

Business Model Innovation using Lean Methodologies for Companies with Established Technologies

Summary of dissertation for the degree of Master in Information Systems and Computer Engineering

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ABSTRACT

Innovation is no longer an option. But established companies fail to launch new products and end up spending a lot of resources on developing technologies no one is willing to buy. Using the Design Science Research methodology a framework based on lean methodologies to facilitate business model innovation for companies with established technologies is proposed. The proposed framework will allow companies to find the right business model to sell their technologies through an iterative process constantly generating knowledge about their markets. The thesis was evaluated through a field study in order to apply the framework in practice and by interviewing field experts and practitioners.

Keywords

Innovation, Business Model, Lean Startup, Lean Analytics, Innovator's Method, Business Model Canvas, Value Proposition Canvas, Intrapreneurship.

1. INTRODUCTION

Entrepreneurship is trending. New books and methodologies are published every month creating an overwhelming panorama for existing companies, struggling to innovate within their businesses. Although many of these methodologies can be adapted for established organizations, it is not clear and not easy to implement these processes. However, business models innovation can nowadays leverage research and development (R&D).

We propose a framework based on modern entrepreneurship methodologies to support companies to innovate their already developed (technologies) business model by building a new value proposition for the services and products they already possess based on the most interesting aspects of each methodology (Lean Startup, Lean Analytics, Innovator's Method) using recent visual tools (Business Model Canvas, Value Proposition Canvas) and Web Analytics.

The proposed framework was applied to a field study: DemoCorp - a spin-off ready to promote a new business model for the parent company's developed technology. The evaluation process was based on the field study (demonstration) as well as Nicolas Prat et al. evaluation criteria and interviews to practitioners and field experts.

1.1. Problem

The logical, competent decisions of management that are critical to the success of companies are also the reasons why these companies lose their positions of leadership - good management can lead to failure. Companies fail not due to bad management but to a lack of innovation culture.[1]

Innovation no longer means the creation of new products or technologies, as product life-cycles get shortened even great technologies can no longer be relied upon to earn a satisfactory profit before they become commoditized. Innovation must include business models, rather than just technology and R&D.[2]

BusinessWeek and Boston Consulting Group (BCG) conducted a survey in order to identify the most innovative companies and concluded that Business Model Innovation (BMI) could not only be more profitable but sustainable on the long term than product or process innovation. In line with these results BCG states that BMI can be more powerful when it is approached proactively to explore new avenues of growth instead.[3]

Nowadays there are many methodologies and frameworks suggested for entrepreneurship and innovation or simply the pursuit of new ideas by established companies, however, for companies with established technologies demanding to innovate through their business model, an exhaustive adaptation to this particular context is still necessary. These frameworks are abstract in order to be adaptable to different type of businesses

In short we define our problem as **being very difficult for companies with established technologies to innovate their business models.**

1.2. Research Methodology

Design Science research methodology (DSRM) is the approach chosen for this work. DSRM's main goal is to develop and validate a proposal to solve our problem by proposing the design, development, demonstration and evaluation of artefacts that may consist of constructs (vocabulary and symbols), models (abstractions and representations), methods (algorithms and practices) and instantiations (implemented and prototype systems). The focus of this research will be the creation of a model and an instantiation of that model.[4] In (Figure 1) are the DSRM phases mapped to this research work.

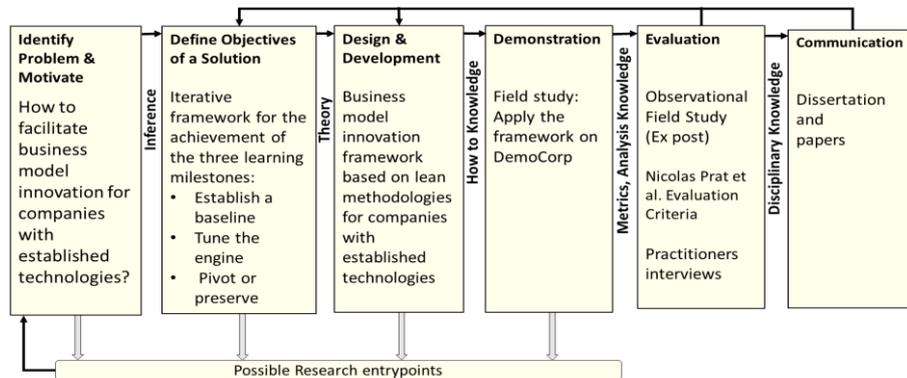


Figure 1 - DSRM mapped to this research work (adapted from [4])

DSRM contains the test cycle, which characterizes the iterativeness of design science: after evaluating and/or communicating the solution, we can re-define the objectives and/or re-design the solution.

