

POLITECNICO DI MILANO
School of Industrial and Information Engineering
M.Sc. in Management Engineering



POLITECNICO
MILANO 1863

**Fintech Startup: Analysis of a Digital Lending Business
for Small & Medium-sized Enterprises (SMEs) in
Argentina**

Supervisor: Prof. Giancarlo Giudici

Mariano Juan Alday Bonanno
(Matricola 803946)

2018

Abstract

This report shows the analysis made for an existing and currently operating online lending platform born in Argentina. This business, named GroUit, aims to grant working capital loans to small businesses, assessing a lot of different non-traditional variables, to approve credits in an agile and paperless manner. This study presents a comprehensive approach which will be detailed from the technical features of platform development, to the profitability of the investment project. The report aims to assess the recent expansion that exists in the so-called Fintech field, where the trend seems to continue the path of exponential growth. The Project consists in a market analysis in first place and then going deeper into technical and economic-financial analysis. It ends in a viable, profitable and attractive business model.

Access to credit in Argentina and the South American region is significantly behind respect of the world and even in comparison with the rest of the emerging countries. Nevertheless, in the last 2 years a great advance has been seen in this area, supported with public policies from the government and Central Banks. This been said, it seems to be a great business opportunity. Based on this context, a market research will be performed, to then go into the analysis of the business development itself, where technical, marketing and legal issues will be considered. Finally, a Financial and economic analysis will be carried out to complete the breakdown of this business.

With all the mentioned information, a financial analysis was made considering the development of future cash flows. Once revenues and expenditures are estimated, the project yields an annual IRR of 28% (2.1% monthly) and an NPV of USD 173,100 (2 years)

Finally, to assess the risks associated with the project and in order to understand how some variations of certain variables affects the project, studies are conducted simulating different scenarios and variations

This report concludes that the business is viable, profitable and attractive for investment

Index

Introduction	9
Business Model	12
Business Model Lean Canvas	12
Problem	12
Solution	13
Value Proposition	13
Unfair Advantages.....	14
Channels.....	14
Key Metrics.....	15
Clients.....	15
Cost Structure.....	16
Revenue Streams.....	16
Market Research	17
Global context analysis.....	18
Regional context analysis	19
Competition Analysis.....	20
Porters 5 forces analysis.....	20
SWOT analysis	22
Comparison with a "Success Case" (Kabbage Inc - USA).....	23
Key Facts.....	24
Key Success Factors	25
Business Development	26
Legal Structure	26
Operational	26
Data Collection	29
Risk Assessment	30
Sale & Acceptance.....	30
Sales & acceptance process scheme	32
Collection.....	33
Platform Development.....	34
Third party supplier	34
MVP.....	34
Final product	35
Associated Platforms (partners) and Services.....	36
Marketing.....	37
Financial and economic Analysis.....	38

Sizing analysis	38
P&L Statement	39
P&L 2-year projection (up to month 12)	42
P&L 2-year projection (up to month 24)	43
Cashflow	44
Cash Outflows	44
Cash Inflows	45
Cost of capital.....	45
2-years Cashflow Statement	46
Sensitivity analysis.....	49
Conclusions	50

TABLE OF FIGURES

Figure 1- Lean Business Model Canvas	12
Figure 2 - Representation of the problem.....	13
Figure 3 - Fintech ecosystem.....	17
Figure 4 - Annual amount originated in USA.....	18
Figure 5 - Porter’s 5 forces representation.....	21
Figure 6 - Kabbage integrations	24
Figure 7 - Landing page	26
Figure 8 - Step 1	27
Figure 9 - Step 3	27
Figure 10 - Step 3	28
Figure 11 - Step 3 (approved).....	28
Figure 12 - Old landing (MVP)	35

Introduction

When applying for a working capital loan, businesses, especially small ones, are very careful and consider several variables for making this important decision that could determine its future. Since small businesses have usually very limited capital and are quite restricted to credit access because of its nature, they ponder funding speed and simplicity of the process, over interest rate. And this is the main foundation of this business model. GroUit was conceived not for granting working capital loans to small business, but for giving them a fast and proper solution, so they can be continuing growing.

In the South American region, and especially in Argentina, banks are not a solution for this type of business. The process to borrow a loan from a bank is very bureaucratic, slow and only observes factors related to the financial present of the business and not with the potential future cashflow. And here is where it lies GroUit's main competitive advantage.

In North America and in the main business and financial centers of the world, this kind of online lending platforms had been a boom in the last 10 years. Later in this report, concrete examples will be mentioned and analyzed.

It is important to mention that the growing working capital online lending, is largely due to the rocketing growth of e-commerce. Through the online sales channel, a fine new product or service that matches the demand is doomed to growth. And when this occurs, is when the small business needs capital to satisfy the demand of its product/service.

Business Model

For a correct understanding of GroUit's business model, a breakdown will be made in the form of Business Model Canvas.

In this way, different aspects of the business will be analyzed, such as the identified problem trying to be solved and the proposed solution, competitive advantages, customers, channels, KPIs and, of course, the monetization of this business.

Business Model Lean Canvas

For the analysis of the business model, an alternative to the traditional canvas is used. It is called lean canvas and its use is spread among startups and young companies

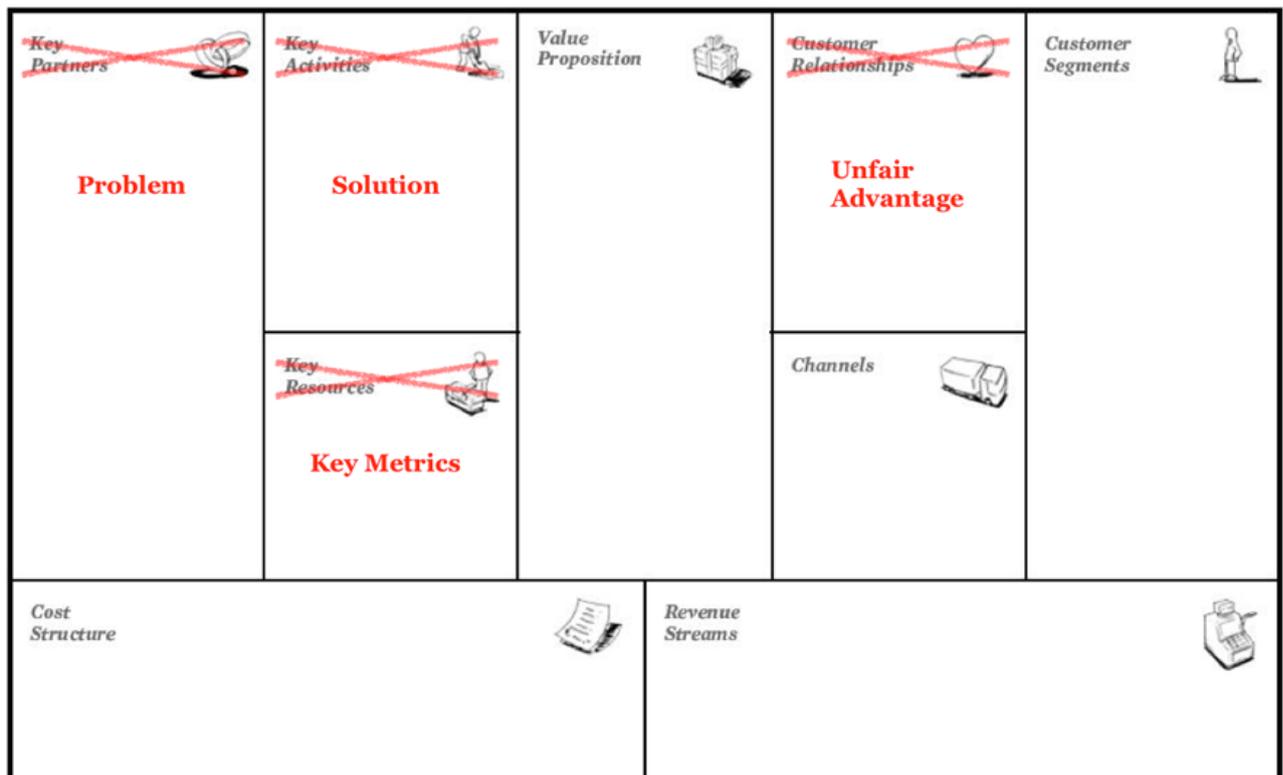


Figure 1- Lean Business Model Canvas

Problem

The problem can be described largely with the graph below. Here you can see both the poor access to credit that businesses have in Latin America compared to North America on the one hand, and the exponential growth of ecommerce in the region on the other. It is worth noting that, according to a survey by INDEC (Argentina's official body of surveys and data), most small businesses make their first sales approach through the online channel.

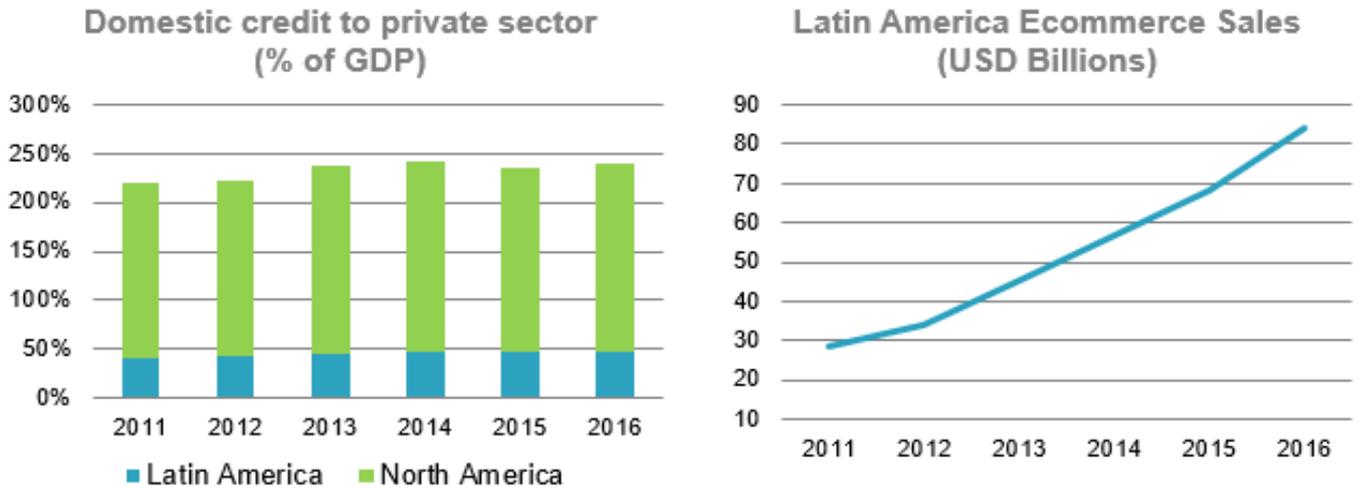


Figure 2 - Representation of the problem

Assuming the case that the newly born venture does has access to a bank loan, the granting process is very slow and requires a lot of paperwork. Most of the small businesses doesn't have neither the time nor the paperwork required.

