# The Permanent Challenge Of Innovative Companies: The Application Of Business Model Generation And Customer Development Taxonomies To A Brazilian Startup

Leandro Fraga Guimarães
Sérgio Zacarias
Selma Regina Martins Oliveira
Roberto Sbragia

*University of São Paulo, São Paulo, Brazil*

## Abstract

*This work intends to examine how does the taxonomies presented by the authors Osterwalder and Pigneur (2009), and Blank (2012), can be applied as enhancement tools to diagnose faults, correct the course and plan the recovery of a Brazilian tech startup. In the perspective of solving the search problem and achieve the desired goal, the research was initially developed in light of the literature, where they were extracted data on taxonomies of business model, proposed by the authors, structured as follows: (i) - Customer Discovery, (ii) Validation Customer (iii) Customer Creation and (iv) Building Company. Secondly, to demonstrate the feasibility and plausibility of the model, an exploratory study was conducted on a case study in a Brazilian technology company. The research involved the intervention of specialists with expertise on the research subject. The comparison between the state of the art and the state of practice was observed throughout a structured questionnaire, in which the experts have issued their opinions on the variables (taxonomies) presented in the reference models. In light of this proposal was possible to identify the taxonomies that best fit the case investigated. So, this exploratory case study describes the benefits that can be obtained from implementing a structured program based on the correct theoretical models, based on deep and comprehensive conceptual audit - using the selected taxonomies - and including also observations, conceptual and result comparisons, and exploratory in-depth interviews. The results obtained have been satisfactory, validating the proceeding proposed for startups.*

**Keywords:** Permanent Challenge; Innovative Companies; Business Model Generation and Customer Development Taxonomies.

## 1.INTRODUCTION

Today's relevant changes have transformed organizational boundaries, making them more fluid and dynamic in response to the rapid pace of knowledge diffusion (Abrahamson, 1991; Griliches, 1990; Teece, 1986), innovation and international competition (Chesbrough and Rosenbloom, 2002; Christensen, 2003; Damanpour, 1996), thereby urging to reconsider how to prevail using innovation (Teece, 1986; Wheelwright and Clark, 1992).Thus, innovative companies began to focus more on their own abilities to adapt to the economic value generated from their knowledge and innovations (Griliches, 1990; Teece, 1986). The companies that can supply their products to customers faster and more efficiently will probably be in better conditions to create a sustainable competitive advantage (Prahalad and Hamel, 1990; Amit and Schoemaker, 1993) gained from innovation in order to create new products (Teece et. al., 1997) as the main source of economic income (Nonaka and Takeuchi, 1995).

The high tech industry is particularly lacking with regard to processes of innovation management. Its natural compulsion for fast renewal cycles amplifies the challenge of planning new products creation processes and their launch which quite often faces the "one product company" strategy instead of improving a diverse portfolio. High Tech industry has for quite some time presented challenges within a wide diversity of extremely complex events, all of which in an unsure and risky context that can affect the flux of decisions and the desired levels of performance, hence frustrating expectations for stability (Khan and Burnes, 2007).

It must be acknowledged that risks can be brought about from different origins and scenarios. With time, this eventually leads to changes in the configuration of the industry. This requires an

integrated and shared decision structure that involves key business model, concerning efficient coordination of functional-temporal company-client (Cheng, Yeh, and Tu, 2008; Power, 2005; Blos, et. al., 2009). Within this spectrum, controlling the performance is crucial and should be indicated on many dimensions; that is why business models / instruments that capture if not all, at least the most relevant ones, should be used (Lee, Kwon, Severance, 2007). They should be able to provide the managers a short-term, as well as a long term view of the high tech industry performance, and especially, be able to reflect the most relevant aspects of the organization (Green , Whitten, and Inman, 2008).

This work intends to examine how does the taxonomies presented by the authors Osterwalder and Pigneur (2009) can be applied as enhancement tools to diagnose faults, correct the course and plan the recovery of a Brazilian tech startup. This study sought to answer the following question: How does the taxonomies presented by the authors  can be applied as enhancement tools to diagnose faults, correct the course and plan the recovery of a Brazilian tech startup? In the perspective of solving the search problem and achieve the desired goal, the research was initially developed in light of the literature, where they were extracted data on taxonomies of business model, proposed by the authors, structured as follows: (i) - Customer Discovery, (ii) Validation Customer (iii) Customer Creation and (iv) Building Company. Secondly, to demonstrate the feasibility and plausibility of the model, an exploratory study was conducted on a case study in a Brazilian technology company.

The research involved the intervention of specialists with expertise on the research subject. The comparison between the state of the art and the state of practice was observed throughout structured interviews, in which the experts have issued their opinions on the variables (taxonomies) presented in the reference models. In light of this proposal was possible to identify the taxonomies that best fit the case investigated. So, this exploratory case study describes the benefits that can be obtained from implementing a structured program based on the correct theoretical models, based on deep and comprehensive conceptual audit - using the selected taxonomies - and including also observations, conceptual and result comparisons, and exploratory in-depth interviews. Thus, this work is systematized in the following sections: 1. Research Design, 2. Underlying Analysis, and lastly, the conclusions and implications. These different phases and stages are detailed here.

## 2. RESEARCH DESIGN

### 2.1 Scope of the Study: Application

The definition of what is a startup is not necessarily a standard concept for all publics, specialists included. So, limiting the scope and finding the boundaries that characterize an emerging company as a startup is necessary for better understanding the objectives of this article. The term was originally a synonym of "arise" (Oxford, 1993); after that, the word was associated to any kind of new venture (Oxford, 1995). According to Blank (2012), startups nowadays "are not smaller versions of large companies. Large companies execute known business models" - and almost all micro and small companies also do so. Thus, Blank (2012) complete the concept explaining that "in the real world a startup is focused on the search for a business model or, more accurately, startups are a temporary organization designed to search for a business model scalable and repeatable." In the view of Ries (2011), a startup is "a human institution designed to create something new in an environment of extreme uncertainty."  Understanding what these two concepts indicate - that through different constructions and words, they are about many similar elements - is the first step to better spell out the distinct challenges of this particular type of incipient enterprise, and not to incur in significant and potentially tragic mistakes.

