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Digital Transformation: News Technologies and Business Model



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ABSTRACT

New information and communication technologies (ICT) are providing new scenarios for companies that were previously not possible, requiring companies to reformulate or create new business models. The big challenge for managers is to make sure their organizations are ready for this digital transformation. These new scenarios have awakened in the researcher's several types of definitions for this type of services offered as shared economy, marketplace, digital business platform, ecosystem, etc. The common features of these services are that the applications are unique, specific and developed for each provider, the provider mediates between a service provider and a service provider, there is value creation and use of IT. Some authors consider that business models are not enough to analyse these new scenarios. The purpose of this research is to evaluate whether business models are capable of evaluating the scenarios of digital transformation. For the research methodology, we use the attributes of business models as indicators. In the preliminary bibliographic research, we find one framework Kübel and Zarnekow (2014). The first examines the proposed dimensions of value, architecture, network and finance, and the second examines the attributes on platforms and marketplaces. The sample was 3 service companies offered as shared economies and using platforms or marketplaces. The results showed that business models are able to identify: Value proposition refers to how organizations create value for both their customers and each party involved in service delivery; Value architecture represents how an organization's capabilities and core competencies are configured to create and deliver value to customers. The value network defines the inter-organizational relationship in a business model and focus on the different actors and ways of collaboration network. As a consequence, the value network of a platform comprises the roles of the platform's sponsor, provider, partner and client, allowing participation in open or closed mode, and the value financing dimension relates to how revenue is generated, and costs are structured in the business model. Furthermore, the dimension of value creation refers to the architecture of the value of the company and the mechanisms that allow the creation of the value proposition; the value delivery dimension contains the elements that generate value for a defined target customer group, and the value capture dimension or profit formula describes how the company transforms the value delivered to customers into revenue and profit. The contribution is to demonstrate how business models are able to analyse the scenarios of digital transformation through business models.

INTRODUCTION

Companies are adapting to new technologies and becoming digitalized, structured in new ways are called digital organizations of the future. According to CHEW (2015), they are called DOOTF (digital organizations of the future).

Digital transformation is profoundly changing how value is captured and created, the new companies with new and innovative business models are born and existing companies must rethink their business models to become digital (ITÄLÄ, 2015).

Digital transformation of business means discussing various types of business transformation by introducing or adapting value-added services, using new technologies to generate a direct impact on the delivery of results and the customer experience, making this one of the company's main guidelines. Channels and processes will also be transformed and the need to look for new models and revenue streams based on customer requirements will become necessary and, consequently, it will be mandatory to change the company's internal culture to include "digital" at the heart of everything is done (LLORENTE, 2016).

In more digitally mature companies, the ability to adapt or redesign the business is determined in large part by a digital strategy clearly supported by leaders who foster a culture capable of changing and inventing the new. In digital transformation one of the most evident attitudes is the taking of risks as a cultural norm, causing the most advanced companies to seek new levels of competitive advantage. Another equally important aspect is the preparation to adapt to the challenges and functioning of the company thinking about the retention and attraction of new talents as employees of all ages that seek compatible opportunities to work and develop in companies committed to digital progress (Kane et al., 2015).

In view of this process evidenced in the academic and business literature, the contributions are: a) verify in which factors companies should focus on the digital transformation of their business, through bibliographic review and interviews with expert consultants in this area. b) to demonstrate how business models are able to analyse the scenarios of digital transformation through business models.

THEORETICAL FRAMEWORK

Digital Transformation

A study presented by Press (2016) reveals that in 2019, global spending on digital transformation initiatives will reach \$ 2.2 trillion, almost 60% higher than that spent in 2016. It is rather arduous for traditional companies that already have a structure and form, the task of overcoming the obstacles of their own style and organizational structure, in addition to finding the right talents and strengthening them, adapting their traditional environment in an environment that allows agility in the creation of prototypes, rapid decision making and even acceptance because these issues determine whether they can compete with the new digital markets.

According to Downes and Nunes (2013), as a result of this restructuring, whole business models can be reformulated or replaced. Because of this broad scope and far-reaching consequences, digital transformation strategies seek to coordinate efforts to transform products, processes, and organizational aspects due to new technologies, with a more broadly designed scope that explicitly includes digital activities in the interface or totally next to the customers.

Digital Business Transformation is the application of technology for building new business models, processes, software and systems that result in more profitable revenue, greater competitive advantage and greater efficiency (CISCO, 2018). Companies achieve this by transforming business processes and models, enabling workforce efficiency and innovation, and customizing client/citizen experiences (SCHWERTNER, 2017).

In the case of digital business, the question of adapting, transforming and / or replacing the business model is widely contemplated by the studies on the subject (DÖRNER, EDELMAN, 2015, SWANTON, LEHONG, 2017, BURTON et al., 2018). SCHALLMO; WILLIAMS; BOARDMAN (2017) present in Table 01 further definitions of digital transformation.

