in a vacuum. They must attract resources of all sorts, drawing in capital, partners, suppliers, and customers to create cooperative networks […]. I suggest that a company be viewed not as a member of a single industry but as part of a business ecosystem that crosses a variety of industries. In a business ecosystem, companies co-evolve capabilities around a new innovation: they work cooperatively and competitively to support new products, satisfy customer needs, and eventually incorporate the next round of innovations."*

Moore's paper was prophetic; considering that it has been written right at the beginning of the Internet era and more than a decade before the introduction on the market of smartphones and other mobile devices.

Due to Moor's paper timing, in the beginning, his theory about "business ecosystems" was included primarily within the group of researchers and innovators that were involved in creating the breakthrough capabilities and infrastructures on which ecosystem today are relying on.

Today, Moor's idea has expanded far outside the US technology industry.

Over the last few decades, pushed mainly by digital technologies and massively augmented connectivity, companies have been pushed outside their own *walls* to cross-sector collaborations.

3.3 The emergence of business ecosystems

The American author James Moore in his book entitled The Death of Competition was the first to implement the ecosystem concept to business: *"A company must be viewed not as a member of a single industry but as part of a business ecosystem that crosses a variety of industries"* (Moore, 1993). Firms, indeed, in the search for delivering better customer value than their competitors, have always been relying on well-trusted suppliers, great employees and solid distribution channels and vendors.

So, what has changed nowadays?

Kelly et al., (2015) defines business ecosystems as *dynamic and co-evolving communities of diverse actors (1) who create and capture new value (2) through increasingly sophisticated models of both collaboration and competition (3).*

This definition delineates three main characteristics that form nowadays ecosystems:

1- Ecosystems normally combine several players of different kinds and sizes with the aim of generating, scaling and serving markets with offering that goes beyond the competences of any alone company, or any traditional sector. Their multi-plurality (together with their ability to learn, adjust to changes and innovate ensemble) is a key factor for their long-lasting success.
2- Empowered by augmented connectivity across specific capabilities and resources, ecosystems create new, co-created results that satisfy crucial human needs, desires and rising societal challenges. On one hand, ecosystem pave the way to generate new value, on the other, they push managers to investigating new forms of business models in order to

maximise that value in a fast-competitive environment of depreciation.

3- Rivalry, despite still being important, it is not the only driver for creating sustained advantage. Within ecosystems, instead, players are pushed by shared interests, objectives, and values. Moreover, the increasing call for collaboration, demanded by new empowered consumers, it forces companies to invest in the long-term *well-being* of their shared ecosystem; main source of their mutual benefit.

3.3.1 Ecosystems as dynamic and co-evolving communities of diverse actors

Today, companies are not just members of a single industry, but rather a part of a business ecosystem that crosses a variety of industries. Companies today work cooperatively and competitively to support new products, satisfy customer needs and be a part of the next round of innovations (Kelly et al.,2015).

In the last years, technological innovations, on one hand, have completely changed the way consumers purchase and, on the other, changed the way they engage with companies and brands.

The Internet and mobile devices, indeed, have dramatically changed people traditional decision-making processes. Consumers today have the possibility to easily research, compare products, place orders and get doorstep delivery for their items whenever they want from all around the world, just a click away on their smartphones (Edelman & Singer, 2015). From an organisational perspective, as

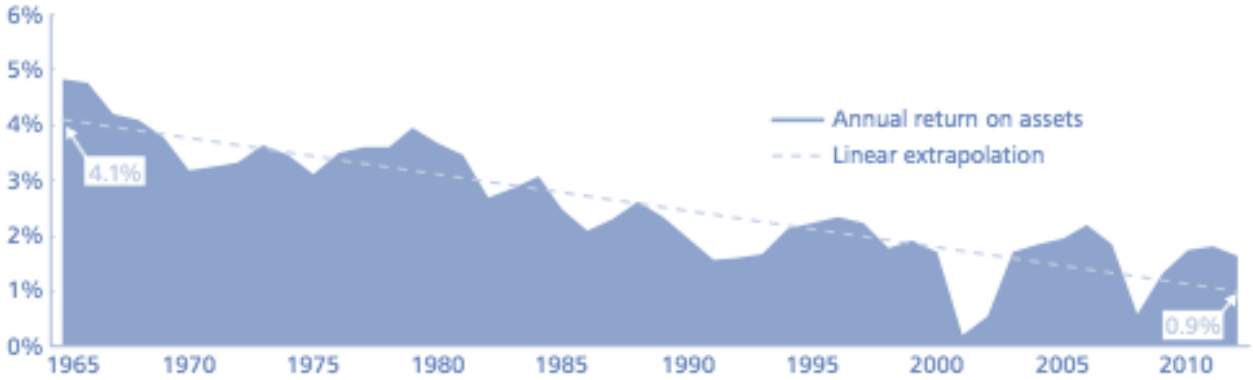


Fig. 3.2: *Declining ROA from 1965 to 2012 in the US market.* Source: (John Hagel III et al., 2013)

seen in the introduction of this project, this new possibility can be translated in increasingly higher level of competition, decrease of prices and lower Return on assets (ROA).

At the same time, digital technologies have amplified and extended the relationship between buyers and sellers far beyond the moment of purchase; transforming buyers from *operand* to *operant* (active users) resources (Vargo & Lusch, 2004).
Customers, indeed, once they have hunted down their object of desire, are today empowered by new media to share and generate new content/information capable of influencing and co-creating, or co-destroying, brand identities and reputations (Nysveen & Pedersen, 2013).
In other words, while yesterday firms were comfortably in the driver's seat, today marketers are struggling to keep the pace of more informed, more connected and more demanding buyers (Perkins & Fenech, 2014).
If in the past decade, in order to attract, influence, satisfy and keep customers, the business equation looked linear and plannable (Guldbrandsen & Just, 2015), nowadays, instead, new technologies, channels and media have scrambled this linearity in myriad of touchpoints and interactions; transforming the purchase process from the funnel metaphor into an extremely complex offline and online customer decision journey (Court et al., 2009; Lemon & Verhoef, 2017).

Due to this new scenario, the old way of doing business has become unsustainable. If until some years ago, the generation of value was strictly related to the single company, today, instead, enterprises cannot go it alone (Lyman et al., 2018). On the contrary, they need to work together with many other players to define, build and execute market-creating customer and consumer solutions (Nichol, 2016). Collaboration can provide shortcuts for companies racing to improve their production efficiency through the acquisition of new technologies or skills (Hamel et al., 1989); allowing enterprises to raise the level of quality of their products and customer experience while producing new economies of scale (ibid).

Co-evolution

Several academics, trust that emerging co-evolution models are a great example to efficaciously comprehend the dynamics related to industrial change (Murmann, 2003).

Going back to Moore (1993), the co-evolution phenomenon encourages to increase the firms' yearning for innovation within the business ecosystem. These enterprises, indeed, need to *co-evolve* their energies to support a new degree of innovation.

As a result, they both show behaviours of *cooperation* and *competition* when commercialising new products, satisfy customers and bring new innovations to the marketplace.

Additionally, stepping for a moment outside the business ecosystem sphere, the co-evolution process contributes to the development of the relationship between the single organization and its environment; composed of other companies and its larger societal surroundings.

As said by Peltoniemi (2005), co-evolution can happen only in presence of some conditions.
They are here summed up in the following bullet-points:

1- A niche of consumers demanding businesses to change and evolve.
2- A clear and shared vision about the new business dimension and characteristics.
3- A degree of interconnectivity among organizations so to reciprocally extend the effect of co-evolution to all its participants.
4- A feedback process sustaining the results derived from co-evolution.

The figure below visually express the author's research:

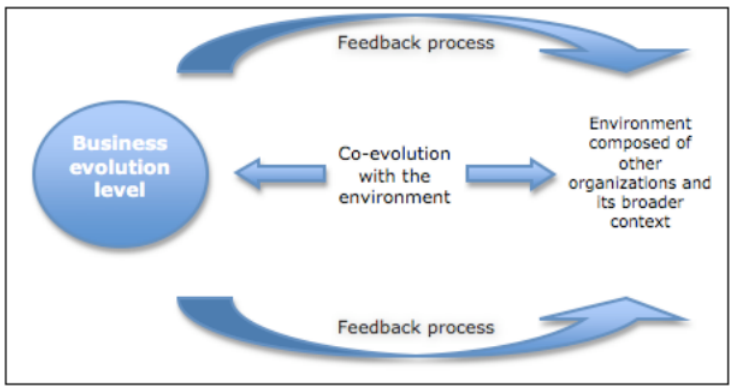


Fig. 3.3: *The co-evolution in the business ecosystem.* (Source: Peltoniemi, 2005)

Another perspective on co-evolution is given by Iansiti and Levien (2004).
In their book *The Keystone Advantage*, they employ the idea of *Shared Fate* to somehow underline the importance of the same co-evolution dynamic above-mentioned.
The researchers, however, face this concept from a critical eye stressing how the inter-dependency among communities forming the ecosystem could be translated into the risk that the mistake (or failure) of one actor could bring the entire system to a sequence of errors and miscalculations; leading to the failure of the whole eco-system.

Finally, in order to find practical evidence of the importance of co-evolution, it is here brought the example of the relationship between smartphones producers and independent APP developers.
Pushed by a consumer demand (the developers themselves can be intended as consumers), global producers such as Apple (IOS) and Google (Android) have been pushed to create a common space (platforms) where external APP developers could find tools and instructions to generate products in conformity with smartphones' operating systems.
Among these tools, Application Programming Interfaces (APIs) and Software Development Kit (SDK), empower APP developers to facilitate and increase their productivity.
This is a optimal scenario where two parts, externals to each-others, co-evolve together.
The higher the number of developers joining the platform is, the more is the value generated for the company but also for the smartphones end consumers and the developers themselves (they earn from every single APP purchased); increasing the overall value and attractiveness of the business ecosystem.

Coopetition

In today business environment, many companies are going far beyond the concept of co-evolution by opening their assets to their direct competitors. Some managers, such as Elon Musk former CEO of Tesla, for instance, made its companies patents, software and others strategic assets publicly available, even to competitors "*in the spirit of the open source movement, for the advance of electric vehicle technology*"[4].
This last example sums up perfectly what is the nature of ecosystems today.
Rival companies that, until a decade ago, would have fought until the last resource to win over each-others, today they are going beyond the boundaries created by competition in order to generate common good and growth.
Many other examples of huge competitors which have been collaborating can be found.
Such as BMW and Toyota collaborating to develop key technologies (e.g. car batteries) in the making of electric cars. Or, Apple and Garmin, apparently two big competitors when coming to smartwatches which partnered and generated an ecosystem to innovate the sector of fitness *APP* (Garmin connect and Apple Health).

[4] https://www.tesla.com/blog/all-our-patent-are-belong-you

This new trend, breaks out from the concept of co-evolving. Despite co-evolution already requires that actors in the business ecosystem mutually co-operate and compete (Moore, 1993), some others, defined this co-operation as not so different from the classic concept of *business partnership* (Torres-Blay & Gueguen, 2003).

A new term, therefore, *coopetition*, universally outlined as "*a situation of cooperation and competition*" (Baumard, 2007), enable the combination of these two *oxymoronic* words (cooperation and competition) under the same umbrella (Boucher & Gueguen, 2004).

Following their study, the growth of the business ecosystem is encouraged firstly and mostly by the strength of co-operation and secondly through coopetition when companies are in front of a new dynamic. In a third moment, these two situations will flow simultaneously in the development of the business ecosystem.

For Hamel, Doz and Prahald (1989), the interest of co-opetition lies in learning and knowledge creation, which can be translated into *"low-cost ways to gain technology and market"*.

Due to the today extraordinary level of competition (mentioned in the introduction of this paper), indeed, *coopeting* can be a useful resource for adapting to a hyper-competitive world. It is, therefore, important that companies, when implementing competitive positions, prepare themselves to execute *collective strategies* to face competitors or to collect external resources and share knowledge (Lado et al., 1997). As in the case of co-evolution, some academics raised several problematics intrinsic to the *coopetition* concept. Schmiele and Sofka (2007), for instance, underline the risk related to operating in international settings; such as the problematics related to sharing sensible knowledge that can be source of competitive advantage: Intellectual Property (IP) rights. International cultural, regulatory and trust barriers could, therefore, increase uncertainty to the coopetition practice; encouraging organisations to avoid disclosure.

3.3.2 Ecosystems as creating and capturing new value

Information communication technology (ICT) platforms and the challenge of leadership

In his book '*The Death of Competition'*, Moore (1993; 1996) indicates that business ecosystems are exposed to the natural life-cycle laws. He defines four major phases of development distinct by

stages of stability and instability: 1- birth stage, 2- expansion stage, 3- leadership stage and 4- self-renewal (or death) stage. At the third stage, the concept of leadership is introduced. Leaders are seen as crucial for providing added value to the community of players around him.
As a consequence, Moor exhort leaders in ecosystems to act in reason of a common vision and to adjust their investments in order to generate mutual benefits in support of the other members of the system.

Protocols and communication technology standards therefore have to be as universal as possible. Leadership, undeniably, is very frequently originated on technology standardization processes (Torres-Blay & Gueguen, 2003).
Despite Moore's well-defined challenges of leadership in the business ecosystem, it does not investigate and explain the dynamics and the relationships that leaders need to embrace when building a platform capable of gathering together inputs of different actors.

Iansiti and Levien (2004), bringing the example of Wal-Mart (with its digital platform *Retail-Link*) and Microsoft (with its operating system *Windows*), brings evidence that the well-being of the business ecosystem is depending by the role embraced by some *key* members, called *Keystones*: "[…] *they are able to enjoy a remarkable power, power delivered through an electronic platform on which the whole system."*

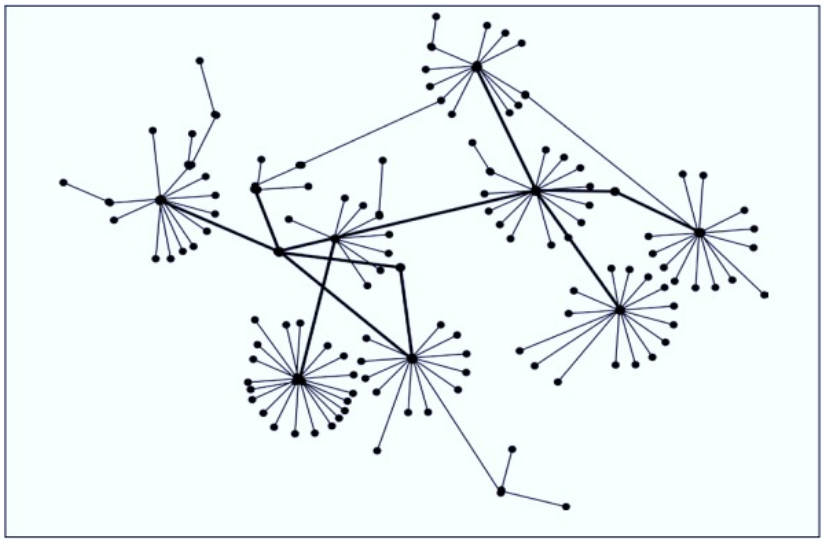


Fig. 3.4: *An illustration of the Keystone concept in the Business Ecosystem*. Source: (Iansiti & Levien, 2004)

On the same wave-length, Gawer and Cusumano (2002), in their work "*Leadership Platform*", underlines how being leader of an electronic platform can be directly related to the whole industry innovation outcomes and, as well, on the network of business ecosystems and customers interacting and using the platform.

Looking at the ecosystems created by Google, it can be given better explanation of Insiti and Levien (2004) theory. Today Google, despite being mostly famous for its search-engine, it has become a giant; grouping so many projects and companies under its umbrella to require the creation of *Alphabet*: a bigger mother enterprise.