Brazil, by many reasons, doesn't have a particularly impressive historical in nesting technology startups, what is explainable by factors that goes from the complexity of the legal and business environment to the availability of infrastructure and financing alternatives, among many other elements. The 2$^{nd}$ Private Equity and Venture Capital Census, conducted by the Brazilian Agency for the Industrial Development (ABDI, in Portuguese), and published in 2011, has presented and described many of these obstacles. That study shows also that, as a consequence, from 2005 and 2008, only US$ 300 million were invested in startups in Brazil. Although this number has jumped to US$ 750 million just in 2011, this represents only a small fraction of the amount appointed in more dynamic markets for this kind of initiative. So, trying to develop a technology startup in Brazil, back in 2005, was certainly a significant challenge, not only because of the local Brazilian environment, but also thanks to the intrinsic challenges on venturing in this special field. Understanding the difficulties and obstacles presented on this case study about the company's evolution along the seven years that followed its foundation is helpful not only for related ventures in Brazil, but also for equivalent efforts anywhere.

*The Company*

MCOMPANY SA was founded by the middle of 2005, and its first services were introduced to the market in late 2010. The central idea was to provide access to cloud computing based information systems, to clients that come from small to large companies. It is headquartered in São Paulo - SP, and its controlling stake owned by a U.S. investment fund, BWP LLC. Since the very beginning, the company had a very distinctive technical team, dealing with technology in a non conventional way, in order to provide non conventional services – a typical startup approach. Thus, the company strategy is not to provide software development but services delivered through innovative software platforms, renewed business structures and creative solutions for common business needs. In order to get there, the MCOMPANY team is focused on developing alternatives that allow users to solve their problems by considering three factors:

- *Mobility* – the services should be available anytime, anywhere.

- *User Experience* – the final user should be delighted by the experience of using the company's service.

- *Proptness/Speed* – the services should be accessed without significant delay, and the navigation must be fast.

As the shown at Figure 1, these three elements, or pillars, have to be combined, in order to get a comprehensive solution. These three pillars are jointed with 4 other elements, establishing a comprehensive solution, as follow:

- • *Safety* - data and systems with integrity and privacy;

- • *Innovation* - creative solutions, always;

- • *Integration* - different technical architectures and operational systems have to work in harmony;

- • *Sustainability* - it is no longer a wish, but a business requirement and cloud computing has a major role to play.

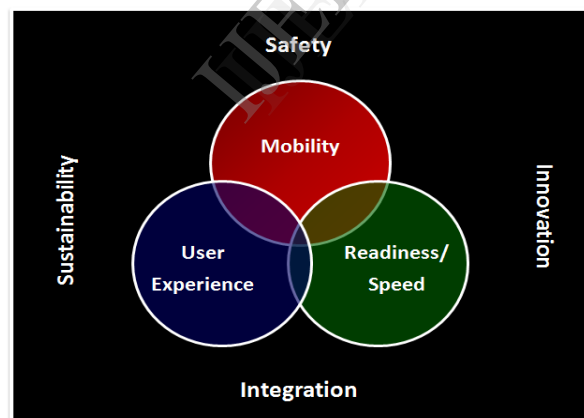Together these elements represent MCOMPANY's business approach (Figure1).



Figure 1 – MCOMPANY Strategic Approach - Source: MCOMPANY

MCOMPANY's mission is defined as "to be an innovative digital technology services provider, creating for its user a natural, simple and effective experience". Also, MCOMPANY's vision gives a hint about company's performance expectations. It says: "to be recognized until 2016, as a successful company, which renews and transforms the environment and technology to bring unique user solutions."

*The Service*

The service was connected to the state of art of cloud computing concepts (Figure 2). Data, software and user applications can be accessed through the company's servers, which are responsible for maintaining the agreed service levels regarding to availability and security. These resources are now available through an internet connection, providing the same experience the user had in the conventional environment. This can further eliminate, for instance, the investment in office software licenses. The client can also eliminate maintenance routines such as daily backups, viruses scan, data restore when something goes wrong, among other features. The users tend to have a better navigation experience once

they have now powerful servers hosting their data and running their systems. Their current computers can still be used as workstations, able to access and treat data through internet connection. When end users need to refresh their local infrastructure, MCOMPANY can provide that, also as a service, avoiding direct investments. If clients expand the number of company users, they only need to request more workstations, avoiding costs such as antivirus and backup software licenses, computer maintenance, backup and restore routines, and other IT related matters. The service combines mobility and full availability, which means, if there is a device connect through the internet, it becomes a work station, anytime and anywhere. When the number of users is reduced, the service charge is also reduced. So, MCOMPANY ensures, by contract, to take care of systems and customers information, charging them only what they used.
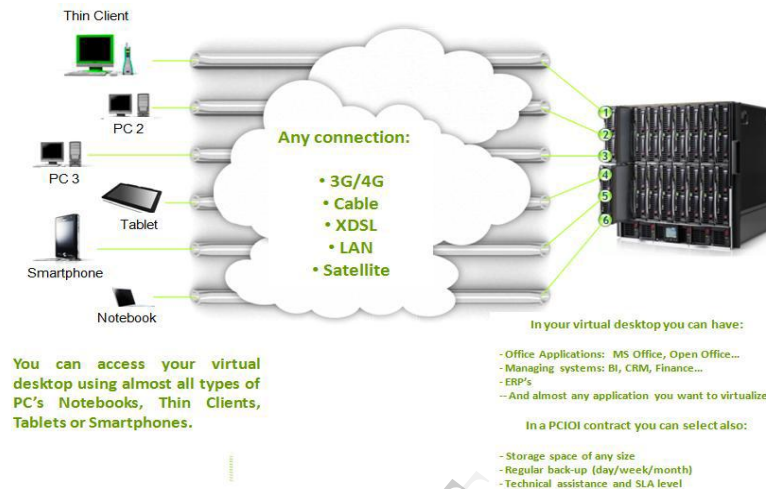


Figure 2 – THE SERVICE Structure - Source: MCOMPANY

All said, "The Service" seems to be perfectly aligned to the tendencies of the cloud computing market, but the sales results are showing much less progress than expected. One and half years after the official launch (that occurred by the end of 2010), and having visiting more than 200 prospect clients, the company is still far from achieving the intended results. The traditional questions about "are we trying to sell the right product to the wrong customers?" or "is the product all wrong?" start to concern people all over the company. "MCOMPANY" needs an urgent diagnosis, pointing to a new and right direction. The company's internal staff is clearly feeling the effects of the lack of more relevant results and the investors' interest in financing the operation starts to run out. A radical course change seems to be inevitable.

