



Whiz Water

Venture Launchpad

MENTOR:

José Luis Cataño Cabañas

ENTREPRENEURS:

Gabriel Brinas

Isalbry Brito

Ruben Blazquez

Javier Nespral

Mariana Palacios Valderrama

Alison Peron

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1. EXECUTIVE SUMMARY

1.1 *WHIZWATER'S* MISSION

WhizWater is a Spanish based startup pioneering technology for change. We focus on bringing technological solutions for more sustainable behavioral changes. We want to empower our clients and users by giving them the tools and information they need to make informed decisions on their consumption and understand the impacts of their behaviours. We do this by keeping innovation at the heart of what we do as well as constant and open communication with our users in order to develop and grow based on their feedback and needs.

1.2 COMPANY MANAGEMENT

WhizWater was created by six fellow classmates. Together, they make a diverse and interdisciplinary team, which allows them to be adaptable, flexible and find creative solutions.

- Gabriel Barinas: Civil Engineer from Dominican Republic with a specialization in Water Management leads product design and operations
- Isalbry Brito: Civil Engineer from Dominican Republic with background in business administration and a specialization in Water Management leads marketing and supports product design
- Ruben Blazquez: Agricultural Engineer from Madrid with a specialization on Water Management supports operations and leads market research
- Javier Nespral: Electrical Engineer from Asturias with a specialization in Renewable Energies leads the finances and supports market research
- Mariana Palacios: Business Administrator from Colombia, specialized in Sustainable Development and Corporate Social Responsibility (CSR) manages outreach strategies and supports financials
- Alison Peron: Business Administrator from France, specialized in Sustainable Development and Corporate Social Responsibility manages partnerships and marketing strategy

Managing in a dynamic and interactive way, enables **WhizWater** to always think differently to come up with innovative solutions.

1.3 WHAT DOES *WHIZWATER* DO?

We focus on empowering users and consumers, helping them understand the type and level of impact their behavior can have on the world around them. We do this through **WhizWater**, a water meter device with a screen that allows for real time information on consumption. The water meter is also connected to an app, which users download, where they can learn more about their water consumption behaviors. This interactive app allows them to visualize statistics on real time and historical consumption. The users can also compare their usage with other household member and communities, as well as receive tips on more efficient ways to consume.

1.4 THE MARKET

“Climate change is the main issue concerning the world’s millennials... according to the annual Global Shapers Survey just released by the World Economic Forum”¹. Knowing this, **WhizWater**’s aim is to service this market. Millennials are an incredible diverse group of individuals, they can range from 20 - 40 years of age, and have a wide range of interests and preoccupations. The current millennial population in Spain is 18.7% according to research done by CaixaBank². Based on this information and further market research, **WhizWater** will target this group and its early adopters.

We will focus on the ecological consumer, we are targeting this group due to their sensitivity when it comes to the environment. Individuals who not just care about the environment but want to take action in to their own hands. Our main focus will be on the young, technological, and environmentally concerned individual ranging from 20-38 years of age, as well as the concerned young parents, ranging from 35-42 years of age, who are conscious and want to show their kids how to have a better world. Having these two target markets will allow us to cover a large range of early adopters and will give us the possibility of expanding our range as we grow.

1.5 STRATEGY

WhizWater is unlike any other water meter and we intend to show our customers just this. We realize there is a range of devices that aim to give users the opportunity of measuring, monitoring, and lowering their water usage. We identified some of them, Aquareturn, Flo, and The Smart Water Meter. These three all focus on different technical aspects of saving water, saving while water is getting hot, leakages, and metrics on usage.

What we do is look at the issue of saving water from a more general approach, empowering our clients to choose how they want to experience this new challenge. We want to ensure all individuals who care about their usage have the opportunity to understand it. Therefore, our system simplifies information and provides the user with clean and simple measures regarding their consumption.

1.6 MARKETING STRATEGY

Our approach to breaking into the desired target marketing will be based on the 7p’s: Price, Promotion, Product, Place, People, Physical Evidence and Process. The **WhizWater** team decided to implement this approach since it extended the 4p’s and allowed for People, Product and Physical Evidence to be taken into account when designing the Marketing strategy. In an ever changing environment, these allow us to remain competitive, flexible and adaptable. The details on the 7p’s will be explored further in the complete business plan.

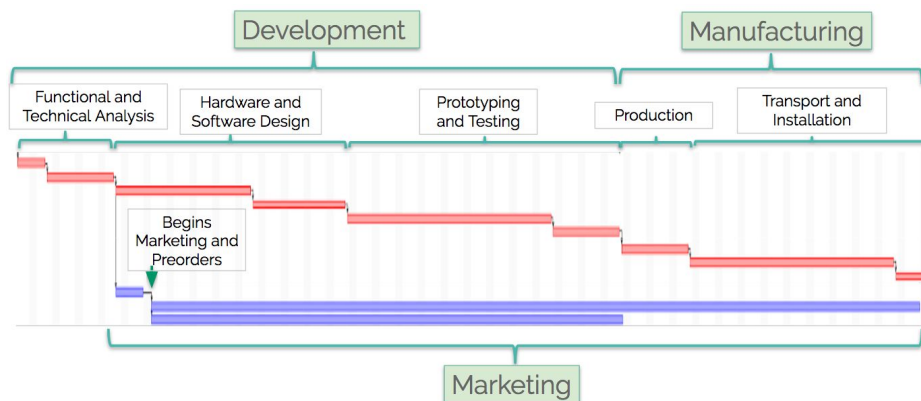
¹ Galán, Javier, et al. “Almost Nine in 10 Spanish Millennials Would Go Abroad for a Job.” *EL PAÍS*, Síguenos En Síguenos En Twitter Síguenos En Facebook Síguenos En Twitter Síguenos En Instagram, 29 Aug. 2017, elpais.com/elpais/2017/08/29/inenglish/1504002024_219101.html.

² Ferrer, Roser. “Who Are the Millennials?” *CaixaBank Research*, Caixa Bank, 17 Apr. 2018, www.caixabankresearch.com/en/who-are-millennials.

Working with an SME specialized in marketing and innovation, we will reach our clients through digital channels and have extensive marketing campaigns before launch, during, and after. Our marketing campaign will focus on telling our customers our story and how it can also be theirs. We want to make them feel listened to and understood. We intend to partner with influencers that have a strong environmental profile as well as organizations that support water consumption awareness in order to diversify how we reach our audience.

1.7 OPERATIONS

There will be three phases in the initial operations plan, design, manufacturing and marketing. These three phases will be connected and dependent on each other.



The development phase will be comprised of the three phases, defining of the functional and technical characteristics of the **WhizWater** water meter, display screen and app; hardware and software design; and creating our first prototype for which we have budgeted 10,000 euros. Once we have tested and approved of the prototype we will start production, which we aim will take about 3 months, for transportation and installation we will partner with a logistics company which will manage supply and demand.

1.8 FINANCES

Projected Sales

WhizWater's projected sales are illustrated below. We expect to increase sales yearly, from the first to the second year we will have increase sales of 162%, the third year we will see 30% and from then on we will see an increase of 20%. Through these 5 years we will be exploring new lines of business and growth strategies which will be described into details in the full report.

YEAR	YEAR 1	Growth	YEAR 2	Growth	YEAR 3	Growth	YEAR 4	Growth	YEAR 5
Total Sales	244.384	162%	640.329,4	30%	832.428,3	20%	998.913,9	20,0%	1.198.696,7

WhizWater is asking for 30,000 euros in financing to focus on growing the business. A large part of this investment will be dedicated to marketing and promotions for the product. We expect that based on our performance and growth the investment will be recovered in 3 years and 132 days.

We are also going to receive 8,000 euros from our crowdsourcing campaign, which will be a high push for catching our early adopters.

Ratios for Performance

Profitability Ratios	YEAR 1	YEAR 2	YEAR 3	YEAR 4	YEAR 5
ROE (Return On Equity)	NS	38,58%	50,03%	41,05%	35,23%
ROI (Return on Investment)	0,01%	20,33%	28,90%	29,05%	27,80%

2. INTRODUCTION

2.1 BACKGROUND

This document is designed to present **WhizWater**, a start-up born from a long process of selection and planning. Individuals were given the opportunity to choose among several business ideas to develop, six individuals: Gabriel Barinas, Isalbry Brito, Ruben Blazquez, Javier Nespral, Mariana Palacios and Alison Peron all chose the same one based on their interests and expertise. Together, they created **WhizWater**.

Following the Lean Startup methodology, the team developed a business plan centered on the validation of the need for the solution and the identification of pains associated with the problem. This business model allows them to identify possible client needs and adapt **WhizWater** to these needs, creating a dynamic and flexible product.

Objective

The **WhizWater** team is committed to helping individuals become aware and understand their consumption behaviours in order to make better decisions. Innovating, through technology and information sharing, **WhizWater** will empower consumers to become agents of change in responsible consumption.

Developing partnerships and collaborating with social and environmental initiatives, **WhizWater** is going to be a pioneer in the industry. Our aim is to revolutionize how individuals see their spending and we want to do this by relating to them and turning untagibles into tangibles. The essence of what we do is in the relationship we have with our clients, we listen to what they need from us in order to become much more responsible consumers and we support them through their

journey. We provide them with the information and tools they need to become aware of their behaviors and their impact.