Besides, since the main indicator for banks to decide whether a business is eligible or not for a loan is its own past credit and sales history, most of small or new businesses can't access to credit in the traditional way.

Solution

GroUit proposes a solution to the mentioned problem, in the way that offers accessible loans to new/small businesses through a user friendly designed website. The idea is not only to provide accessibility to credit, but also to offer a smooth request & granting process that is not time consuming nor stressful, as traditional loan requests use to be.

Besides the granting process, there is also the collection one. As the mission of this venture is to always make it easy for the customer, GroUit has agreements with several banks and electronic payment platforms, so the loan fees can be directly collected for the customer account. In this way, the small business doesn't have to worry about the payment – it just has to count with enough money in its account-, and of course, the default rate is reduced.

Value Proposition

“To fast fund businesses that find it difficult to get financing from traditional banks with tailor-made loans and 100% online process, by also contributing to financial inclusion”

- Fast Funding: Through an innovative scoring method and API integration with main E-commerce and Payment platforms, qualification + granting process is made within a working day
- Tailor-made loans: By evaluating several variables, we offer a loan that fits the reality of each business and its payment capacity.
- 100% online process: Absolutely no paperwork needed
- Financial Inclusion: Minimum requirements (+6 months in business and +\$500/month) and capital lending for businesses who don't have access to credit.

Unfair Advantages

GroUit's main competitive advantages in comparison with Banks and other online lending websites are:

- 100% online & 24/7 service: Since the process is totally automatic our operation is continuous, and we can fund a business whenever it needs.
- Innovative credit scoring: GroUit's is integrated via API with main ecommerce, tax agencies and payment platforms of the regions. This, along with the analysis of social network behavior allows to collect several variables to feed the risk decision engine and provide the best loan for the borrower.
- Tailor-made loans: By evaluating several variables, we provide the best suitable credit for the customer. By this, we protect in some way the client from bad financial decisions, thus keeping the default rate under control
- Experienced team: The founder team, along with partners, investors and first employees are experienced professional in the entrepreneurship environment. This contributes for the development in the business.
- Fast funding and NO paperwork: This might be the biggest competitive advantage. Thanks to the advanced risk decision engine there is no need to require any paperwork at all to the borrower. This, along with a developed process of wire transfer allow to fund a business within a working day.

Channels

Certainly, the best channel to let us know for potential clients is through the platforms through which we analyzed borrowers. This was what was done at the beginning of GroUit, by investing in online advertising in MercadoLibre (biggest ecommerce in Argentina), that was the main associated platform in that time. Then, MercadoLibre launched its own lending platform, "MercadoCredito", and banned our advertising. With this new reality, we had to adapt and look for new Marketing channels. After analyzing different channels, we end by very well developing Facebook Ads and Google AdWords which are our main channels

nowadays. GroUit also approaches potential clients through mailing and text messages. It is important to highlight that Marketing is a key success factor for the business and is one of the highest variable costs.

Key Metrics

For assessing the performance of the business different key indicators (KPIs) must be monitored. There should be indicators of loan origination, collection, customer service and marketing. The most important are:

- Origination
 - Monthly \$ amount originated
 - Monthly quantity of loans
 - Loan average Amount
 - Loan average term
 - APR
- Collection
 - Default rate
 - Fraud rate
 - Late payments rate
- Customer service
 - % of repeat customers
 - Total granting time
 - Customer satisfaction
- Marketing
 - # monthly visits
 - # monthly requests
 - % conversion rate over originations.
 - Marketing investment/originations

Clients

GroUit's mission is to fund small business (either small companies or individuals) as they need working capital for grow.

Typical borrowers are small companies with less than a year in business, with a medium credit score and not much credit history. All these factors together mean that they don't have easy access to traditional financing. Banks and traditional lenders don't like pretty much this type of business since they don't have much credit history nor goods to guarantee the payment of the loan. Nevertheless, GroUit aims to this segment of client, and grant them money not based on credit history nor their balances, but on hard and soft data of the business itself.

Our clients work on different industries and a large part of them bills through an online channel or platform. This is a great advantage at the time of analyzing a

client since we have much more data to feed the risk decision engine and to assess the loan request eligibility.

This type of clients values the funding speed and simplicity of the loans much more than the interest rate. They need quick money to not miss business opportunities and this is what allows us to be perhaps more expensive than a bank, but to provide them with a fast and efficient financial solution

Cost Structure

For the initial development of GroUit, an IT consulting firm was hired to deliver the project accomplishing with all the requirements and functionalities of the business model proposed. The idea of this first iteration of GroUit was to have a Minimum Viable Product (MVP) to validate that there was a demand for the product offered and to assess potential changes for the business model in case it was necessary. This was one of the biggest initial costs to be faced.

Once in operation, there is a fixed expense in which salaries, rent and other expenses are included. There are also variable expenses made up of marketing expenses, bureau agencies, collection expenses, etc. For the growth evaluated in this report, there is also an investment to be considered (Financial and Economic Analysis)

Another cost that must be considered for the correct evaluation of the company is the cost generated by the loans that are in default or already uncollectible.

For a loan in default, the company will not receive interest and often not even the capital that it lent to the client. To try to recover this loan, GroUit has the possibility of initiate legal actions that, of course, also entail a cost

Revenue Streams

GroUit generate income in a very straight forward way, it charges interests for granted loans. The revenue model is likely to a traditional financial service but is important not to lose focus that GroUit does not aim to be this. We are here to provide a financial solution that fits with the reality and needs of small venture for helping grow.

The company mission, as said before, is “to fund small businesses (either small companies or individuals) as they need working capital for grow”. For being able to afford most of the different risk profiles of borrowers, GroUit has different interest rates according to each profile. Of course, each rate has a certain profitability that depends on interest charged, default rate, volume of money granted (related to acceptance of the rate in question), repayment term, etc.

Market Research

FinTech firms are establishing themselves not only as important players in the industry, but also as a benchmark for financial services. Their new proposals are increasingly attractive to consumers, often neglected and unattended by traditional financial service providers. Fintechs will continue the path of growth as FinTech awareness grows, consumer concerns fall, and technological advancements, such as open APIs and new technologies as blockchain, continues reducing cost and doing operations more efficient.

Investment and regulatory support will continue to play a role in stabilizing the development of the FinTech industry, which will benefit consumers.

When talking about Fintech is important to have in mind that comprehends various subsectors with multiples edges. For the purpose of this report, the digital lending sector will be analyzed.



Figure 3 - Fintech ecosystem

Digital lending refers to technology-driven nonbank lending. Access to massive data, sophisticated algorithms and considerable computing power enabled new companies to compete with traditional banks by providing appealing new offerings to potential borrowers

Global context analysis

One of the most important factors, according to a report by Deloitte that analyzes several key countries in the world fintech ecosystem, is regulation. In this matter, top fintech countries/regions are North-America, Australia, United Kingdom, Mexico and China. This factor is in line with reality since the pioneering and the most innovative Fintech companies are in these regions. Some of them are:

USA: Kabbage (SME), BestEgg (Personal loans), Lending Club (P2P)

Australia: Moula (SME), Lending Post (P2P)

United Kingdom: Ezbob (SME), Wonga (Personal loans) Zopa (P2P)

Mexico: Konfio (SME), Kueski (Personal loans)

China: WeLend (Personal loans)

The next graph shows the dimension and the perspective of digital lending in the US. We can observe that digital lending is expected to grow rapidly, and particularly SME-focused lenders are projected to grow the fastest over next years.