### 2.2 Sample and Data Collection

Case study is an ideal methodology when a holistic, in-depth investigation is needed (Feagin, Orum, and Sjoberg, 1991), what is the exact case of this paper. Yin (1993) has identified that there are some specific types of case studies: Exploratory, Explanatory, and Descriptive. Exploratory cases are sometimes considered as a prelude to social research. Explanatory case studies are indicated for doing causal investigations. Descriptive cases require a descriptive theory to be developed before starting the project. Stake (1995) included three others: Intrinsic - when the researcher has an interest in the case; Instrumental - when the case is used to understand more than what is obvious to the observer; Collective - when a group of cases is studied. As one of the authors of this study used to be a minority stakeholder of MCOMPANY and has participated in its management team for a couple of years, the intrinsic model could be suggested, but as this relationship no longer exists, this research was more appropriated conducted as an Exploratory case study. As the main source of information, we have conducted several open interviews involving all the management team of the MCOMPANY, along 2012.

### 2.3 Issues for Solving

The initial stage of almost every project like MCOMPANY - drawing up a business plan structured in the traditional manner, or in a format more in line with the spirit of technology companies, such as the Business Model Canvas - simply did not exist in its case. In fact, the company was created based on an idea, Theservice, and an investor who was enchanted by its seemingly unlimited potential and its highly innovative appearance for its time. As in many startup cases, the initial perspective was that there will be a low investment need for the realization of its beta version. The product was the only concern at that moment, and it seemed natural that, after the development phase, there would be market

for it. "Build and they will come."As a result, several of the elements that build a conventional business plan were never clear nor adequately measured in MCOMPANY, and none of them had formal record made by its statutory managers from the beginning. This lack of clarity made several of the steps taken throughout the history of the company to go in the wrong direction, or in no direction, according to the interviews we have conducted. This prevented the actions of being clearly focused on market-oriented development, on greater understanding of the missing elements of the scenario in which they are working, and on greater objectivity to structure the company's operations. Its application, albeit belatedly, seems to redeem these fundamental elements. Additionally, Blank (2012) compiled a list of "9 deadly sins in the model of introduction of new products", which contains the essential elements of the canvas and clearly helps to explain some of the mistakes made at MCOMPANY. With varying degrees of intensity, almost all 9 sins were committed throughout the history of MCOMPANY, some of them seriously. Analyzing one by one:

### 2.3.1. Assuming that "I know what the customer wants"

The belief of the founders and technicians of MCOMPANY in that they knew who would be the consumers, what would be their needs, and how they would sell to them, was a present element from the very beginning. Although this potential market had never been actually measured or characterized, the "image" of this market went like this, with a significant part of the company group, over the years. The few dissenting voices had little effect in changing actions that were taking place. Unless the company counted with a great expert in the market or in the product that they wanted to sell - and there wasn't, although MCOMPANY have always counted with undeniable technical competence in computer - all you could do was describe some assumptions about the market, the customer and the business model, as well remembers Blank (2012). For the idea to become a business and work out, it is necessary that these initial assumptions are turned into facts, as soon as possible, through interactions with customers, to check what is true in that thought, and do quickly course corrections. This has never been done in MCOMPANY. The development group has never been encouraged to interact with prospects, or to take advantage of the relationships that were established with partners and potential customers to see if the hypotheses they were working with were correct, or made sense for a significant market segment.

### 2.3.2. The failure "I know which specifications and features I must build "

This item is a consequence of the above, as noted Blank (2012). Judging that he knew the needs of the future clients, the leader of MCOMPANY's development group remained determined to write lines and lines of programming, draw and design Theservice without any necessary understanding of the lessons of interaction with future potential clients. In the pre-launch phase, 4 or 5 individuals outside the company were invited to use the service superficially, for about a month, with the following problems:

• The testing group was formed by friends and acquaintances, without any more formal experience as testers, and the professionals involved was not particularly skilled users;

• Any form of structured monitoring of these tests was made, nor incentive for the testers to use all or most of the available resources.

• Due to the short period of the test, none of these users actually came to fully utilize the system, for the simple fact that it would require a transfer of their files into the Theservice, providence not actually practicable in a one month test.

A single client has tested the product further and included the Theservice in their everyday operation, but its complaints and observations were not treated with the necessary attention, and that company eventually discontinued the use (this beta client also had financial problems, which prevented, one way or another, the continued use of the service). Then, the specifications of the product could not be timely adjusted, in many cases, which could be offered to a market that appeared to be potentially attracted by the potential of Thervice.

### 2.3.3. Concentrate on the release date

From 2009 on, the Theservice was considered ready for release by the technical leadership. As MCOMPANY doesn't has an executive with relevant experience in marketing and sales (although the company already counted on a commercial director that had been hired years before, and that was maintained in standby despite the general acquaintance that he had not the specific knowledge, nor experience and skills necessary to the challenge), it was decided to hire a marketing study to guide the launching process. The study, developed by a very renowned institution, was delivered in late 2009, and the initial efforts began. From this date on, the expectation regarding the results generated by the product sale of was considerably higher, since the Theservice was treated by the technical leader as "ready to be

sold". After the product was officially launched, there were dozens of tests in companies of all sizes and many economic sectors. The development group has never been encouraged by their leadership to monitor these tests with the necessary attention and details, and he saw these events with evident distress: particularly when they were made by larger, more structured companies, he felt like if the work of years was being "evaluated" and, in case of problems, it was common for the company or the testers to be disqualified, or to be considered "the wrong customer for us." So, where would be the right customers? Blank (2012) warns that this premature launching process is a mistake: "focus on delivering a product or service based on these initial untested hypotheses is a strategy to exit the business."Blank (2012) also noted that "a good day in front of customers means two steps forward and one step back. The ability to learn from these backwards steps distinguishes successful startups from those that fail. "

### 2.3.4. Emphasis on execution, rather than hypotheses, testing, learning and iteration

Blank (2012) explains that startup professionals often think they were hired "by what they do, not by what they can learn." In an industry in which, very often, there is innovation in form and content, and in that the scenario is changing constantly and very fast, this is a particularly serious sin. In MCOMPANY this problem was often acute. Crystallized certitudes and low sensitivity to new facts led to the obstinate implementation of projects that the market was not exactly asking, while others who were part of the demands raised by prospects clients were deferred to "when they are possible". This adaptive process indicated by Blank (2012) does not mean creating a new product to every new customer, clearly; it indicates that is necessary to carefully evaluate each of the demands that come by the testers to select the ones that will make sense not only for that one prospect, but for the product itself, and for the potential market prospects that this initial one represents.

### 2.3.5. Traditional business plans assume "without trial and without errors"

As on the occasion of the launch, it was deemed that the TheService was "ready", every expectation formed was only directed to the commercial performance of the company. Projections were based on a traditional product development process, when the offering to the market phase came in, but the Theservice was still only a very interesting potential product, still far from reaching the market-fit resulting from the Customer Development method application.