The purpose of this document is to introduce **WhizWater** to the industry and its investors, illustrate its value and start the **WhizWater** movement.

Environment

We are currently living in a world where, largely due to the manner in which we consume, we are depleting natural resource and harming the planet. The idea of sustainability and responsible consumption has been around for years. Many scientists had identified and studied the effects that human consumption could affect the planet way before we became aware a global citizens. However, not until more recent years did this movement take a stronger force. In September of 2015 the world 193 leaders from came together and committed to working towards achieving the 17 UN Sustainable Goals by 2030.

WhizWater is committed to and supports goals: 6. Clean Water and Sanitation, 11. Sustainable Cities and Communities, 12. Responsible Consumption and Production, as well as 13. Climate Action. Each to a different extent, these Sustainable Development Goals are undeniably connected to the effect and impact our business can have.

The average consumption of water in Spain is of 135 liters per day per person³. The minimum amount required for a person to live a healthy lifestyle is between 50-100 liters per day. There are even some places in the world that use even more. Through extensive research and validation, **WhizWater** team was able to recognize that more and more people in the world are asking for solutions and ways to take matters into their own hands. People care about their impact, but too often it seems too hard to find ways to see the difference they are making. **WhizWater** does just this, facilitating this interaction for clients.

2.2 WHO IS WHIZWATER

The Team

In Spain on October 2017 at a conference on water challenges and scarcity facing Spain, the initial seed for **WhizWater** was planted. As one of the founders sat and listened to the different situations facing the country, she realized that something, at the individual level needed to be done. She asked herself, how can I help? This simple question pushed her to ask a bigger questions, how can individuals help?

Her and five other like minded individuals would become the creators of **WhizWater**. An incredibly diverse and interdisciplinary team, they are committed and passionate about their work and unified objective.

³ Moral, Cristina. "How Many Litres of Water Does a Person Need per Day?" *Intelligent Infrastructure*, Ferrovial, 11 Nov. 2016, blog.ferrovial.com/en/2015/03/how-many-litres-of-water-does-a-person-need-per-day/.

- Gabriel Barinas: a Civil Engineer from Dominican Republic, who specialized in water management leads Operations and Design.
- Isalbry Brito, a Civil Engineer from Dominican Republic, who specialized in water management, supports Design and works in Market Research.
- Ruben Blazquez, an Agricultural Engineer from Madrid, also specialized in water management supports Operations and Market Research.
- Javier Nespral an Electrical Engineer from Asturias, who specialized in Renewable Energies, leads Financials.
- Mariana Palacios with background in business and specialized in sustainable development and CSR leads Outreach Strategy and supports Financials.
- Alison Peron a business entrepreneur from France, who specialized in sustainable development and CSR, leads Partnerships Strategy and supports Marketing.

The diversity in the team's professional background as well as cultural, gives them the ability of being versatile, adaptable and innovative. Always looking for the best solutions and ways to create value for their customers and their communities and society.

2.3 THE COMPANY

Mission

WhizWater is a Spanish based startup for technology for change. We focus on bringing technological solutions for more sustainable behavioral changes, empowering our clients and users by giving them the tools and information they need to make informed decisions on their consumption and understand the impacts of their behaviours. We do this by keeping innovation at the heart of what we do as well as constant and open communication with our users in order to develop and grow based on their feedback and need.

Vision

WhizWater wants to see a society in which conscious consumption, is the only way in which every household consumes. **WhizWater** envisions this as becoming one with daily behaviours. Giving users a straight and direct access to their consumption information in a simple and comprehensible way, we are working towards a more sustainable society. Becoming the leader in providing consumers with a platform to learn, track and understand how they, with their little grain of salt, make a difference.

Values

Responsibility and transparency at the core, **WhizWater** believes in the responsibility every individual has in creating a better world. In this responsibility we hold transparency at the center of it. Transparency in all of our lines of business, production, distribution, and general management. Everything we do is for a better world, we hope to empower and inspire our employees and our clients to take a part in this movement.

Company Logo

The company logo was designed by our creative co-founder Ruben Blazquez, focusing on associating the household with sustainability, the environment and water. Blue because we are focusing on water consumption and green because it gives the overall feeling of being green and environmentally conscious as well as leaving our doors open for expansion to other forms of monitoring.



Sustainability Model

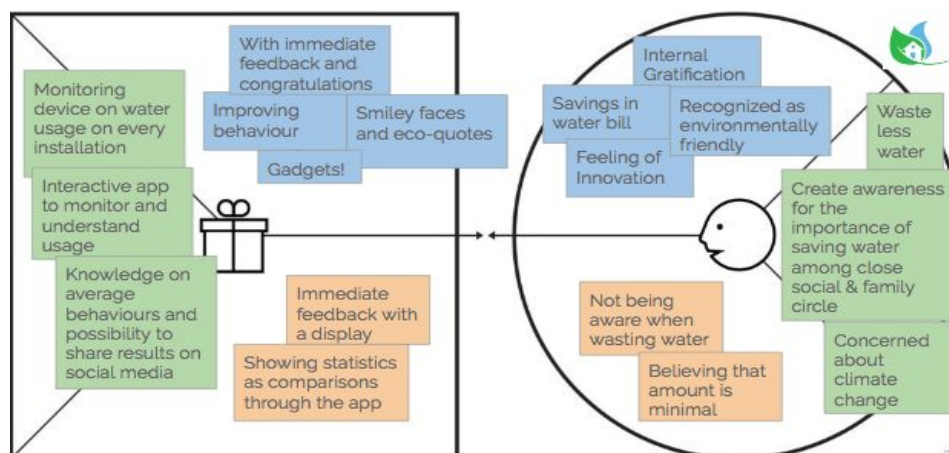
Sustainability is at the core of everything we do. **WhizWater** focuses on how our business activities can impact our surroundings, creating a model that focuses on generating value for the triple bottom line - environment, social and governance/economy. We believe that if we focus on creating value for the environment through sustainable business practices and responsible sorting. By supporting communities around what our business stems from, water, we can generate incredible value for society. Lastly, having good governance, caring for our employees and responsibly managing our finances will make us economically strong and help us live a long life.

2.4 THE SOLUTION

Solution

The **WhizWater** team decided to seize the opportunity and develop their product based on the lean startup methodology, through validations, testing and market research.

Lean Startup - Business Design: Value Proposition Canvas



Customer Profile:

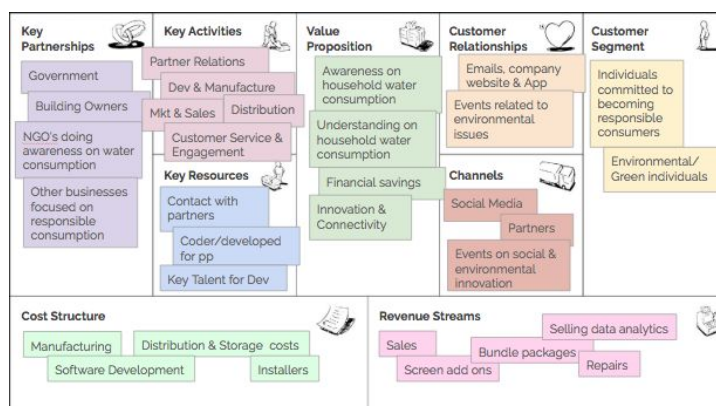
- **WhizWater's** customers are conscious about water and want to learn how to save it. They care about the environment and climate change and want to share this knowledge with their social circles.
- The pains we identified are related to the lack of information users have. Not being aware of how much water is being wasted in a tangible manner and not knowing what is a lot of water, or what is the ideal amount to be spent in order to be a responsible consumer.
- The gains we identified are related to intrinsic good feeling that comes from knowing users are doing a good thing. Internal gratification, being recognized and feel as environmentally friendly and the feeling of innovation from the connectivity that comes from our solution.

Value Proposition:

- As pain relievers we identified that **WhizWater** can provide this information that the users is asking for. Immediate live feedback on water usage on display screen plus clear metrics in the interactive app. Users will have the ability of learning about their usage and ways in which they can save water and become responsible consumers.
- As gain creators, we identified immediate feedback and “congratulations” on low water usage, with smiley faces and up to date interesting news and articles on water consumption and climate change. Innovation and technological edge feeling from the interactivity of the devices.

To address the pains and provide the gain creators, **WhizWater** provides real time and historical data on water consumption through an app connected to a water meter on every installation. Through the real time display users can see how much water they are spending and using at the moment. With the app, they can monitor their daily, weekly, monthly and yearly water usage. Users can set an average they want to spend, depending on out statistics on a responsible average use of water, and they can use and interact with all of **WhizWater's** features to adapt their consumer behaviours. **WhizWater** also gives users the possibility of choosing to share with their networks and contacts their performance and progress, creating a sense of community.

Lean Startup - Business Design: Business Model Canvas



Customer Segment:

WhizWater's customer base is on individuals who are environmentally conscious and concerned about climate change. The ecological consumer, which tends to be, on average a millennial. Raging from ages 20-40, we will focus on the young technologically driven user that wants to have an active involvement in making the world a better place. Furthermore, we will also focus on those young parents concerned about their kids education on climate change and how they will leave the world for future generations. Both these markets have an affinity and sensitivity towards being responsible in their consumption and role in making sound consumer choices.