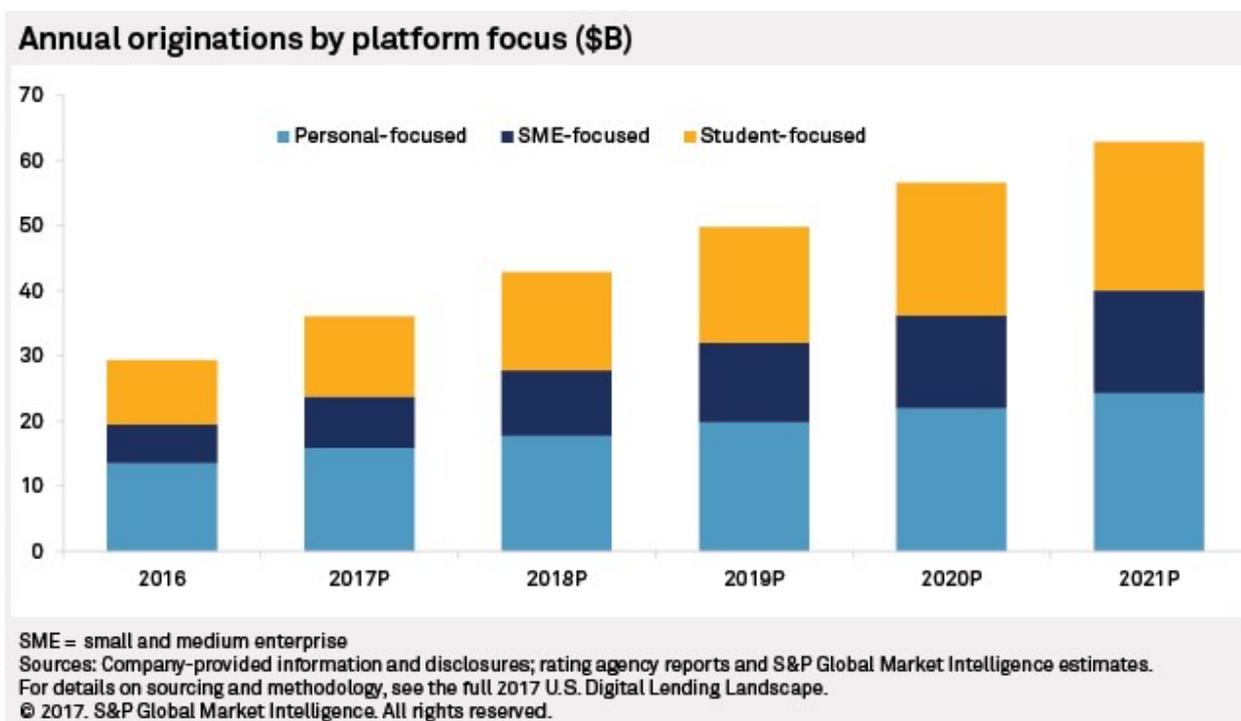


Figure 4 - Annual amount originated in USA

Regional context analysis

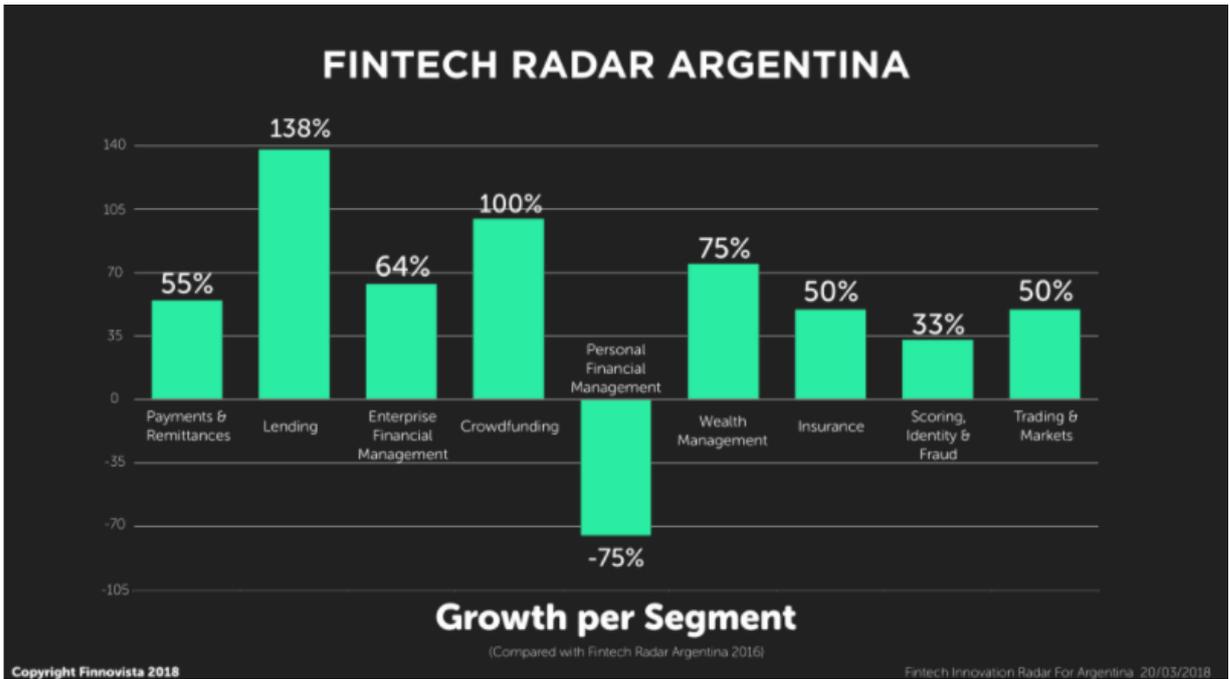
Latin American market represents a huge opportunity for Fintech startups from the region as well as for foreign Fintech startups that are looking to expand operations in foreign countries. In the region there are two elements that contribute to the importance of the Fintech sector: a high rate of unbanked people and a high technological penetration.

According to the World Bank, it is estimated that 2 billion adults (42% of the global adult population) are excluded from the formal financial system. In Latin America 49% of the adult population does not have access to a bank account, a figure well above the average of 6% in high income countries of the OECD. Given this situation, Fintech services represent the most important driver to improve financial inclusion due to its capacity to optimize costs and improve the supply of products and services, and a great market opportunity as it has the capacity to reach a segment of the population that was previously unattended by traditional financial services. For example, Brazil has more than 5 million SMEs that employ almost 60 million people. However, only 7% of those MSMEs have easy access to credit

Also, Smartphone and Internet adoption, along with the rocketing growing of ecommerce, shows the high technological penetration that exists in the region, and that generates a friendly environment for the development of Fintech companies.

Fintech revolution has reached Latin America, and this is no longer a surprise. More and more countries have risen to this wave of financial innovation and have opted for Fintech innovation to improve the traditional financial system. Particularly in Argentina, the growth of Fintech companies in recent years has been enormous, increasing by 80% the number of startups in just 2 years. Much of this growth must be attributed to a National Government and to the Central Bank, that understand that the financial system needs a change. Fintech spirit will favor financial inclusion as well as the development of new businesses and new jobs.

In the following graph, it can be observed how almost all segments of Fintech in Argentina have had a major growth in the last 2 years. Digital lending is positioned as the segment with the greatest expansion



Competition Analysis

To make a strategic decision, such as the implementation of this online lending platform, the project was analyzed within the global and regional context and will be analyzed within its own market to see how attractive the project is.

For this, two widely known tools were used such as the 5 Porter forces and the SWOT analysis. The first analysis is a tool for analyzing competition of a business, as identifies the forces that make up the market and analyzes how these affects or could affect the project in question. SWOT analysis instead, breakdowns what the strengths and weaknesses of the project are (both internal and external).

Porters 5 forces analysis

For a better understanding of the business area of the project, a strategic study of market forces was carried out to understand the attractiveness of the venture

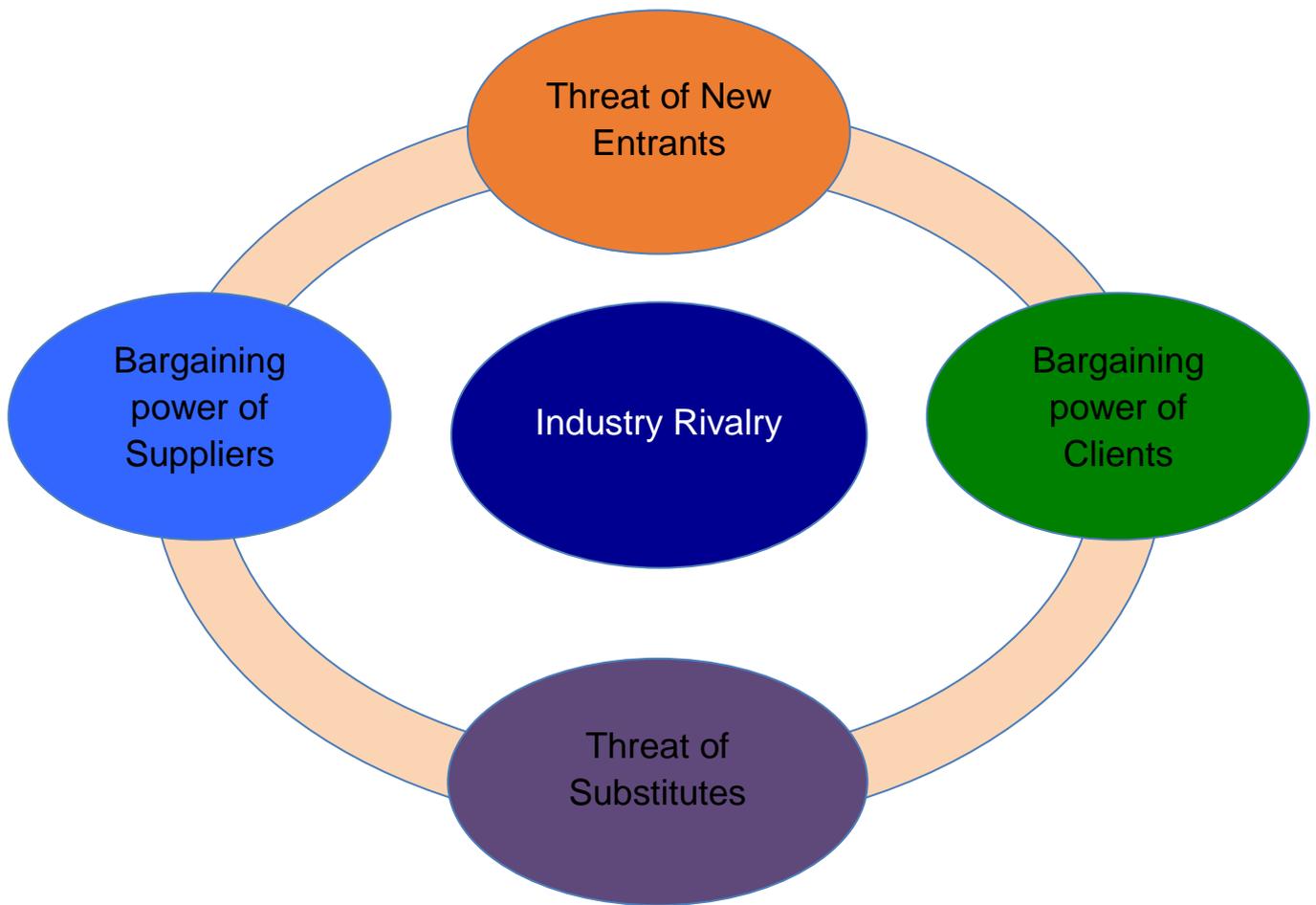


Figure 5 - Porter's 5 forces representation

Industry Rivalry: While there are other companies that grant SMEs online loans in Argentina, GroUit is the only one that covers all segments, focusing especially on the riskiest one. This is a great advantage since we are “first movers” somehow. However, in case our competitors decide to enter to this segment, we must bear in mind that the "switching costs" between competitors is low since it would only mean for customers to stop using our platform to make use of the competition.

Bargaining Power of Clients: Although the segment in which we focus our clients do not have many alternatives, is key for the business that they choose us over the competition. For this, an excellent customer service must be provided and is essential to satisfy the factors that our customers value the most when obtaining a loan, that are speed, transparency and simplicity of the process.

Bargaining Power of Suppliers: For being operative, as will be seen later, services of Bureau agencies, ecommerce APIs, Banks, payment processing providers and hosting services, among others are needed. As the demand for these services is very large and has a great growth, and as these suppliers are also very important players in the industry, they have a very high bargaining

power. In addition, a good hosting service, payment processing and development of the platform will be crucial for the quality of our product, and thus for the profitability of the project

Threat of Substitutes: GroUit itself could be considered as a substitute for traditional banking loan for SMEs, that aims to empower customer experience as being a financial solution for them. Of course, we must be aware of new potential substitutes as could be Government loans for SMEs or even online solutions created by Banks to aim this segment.

Threat of New Entrants: The continuous growth of this market and the great demand without satisfying, make this very attractive for the entry of new competitors. In addition, there are many funds and individual investors who want to enter the niche of digital lending, so funding for new ventures of this type is not difficult to get. That said, it is essential to take advantage of our "First Mover" condition in the country and thus create an identification with our brand and the loyalty of our customers.

SWOT analysis

Strengths

- Being "first movers" in the riskiest segment of SMEs lending, gives us a competitive advantage over future competitors in terms of know-how and market penetration.
- Fast funding and simple process with minimal requirements thanks to the large amount of data analyzed by our algorithm
- Experienced team in financial and digital businesses.
- Small company with own capital which allows us to be flexible and react rapidly to the market
- As a 100% digital business, we have national and regional scope, without the need for large investment in infrastructure.