### 2.3.6. Confusing the traditional functions with those that a startup needs to accomplish

Blank (2012) exemplifies here that the sales force of a conventional company, for example, engages in marketing a particular and known product, repeatedly and increasing standards of price, performance, terms and conditions. Startups often do not have many of these elements from the beginning (and frequently will never have all these aspects completely defined, since the product or service content they market will change, or could change, quite rapidly, and often dramatically). This concept was not widely understood by all of The COMPANY managers, and finding structured ways to better understand the market and to adapt The Service SERVICE to what the market values was not an option realistically considered.

### 2.3.7. Sales and marketing focused on execution of a plan

The MCOMPANY did not reach the commercial stage Blank (2012) describes here (when, after the first large wave of customers, the company does not really understands who they are, what they want, and what is the company's ability to continue attracting new clients to a greater or lesser extent), also because MCOMPANY sales force was very small, and the problems associated with those potential customers since the initial contacts were particularly damaging to the constitution of an initial and consistent portfolio. So this initial group of regular customers was never formed. This step is also widely discussed by Moore (2001), when presenting the concept of "chasm."

### 2.3.8. Success assumption leads to premature growth of structure

This was another aspect that has compromised the effort of MCOMPANY so far: as Theservice was prematurely considered "ready to launch" by the technical managers in 2009, the operational structure was built as if the company was about to fully operate in the short term, and with a significant number of customers. In fact, since 2007 the company already has a help desk structure and a sales manager (although not focused on the expected concerns from someone in this position in a startup – to seek and to understand, with the deepest possible details, which are the potential customers and what they want).

The commercial action at 2007, and for about three years, was just to present Theservice to possible clients, but not considering what should be the main concern at this point: in the contacts with prospects, and throughout a structured way, to explore the information that would base the development

of the product until it reaches Blank's (2012) concept of "market-fit". Thus, the MCOMPANY procedures are far from fulfilling the steps described in the Customer Development model (Blank, 2012), which propose to keep the structure as small as possible, just according to the current number of customers, until there is a real necessity of making it grow.

### 2.3.9. Management by crisis leads to a death spiral

This situation described by Blank (2012) was also found at MCOMPANY. Poor results and investor's pressure jeopardize collaborative and focused work, which was already fragile at the company. As the situation got worse by the lack of the expected results, an intense process of remodeling and structure transformation is required, in order to the fill in the missing information at the Business Model Canvas and to implement the Customer Development taxonomy.

### 2.4 The Theoretical Framework Proposal for Solving the Problem

### 2.4.1 The Business Model Canvas by Alexander Osterwalder and Yves Pigneur
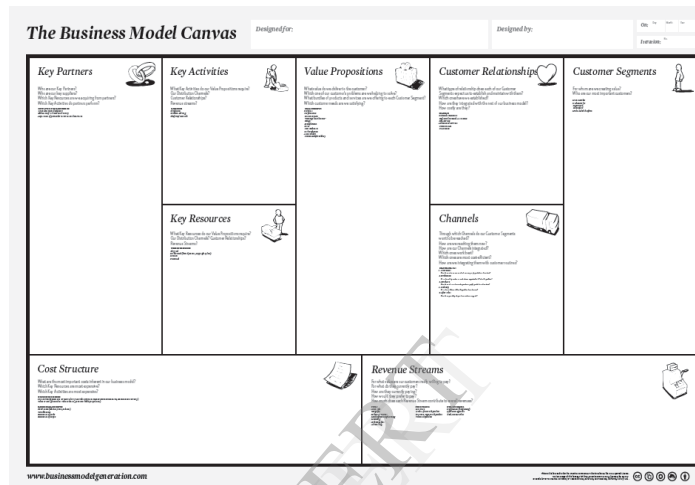


Figure 3 – Business Model Canvas - Source: Osterwalder and Pigneur (2009)

The Business Model Canvas (Figure 3) is a map of the key elements that will form the business enterprise structure. The map is a summary of a business plan key points, although it does not replace, eventually, the business plan itself; it is a more compact and less formal tool, so it can be used as a starting point analysis, and is also an interesting tool to manage the development of the startup project. It is divided into 9 elements, grouped in 4 major blocks:

*Infrastructure:* Main Activities: The activities necessary to implement the company business model: production, distribution channels, network, etc.

*Key Resources:* The resources required to create perceived value for the customer: physical (facilities), intellectuals (trademarks, patents, data), human and financial.

 *Partner Network:* Alliances and partnerships that complement the other aspects of the business model.

*Offer:* ○ Value Proposition: The products and services offered by the business. According to Osterwalder and Pigneur (2009), a value proposition "is an overview of products and services that together represent value for a specific customer segment. Describes how the company differentiates itself from its competitors and is the reason why customers buy from a certain company and not another." It describes what customer needs are going to be solved by products and / or services of the company.

*Customers:* ○ Customer Segments: The target audience for the products and services offered by the company. Key questions are: to whom are we creating value? Who are - or should be - our main customers?

*Channels:* The means by which a company provides products and services to customers. This includes marketing and distribution company strategies.

*Customer Relationship:* The company establishes links with different customer segments and defines how these connections are made, including cost definitions.

*Finance*

*Cost structure:* amount – cumulative and time phased – of the necessary resources for the business model operation.

*Cash flow:* The expected cash generation, its forecast and its origin.

### 2.4.2 The Customer Development, by Steve Blank

In essence, the Customer Development is a methodology that allows a startup to find the so called Product / Market Fit. It is a process that starts from the assumption that "the facts are out of the office, inside it there are only opinions", and that the entrepreneur must validate his key market hypotheses as soon as possible. The model is comprised by 4 steps (figure 4) that must be applied very strictly when regarding with goals achievement, but with flexibility in the methods, according to the type of startup business. The Figure 4 illustrates these steps:
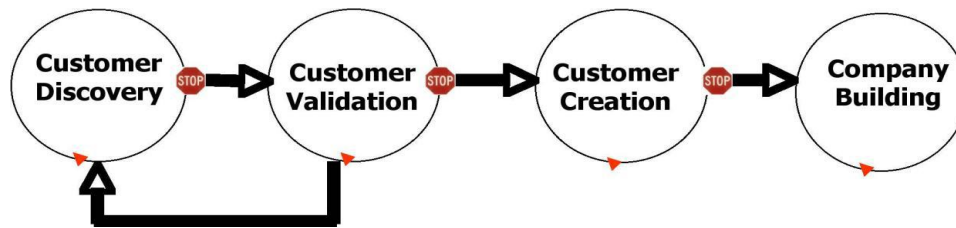


Figure 4 – Customer Development Schematic Model - Source: Blank (2012)

In summary, the description of each step is as follows:

*Customer Discovery:* Tests of market assumptions and understanding of customer problems by those responsible for managing, checking if the product offered meets these needs satisfactorily. The question is: Do the customers want the product?