Section 1 and Section 2 identify the problem and the motivation behind the research work. Section 3 details the objectives of the solution and the proposed solution. The solution is demonstrated in section 4 and evaluated in section 5. In section 6, the research work is concluded.

2. RELATED WORK

In this section a literature review of the subjects in this thesis context is introduced.

2.1. Design Thinking

Design Thinking, a notion of design as a "way of thinking" is the foundation for many of the entrepreneurship methodologies and tools. Design thinking focuses on the human-centered approach, experimentation, collaboration, creativity to find a solution iteratively. [5]

2.2. Lean Startup

The Lean Startup is a set of management practices for helping entrepreneurs increase their odds of building a successful startup. Defining a startup as a "human institution designed to create a new product or service under conditions of extreme uncertainty" these practices can also be applied to teams within established companies willing to innovate and see entrepreneurship as a new kind of management adapted to this context of high unpredictability. [6]

Learning is proposed as the crucial unit of progress for startups and validated learning is the process of demonstrating (supported by empirical data collected from real customers) that a team has discovered valuable truths about a startup's present and future business prospects.

Leap-of-faith assumptions are taken by entrepreneurs based on their knowledge and intuition. These leap-of-faith assumptions need to be tested as soon as possible. Among the techniques suggested by the author there is the Genchi Gembutsu principle, "Go and see for yourself" particularly useful to build a customer archetype, a document that endeavours to humanize the proposed target customer, a guide to product development and decision-making. Business should be based on deep first-hand knowledge.

The fundamental activity of a startup is to convert ideas into products, measure how customers respond, and then learn and decide whether to pivot (change the course of strategy) or persevere. All successful startup processes should be adapted to accelerate that feedback loop (Figure 2).

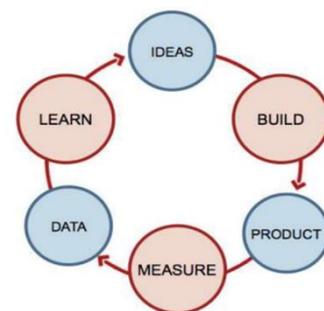


Figure 2 - Build-measure-learn feedback loop [6]

Once the leap-of-faith assumptions are well defined, the first step is to enter the build phase as quickly as possible with a minimum viable product (MVP) - a version of the product that enables a full turn of the build-measure-learn loop with a minimum amount of effort and the least amount of development time.

Innovation Accounting is how progress is measured when validated learning is the progress unit. Three learning milestones are suggested - 1) establish a baseline, 2) tune in the engine and 3) pivot or persevere.

Ries emphasizes the importance of using *metrics that matter*, metrics that are *actionable* (must demonstrate clearly cause and effect), *accessible* (must be simple and understandable to avoid data misuse) and *auditable* (must be credible, testable and coherent).

Engines of growth are mechanisms to achieve sustainable growth, there are three types:

- Sticky - If the rate of new customer acquisition exceeds the churn rate the business will grow;
- Viral -The viral coefficient determines the rapidness of the product spreading and is a mathematical function that measures how many new customers will use a product as a consequence of the acquisition of a new customer;
- Paid - As long as the lifetime value (LTV) is higher than the cost per acquisition (CPA) of advertising the business will grow.

These engines may be considered feedback loops powered by the above mentioned sources and corroborated by *metrics that matter*. The faster the loop is covered the faster the business will grow.