Customer Relationship:

We will heavily used social media and and our website to communicate with our potential clients. We will also take part in environmental and innovation conferences to attract those early adopters. To maintain communication with existing clients, we will use our app and ou social networks. Users can also choose to receive monthly newsletters on their email with information and news on product and industry updates as well as climate change and water scarcity news.

Value Proposition:

The interconnectivity of the water meter, display screen and monitoring app will help create awareness and consciousness on household water consumption. Users will be able to understand and identify where they spend the most water around their houses. This is an innovative manner to connect users, in an autonomous manner, to their consumption behaviours. Users will also have the possibility to become part of a community that cares and actively is trying to find tangible individualistic solutions to water and environmental problems.

Channels

Our main communication channel with our clients will be social media. Were we will be posting constantly user features, fun facts and general information about the importance of saving water. As mentioned before, we plan to participate on conferences and events related to the environment and innovation, where we will communicate with potential early adopters. Along with this same idea, we are planning on partnering with NGO's and water conservancy organizations as well as climate awareness influencers.

Key Activities:

WhizWater's main business activities center around research and design while we develop the product. Simultaneously, as the product is being developed and manufactures, we will focus on our marketing and partnership development, creating awareness on our product and a network to create future opportunities. Once production is done we will manage distribution and inventory through a third party. As we continue to grow and develop we maintain open communication channels with our clients to ensure good customer service and engagement.

Key Partnerships:

WhizWater realizes the importance of partnerships, we are tackling a huge problem and we need to ensure we have the right partners in place to have an impact. Not only do we need good

partners to reach our desired market, but we need good partners in our business operations. We care about the type of companies we do business with, therefore we will ensure our suppliers, marketing partners and distribution partners are responsible in their business models.

On the other side, we intend to partner with NGO's, the government and potentially the sustainable hotel network, Instituto Tecnológico Hotelero. These partnerships would enable us to widen our network, potential customer base as well as line of business.

Key Sources:

Aside from the general business needs, we place specific focus on the following resources: Partners, developer and coder for app and data management, and talented people to join our team as we grow. These the **WhizWater** team sees as key for growth and development.

Cost Structure:

The costs associated with the **WhizWater** business processes are software development and design, manufacturing, distribution and storage costs, and installations. Apart from these, we would have significant costs associated with marketing and development for the product.

Revenue Streams:

Apart from regular sales, bundles, screen add ons and repairs **WhizWater** realizes that there is a huge opportunity for extending our business lines to selling data. Information on key behaviours in order come up with even more innovative solutions for issues related to consumption behaviours.

Method and Validation

Our first business model for **WhizWater** was targeting B2Cs. Quickly, we got confronted to installation limitations. The meter needed to be plugged into different water pipes, shortening our potential target to "handy - environmentally - conscious - consumers". We decided to adapt ourselves to this new problematic and to pivot to B2Bs; targeting gyms, hotels, and public spaces. Regardless of how enthusiastic we were about this pivot, validating the hypothesis became a challenging mission for a B2B due to access limitation to our potential new targets.

After few interviews, **WhizWater** made the decision to once again re-adapt ourselves, to pivot again and to switch back to concentrating our sales on B2C. In order to validate our hypothesis, we conducted personal interviews, to friends, family, neighbors, people in the library, people in the streets, interviewing our teachers and people at the cafeteria. All together we interviewed 52 individuals, and validated our problem hypothesis.

In order to validate the remaining hypothesis we conducted an online survey that we dispatched in our respective online networks. We got 96 answers, allowing us to validate our remaining hypothesis.

Lean startup Validation

P R O B L E M V A L I D A T I O N	We believe there is a growing amount of the population subject to living within water stressed cities.	✓	<i>“Water scarcity already affects every continent. Around 1.2 billion people, or almost one-fifth of the world's population, live in areas of physical scarcity, and 500 million people are approaching this situation. Another 1.6 billion people, or almost one quarter of the world's population, face economic water shortage (where countries lack the necessary infrastructure to take water from rivers and aquifers).”</i> UNDP 2006
	We believe there is a growing share of the population concerned about their energy consumption.	✓	2017 Unieliever report : “a third of consumers prefer sustainable brands”
	We believe there is a growing trend in the technological world concerning amenities monitoring trough connected devices	✓	CES 2018 : ranks air and water monitoring 3rd in the smart home trends

Hereafter some of the main hypothesis we elaborated :

M A I N H Y P O T H E S I S V A L I D A T	There is a growing amount of the population interested in reducing their environmental impact by consuming less water, even if it costs money to do so.	✓	More than 65% of the interviews we conducted showed that people were interested in respecting the environment, most knew eco labels but mainly from the agriculture industry. 30% had heard or changed for sustainable alternatives when it comes to energy consumption.
	There is a growing amount of the population interested in reducing their water consumption due to water scarcity and/or climate change, even if it costs money to do so.	✓	More than 65% of the interviews we conducted showed that people were interested in respecting the environment, most knew eco labels but mainly from the agriculture industry. Over 25% claim they change their consumption habits towards responsible choices.

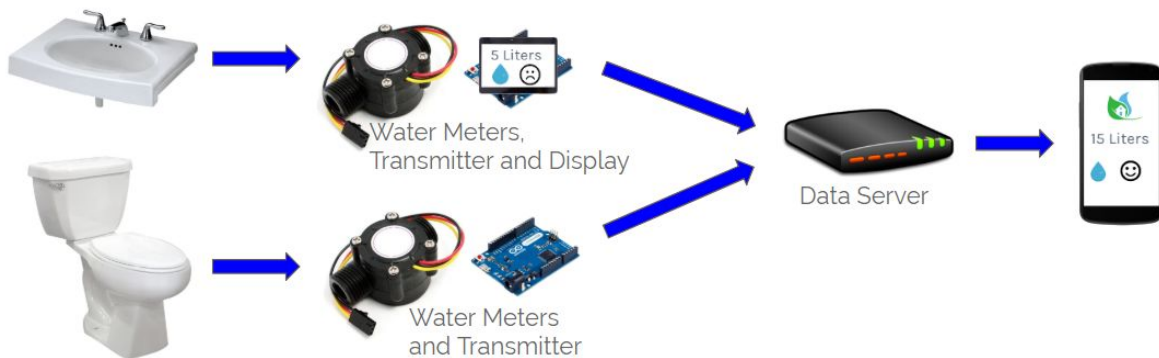
I O N	Most people are a lot more likely to invest in reducing water consumption (regardless of the motivation) if it comes with a relative low investment over a larger one.	✓	People do not know the volume nor the economical value of a water a metric ton, nor how much they consume of it. We found that most of the people don't mind investing a little amount of money to be able to understand. their consumption
	Most people want to know how much water they spend in real time.	✗	Unvalidated. Back up hypothesis => Real time displays incentivise behavioral changes. Partially validated.
	Most people want to know where in the house they spend more water.	✓	Over 90% of the interviews showed that people have no idea where they spend water the most, and thus no idea how to reduce their consumption.
	Most people in large houses would love to know where the most waste is happening	✓	Around half the people living in large houses we interviewed (7) have had leakage problems in the past.
	Awareness on water footprint can be translated into behavioral changes	✓ ✗	The people we interviewed seemed to be reacting positively. More research is being done. Not unvalidated
	People in areas where water is scarce are more likely to invest time and money in saving water if there was a product available to them	✓	We found that our few interviews from Sevilla turned out a lot more positive than the others (100%). We believe the correlation is because of the drought alerts.

Validation and Key Findings

One of our major findings is that around 90% of the people interviewed had no idea where they spend water the most in their homes, and thus no idea how to reduce their consumption. We also found out that behavioral change is not a science of precise data. It is hardly proven, although research suggests it's easier to induce behavioral change through visual displays, and that real time monitoring helps the brain associate an action to a behavior. However, the experience towards water consumption needs to improve, the actual action of water saving needs to be made easier for the consumer. We also found out that an unexpected target lied in a population more interested in high tech-gadgets and monitoring functions rather than interested in saving water. We found that smarthouses are a trend that is growing rapidly among the new home buyers.

3. Product Description

The product is comprised of several measuring devices installed on each individual pipe that feeds domestic sanitary installations such as the toilet, sinks, bathtub laundry connection and/or garden hose. These data is then sent to a single central device that gathers and process the information. All other home and personal devices can then be connected to the aforementioned central device so that users can access all data and relevant statistics through a mobile application.



3.1 ARCHITECTURE

Since the product is not a single device, but a system of several components, the underlying architecture of each one has to be described separately. Therefore, this section is going to be divided in: the measuring device, the microcontroller, the display, the central server, and finally the mobile application.

The Measuring Device

The type of water flow meter that fits our product is developed mainly for professional cooling of desktop computers. These devices provide enough precision to measure the flow of water within an acceptable range. There is a lot of room for improvement in the future by implementing high accuracy to limit any possible complaint.