*Customer Validation:* Validation of the sales process and product distribution, where is developed a replicable and scalable business model. The question is: do the customers will actually pay for the product?

*Customer Creation:* This is the time to create demand in order to increase sales. This is the moment (and only here) to launch the product.

*Company Building:* Creation and practice of processes for company structuring/development, finalizing the transition from an organization focused on learning to one focused on execution. It is the stage where the company has the challenge to grow and reach the target audience.

### 2.4.3 The Lean Startup by Eric Ries

The Lean Startup philosophy originates from the Japanese concept of lean production - created by Taiichi Ohno and Shigeo Shingo, and developed at Toyota - which aims to increase the practice of creating value and eliminating waste. Ries (2011) says, "Lean is not about being cheap [even being related with] but be more efficient (less waste) and still do the things that are great". Ultimately, the goal of the Lean Startup philosophy is to build efficient companies in capital management, making them more sensitive to consumer demand and thus reducing wasted time and resources. Ries (2011) also highlights other issues that are relevant to the case of MCOMPANY: the startups do not know exactly who their customers are, and live in an environment of high uncertainty. Also, there are 4 key questions that must be answered by the development leaders (R&D product managers and/or directors):

- Do the consumers recognize that they have the problem you're trying to solve?
- If there was a solution, which should it be?
- Would they pay for this solution?
- Can we build a solution for this problem?

Ries (2011) explains that there is a tendency to go straight to the 4th question, without considering the previous 3 ones, which can lead to frustration when customers do not adhere enthusiastically to the solution built. This happened in MCOMPANY. The author establishes a development cycle, which has similarities with the basic ideas of the initial phase of Blank´s Customer Development model (2012). This cycle was not followed by MCOMPANY either, once they always developed products from internal ideas, without market tests, like shown ate Figure 5:
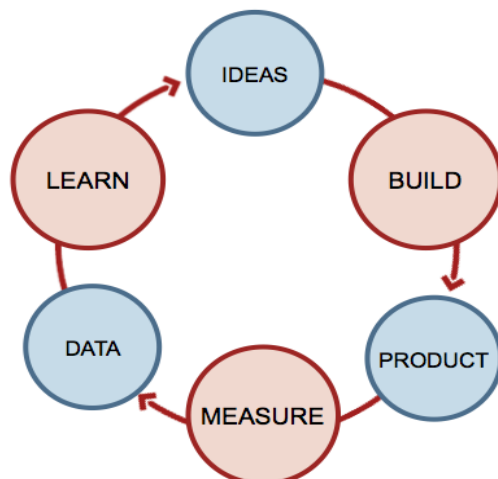
Figure 5 – The Lean Startup Cycle - Source: Ries (2011)

Ries (2011) indicates also the necessity to measure the development process using metrics that consider 3 main characteristics, that he calls the "3 A's":

*Actionable* - metrics in which there is a clear relation of cause and effect;

*Accessible* - that can be measured without complex methods, be understood by everyone, and that may be handy for their users;

*Auditable* - data must be reliable

At MCOMPANY they did not have disclosed development metrics.

The Pivots are described by Ries (2011) and Blank (2012) works; taking Ries´s words, a pivot is not a simple synonym for change; is a kind of change designed to test a new fundamental hypothesis about the product, the business model and its growth engine. In MCOMPANY, although the sales group had identified some faults that will let to pivot needs, they have not appropriately influenced the development pipeline.

*2.4.4 The Chasm by Geoffrey Moore*
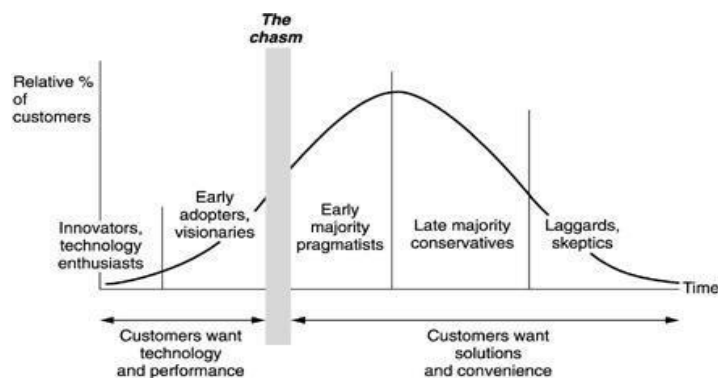


Figure 6 – The Chasm - Source: Moore (1991)

In "Crossing the Chasm" Moore (1991) begins considering the Everett Rogers' diffusion innovation theories, and argues that there is a chasm between the "visionaries" and "pragmatists". Moore believes that both have very different expectations and tries to explore these differences and suggests techniques to successfully cross this "Chasm" (Figure 6), including the choice of the target audience, the full understanding of the product concept, product positioning, building a marketing strategy, choosing the most appropriate distribution channels and pricing structure.

"Crossing the Chasm" is closely related to the life cycle of technology adoption, where five main segments are recognized: innovators, pioneers, most precocious, late majority and laggards. According

to Moore (1991), the company should focus on a group of clients at a time, using each group as a base for the marketing to the next group. The most difficult step is making the transition between visionaries and pragmatists. This is the chasm to which he refers. If a successful company can create a wave effect with enough impact, then the product becomes an actual standard. However the theories of Moore are applicable only to radical or disruptive innovations. Adoption of incremental innovations (that does not force a significant change in customer behavior) is still best described by the original life cycle of technology adoption. Mistakes in incremental and radical innovation concepts understanding is the main failure cause in high-tech products development.

## 3. UNDERLYING ANALYSIS AND RECOMMENDATIONS

Taking the procedures described by Osterwalder and Pigneur (2009) and Blank (2012), and analyzing the situation of MCOMPANY at the time, and the willingness of its investors, in addition to carefully evaluating the knowledge generated from more than 300 visits at more than 200 prospects made over the past 1.5 years by the sales team, it was possible to draw a picture of what are the most essential needs to the company. MCOMPANY has essentially three potential markets for the Theservice, wherein the product has shown to have potential (Figure 7).



