

Business
Report
2020-21

Flow  **N**

we change the flow of things

EXECUTIVE SUMMARY

PROBLEM

Water gives life to the world and it constitutes 70% of our blue planet. However, only 7/1000 is safe to drink and its distribution is unstable. Close to 2.6 billion people today have no access to safe drinking water; 10 million of them die every year, due to those limitations. Experts have warned us: a global water crisis threatens the health of billions of people as well as the countries' stability.

The way we manage our water resources will decide have as a result our fate on the planet. However, those water resources are unfortunately not managed efficiently. Water, especially in public areas, is usually considered to be a free resource. Also, the pandemic resurfaced the safety issues of public water taps. UN point out: Hand hygiene saves lives!

SOLUTION

In order to become part of the solution, we have created FlowON!

Our vision: to create a sustainable future for all. Our mission: to develop innovative technologies and take initiatives to reduce our water footprint. We strive to protect public health, and we are the only business focusing on the production of advanced, automatic, instant water-saving systems for outdoor taps. We have created a new market, with new products adjusted to the special needs of outdoor spaces.

PRODUCT

Our product, exclusively developed by us, is applicable to any type of outdoor tap, transforming it into a smart tap! It turns on and off automatically using motion sensors, it has a locking mechanism temporarily deactivated by its operator, it requires no contact by the user.

MARKET & CUSTOMERS

We aim both at the public and private sector. Our priority is all the school units of our country, but we aspire to install our system in all outdoor taps found in parks, playgrounds, sports areas, hotel units, petrol stations, educational institutions, homes, wherever people live in vulnerability, everywhere!

The domestic, European and foreign needs shape a particularly advantageous environment for our business. Our product is already impressively accepted by various municipalities, the University of Macedonia, many consumers and PTAs.

PROSPECTS

The above justifies that FlowON is meant to function profitably, with annual sales of at least 150 items the first year, at the price of 19.99€/item, and 10000 in the 5th, at the price of 17.99€/item.

Having designed our product in a way that it is highly customisable and adjustable, it can easily be adjusted to fit every tap. In the very close future, we intend to improve our product and penetrate the global market, while we have already applied for a patent. We are also evaluating a business proposal made to us from one of the largest Greek companies in water automation which contacted us with the intention of future collaboration.

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STARTING UP

FlowON was created in October 2020 by 21 students, aged 15-18.

We chose to deal with the conservation of one of the most valuable goods for humanity, water.

We came up with this idea when we realised:

- how much water is being wasted daily in our school's water taps.
- that these taps are being touched by hundreds of people every day, raising hygiene concerns, especially during the pandemic.

For these reasons, we have decided to **develop** innovative and advanced automatic instant water saving systems for **outdoor taps**.

Our systems easily transform any tap into a smart-contact faucet, which works with a motion detector:

- allow us to save water in outdoor taps and
- operate without contact, preventing the transmission of germs or viruses.

We decided from the beginning to **create the product exclusively on our own** because team members had the knowledge and skills to design and produce that which helped us to:

- overcome the practical difficulties during the lockdown and
- handle complexity of the designing process.

Access to safe drinking water is a human right! Though, water is becoming less abundant, while reducing our water footprint in outdoor spaces, public or private, is not a priority.

Determined to be part of the solution, we created an innovative product which

- reflects our research interests but, mainly,
- has the dimension of social contribution.



What Makes FlowON Unique

Our product combines durability, reliability, affordable price and a great social value. It gives a simple and cheap solution to a global problem.

With a **vision** of a sustainable future for all and a **mission** to develop innovative technologies and take initiatives to reduce our water footprint.

We desire to become the change that we want to see in our world.

OUR PRODUCT

Our products are designed exclusively by us with excellent know-how. The autonomous design department of our company utilizes the most modern robotic technology, aiming at a modern and functional result from the design to its final form. Our executives have the knowledge and the skills that ensure our company the autonomy and decision-making flexibility and ensure the continuous development of our products.

Our Production Department's main concern was the creation of a sustainable, energy-independent, durable device that will be an affordable and easy-to-install solution for our customers.

Our current production process consists of 3D printing some of the components, working with sheet metal and buying a few off the parts. Then, the final assembly is done by our staff

The features that allow our device to operate in outdoor spaces are:

Weather resistance.

Independence from the main electricity network (rechargeable battery with an autonomy of 8 months).

The anti-theft technology implemented. (Very important for a device installed in public spaces.)

Our product is also:

Very cheap.

Very easy to install (The only thing required is to attach the device to the tap and lock it in place.)

Able to be temporarily deactivated by its operator.

We have also designed, and will soon produce, models that take advantage of the flow of water and solar power to recharge themselves and others that can connect to

the internet through a wireless network. These models will be able to give live feedback related to their status and, in some cases, to operate indefinitely without having to be recharged manually. Additionally, we already have a patent pending using the prize money from the Greek JA competition.