Table No. 01 - Definitions of digital transformation

Author	Author definition
BMW (2015)	Typing means the complete network of all sectors of the economy and society, as well as the ability to collect relevant information and analyse and translate that information into actions. The changes bring advantages and opportunities, but they create completely new challenges.
Bowersox et al. (2005)	Digital transformation is a "business reinvention process to digitize operations and formulate extended relationships with the supply chain. TD's leadership challenge is to reenergize companies that can already succeed to capture the full potential of information technology across the supply chain".
Westerman et al. (2011)	"TD - the use of technology to radically improve corporate performance or reach - is becoming an important topic for companies around the world. Executives across all industries are using digital advancements such as analytics, mobility, social media, and embedded smart devices - and enhancing the use of traditional technologies such as ERP - to change customer relationships, internal processes, and value propositions".
Mazzone (2014)	"TD is the deliberate and continuous digital evolution of a company, business model, process of idea or methodology, both strategically and tactically".
PwC (2013)	TD describes the fundamental transformation of the entire business world through the establishment of new technologies based on the Internet with a fundamental impact on society as a whole.
Bouée and Schaible (2015)	We understand TD as a consistent network of all sectors of the economy and the adjustment of actors to the new realities of the digital economy. Decisions in networked systems include exchange and analysis of data, calculation and evaluation of options, as well as the initiation of actions and the introduction of consequences.

Source: SCHALLMO; WILLIAMS; BOARDMAN (2017)

Williams & Boardman (2017) based on a broad bibliographical query propose the following approach: Digital Transformation includes the network of actors as companies and clients in all segments of the value-added chain and the application of new technologies, requiring skills that involve extraction and exchange of data as well as the analysis and conversion of this data into actions. Information should be used to calculate and evaluate options in order to

allow decisions and / or initiate activities in order to increase the performance and reach of a company. Digital Transformation involves companies, businesses, models, processes, relationships, products, etc.

BUSINESS MODEL

When we talk about Digital Companies, the issue of adaptation, transformation and / or replacement of the business model is widely contemplated by studies on the subject (DÖRNER, EDELMAN, 2015, SWANTON, LEHONG, 2017, BURTON et al., 2018).

According to Veit (2014), in a context where business and society undergo extensive digitalization, the logic offered by the business model becomes essential for success and a subject of great interest to the academic community.

With the digital age, it becomes critical to the success of the business, the availability of adequate levels of information and knowledge. Organizations need to adapt to survive and succeed as their domains, processes and business technologies change in a world of increasing environmental complexity. Improving your competitive positions, improving your ability to respond quickly to rapid environmental changes with high-quality business decisions, can be supported by the adoption of business models appropriate for this new digital business world (Al-Debi, El-Haddadeh, Avison, 2008).

The importance of the business model has also been highlighted in Zott, Amit and Massa (2011) where the authors state that since 1995, there have been at least 1,177 articles published in peer-reviewed academic journals, in which the notion of business model is addressed.

Foss & Saebi (2016) also analysed that in two decades, the literature related to the Business Model has expanded massively. Analysing the Scopus data database, 7391 publications of the topic "business model" were listed in the period from 1980 to 2015 as we see in Figure 1. The number of volumes dedicated to the subject "Business Model" grows over the years. In spite of the growth of the "Business Model Innovation" theme, but also in an increasing number, there are "Open Innovation" and "Dynamic Capability".

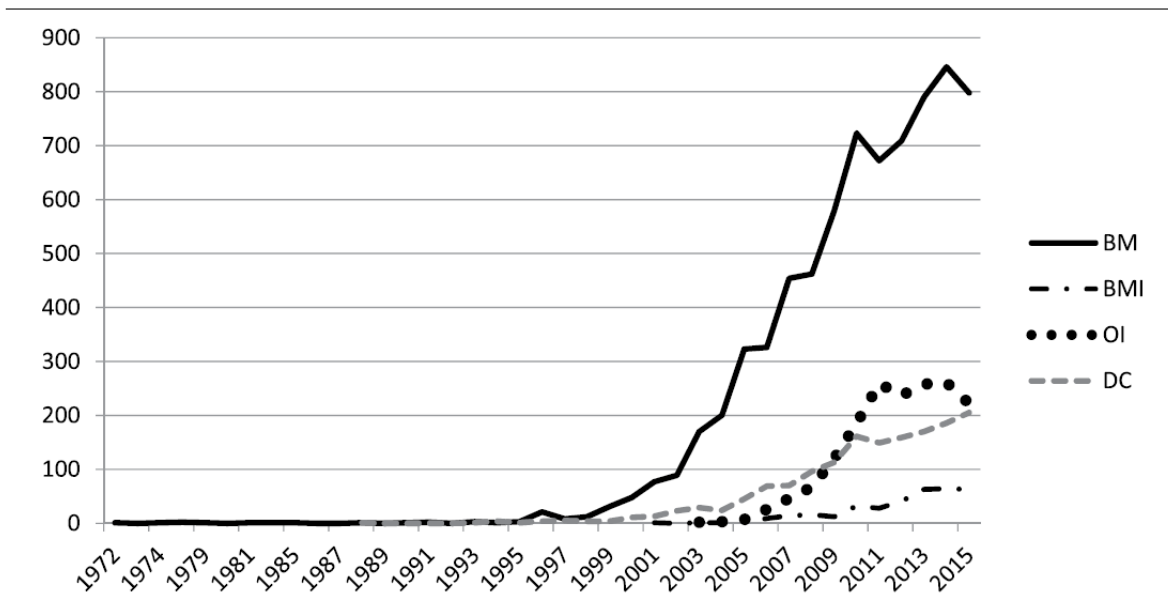


Figure No. 1: Number of documents using the terms "Business Model", "Business Model Innovation", "open innovation" and "dynamic capability".