Figure 7 – MCOMPANY Market Segmentation

Who are these potential customers is too described in the following table. These sectors were selected based on two key aspects: the number of companies in each market sector, and the problems that they have that can be potentially solved by Theservice (Figure 8).
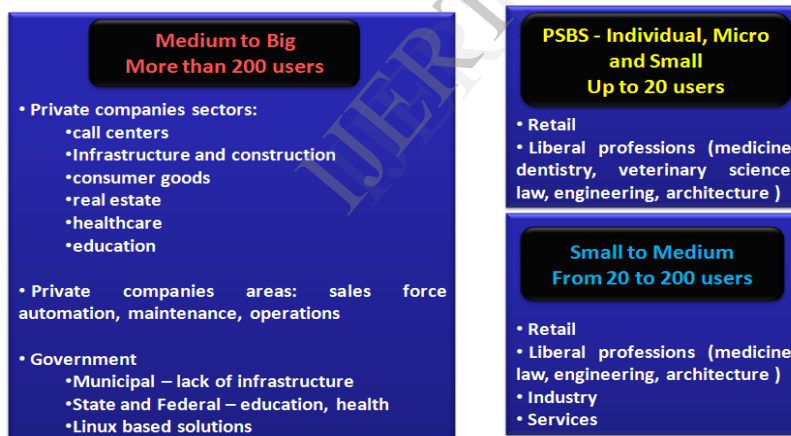


Figure 8 – MCOMPANY Main Market targets

What the company should to do in each of these blocks, however, is quite different. To exploit this potential, so it is necessary to take a series of measures. The chart bellow (figure 9) describes some of the crucial elements in understanding each of these segments, and their differences:

| | Medium to Big More than 200 users | Small to Medium From 20 to 200 users | PSBS Individual, Micro and Small Up to 20 users |
|---|---|---|---|
| Partners to fast scale-up (type) | IT service integrators | IT service integrators | Internet connection provider/APP (specially ERP) developers |
| Partners (need) | Essential; specially useful in Government deals and some specific projects | Essential for operational activities; specially useful in some specific projects | Essential for operational activities; specially useful in some specific projects and to faster and strongest results |
| Market Results (when) | Short to long term | Short to long term | Medium to long term |
| THESERVICE offer | Tailor-made Premium price | Basic virtualization package with optional features under the S.a.a.S. model (market enterprise app's – ERP, BI, CRM, HR) with tablet/smartphone features; Possible tailor-made projects; Low to medium price | Basic virtualization package with optional features under the S.a.a.S. model (market enterprise app's – ERP, BI, CRM, HR) with tablet/smartphone features); Low price |
| MCompany service level | Full | Medium to low | Low |

Figure 9 – MCOMPANY Strategic Approach to Each Segment

The first line on the chart considers the convenience of partnerships, their typology and actual need. Although MCOMPANY has agreements with some suppliers, the most important thing at this moment seems to be to establish partnerships with complementary companies that bring:

- *Operating Force*, especially on issues such as ability to service and support;

- *Increase competitiveness* to access the chosen markets and to gain operational scale (after completing the process of Customer Development), since that partners already have business connections with customers and can extend their sales, also offering Theservice.

Those partnerships are particularly important in some prominent markets such as government and big business, where the configuration and still modest portfolio of MCOMPANY may represent an extra barrier. The second element has to do with the expected term for these initiatives to succeed. The table below shows the opinions of most of the interviewed professionals at MCOMPANY, that identifies that smaller customers have a perspective to bring results at long-term, mainly because, by analyzing the historical of MCOMPANY and the application of the concepts of the canvas, it became clear that the company does not have an offer that is by now sufficiently attractive for this audience (Figure 10).

| | Medium to Big More than 200 users | Small to Medium From 20 to 200 users | PSBS Individual, Micro and Small Up to 20 users |
|---|---|---|---|
| Partners to fast scale-up (type) | IT service integrators | IT service integrators | Internet connection provider/APP (specially ERP) developer |
| Partners (need) | Essential to Government deals; useful in some specific projects | Useful in some specific projects | Essential (to faster and strongest results) |
| Market Results (when) | Short to long term | Short to long term | Medium to long term |
| PCIO offer | Tailor-made Premium price | Basic virtualization package with optional features under the S.a.a.S. model (market enterprise app's – ERP, BI, CRM, HR) with tablet/smartphone features; Possible tailor-made projects; Low to medium price | Basic virtualization package with optional features under the S.a.a.S. model (market enterprise app's – ERP, BI, CRM, HR) with tablet/smartphone features); Low price |
| MIPC service level | Full | Medium to low | Low |

MCOMPANY does not match the client needs on time

MCOMPANY does not have an Interesting offer

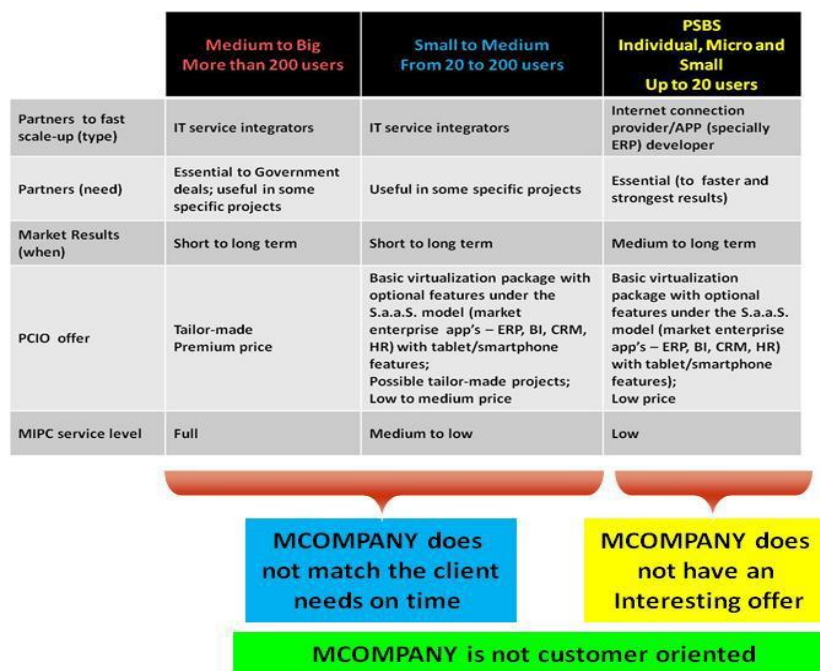MCOMPANY is not customer oriented

Figure 10 – MCOMPANY Fragilities

Considering the larger companies, although the Theservice is not yet completely formatted, it is quite possible to observe that the result is closer to what customers expect and value. It will be necessary to apply the model more quickly and give the Customer Development definitive focus on the market for the development process. As Blank (2012) recommends vehemently, "Get Out of The Building." This brings us to what is described in the chart bellow (Figure 11):