Weaknesses:

- As GroUit is self-funded, our capital is limited, and this is what defines our growth rate. This gives an opportunity to competitors to take a bigger share of the market
- Our data-based model depends on various private sources of information. If for some reason this companies decides to restrict the data, it could be a serious problem for the business
- We rely in Banks (competitors) to wire funds to our customers
- Since there is no paperwork in the process, GroUit is more exposed to fraud than other lending companies

Opportunities

- Great growth of the Fintech ecosystem in Argentina with great support from the National Government and the Central Bank
- High availability of Venture Capitals and of private investors willing to invest in projects of this type
- Trending sector which is an attraction for professional talents
- Highly regulated Banking Sector which slows down the operations of these entities, meaning this an opportunity for Digital Lending startups
- The business model is easily replicable in several countries
- Large potential customer market

Threats

- High rate of innovation in the sector.
- SMEs segment is very sensitive to the interest rate, so if competitors reduce the interest rate we will be push to the same
- Diminishing margins as competition is increasing
- As we are a substitute for Banking Loans, and they are powerful entities, it is expected that Banks invests in private companies for compete for customers

Comparison with a "Success Case" (Kabbage Inc - USA)



Kabbage, funded in 2009, is now the #1 online provider of working capital to small businesses in the US. They leverage data generated by multiple business operations to understand performance and deliver fast, flexible funding in real time. By doing this, they achieved to build the world's fastest platform to provide capital to small businesses, claiming to fund companies within as little as 7 minutes. Kabbage can assess any small business eligibility for a loan request, by analyzing data sources such as their business checking account, Intuit QuickBooks, eBay, Amazon, UPS, PayPal, Authorize.Net, Stripe, and many others. Underwriting decisions include also social media metrics: e.g. how many likes a business has, how often it posts information, how many times people comment on the posts

Link any of your business's online services to qualify on the spot. Unlike traditional lenders, we look at your real-time data, not just your credit score. No paperwork, faxing, or waiting in line. Just straightforward, instant results.



Figure 6 - Kabbage integrations

For a better understanding of the Kabbage business model we will mention some descriptive points of the business (key facts) and then some key factors that brings Kabbage to the current success (key success factors)

Key Facts

- Founded in 2009 and currently operating in North America (US, Canada and Mexico), Europe and Australia. Kabbage's Headquarters are in Georgia Atlanta.
- Up to date has provided over \$4billion in funding to more than 130,000 businesses.
- It grants up to \$35k in loans or up to \$250k in line of credit. Terms of repayment are 6 or 12 months
- Its typical customer is an online business with annual revenue of less than \$1 million
- Kabbage's customers typically utilize advances for inventory purchases, upgrading systems, and marketing
- Annual Percentage Rate (APR): 40% to 80%

Key Success Factors

- **Simple Process:** Kabbage's analysis process uses number of data factors, including business volume, time in business, transaction volume, social media activity, seller's credit score and also checks traffic patterns on Web sites with Google Analytics. All this ends in a fast, simple and paperless process for the borrower.
- **Instant accessibility to money in case of approval**
- **Transparent Terms:** Kabbage small business loans have simple, monthly payments with no origination fees or prepayment penalties
- **Dedicated customer service:** From applying to managing their account and making the most of borrowed capital, Kabbage has an in-house team of experts that helps businesses. This is reflected in the +80% of renewal rate.

Kabbage has definitely been an inspiration in the business model analyzed in this report. Therefore, from the beginning of the project, we try to replicate these success factors, of course considering cultural and scale differences that applies to GroUit.

Business Development

For the start up of a business, several aspects must be analyzed. For GroUit, legal, operational, marketing, and platform development features were considered.

Legal Structure

For the creation of GroUit, it was necessary to study under what legal structure it was convenient to create the company, and investigate the relevant regulations. After conducting these studies, it was determined that the most convenient corporate structure was that of an "anonymous company" (S.A) regulated by the Argentine commercial code.

In addition, when studying the relevant regulations of National Government and Central Bank, it arose that a financial private company that has not a banking license, cannot receive deposits from third parties and then lend them as this would constitute the illegal figure of financial intermediation. For this reason, the company can be funded only through equity or third-party debt with the signing of an agreement. At the beginning the company was fund with own capital and now is looking for private investor that are willing to acquire a piece of equity while providing extra capital through debt for expanding operations.

Operational

In this section we will breakdown the process for the proper analysis of each stage of the operation; from Data Collection, Risk Assessment, Sale & Acceptance, and Collection.

But first, it is important to graph the user experience in the fund request process. In three simple steps it is:

1st step) The SME looking forward for funding enter to GroUit and completes basic business and contact information



Figure 7 - Landing page

Seguro | https://www.grovit.com.ar

grovit

Como Funciona | Por qué Elegirnos | Preguntas Frecuentes | Blog | Contacto

Completa el formulario y sin compromiso te mandamos una propuesta!

Seleccionar monto

Monto

\$10.000 | \$30000 | \$1.000.000

Tiempo

6 Meses | 12 meses | 12 Meses

Persona Fisica | Persona Juridica

Razón Social

DNI o CUIT para Responsable Inscripto

0 Cod. | 15 Numero

Email

Figure 8 - Step 1

2nd step) The customer has the possibility to get link with several data sources for their business to be evaluated. As more data points the SME get linked with, the better chances has to get a good loan offered.

grovit

2 de 3

♥ Acceder a tus ventas

Vinculandote con una de las siguientes plataformas realizaremos una evaluación crediticia. MercadoPresta no tiene acceso ni almacena tus claves, solo recabamos la información de tus transacciones.

AFIP Vincular →

Mercadopago Vincular →

Mercadopago Vincular →

Mercadolibre Vincular →

Figure 9 - Step 3

3rd step) After completed step 1 and 2, GroUit has enough data to either approved the funding request, or not. In case the application gets rejected, a screen with a “We will contact you later to inform you the status of your request” is shown. This is because before reject an application it is important to ensure that the potential borrower provide us with all the possible information to it qualification. That’s why a customer attendant gets in contact with all the rejected applicators.



Paso 3: Solicitud de préstamo en proceso

Tu solicitud está siendo procesada. Te estaremos enviando un correo electrónico a la brevedad.

Figure 10 - Step 3

In case the request gets approved, a screen with the offer and all the possible combination of amount and term through an expandable menu is shown. If the borrower accepts the offer it just has to select amount, term and complete bank information. Then the money will be wired to it Bank Account within the hour.

Figure 11 - Step 3 (approved)

Now that the process has been shown since the user point of view, lets breakdown the process internally:

Data Collection

For develop the proper APIs integration and to feed the data-based risk model, first it is necessary to understand and define the data that is going to be used and collect it. This information is:

- **Basic personal and business information:** This data is given by the customer in the first step of the loan request by filling a form. This information is very important since it has not only customer contact information, but also information needed to obtain Credit Bureau information, Tax information and more
- **Credit Score:** It is a score given by a Credit Bureau Agency (CBA). It is defined by the agency and it considers a lot of variables to be set. It goes from 1 being the worst to 999 being the best.
- **Credit History:** Also collected from the CBA, it gives an idea of the payment behavior of the potential customer, being “1” when payment behavior is excellent and “5” when is very bad.
- **Income:** GroUit collects revenue information from several sources as electronic invoices, CBA and ecommerce APIs. “Income” minus “Expenses” will define the available money that has the SME to pay the loan fee
- **Expenses:** As “Income” this information is gathered from several sources as Tax Agency, CBA estimation and ecommerce APIs
- **Ecommerce qualifications:** This data comes obviously from ecommerce APIs and gives an idea of the quality of the service provided by the customer.
- **Bank Information:** A banked SME provides more information to analyze the willingness and ability to pay. However, in case a potential client is not banked or has little history, other variables should be analyzed.
- **Tax Information:** Tax condition of SMEs is a good proxy of formality of the business, and this is a key variable to analyze at the time of asses the eligibility of a business to receive a loan.
- **Social Network behavior:** This a non-traditional variable that has been very used from different startups around the world. A SME, particularly those who operate online, must have an active participation in social networks. From evaluating this, GroUit used a third-party supplier called “Friendly Score™” that by evaluating SME social networks through API integration provides us a score and a % possibility of default of the customer.

Risk Assessment

For proper and tailor-made lending, SMEs are segmented depending on several variables (mentioned before in “Data Collection”) that feeds the data-based risk model. Its combination will define if the customer is eligible or not to receive funding, as it determines maximum amount of loan, term, and interest rate.

The risk decision engine is in constant improvement and gets feedback of the payment behavior of existing customers. For this, advanced tools of machine learning are applied. In addition, as customer segmentation improves, the engine becomes more complex and new variables are added.

Sale & Acceptance

After the potential client has filled in with business information and has linked with available partner platforms, risk assessment of the funding request is made. Then, depending on the combination of several factors, the borrower can be either approved or not.

In case the application gets approved, automatically, the borrower will be shown with a screen that has all the details of the approved loan. It shows all combination of amount and terms (up to the maximum amount and term), and the payment fee as total and in detail (administrative costs, interest, taxes, etc.).

At this point there are two possible paths. Either the borrower selects amount, term and fill in banking information, or it leaves the website.

In the first case, as the borrower has accepted the loan, terms & conditions and has provided its banking information, GroUit proceeds to funding and sends an email with all the detailed loan information to the borrower. In this case, the process is 100% automatic and takes around 8 minutes since the requester enters to the website up to the acceptance of the loan. Then it takes around 1 labor hour to wire the funds to the client bank account.