However, as the aim of this section is to understand the key roles in the Google ecosystem, only two main functionalities of Google will be taken into account:

1- Its search engine;
2- Its technological architecture that enable the creation of platform on which the knowledge network is built. Platform *Keystone* can be so individuated:

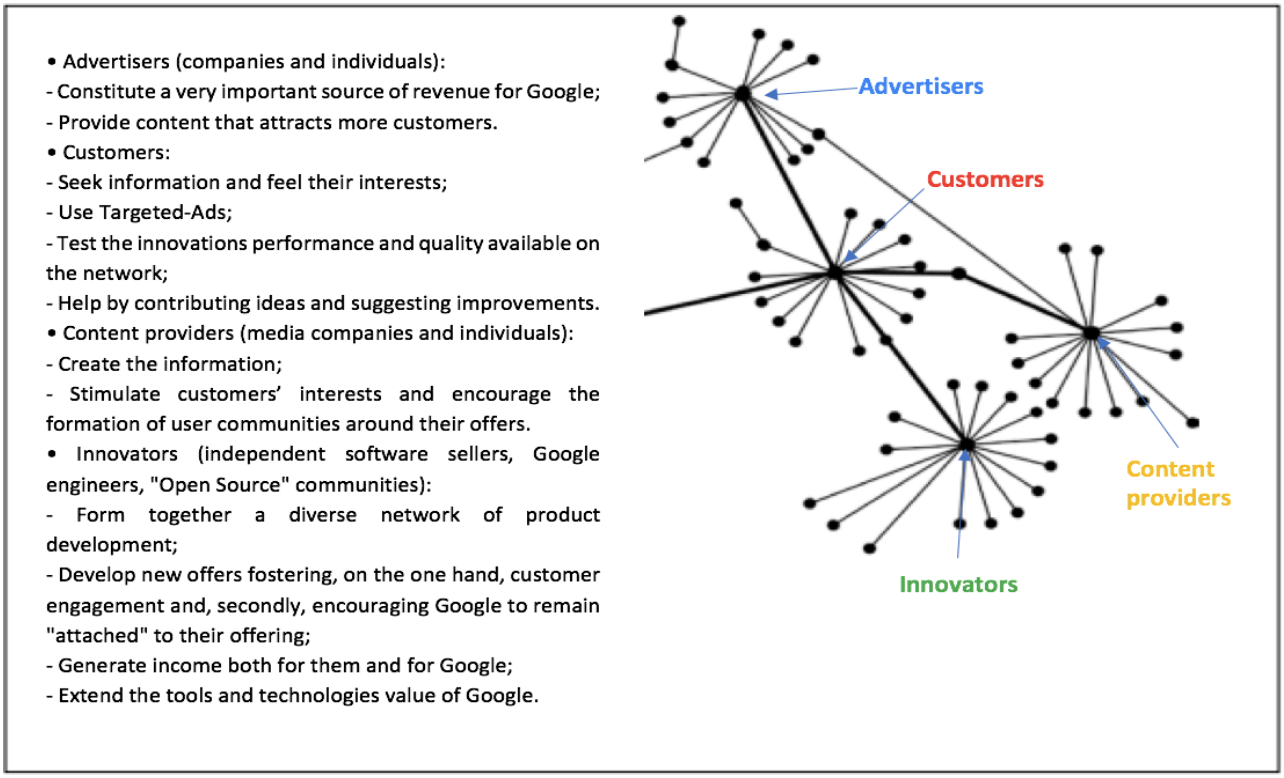


Fig. 3.4: *Adapted illustration of the Keystone concept in the Business Ecosystem to the Google partner network*. Source: (Iansiti & Levien, 2004)

As fig. 3.4. shows, it can be said that Google's technology set-up, (network environment), can attract and retain many inputs from many ecosystem actors. This system, while consolidating Google's leadership in different sectors (such as on-line marketing and the creation of Internet apps), it, most importantly, enables Google to share the value with all the actors presented above.

In connection to this last point, in order to understand why ecosystems today play such a crucial role, it is important to analyse how value is today generated.

Redefining the concept of value; from linear value chain to value webs

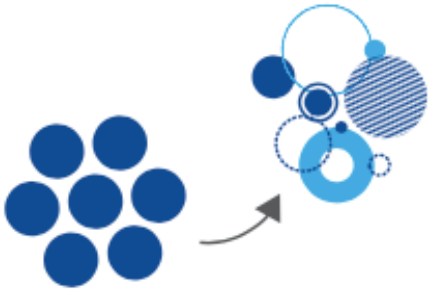
As the above-mentioned Google business case has showed, it can be said that, today, successful companies are those who can generate knowledge networks.

The use of platforms, indeed, moves value generation from goods and services to information exchange. Ecosystems, therefore, promote scale through interactions, not production of volume (Nichol, 2016).

In this sense, it can be said that nowadays the final aim is to combine the previously introduced platform models (paragraph 2.2.2.1) in order to generate *learning platforms.*

Learning platform

- Ease learning
- Bring members together in the process of knowledge sharing.
- Model enhance trustworthiness among participants as everyone benefits for mutual collaboration (Hagel, 2015).



Many researchers, above all Vargo and Lusch (2004) through the Service-dominant (S-D) logic, stressed how, in today's society and businesses' external environment, value creation is not anymore restricted to single companies and their production of goods or other outputs, but, rather, a much more complex process based on the *exchange of information and co-creation* among a wide range of actors (including the final consumers).

This shift in value creation, furthermore, would not have been as significant as it is today without the support of new technologies and the Internet revolution.

Other authors, following the work Vargo and Lush (2004), investigating the impact of new technologies on Consumer Behaviour, discovered that consumers, empowered by new technologies are nowadays rewarding companies who are able to generate added value through the generation of comfortable, personalised and intuitive *customer journeys and experiences* first, while products are just the tools that should keep together the entire ecosystem (Perkins & Fenech, 2014; Brodie et al., 2011; Edelman, 2010; VanDoorn et al., 2010).

Many examples can be taken out from the sharing economy, such as Airbnb Inc. where the product/service is just the platform (APP, website) that enable the information exchange between the house owners and the travellers.

Merging these different perspectives, therefore, Kelly et al. (2015) firmly summed up how today value is not based anymore on the production of goods and services, but, on the contrary, value is based *on knowledge exchange that drives proactive production of goods and services.* (see fig. X).

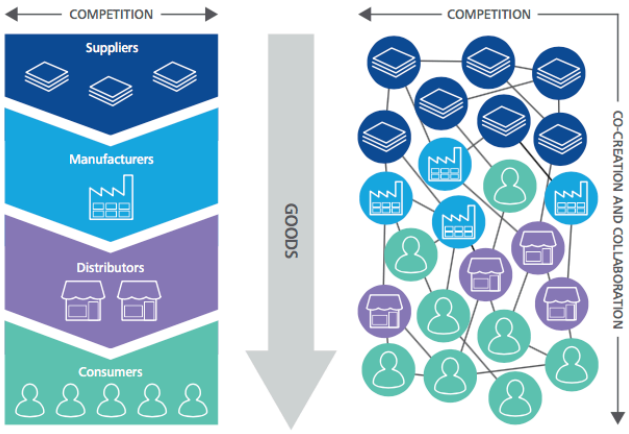


Fig. 3.5: *Value chain shifts towards a value network.* Source (Kelly et al.,2015).

Consequentially, consolidated growth parameters focused on consumer goods will shift towards business models where platform-empowered connected interactions are at the centre of the ecosystem; the knowledge network (ibid).

In order to let this flow of information *flourishing* and growing, it is important that ecosystems are able to foster the development of new ideas through the creation of open environment, the creation of infrastructures and open-innovation (see paragraph 2.3).

3.3.3 Ecosystems as increasingly sophisticated models of collaboration

The orchestration of these connections enhances an ecosystem's value as organizationally siloed processes transform into a shared ecosystem — a community of trust.

In order for ecosystem to be able to growth from the collaboration of all its participants, it is important that some prerequisites are met in order to keep the whole process united and evolving.

Once again, one of the main prerequisite is the creation of value.

being an ecosystem mainly a network/community, Iansiti and Levien (2004) underline two prerequisites for an ecosystem to exist.

1- The value generated by an ecosystem needs to beneficial to all its components in order to attract and retain new members (or customers) so to provide potential growth. This value is based on disruptive or radical innovation. Moreover, as ecosystems are *dynamic* and *co-evolving entities,* their existence is related to the constant and on-going innovation and development.
2- The value generated within the ecosystem must be *sharable*. Ecosystems, therefore, must enable and incite the participation of a various kind of (large and small) organizations, and often persons, who together can create, scale, and help markets beyond the competences of any lone corporation.

   In other words, Iansiti and Levien (2004), underline the importance for all the actors to interact and co-create in increasingly sophisticated ways. This way of innovating must be sustained by both technologies and tools of connectivity/collaboration and innovative model of governance that an individual company would find hard to coordinate to its "top-down" means.

It can therefore be said that ecosystems need to be formed by participants, often including customers, who are *glued together* by shared interests, purpose, and values which pushes them to collectively nurture, sustain, and protect the ecosystem as shared *commons*.
Everyone supplies value, everyone benefits from it. This improves the endurance of an ecosystems (Kelly et al, 2015).

Value sharing

As above-mentioned (point 1 and 2), ecosystem cohesion can be mined, unless some of the created value is shared in the ecosystem.
As anticipated in the previous paragraphs (2.2.2.1; 2.2.2.2) *keystones* leadership legitimation pass mainly through the capability of value creation with value sharing. Moreover, value sharing is not simply a question of deciding whether to share, or not, the value, nor a matter of how much value should be shared. On the contrary, it is a noteworthy *operating challenge*.

As business ecosystem mostly rely on the value sharing across massive networks, it is, therefore, important that the cost of sharing value with each single business partner is constrained to the lowest and, preferably, benefitting of economies of scale (more quantity less costs).
In order to enable value sharing in the ecosystem, different solutions have to found to communicate problems throughout the network and sustain value creation.
The value sharing means and approaches vary in relation to the type of ecosystem.
However, as *Keystones* have the main responsibility in keeping the ecosystem *healthy*, the efficient value sharing methods generally involve robust platforms, easy-to-use application programming interfaces (APIs), intellectual property licensing, shared operations and enabling software tools (Iansiti & Levien, 2004).

Finally, once again it is important to highlight the importance that value sharing has in keeping together and enable the growth (innovation) of the members of the ecosystem; and the final users (customers).

3.4 Towards open-innovation models

Today most important characteristics for businesses, in any of their life-cycle phase, is to sustain their growth and innovation by limiting the investment on solid internal assets. On the contrary, in order to try to keep the costs of production low, firms should enhance their capability of gathering the necessary resources and capabilities by the external environment (Daugherty et al., 2016). From this point of view, growing through models, such as the open-innovation, is becoming a crucial form of competitive advantage.
As seen in these pages, the business ecosystem development is characterized by collective innovation and "open" logics involving several companies with different skills and complementary functionalities.
From the beginning of its life cycle, an ecosystem needs to growth through the innovation coming firstly from the *Keystone,* and, secondly, from the contribution, co-evolution and coopetition of different allies in developing new products or services.

Moore's analysis (1996) of different progress stages of an ecosystem can be corresponded and linked to the open-innovation strategy of Chesbrough (2011); innovation strategy supported by ICT, including platforms.

The notion of openness in the process of R&D, indeed, cannot be simply referred to the traditional market exchange and purchase of technologies or know-how among firms (Henkel, 2006). Openness is linked to the concept of sharing knowledge in order to enhance the participation of more actors in the research and development process.

A clear example of openness can be found in the Tesla approach to the electric car industry. The Californian brand, indeed, in order to foster the participation and development of the industry for the common good, decided to leave available to anyone their strategic patents and R&D documents. Another example can be found in the Linux operative system, which source code has been deliberately left available to modification and improvement to external software engineers and programmers; creating one of the first *open source* software (ibid).

Chesbrough (2009) in relations to open-innovation discerns to kind of systems to lower internal costs and find new sources of profitability:

1- *Outside-in innovation:* This process aims to best integrate solutions generated by external actors in order to acquire crucial resources and capabilities without increasing asset expenditure.
2- *Inside-out:* This process aims to sell and capitalise all the ideas (intellectual property) that are not used by the company which, otherwise, would get lost.

Chesbrough, through its work, exhort companies to improve their innovation process and exploit new business opportunities by using the "openness" method.

In order to best-implement open-business processes, companies should shift from business models based on closed innovation, where the single organisation is in direct control of their own value chain (research and development (R&D) and commercialization of new products/services), to an open model where sources of innovation come from the outer environment (see fig. 3.6.).

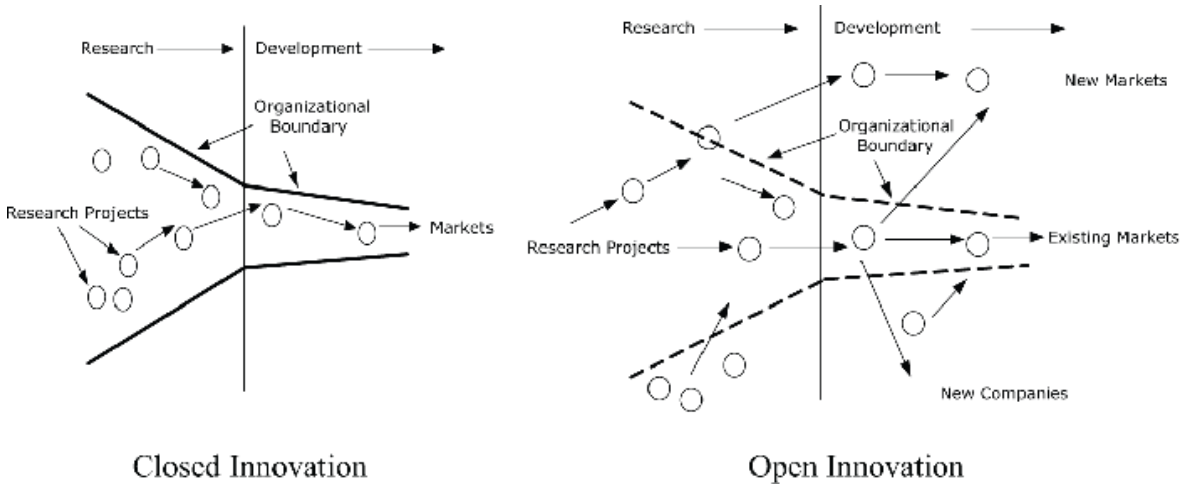


Fig. 3.6: *Close innovation vs. open invagination graphically.* Source (Chesbrough & Vanhaverbeke, 2006).

The idea of open-innovation, therefore, underlines the growing impact of external source of innovation and the new role that information communication technologies have on the value creation process.

On this regard, Chesbrough (2011) included in his analysis the role of platforms on the processes of open innovation.

In line with Iansiti and Levien and Gower and Cusumano (2002), he states that by making the platform accessible from external players and actors, the *Keystone* can integrate contributions of different members and, thus, support the business ecosystem development.

"One important device that enables this integration of business models throughout an ecosystem of suppliers, customers, partners and collaborators is the ability of the company to establish its technologies as the basis for a platform of innovation for that ecosystem" (Chesbrough, 2011).

The platform strategy, while focusing on outside-in functionalities, it should also include an inside-out logic, which can enable the platform owner to (ibid):

- To put hands-on a share of the value within the business ecosystem by leveraging on intellectual property rights (including licensing); hence, establishing some degree of control.
- To increase the overall well-being of the ecosystem by empowering other members through the diffusion of cutting-edge technology. *Keystone* while enhancing the overall growth of the

ecosystem can, at the same time, create value for themselves (ecosystems can be linked to the *win-win* type of relationship).