Source: Foss & Saebi (2016)

The source of the data was the Scopus knowledge base, from 1972 to 2015. The term "Business model" (BM) obtained 7,391 results, the term "business model innovation" (BMI) obtained 349 results, the term "open innovation" (OI) scored 1,700 results and "dynamic capability" (DC) scored 1,562 results. They were considered peer-reviewed documents or equivalent. The terms were searched by the authors in the fields abstract, title, keyword and within the field of Social Sciences and humanities, excluding physics, health and life sciences in January 2016.

In another analysis, Dasilva (2013) links the term "business model" with technology companies through an analysis of the use of the term in the academic base "Web of Science" with the fluctuation of the NASDAQ index. According to the author, with the development of information and communication technology (ICT) and emerging Internet companies, the term quickly gained prominence both in academia and in its practical use.

Figure 2 shows the number of documents with Business Model either in the title or as a topic appearing in the journals indexed in the Web of Science. The author chose the Web of Science database because it provides reliable coverage and an overview of journal history, articles, and reference level.

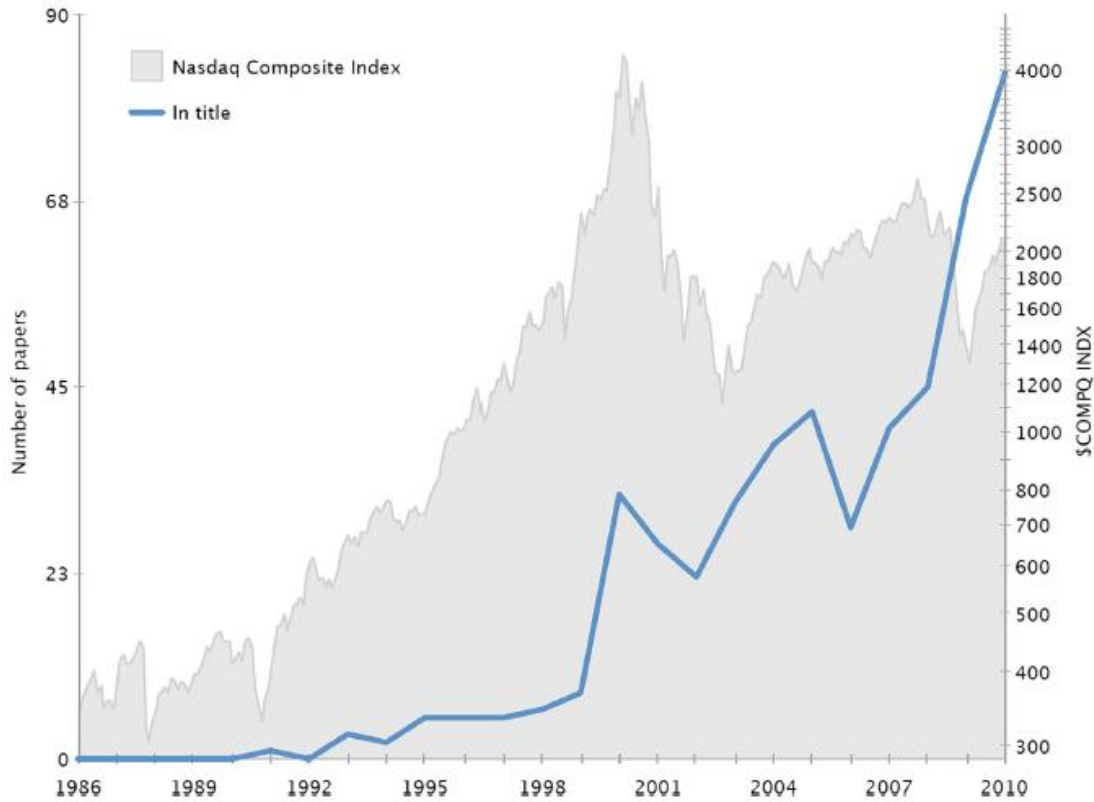


Figure 1. Number of papers published on business models vs. the NASDAQ trend

Figure No. 2: Nasdaq x documents published with the term "business model" in the Web of Science.



Source: Dasilva (2013).

The fact that the term "business model" has propagated along with the rise of NASDAQ stock may show that the (innovative) business model was initially just a word of the moment. The terminology of the business model concealed the lack of strategy and the bad revenue models of companies with fast-growing stock prices, but with low or even non-existent profits.