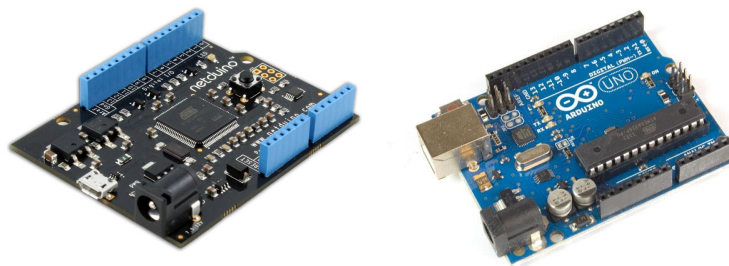
The Microcontroller

The signal generated from the water flow meter is recognized and sent to the central server by a microcontroller. A microcontroller can be defined as a programmable circuit capable of

executing functions prerecorded in its memory. It is comprised by a series of functional blocks, each responsible for a specific task.

For our purposes the essential task needed to be done by the microcontroller is to receive the measuring data, to send it to a wifi module in its board, and in some cases calculate and send specific data to a display.

The tasks are recorded into the microcontroller by something referred to as Libraries, but in essence are just lines of code that are followed continuously.



The Display

There are some sanitary installations that consume a fixed amount of water per use, like the toilet, washing machine or dishwasher. For these installations the user does not need feedback, but for the rest, like sinks and the shower, our product includes a visual feedback on how much water they are actively using so that they can control their waste.

This visual feedback is achieved by installing a display connected to the microcontroller either via a cable or with both devices merged into one.



The Central Server

All of the measuring data from each sanitary installation is gathered in a single central device or server. This device is basically a computer that manages the whole system, but since nowadays this amount of information can be handled with pretty small processing power, our product is satisfied with a microcomputer like the open-source Raspberry-Pi.

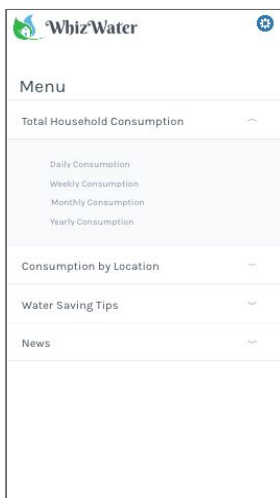
A microcomputer is a very small computer with a single CPU (central processing unit) and other components needed to handle an operative system like a standard one.



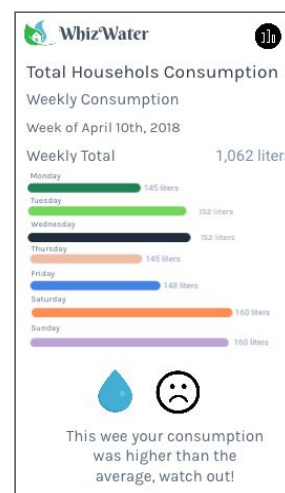
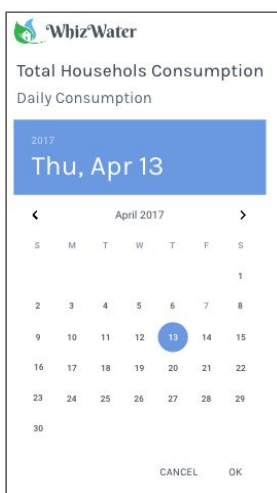
3.2 THE WHIZ WATER APP

All the data gathered by the central server will be available for the client through an application available for android and IOS. The app will offer different services such as a map of the home where it is possible to see where is the highest water consumption. It will allow the possibility to have multiple users per home. With this option the users will declare what part of the water consumption they are responsible for and can compare who is wasting more water at home.

The application will be used as a source for water saving tips and news about water saving related topics. With the calendar the users can be aware of the days of the month when they spend more water or, if there is a significant difference in expenditure, it might be because of a problem in the pipes system or a leakage.



In order to accomplish a behavioural change in users, the app will offer gratifications if the water consumption is better than the average and encourage the reduction of water consumption if it is above the average. With the application the user will have available all the statistics of water use: by day, week, month, year, by place and by user, as well as the cumulative amount and their usual behavior. This way they can control and have all the information to reduce the waste of water at home and compare it to averages offered by the application database.



3.3 DIFFERENTIATION

Our product, apart from being innovative, covers needs or limitations that improve the use of water in homes. **WhizWater** recognized we are not alone in this market and have identified some of the competition in this market there are competitors like, for example:

- [Aquareturn](#): is a product that recirculates the water until it is hot enough so reduces the wastewater produced by the time the water takes to be hot.



- [Meetflo](#): is a product focused in avoiding water leakages which is able to close the flow of water in the house from the smartphone.



Get a Flo Water Damage Prevention System

Flo is a comprehensive water monitoring and shut-off system with leak detection and proactive leak prevention technologies. Via its smartphone dashboard, Flo provides the ability to monitor and control your water remotely, while empowering conservation efforts. Be one of the first homes secured by Flo.

Introductory Price

\$499

[BUY NOW](#)

Starting at \$44/month with [Affirm](#). [Learn more](#)

Those products are not similar to **WhizWater**, since we exceed them in terms of price and one of our main distinction is the display. Furthermore, our product offers a complete system to each installation, not to a single pipe.

The main advantage of **WhizWater** resides in the fact that it offers a passive way for the feedback. There is no need for the client to take the smartphone, open the app and search for the info. Of course, we offer this possibility because there is a lot of useful information that could be valuable for the client, but we are conscious about the reality in which the client will forget about the app in a short period of time and will only use it very rarely or maybe when they receive the water bill.

What makes **WhizWater** unique is the fact that the users will have a display telling them in real time in front of their eyes the amount of water they are using each time they open the tap, in a passive way, they don't have to do anything, the information is right there for them to watch it. We believe that this is the way to achieve a real improvement in the behavior related with water waste.

4. Operations

4.1 PRODUCT CREATION

Development

Functional analysis

The first step in the development of a product is to have a clear picture of the basic functionality and purpose of said product.

The **WhizWater** team is developing a water flow meter capable of not only measuring the water flow but also sending the information to another device, which will process the information on water flow and serve as a communication beacon that will be able to gather information from several other meters wirelessly and provide statistics on users' water consumption. The gathered information from each beacon will be sent to users personal devices. The beacons will be able to be controlled and be turned on and off from each personal device.

Users will be able to see their consumption in real time while they are using either the shower or sink as well as access their historical information through our app. They will be able to find details on their water usage at different times: daily, weekly and monthly, as well as averages depending on their locality.



1 – Monitoring office, client's experience.

Using kinetic energy from water flow, we will turn this into electricity, which will power the battery of the device and the display screen.

Technical Analysis

After defining the functional properties of the device to an engineering design team, we would receive the technical specifications of the technology that will be required in order for the device to function as intended. Our research shows that the technology to make this integrated model exists. Most of the functionality would require microcontrollers to serve as the beacon, wireless transmitters that would send the data and servers to receive it. The microcontrollers would receive the data through a physical cable from the water flow meters and then send that information wirelessly to the data server. We decided to hire an engineering team to ensure we are creating this product in the most efficient way.

Hardware Design

The core hardware needed to implement the aforementioned technologies are:

- A robust water flow meter which should have high sensitivity. Precision and accuracy are a plus to limit complaints. (one per appliance)
- A circuit board with a microcontroller resilient enough to handle high levels of humidity or isolated enough. This board should be equipped with a wireless module. (one per appliance)
- Screen/tablet waterproof that will display the real time usage. (only for some appliances)
- A small server computer will need to be installed so the information from each circuit board can be sent to the user. (one per home)



Figure 1. Hardware. From left to right: water flow meter, microcontroller, server computer & screen display

Software Design

The software needed will be divided into three essential parts: the user interface (display screen and monitoring app), the server software and the microcontroller programs. The microcontroller programs will be calibrated on installation to ensure that the information is properly processed and sent to the server. The client does not interact with the microcontroller program after it has been set up for the first time.

The user interface (app) will be easy to use but have a wide array of display parameters and filters. The interface (app) will be dynamic, appealing to the eye and easy to understand and navigate. It will analyze relevant statistics in relation with time (by the hour, by month, winter vs summer) and in relation with the activity (bathrooms, kitchen, garden, etc.) in relevance to water usage. The display screen will be an on and off screen that will simply show in numbers and graphs how much water the user is using at the time the water is flowing.

Prototype

After the designs are received by the engineering team and the revisions are submitted and applied, prototyping begins. The prototype will be created by the manufacturing company and will then be subject to testing. Since the hardware designs could offer different options for materials, multiple versions (3) of the device will be created and tested to select the best materials. For the sake of time, the software will be coded without an interface in the first prototype and will also help the team get familiarized with the core functionality. This first prototype should be capable of handling an installation of an interface as testing progresses.

Testing

There will be several test types including but not limited to: software stress, humidity resilience, overheating, tempering, connectivity, data transmission, water meter indicators (sensitivity, precision and accuracy), leakage, energy consumption, power outage behaviors and loss of calibration.