- Providing all the participants with specific knowledge and with a platform where they can create new sharable meaning, it supposes to increase the costs of an eventual exit of from the ecosystem; lowering the overall degree of uncertainty. Decreasing uncertainty level, it is important especially in view of inter-ecosystem competition (ibid).

As mentioned in previous paragraphs on co-evolution and co-opetition (2.2.1.1; 2.2.1.2), the business ecosystem sustenance and growth is heavily depending on the co-operative innovation where distinctive sorts of resources or ideas are shared among the participants of the *organism*.
This logic of innovating is, most the time, paved and carried out until the platform is implemented by the *Keystone*/platform owner; which has, also, the role of sharing initial resources and coordinate the other participants (Chesbrough, 2011).
In practice, many examples can be found of companies that have been using such platforms to maintain their innovation by exploring and taking advantage from the business ecosystem they created.
Upstream, these platforms are just used to kick-start the innovation process; for instance, IdeaStorm (Dell) or IdeaJam (IBM).
Downstream, instead, platforms are mainly used foster the today well-known processes related to co-production, co-creation, co-branding, co-design and so on.
In both of the situation, Chesbrough (2011) recognise the *Keystone* a role of moderator of the interactions. Keystones, indeed, are the process *keepers* providing all the partners with the tools to generate value and strengthen their position in the business ecosystem.

Even if the innovation process is not kick-started, platforms can be used to extract value (like in the case of IBM and Dell) from the collection, the analysis and processing of big data (usually through artificial intelligent (AI) software). As there is an increasing number of companies that today are recurring to the use of platform and open-innovation, Phillips (2011) investigated and discovered two main ways companies are using in the ideation phase of the innovation process.

1- Who takes the responsibility for presenting the idea?

Several organisations decide to open up already at this phase to a large group of contributors: applying the so-called *crowdsourcing*. Others, instead, decide to keep this phase close to a limited group of experts working on a rather narrow issue.

2- How are topics or themes of innovation chosen?

In some cases, businesses are opened to accept topics and external reflections, in others, the themes are fixed and related to a specific problem or issue (ibid).

The decision whether to start a new innovation process or not, is purely linked to the goals of the firm (Phillips, 2011). Objectives can be focussed on discovering new operational business areas, or, on the contrary, on discovering selected area where to gather specific knowledge. In relation to this choice, the process can be largely open and involving a broad number of participants or, oppositely, shared with a narrow number of experts.

Finally, it is important to specify that not all the companies who wants to grow through open-innovation and the creation of a platform have the capabilities internally. In the second case, they lean on intermediaries (Sawhney et al., 2005), which empower them with the full competences package for creating the desired infrastructure. When relying on these intermediaries, companies need to actively participating by aligning the internal processes to the development of the platform. Among these, enterprises need to manage their IP, have bigger concern about technological development happening in the external environment and align the internal organisational structure so to correspond the innovation process (Lichtenthaler & Holger, 2008).

Lichtenthaler and Holger (2008), indeed, discovered through their research that, most of the time, when expectations related to technological innovations are not met, it is not a matter of platform collaborations. Rather, it is a problem related to lack of proper governance structures supposed to drive and corporately institutionalize the new generated platform.

3.4.1 Key structural elements of open-innovation: platform technology and business models behind the ecosystem

Market-leaders are todays more than ever the companies that can leverage on open-innovation and new technologic power through the development of technology platforms and, as well, business-model and strategies complementary to them (Daugherty et al., 2016).

Platform technology and open-innovation

As recognised in the master thesis framework, platforms today, thanks to their capability of driving and exploiting new ways of creating value, are the heart of innovation processes.
Platform literature review it is now condensed in order to analyse critical functions and structures.

Despite platforms have been important for the companies development in the last decades (Evans, 2003), platforms have never been so central in driving and exploiting new ways (and speeds) of creating value, as today. Airbnb Inc. for instance, in just few years, has become the biggest hospitality platform on the globe. Same case for Netflix and Spotify, respectively in movie and music industry. Or Uber in the transportation and Amazon in the commercial sector.
Literature on platform businesses describes platforms as:
For Iansiti and Levien (2004), electronic platforms are a vital configuration for the process of value sharing among the ecosystem.
Furthermore, both researchers claim that a platform gives the possibility to foster the definition of shared solutions when resolving common challenges in the business ecosystem.

Eisenmann et al. (2006) instead describes a platform as:
"*A platform embodies an architecture–a design for products, services, and infrastructure facilitating network users' interactions– plus a set of rules; that is, the protocols, rights, and pricing terms that govern transactions*".
This definition, therefore, *put the accent* on the role and the effects of networks.

Gawer and Cusumano (2008), instead, see the platform more from a practical point view. They individuate two main conditions on which technology platforms can proliferate:

1- The platform, since it is described as a *system of use*, it must able to, at least, perform one critical function, or outsource a critical technology in an industry.

2- It must facilitate connection among all its members, offering the option to enlarge the *system of use* by building new features; as well as integrating new contributions from its community.

Most recently, due to the recent years' massive impact of digitalisation (and the falling costs of digital see fig. XX) on globalising markets (see fig. 1), platforms represent a massive opportunity for:

1- Extracting relevant data in regards to consumers' preferences and behaviours; platforms today embody the perfect tool for empowering consumers to gather together (social media, communities) enabling the consumers' beloved "pull-activities" (Hagel III et al., 2010).

2- A. Facilitating the cooperation and the collaboration (transaction) of different players through the interconnection of resources.

B. Create common goals in terms of value creation.

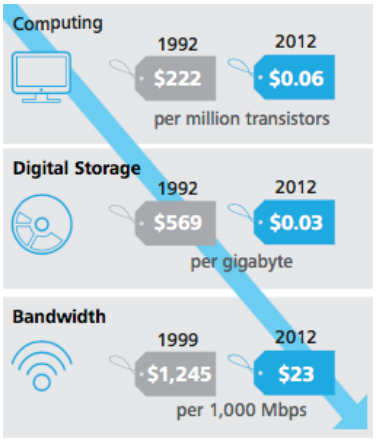
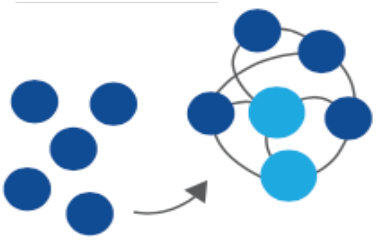


Fig. 3.7: *Falling costs of digital technologies.* (Hagel III et al., 2013)

On this regard, it is possible to distinguish 3 main platforms models (Hagel III, 2015):

1. Social platform

- Ease social interactions.
- Link individuals to communities.
- Enhance web relationship networks

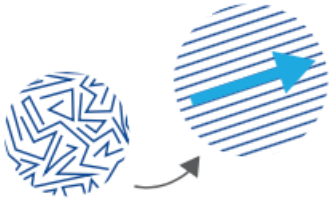


A. Aggregation platforms

- Ease transactions.
- Link users to resources.
- Model is enhanced when the platform is centralised (e.g. Keystones)

B. Mobilisation platforms

- Ease organisation.
- Encourage people to act ensemble.
- Model enhance the long-term relationship by giving common shared objectives.



In order for companies to create a platform economy, it is important that they are also creating a system around the platform technology. This system comprises of strategies/visions and a complementary business model that can maximise the potential of value exchange and outside-in open-innovation.

Business models and open-innovation

As seen in the previous paragraphs, business ecosystems can improve the potential of companies in terms of innovation and product development through the creation of knowledge network and resource exchange practices.

Despite critical factors for innovation nowadays can be found in the contribution of external partners, companies need to generate internally a wide range of capabilities and governance models in order to align and integrate external sources of innovation. In other words, firms need to reconfigure their business models.

Many academics, such as Lyman et al. (2018), recognise the role of business models as pivotal in the last decades' business transformation.

Since processes such as open-innovation, co-creation requires the involvement of new actors in the value creation model, the choice of a suitable business model plays a crucial role in positioning the firm as leader and orchestrator in this new operating ecosystem.

As for the concept of open-innovation, a main characteristic of new business models can be found in the difference between *open* business models and *closed* business models (Chesbrough, 2007).

The concept of *openness*, once again, matches with the need for companies to contrast the higher COGS and the reduced profitability given by the new competitive scenario outlined in the introduction of this written product.

On this regards, Chesbrough (2007) individuate in the business model the game-changer to arrive to capture and create new value in the company.

As for the concept of *open-innovation*, business models on one hand should arrive to capture external solutions and technologies to be used in the internal R&D processes. On the other, should create new profitability from the external sales of internal intellectual properties and other internally created *inputs* (see fig. 3.8)

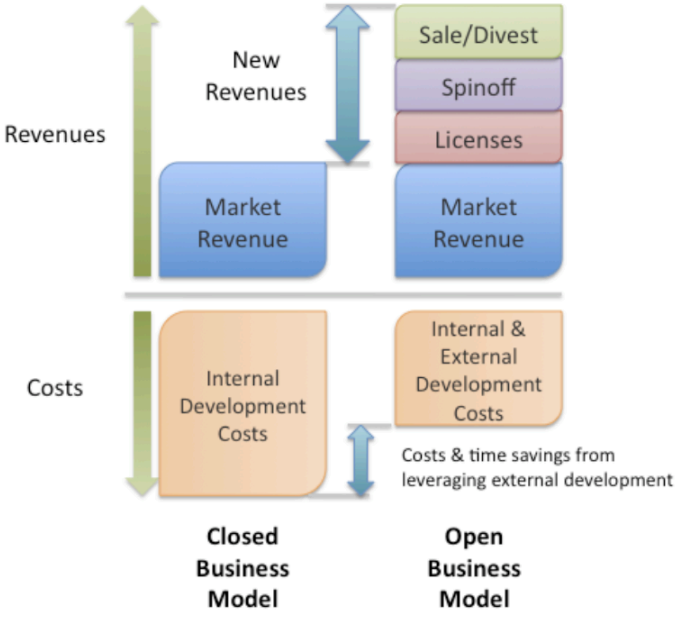


Fig. 3.8: *Closed business model vs. open business model.* Source: (Chesbrough, 2007).

3.5 Conclusions

Overall, the investigation about ecosystems showed some on-going trends in nowadays business environment.

First of all, as value is progressively shifting from product and services to interactions, a revisited idea of value has to be embraced.

Consequentially, enterprises when executing strategies and operations to generate and deliver value to their main clients, need to understand that the process cannot rely anymore only on the

company's single capabilities and resources. On the contrary, the business needs to embrace and include the external players and environment through processes of open innovation.
In order to do this, firms have to build the necessary infrastructures (platforms and ICT) and business models in order to support the exchange of the main resources such as data and knowledge. Value-chain can today be renamed as *knowledge networks* and, as well, seen as *open-models*.
From this point of view, the business ecosystem approach offers a framework for map this innovation by considering the several inter-firm relations (cooperation, competition, coopetition).
Finally, as processes of outside-in are becoming progressively more crucial, companies do not have to forget the importance of inside-out processes. On this regards, it has been underlined the importance for enterprises to align the new innovation processes with the organisational internal structures, model of governance and business models.

CHAPTER 4: COMPANIES NEW CAPABILITIES IN THE ECOSYSTEM ERA

4.1 Introduction

As anticipated in the end of last chapter, business ecosystem innovation processes, in order to arrive to generate positive experiences for their final customers, must be followed up by the alignment of organisational internal structures and capabilities.

As touched-upon in the previous chapters, the role of platforms has massively increased the level of knowledge moving around; dramatically changing people traditional decision making processes and the way they engage with companies and brands.
On this regards, digital technologies have amplified and extended the relationship between buyers and sellers far beyond the moment of purchase. Customers, indeed, once they have hunted down their object of desire, are empowered by new platforms (social platforms) to share and generate new content/information capable of influencing fellow users, as well as, co-creating, or co-destroying, brand identities and reputations (Nysveen & Pedersen, 2013).
Consequentially, if in the past decade, in order to attract, influence, satisfy and keep customers, the marketing equation looked linear and plannable (Guldbrandsen & Just, 2015), nowadays, instead, new platform technologies, channels and media have scrambled this linearity in myriad of

touchpoints and interactions; transforming the purchase process from the metaphor of a *funnel* into an extremely complex, dynamic and always accessible (offline and online) customer decision journey (Court et al., 2009; Edelman, 2010; Edelman & Singer, 2015; Lemon & Verhoef, 2017).
For firms, therefore, the old way of doing business has become unsustainable.

In response to this situation, marketers and researchers, in order to foster engagement with their current and prospect buyers, focused on the creation and the management of Customer Experience (CX) (Kumar & Pansari, 2016).
However, despite giving the top priority to customer experience generation, companies have kept failing in establishing long-term results (Bodine et al., 2013; Rawson et al., 2013).
The main reason of this failure can be found in the incapability of generating the necessary back-office activities and tools (mentioned in the previous paragraph) to establish ecosystems of interactions with their customers (Bodine et al., 2013). This lack of new governance structures is, therefore, reflected in what Rawson et al. (2013) define as the inability of managing the experience as a *whole*.
As many companies, indeed, are still focusing on the maximisation of the experience at each single customer touch-point, they are missing to understand that many consumers, who are measured as satisfied in the single interaction, are, in reality, unhappy when looking at the overall journey (Rawson et al., 2013).

On the contrary, successful enterprises, today, are those who can leverage on *ecosystemic* model of offer: "*Brands like Amazon, Apple and Google that make consumers' lives easier by connecting different aspects across a number of touchpoints have created a new model of securing loyalty*." (Tesseras et al., 2017).
These strategies, though, must be supported by some key elements (such as the creation of positive customer experience (CX) along the consumer journey (CJ) that will be investigated in the next paragraphs (ibid).

Finally, in the second part of this chapter, a literature review will be used to investigate the new competences that companies, needs to master when sustaining the key elements of an ecosystemic

offering. This part is needed because it is necessary to understand that a creation of an ecosystems at any level requires different and new adapted organisational capabilities.

4.2 Definition of experience

According to the study of Consumer Behaviour "*experience is above all a personal occurrence, often with an important emotional significance, based on interaction with the stimuli that are products or services consumed*" (Holbrook & Hirschman, 1982). This definition recognizes that experience is subjective and individual in nature. Here, subjectivity signifies to people's psychological state. For instance, buyers' emotions during the consumption experience are individual and, therefore, change according to different environments (Addis & Holbrook, 2001).

Moreover, the definition above, identifies the role of emotions as significant features of experience; a function which have been neglected before (Ibid).

In most of the cases, therefore, the customer-perceived added-value can be individuated in the experience itself, rather than in the product/service.

Organisations, thus, should keep the role of experience in mind every-time they want to generate some kind of competitive advantage.

4.2.1 Experience as an economical offer and marketing tool

Within the field of consumer studies, the first appearances of the term "experiential" is, again, dated back in the 80s through the researches of Holbrook and Hirschman (1982). They define experiential view as an approach that focuses on the symbolic nature, hedonistic and aesthetic of consumption; grounded on the idea of experiential consumption as the activity voted to the research of sensations and enjoyment (ibid). Following this research, the topic developed in three main categories:

The first groups of academics analyse the purchase and product usability experiences and come up with some of managerial tools aimed to transform the brand offering into experiential. This mean to enrich the offer with symbolic emotional meanings in order to boost the experience of consumers (ibid).

The second group of academics, instead, direct the efforts towards the investigation of the shopping experience; trying to understand what are the determinants to transform the brick and mortar shopping into a multisensorial experience.
Lastly, a third group focus on the experience as part of the brand offering exchange; in other words, the experience as the third component of the whole package: brand – offering – customer experience.