For Thornton and Marche (2003), the widespread use of business model terminology seems to be intrinsically linked to technology-based firms. Business models seemed to be the answer to explain how innovative ventures dealing with technology or any other form of unclear but potentially profitable concepts, foreign to the logic of traditional industries, were translated into business terms. In fact, Internet companies could not be valued based on their past performance, since there was no precedent. As a result, investors speculated on the compelling future promise based on innovative business models.

Therefore, the term "business model" survived the dot-com bubble and, as we can see in Figure 4, the number of "business model" articles in its title remained relatively stable between 2004 and 2007 in 25-42 articles per year. After this period, there is a new growth with 45, 68 and 83 articles, in 2008, 2009 and 2010, respectively. A more detailed look at the situation in 2004-2007 may indicate that these documents were characterized by a shift of focus from the Internet business model to the analysis of business models in "general business". In virtually all sectors, the term of the business model quickly spread to the analysis of companies in a wide range of industries. The business model terminology has spread to various communities such as marketing, management, banking and ICT and has been used within a variety of contexts such as business plan, business strategy, value creation, globalization and organization design. In addition, the growth of the business model literature in recent years can also be attributed to documents on business models outside the sphere of business. The term has also been used as a buzzword to analyse basically any type of human endeavour with a wide range of interpretations (GHAZIANI & VENTRESCA, 2005).

Still, on the concept of the business model, Veit et al. (2014) define as a missing link between business strategy, processes and information technology.

Osterwalder and Pigneur (2010) describe the business model as something that clarifies the logic of creating, delivering and capturing value in an organization's vision, translated through nine core components segregated into four main areas, business, customers, infrastructure, and financial:

- Clients segment: defines the different groups of people or organizations that a company seeks to reach and serve;
- Value proposition: aggregation or set of benefits that a company offers its clients;
- Channels: the means and means by which the company communicates and reaches its Customer Segments to deliver a Value Proposal;
- Relationship with customers: it establishes the types of relations to be had with its Segments of Clients;

- Revenue sources: represents the compensation generated by the Customer Segment for the delivery of the value;
- Key resources: resources needed to make the Business Model work;
- Key activities: describes the most important actions that a company must take to make the business model work;
- Main partnerships: network of main suppliers and partners;
- Cost structure: related to all costs involved in the operation.

In more complex and sometimes unique digital businesses, the business model needs to be explicit and provide a new layer of information and knowledge essential to support digital business managers become a necessity (Al-Debi, El-Haddadeh, Avison, 2008).

According to Brousseau and Penard (2007), with the evolution of digital business, it becomes easier to identify the commonalities between the business models that exploded with the growth of the Internet and those that existed before. The new models combine new and innovative ways of organizing the relationship between demand and demand with a pricing strategy that takes into account network externalities, information specificity and the ability to differentiate and discriminate through digital technologies.

These new business models contradict the prediction of massive disintermediation caused by the strong development of digital technologies and the Internet, due to the fact that the intermediaries in this context, combine demand and supply plans, then carry out transactions that remain costly within the process. They also perform the combination of various digital products to take advantage of their interoperation - as is the case when content is processed by software running a technical interface - is certainly much easier than it was in the past, thanks to standardized interfaces. However, resource and time expenditures are still required to ensure effective interoperability between digital products to generate a service that adds value to customers. Another reason is related to the availability of goods and services both "on" and "off-line", making it still a challenge, ensuring the user's access to the information or the specific knowledge they need. Those who can provide the information should receive appropriate incentives as well as potential users should have access to that information.