4.2 MANUFACTURING

Production

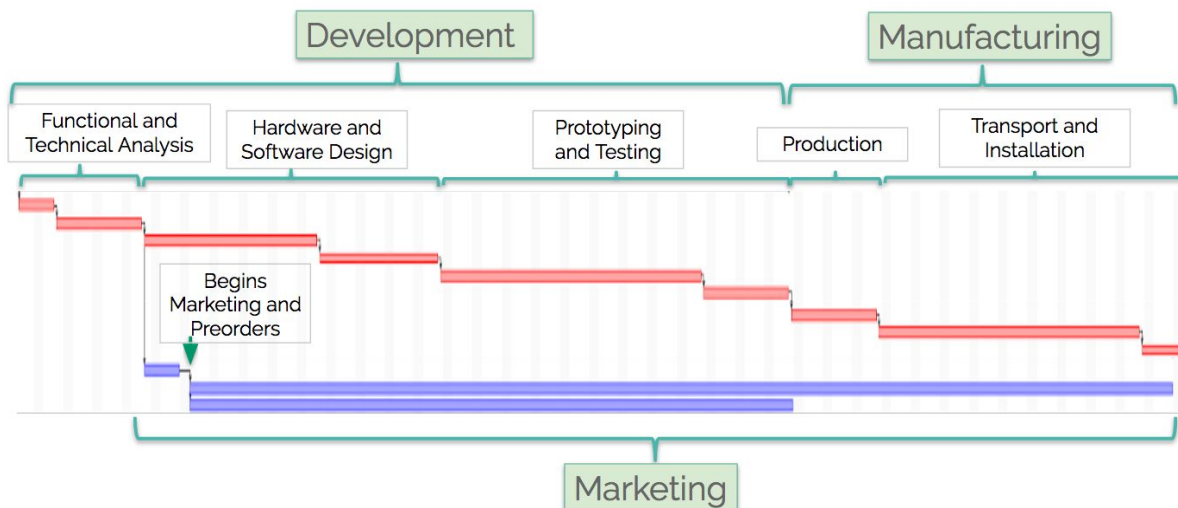
We will have a pre-order period, which we will use to estimate the number of devices that will be sold. Once this period ends, an order will be sent to the production company to build the number of devices sold in the pre-order period plus a 25% extra to have in stock in case of new buyers. An external, electronic manufacturing enterprise will build the device with all the characteristics described in the development phase. It is important to us that the manufacturing of this device is as responsible as possible in terms of environmental and social impacts. There will be stock to supply our customers in our warehouse and there will be a small stock for replacements, tests, marketing, etc.

Transport

The transport is included in the production process, the manufacturing company will be in charge of delivering the products to a contracted logistics company, which will be in charge of fulfilling orders and giving supply and demand reports.

Installation

Customers will have the option of having one of our technicians install and configure the device, or they can also choose to follow the manual and instructions and install it themselves.



4.3 PRODUCT MARKETING

Hire a Marketing Agency

We will choose an innovative marketing agency, both for on and offline marketing that specializes in SME's. We aim to sign an agreement of six months to one-year long. They will be provided with our marketing plan, mission, vision and any other details that provide insight on our

brand. They are to analyze this info and develop a marketing plan that we will evaluate, give feedback on, approve and launch.

Execute Marketing Plan

Based on the selected marketing plan, the first step is the market launch strategy to create a brand presence in order to increase the sales and the visibility. Hoping that the agency will use the inbound marketing strategy with three pillars:

- Content creation
- SEO optimization and key words
- Social media marketing

Preorder

The marketing agency is to creation of a pre-order online platform where the clients will be able to buy the device, knowing that, since it is pre-order, it will take some time to arrive. The pre-order period will end once the final prototype is tested and we are ready to start the production.

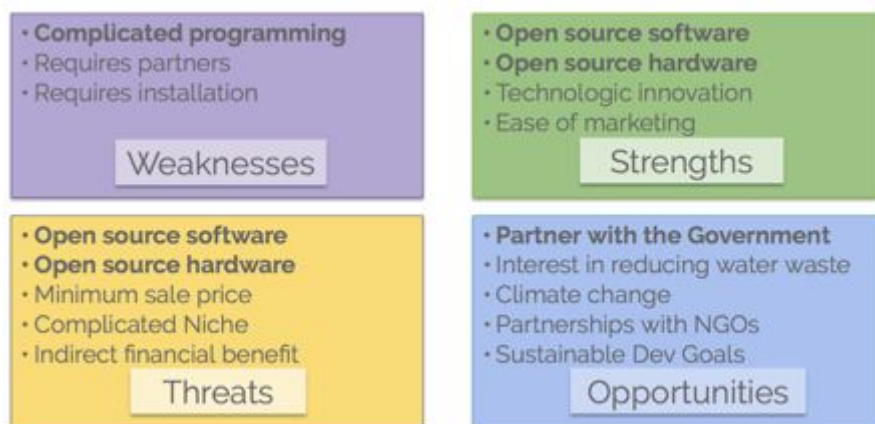
5. MARKETING PLAN

Whizwater's Marketing strategy is based on market research done by the *WhizWater* team. We believed the critical tasks of market analysis and product positioning required the involvement of the core members of our crew. However, it is important to keep in mind the execution of the marketing and communication campaign will be outsourced to a firm of marketing consultancy experts. The following content is a base for this firm, nothing is to be excluded, additions and improvements are expected to be further combined during the elaboration phase of the final campaign.

5.1 ANALYSIS AND DIAGNOSIS

SWOT Analysis

The SWOT analysis was the first business planning analysis we carried out. It allowed us to summarize the framework of our product's environment, and to set a common base for our team.



Here after find a detailed explanation of each section of *WhizWater*'s SWOT analysis.

Strengths

Our product is backed up by a monitoring application, this application's hardware and software was freely available to us online. Thanks to this open source, the design and development time of this monitoring service has been reduced by more than half, allowing us to speed up the development phase of *WhizWater* and thus to have it out on the virtual shelves more rapidly. In addition, our product will position itself on the trend of smart housing monitoring devices. The market of connected house is booming, smart water monitors are becoming a mix between trend and a necessity induced by the reality of a water stressed world. This message will be easily conveyed to our market as the target is aware and concerned of the climate situation the world is facing.

Weaknesses

The programming of the app is going to be time consuming as it needs to take in consideration many parameters. The issue is not the impossibility of the realization of such programming, but in the time it will incur. However thanks to the time saved thanks to the open source software and hardware, this time is able to be allocated to the app.

Opportunities

There is a big opportunity in term of partnering with big entities such as the government. There is an open spot for water monitoring amenities in schools and public places. Once the marketing campaign is launched we will decide whether or not aggressively prospecting for a partnership with governments. As terrible as our reality is, a big opportunity lies in the fact that climate is changing, and water is getting stressed and over consumed. This issue, as we've heard a lot about early 2018, affects major cities like Cape Town, but that's not the only one, São Paulo, Beijing, Cairo, Jakarta, Moscow, Istanbul, Mexico City, London, Tokyo, Miami. All those highly populated cities demonstrate prematurely the face of water stressed earth.

Threats

As the software and hardware is open source, it is also available to our concurrence. This needed to be taken into consideration, and the optimization of operations became a main goal in terms of delays. Those timeframes make this niche complicated to penetrate, however the demand for amenity monitoring devices and smart housing is predictably going to increase in the industry.

This analysis allowed the different units of our team to follow a common key strategic structure while developing *WhizWater's* planning. It ensured the connection between strategies, objectives and concrete action plans. It also established a monitoring competitive intelligence of the vulnerabilities of our product's environment, making sure it is taken taken in consideration in each step of our value chain.

MARKETING MIX : 7Ps

We decided to use the new 7Ps when doing our Marketing Mix, we identified we needed the additional layer of depth the 7Ps offer. Find hereafter each point developed.

Product

WhizWater features a mix between a product and a service. It is a technology intended for behavioral change, a real time monitoring device that can be consulted through different medium : a screen, an app, a shower light sensor, etc. All these different options are going to be offered through different product bundles, making our offer personable providing the user the best chances to save as much water as possible. It is a technology that helps saving water, helps detecting leaks and that is planet friendly.

Place

We decided to sell exclusively online through our website : www.whizwater.com. Our B2C model allows us to reach directly our target market, a growing percentage of the concerned population (see point 5 - people). Thanks to this decision we avoid all intermediary cuts and focus on expanding our market through an aggressive online presence.

Price

We decided to set our price on a value based pricing. The completeness of **WhizWater** in terms of monitoring service, of positive influence on one's behavior, of satisfying sense of caring for the environment, provides the perfect benefit features for a value based pricing. Our entry price is 199,90€ (that represents two water meter, the display and the server), our net margin on this bundle is 47,90€. Our objective was to fix a price that captures the maximum value for our customer.

In order to set our price we've also identified our competition, the product they offer and their prices, hereafter our main competitors :

- Buoy: Similar product / Equivalent bundles (without display)
Price for one meter : \$613,88
- Phyn : Similar product + Specialized in leak detection (without display)
Price for one meter (only one meter needed for entire home) :
\$850 USD + installation costs
- Flo : Similar product + specialized in water damage prevention (without display)
Price for one meter : \$499 USD

Promotion

- Early adopters : We will get our early adopters through a crowdfunding campaign, we hope to raise between 5,000€ and 10,000€ allowing us to produce and ship our first versions in previews before the actual launch day.

- Simultaneously, we will launch the online campaigns developed by an outsourced Marketing consultancy firm.
- We want to find around 3 different IT influencers active on the web, posting about environmentally friendly devices and to use them as a medium to reach our market faster. The marketing firm will be in charge of determining the most powerful candidates as **WhizWater** ambassadors.