Among these numerous authors, this paper has decided to prioritise the last two streams of studies considered among all the most authoritative, but most of all, the most revolutionary in regards to the topic of experiential marketing.

Pine and Gilmore (1999) have shed the light on how, economy and, therefore, marketing in those years were changing the nature of their proposals towards consumers.
The authors underlined how consumers were shifting towards a willingness of purchasing products with a high experiential component. According to the authors, moreover, the latest and most recent economic frontier is linked to experiences and these are, therefore, considered the proposals with the highest added value for people (ibid).

If in the very beginning, as commodities, natural raw materials, were traded in the markets, marketing as we know it today did not make sense to exist. With the improvement of the economic regime, and the industrial revolution, goods started to be produced.
Goods, through industrial processes, were the evolution of commodities and had greater value than the raw materials; due to the transformation processes and the higher costs incurred. In this economic phase, marketing was also seen as the necessary tool to sell the asset in the market.
The slow and standardized production process, even at the achievement of economies of scale, required less and less manpower; thankfully to the technological evolution, the social welfare increased. In this scenario, a new necessity of people, services, took over.
Services are intangible and customized activities for customers. For this reason, the service value is perceived as greater value than the goods.

As services increased, on one hand they have become more and more personalized, on the other hand, they generated an exponential number of customers; until reaching a progressive and inexorable saturation of both the good and service markets. Nowadays, most of the reasons of this saturation can be found in the advent of the technologies mentioned in the previous paragraphs.
As in the last years, due to the above-mentioned increase of competitiveness, companies had to adapt and find a new tool in order to stimulate a saturated demand and offer: the *experience*.
Experience is neither a service neither a good but something that occurs in people's cognition. It can somehow be described as something memorable, which adds further value to a moment or to the use of a product / service. This can allow marketers to create a memory in the mind of the consumer that will be more powerful than any other communication. Establishing a positive and strong experience will be the basis for a lasting loyalty, or at least a positive word-of-mouth (ibid).
The change towards an experiential paradigm of marketing implies a focus-shift on the consumer and on the dynamics of purchase. As a consequence, this brings out some differences with respect of the traditional scheme.

4.2.2 Definition of customer experience

The studies in the field of experience that were analysed in the previous paragraph - on which laid the foundations for understanding the importance of this new form of offer and new way of doing marketing - have further evolved with the awareness of having to bring in all this at the centre of the consumer.

According to Gentile, Spiller and Noci (2007) the consumer experience derives from a series of interactions between customer, product and company that provokes a reaction. The main features are in the engagement and in the personal nature of the interactions. These interactions can also be better defined as *touchpoints* (Kotler et al. 2017). To Meyer and Schwager (2007), instead, "*the customer experience is the **subjective** response of consumers to any direct and indirect contact with the organization. Direct contact generally occurs in the course of purchase, use, and service and is usually initiated by the customer. Indirect contact most often involves unplanned encounters with*

representatives of a company's products, service or brands and takes the form of word-of- mouth recommendations or criticisms, advertising, news reports, reviews and so forth".

Brakus et al. (2009), also conceptualise CX as the "*subjective, internal customer responses (sensations, feeling, cognitions) and behavioural responses caused by brand-related stimuli that are part of the brand's architecture*".

In the recent years, the concept of customer experience has not changed much. What differs, indeed, is the impact that the digital and on-line processes have had on the modality through which the experience is generated and *lived* (Borowski, 2015). Today, the broad meaning extension of CX expands from traditional customer service channels to new digital interfaces that people use to interact with companies. Digital customer experience (DCX) spotlights the latter, comprising either front-end services and back-office process optimization; that finally benefit consumers (McCarthy & Wright, 2004). Because both concepts (off-line/on-line) are intensely focused on meeting customer expectations, they overlap as often as digital and non-digital do in today's world.

Overall, Verhoef et al., 2016 sum up customer experience as a "*multidimensional construct focusing on a customer's cognitive, emotional, behavioural, sensorial and social responses to a firm's offering during the customer's entire purchase journey.*"

4.3 The era of the customer experience ecosystem

Technological development in the last decades has been the steepest in the entire humanity history. By comparing the way people today watch a movie on Netflix or listen to a music album on Spotify, with how they did just a couple of decades ago on a tape or listening to music on vinyl or CD's, it is possible to understand how fast technologies are nowadays replacing each-others.

Technology developments, like the latter mentioned, are not just changing the way consumers play a record or watch a movie, rather, it can be said that they are revolutionising the entire way enterprises do business.

For instance, companies such as Spotify or Netflix - todays biggest players in the music and movie industry - in practical and operational terms, have nothing to do with music or movies production

(Netflix just started a couple of years ago producing its own series); they are just streaming platforms.

Platforms, indeed, are becoming the new fields were consumers are spending, and perhaps are going to spend, most of their *consumption* time:

1- Pre-purchase phase; Looking for information on products or brands (rating websites: e.g., Tripadvisor, Trustpilot or price comparison websites: e.g., Momondo, Google shopping;);
2- Purchase phase (e.g. Alibaba, Amazon, Zalando);
3- Post-purchase; when leaving feedbacks or simply rating a product or an experience (Tripadvisor, Trustpilot, Google maps) or simply engaging and sharing knowledge in brand communities' platforms (Bodey & Gyrd-Jones, 2015).

In response to this new scenario, it is clear that companies, on one hand, must have the urgency to realign their marketing strategies in order to ensure their presence, meet and influence consumers on the new digital platforms, new digital touch-points and the overall new consumer *journey* (Court et al., 2009; Edelman, 2010).
On the other hand, as consumer platform-generated value it is not anymore primarily related, and evaluated, to product and service, companies need to be able to generate a new king of economic-value: the *experience.*

On this regard, Marketing, as academic science, has been very slow to shift the investigation point of view on the customers' side. Researchers, indeed, have been focussing on generating customers' value creation for firms; like, for instance, the case of all the studies related to the measurement of Customer Lifetime Value (CLV) (Holm et al., 2011; Gupta et al., 2006; Kumar et al., 2007).
However, since todays' digital revolution has empowered consumers through new knowledge, putting them in the driver's seat, companies' strategies cannot respond anymore to this environment with a company-centric approach. On the contrary, as stressed by many practice-oriented authors (Edelman, 2010; Rawson et al., 2013), a rather *customer-centric* approach is needed.

Following studies, understanding the importance of managing the relationship, started investigating the best practices in order to generate and manage customer *engagement* (Van Doorn et al., 2010; Brodie et al., 2011). These studies, by fully embracing the consumers' sphere, they have focused on consumers' behaviours and shopping preferences as the result of a psychological state and a sum of the overall brand perceptions.

This new approach to the matter has led academics and marketers to establish the link between positive customer experiences at each single interaction with customers and customer acquisition and retention (Homburg et al., 2015). However, in search for the quality maximisation of each single interaction, managers and companies ended up overspending in terms of budgets and, yet, having consumers being not satisfied, or worse, switching to other products/services. (Rawson et al., 2013; Edelman & Singer, 2015).

Furthermore, most of the previous researches in recent Marketing literature have missed to integrate the role of the complex set of interactions occurring along the new consumer *journey* and outside the duality brand-consumers.

As platforms "*shift value from product and services to the quality of the interactions"* (Nichol, 2016), customer experience should be studied from the overall perspective of the *ecosystem*.
Today more than ever, indeed, consumers' decisions are influenced by touchpoints that are external to the organisation (such as before-mentioned platforms or partners); the so-defined customer experience ecosystem (Bodine et al., 2013; Edelman & Singer, 2015; Maslowska et al., 2016; Verhoef et al., 2016)

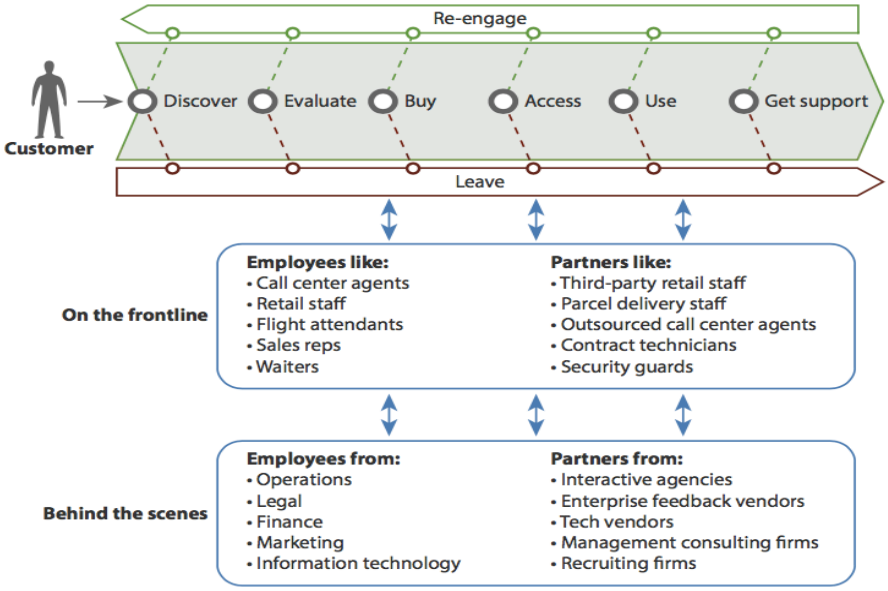


Fig. 4.1: *Customer experience ecosystem.* Source: (Bodine et al., 2013).

Like in the case of business ecosystems (chapter 3), the concept of customer experience ecosystem, require marketers to leverage on different kind of technologies (digital platforms) and capabilities (such as ICT) in order to arrive to fully manage and control the overall customer experience and *journey*. In other words, while few years ago, the customer acquisition and retention was a problem strictly related to the marketing department, in today's scenario, instead, the idea that organisations can still respond to this competitive landscape as internally "divided" units, it has become unsustainable and counterproductive (Court et al., 2009; Edelman, 2010; Perkins & Fenech, 2014; Rawson et al., 2013). Many established firms, indeed, due to their incapability to bring the necessary changes to their governance model and overcome siloed business units, are missing to integrate the different customer experience ecosystem elements under a unique and coherent vision and management; facing troubles in todays' competitive and market environment.

4.4 Key structural elements of a customer experience ecosystem

4.4.1 The concept of touchpoints

The concept of touchpoint is the *nucleus* and the starting point for understanding the customer experience ecosystem. In general terms, a touchpoint indicates the moment of interaction between a brand and its stakeholder (such as customers, suppliers, employees) (Jenkinson, 2007).
Kotler et al. (2017) defines touch-point as the "*instant the consumer encounter the brand or its products through a direct experience, mass media communication or a random observation*".
The notion of touch-point, therefore, has always existed in the commercial field.
What todays has changed, it is the numerical quantity and *the nature* of touchpoints.

It is, indeed thanks to new networking technologies, such as the advent of Internet 2.0, mobile technologies and platforms, consumers today engage licentiously with brands.
On this regard, it can be said that buyers' relationship with brands during the purchase process today is *polygamous and unfaithful; c*onsumers, indeed, in their option-evaluations process, keep extending their options along the decision-making process and use media and channels which are not under the control of producers and the sellers (Edelman, 2010).
Moreover, if just some years ago the post-purchase relationship between buyers and sellers was limited to a request and supply of *customer-service* actions, today, instead, mostly because of social platforms, consumer stay heavily engaged, socially positively or negatively advocating the purchased brand or in some cases even participate in the brands development (ibid).

Summing up, it can be said that touchpoints today can be divided in three phases (Lemon & Verhoef, 2016):

1- *Pre-purchase*; it groups all the contacts between the prospect buyers and the brand, and its ecosystem, before the purchase.
2- *Purchase*; it groups all the contacts between the prospect buyers and the brand, and its ecosystem, during the purchase moment.
3- *Post-purchase*; it groups all the interactions between the consumer and brand, and its ecosystem, after the monetary transaction. In the most recent years, this phase, above all, has been the one which received more attentions either from academics that managerial-oriented researchers. If few years ago, this phase was limited to the product experience and the customer service (Holbrook & Hirschman, 1982; Kelley & Davis, 1994), today, many

authors suggest that this stage has become the most crucial to drive re-purchase (Court et al., 2009; Edelman, 2010; Edelman & Singer, 2015).

Customers' touchpoints have also changed in nature. If just few years ago, all the interactions were, more or less, under the direct control of the enterprise, today this has changed as companies are progressively losing *grip* over them. This is mainly due to new dynamics such as open-innovation, collaborations, co-operation, for instance, that have externalised some stages of the consumer journey to third parts (Lemon & Verhoef, 2016). Furthermore, as customer experience ecosystems have expanded the number of influencers in the decision-making process, managers need to take care of opinions and content related to the firm those are generated by their customers, peer influencers (public known sector experts) and independent information sources.
Lemon and Verhoef (2016) arrived to the following touchpoints categorisation:

1- *Brand-owned touchpoints*: customer interactions along the experience that are created and controlled by the firm.

They comprise brand-owned media (e.g., social media pages, loyalty programs, websites and brand promotions) as well as, marketing mix outcomes (e.g., brand manifestations, packaging, price, sale advisors and support).

2- *Partner-owned touchpoints*: customer interactions along the experience that mutually created and controlled by the company and one of its partners.

Partners are intended to be external agencies, distribution allies or external vendors. As today the practice of co-evolving and collaborating through the usage of platforms is increasing, the line between brand-owned and partner-owned touchpoints is progressively disappearing.

For instance, when looking at the smart speaker Sonos, it is clear that the APP people have to use to play through the speaker does belong to Sonos (therefore is brand-owned) but it is operated by the smartphone operating system platform (Apple platform or Android platform (partner-owned). In other words, the management of customer experience in the business ecosystem era must take into consideration this touchpoint increasing co-creation.

3- *Customer-owned touchpoints*: this group involves all customer actions that are still part of the customer experience which are not controlled by the brand or its partners.

Once again, this touchpoint category can be linked to the explosion of technologies such as *social platforms*. Customer-owned touch points can be found mostly in the post-purchase phase. A clear example could be a customer review about the product or website on Tripadvisor or Trustpilot, or simply a video on Youtube or a post on Facebook.

Finally, this touchpoint-category has enable the formation and the explosion of the phenomenon such as *influencers;* consumers with a higher degree of expertise about certain product categories which are *followed* by fellow consumers through their social media channels in order to gain more knowledge or simply listen to their opinions.

4- *Social/external touchpoints*: these group of touchpoints comprise all the influences that consumers get from the social environment. This includes the impact of *word-of-mouth* as well as the above-mentioned *social media* and *social influencers.*

Overall, it can be said that customer experience is not derived from a unique and time-limited interaction, but, on the contrary, it is the result of numerous touchpoints that take place in different situations and dynamics (Verhoef et al., 2009). Each phase of the customer decision-making process, therefore, has its own peculiarities and dynamics that contribute to create the consumer experience in the consumer's mind.

As seen, these phases, influencing the whole experience, extend from the initial research phases to post-purchase interactions (Verhoef et al., 2010). Over time, the succession of positive elements creates a satisfaction in the person that will positively influence future expectations.