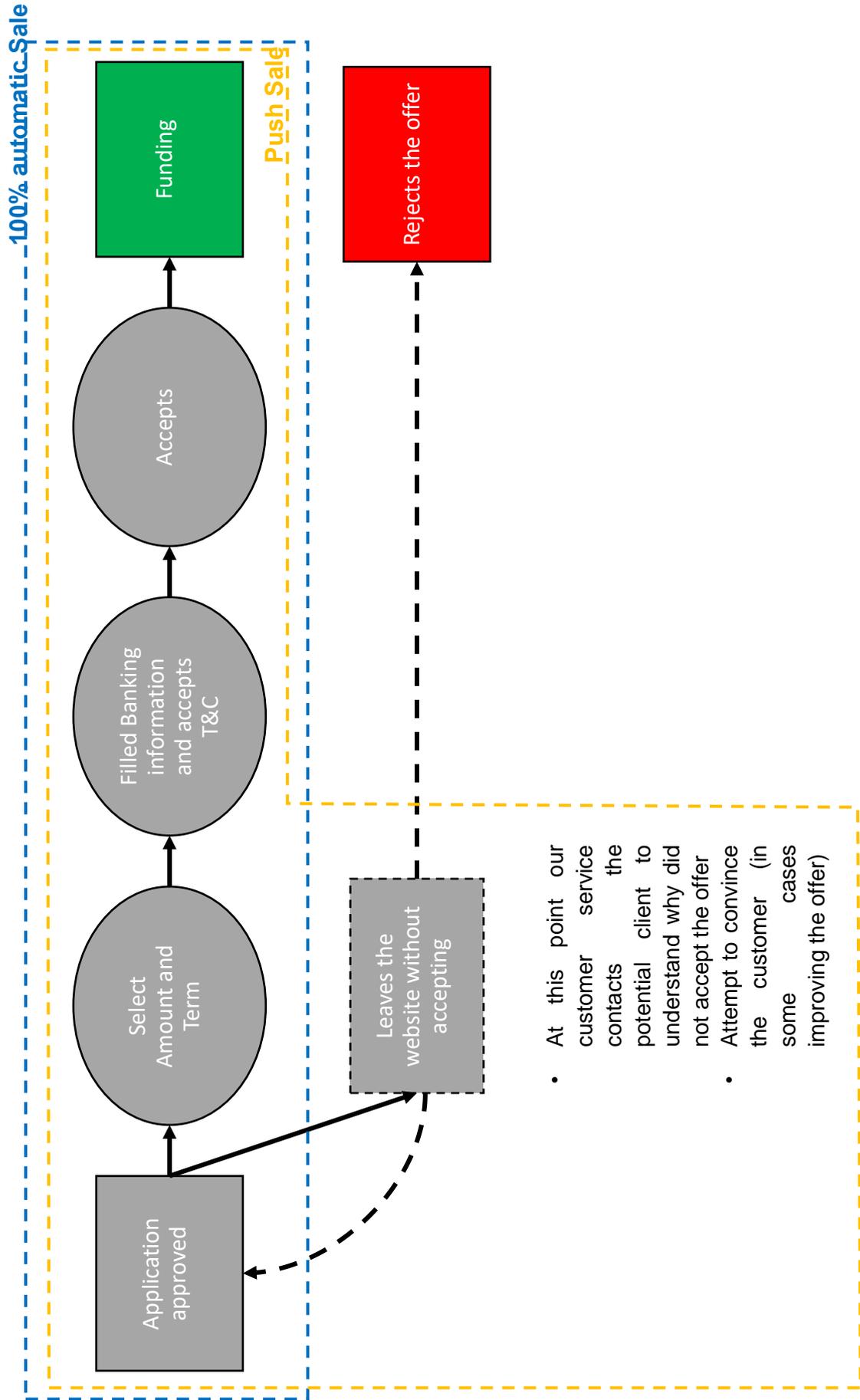
On the other hand, it will be a mistake taken the offer as rejected from part of the potential borrower if the user gets approved and then leaves the website without doing any action. Sometimes users leave the website for many reasons as being that they are not convinced and need a little push, don't have banking information with them at that moment, or they just don't understand the process completely.

Therefore, it is important to contact and to push all the clients with an approved loan that abandon the website. Many sales and good customer could be “rescued” by this practice.

For having an idea of acceptance rates:

- From all the approved application, 25% goes through the 100% automatic sales channel
- The other 75% of approved borrowers abandon the website.
- From those who abandon the website without accepting, between 20 and 25% takes the loan after the “pushing process”
- This end in a conversion of accepted/approved around of 40%

Sales & acceptance process scheme



Collection

Collection is as important as the Sales process. It determines how good will be the repayment of the loans in terms of delay and default, thus defining the profitability of the business.

Since our customers are SMEs and their incomes are regularly, GroUit has a weekly payment scheme. This allow the customer to pay less in each weekly fee than if it may to pay one monthly fee. Besides, the weekly payment scheme benefits the liquidity of GroUit.

We count with 3 methods of collection, and each of them has certain effectivity and operational cost. The collection method is assigned to each borrower depending on their risk profile:

Automatic collection through MercadoPago: The fees are collected automatically from the available money in the MercadoPago account of the borrower. This method can only be applied for SMEs that operates through MercadoLibre or MercadoPago. Since this is an automatic debit it has a high cost (4.95%) but is very secure and has a low default rate, so it is applied to riskier customers

Bank Debit: Through different agreements with several Banks, money is debited from the account of the borrower and credited to GroUit bank account. It cost is around 2%

Wire Transfer: The customer voluntarily wires the of weekly fee, to GroUit's account. This a 100% voluntary payment so it is applied to best risk profiles. It is almost free of charges

Due to our paperless granting process, collection must be very sharp, always pulling the client so that it does not fall in delays or default and can fulfill its commitments.

To reinforce payments, GroUit is working on an internal score, so that customers whose payment behavior is good will be rewarded by improving the conditions of the next loan. In the same way, those customers who do not pay in time and form will be punished, not only applying punitive interests but also restricting access to their next loan with GroUit. This internal score promises to have a positive impact since more than 60% are repeat customers

Platform Development

The founding team of GroUit, which was conceived under the name of MercadoPresta and then modified, is made up of specialists in finance, digital business and project management. While all the founders, including myself, are related to this business model, none have the technical knowledge to carry out the development and the coding of this platform. Given the lack of sufficient “IT hands” in the founding team, an external (third.party) company was hired to carry out the development of the Minimum Viable Product (MVP).

Despite previously it was seen how simple the process for the user is, on the back office there is a quite complex development system with simultaneous processes and that uses several external services with different characteristics.

Although the MVP had a very similar operation to what is now GroUit, it had a few fewer functionalities, since the goal was not to have a profitable and scalable business model, but to validate our business idea.

Third party supplier

As mentioned before, a supplier was hired for the development of the MVP. The selection of this supplier required a lot of research between software development companies, since it was taken from the beginning that it would be a key partner in the early stage of the project.

The company chosen was Wolox, an Argentinean software developer very well-known and with a very good network. Since they are used to work with startups and were very excited about Fintech in the beginning of GroUit, we found a strategic partner that deliver us with the MVP and that continues until today giving us support and consultancy.

MVP

The goal of the development of an MVP is to validate the business model. Since our development was done by a third-party, and of course has a cost per hour, we entrust to Wolox an MVP with absolutely the minimum functionalities to confirm that there was a demand for our product and that we can satisfy it properly.

For achieving this, the design of the platform was very basic as you can see in the screen printing, and the *Admin* was mounted on Salesforce, a well-known Customer Relationship Manager. Salesforce has a cost per license but allowed the development company to reduce the time of the project, and thus the costs, almost to the half. In terms of API ecommerce integrations, the MVP was only linked to MercadoLibre, since is the main ecommerce platform in Argentina.

In addition, reducing development time was one of the priorities given to the software company to enter to the market ASAP.

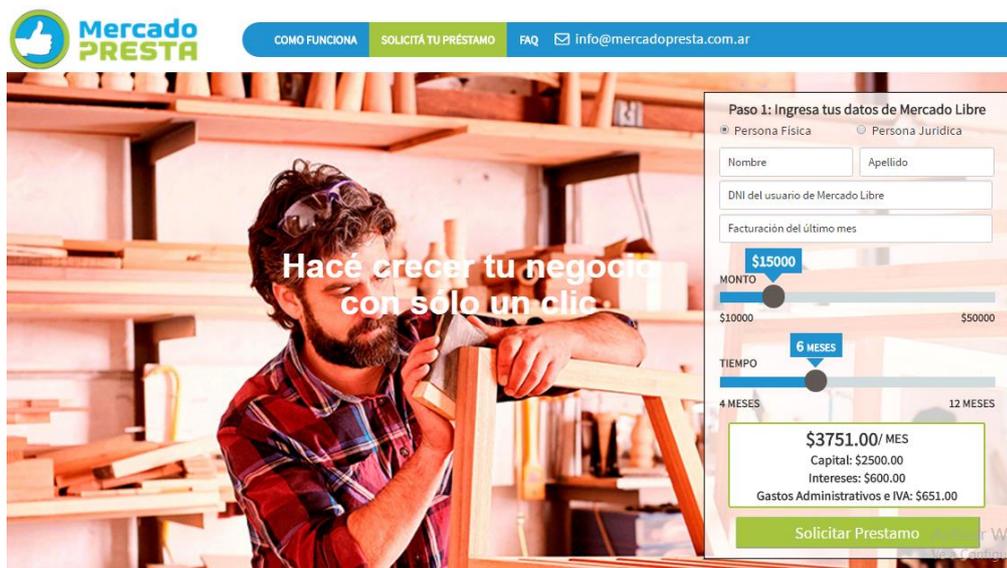


Figure 12 - Old landing (MVP)

Final product

The business was operative, and hints of the business model validation were starting to appear. With this, some functionalities and improvements were introduced such as more variables of the Credit Bureau Agency to assess better the risk of the customers, new API integration with other ecommerce and the Tax agency, and of course the design, that was left behind in the development of the MVP

While the team was trying to move forward with these improvements, it was noted that it took a lot time and effort to improve the existing structure. Although the MVP was very useful to validate the model, now the business asked us for more and we had to measure up to it.

This led to the search of 1 developer position at the beginning, then another, then another and finally a CTO to lead the team. In this way, as we were counting on an IT fully dedicated team, a new platform for GroUit was developed (called MercadoPresta at the beginning). In this new development, Salesforce was eliminated, a 100% customized Backoffice was designed for the Admin, and all the improvements and new features that had been left in the backlog were introduced.

This road led us to the robust product we have today, although we do not lose sight of the fact that this is a continuous improvement process and the team is always looking for innovation and the best user experience

Associated Platforms (partners) and Services

External services and associated platforms with which the borrower can link their business to qualify will be mentioned and described. This data points are:

- **Credit Bureau Agency:** The CBA is named NOSIS. It provides us with all the credit information of the borrower and with some basic information that allows us to check the identity of the business. It collects the data directly from the Central Bank and of different financial providers in Argentina and has its own algorithm that determines the credit score. NOSIS has an API through which GroUit is connected and obtain the data
- **MercadoLibre:** It is the biggest ecommerce in Argentina and in Latin-American. Through an API integration we obtain several data from the businesses that allows GroUit to score them and grant them a proper loan for empower the growth of these online sellers. These variables are, monthly amount of sales, monthly operations, qualifications and ratings, number of articles posted, category of the goods sold to estimate a profit margin, and many more data.
- **MercadoPago:** The ecommerce mentioned above has its own electronic payment platform, which is very similar to PayPal. Here MercadoLibre sellers collect the money of their operations, but also businesses that don't sell through MercadoLibre can use this payment platform as a mean of digital collection. Many businesses use it as a mPOS because of the practicality of the system, and because has many benefits for buyers. It is also linked to our platform by an API integration
- **AFIP:** It is the National Tax Agency. Argentina is one of the many country that has adopt electronic invoices as mandatory in the last year. This policy contributes to information accessibility and formalizes somehow the SMEs economy. The connection with AFIP to obtain billing information is through a VPN connection,
- **TodoPago:** As MercadoPago is an electronic payment platform and digital wallet. Having access to information of TodoPago is a data source to score and qualify a potential borrower. Its use is spread among small businesses and individual sellers
- **Amazon:** One of the most known ecommerce. It is not currently operating in Argentina but is expected to arrive soon
- **Uber & Cabify:** Both provide peer-to-peer transport services through a mobile application. By accessing to information as monthly billing of the drivers we can grant them a loan.