Physical evidence

In order to demonstrate our product, we will use the research done through our market analysis (and previous pivot) and freely provide a selected sustainable hotel or hostel with a few of our **WhizWater** bundles. The goal is to monitor feedback on user experience, it is a a medium to reach feedback from all over the world's reaction in one place, as well as the opportunity to collect the owner's experience with the app. In exchange we will ask them to communicate on our product on a basis of twice a week during 45 days on all their communication platforms. We also want to create the Buzz, asking our marketing firm to create a campaign around footage of hidden cameras in public spaces filming people's reactions when confronted to **WhizWater**.

People

The customer segment we are targeting is the following : Environmentally conscious individuals, gadget lovers and monitoring freaks. They are new homeowners for the most part, ranginf from 20-40, curious about how the world functions and concerned about their impact as individuals. We believe that all those attributes can be found in a significant growing share of the market.

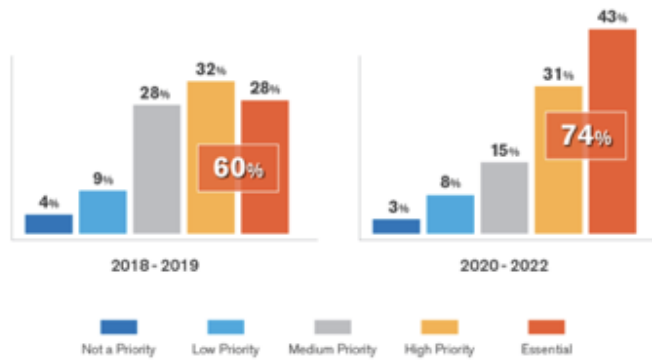
"A large [survey by BDX](#) indicates that 60% of home buyers consider smart tech essential or high priority in new homes. Other major studies report that [86 percent of consumers](#) prefer and are willing to pay for a connected home over a low-tech one." ⁴

Process

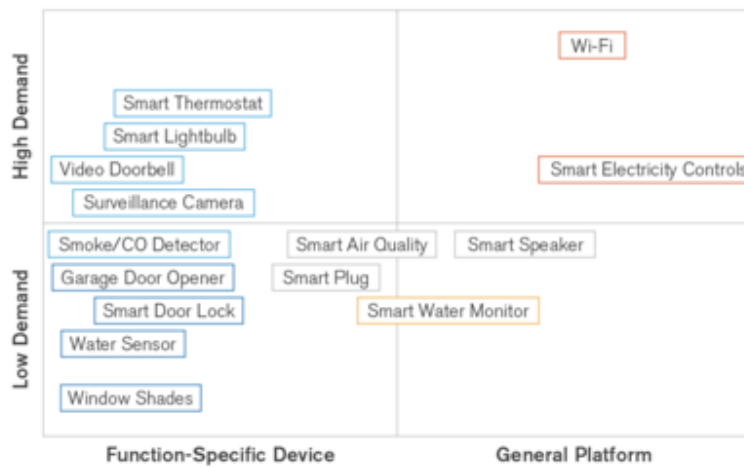
As part of one of our product bundle, it is possible order an installation of our product. It will be done by partner High-Tech Kitchen specialists or plumber companies. The same discount rates as our website will be offered to them when buying our product in bundles, it's by reselling **WhizWater** per smaller bundle that the .resellers will be allowed to make a bigger profit.

⁴ <https://goconex.com/production-builders-behind-smart-home-trend/>

Is smart technology essential in a new home?



Smart Home Devices – Demand versus Complexity



5.2 MARKETING OBJECTIVES

The objectives pursued with this marketing plan and with the hiring of the Marketing consultancy experts are the following.

- To penetrate the market by selling about 70 **WhizWater** units through our crowdfunding campaign (=raising a little over 8000€).
- To establish a baseline of information to provide the marketing consultancy firm
- To provide a direction and a framework for the building of the promotional strategic communication campaigns
- To position **WhizWater** as leader in water monitoring device, opening the door to other amenities.

5.3 STRATEGY

Visibility

As **WhizWater** is going to be exclusively sold online, the visibility of our product is a key concern for our team. This is the reason why we commonly decided to outsource the communication and marketing to a consultancy firm. This firm of expert will be working on the creation of our website for brand presence, the elaboration of the e-commerce platform. They will also be in charge of the content and planning of the posts in the following social media platforms : Facebook, Twitter, Instagram and LinkedIn.

The Marketing firm will also be in charge of designing a big “visibility campaign” aiming to reach as many potential sales as possible.

Customer Loyalty

In order to maintain our customers’ loyalty, we provide a 1 year maintenance free of charge. By offering this extra service to our customer during our first year in business will allow us to monitor bugs and to address them quicker. We will also be transparent about those bugs and report them on our website and share them in our FAQ “reported bugs” section.

In terms of complaint management, we ensure a 24h hour response time for any reported complaints, either by phone, on our website thanks to chatbox or by emails. We will also share upgrades on our platform, providing our customers with free updated versions of their monitoring app available for download. We also have a free return policy for any unsatisfied customer within 30 days after the day of reception of the customer’s **WhizWater** bundle.

Last, but not least, we will provide our customer the possibility of being interactive with their water consumption. By that we mean that one of the feature of the app will be, if decided, to share the water consumption of one household with another. With this extra service, we try to incentivize neighborhoods to challenge one another and thus to try and save the most water possible. A reward system will be elaborated.

Growth Strategy

Year N0-N2

During the first two years in business our goal is to make constant adjustments on latest **WhizWater** versions from the feedback we will receive from our various customer. We also want to share our data on water usage and the behavioral change induced by **WhizWater** and publish at least one article in a renowned scientific journal. We are also planning on launching aggressive marketing campaigns in identified cities under water stress. Indeed the potential demand is expected to increase for people who are directly impacted by water and thus increasing sale objectives.

Year N3-5

Once the product is launched, we want to start involving our customers to raise funds for free installation of WhizWaters in water stressed developing cities. We want to penetrate 3 cities under water stressed conditions within 5 years.

We also envision for **WhizWater** to participate CES, the consumer electronics show, one of the major show dedicated to technological innovation. In addition, we plan on partnering with futuristic cities like the Sustainable City in Dubai, demonstrating the real need of **WhizWater** in a sustainably concerned city. In year 3 we plan on hiring a Spanish consultancy behavioral experts to conduct research on energy consumption, amenities, prices and habit in Spain. The idea is to best learn from our customers, translate our model to adapt it to other countries habits and then to flood the market with **WhizWaters**.

Year N5+

By year 5 we want to have our main sales distributed in at least 3 different countries. We also want to start the possible multi brand strategy in Spain (the monitoring of other amenities, and to offer more complex bundles for smart housing). Eventually, we want to buy a warehouse to direct our operations and to use it for storage and shipping.

5.4 Action plan

The following action plan is an extract of a more detailed action plan intended for the marketing consultancy experts. They represent the first three tasks to be pursued by this team.

Action #1

ACTION #1	OBJECTIVE	TARGET	HOW?
Visibility campaign	To reach as many potential customers as possible	100+ potential customers reached	Social media : paid marketing campaigns on facebook / instagram
To be determined with the marketing consultants	15 days	Marketing consultancy firm	% of increased views on website + % increased sales
COST	DURATION	PERSON IN CHARGE	MONITORING MEASURES

Action #2

ACTION #2	OBJECTIVE	TARGET	HOW?
Client acquisition campaign	To sell as many units as possible and to create a customer database	200 clients registered in our customer database	Social media : aggressive communication on facebook, website, linkedIn, instagram.
To be determined with the marketing consultants	3 weeks	Marketing consultancy firm	amount of new clients registered in our customer database

COST	DURATION	PERSON IN CHARGE	MONITORING MEASURES
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Action #3

ACTION #3	OBJECTIVE	TARGET	HOW?
Determining best discount rates for product bundles	To sell more units thanks elaborated pricing in smart bundling.	To sell 50+ bundles to late adopters	Social media : aggressive communication on facebook, website, linkedIn, instagram.
Product bundle pricing strategy	10 days maximum	Marketing consultancy firm	The amount of new bundles sold
COST	DURATION	PERSON IN CHARGE	MONITORING MEASURES

5.5 MONITORING AND CONTROL

At *WhizWater*, monitoring and control is a main aspect of the work. We want to offer our clients only the best product possible, who else best than our clients themselves to be put at the core of this process. We have 6 strategic areas that are designed to include customers feedback into product development, key performance indicators listed hereafter :

- Amount of water saved per customer from one month to another
- Increase in customer database (Weekly upgraded map of *WhizWater*'s running)
- Increase in sales (per units / per bundles)
- Number of customer complaints (addressed within 24h / addressed over 24h)
- Time spent on the app / Amount of interaction of customers with the app

+ Externally induced monitoring included in product development :

- Feature feedback platform for customers to express themselves on our website for any improvement ideas, or usage experience shares
- Feature feedback easy click-on button for customers to express themselves on the app for any improvement ideas, or usage experience shares

5.6 Marketing Resources

The budget estimated for this Marketing Strategy is 40,000€. However the specifications of each communication campaigns are in the process of being developed, thus plausible unforeseen cost are taken into consideration when making strategic marketing decisions.

6. Financial plan

The financial plan of the *WhizWater* will be exposed throughout the following 5 years, including sales, manufacturing costs, marketing, personnel, development, etc.

As a start-up, it has been designed under a conservative plan and in a very pessimistic scenario in order to achieve the goals of the corporation. The commercial activity will start in January of 2019 in Spain. It will be valued to expand the commerce to other countries in the future.