Customer experience, from a touchpoint perspective can be summed up as in the following figure (Lemon & Verhoef, 2016):

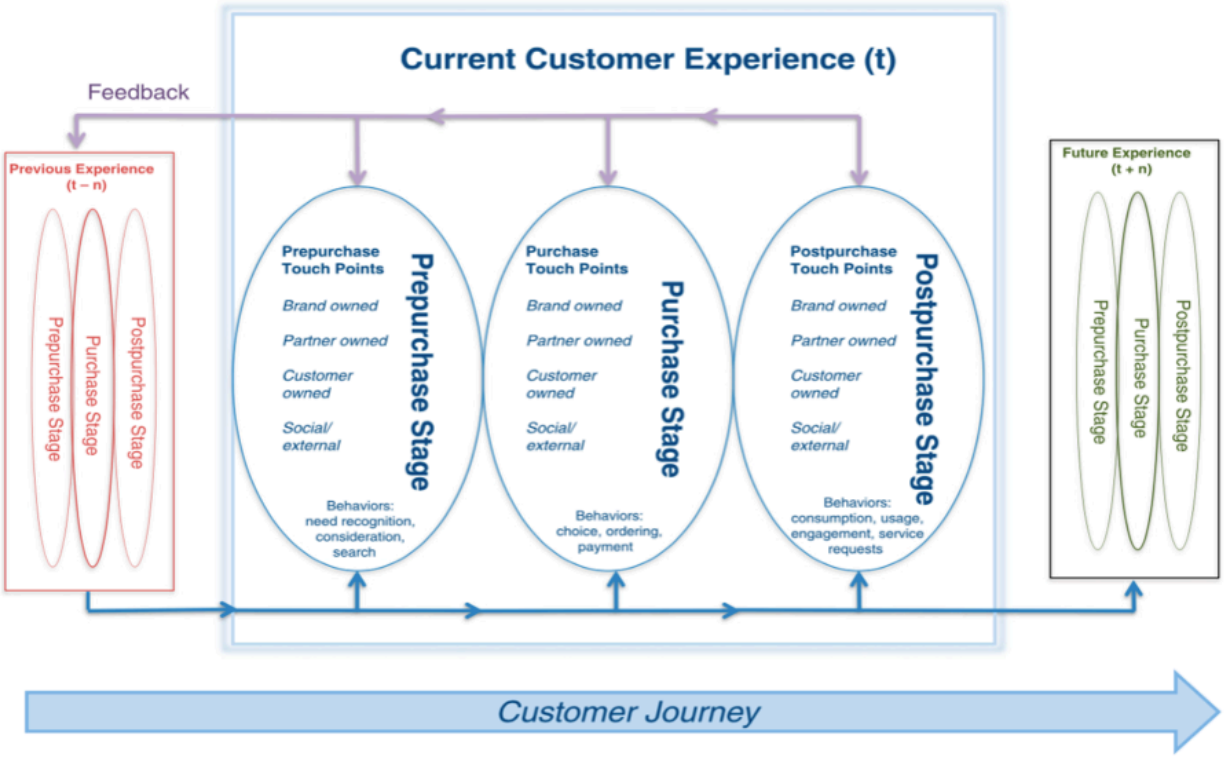


Fig. 4.2: *Process model for customer journey and experience.* Source: (Lemon & Verhoef, 2016).

4.4.2 The customer journey

As showed in fig. 4.2, today the idea of customer journey embeds a much bigger number of stages and touchpoints in comparison with a few years ago (Lemon & Verhoef, 2016).

Before the explosion of the web 2.0 and its digital platforms, consumers' touchpoints, along their decision-making process, were described with the metaphor of the *funnel* (fig. 4.3).

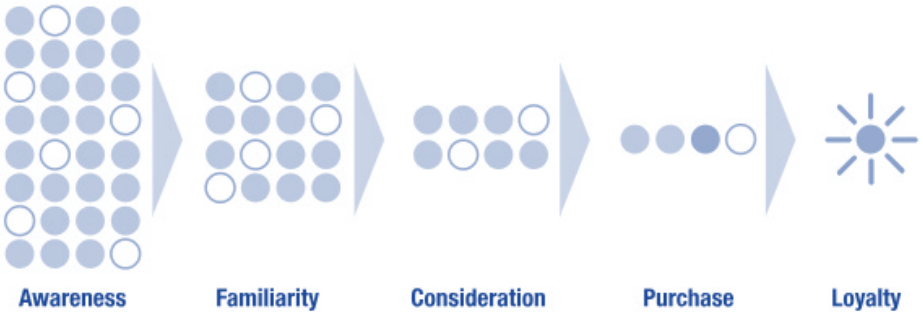


Fig. 4.3: *Graphic representation of the funnel customer journey.* Source: (Court et al., 2016).

Renamed “traditional funnel”, this methodology outlines five steps that guide people from the initial desire to the purchase and, the eventual, loyalty: *awareness, familiarity, consideration, purchase and loyalty.*

Court et al. (2009), which analysed the journey from a cognitive and consumer behaviour perspective, discovered that consumers, in the funnel model, were highly static in their brand considerations.

From step 1 to step 5, indeed, people had in mind the same pool of known brands that were narrowed down at each passage, until arriving to the final decision.

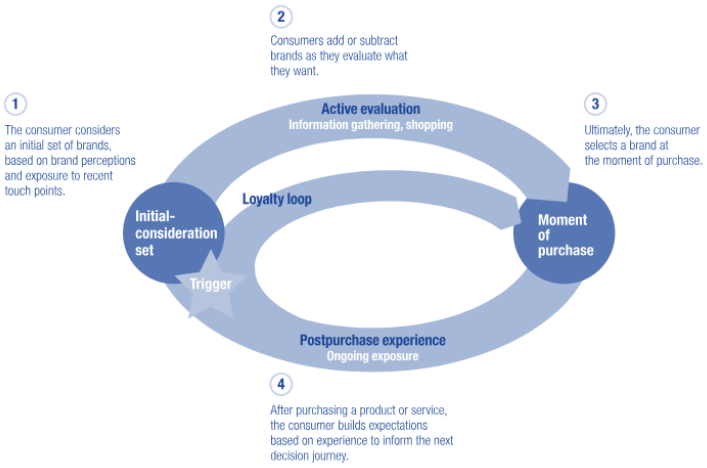


Fig. 4.4: *Graphic representation of the circular customer decision journey.* Source: (Court et al., 2016).

In other words, in the funnel model, brands did not have the chance to appear along the way of people decision making process but, on the contrary, in order to be purchased, a company had to be present in the consumer’s mind from the need arising moment.

Nowadays, instead, the way people take their decisions and engage with brands has changed. Court et al. (2009), indeed, state that the former linear and regular decision-making process cannot reflect anymore the way people purchase and experience a brand. In order to picture this new scenario, David Court and three co-authors carried out an extended research on 20.000 consumers, arriving in 2009 to reformulate the model of traditional funnel into the Customer Decision Journey (CDJ) model (see fig. 4.4).

This new model shows some peculiarities:

a. First of all, the new model describes the process as a *journey.* Consumers therefore, enabled by new technologies and media, follow a path that is circular and irregular: buyers’ steps along the journey are not fixed, on the contrary, they can move back and forth across the myriads of touchpoints and channels.

In contrast with the previous model, this means that brands who are not present in the initial phase can still be considered in the next phases; the pool of considered brands, therefore, increases rather than decreasing (like in funnel model) along the *journey*.

This better reflects the increased level of competition in nowadays market scenario. If on one hand, this openness represents an opportunity for companies to leverage on new source for innovation (*knowledge networks* and consumers' *big* data), on the other, it represents also a huge problem.

As stated in the introduction, indeed, since consumers are free to jump from a brand to another at any time of the journey, it has become harder for companies to find relation between the amount of marketing investments and the acquisition and retention of customers (ROMI) (Court et al., 2009). In other words, this means that a customer can follow all the interactions and touchpoints managed and maximised by the brand along the journey but, end up buy a competitor.

b. Another important change reflected by the CDJ, it consists in recognising the todays active role of consumers empowered by new technologies.

As mentioned before, the transaction from the funnel to the *journey* responds to the shift in the way marketing is now influencing its prospect customers. If in the previous years, marketing and communication plans were using *pushing* methods to generate sales, nowadays instead marketers, due to the incapability of controlling the whole communication process (omni-channel and media), have to embrace a customer-driven approach.

Once again, as the new touchpoints shows, the relationship between brands and consumers is now partially *managed* by people external to the organisation.

In this situation, the consumer is positioning itself in the centre of marketing strategies, going from being passive to company activities, to co-creator (da Silveira et al., 2013).

c. The last main disruption brought by the transition from the *funnel* to the CDJ, can be found in the post-purchase phase.

If in the linear decision-making process (funnel), the concepts of loyalty and advocacy were seen as ending points, now instead, they can be found in other phases of the *journey*; even before the action of purchase.

As underlined in the previous paragraph, new technologies, such as peer to peer media and social media, indeed, have extended the engagement beyond the moment of the monetary transaction.

The result is represented by a new *prosumer* (Toffler, 1980) actively promoting or assailing brands, collaborating in the brand identity development and gathering together in product/service communities (Edelman, 2010).

A new updated customer decision journey

Inspired by the work of Court et al. (2009), Edelman (2010) proposes an updated version the CDJ model. In comparison with the Court model, this new journey implicitly requires a different managerial approach: from being touchpoint and micro-interactions-based, to viewing the process as *holistic*.

As firm's emphasis on perfecting each single interaction with their customers didn't decrease the overall churn rate (Rawson et al., 2013), Edelman (2010) and Edelman and Singer (2015) understood that it was not the touch-points that required to be enhanced, rather it was the process as a whole. This new model, indeed, shifts its focus from satisfying consumers through one-to-one engagement, to the creation of added value through transforming the shopping experience into an intuitive and simplified *journey* (ibid). To Edelman and Singer (2015) consumer journeys, therefore, should be managed as they were products and services.

Following Edelman and Singer (2015), in order to deliver great CX, companies should leverage on new technologies, such as marketing automation and contextual personalisation.

The idea behind the new *journey* (Fig. 4.5), is that companies should generate highly intuitive and compelling paths so that prospect customers would not even think about the *consider* and *evaluate* phase, but they would directly *start the new journey* from the buying phase (Edelman & Singer, 2015); limiting churn rate and increasing people customer acquisition and retention.

In other words, Edelman in 2010 and in the updated theory (Edelman & Singer, 2015), propose a so-called *accelerated loyalty journey* where the final aim is to *bond* with the consumers in order to lock them in the journey and, therefore, with the brand.

As the concept of *locking-in* the customer to a brand is not newly invented, it is important to underline that, unlike the forcing strategies used a decade ago (think about the *razor and blade* business model, or the mobile companies' contracts), Edelman and Singer (2015) state that customers remain engaged to the brands' journey because they benefit from them; the journeys, indeed, on one hand generate value for the customers and, on the other, are source of competitive advantage for their organisations (ibid).

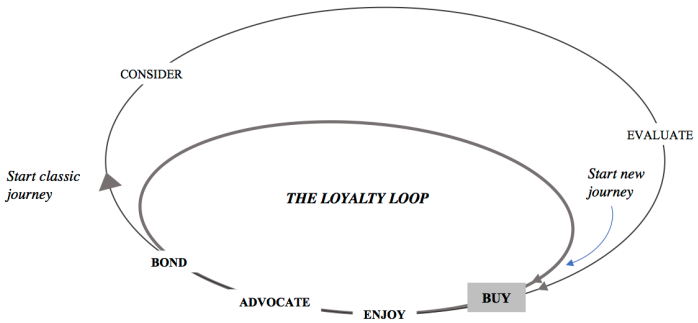


Fig.4.5: *Graphic representation of the updated customer decision journey.* Source: (Edelman, 2010).

Let's now take a look to the individuated phases of the new journey:

- *Consider* (the initial consideration phase):

  In contrast with the funnel model (in which consumers take into consideration many brands), in this model the number of the companies that are initially taken into consideration is lower. Only few brands, indeed, engage with the customer through the commercials, word-of-mouth or in the bricks and mortar shelfs. Brand awareness is important as the brands which are in the initial consideration pool have a three-time higher probability of being bought.

- *Evaluate* (the active phase of evaluation or research of possible purchases):

In contrast with the funnel model (in which consumers progressively narrow down the number of considered brands), in this phase buyers look for feedbacks, competitors' alternatives and re-seller. This phase of information research can generate new opportunities for brands, as new touchpoints are generated, the number of considered brands for the final decision increases.

- *Buy* (purchase phase):

Buyers, more and more often, are taking control of their decision processes (Court et al. 2009). As product information are promiscuous on the web, marketers *push* communications have lost their

efficacy. Direct marketing and all other forms of attempt to direct influencing people decisions are fading in favour of *pull* information (ibid).

- *Enjoy, advocate and bond* (post-purchase phase):

The customer journey is considered as a continuum cycle in which the experience of the post-purchase phase cover the crucial role of influencing future purchases (Court et al. 2009).
The moment following the purchase, indeed, consumers can engage with the brand and show many different behaviours; for instance, maintain a strong level of engagement, highly criticise the product and service on the media platforms, or, contrarily, suggest it and promote it (Edelman, 2010). In other words, a disappointed customer will stop the engagement with the purchased brand, while, a satisfied consumer will actively promote the product/service through, for example, word-of-mouth (ibid).

4.4.3 Customer experience ecosystem management

Embracing the customer perspective of the CDJ, it is important for firms to arrive to, first of all, highlighting the *key aspects* and *moments* in each stage.
Moreover, from this first analysis, firms should find in each of these stages the touchpoints and elements that can be used to influence consumers across their journey (Lemon & Verhoef, 2016).
Lastly, firms should leverage on this knowledge to build the so-called *superior journey* (Edelman & Singer, 2015). However, as anticipated in the introduction, in order to arrive to build and deliver this kind of seamless experience across the omni-channel, companies need to build an *ecosystem* which is able to create an overall journey *logic* by integrating different capabilities and functions; going, therefore, beyond *siloed functions* (Homburg et al., 2015; Rawson et al., 2013).

Moreover, through the study of existing literature on the topic, it can be summed up that organisations today need to master, seamlessly, three main capabilities in order to successfully manage customer experience (Homburg et al., 2015; Edelman & Singer, 2015):

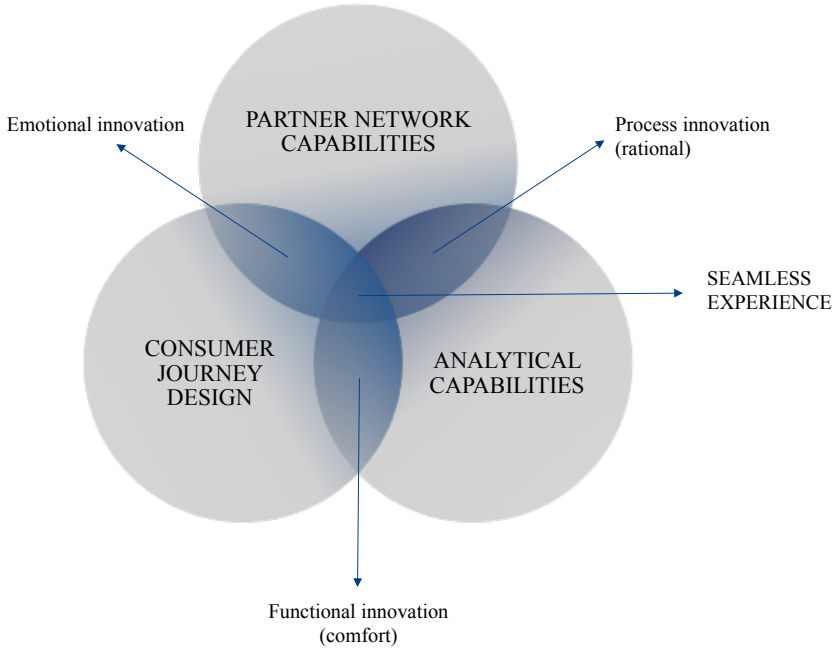


Fig. 4.6: *Graphic representation of the main organisational capabilities for the customer experience management*. Source: own representation.

Mapping the interactions

In order to discover how the consumer journey can be improved by the above-mentioned capabilities, companies need to first analyse the path consumers take along the journey.