| | Medium to Big<br>More than 200 users | Small to Medium<br>From 20 to 200 users | PSBS<br>Individual, Micro and Small<br>Up to 20 users |
|---|---|---|---|
| Partners to fast scale-up (type) | IT service integrators | IT service integrators | Internet connection provider/APP (specially ERP) developer |
| Partners (need) | Essential to Government deals; useful in some specific projects | Useful in some specific projects | Essential (to faster and strongest results) |
| Market Results (when) | Short to long term | Short to long term | Medium to long term |
| PCIO offer | Tailor-made Premium price | Basic virtualization package with optional features under the S.a.a.S. model (market enterprise app's – ERP, BI, CRM, HR) with tablet/smartphone features; Possible tailor-made projects; Low to medium price | Basic virtualization package with optional features under the S.a.a.S. model (market enterprise app's – ERP, BI, CRM, HR) with tablet/smartphone features); Low price |
| MIPC service level | Full | Medium to low | Low |

- Apply the customer development model

- Develop a product
- Apply the customer development model

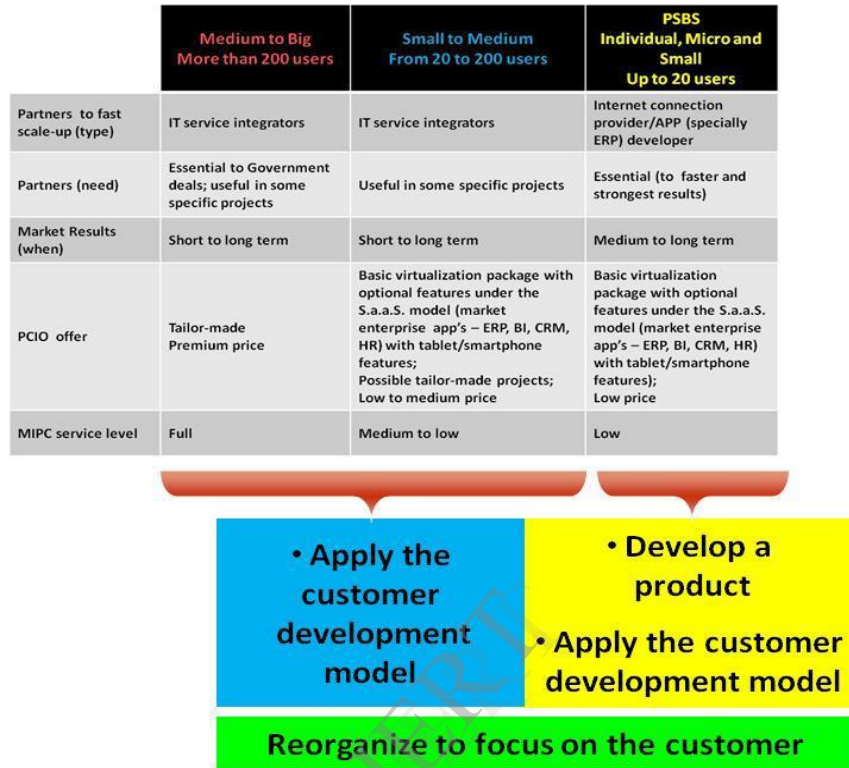Reorganize to focus on the customer

Figure 11 – Main Strategic Objectives

The implementation of these models and the decision on the immediate implementation of these processes can save the concept of what was intended for MCOMPANY and take it to a possibility of success that never really existed before. The projected possible results for the company - if all these measure are taken, and have the expected success - will be described in the charts below. The MCOMPANY participates on a very promising market, the cloud computing world, which makes it very likely that, with a correct offer, it may have an increasing number of customers. The more conservative perspectives, considering the already identified partners that can be achieved without an action far beyond the geographical state of São Paulo, realize that the future of MCOMPANY may be promising indeed (Figures 12 and 13).
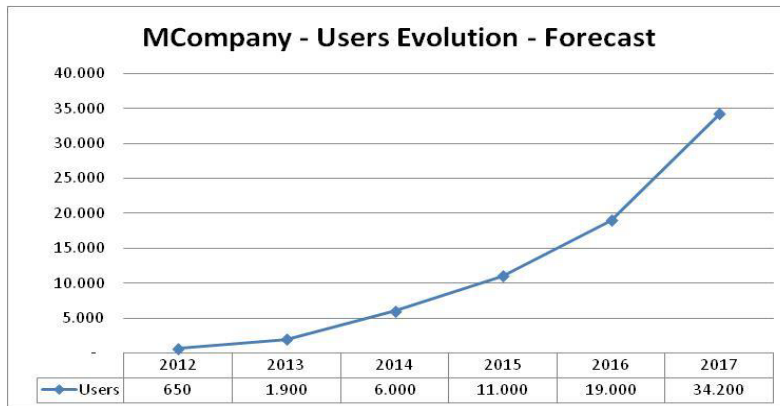
**MCompany - Users Evolution - Forecast**

| | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 |
|---|---|---|---|---|---|---|
| Users | 650 | 1.900 | 6.000 | 11.000 | 19.000 | 34.200 |

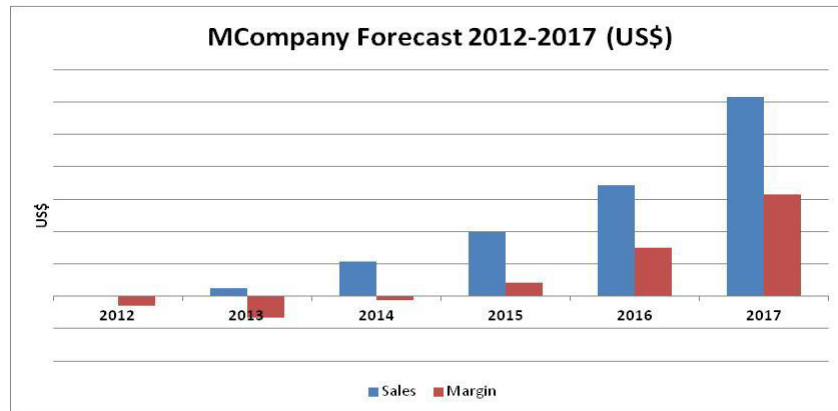Figure 12 – MCOMPANY Users Forecast - Source: MCOMPANY

Figure 13 – MCOMPANY Revenue and Profit Forecast - Source: MCOMPANY

## 4. FINAL CONCLUSIONS AND IMPLICATIONS

This work intends to examine how does the taxonomies presented by the authors Osterwalder and Pigneur (2009), and Blank (2012), can be applied as enhancement tools to diagnose faults, correct the course and plan the recovery of a Brazilian tech startup. In the perspective of solving the search problem and achieve the desired goal, the research was initially developed in light of the literature, where they were extracted data on taxonomies of business model, proposed by the authors. Thus, the approach here is not intended to unconditionally replace the allegedly inefficient models, but rather to value them, enriching them with technical, procedural and managerial advantages. However, these results must be evaluated objectively, based on an advantage indicator of an innovative model given the traditional approaches. With regards to procedures, this proposal also aims to draw attention to: 1) renew the classical model to develop products with creative and sophisticated elements and procedures, which would replace the merely technocratic methods and traditional techniques; 2) a procedure, that is, a set of adjusted procedures, supported by instruments for legitimacy, validity and reliability of the proposal presented.