2.3. Lean Analytics

Following the premise "*If you can't measure it, you can't manage it*" [7] Lean Analytics largely complement Ries' innovation accounting with more detailed frameworks and concepts that can be easily applied to different business model types.[8]

A good metric is a number that will drive the needed changes in the business. The authors suggest a good metric should be comparative, understandable, preferentially a ratio or a rate and emphasize some important proprieties of metrics.

Testing is crucial and allows the constant contrast and analysis of the results and there are different techniques that can be smartly combined - A/B testing (involves testing attributes using groups where the only aspect differentiating their experience is a specific attribute.) and cohort analysis (allows the comparison between similar groups over time, heavily used to differentiate user experiences).

Lines in the sand are the hypothesis concept for Lean Analytics. Similar to leap-of-faith assumptions, the innovator must pick a number and set it as a target using his intuition and be confident enough that if this target is reached the experiment is considered a success. However, when the target is not reached a new line in the sand must be drawn. In order to better backing the line in the sand the innovator should either look at the business model (as to set a minimum number of paying customers based on the business sustainability), to what is considered standard or ideal.

In the particular case of Software as a Service (SaaS) business models, new key metrics (apart from the already known LTV, CPA, churn rate, and viral coefficient) are introduced. Attention, how effectively the business attracts visitors, is one of these key metrics. The most relevant for SaaS are stickiness (how much the customers use the product), conversion (how many of the users become paying customers - is linked to attention) while the ultimate goal is to improve churn rate: if many loyal users are gathered faster than they are lost the business will prosper. User engagement must be measured from the very beginning as well as all customer activity while possible.

2.4. Business Models

Most available definitions for business model have one concept in common: value. A business model is the combination of two major functions for a company: value creation and value capture [2] or even "*describes the rationale of how an organization creates, delivers, and captures value*"[9].

2.4.1. Business Model Canvas

The Business Model Canvas (BMC) is a strategic visual tool to either develop or document business models.[9] BMC is composed by nine building blocks: customer segments (CS), value proposition (VP), channels (CH) customer relationships (CR), revenue streams (RS), key resources (KR), key activities (KA), key partnerships (KP), cost structure (CS).

BMC is already a reference for entrepreneurs and many innovation authors, it has proven to be an essential tool for Steve Blank's Customer Development[10], Lean Startup[6] and the Innovator's Method[11]. In Figure 3 there is an example of the BMC describing Skype's business model.

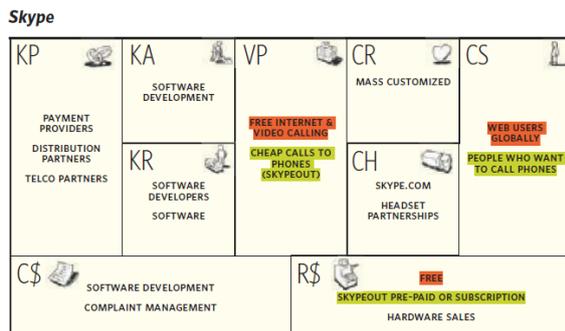


Figure 3 - Skype's Business Model Canvas [9]

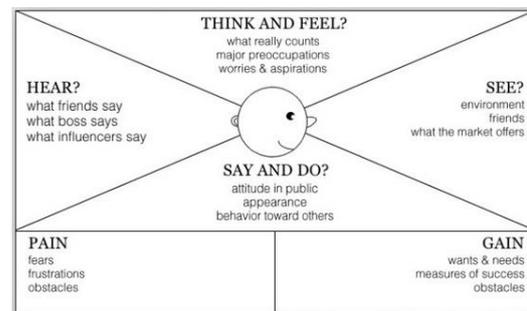


Figure 4 - Empathy Map [9]

Osterwalder proposes the Empathy Map (Figure 4) as a visual tool for customer profiling and creating a customer angle for the constantly inquest of the business model assumptions.

2.4.2. Value Proposition Canvas

While the BMC is a tool for aiding organizations to create value for their businesses, Value Proposition Canvas (VPC) proposes aid in creating value for their customers by being a more elaborated approach to Value Proposition and Customer Segments building blocks. [12]

The Value Map describes with detail the features of a specific value proposition breaking it down into *Products & Services*, *Pain Relievers* and *Gain Creators* all classified according to their relevance (from nice to have to essential). Customer Profile expresses accurately a specific customer segment through its *Jobs*, *Pains* and *Gains*.