Marketing

GroUit's marketing strategy is 100% through online channels. This is because of the nature of the business, and because the costs are lower than in traditional advertising.

Since the founding team does not have a digital marketing expert, a proficient third-party agency was hired. We consider them as a key partner, so in order to align objectives and ensure exclusivity within this niche market, they were made participants of the GroUit with % of equity.

To reach our potential customers we use Facebook Ads, and Google AdWords. Facebook is the channel with the best conversion rate and where the most budget is invested. To reinforce this channel, Google AdWords it is used for retargeting campaigns.

The algorithms managed by these companies are very advanced in terms of customer segmentation allowing us to target directly those customers that we want by defining some characteristics, or better yet, looking for similar profiles of the finest customers we already have.

Other marketing online tools are used to acquire and retain customers such as mailing campaigns or text messages. Also, we are now trying some paid publications in digital newspaper for branding and organic SEO.

One of the biggest marketing advantages of being in the digital lending business is that the cost of acquisition is far below other segments where the bids for acquiring new customers are expensive and very competitive; a clear example of this is Ecommerce. This benefit of having lower acquisition costs is because it is still a new market with few competitors and that demand surpasses supply in large proportions.

Since a major part of loan origination are due to repeated customers, marketing campaigns directed to them are very important to the business profitability. For this is that we know our customer deeply and make campaigns according to its business area in the moments or events where they can need a financial aid the most.

Monthly reports with the most important KPIs are handled to supervise overall marketing performance and to analyze more specific data of this area.

Financial and economic Analysis

In order to properly evaluate the economic and financial aspects, some analyzes will be carried out and certain hypotheses will be established. A brief market sizing analysis will be carried out for determining the size of the potential demand; a Profit & Loss statement for weigh profitability and business economics; and a Cashflow statement, in which by contemplating all the incomes and expenses, capital needs will be assessed.

As GroUit is a business already in operation and with some stable variables, a 2-year projection for P&L and Cashflow will be carried out.

Sizing analysis

This analysis is made with the objective to assess the size of the market, for evaluating the growth potential of GroUit's loan originations.

As our customers are Small and Medium Enterprises (SMEs), we collect data about this segment of ventures from the Argentinean Production Ministry. It turns out that there are over 600 thousand companies in the country, from which 99% corresponds to the segment of SMEs. Most of them are shops and manufacturer companies.

The large number of companies and the low access to financing that exists in the country, results in that practically all SMEs are potential clients for us. For this reason, there is no need to worry about the market size in this scale of the project and it does not seem to be a problem even in the long term with current market conditions

P&L Statement

The P&L has the following structure:

Origination	
Loan originations	Amount of granted loans
Weighted average term	Weighted average loan's term by amount
APR %	Annual Percentage Rate of interest

Revenue	
(+) Financial Revenue (VAT net)	Interest and fees charged net of VAT
(-) Default rate %	% amount of non-paid loans
Net Financial Revenue	
<i>Annual ROI</i>	<i>Annual return of investment of the operation</i>

Variable costs	
(-) Bureau cost	Charges of CBA for their services
(-) Marketing cost	Marketing costs, including agency fee
(-) Collection cost	Charges for services used for collection
Variable Cost	
<i>% Origination</i>	

Operating Revenue	
(+) Net Financial Revenue	
(-) Variable Cost	
Operating Revenue	Result from current operations without fixed costs
<i>% Origination</i>	

Overhead	
(-) Salaries	
(-) Rent	
(-) Other costs	Office supplies costs, utilities, etc.
Overhead cost	
<i>% Origination</i>	

Net Income	
(+) Operating Revenue	
(-) Overhead cost	
Net Income	Net income before income tax
<i>ROA annual</i>	<i>Annual return of assets of the operation</i>

Below, P&L for the latest three months will be shown:

	jan-18	feb-18	mar-18
Loan originations	\$ 85.500	\$ 95.250	\$ 106.750
Weighted average term (month)	9	9	9
APR % (VAT net)	129%	127%	125%

Financial Revenue (VAT net)	\$ 82.721	\$ 90.726	\$ 100.078
Default rate %	10%	10%	10%
Net Financial Revenue	\$ 65.899	\$ 72.128	\$ 79.395
<i>Annual ROI</i>	<i>103%</i>	<i>101%</i>	<i>99%</i>

Bureau cost	-\$ 171	-\$ 191	-\$ 214
Marketing cost	-\$ 7.866	-\$ 8.573	-\$ 9.181
Collection cost	-\$ 2.138	-\$ 2.381	-\$ 2.669
Variable Cost	-\$ 10.175	-\$ 11.144	-\$ 12.063
<i>% Origination</i>	<i>12%</i>	<i>12%</i>	<i>11%</i>

Net Financial Revenue	\$ 65.899	\$ 72.128	\$ 79.395
Variable Cost	-\$ 10.175	-\$ 11.144	-\$ 12.063
Operating Revenue	\$ 55.725	\$ 60.984	\$ 67.333
<i>% Origination</i>	<i>65%</i>	<i>64%</i>	<i>63%</i>

Salaries	-\$ 12.500	-\$ 12.500	-\$ 12.500
Rent	-\$ 1.800	-\$ 1.800	-\$ 1.800
Other costs	-\$ 300	-\$ 300	-\$ 300
Overhead cost	-\$ 14.600	-\$ 14.600	-\$ 14.600
<i>% Origination</i>	<i>-17%</i>	<i>-15%</i>	<i>-14%</i>

Operating Revenue	\$ 55.725	\$ 60.984	\$ 67.333
Overhead cost	-\$ 14.600	-\$ 14.600	-\$ 14.600
Net Income	\$ 41.125	\$ 46.384	\$ 52.733
<i>Annual ROA</i>	<i>64%</i>	<i>65%</i>	<i>66%</i>

From the statement above, we can observe that some variables remain somehow stable such as variable cost as a % origination, APR and % default rate. This will be used to estimate a 2 years projection for the business. Besides, for doing this assessment, these are the assumptions:

- For the next 12 months loan origination will grow 10% monthly. Then, originations will be stabilized to recover capital invested and for business optimization
- Weighted average term, APR and default rate are expected to remain the same
- Variable costs are expected deteriorate during growing stage. Then, with steady originations will tend to return to original values. The ratio marketing investment/total origination was 8.6% in March. This is expected to worsen by 20%, and other variable costs are expected to worsen 5% monthly
- Every 6 months salaries will increase by USD 5k because of origination growing, infrastructure and inflation

Bottom line, as observed in the following projection, the ROA varies from 66% to 73% depending on how much we lend, and by the end of the projection, by originating USD 335k monthly, GroUit will have a Net Income of USD 180k

P&L 2-year projection (up to month 12)

March-18

	0	1	2	3	4	5	6	7	8	9	10	11	12
Loan originations	\$ 106.750	\$ 117.425	\$ 129.168	\$ 142.084	\$ 156.293	\$ 171.922	\$ 189.114	\$ 208.026	\$ 228.828	\$ 251.711	\$ 276.882	\$ 304.570	\$ 335.027
Weighted average term (month)	9	9	9	9	9	9	9	9	9	9	9	9	9
APR % (VAT net)	125%	125%	125%	125%	125%	125%	125%	125%	125%	125%	125%	125%	125%

Financial Revenue (VAT net)	\$ 100.078	\$ 110.086	\$ 121.095	\$ 133.204	\$ 146.524	\$ 161.177	\$ 177.295	\$ 195.024	\$ 214.526	\$ 235.979	\$ 259.577	\$ 285.535	\$ 314.088
Default rate %	10%	10%	10%	10%	10%	10%	10%	10%	10%	10%	10%	10%	10%
Net Financial Revenue	\$ 79.395	\$ 87.335	\$ 96.068	\$ 105.675	\$ 116.243	\$ 127.867	\$ 140.654	\$ 154.719	\$ 170.191	\$ 187.210	\$ 205.931	\$ 226.524	\$ 249.177
Annual ROI	99%	99%	99%	99%	99%	99%	99%	99%	99%	99%	99%	99%	99%

Bureau cost	-\$ 214	-\$ 247	-\$ 271	-\$ 298	-\$ 328	-\$ 361	-\$ 397	-\$ 437	-\$ 481	-\$ 529	-\$ 581	-\$ 640	-\$ 704
Marketing cost	-\$ 9.181	-\$ 12.118	-\$ 13.330	-\$ 14.663	-\$ 16.129	-\$ 17.742	-\$ 19.517	-\$ 21.468	-\$ 23.615	-\$ 25.977	-\$ 28.574	-\$ 31.432	-\$ 34.575
Collection cost	-\$ 2.669	-\$ 3.082	-\$ 3.391	-\$ 3.730	-\$ 4.103	-\$ 4.513	-\$ 4.964	-\$ 5.461	-\$ 6.007	-\$ 6.607	-\$ 7.268	-\$ 7.995	-\$ 8.794
Variable Cost	-\$ 12.063	-\$ 15.447	-\$ 16.992	-\$ 18.691	-\$ 20.560	-\$ 22.616	-\$ 24.878	-\$ 27.366	-\$ 30.102	-\$ 33.113	-\$ 36.424	-\$ 40.066	-\$ 44.073
% Origination	11,3%	13,2%	13,2%	13,2%	13,2%	13,2%	13,2%	13,2%	13,2%	13,2%	13,2%	13,2%	13,2%

Net Financial Revenue	\$ 79.395	\$ 87.335	\$ 96.068	\$ 105.675	\$ 116.243	\$ 127.867	\$ 140.654	\$ 154.719	\$ 170.191	\$ 187.210	\$ 205.931	\$ 226.524	\$ 249.177
Variable Cost	-\$ 12.063	-\$ 15.447	-\$ 16.992	-\$ 18.691	-\$ 20.560	-\$ 22.616	-\$ 24.878	-\$ 27.366	-\$ 30.102	-\$ 33.113	-\$ 36.424	-\$ 40.066	-\$ 44.073
Operating Revenue	\$ 67.333	\$ 71.888	\$ 79.076	\$ 86.984	\$ 95.682	\$ 105.251	\$ 115.776	\$ 127.353	\$ 140.089	\$ 154.097	\$ 169.507	\$ 186.458	\$ 205.104
% Origination	63%	61%	61%	61%	61%	61%	61%	61%	61%	61%	61%	61%	61%

Salaries	-\$ 12.500	-\$ 12.500	-\$ 12.500	-\$ 12.500	-\$ 12.500	-\$ 12.500	-\$ 17.500	-\$ 17.500	-\$ 17.500	-\$ 17.500	-\$ 17.500	-\$ 17.500	-\$ 22.500
Rent	-\$ 1.800	-\$ 1.800	-\$ 1.800	-\$ 1.800	-\$ 1.800	-\$ 1.800	-\$ 1.800	-\$ 1.800	-\$ 1.800	-\$ 1.800	-\$ 1.800	-\$ 1.800	-\$ 1.800
Other costs	-\$ 300	-\$ 300	-\$ 300	-\$ 300	-\$ 300	-\$ 300	-\$ 300	-\$ 300	-\$ 300	-\$ 300	-\$ 300	-\$ 300	-\$ 300
Overhead cost	-\$ 14.600	-\$ 19.600	-\$ 24.600										
% Origination	-14%	-12%	-11%	-10%	-9%	-8%	-10%	-9%	-9%	-8%	-7%	-6%	-7%