On this regards, mapping the journey touchpoints it is the first step to arrive to understand what the customers are trying to do, which barriers they encounter and how they *feel* during the interactions with the product/service or journey (Richardson, 2016).

Richardson (2016) stresses the importance of taking into the analysis also the so-called *micro-interactions* – few seconds or less interactions that can be reason for liking or disliking the current CJ (ibid).

However, it is important to underline how this mapping analysis does not aim to manage customer experience as the experience-maximisation of each single touchpoint; rather the objective of this tool is to create a full and complete picture of the overall CX situation and health.

Consumer analytical capabilities

As nowadays consumer journeys are mostly flowing across *digital* channels, on one hand, companies should understand that an approach such as Richardson's touchpoint-mapping could reveal itself a very complicated and extended process to carry out. On the other hand, companies can leverage on the data collected across the omni-channel journey to gain precious insights about consumers' preferences and behaviours when shopping (Fanderl et al., 2014).

Todays' capability of managing and generating great customer experience passes mainly through retrieving customer data, performing analytics on those data and taking action based on the resulting insights.

More than ever, when navigating on the over-crowded Internet, consumers are demanding for relevant, targeted and *tailored-to-their-needs* information. In order to make the CDJ a stickier experience, therefore, enterprises must be able to leverage on real-time data analytics in order to let their journey stand out (Edelman & Singer, 2015; Harvard Business Review, 2018). Consequentially, the objective in this process is the *personalisation* of the CX.In order to achieve their objectives, companies need to use technology capable to enable the consumers journey to independently optimise the *surfing* experience and predict customers' actions (ibid; Edelman & Singer, 2015).

Collecting tons of data about customers is now important for having customer-driven approach to business. However, this approach itself does not automatically make the customer experience engaging and successful.

Today companies need to be *agile* when managing the relationship and the experience of their customers.

To be agile requires businesses to foster collaboration within different departments through the development of cross-functionality Customer Relationship Management (CRM) platforms in order improve the customer experience along the journey (Albrecht & Schroeder, 2016).

Edelman and Singer (2015) also recognise the important role of emerging technologies for empowering companies to adopt *proactive* solutions in order to generate great CDJs ans bring new added value for both buyers and sellers.
On this regard, Edelman and Singer (2015) states that "*companies have been merely reacting to customers' needs, improving the efficiency of CJs or identifying and fixing pain-points in them. Now, managers are working to create customised experiences so finely tuned that once customers get on the path, they are permanently engaged. […] cutting-edge journeys succeed because they create new value for customers.*"

Finally, in terms of practical execution, analysis of existing literature-review underlined the importance of having (Edelman & Singer, 2015; HBR, 2018)

1- *A clear strategy* of what is the firm target to achieve though real-time analytics;
2- *New journey technologies*:
    A. On-going data-access stream: smart-technologies (e.g., smart-phones, smart-speakers, smart-televisions) are always-connected products which provides a constant open bridge between companies and consumers. This bridge empowers the exchange of stream of data about products users' experiences and preferences.
    B. Journey analysis and management platforms: these unstructured data regarding customer behaviours on the omni-channel touchpoints need to be analysed by platforms able to make-sense of them by leveraging on elaborated algorithms or machine-learning/artificial intelligence software (e.g. Cloudera, Adobe, ClickFox and Pega).
    C. Application programming interfaces (APIs): These range of technologies exponentially raise the creation of cross-brand customer journeys.
    APIs, indeed, allow seamlessly interconnections between APPs, websites of different companies. A crucial technology in the *ecosystemic* era of collaborations and partnerships (see chapter 2 and paragraph 3.3.3.4);

3- *Strong organisational collaboration* across all the functions in order to integrate and align technologies to the organisational department and processes (overcoming siloed business) (Edelman & Singer, 2015; HBR, 2018).

Once companies have managed to gather all these information and insights together throughout the use of above-mentioned technologies and processes, the next phase and main capability is to translate these insights into the design of compelling and s*tickier* customer journey.

Consumer journey design

In a world where complexity is raising in all contexts, great solutions and strategies can most of the time fail simply because they don't get to be understood by their audience. For the same reason, consumer journeys, despite they are built up from great premises and enormous amount of data and insights, can fail to attract and engage with consumers. In order to increase the likeability of their journey, many companies, such as Apple Inc., Coca-cola, Ford, have integrated the concept of *design thinking* into their business and experience processes (Kelly et al., 2015).

In the era where any technological device was requiring an instruction leaflet to be learnt before it could be used, Apple's main focus, and disruptive innovation, has been understanding people's needs and desires when approaching a PC or whatever technological product. With this consumer-centric approach, the Cupertino based company arrived to generate intuitive, easy to use and easy to like (design wise) products and software. Design thinking, therefore, approaches customer experience and customer journey from the opposite angle of the analytical one; starting from the solutions rather than the analysis of the problem (ibid). This is very similar to the philosophy that Apple used, where products were designed before that engineers had even created the necessary hardware and software. From this point of view, Apple Inc. has been the first recognising the precious value that simplicity, intuitiveness and clean design (in a word, *user experience*) can add to the strategy of product development.

As today customer experiences and journeys can be intended as the new *product* and *services* (Edelman & Singer, 2015), the same concepts of design thinking and user experience can be crucial

when designing and managing customer interactions. When designing customer journeys, therefore, managers should embrace both information coming from the real-time analytics tools and, as well, they should simply ask themselves: "*If I were a customer, what would make my experience so easy at this touchpoint or in this phase of the journey*?" (generating functional innovation - comfort-).

In practical terms, consumer journey design should start from the analysis and mapping of the *user experience* at each single touchpoint in order to respond with simplified and coherent touchpoints across the whole customer experience and journey (Breschi et al., 2017). Furthermore, by leveraging on technologies such as *marketing automation*, journeys should *become alive* and be able to adapt to customers' decisions and *clicks*.

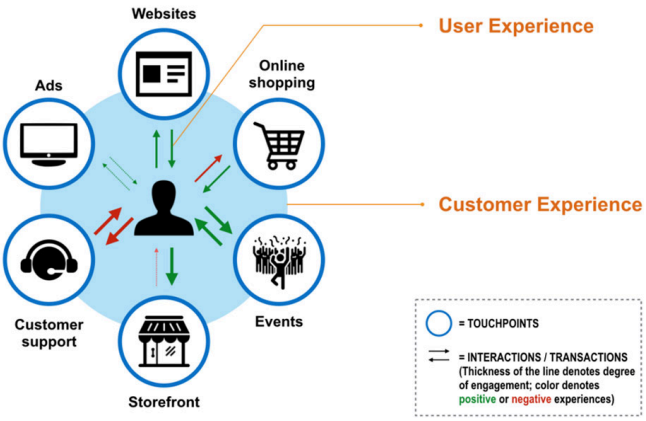


Fig. 4.7: *User experience vs. customer experience in the CDJ.* Source: (Suzuki-Lambrecht, 2018).

Edelman and Singer (2015) propose a list of four interconnected tools that managers should take into considerations in order to design *sticky* and compelling journeys:

1- *Automation*: this process comprises the digitalisation through the use of automation platforms of some steps of the journey that used to be done manually. This shift makes it possible to transform complex back-office operations into simple, intuitive front-office experiences. Many examples can be found in the banking sector where APP-based services are replacing some of the old practices (such as money transfers, account opening, communications from the bank and so on).

2- *Active personalisation*: leveraging on technologies such as real-time analytics or previous purchases and researches journey should be able to adapt and constantly understand which is the most suitable content or configuration for the user. Amazon with its content personalisation and items suggestion is, perhaps, the most clear and famous example of this practice.

3- *Contextual interaction*: journeys, following Edelman and Singer (2015), should also be able to recognise and adapt their design and content to the consumer's physical surroundings. By doing so, the journey can even gain the conative function of inducing consumers to the next phase of the journey. A perfect example of this last tool can be found in the SAS (Scandinavian Airlines) APP. People flying with SAS, besides being able to effortlessly accomplish the pre-purchase and purchase phase of their consumer journey (comparing flights and buying the ticket), consumers are empowered by the APP with other multi-functions such as on-board entertainment or hotel offer related to the selected destination. Moreover, the APP, laying on the geo-localisation of mobile devices, is intuitively providing flyers with boarding pass, gate number and other flights info (such as delays) at their arrival at the airport.

Overall, in today over-crowded and complex online panorama, consumer journey design can be intended as the pivotal capability to generate extra value by providing customers with comfortable and time-saving online experiences (Lemon & Verhoef, 2016). In order to increase the value of the experience, companies should seek not to just improve the journey but to expand it by including complementary and useful functionalities. In order accomplish this objective, companies should be able to establish a network of partnership with other service providers. The role of collaboration and alliances, therefore, comes back as a crucial tool also as value creator in the customer experience and journey management.

Partner network capabilities

Despite being intuitive, simple and user friendly, journeys should also empower consumers, and the firm itself, to capture new value by creating external partnerships and collaborations.
As customers today keep getting *attacked* by new product/services or new APP to have on their smartphones, it has become crucial to enable consumers to do *more* with a single APP or journey.
On this regard (Singh & Singh, 2016) take from the *payment-world* the concepts of *open-loop* vs *closed-loop* networks to distinguish APPs that enable consumers with a multitude of use cases (like credit cards – paying everywhere with the same service-) and APP which, instead, have the usability limited to their *territory* (like gifts cards - they can only be used in the issuer shop-).

They conclude by individuating in the *open-loop* the fundamental premise to create *all-in-one* products/services and experiences; like the case of *WeChat*, the APP that is *"setting the prime example of a compelling all-in-one experience"* (ibid).

Today, the consumer's demand for product/services and APPs like *WeChat* where users can shop, book an Uber ride or an hotel and transfer money right while chatting with their friends, is steeply increasing (ibid). Taking from cases such as *WeChat*, some researchers called for expanding the definition of customer journey to a network perspective that recognise the importance of the broader ecosystem in which the experience occurs (Tax et al., 2013; Bodine, 2013, see fig. 4.1).
In the specific, Tax et al. (2013), investigating the service network through which customer experience is generated, identify three kind of networks:

1- *Customer-coordinated network:* in this case the customer is in charge of coordinating and organising all the activities of the experience (for instance, going to a football match the supporter organises the ticket purchasing, the transport to the stadium and the related activities.)
2- *Service-coordinator-network*: the customer is still in control of most part of the journey except for the outsourcing of few activities (such as when travelling, travellers are in coordinating most of the activities except when using airlines websites to check-in or get extra on-board services).
3- *Firm-coordinated network*: in this model, firms could be compared to the Iansiti and Levein (2004) role of Keystones. Companies, indeed, are the leaders in connecting all the phases and steps of the customer journey. As a result, this is the network *shape* where enterprises have the highest degree of control over the process; often because owners of the platform on which the network is exchanging information.

Finally, Kenis and Provan (2007) individuate different model of governance for each of the network-type above-listed: (1) *participant-governed network* where the customers are rule themselves, (2) *lead-organisation governed network* where one of the partner of the network manage the interactions and, lastly, *network administrative organisation* where a separate organism is in charge of the network administration.

4.5 Conclusions

Customer experiences are at the centre of every ecosystem. When ecosystem players mix their functional, technology and sectorial strengths, and capabilities, they can deliver a unique value proposition to customers. Going beyond the traditional concept of value, platforms and ecosystems are able to engage and keep customers *stuck* to the brand journey because they create tangible benefits from their buyers. People use Uber because it is easy to use and cheaper in comparison with taxi services. The same can be said for Spotify (cheaper and easier than buying LPs or albums) and Netflix (easier and cheaper than buying DVD or renting them from the *death* Blockbuster). Customer experiences, therefore, can be considered to be based on the value concept of convenience and comfort (Edelman & Singer, 2015) rather than emotional bonding (VanDoorn et al., 2010; Kumar et al., 2013).

In the next section, this topic is further analysed through the study of the latest strategies and actions of Airbnb Inc. (the hospitality sharing platform).

In order to answer the last research question "*How can business ecosystem impact on companies' operations?", a* practical case scenario is taken in consideration to put in tension the literature review of this master thesis.

CHAPTER 5: THE CASE STUDY

Airbnb Inc.: from simple platform to complex and holistic travel ecosystem

In order to arrive to test the validity of the individuated literature review, and this project itself, it is now analysed the case of Airbnb in order to see how ecosystems can nowadays impact on the companies' success.

5.1 Case introduction

Today Airbnb Inc. is one of the most famous platform in the world sharing economy.
The American company entered the market of hospitality exactly 10 years ago (August 2008) and today has reached the yearly revenue of 2.1 billion dollars (2017); an extraordinary result considering that the market leader (Wyndham Hotel Group) after many decades of operations reached the revenue of 5.1 billion dollars in the same year. What is even more extraordinary about this data is that, while the Wyndham Group owns, approximately, 8000 hotels and resorts, Airbnb owns none.
So how has Airbnb arrived to disrupt the hospitality market so fast and in such a profitable way?
The American company simply applied to the old rule of trading (a bed for money), the modern concept of online exchange spaces: the platforms.
In line with what stated in the chapter 3 of this paper, Airbnb has benefitting of new business trends which have seen shifting the value creation from the idea of the pipeline and classic value chain, to the idea that value is today the result of networks (paragraph 2.2.2.3).

From a *customer experience* perspective, the company, indeed, does not do anything else than providing the platform where travellers' demand for apartments/rooms is met by peers who have vacant spaces which, before Airbnb arrival, were left unused.

Beside a simple platform, the San Francisco company provides, as well, other benefits to the platform participants; such as a free *house reservation* management tool for the lender and a safe environment where renters can easily pay, cancel the reservation and benefit from previous renter feedbacks. In other words, it can be said that the functioning mechanism of Airbnb relies on the idea of co-creating *shared value* among all the participant of the ecosystem:

- House lender (Airbnb hosts) gets money for renting a space that without Airbnb would be left unused.
- Travellers can rent cheaper solutions than hotels; furthermore, Airbnb listings, being private residences are more unique than standardised rooms.
- Airbnb earns from the service fees that people pay every time they complete their bookings.

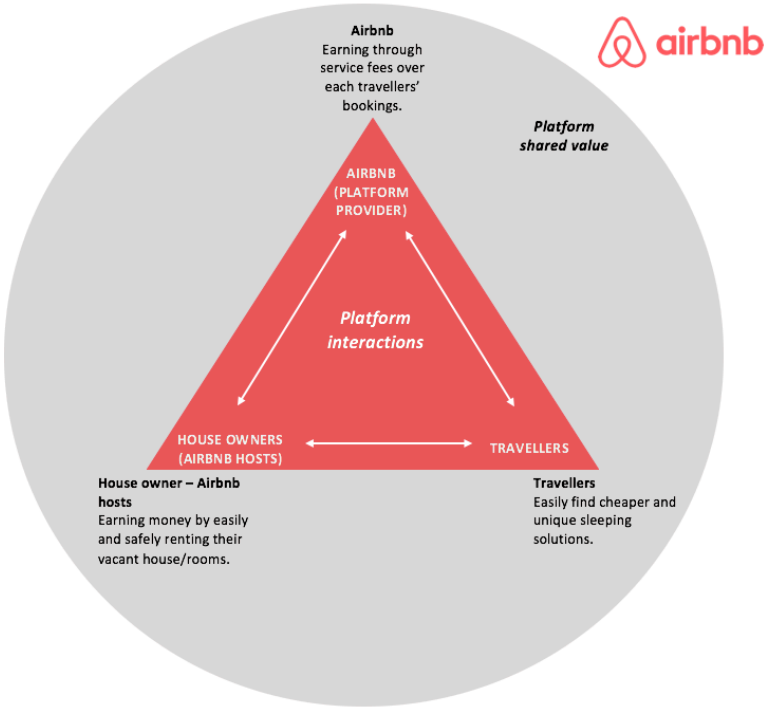


Fig. 6.1: *Representation of Airbnb platform*. Source: own representation.