The whole purpose of the process of designing value proposition is to find an adequate *Fit* between Value Map and Customer Profile (Figure 5).

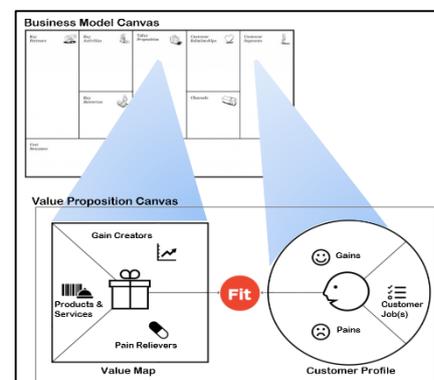


Figure 5 - BMC and VPC connection (adapted from [9][12])

2.5. Innovator's Method

The Innovator's Method is introduced as "a linear process to simplify a complex process", the process of innovation in established organizations. Influenced by design thinking, agile development, the Innovator's Dilemma and the Lean Startup framework, the innovator's method claims to be a holistic model for covering the innovation process as a whole (Figure 6). [11]

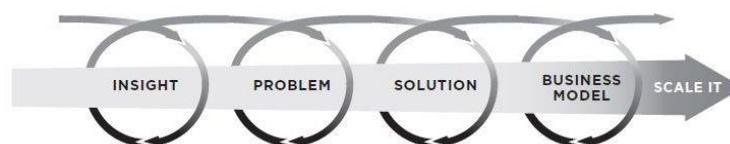


Figure 6 -The Innovator's Method cycle [11]

The innovator's method is optimized for innovation having an idea as the entry point for the whole process, but does not offer such a complete approach when the input is the solution (the already developed technology) and, therefore, business model innovation.

2.6. Summary

Of the various methodologies and frameworks presented none was built with the particular goal of solving our research problem. They are complete approaches but still lack objectivity and can be greatly complemented by each other, considering the different benefits each has to offer.

3. PROPOSAL

In this section, a proposed solution to the problem identified in section 1.1 is explained. Objectives of the proposed solution will be presented followed by a complete description of what the proposal comprises.

3.1. Objectives

The main objective of our solution is to have a facilitator framework for business model innovation in a specific context: when there is already a technology fully developed and existing assets (sales, channels, brands, etc...) that can be leveraged, innovating by finding both a new value proposition and customer segment.

More specifically the objectives of our solution are linked to the three learning milestones proposed by Eric Ries in his Innovation Accounting:

- Establish a baseline;
- Tune the engine;
- Pivot or Persevere.

When applied this framework will facilitate the gathering of knowledge on the environment it is implanted into and will put the innovators closer to the desired new business model but success depends on other factors too, like how the methodologies are studied and embraced within their teams. The solution aims to, if needed be, fail faster and actively explore other hypothesis, turn questions into facts and intuitively explore making more questions.

The objective of the solution is **to produce as much as possible validated learning about the business's value proposition and customer segment for companies with established technologies.**

3.2. Proposal

A separation of the Innovator's Method linear process is proposed. Both the Insight and Solution steps (since they represent correspondingly the idea/opportunity and the technology) are joined as well as the Problem and Business Model (since they are connected through the value proposition concept) and these two new pairs are placed on the top and centre of the loop respectively (Figure 7).

The framework comprises of three main phases: Learn, Build and Measure. The loop endures iteratively approximating the ultimate Problem and Business Model hypothesis. This hypothesis is to be scaled only when considered and backed up solid. An iteration combines the passage through the three phases and produces validated learning with each loop being of variable time. (Figure 8).

A small set of tasks is suggested for each phase, however, although some tasks and whether or not to fulfil them is left to the innovators' reasoning of what is appropriate according to the defined hypothesis, other tasks are considered mandatory.