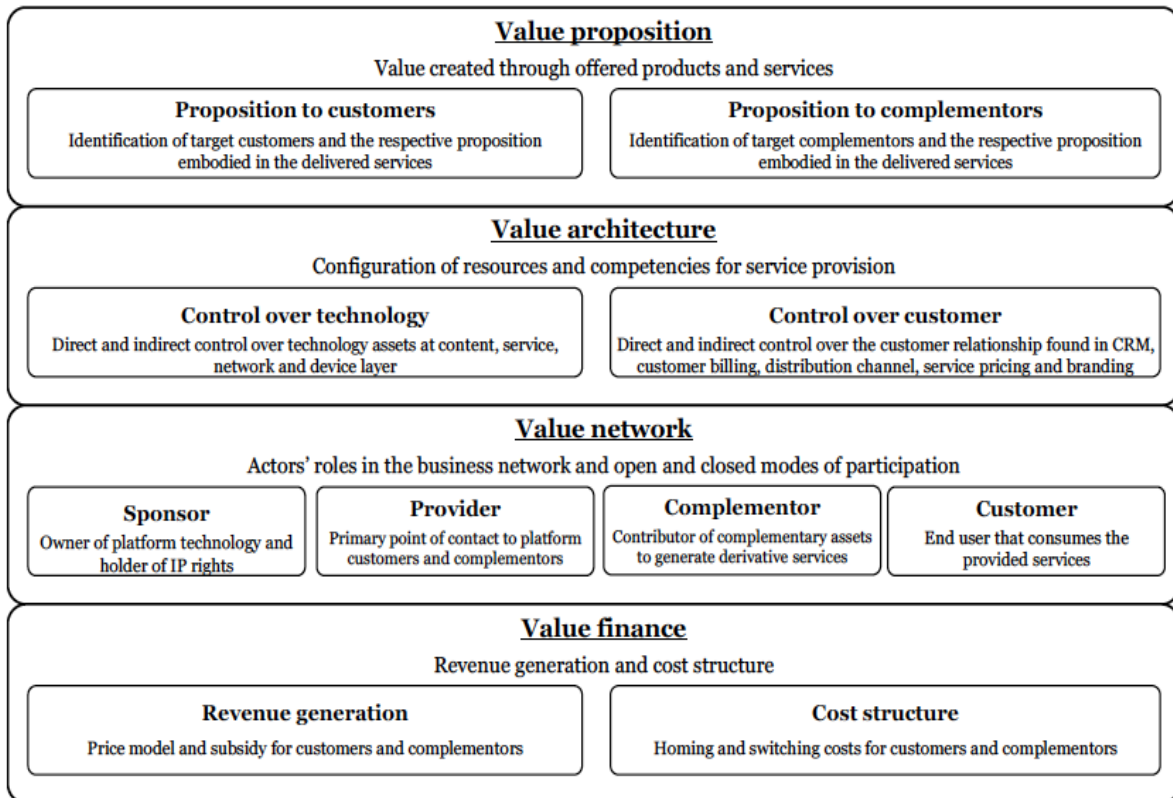


Figure No. 3 - Derived analysis framework for platform business models

Source: Kuebel & Zarnekow (2014).

Kuebel and Zarnekow (2014) have implemented and described a framework for platform business models based on the concepts presented by Al-Debei and Avison (2010) where they identified the value proposition, architecture, network and finance as the main elements to be examined in the design, analysis and evaluation of business models (Kuebel and Zarnekow, 2014).

Parker et al. (2017) still define two types of business models for digital companies: pipelines and platforms. For authors, pipelines are more traditional systems employed in most companies that follow a step-by-step scheme that creates value and transfers that value to producers at one end and consumers to another, i.e. a linear product chain.

The platform is described as a business that enables interaction between suppliers and external buyers, creating value for both sides. It provides an environment that provides an infrastructure that encourages interactions, facilitating the exchange of goods, services, or "social currencies."

Many of the Internet success stories - E-Bay, Amazon, Google, Yahoo, Autobytel - have developed business models based on the concept of platforms, assembling components, then grouping them into packages that match complex and specific consumer needs.

METHODOLOGY

To support and better understand the subject, bibliographical research was elaborated on the main themes involved that are digital transformation and business models, which compose the Phase of the theoretical framework (foundation). For this stage, national and international scientific knowledge databases such as Web of Science, Elsevier, IEEE, among others, as well as books and other information sites were considered.

In relation to the instruments and protocols used, that is, the form and the mechanisms used to construct and collect the empirical data, it is used as sources of information, interviews with specialists of companies that act strongly in projects of digital transformation in clients of various sizes and segments. The interviews were conducted with open questions, with semi-structured script.

For Yin (2001), a case study is "an empirical investigation that investigates a contemporary phenomenon within its real-life context, and when the boundaries between phenomenon and context are not clearly defined."

The case study is a research strategy that focuses on understanding the dynamics present within individual configurations, and may still involve a single, or multiple, case (EISENHARDT, 1989). For this case study, two digital transformation consulting companies will be considered as objects of study.

Qualitative and quantitative evidence will be used for this study. According to Eisenhardt (1989) case studies can be used to provide a description; test a theory; or generate a new theory.

For field research, the sources of external and internal evidence (YIN, 2001) will be considered. The sources of external evidence researched will be: documentary analysis, which will include literature review and consulting documents. The sources of internal evidence: interviews using a questionnaire with open questions together with consulting professionals, in addition to performing direct observation techniques at the site.

The data analysis procedure will be based on the intra and inter case analysis established by Miles and Huberman (1994). This analysis aims to describe, understand, explain and cross-refer the conceptual contents, processes and results of a given phenomenon in a multiple-case context and thus develop a more detailed understanding of all the cases in the sample (Miles & Huberman, 1994).

The intra-case analysis, a description of each case in isolation, will provide an in-depth analysis of the data collected in each case, highlighting specific characteristics of each one. According to Eisenhardt (1989) it is fundamental to know the unique patterns of each case, before seeking generalization through the cases, this will allow the researcher the deep understanding necessary to carry out an analysis with cross-referencing of the cases.

The method to verify if it is possible to use the business model with the digital transformation was to perform a theoretical analysis of the Uber company with the business model of Kuebel & Zarnekow (2014).

RESULTS AND ANALYSIS

Case Study 1

Intra-case analysis 1

The first expert interviewed works in an Indian multinational company that operates in Brazil with several fronts such as technology and service design. The company has a strong technological aspect in its operations but sought to acquire other complementary companies that would bring a more consultative vision to understand, not only the technological issue but the business as a whole, supported by these technologies, thus allowing to attend the cycle all for digital transformation. Serves companies seeking a renewal or disruption, in some cases traditional companies that seek to reinvent themselves.