The following assumptions have been made:

- Currency: Euro
- IVA: 21%
- Company tax rate: 25%
- Spanish fiscal, monetary and legal framework

6.1. INVESTMENT PLAN

The company's plan begins on July 2018 with a 6 month start-up period, during which the focus will be primarily on non-commercial activities like the legal constitution of the firm and the final stages of the designing process, prototyping and the development of the device. Besides, the app and website, as well as processes related with licensing, patents and lastly the pre-marketing efforts looking forward to launch the device on April. Also the marketing plan will start in this dates in order to raise awareness to the people and let them know we will land the product soon.

The start-up expenses of 6.000€ and the credit of 40.000€ contemplates the investment made between July and December 2018 for:

- Marketing plan and market test (€12.000): includes developing and selling test of our prototype into the market.
- Initial payments for developing of device and app (€1.700): 10% advancement pay product and app.
- Legal Constitution of the firm (€5.000): legal fees, consultancy, permits, etc.

STARTUP FUNDING	
Founders	6.000 €
Crowdfunding	6.611,06 €
Investors	40.000 €
TOTAL	58.611,06 €

External financing:

- 6.611,06 € crowdfunding
- 40.000 € investors

6.2. CONTINGENCY PLAN

In the case of not finding the required investment through external investors or crowdfunding, the founders will increase their contribution to €12.000 and will apply for a commercial loan of €46.000, with a 12-month grace period, 5% interest rate and 4 years to be paid, all conditions achievable under the estimations made.

6.3. SALES FORECAST

The following table shows the sales forecast for the first 6 months from when we start the commercial activity. As you can see the number of units that will be sold, is increased by 3% each month. The sales will increase in the same way for the following 2 years. In the next table can be seen the total incomes from sales for the following 5 years, and its variation regarding to the previous year. It can be seen that the variation in the second year is 162%, that happens because in the first year the company only sells during the last 6 months.

Concept	Unit sale price		January	February	March	April	May	June	Total	% sobre Total de
Two water Meter + Display + Server	120	Units to sell	194	200	206	212	219	225	1.256	
		Total monthly sales	23.261	23.980	24.699	25.440	26.204	26.990	150.574	61,6%
Extra water meter	20	Units to sell	291	300	309	318	328	338	1.884	
		Total monthly sales	5.791	5.970	6.149	6.334	6.524	6.719	37.486	15,3%
Extra display	10	Units to sell	97	100	103	106	109	113	628	
		Total monthly sales	960	990	1.020	1.050	1.082	1.114	6.216	2,5%
Installation	40	Units to sell	194	200	206	212	219	225	1.256	
		Total monthly sales	7.741	7.980	8.219	8.466	8.720	8.982	50.108	20,5%
Total sales			37.752	38.920	40.088	41.290	42.529	43.805	244.384	

	2018-2019	2019-2020	Variation	2020-2021	Variation	2021-2022	Variation	2022-2023	Variation
Sales (Incomes)	244.384	640.329	162%	832.428	30%	998.914	20%	1.198.697	20%

6.4. PERSONNEL EXPENSES

	2018-2019	2019-2020	Variation	2020-2021	Variation	2021-2022	Variation	2022-2023	Variation
Wages and salaries (Founders)	18.000	90.000	400%	112.500	25%	140.625	25%	175.781	25%
Individual founder salary	3000	15000	400%	18750	25%	23437,5	25%	29296,875	25%

Regarding Human Resources expenses the 6 founders will be the only members of the staff. This staff will start with no salary until we start to have commercial activity. From this moment they will be retributed with a €500 monthly salary during the first 6 months. The second year they will earn 15.000 € yearly and from there it will be increased 25% each year. As it can be seen that not until the second year will the founders start to receive a considerable amount of money.

6.5. MARKETING EXPENSES

The main operating expenses of *WhizWater* is related to marketing activities. Because the device will be sold through online platforms, the company's efforts to attract consumers through

the network will be intensive. During the first 6 months of year 1, the company will invest 12.000€ in marketing activities, and after that, the budget will rise up to 10% of the total sales (8% for digital and 2% offline) in addition to the €2.000 monthly to a total of €48.438,4 on year 1. The following years will be invested only the 10% of the total sales.

	Percentage on sales	July-December	January	February	March	April	May	June	Total
1. Digital marketing (SEO, SEM, etc)	8%		3.020,19 €	3.113,60 €	3.207,01 €	3.303,22 €	3.402,31 €	3.504,38 €	19.550,72 €
2. Offline marketing (Advertisement, promotions...)	2%		755,05 €	778,40 €	801,75 €	825,80 €	850,58 €	876,10 €	4.887,68 €
3. Fixed costs (on y off) independent of sales		2.000 € monthly	2.000,00 €	2.000,00 €	2.000,00 €	2.000,00 €	2.000,00 €	2.000,00 €	24.000,00 €
Total costs			5.775,24 €	5.892,00 €	6.008,76 €	6.129,02 €	6.252,89 €	6.380,48 €	48.438,40 €

	Percentage on sales	July	August	September	October	November	December	January	February	March	April	May	June	Total
1. Digital marketing (SEO, SEM, etc)	8%	3.609,52 €	3.717,80 €	3.829,34 €	3.944,22 €	4.062,54 €	4.184,42 €	4.309,95 €	4.439,25 €	4.572,43 €	4.709,60 €	4.850,89 €	4.996,41 €	51.226,35 €
2. Offline marketing (Advertisement, promotions...)	2%	902,38 €	929,45 €	957,33 €	986,05 €	1.015,64 €	1.046,10 €	1.077,49 €	1.109,81 €	1.143,11 €	1.177,40 €	1.212,72 €	1.249,10 €	12.806,59 €
Total costs		4511,8947	4647,2515	4786,66908	4930,2692	5078,1772	5.230,52 €	5.387,44 €	5.549,06 €	5.715,53 €	5.887,00 €	6.063,61 €	6.245,52 €	64.032,94 €

The Cost of Customer Acquisition (CAC) will be 46€, as our average ticket is €48,7, the gross margin is 32,6%, this data is for the first year. The next year the CAC will be 19.

Regarding Customer Lifetime Value (LTV), assuming that an average customer will buy from us once a year (RA=1) and that his relationship with the company will last 10 years (VC=10), our LTV will be 159. As it is 3,48 times the CAC and due to the nature of the product, the company finds this indicator is reasonable.

6.6. OTHER OPERATING EXPENSES

WhizWater will need to invest on other important issues in order to operate on the daily basis:

- Cloud Data storage for €500 monthly fee with a 10% annual increase because of the need for more space as number of users increase.
- Accounting and legal services for €350 monthly fee with a 3% annual increase.

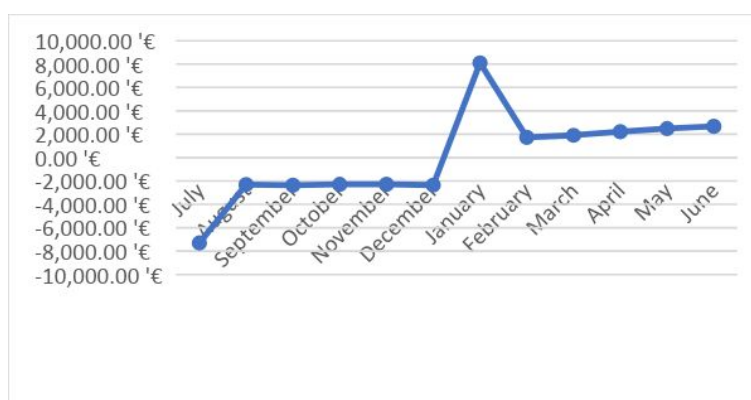
6.7. PROFIT & LOSS STATEMENT AND CASH FLOW STATEMENT