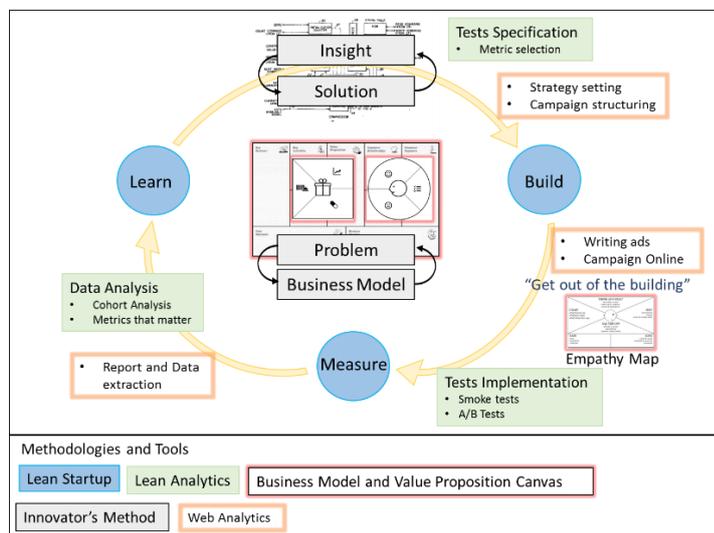


Figure 7 – Model of the proposal

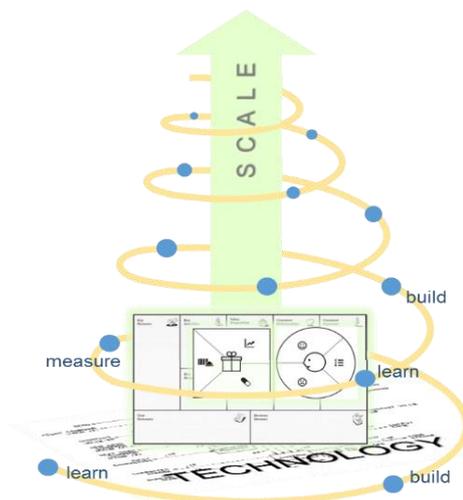


Figure 8 - Model of the proposal 3D view

The BMC will be used to represent the various hypothesis of business models, always considering some of the building blocks as partially completed – although this is business model innovation, there are assets in the company and already implemented processes that can be leveraged in favor of the new value proposition.

Lean Analytics techniques and suggested approaches when it comes to metrics and how to improve them and the suggested Web Analytics tools are Google AdWords and Google Analytics.

3.2.1.Learn

This phase is where the hypothesis is defined and, therefore, critical where creativity and boldness are concerned, requiring the involvement of all the team in order to drive a stimulating discussion. A hypothesis can be a question that needs an answer and how it will be answered based on what is already known. Having a clear understanding of what the initial idea to develop the solution/technology was, its functionalities and the problem this solution intends to solve is crucial. The mandatory tasks for the Learn phase are:

- Assemble facts – what is known as a result of validated learning;
- Ask questions – business questions that need answer;
- State the leap-of-faith assumption.

The suggested tasks for the Learn phase are:

- Fill the BMC and the VPC;
- Draw a line in the sand in what concerns metrics;
- Specify alterations to the solution (to emphasize a set of functionalities for a given customer segment);
- Specify tests in order to answer your questions;
- Define a web analytics strategy and/or structure digital marketing campaigns.

Assembling facts, asking questions and taking a leap-of-faith assumption drive every iteration.

3.2.2.Build

This phase calls for action and execution, this is when the hypothesis will be implemented. The development of web material (website, landing page), the tests setting and the marketing campaigns configuration are suggested, always keeping in mind that the effort should be minimal in order not to spend too much time implementing material that won't bring any answers. The suggested tasks for the Build phase are:

- Alter/Customize the solution or/and develop a landing page
- Implement tests and consider that a “Get out of the Building” can be a test too;
- Write advertisements or prepare campaign materials and set them up.

This phase doesn't require far creative input, however, it is important not to lose focus and to follow the strategy defined on the Learn phase.