Operating Revenue	\$ 67.333	\$ 71.888	\$ 79.076	\$ 86.984	\$ 95.682	\$ 105.251	\$ 115.776	\$ 127.353	\$ 140.089	\$ 154.097	\$ 169.507	\$ 186.458	\$ 205.104
Overhead cost	-\$ 14.600	-\$ 19.600	-\$ 24.600										
Net Income	\$ 52.733	\$ 57.288	\$ 64.476	\$ 72.384	\$ 81.082	\$ 90.651	\$ 96.176	\$ 107.753	\$ 120.489	\$ 134.497	\$ 149.907	\$ 166.858	\$ 180.504
Annual ROA	66%	65%	67%	68%	69%	70%	68%	69%	70%	71%	72%	73%	72%

P&L 2-year projection (up to month 24)

	13	14	15	16	17	18	19	20	21	22	23	24
Loan originations	\$ 335.027	\$ 335.027	\$ 335.027	\$ 335.027	\$ 335.027	\$ 335.027	\$ 335.027	\$ 335.027	\$ 335.027	\$ 335.027	\$ 335.027	\$ 335.027
Weighted average term (month)	9	9	9	9	9	9	9	9	9	9	9	9
APR % (VAT net)	125%	125%	125%	125%	125%	125%	125%	125%	125%	125%	125%	125%
Financial Revenue (VAT net)	\$ 314.088	\$ 314.088	\$ 314.088	\$ 314.088	\$ 314.088	\$ 314.088	\$ 314.088	\$ 314.088	\$ 314.088	\$ 314.088	\$ 314.088	\$ 314.088
Default rate %	10%	10%	10%	10%	10%	10%	10%	10%	10%	10%	10%	10%
Net Financial Revenue	\$ 249.177	\$ 249.177	\$ 249.177	\$ 249.177	\$ 249.177	\$ 249.177	\$ 249.177	\$ 249.177	\$ 249.177	\$ 249.177	\$ 249.177	\$ 249.177
Annual ROI	99%	99%	99%	99%	99%	99%	99%	99%	99%	99%	99%	99%
Bureau cost	-\$ 701	-\$ 699	-\$ 696	-\$ 694	-\$ 691	-\$ 689	-\$ 687	-\$ 684	-\$ 682	-\$ 679	-\$ 677	-\$ 675
Marketing cost	-\$ 34.064	-\$ 33.560	-\$ 33.064	-\$ 32.576	-\$ 32.094	-\$ 31.620	-\$ 31.153	-\$ 30.692	-\$ 30.239	-\$ 29.792	-\$ 29.352	-\$ 28.812
Collection cost	-\$ 8.764	-\$ 8.733	-\$ 8.703	-\$ 8.672	-\$ 8.642	-\$ 8.612	-\$ 8.582	-\$ 8.552	-\$ 8.522	-\$ 8.493	-\$ 8.463	-\$ 8.433
Variable Cost	-\$ 43.529	-\$ 42.992	-\$ 42.463	-\$ 41.942	-\$ 41.428	-\$ 40.921	-\$ 40.421	-\$ 39.929	-\$ 39.443	-\$ 38.964	-\$ 38.492	-\$ 37.920
% Origination	13,0%	12,8%	12,7%	12,5%	12,4%	12,2%	12,1%	11,9%	11,8%	11,6%	11,5%	11,3%
Net Financial Revenue	\$ 249.177	\$ 249.177	\$ 249.177	\$ 249.177	\$ 249.177	\$ 249.177	\$ 249.177	\$ 249.177	\$ 249.177	\$ 249.177	\$ 249.177	\$ 249.177
Variable Cost	-\$ 43.529	-\$ 42.992	-\$ 42.463	-\$ 41.942	-\$ 41.428	-\$ 40.921	-\$ 40.421	-\$ 39.929	-\$ 39.443	-\$ 38.964	-\$ 38.492	-\$ 37.920
Operating Revenue	\$ 205.648	\$ 206.184	\$ 206.713	\$ 207.234	\$ 207.749	\$ 208.255	\$ 208.755	\$ 209.248	\$ 209.734	\$ 210.213	\$ 210.685	\$ 211.256
% Origination	61%	62%	62%	62%	62%	62%	62%	62%	63%	63%	63%	63%
Salaries	-\$ 22.500	-\$ 22.500	-\$ 22.500	-\$ 22.500	-\$ 22.500	-\$ 27.500	-\$ 27.500	-\$ 27.500	-\$ 27.500	-\$ 27.500	-\$ 27.500	-\$ 32.500
Rent	-\$ 1.800	-\$ 1.800	-\$ 1.800	-\$ 1.800	-\$ 1.800	-\$ 1.800	-\$ 1.800	-\$ 1.800	-\$ 1.800	-\$ 1.800	-\$ 1.800	-\$ 1.800
Other costs	-\$ 300	-\$ 300	-\$ 300	-\$ 300	-\$ 300	-\$ 300	-\$ 300	-\$ 300	-\$ 300	-\$ 300	-\$ 300	-\$ 300
Overhead cost	-\$ 24.600	-\$ 24.600	-\$ 24.600	-\$ 24.600	-\$ 24.600	-\$ 29.600	-\$ 29.600	-\$ 29.600	-\$ 29.600	-\$ 29.600	-\$ 29.600	-\$ 34.600
% Origination	-7%	-7%	-7%	-7%	-7%	-9%	-9%	-9%	-9%	-9%	-9%	-10%
Operating Revenue	\$ 205.648	\$ 206.184	\$ 206.713	\$ 207.234	\$ 207.749	\$ 208.255	\$ 208.755	\$ 209.248	\$ 209.734	\$ 210.213	\$ 210.685	\$ 211.256
Overhead cost	-\$ 24.600	-\$ 24.600	-\$ 24.600	-\$ 24.600	-\$ 24.600	-\$ 29.600	-\$ 29.600	-\$ 29.600	-\$ 29.600	-\$ 29.600	-\$ 29.600	-\$ 34.600
Net Income	\$ 181.048	\$ 181.584	\$ 182.113	\$ 182.634	\$ 183.149	\$ 178.655	\$ 179.155	\$ 179.648	\$ 180.134	\$ 180.613	\$ 181.085	\$ 176.656
Annual ROA	72%	72%	72%	73%	73%	71%	71%	71%	72%	72%	72%	70%

Cashflow

Cashflow projection considers all inflows and outflows of the project. This analysis is made for 3 main reasons:

- Determine if it is convenient to carry out the project by calculating the Net Present Value (NPV). In this case, as we are evaluating a current operative venture, the decision will be to continue or not with the business
- To assess the maximum capital need through the projection. This is important since in accordance to the capital availability and what the business needs, financial decisions should be taken (for example to ask for a private loan, financing with equity, etc.)
- To know some important financial indicators of the project as Internal Rate of Return (IRR) and payback period. IRR is a metric of the profitability of the business and it is calculated by setting NPV equal to zero. Decisions can be taken by comparing IRR with cost of capital, and while $IRR > \text{cost of capital}$ it will be a good decision to invest.

To properly develop the Cashflow Statement, cash inflows and outflows over time should be identified, as well as the discount rate to be applied for calculating NPV and the discounted payback period

The period considered for the cashflow was 24 months since it is the time for which the initial investment to be made on the month 0 will be valid.

Cash Outflows

Regarding outflows, besides variables and fix costs payed monthly, cost associated to the default rate must be considered

Default must be taken into account as a cost associated with the loan origination of the month to which it corresponds, and with its evolution and maturity. For this it is important to know how the default rate evolves in the life of the loan until reaching the final default rate, defined in the P&L as 10% (based on history).

(1 – Collection rate = Default rate)

Collection by maturity	
Fee 1	80%
Fee 2	84%
Fee 3	86%
Fee 4	88%
Fee 5	89%
Fee 6	90%
Fee 7	90%
Fee 8	90%
Fee 9	90%

Cash Inflows

GroUit source of income are interests charged for originated loans. For this, loan term and interest rate % (APR) must be considered. This data can be obtained directly from the P&L seen above.

It is important to keep in mind that a monthly loan origination will generate income in the following 9 months. In the model, this is represented as follows to then be able to affect it with the default rate of each maturity according to the maturity collection table. The diagonal of the correspondent month of origination shows the monthly fees to be collected.

Origination

	Month 0	Month 1	Month 2	Month 3	Month 4	Month 5	Month 6	Month 7	Mont 8	Month 9
Origination	\$ 106.750	\$ 117.425	\$ 129.168	\$ 142.084	\$ 156.293	\$ 171.922	\$ 189.114	\$ 208.026	\$ 228.828	\$ 251.711
Fee 1		\$ 22.981	\$ 25.279	\$ 27.807	\$ 30.588	\$ 33.646	\$ 37.011	\$ 40.712	\$ 44.783	\$ 49.262
Fee 2			\$ 22.981	\$ 25.279	\$ 27.807	\$ 30.588	\$ 33.646	\$ 37.011	\$ 40.712	\$ 44.783
Fee 3				\$ 22.981	\$ 25.279	\$ 27.807	\$ 30.588	\$ 33.646	\$ 37.011	\$ 40.712
Fee 4					\$ 22.981	\$ 25.279	\$ 27.807	\$ 30.588	\$ 33.646	\$ 37.011
Fee 5						\$ 22.981	\$ 25.279	\$ 27.807	\$ 30.588	\$ 33.646
Fee 6							\$ 22.981	\$ 25.279	\$ 27.807	\$ 30.588
Fee 7								\$ 22.981	\$ 25.279	\$ 27.807
Fee 8									\$ 22.981	\$ 25.279
Fee 9										\$ 22.981

Cost of capital

To calculate the cost of capital or the discount rate we must define the WACC. This is calculated by taking into account several factors such as risk-free rate, Beta of the business, country risk premium, and cost and proportion of both debt and equity.

For Argentina and for the sector of Digital Lending, the appropriate discount rate according to important references as Moody's and Standard & Poor's is around 14% per year (equivalent to 1.1% per month). This number may seem high but, is affected by inflation, cost of debt and the great risk (and therefore the premium) of developing a business in the region.