Moreover, it can be added that all the participants *co-evolve* as the ecosystem provide economic benefits to all three players allowing them to travel more, make more money monthly and re-investing the transaction fees into the platform survival and expansion.

From a *business and product/development perspective*, Airbnb platform can be intended as the result of a collaborations.

In order to create the platform, indeed, several already existing technologies have been integrated (outside-in) to support most of the functionalities of the website, booking management tool, payment tool and apartment/room finder. Among these Google maps, Amazon storage services and Java programming tools.

However, in the last years Airbnb is facing new and complicated challenges that are threatening its financial performances and in some cases, the existence of the business itself.
In the first case, an example can be found in a progressive number of hosts dropping the service because of the risks related to rent their properties to unknown people[5]. Many episodes of damaged houses, indeed, have induced participants and platform value shareholders to drop out the service as they lost the trustworthiness towards the service and the platform members (see paragraph 2.2.2.3)[6].

Pic. 6.1 *Warning signal in regards to the prohibition of Airbnb in the lodgings.* Source: (Japan time, 2018).

Besides losses in trustworthiness from its members, Airbnb, as many other platform businesses operating worldwide (e.g. Uber), has been subjected to local governmental restrictions.
As Uber, which has been forced to shut down its operation for unfair competition (e.g. in Denmark), Airbnb is threatened by laws protecting the national hospitality industry players.
In Japan, for example, in last June, the govern have approved restrictions to unlicensed lodgings (Minpaku law) forcing Airbnb to cancel thousands of bookings (only few Airbnb hosts have managed to receive the license from the govern)[7].

[5] https://www.theguardian.com/technology/2015/apr/30/airbnb-calgary-home-trashed-drug-induced-orgy
[6] https://community.withairbnb.com/t5/Hosting/House-trashed-wrecked-destroyed-by-guest/td-p/76067
[7] https://www.japantimes.co.jp/news/2018/06/07/national/airbnb-users-face-summer-crunch-japan-seeks-delisting-unlicensed-lodgings/#.W5Od6ZMzZE4

5.2 Innovating its business and customer experience through the use of ecosystems

In order to respond to these challenges, Airbnb has recently adopted an *ecosystemic* strategy to expand its activities and partnerships in order to improve the level of its platform trustworthiness and, in certain states, to adapt to new regulations.

In the specific, the next paragraphs aim to analyse the launch of a pilot business campaign in Japan (*Airbnb partners*) and, as well, the expansion of its customer experience and journey from providing a *unique night sleep* to provide a *whole trip unique experience* (*Airbnb experiences* and *Airbnb restaurants*). Airbnb is, therefore, shifting from the *hospitality* industry to the much broader *tourism* industry.

Since these new strategies, as it will be showed, are perfectly in line with the concepts of ecosystems (business models and experiences), they represent a good empirical case for the explanation and put in practice of the theories listed in this master thesis.

5.2.1 New Airbnb business ecosystem strategy in Japan

In response to above-mention legislation restrictions, Airbnb has just redesigned its business, in Japan, through the creation of a complex network of partners and collaborators.

The so-called Airbnb *partners* project, indeed, aims to transform the final offering into a more professional hospitality solution (hostel/hotel) (Airbnb Press Room, 2018).

Pic. 6.2: *Airbnb co-founder at the press event Airbnb partners.* Source: (Airbnb press room, 2018).

On one hand, Airbnb *hosts* (those who got the governmental licence and real-estate developers) will be receiving extra services and support from a wide range of partners; such as host training, listing legal registration, furniture setup, home professional advertising service and cleaning.

On the other hand, travellers and guests will also benefit from these new collaborations; as they will be able to collect points for loyalty programs and mileage on specific airlines (ibid).

In order to arrive to such objective, Airbnb is innovating its platform model, its business model and its offering system by *opening and merging* its platform and customer journey with 36 Japanese businesses.

These 36 partners represents a wide range of industries: airlines companies (All Nippon Airways Co., LTD.), financial institution (SoftBank Group Corp.; Mizuho Bank, Ltd., Venture Republic Inc.), insurances (Sompo Japan Nipponkoa Insurance Inc.; Aioi Nissay Dowa Insurance Co.), law firms (SATO OFFICE certified administrative procedures specialist), real estate and constructors (Fujii BUILDING; Housing Kousan, irodori, Inc.; Tamaki Home Co., Ltd) communication and marketing agencies (ORANGE AND PARTNERS CO., LTD., OTSUKA KAGU, LTD.) and life style brands loyalty systems (Culture Convenience Club's T Point loyalty).

Is Airbnb creating an ecosystem or it is simply relying on the old concept of partners and affiliates?

First of all, in order to answer this question, it is important to refer to the definition of *business ecosystem* provided in paragraph 3.3.

Business ecosystems as dynamic and co-evolving communities of diverse actors (1) who create and capture new value (2) through increasingly sophisticated models of both collaboration and competition (3).

1- As stated before, Airbnb teamed up with other 36 independent and already-existing companies in order to achieve its goal of complying with the new Japanese legislation and, as well, providing a higher degree of trustworthiness to travellers/guest using its platform.

In order to understand if this project can be considered an ecosystem, it is important to understand if this community of enterprises are as well benefitting and co-evolving with Airbnb.

To this purpose, it is used the Peltoniemi (2005) model on co-evolution (paragraph 3.3.1.1):

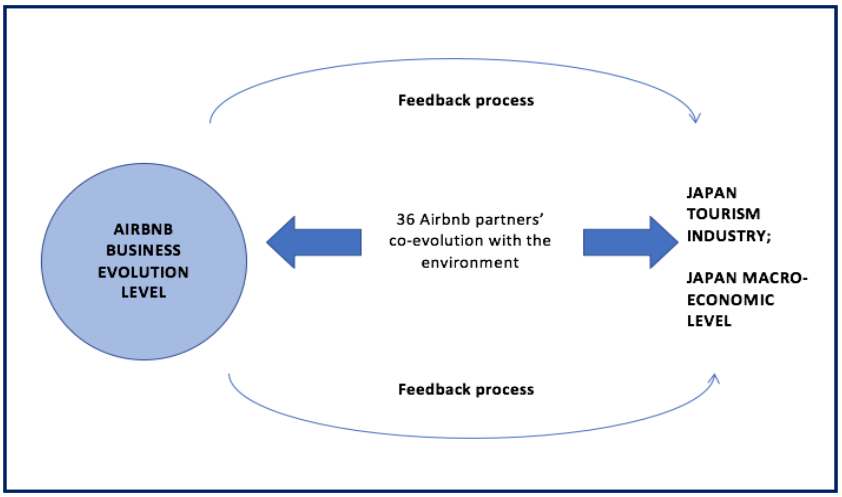


Fig. 6.2: *Adapted co-evolution model to Airbnb case.* (Source: Peltoniemi, 2005; own representation)

As the model shows, it can be argued that all the partners collaborating with Airbnb are, with a higher or lower degree, positively impacted by the growth both the Tourism industry and the Hospitality industry (represented here by Airbnb). For instance, the evolution of Airbnb would generate a higher demand of people willing to visit Japan; feedback process on the Tourism industry (e.g., more demand for Airlines, Japanese local businesses).

A higher number of visitors, vice-versa, would foster a higher demand and investments for hospitality structures (e.g. more demand for real estate and constructors, financial institutions). Finally, the overall Tourism Industry and Japan's economy would benefit of the evolution of Airbnb, as it would reflect more visitors and therefore greater internal demand for services and local businesses. It can be, therefore, stated that the whole community would co-evolve from the mutual collaboration.

> 2&3 - Airbnb, through the development of a new network of partnerships, is aiming to generate new value that can satisfy the company users' needs (higher degree of trustworthiness among the platform members -less risks when lending to strangers and higher safety when renting from a stranger-) and the broader societal challenges (Kelly et al., 2015) related to the Japanese tourism industry (need for an increasing capability of hosting tourists in preparation for the Tokyo Olympic games of 2020).

In this context, partners are providing Airbnb, and its users, with resources and capabilities that, if the company had gone alone, it would have required many years and huge investments to be

acquired and integrated. A situation that would have been financially unsustainable since the company was force to shut down due to the new regulation. It can be, therefore, argue that Aribnb in the *partner* pilot campaign leverage on the previously-individuated concepts of *value network* and *open-innovation;* shifting from generating strategic value only through internal processes to the collaborative model (Kelly et al., 2015; Chesbrough, 2011).

In regards to the modality and the technologies of this collaboration, Airbnb and its partners haven't disclosed any information. However, the benefits for the clients of these collaborations are still developed and shared through the platform technology (booking, reviewing system, payment system). Moreover, Airbnb, empowered by the *partners* project, has also built its own first hotel (Yoshino Cedar House); Airbnb calls it a "design studio" with the functions of an hotel for tourists and community centre for locals. This result is perfectly in line with Chersbrough idea that open-innovation can lead the company to explore or extend new markets.

Summing up, this case has showed how Airbnb, through the creation of an ecosystem, it has been able to overcome new business challenges and obstacle. While doing that, the ecosystem generated shared value for all the members:

1- Airbnb end consumers can now benefit of better and more professional services by just joining the platform.
2- New Airbnb partners can economically and socially co-evolve through the business evolution of the Californian company.
3- The whole macro-economic and social environment benefits from the ecosystem growth and existence through a potential growth of tourism and international visitors.
4- Finally, Airbnb by playing as Keystone in the creation of the new shared value through the *partners* ecosystem has managed to:
    a. Overcome restrictions related to the new Japanese legislations and limit the risks associated to it in an extremely short amount of time.
    b. Keeping its business running in such an attractive and economically fast-growing country such as Japan.

c. Further expand and secure its business by increasing the degree of control on the new shared value (new listings) (Chersbrough, 2011). Airbnb, indeed, for the first time arrived to introduce in Japan Airbnb Plus (a selection of homes verified for quality and comfort) and launched the construction of directly controlled hospitality structures; such as the Yoshino Cedar House.

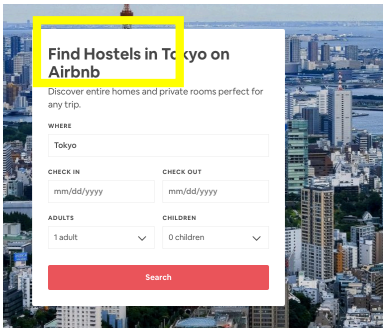


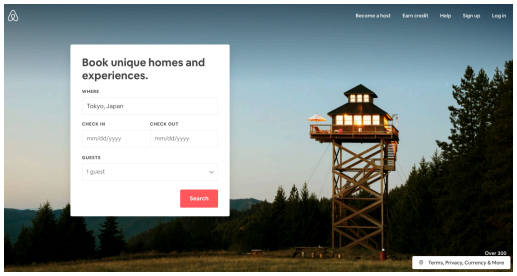
Fig. 6.3: *Image take from Airbnb website.* (Source: Airbnb.com, 2018)

In other words, Airbnb by leveraging on a new ecosystem agilely transformed its crisis which started with the cancellation of around 80.000 booking and the creation of a special crisis fund of 10 million dollars[8], into an opportunity for further growth.

5.2.2 New Airbnb customer experience ecosystem: from providing unique night sleeps to all-in-one travel experience platform

As stated in the introduction to this case, Airbnb, since its foundation, has focused its business in providing a platform where people could lend and rent *night sleeps* all around the world.

By analysing the case from a customer experience perspective, Airbnb focused his offering on providing unique experiences to their end users: "*Part of the appeal of booking on Airbnb is the astounding variety of homes someone has to choose from, with looks and styles that are highly individualized.*[9]"



When renting a private house, indeed, besides being on an average cheaper, consumers get a much more customised, locally crafted experience in comparison with the one provided by general standard hotels.

For years, this has been, and keeps being Airbnb's main claim.

[8] https://press.airbnb.com/supporting-travelers-in-japan-anz/

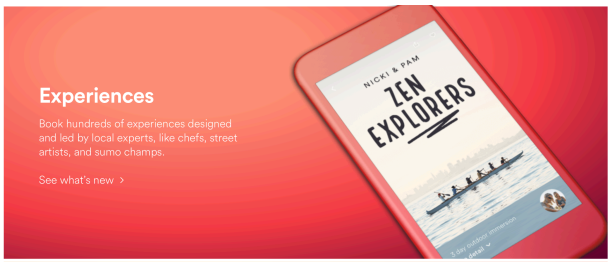
[9] https://airbnb.design/plus-personality/

Starting from this premise, in the recent years, the company has tried to innovate and further expand its customer experience offer. In order to arrive to such disruption, company's managers adopted various strategies and management tools. Among these, the game-changer innovative moment has been declared to be driven by approaching CX from the customer journey design perspective: *"[…] the game-changer moment came through by practicing design thinking. A group of us were in the synthesis phase, crowded around a bunch of sticky notes that represented the moments of our customer journey. At the time, like a lot of tech start-ups, we called the website and the app "the product"; which was both limited and limiting. Suddenly, we were looking at a journey through these sticky notes, imagining our customers booking, and we saw that the moments that mattered most were offline. This offline experience -- this trip to Paris or stay in a treehouse -- is what they were buying from us, not a website or an app. That's when we started to say, "the product is the trip" and began shifting our perspective.*[10]*"*

Airbnb, therefore, through the touchpoint and customer journey mapping (paragraph 3.3.3.1), arrived to discover new potential value for their customers and for their own strategic business creation.

Today, the American platform arrived in extend its core offering system with new features:

- *Airbnb experiences* (locals offering personalised experiences to tourists);
- *Airbnb restaurants* (locals suggesting restaurants through the creation of a personal city guidebook. Restaurant can be booked directly from the platform).



It comes automatically that shifting from being a *share economy* platform to a *travel booking* site, Airbnb number of collaborators and participants is also expanding (local hosts, local guides, local restaurants).

In other words, it can be argued that through this process, Airbnb is expanding its definition of customer journey to a *partner network* perspective that recognise the importance of the broader ecosystem in which the experience (the trip) occurs (Tax et al., 2013; Bodine, 2013).

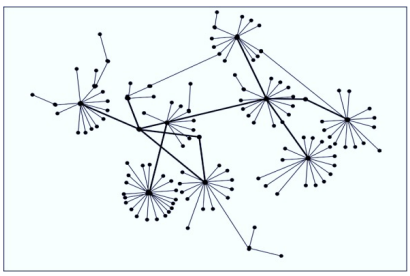
[10] https://www.forbes.com/sites/emilyjoffrion/2018/07/09/the-designer-who-changed-airbnbs-entire-strategy/#296b26992c36

In practical terms, the new strategy is aiming to enable consumers with a higher range of *use-case* and, therefore, creating a *stickier* experience through the creation of the *open-loop* (as Aribnb is becoming an all-in-one trip experience management tool) (Singh & Singh, 2016; paragraph 3.3.3.4) and, as well, *loyalty-loop* (Court et al., 2009; Edlman, 2010; paragraph 3.3.2.1).

Finally, while company's managers expand the activities through the creation of a new ecosystem, it is important that Airbnb, as Keystone of the new community, secures the overall *health* and foster the creation process of shared value among the participants (Iansiti & Levien, 2004).
For instance, as Airbnb, in order to suggest *restaurant*s and local activities to travellers, uses the voluntary participation of hosts and locals who write *city guides* for free, the company may be subjected to the accuses of work exploitation from third parts, or the same contributors; mining the growth and the survival of the entire ecosystem and, therefore, of Airbnb business.