3.2.3.Measure

The goal in this phase is to draw conclusions that will serve as input for the Learn phase and to assess the Lean Analytics framework status. The innovators are encouraged to produce cohort analysis or just to extract reports from web analytics tools, to find causality between data and ultimately finding the answer they were looking for - the driver for the whole loop iteration. The suggested tasks for the Measure phase are:

- Produce legible graphs and actionable metrics and find causality among the extracted data;
- Produce reports by logging results and inferences;
- Draw conclusions.

Keeping the results and data gathered from every iteration is essential, some metrics may not seem relevant at that moment but may be in the future and interesting analysis can be made.

3.2.4.Scale

Lean Startup's and Lean Analytics can be very useful in this phase considering the Ries' Engines of Growth and the frameworks offered for growth-hack in Lean Analytics.

4. DEMONSTRATION

This section explains how the solution was demonstrated and how the proposed framework was used to innovate in a company with an already developed technology eager to find the most suitable business model for it: DemoCorp.

DemoCorp is a spin-off of a small Portuguese company with the following areas of expertise: software, transports and mobility integrated solutions. DemoCorp is heavily inclined to explore business models using cloud technologies and software as a service solutions.

4.1. Iteration #1

The Learn phase, will start by clarifying the DemoCorp situation and the Insight and Solution - the idea, the technology developed and the challenges implied, then the Build phase, where a “get out of the building” took place, will be described and finally the Measure phase concludes the iteration with the results and conclusions.

4.1.1.Learn

DemoCorp developed a software to ease booking management for the tourism services in the excursion and activities area as a tailor-made solution. The goal is to find a new market and provide as a SaaS a more efficient and automated alternative to the whole booking process with promising features by combining the booking system with cloud technology using a smartphone or even rugged PDA or handheld printer app as a transaction facilitator (when it comes to showing tickets or even payments). The leap-of-faith assumption is “There are small and medium tour operators in Lisbon interested in tour booking management systems we just don’t know what type of features and pricing models they prefer yet.” and this assumption will be validated by a “get out of the building”.

4.1.2.Build

The “*get out of the building*” was comprised of two parts 1) getting to know the market and 2) setting up conversations with potential customers.

Part I – The Market

Portugal’s economy is highly impacted by its tourism revenues, being Lisbon, Madeira and Algarve the major destinations [13]. Taking this into account and the geographical setting of DemoCorp there’s a need of familiarization with not only the type of touristic activities, excursions and experiences existing in Lisbon but the existing similar booking management systems software offer.

Part II – Meeting Tourism Professionals

The goal was to set around 10-15 encounters with tour operators (in Portuguese: “Agentes de Animação Turística”), use the empathy map to design a customer profile and try to understand what these potential customers need in a booking system. The desired sample was diverse on the type of tour/experience presented and on the use of booking systems, to allow some interesting and diverse insights.

4.1.3.Measure

As well as in the previous phase (Build) the Measure phase was divided in two parts in order to better structure the results obtained.

Part I – The Market: Results and Conclusions

Online companies who deal booking systems/engines for tour operators and tourism related activities were explored and some conclusions on the most visible companies found regarding their business models and solution features were gathered:

- Many companies already provide mobile applications and real-time transactions for customers and most are easily integrated with online sellers of tours and activities allowing real-time synchronization;
- The most common type of pricing is the monthly/annual fee and the least common the commission;
- In general all brands appear to have a well-structured and organized value proposition allied to attractive interfaces, good usability and accessible support.

Part II – Meeting Tourism Professionals: Results and Conclusions

Twenty-one tour operators of different agencies were contacted while ten agreed to talk. The interviewed belong to agencies with a young spirit, with a good website (comfortable with IT), present on TripAdvisor (the biggest peer review website for tourism) and with a significant bookings’ volume. Tour operators working with tuk-tuks, bikes, boats, limousines, a diving centre, a surf school, excursions around Lisbon, some with less than five years in business others with more than ten, were part of the sample.