WACC (monthly)	1.1%
-----------------------	-------------

2-years Cashflow Statement

Business Model assumptions	
Term (months)	9
APR (VAT net)	125%

	0	1	2	3	4	5	6	7	8
Loan origination	\$ 106.750	\$ 117.425	\$ 129.168	\$ 142.084	\$ 156.293	\$ 171.922	\$ 189.114	\$ 208.026	\$ 228.828
Total to be collect		\$ 22.981	\$ 48.260	\$ 76.067	\$ 106.654	\$ 140.301	\$ 177.312	\$ 218.024	\$ 262.807
Default		-\$ 4.596	-\$ 8.733	-\$ 12.823	-\$ 16.863	-\$ 21.078	-\$ 25.483	-\$ 30.330	-\$ 35.661
Total Inflows		\$ 18.385	\$ 39.527	\$ 63.243	\$ 89.791	\$ 119.223	\$ 151.828	\$ 187.694	\$ 227.146
Δ Working Capital (Inflow-Origination)	-\$ 106.750	-\$ 99.040	-\$ 89.640	-\$ 78.841	-\$ 66.502	-\$ 52.699	-\$ 37.286	-\$ 20.332	-\$ 1.682
Initial Investment	-\$ 50.000								
Variable Costs	-\$ 12.063	-\$ 15.447	-\$ 16.992	-\$ 18.691	-\$ 20.560	-\$ 22.616	-\$ 24.878	-\$ 27.366	-\$ 30.102
Overhead Costs	-\$ 14.600	-\$ 14.600	-\$ 14.600	-\$ 14.600	-\$ 14.600	-\$ 14.600	-\$ 19.600	-\$ 19.600	-\$ 19.600
Total outflows	-\$ 76.663	-\$ 30.047	-\$ 31.592	-\$ 33.291	-\$ 35.160	-\$ 37.216	-\$ 44.478	-\$ 46.966	-\$ 49.702
Net Cashflow	-\$ 183.413	-\$ 129.088	-\$ 121.232	-\$ 112.132	-\$ 101.662	-\$ 89.915	-\$ 81.764	-\$ 67.297	-\$ 51.384
Net Cashflow accumulated	-\$ 183.413	-\$ 312.500	-\$ 433.733	-\$ 545.865	-\$ 647.527	-\$ 737.442	-\$ 819.206	-\$ 886.503	-\$ 937.888
Net discounted Cashflow	-\$ 183.413	-\$ 127.683	-\$ 118.609	-\$ 108.512	-\$ 97.309	-\$ 85.129	-\$ 76.569	-\$ 62.336	-\$ 47.078
Net discounted Cashflow accum	-\$ 183.413	-\$ 311.096	-\$ 429.704	-\$ 538.216	-\$ 635.525	-\$ 720.654	-\$ 797.223	-\$ 859.560	-\$ 906.638

	9	10	11	12	13	14	15	16
Loan origination	\$ 251.711	\$ 276.882	\$ 304.570	\$ 335.027	\$ 335.027	\$ 335.027	\$ 335.027	\$ 335.027
Total to be collect	\$ 312.069	\$ 343.276	\$ 377.603	\$ 415.363	\$ 456.900	\$ 495.377	\$ 530.490	\$ 561.902
Default	-\$ 41.525	-\$ 43.380	-\$ 46.339	-\$ 50.053	-\$ 54.599	-\$ 58.387	-\$ 61.629	-\$ 64.186
Total Inflows	\$ 270.543	\$ 299.896	\$ 331.264	\$ 365.310	\$ 402.301	\$ 436.991	\$ 468.861	\$ 497.716
Δ Working Capital (Inflow-Origination)	\$ 18.833	\$ 23.014	\$ 26.694	\$ 30.283	\$ 67.273	\$ 101.963	\$ 133.834	\$ 162.689
Initial Investment								
Variable Costs	-\$ 33.113	-\$ 36.424	-\$ 40.066	-\$ 44.073	-\$ 43.529	-\$ 42.992	-\$ 42.463	-\$ 41.942
Overhead Costs	-\$ 19.600	-\$ 19.600	-\$ 19.600	-\$ 24.600	-\$ 24.600	-\$ 24.600	-\$ 24.600	-\$ 24.600
Total outflows	-\$ 52.713	-\$ 56.024	-\$ 59.666	-\$ 68.673	-\$ 68.129	-\$ 67.592	-\$ 67.063	-\$ 66.542
Net Cashflow	-\$ 33.880	-\$ 33.010	-\$ 32.972	-\$ 38.390	-\$ 855	\$ 34.371	\$ 66.771	\$ 96.147
Net Cashflow accumulated	-\$ 971.768	-\$ 1.004.778	-\$ 1.037.750	-\$ 1.076.140	-\$ 1.076.995	-\$ 1.042.624	-\$ 975.853	-\$ 879.706
Net discounted Cashflow	-\$ 30.703	-\$ 29.589	-\$ 29.234	-\$ 33.667	-\$ 742	\$ 29.490	\$ 56.665	\$ 80.708
Net discounted Cashflow accum	-\$ 937.341	-\$ 966.930	-\$ 996.164	-\$ 1.029.831	-\$ 1.030.573	-\$ 1.001.083	-\$ 944.418	-\$ 863.709

	17	18	19	20	21	22	23	24
Loan origination	\$ 335.027	\$ 335.027	\$ 335.027	\$ 335.027	\$ 335.027	\$ 335.027	\$ 335.027	\$ 335.027
Total to be collect	\$ 589.243	\$ 612.105	\$ 630.041	\$ 642.559	\$ 649.115	\$ 649.115	\$ 649.115	\$ 649.115
Default	-\$ 66.132	-\$ 67.481	-\$ 68.242	-\$ 68.359	-\$ 67.766	-\$ 66.393	-\$ 65.604	-\$ 65.168
Total Inflows	\$ 523.110	\$ 544.624	\$ 561.799	\$ 574.199	\$ 581.349	\$ 582.722	\$ 583.512	\$ 583.947
Δ Working Capital (Inflow-Origination)	\$ 188.083	\$ 209.597	\$ 226.771	\$ 239.172	\$ 246.322	\$ 247.695	\$ 248.485	\$ 248.920
Initial Investment								
Variable Costs	-\$ 41.428	-\$ 40.921	-\$ 40.421	-\$ 39.929	-\$ 39.443	-\$ 38.964	-\$ 38.492	-\$ 37.920
Overhead Costs	-\$ 24.600	-\$ 29.600	-\$ 29.600	-\$ 29.600	-\$ 29.600	-\$ 29.600	-\$ 29.600	-\$ 34.600
Total outflows	-\$ 66.028	-\$ 70.521	-\$ 70.021	-\$ 69.529	-\$ 69.043	-\$ 68.564	-\$ 68.092	-\$ 72.520
Net Cashflow	\$ 122.055	\$ 139.076	\$ 156.750	\$ 169.643	\$ 177.279	\$ 179.131	\$ 180.393	\$ 176.400
Net Cashflow accumulated	-\$ 757.651	-\$ 618.575	-\$ 461.825	-\$ 292.182	-\$ 114.903	\$ 64.228	\$ 244.621	\$ 421.021
Net discounted Cashflow	\$ 101.341	\$ 114.217	\$ 127.332	\$ 136.306	\$ 140.891	\$ 140.814	\$ 140.263	\$ 135.666
Net discounted Cashflow accum	-\$ 762.368	-\$ 648.151	-\$ 520.820	-\$ 384.514	-\$ 243.623	-\$ 102.809	\$ 37.454	\$ 173.120

Bottom line these are the result of the Cashflow analysis:

NPV	\$ 173.120
IRR monthly	2,1%
Maximum capital exposure	-\$ 1.076.995
Discounted Payback Period	23 months

Sensitivity analysis

For the sensitivity analysis, two other possible scenarios were proposed. One of the scenarios was to place loans at a shorter term and at a higher interest rate (scenario a). And the other of the scenarios was raised with longer terms and lower rates (scenario b)

Based on these scenarios, the results obtained in the cashflow were evaluated:

Scenario A	
Term (months)	6
APR (VAT net)	140%

Scenario B	
Term (months)	12
APR (VAT net)	110%

NPV	-\$ 14.159
IRR	1,0%
Maximum capital exposure	-\$ 869.528
Discounted Breakeven	N/A

NPV	-\$ 57.608
IRR	0,8%
Maximum capital exposure	-\$ 1.400.580
Discounted Breakeven	N/A

Neither of the two scenarios are convenient since the NPV is negative and the IRR is minor to the cost of capital. This shows up how sensitive is the business to these two variables

Conclusions

Throughout this report an existing digital lending business was evaluated. After several analyses some conclusions of the market and the project itself were reached

Regarding the business model, it is worth noting that it emerged as the solution to a problem, that is the lack of financing and a cumbersome granting process. Around this solution, the business model was monetized, customers were segmented and best channels to arrive to them were selected. After analyzing the business model of GroUit, it is clear that for the success of the business the most important are the competitive advantages. This is the core of the proposed solution and empowers the premise that we must be very customer-focused. In addition, a great inspiration and model to follow was that of Kabbage in the USA, also analyzed in this report.

Regarding the market, its attractiveness and potential are very high. As the attractiveness is high, empowered also by fintech trend and national government policies, it is important to be on the edge of innovation and in a continuous improvement process so as not to lose in front of current and potentials competitors. GroUit has the very great advantage to be a “First Mover” in the region.

Then, the business development was explained in detail. The legal structure of the business was described as well as the operation and development of the platform. The operation was breakdown to clarify each process, and as said before, since our competitive advantage is the customer-focused approach, all stages of the process must be aligned for providing the best financial solution. This also applies for the development of the platform, and that’s why a strategic provider as Wolox was chosen in the MVP development, and why an elite IT team was then hired.

By performing a financial and economic analysis, some monetary metrics of the business were evaluated. Under current conditions the project is profitable and represents a nice business opportunity, so it is advice to continue with the operation. Finally, a sensitive analysis was made to assess how sensitive is the business to term and APR of the loans, and it result that is very sensitive to these inputs. This is a common characteristic of financial businesses, and that’s why it is important to have a very strict control of these variables to assure the profitability of the project

Sources

Finnovista

<https://www.finnovista.com/actualizacion-fintech-radar-argentina-2018/>

<https://www.finnovista.com/fintechradarforeignstartupslatam2018/?lang=en>

BBVA

<https://www.bbva.com/en/fintech-companies-making-inroads-latin-america/>

McKinsey

https://www.mckinsey.de/files/160525_fintech_english.pdf

S&P Global Market Intelligence

<https://marketintelligence.spglobal.com/documents/our-thinking/research/an-introduction-to-fintech-key-sectors-and-trends.pdf>

<https://marketintelligence.spglobal.com/our-thinking/ideas/u-s-digital-lenders-to-double-annual-loan-originations-by-2021>

Ernst & Young

[http://www.ey.com/Publication/vwLUAssets/ey-fintech-adoption-index-2017/\\$FILE/ey-fintech-adoption-index-2017.pdf](http://www.ey.com/Publication/vwLUAssets/ey-fintech-adoption-index-2017/$FILE/ey-fintech-adoption-index-2017.pdf)

Kabbage

<https://www.kabbage.com>