The application of Osterwalder and Pigneur (2009) models and the conceptual framework of "deadly sins" described by Blank (2012), allowed the development of a diagnosis that appears as quite consistent in which regards the detection of problems that affected MCOMPANY since its early days, nearly 7 years ago, and the drafting of its rescue plan. Adding these reviews on top of Ries (2011) and Moore (1991) elements, and other relevant observations and highlights collected from other authors, it was possible to understand why the company has always been committed to getting marketing results and has never been able to reach them as expected. The application of Customer Development process, proposed by Blank (2012), would serve as the basis, as we have seen, to create an offer that really meet the potential clients needs and also to make adjustments according to the gap analysis discussed before. After all it means to rebuild this company, preserving the value it has eventually created, but avoiding past mistakes and dysfunctional aspects that it had over the years - and they were many – maximizing the chances to achieve its goals. Finally, it is important to reinforce that this model does not intend to be complete, but rather as a generator of elements that can be strategic for the Startups in Brazil.

## REFERENCES

Abrahamson, E. Managerial fad and fashion: the diffusion and rejection of innovations. *Academy ofManagement Review*. 16, 586-612, 1991.

Amit, R. E , Schoemaker, P.J.H. Strategic assets and organizational rent, *Strategic Management Journal* Vol. 14. 1, 33–46, 1993.

Blank, S. G., The Four Steps to Epiphany. Quad/Graphics, 2007

Blank, S.G. A new Way to Teach Entrepreneurship - The Lean Launchpad at Stanford (ENGR 245: The Lean LaunchPad), 2011

Blank, S.G. and Dorf, B. The Startup Owner's Manual. K&S Ranch, 2012

Blos, M.F., Quaddus,M., Wee, H.M., Watanabe, K. Supply chain risk management (SCRM): a case study on the automotive and electronic industries in Brazil. *Supply Chain Management: An International Journal.* Vol. 14, 4, 247 – 252, 2009.

Cheng, J., Yeh, C., Tu, C. Trust and knowledge sharing in green supply chains', Supply Chain Management: An International Journal, 13, 4, 283-95, 2008.

Chesbrough, H., Rosenbloom, R.S. The role of the business model in capturing value from innovation: evidence from Xerox Corporation's technology spin-off companies. Industrial and Corporate Change, 11, 3, 529-555. Six components for a business model, 2002.

Christensen, C. M, Raynor, M. E. The Innovator's Solution: O crescimento pela inovação. 1ª ed. Rio de Janeiro: Elsevier, 2003.

Damanpour, F., Organizational complexity and innovation: Developing and testing multiple contingency models. Management Science 42, 5, 693-713, 1996.

Green, Whitten, and Inman The Impact Of Logistics Performance On Organizational Performance In A Supply Chain Context Supply Chain Management: An International Journal, 13, 4, 2008.

Griliches, Z., Patent Statistics as Economic Indicators: A Survey, Journal of Economic Literature 28: 1661- 1707, 1990.

Hackler, D. Innovation and Entrepreneurship in Cities: Unlocking Future Local Economic Growth and Fiscal Capacity - George Mason University - Public & International Affairs, June, 2011

Hauptmann, S. The Lean Startup: A New Entrepreneurship Model (final paper presented as a partial requirement to conclude the International MBA Program) FIA Business School, 2012

Khan, O., Burnes, B., Risk and supply chain management: creating a research agenda, International Journal of Logistics Management, The, 18, 2, pp.197 – 216, 2007.

Lee, C.W.; Kwon, I.G. and Severance, D. Relationship between supply chain performance and degree of linkage among supplier, internal integration, and customer. Supply Chain Management: An International Journal, 12, 6, pp.444-452, 2007

Livingston, J. Founders at Work: Stories of Startups' Early Days Apress, First edition, September 2007

Moore, G. Crossing the Chasm. Harper Business, 1991.

Moore, G. Dentro do Furacão. Futura, 1996.

Nonaka, I. ; Takeuchi, H., The Knowledge-Creating Company, Oxford University Press, New York, NY, 1995.

Osterwalder, A. and Pigneur, Y. Aligning Profit and Purpose Through Business Model Innovation. August 2010

Osterwalder, A. and Pigneur, Y. Business Model Generation – Inovação em Modelos de Negócios. Alta Books Editora, 2012.

Osterwalder, A. and Pigneur, Y. Business Model Generation: A Handbook for Visionaries, Game Changers, and Challengers Wiley, 1st edition, July 2010

Ottosson, S. Dynamic Product Development. Technovation, 24, 3, pp. 207-217, 2004

Power, D. Supply chain management integration and implementation: a literature review, Supply Chain Management: An International Journal, 10, 252-63, 2005

Prahalad, C. K.; Hamel, G., The Core Competence of the Corporation. Harvard Business Review, 3-15, May/June, 1990..

Prahalad, C.K. and Ramaswamy, V. Co-Opting Customer Competence. Harvard Business Review, 79-87, Jan-Fev/2000

Ries, E. The Lean Startup: How Today's Entrepreneurs Use Continuous Innovation to Create Radically Successful Businesses Crown Business, September, 2011

Schmiedgen, J. Innovating User Value (a thesis in (partial) fulfillment of the requirements for the degree M.A. of Arts) Zepelin University - Department of Corporate Management & Economics, December, 2011

Teece, D. J., Pisano, G., Shuen, A., Dynamic capabilities and strategic management. Strategic Management Journal, 18, 7, 509-533, 1997.

Teece, D.J., Profiting from technological innovation. Research Policy 15, 6, 285–305, 1986.

Wheelwright, S., Clark, K. Revolutionising Product Development. Free Press, New York, 1992