The interview was held in October 2018, using the Skype tool with digital file recording and later transcribed using Atlas software.

One of the main points raised by the interviewee was the question of understanding the business vision with the centrality of the user, redesigning the process in search of innovation. It also considers that there is a great lack of alignment with the concept of what is digital transformation and many customers still understand that only investment in

technology is enough for a digital transformation of the business. Emphasis was placed on the importance of revisiting processes and aligning strategy and technologies.

In the interview, the question of the processes appears in evidence and it helps in the understanding of where the company wants to arrive and how and what to do to align the strategy for effectiveness in the digital transformation of the business.

In addition, there have been cases in which customers invest in leading-edge technologies and are actually involved in the process of digital transformation, but the use of technology in isolation does not transform the business. It is mandatory to align with the other areas so that the data is transformed into information that leads to the expected result strategically.

The issue of culture change is also a priority and preparing teams is critical.

Intra-Case Analysis 2

The second expert interviewed works in a Brazilian multinational company that was born as a software consultant and today works mainly with digital transformation. Some clients come from the software consultancy, extending the projects aiming at an evolution towards a true digital transformation, others are already specifically looking for a move to digital.

The interview was held in October 2018, through the phone with digital file recording and later transcribed using Atlas software.

The interviewee stressed that generally, a digital transformation project begins with the management part. Predicting the scenarios, the company needs to understand the need for digital transformation within its business and seek out specialists who can assist them in this transformation. An analysis of the return of this investment, the difficulties and the necessary time is made, going to the training of the leaders and then arriving in the operational.

It is not possible to do digital transformation in only some areas, it is usually a horizontal process that takes a product and goes through all areas. In this way, all the leaders involved are trained and can help to clarify internally in the company the importance and benefits of this change.

One premise within digital transformation is the involvement of the ecosystem to minimize risk. With this, the analysis of the company is much more complete, but this process depends

on the level of maturity of the company culture. For this to happen, paradigm shattering and culture shock need to be very well worked out.

With this closer involvement of customers and partners, there is a need for companies to respond faster and this is reflected in internal IT processes. Implementation deadlines should be reduced, and software developments need to adapt to agile cultures, bringing people even from infrastructure into teams and automating processes to ensure security and risk minimization. Another aspect is that the owner of the product becomes the owner of the process, assuming the management of production lead times in the time the market demands, generating dynamism in the analysis through automation techniques and control tools for a greater aggregation of value for customers.

When the company's culture changes, digital transformation takes the company to another reality and it is mandatory to revisit the business model and update it to this new reality. This is a big challenge for traditional companies because for a large company today, a failure can cause millions of losses, but if the business model does not adapt to the agility demanded by the market, competing with the start-ups that arise presenting new solutions that taking advantage of their agility can transform the market they enter, that is, they can test their business models quickly and cheaply, changing and adjusting according to the market response, traditional companies can be swallowed and expelled from their current markets.

Intercase analysis

In order to answer on which factors companies should focus on the question of the digital transformation of their business, a summary table was elaborated from the essential points that were presented in the intra-case analyses.

Table No. 2. Summary view of the main points.

	Case 1	Case 2
Value offer	The value proposition is in the understanding of what the client wants, concepts and objectives, but the company's own culture does not allow, difficult to understand the value proposition	Customers still do not understand the value proposition, it is still very vague for them. The very understanding that the customer should participate in the process.
Value creation	It is in the processes that will be remodeled.	In the view of companies is the use of.
Value Delivery	Generally, value is economical in the view of companies.	Generally, value is economical in the view of companies.
Culture	There is a lack of culture, to be inserted in a larger context.	It's time to train the leaders, to implant the digital culture.
People / Training	Change the culture, thought.	Essential to train and train people, there is no formal education for this digital environment.
Technology	Without processes and alignment with the vision, strategy does not mean a true Digital Transformation. There is a need to use technology to capture data and transport information to results linked to strategy.	On average, only 30% of a project is related to technology within Digital Transformation. 60% is the issue of communication and training and disruption of paradigms. It needs a set of changes.
Processes	Focus change on internal and external customers.	It requires an adaptation of current processes to better respond to the market/customers.
Difficulties	Lack of business understanding of what they want. Need for leveling, culture talk and change management. It requires commitment and takes more time.	Breaking the company's internal paradigms, each area looks at its world and digital transformation requires it to look at the whole, for the product. It's a culture shock.
Related issues	Agile methodologies. Processes.	Agile methodologies, Lean, Culture.

Source: Prepared by the authors.

Case Study 2 – Uber

Uber is a company that provides transportation services, connecting the user to a driver through an electronic platform. According to Uber's website (2018), the idea came in 2009 when Garrett Camp and Travis Kalanick were attending the LeWeb conference in France.