	2018/2019	2019/2020	Variation	2020/2021	Variation	2021/2022	Variation	2022/2023	Variation
Sales (Incomes)	244.383,97 €	640.329,43 €	162%	832.428,26 €	30%	998.913,91 €	20%	1.198.696,69 €	20%
Two water Meter + Display + Server	150.573,68 €	394.529,80 €	162%	512.888,74 €	30%	615.466,48 €	20%	738.559,78 €	20%
Extra water meter	37.486,44 €	98.221,14 €	162%	127.687,48 €	30%	153.224,98 €	20%	183.869,97 €	20%
Extra display	6.216,34 €	16.287,93 €	162%	21.174,31 €	30%	25.409,17 €	20%	30.491,00 €	20%
Installation	50.107,50 €	131.290,57 €	162%	170.677,74 €	30%	204.813,28 €	20%	245.775,94 €	20%
Sales costs	164.676,62 €	431.482,00 €	162%	560.926,61 €	30%	673.111,93 €	20%	807.734,31 €	20%
Gross margin/Sales	79.707,35 €	208.847,42 €	162%	271.501,65 €	30%	325.801,98 €	20%	390.962,38 €	20%
Wages and salaries	18.000,00 €	90.000,00 €	400%	112.500,00 €	25%	140.625,00 €	25%	175.781,25 €	25%
Consulting agencies	2.100,00 €	4.326,00 €	106%	4.455,78 €	3%	4.589,45 €	3%	4.727,14 €	3%
Office material	180,00 €	185,40 €	3%	190,96 €	3%	196,69 €	3%	202,59 €	3%
Marketing (on y off)	48.438,40 €	64.032,94 €	32%	65.953,93 €	3%	67.932,55 €	3%	69.970,53 €	3%
Cloud data storage	3.000,00 €	6.600,00 €	120%	7.260,00 €	10%	7.986,00 €	10%	8.784,60 €	10%
Legal constitution of the firm	5.000,00 €	0,00 €		0,00 €		0,00 €		0,00 €	
Operative outcome (EBITDA)	2.988,95 €	43.703,08 €	1362%	81.140,98 €	86%	104.472,29 €	29%	131.496,28 €	26%
Depreciation allowance	2.966,67 €	2.966,67 €	0%	2.966,67 €	0%	2.966,67 €	0%	2.966,67 €	0%
Total operating expenses	79.685,06 €	168.111,01 €	111%	193.327,34 €	15%	224.296,36 €	16%	262.432,77 €	17%
Operating expenses outcome (EBIT) o (BAI)	22,29 €	40.736,42 €	182683%	78.174,31 €	92%	101.505,62 €	30%	128.529,61 €	27%
Financial expenses	9.362,28 €	18.219,16 €	95%	19.749,75 €	8%	20.185,50 €	2%	20.772,91 €	3%
Financial outcomes	-9.362,28 €	-18.219,16 €	-95%	-19.749,75 €	-8%	-20.185,50 €	-2%	-20.772,91 €	-3%
Outcome before taxes	-9.339,99 €	22.517,25 €	341%	58.424,56 €	159%	81.320,12 €	39%	107.756,69 €	33%
Other incomes (crowdfunding)	6.611,57 €	0,00 €		0,00 €		0,00 €		0,00 €	
Outcome before taxes (EBT) o (BAI)	-2.728,42 €	22.517,25 €	925%	58.424,56 €	159%	81.320,12 €	39%	107.756,69 €	33%
Tax on profits	0,00 €	5.629,31 €		14.606,14 €	159%	20.330,03 €	39%	26.939,17 €	33%
Net outcome	-2.728,42 €	16.887,94 €	719%	43.818,42 €	159%	60.990,09 €	39%	80.817,52 €	33%
Economic Cash-Flow	238,25 €	19.854,61 €		46.785,09 €		63.956,76 €		83.784,19 €	

	July	August	September	October	November	December	January	February	March	April	May	June
Economic Cash-Flow	-7.306,67 €	-2.301,86 €	-2.364,53 €	-2.292,18 €	-2.287,31 €	-2.349,92 €	8.108,39 €	1.737,55 €	1.910,81 €	2.226,16 €	2.481,31 €	2.676,50 €

It is of extreme importance that the company counts with enough cash to cover all the needs from daily operations, as well as investing and financing operations. That's why on the initial investment plan, it was taken into account that the company will not be generating money during the first 6 months and it is not until month 7 that *WhizWater* will be able to cover its own expenses through revenues.

As the most critical year in terms of available cash is the year 1, here is presented a detailed monthly Cash Flow Statement. After month 7 and for the following years, the company is capable to finance its own activities. The fact that in month 7 there is a peak on the cash it is due to the incomes produced by de crowdfunding.



6.8. BALANCE SHEET

It can be observed how the assets and liabilities of the company keep a steady and significant growth.

	Opening 2018/2019		Ending 2018/2019		Ending 2019/2020		Ending 2020/2021		Ending 2021/2022		Ending 2022/2023	
	Euros	%	Euros	%	Euros	%	Euros	%	Euros	%	Euros	%
Fixed Assets	40.000,00 €	68%	49.033,33 €	32%	46.066,67 €	23%	43.100,00 €	16%	40.133,33 €	11%	37.166,67 €	8%
Intangible Assets	35.000,00 €	59%	52.000,00 €	34%	52.000,00 €	26%	52.000,00 €	19%	52.000,00 €	15%	52.000,00 €	11%
- Amort. Acumul. Inmovil. Intangible	0,00 €	0%	-2.966,67 €	-2%	-5.933,33 €	-3%	-8.900,00 €	-3%	-11.866,67 €	-3%	-14.833,33 €	-3%
Current Assets	19.000,00 €	32%	102.849,65 €	68%	154.321,57 €	77%	227.442,03 €	84%	309.278,00 €	89%	425.190,60 €	92%
Liquid Asset	7.350,00 €	12%	69.777,28 €	46%	97.581,66 €	49%	126.856,16 €	47%	152.227,39 €	44%	182.672,87 €	40%
Cash & Banks	11.650,00 €	20%	33.072,38 €	22%	56.739,91 €	28%	100.585,87 €	37%	157.050,61 €	45%	242.517,73 €	52%
Total Assets	59.000,00 €	100%	151.882,99 €	100%	200.388,24 €	100%	270.542,03 €	100%	349.411,34 €	100%	462.357,27 €	100%
Net Profit - Own Resources	17.611,57 €	30%	26.883,15 €	18%	43.771,09 €	22%	87.589,51 €	32%	148.579,60 €	43%	229.397,12 €	50%
Capital (Founders)	11.000,00 €	19%	23.000,00 €	15%	23.000,00 €	11%	23.000,00 €	9%	23.000,00 €	7%	23.000,00 €	5%
Residuary and previous years outcomes	0,00 €	0%	6.611,57 €	4%	3.883,15 €	2%	20.771,09 €	8%	64.589,51 €	18%	125.579,60 €	27%
Outcomes (including Crowdf)	6.611,57 €	11%	-2.728,42 €	-2%	16.887,94 €	8%	43.818,42 €	16%	60.990,09 €	17%	80.817,52 €	17%
Fixed Liabilities ("Long term")	40.000,00 €	68%	40.933,90 €	27%	25.276,27 €	13%	8.817,56 €	3%	0,00 €	0%	0,00 €	0%
Long Term Financial Creditors	40.000,00 €	68%	40.933,90 €	27%	25.276,27 €	13%	8.817,56 €	3%	0,00 €	0%	0,00 €	0%
Current Liabilities ("Short term")	1.388,43 €	2%	84.065,94 €	55%	131.340,88 €	66%	174.134,96 €	64%	200.831,74 €	57%	232.960,14 €	50%
Short Term Financial Creditors	0,00 €	0%	14.895,55 €	10%	15.657,63 €	8%	16.458,71 €	6%	8.817,56 €	3%	0,00 €	0%
Commercial Creditors	0,00 €	0%	69.170,39 €	46%	98.620,43 €	49%	128.206,57 €	47%	153.847,88 €	44%	184.617,45 €	40%
Taxes	1.388,43 €	2%	0,00 €	0%	17.062,82 €	9%	29.469,69 €	11%	38.166,29 €	11%	48.342,69 €	10%
Total Liabilities	59.000,00 €	100%	151.882,99 €	100%	200.388,24 €	100%	270.542,03 €	100%	349.411,34 €	100%	462.357,27 €	100%

6.9. FINANCIAL INDICATORS

NPV, IRR and MIRR

After analyzing the free cash flows of the project, we obtain as a result a positive Net Present Value (NPV), which tells the investor that it is a project worthy of capitalizing. Taking into account a discount rate of 8% (WACC), higher than the industry average of 6%, the NPV sits at 99.414,47€. The Internal Rate of Return (IRR) or return of the project is estimated at 40,38% for 5 years while the MIRR or return of the investor is 22,3%. Finally, the time to recover the initial investment on year one (payback) is 3,35 years.

Ratio	Result
NPV 8% (euros)	99414,47
IRR	40,4%
MIRR	22,3%
Payback (years)	3,35

Profitability Ratios

As shown in the following table, the first year the project is not profitable, generating losses to the company as it usually happens, but after year 2 a steady growth is expected with several indicators showing positive signs.

	2018-2019	2019-2020	2020-2021	2021-2022	2022-2023
1. ROE (Return On Equity)	NS	38,58%	50,03%	41,05%	35,23%
2. ROI (Return On Investment)	NS	20,33%	28,90%	29,05%	27,80%
3. EBITDA over sales	NS	6,83%	9,75%	10,46%	10,97%

Solvency Ratios

It is important to show that the cash flow of the company is enough to meet long and short-term liabilities across the 5 years estimated.

	2018-2019	2019-2020	2020-2021	2021-2022	2022-2023
1. Solvency	1,22	1,28	1,48	1,74	1,98
2. Acid Test	1,22	1,17	1,31	1,54	1,83
3. Availability	0,39	0,43	0,58	0,78	1,04

Working Capital

The company has applied a structure that allows the company to have enough resources to finance its operating activities as shown on the following table, where all the amounts of working capital are positive through the 5 years forecasted.

Break Even Analysis

The breakeven point of 273.020,05€ for the first year will not be reached because of sales estimations of 244.384€. However, the indicator will be surpassed on the following years as shown here.

	2018-2019	2019-2020	2020-2021	2021-2022	2022-2023
Breaking Point	273.020,52 €	571.291,19 €	653.297,66 €	749.585,15 €	868.313,00 €

Conclusion

As it was illustrated in this paper, **WhizWater** is looking to make a difference. We have clear values and set goals that we believe will help consumers and users take charge and feel empowered in their daily consumption decisions. We are confident investing in **WhizWater** will provide value to investors as well as users, we invite you to become part of our family and help us, through technology and fun user interactions make this world better and safer for future generations. Let's be the change.