The main conclusions inferred from the encounters are:

- Either the booking process is most of the times a one-person job being that person the owner of the agency or there is a small group of people with that job function;
- Only a few have shown interest about the booking system, for those who do, when pricing is concerned, the monthly/annual fee is the less desired due to the seasonality of some services;

- For some agencies the excessively automated process is an obstacle – either they sense that communication (email exchanging) with the customers permits a tailored service and that is part of their value proposition or they have constraints on their services that require flexibility in the booking process (for example the weather for outdoor activities);
- There is a clear avoidance of any type of logs and records and no interest in payments credited directly on the bank account, being the preferred when not the only available, the payment in cash.

These conclusions were surprising and discouraging. It is assumed that there is a cultural obstacle to this solution and this is not easily circumvented.

4.2. Iteration #2

The second iteration's goal was to pursue a global market, developing a landing page in order to see how much attention this solution can gather on the web.

4.2.1. Learn

The conclusions on the encounters with the tourism professionals led to a rethinking of the customer segment. Though Portugal seems to be a difficult market, there are still other countries and cultures who this technology may suit. The leap-of-faith assumption for the second iteration is “In a global context the solution will have more interested customers, mainly due to the high compatibility with many cloud-ready devices”.

Among the proposed tasks for this loop are:

- Evaluate the Attention metric (according to the Lean Analytics for SaaS);
- Develop a landing page for the company and bring attention to it, this landing page will work as a smoke test considering the potential interested will have to leave an email for more information;
- Use Google Analytics and AdWords: one advertisement focusing on value proposition.

4.2.2. Build

In this Build phase, the focus was to develop a landing page. A single-page sliding website was then developed under a fictitious brand name and image in order to distantiate from DemoCorp and allow experimentation without risk for the company. The chosen brand name was Rezlite with a clear reference to reservations and the cloud technology feature.

As stated on the Learn phase the written advertisement focuses on the multi-device aspect of the solution and its ubiquity and versatility. The website was connected to a database in order to easily store the submitted contacts for more information and the required script for Google Analytics was included on the website's source code.

4.2.3. Measure

The results were extracted from both the Google Analytics and Google AdWords platform. The obtained results for this iteration were 104 page views in 4298 advertisement printings with only 17 advertisement hits. Only one contact was submitted.

These were unexpected results only 100 views for seven days and only one contact submitted is not enough attention for a SaaS business. The email for the interested contact is left for the next iteration.

4.3. Iteration #3

On the third iteration the website was adapted to include a pricing model for the solution.

4.3.1. Learn

The leap-of-faith assumption for the third iteration is “The website must have the pricing model in order to look credible”. Among the proposed tasks for this loop are:

- Evaluate the Attention metric once more;
- Produce a similar pricing model based on the competition's type of models;
- Transform the website in a multi-page template and add a pricing tab.

4.3.2. Build

An email was sent to the previous iteration submitted contact and the website was adapted to include a pricing model. The pricing model is based on the most common pricing models already present on the competition. Rezlite offers two types of pricings: monthly fees and commissions. The “More” button leads to a contact submission in order to be posteriorly contacted by the Rezlite team. In terms of Google AdWords the same advertisement was used as in Iteration #2 and the campaign was set online.

4.3.3.Measure

The results for the third iteration were 111 page views in 18569 advertisement printings with 120 advertisement hits. No contacts were submitted in this iteration.

Once more the results are not as good as expected and there is only a slight difference in the page views number between iterations.

4.4. Iteration #4

On iteration #4 a new hypothesis was tested adding another Rezlite advertisement. The goal was to understand if by advertising a discounted price more potential customers would click the advertisement.

4.4.1.Learn

It was concluded that having high-compatibility was not sufficient as a differentiating value proposition to bring more attention for Rezlite. The leap-of-faith assumption for the fourth iteration is: “The lower or discounted price will stand out when the potential customer confronted with a lot of competition is choosing”. The task for this iteration is to rewrite and add new Rezlite advertisements focusing on the price and the ubiquity aspects.

4.4.2.Build

For this iteration one advertisement was rewritten and another was added, now with a clear call to action for a discount on prices without leaving the advertising focus on the ubiquity behind. Both advertisements were online at the same time although they have different display requirements.

4.4.3.Measure

The results for the fourth iteration were 289 page views with a total of advertisement printings of 11635 and a total of advertisement clicks of 91.