After the event, when they needed to return to the hotel, they found it difficult to find a taxi, other public transportation and even a private driver. It was then that they thought that it would be incredible power, at the touch of a cell phone, to hire the service of a private driver. The goal was to facilitate and innovate the way people move through cities, initially in San Francisco (USA), using sedan vehicles. This is how UberBLACK came about, the company's first product Uber Technologies Inc. was officially founded in June 2010 in the city of San Francisco and today it is in more than 600 cities in 65 countries. Uber has rapidly expanded its presence around the world to bring people together and revolutionize the way cities move.

Analyze with the Kuebel & Zarnkow business model (2014).

Value Proposition - The value proposition offered by Uber is to connect the user to the driver and thus, to have an exclusive and personalized means of transportation to get around. As we have two actors in this process, user (client) and driver (partner), the value propositions are different. For the user, Uber offers a form of transportation with comfort and a lower rate than the Taxi. For the driver, Uber offers the driver a range of users who hire the services and pay for them.

Value Architecture - The technology is developed and controlled by Uber, the necessary technology infrastructure such as servers, networking devices and application development is the responsibility of Uber. Users and drivers install an application provided by Uber on the mobile device and through the application access the Uber platform. The control over the clients is done through login and password of the user and / or driver.

By application the user can:

- Anyone who has a smartphone with internet access can register. You must first download the Uber app on Google Play, App Store (Apple) or Windows Store and install it on your phone.
- It is then necessary to register, informing the telephone. In all cities it is possible to register a credit or debit card so that the value of the trip is charged as soon as the user leaves the car - cash payment is also available. To call a car, just open the application, write where you want to go and push a button to request your Uber.

- When the partner driver is arriving, the application will notify the user with the message "your Uber is coming now". Just identify the car (the application shows the model, plate and color of the car, driver's name and photo of it) and enjoy the trip.
- If the user is traveling with a friend who is also a registered user, it is possible to divide the direct value by the application. When arriving at the final destination just get out of the car (in the option of payment by credit card) and evaluate the driver with a score between 1 and 5 stars. If necessary, you can send a message to Uber directly through the application, with praise, suggestions or any kind of feedback.

By application, the driver can:

- To be an Uber partner driver it is necessary that the interested party is a professional driver - that is, that has a driver's license with authorization to engage in remunerated activity (EAR).
- It is necessary to register on the Uber website and then go through an information and security check.
- Drivers need a luxury sedan, leather-seat, air-conditioning and four-door UberBLACK, and a compact, air-conditioned, four-door model for uberX, uberPOOL and UberSELECT.
- When he wants to drive, all he needs to do is turn on the app. There is no minimum daily, weekly or monthly time for the partner driver to use the platform. It has total flexibility to work like, when and where you want.
- In the application for partner drivers, you must log in using the personal and non-transferable password. After this procedure, it is possible to choose which car the driver will drive if there is more than one car registered on the platform.
- When receiving a call from a user, the application screen flashes and a tone sound. Only after accepting the trip will the application show who the user is, and the location.
- As soon as the user enters the car, the partner driver starts the journey through the application.
- Upon reaching the destination indicated, the partner driver ends the trip in the application. The app then shows the price of the trip and the user's evaluation screen, using a 1 to 5-star rating.

Value Network

Sponsor - A Uber

Supplier - IT Company outsourced by Uber

Partner - Drivers

Customer - Users

Value financing

Revenue generation - In Brazil, Uber offers five types of service:

uberX: Compact cars, with air conditioning and 4 doors. The price is competitive and an ideal option for getting around on a daily basis.

uberPOOL: Available in São Paulo and Rio de Janeiro, this service allows you to share the trip with other users who are in a similar path to yours, putting more people in less cars. The price is even more competitive than uberX, but it can generate a slightly longer travel time due to adjustments in the route. The advantage for users is the most competitive price, already for partner drivers means more hourly journeys and even greater gains.

UberSELECT: a selection of more comfortable and spacious cars for an average price, up to 20% higher than uberX.

UberBLACK: A service that allows users to order sedan-type cars such as Toyota Corolla, Ford Fusion, Volkswagen Jetta and others, all with leather seats and air conditioning always on.

UberEATS: Service that allows the user to order meals from the most popular restaurants in the city, wherever they may be. It is available, in the initial phase, only in São Paulo.

Cost Structure - The cost structure is technology platform, office employees and drivers.

CONCLUSION

The objectives of this project were reached in the first case study we present the expert opinions on the digital transformation. It can be concluded that the factors pointed out by the

interviewees converge to what the literature cites: there is a need to review the business models of companies comprehensively, the introduction of new technologies must be accompanied by restructuring of production processes, people management and changes, introduction of agile methods and ways of communicating internally and externally.

In the second case study on Uber, we can prove that the use of the business model to analyse digital/computational platforms contributes to the service being accessible and available to a greater number of users, as well as enabling certain controls and processes that do not would be possible manually. Defining what each of these is becomes laborious because it involves a series of processes and services from various areas and some are innovative and not clearly described or conceptualized.

These services of digital business platforms, business platforms or shared economy, have a great adhesion due to the ease of use and the quality of the services offered, identified in the texts the clear presence of the concept of offered value that induces the concept of value creation.