5.3 Case wrap-up

Since its start, Airbnb immediately got great success in today sharing economy as the platform achieved to generate shared value and convenience for all its participants.
However, because of the simple role of intermediary, Airbnb had low control over the behaviours and the whole experience outside the on-line interactions. In many cases, travellers ended up damaging the proprieties of the hosts. These latter, moreover, couldn't find support in the American platform as they denied any responsibilities over the travellers.
In this uncertain scenario, the sharing platform lost credibility, reputation and, above all, trustworthiness from its members.
In response to this situation, Airbnb launched a business model innovation process in order to arrive to establish a more direct control over the listings and expand its market to private own "hotels".
As seen, this process is based on the creation of an ecosystem and network of *partners* (Keystones Airbnb 36 new business partners) and Airbnb *Plus* (Keystones *super-hosts*) in order to arrive to extend the company's control on the off-line interactions.



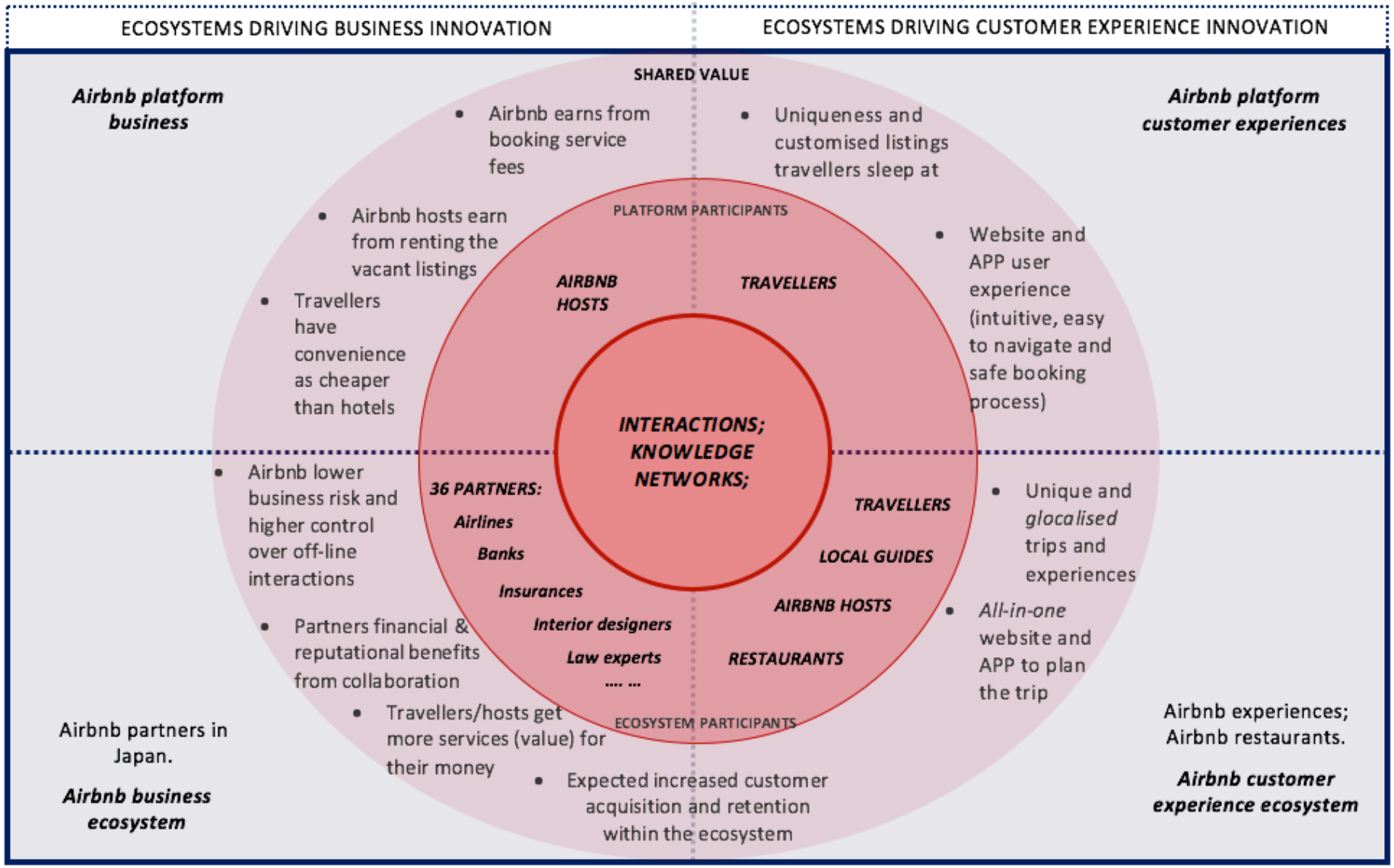
As the process of transformation is still on-going (it started in June 2018), the results of the campaign are yet to be confirmed.
However, it is important to underline how this process and the choice of creating a knowledge network (*open-innovation* process), in order to increasing the control over the business process, it is in neat contrast with the past process of vertical integration - where the companies were directly acquiring the external value chain assets -.
Possible financial benefits of this new business model can be individuated in reduced operational costs (the company don't have to invest to gain new resources and capabilities) and higher agility on the market (the company benefits of a broader knowledge from 36 partners and can face higher degrees of market uncertainty).

From the customer experience point of view, Airbnb is also aiming to expand its market.
The Californian company, by analysing and mapping all the interactions and touchpoints along the consumer journey, indeed, individuated some possibilities for extending their journey through the creation of Airbnb *experiences* and Airbnb *restaurants*.
This case shows how, despite most of the focus nowadays is on understanding customers through big-data analytics, sometimes the best ideas can come from the *design-thinking* reversed approach to problem-solving (paragraph 3.3.3.3).

Furthermore, the new core offer system, allows Airbnb to expand its customer journey and, therefore, create a more compelling and holistic experience of *travelling* (from booking local unique night-sleeps to experiencing best local activities and restaurants). As theorised in this master thesis, companies should aim to create *all-in-one* product/services in order to minimise the effort of customers and reduce their journey complexity. On this regard, it can be argued that these two new Airbnb services are fostering this process.
However, Airbnb while generating new interactions through these new services, should also be aware of the risks related to them.
Since the platform, neither in this case, can have *hands-on* the off-line interactions, it should be aware that the shared value-chain could be broken in the moment final expectations are not met.

For instance, Airbnb could lose again credibility and trustworthiness in the case local guides are strongly promoting restaurants that in reality have poor service or bad food.

The securing of shared value for all the platform participants must be, therefore, following the business expansion and growth.


ECOSYSTEMS DRIVING BUSINESS INNOVATION
ECOSYSTEMS DRIVING CUSTOMER EXPERIENCE INNOVATION
SHARED VALUE
Airbnb platform business
Airbnb platform customer experiences
Airbnb earns from booking service fees
Uniqueness and customised listings travellers sleep at
PLATFORM PARTICIPANTS
Airbnb hosts earn from renting the vacant listings
Website and APP user experience (intuitive, easy to navigate and safe booking process)
AIRBNB HOSTS
TRAVELLERS
Travellers have convenience as cheaper than hotels
INTERACTIONS; KNOWLEDGE NETWORKS;
Airbnb lower business risk and higher control over off-line interactions
36 PARTNERS:
Airlines
Banks
Insurances
Interior designers
Law experts
....
TRAVELLERS
LOCAL GUIDES
AIRBNB HOSTS
RESTAURANTS
Unique and glocalised trips and experiences
All-in-one website and APP to plan the trip
Partners financial & reputational benefits from collaboration
Travellers/hosts get more services (value) for their money
ECOSYSTEM PARTICIPANTS
Expected increased customer acquisition and retention within the ecosystem
Airbnb partners in Japan.
Airbnb business ecosystem
Airbnb experiences; Airbnb restaurants.
Airbnb customer experience ecosystem

CHAPTER 6: CONCLUSIONS

This master thesis aimed, through an explorative research, to shed the light over the increasing trend of ecosystem creation in the business and marketing management processes.

On one hand, this project wanted to investigate the phenomenon as response to the increase business environmental complexity and competitiveness level given by the advent of Internet.

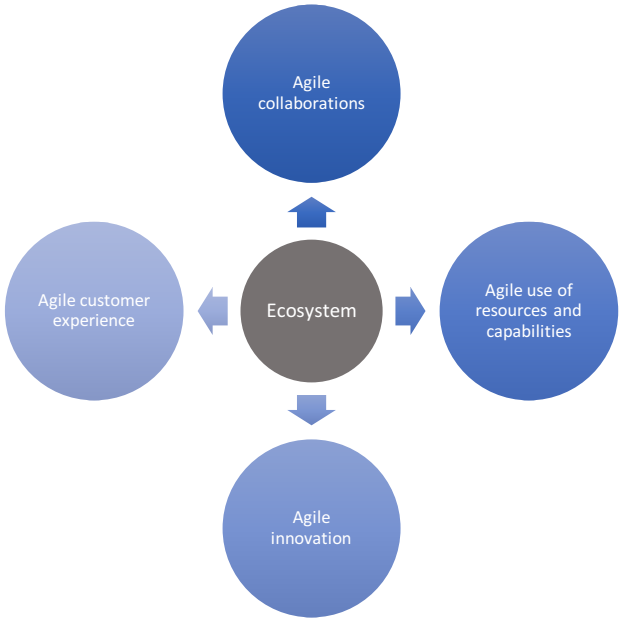
On the other hand, ecosystems have been studied to highlight viable paths for marketers to close the gap with the new aware and technologically empowered consumer.

Overall, this study can be summed up by saying that ecosystems nowadays represent a major source of innovation, disruption and business *agility*.

Moreover, they represent the best model for capturing value and leveraging on knowledge network effects.

As the Airbnb case has also showed, being part of an ecosystem empowers companies to:

1- Adapt rapidly to market changes through collaborations and knowledge networks;
2- Arrive to collect an amount of resources and capabilities that in their ensemble are valuable, rare, inimitable and non-substitutable: therefore, resource of competitive advantage;
3- Generate and lead cost-effective innovation processes without lowering the quality of the products/services;
4- Respond quickly and openly to customer emerging needs and demands.



6.1 Agile collaborations

Among the pillars of a business ecosystem can be found the concept of collaboration.
As nowadays, the modalities for creating value exponentially multiplied in comparison with some years ago, companies cannot go it alone. Success, indeed, lies beyond the individual capabilities of a manager or a company. On the contrary, organisations need to align their strategies, processes and technologies in order to operate within the context of an ecosystem. At the same time managers need to discover new methods for managing resources. For example, partnering up is one of these new ways.

As seen in the literature review and in the Airbnb case, collaborating with enterprises that are providers of complementary business value oftentimes can result in source of competitive advantage. In other words, it can be said that belonging to a business ecosystem is related to the processes of co-evolving and co-operating with the other participants. Direct competitors have also been found benefitting from collaboration in certain stages of the product/service life-cycle (co-opetition). Enhanced agility in collaborations is brought by technology. Specifically, platform technology has transformed the way companies do business by opening up entirely new *highways* to capture new value. If digitally born enterprises (such as Amazon, Google, Facebook) have embedded platform strategies and operations in their DNA, the collaborative business model, now, is becoming a prerogative also for the traditional firms due to the disruption of technologies on the market globalisation and, the related increased competitiveness.

6.2 Agile use of resources and capabilities

As summed up in the previous paragraph, in the latest years, companies more than ever are today requested to invest in the creation of solid digital infrastructures and platforms to foster and scale collaboration and the capturing of new value.
Platforms gather together numerous participants who co-operate and co-evolve through shared specialised value. Since platform are able to bring together so many players, they can also metaphorically be considered the *fuel* of the ecosystems. Networks, indeed, multiply the companies' access to complementary and specialised resources and capabilities.

As seen in many occasions along this project, knowledge networks represent the base on which business ecosystem can prosper, grow and achieve common purposes.
On this regard, the creation of a *learning platform* is the most important starting pillar and objective when developing an ecosystem as it glues members together through value sharing and generate a common and mutual sense of *trust* among the ecosystem members.

As in the Airbnb case, shared resources and capabilities can empower the ecosystem, and its participants, to agilely respond to unforeseen situations or complex market dynamics. This agility is given by the fact that companies do not have to establish control on the process by investing on acquiring resources or assets. On the contrary, firms can leverage on a pool of resources and capabilities that are, almost entirely, free-risk and low-cost.

Therefore, when participating in a business ecosystem, companies can leverage on new and low-cost resource and capability networks as great tools that improve performance; enhancing innovation and capturing more value through platform connection and coordination.

6.3 Agile innovation

As seen across the business ecosystem chapter and the Airbnb case, belonging to such business networks demands from executives a change of behaviour and thinking.
When innovating, this behaviour comprises collaboration across different arenas of expertise and knowledge. This lead to the third recognised pillar of a business ecosystem; agile innovation.
In order for business networks to be healthy and sustainable, it is essential to generate value through innovation so to appeal and retain members.

Although, innovating within an ecosystem, it is different in comparison with innovating within the single organisation.
Being a part of the business ecosystem, while empowering companies to have an access to smart resources, experts and problem-solvers, it also requires companies to restructure their business and operating models in order to increase the degree of openness and knowledge exchange deriving from the continuous learning processes.

Whenever both these conditions are satisfied, innovation can lead to quickly overcome marketing barriers or expand the company potential in meeting new consumer demand.
When participating in an ecosystem, indeed, companies are gaining agility in development of new R&D processes, marketing strategies and overall operations. As seen in this project case study, for instance, Airbnb has been able to quickly expand its business by both leveraging on new partners and internal resources. Overcoming barriers related to new legislation while expanding on the market demands. Finally, it can be stated that ecosystems enable innovation to be agile and help companies enhance their profitability while reducing the cost-structure.

6.4 Agile customer experience

Customer experience, together with products and services, has been recognised to be the new main output when satisfying consumers' demands. However, managerially speaking, firms have been understanding this concept as enhance the engagement with consumer by closing the loops and the gaps along their journey.
Despite the importance of monitoring consumers' feedback and fix what is not working along the journey, firms can get much more in terms of CX from their ecosystems.
As today ecosystems are bringing together different capabilities and resources, companies should take advantage from this collaboration and expand their journeys in order to transform their experiences in what has been defined holistic and all-in-one (open-loop).
As seen, Airbnb brought together their internal product, design, IT teams and external partners, in order to align its strategic goals around the customer experiences.

This customer-driven process has led the company to enhance its competitive offer (which includes product, price and all elements of the customer proposition) and, as well, the quality of the delivered customer experience. Customer experience, therefore, lays at the centre of each ecosystem. Participants' collaboration across functional, technology and industry strengths, and capabilities, can empower the Keystones to supply a unique value proposition to customers and agilely modify this offer in parallel with real-time consumer data and analytics.
In other words, ecosystems deliver *transformative* experiences.

Limitations

As this master thesis, has set its goal to be explorative about emerging trends in business and marketing management, it also recognises the need for academic validation and consolidation.
While investigating about ecosystems, it is clear that managerial trends are inevitably converging towards the creation of collaborative business models. However, the explosion of consultancy efforts around this topic suggests that executives yet are missing the experience and capabilities to design and execute market-leading ecosystems. As well, traditional enterprises that were not born *digital*, are still missing to praise on the full-potential of ecosystems, as they recognise a risk in changing the whole governance and operational models.
Business front-runners, indeed, sometimes become paralyzed by the fear of co-operating and co-opeting, sharing data and relinquishing control.

This is, therefore, a strong limitation in the implementation and integration of collaborative and co-evolving strategies and operation. Further researches on how to best assimilate ecosystemic business models in traditionally governed and coordinated enterprises is strongly suggested.

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