Although slightly higher in this iteration, the results are again very low and there is no interest shown by customers into knowing more about the service by submitting contacts. In conclusion: having a low price is not a game changer in this type of business.

4.5. Conclusion

The project was interrupted at the end of iteration #4 in order to decide whether to Pivot or Persevere. Thanks to all the information and data gathered along the 4 iterations DemoCorp can now make a more informed decision.

5. EVALUATION

The objectives of the solution included the three learning milestones of Innovation Accounting and having validated learning as the progress unit these milestones will be evaluated in terms of achievement and how much learning was produced. The proposal was evaluated following the proposed approach by Nicolas Prat et al[14], by choosing four system dimensions and five evaluation criteria:

- **Goal – Efficacy:** the degree to which the artifact produces its desired effect.
- **Environment - Consistency with the organization - utility:** Measures the quality of the artifact in practical use.
- **Activity – Performance:** speed or throughput of an activity.
- **Evolution – Robustness:** the ability to respond to the fluctuations of the environment.
- **Evolution – Learning Capability:** capacity of a system to learn from its experience and the reactions of the environment.

The coherency between these criteria and the artefact was proven through not only the field study (the demonstration of the proposal instantiated on a real case) but by the input of several practitioners and field experts.

Validated learning on the business and the market was gathered in every iteration. The artefact was effective, the objectives of the solution were fully achieved and therefore **goal – efficacy** is a fulfilled criteria.

Not only every single business and organization can benefit from business model innovation but can easily have a holistic view of the innovation process. The artefact is consequently considered **consistent with organization – useful** within the environment dimension.

Having successive iterations with well-defined hypothesis and how to test and measure the results speeds up the process enabling the possibility of choosing the length of an iteration according to the available time. Hence the artefact matches the **activity - performance** criteria.

In the evolution system dimension **robustness** is considered proven in terms of the great part of the strategy and proposed tasks being left to the innovators' criteria. This artefact has a high **learning capability**, mostly through experimentation and the innovators' interaction with the artefact.

The proposed solution should include more concerns with the involvement of the project owners in the process, mainly in the Learn phase. Presential meetings should be mandatory and the correlation between engagement and participation of the owners with the richness of results must be evidenced.

Practitioners were selected and contacted according to their field of work and experience with innovation methodologies or for being entrepreneurs and having founded or co-founded their own business. Unanimous opinions reside on the problem being very common and on the fact that the framework adds value to the field and is a good compilation of the best practices of the main entrepreneurship and innovation authors. Not only was the framework well accepted, but in some cases opened business and collaboration opportunities.

6. CONCLUSION

The research problem, the companies' difficulty in innovating their established technologies' business model, was presented in this document then an adaptation of the existing lean methodologies making the process easier for these cases was proposed. This thesis was evaluated by demonstrating the framework in action in a real case – DemoCorp – and by interviewing field experts and practitioners.

The main contribution of this work is a framework for companies to use in their business model innovation and an exhaustive perception of how this is already applied in a field study. In this modern age where the “innovate or perish” necessity is evident this framework being easily explained to non-practitioners presenting a holistic view of the fast process can be the bridge between the traditional mindset and an innovation culture.

Among the lessons learned is the fact that Innovation Consultancy's success is correlated with the engagement of the customer and the customer's mindset and that business model innovation has more barriers than the product or technology innovation mainly because it is fixed to an investment and a solution that was already made.

This thesis framework limitations reside mostly on not having been demonstrated in more real cases. It is possible that the framework has not the same level of usefulness when the innovator applying the framework doesn't have much experience in the field.

This research work was shared with companies and practitioners on the evaluation phase and had a very good acceptance and a paper will be submitted to three Journals. Apart from the companies and practitioners, the research was also shared with DemoCorp by having the framework applied to its particular case.

For future work, the framework could be applied to more cases and even to different kinds of businesses with more experienced innovators in an “island of freedom” but having a personal stake in the results. In a consultancy context, could be interesting to add to the framework proposed tasks to bring the owners closer to the innovators. The development of a tool to support team synchronization and results integration could be useful, and thus a business opportunity.

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