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REFERENCES

1. Al-Debi, M. M., El-Haddadeh, R., & Avison, D. (2008). Defining the business model in the new world of digital business. *AMCIS 2008 Proceedings*, 300.
2. AL-DEBEL, Mutaz M.; AVISON, David. (2010). Developing a unified framework of the business model concept. *European Journal of Information Systems*, v. 19, n. 3, p. 359-376.
3. BROUSSEAU, Eric; PÉNARD, Thierry. (2007). The economics of digital business models: A framework for analyzing the economics of platforms. *Review of Network Economics*, v. 6, n. 2.
4. BURTON, Betsy et al. (2018). Digital Business Gives Rise to the New Economics of Connections. *McKinsey & Company Article*. Disponível em: <<http://www.gartner.com/imagesrv/research/algorithm-economy/pdf/algorithm-economy-292457.pdf>>. Acesso em: 27 de maio 2018.
5. CHEW, Eng K. Digital Organizations of the Future. in *Transition*, p. 13, 2015.
6. CISCO. (2018) Available in: <https://discover.cisco.com/en/us/digital-business/whitepaper/transformation/introduction-626F-200PY.html> Access in Dec 01, 2018
7. DASILVA, Carlos M.; TRKMAN, Peter. (2014). Business model: What it is and what it is not. *Long range planning*, v. 47, n. 6, p. 379-389.
8. DOWNES, L.; NUNES, P. (2013). Blockbuster becomes a casualty of big bang disruption. *Harvard Business Review*, v. 7.
9. EISENHARDT, K.T. (1989). Building theories from case study research. *Stanford University*.

10. FOSS, Nicolai J.; SAEBI, Tina. (2017). Fifteen years of research on business model innovation: How far have we come, and where should we go? *Journal of Management*, v. 43, n. 1, p. 200-227.
11. GHAZIANI, Amin; VENTRESCA, Marc J. (2005). Keywords and cultural change: Frame analysis of business model public talk, 1975–2000. In: *Sociological Forum*. Kluwer Academic Publishers-Plenum Publishers, p. 523-559
12. ITÄLÄ, Timo. (2015). Digital Business and Platforms. in *Transition*, p. 50.
13. KANE, Gerald C. et al. (2015). Strategy, not technology, drives digital transformation. *MIT Sloan Management Review and Deloitte University Press*, v. 14, p. 1-25.
14. KUEBEL, Hannes; ZARNEKOW, Rüdiger. (2014). Evaluating platform business models in the telecommunications industry via framework-based case studies of cloud and smart home service platforms.
15. LLORENTE, José A. A transformação Digital. *Revista Uno*, v. 24, 2016. Disponível em: <https://www.revista-uno.com.br/numero-24/a-transformacao-digital/>. Acesso em: 20 ago. 2018.
16. Miles, M. B., & Huberman, A. M. (1994). *Qualitative Data Analysis: An Expanded Sourcebook*. Thousand Oaks, CA: Sage Publications.
17. OSTERWALDER, Alexander; PIGNEUR, Yves. (2010). *Business model canvas*. Self published. Last.
18. PRESS, Gil. Top 10 Tech Predictions For 2017 From IDC. *Forbes*, 2016. Disponível em: <https://www.forbes.com/sites/gilpress/2016/11/01/top-10-tech-predictions-for-2017-from-idc/#1bf2833d4aad>. Acesso em: 25 ago. 2018.
19. PwC (2013). *Digitale Transformation – der größte Wandel seit der Industriellen Revolution*. Frankfurt: PricewaterhouseCoopers.
20. Schallmo, D., Williams, C. A., & Boardman, L. (2017). Digital Transformation Of Business Models—Best Practice, Enablers, And Roadmap. *International Journal of Innovation Management*, 21(08), 1740014.
21. SCHWERTNER, K. (2017). Digital transformation of business. *Trakia Journal of Sciences*, v. 15, n. 1, p. 388-393.
22. SWANTON, Bill; LEHONG, Hung. (2017). A Digital Business Technology Platform Is Fundamental to Scaling Digital Business. Gartner, Inc.
23. THORNTON, Jennifer; MARCHE, Sunny. (2003). Sorting through the dot bomb rubble: how did the high-profile e-tailers fail? *International Journal of Information Management*, v. 23, n. 2, p. 121-138.
24. Veit, D., Clemons, E., Benlian, A., Buxmann, P., Hess, T., Kundisch, D., ... & Spann, M. (2014). Business models. *Business & Information Systems Engineering*, 6(1), 45-53.
25. Westerman, G, C Calmêjane, D Bonnet, P Ferraris and A McAfee (2011). Digital transformation: A roadmap for billion-dollar organizations. MIT Center for Digital Business and Capgemini Consulting, 1–68.
26. YIN, R.K. (2001). *Estudo de caso: planejamento e métodos*. Porto Alegre: Bookman.
27. ZOTT, Christoph; AMIT, Raphael; MASSA, Lorenzo. (2011). The business model: recent developments and future research. *Journal of Management*, v. 37, n. 4, p. 1019-1042.