We serve two main **goals**:

The reduction of outdoor tap water consumption by up to 80% (with the tap running we consume 15-20 liters of water; we need less than 3!).

The reduction of exposure to viruses and germs by more than 98%, compared to a manual tap (a common tap carries 127000)

We serve the triptych: ecology, economy, and health. Our accessory saves social and private resources, limits water consumption, helps us save money, and also protects against the spread of diseases. The design of our product is in line with the principles of sustainability in the frame of the three E's of sustainability (Environment, Economy, and Ethical).



Our first priority is the installation of our device in the 14175 school units in Greece, with an average of 4 outdoor water taps in each school. We are also organising a campaign aiming to motivate students to start drinking tap water again.

MARKET AND CUSTOMERS

FlowON has put the pillars for the creation of an unknown till now market , with great prospects and high social value.

This market has been segmented into two groups of consumers:

Public sector (public authorities and water-supply network managers)

The circumstances formed are extremely favourable:

From 1st July 2021 onwards, all Greek Municipalities are obliged to provide safe, free drinking water, encourage reusable water containers and expand the water tap network in public spaces within the limits of their jurisdiction. (Implementation of Directive EU 2019/904)

Private sector, mainly hotel units, offices, petrol stations, garages and private educational units that want to minimise water waste in their public water taps, while protecting their staff and clients. Our products also aim to help households save water and money.

Public sector
14175 school units
1700 parks
20000 playgrounds
25 universities

Private sector
9971 hotel units
57000 industry businesses
3700 petrol stations
1136 private educational institutes
2457437 detached houses

BUSINESS ENVIRONMENT

The global population has been doubled since 1950; the water consumption has increased six-fold! Managing water resources and ensuring its future availability are deemed of critical importance and should be prioritised over the next few years. In the meantime, the pandemic highlighted the problem of poor hygienic practices related to public water taps.

Greece is a country rich in water resources, but with seasonal and spatial deficiencies. The increase of population during the summer, especially on water-deprived islands, the concentration of 6 million people in 8 cities and the fact that 1/4 of Northern Greece's water is imported, highlight the importance of efficient management of our water resources. The public needs to be informed and trained on how to save water and use it efficiently. This is also apparent to our national authorities, which have recently announced a program that subsidizes water saving practices.

Furthermore, it is a time period where more and more **public movements** appear demanding public water fountains.

The **European Commission** encourages green public agreements, which promote sustainable development.

EU and **UN** also promote the value of clean, safe water and our right to adequate, free access to it, the reinforcement of people's trust to tap water, the reduction of plastic waste associated to bottled water.

Moreover, the COVID-19 pandemic has highlighted the importance of sanitation, hygiene and adequate access to clean water for preventing and containing diseases. UN experts said that COVID-19 pandemic will not be stopped without access to safe water for people living in vulnerability.

FlowON is the only company aiming to develop and promote technologies which will allow us to save water in outdoor taps, reduce the spread of pathogens and prevent infections.

With its products, FlowON contributes to all the global efforts for a sustainable future, supporting the goals set by UN for good quality water (6th Goal), health and prosperity (3rd Goal), sustainable cities and communities (11th Goal), responsible consumption and production (12th Goal).



As a result, a very positive business environment has been formed for FlowON, on a national, European and global level. The increasing sensitivity of the public to the importance of water is expected to change the perspective on the use of water saving devices by both the public and governments. FlowON can directly benefit, by increasing its sales volume, and indirectly, by the funding that many local public authorities will receive.

This favourable environment is reflected on a proposal of one of the largest Greek companies in the field of water automation which contacted us with the intention of further collaboration.

Human
Right 
2 water



SWOT Analysis

Strengths

- Product's uniqueness
- Affordable prices
- Know-how
- Easy to install
- Adaptable to any outdoor tap
- Competent and effective team
- Low financial needs

Weaknesses

- Facing with severe cash shortfall
- Absence of an online store
- Need for product improvement - energy autonomy

Opportunities

- Great consumer interest
- No market competition
- Consumers' and governments awareness for water resources protection
- COVID-19 pandemic highlighted the need for safe drinking water in public places
- Media's Interest in our Product and Business
- Municipalities' legal obligation for installation public taps
- New government subsidized programs for water consumption
- Cooperation proposal from a large company that makes variable water automations

Threats

- Easy product copying
- Ease of entry of new producers in the market
- Loss of Exclusivity if we accept the cooperation proposals

SALES AND MARKETING

A thorough research has been conducted by our Marketing Dpt and its results were really optimistic. Many public organisations across the Greek territory, such as municipalities and greater regional units have expressed interest and furthermore have placed orders to install a variety of our products not only in schools and universities but also in other public area taps such as parks and kindergartens. Except that, a tremendous interest from individuals who own a vacation house has arisen from our website and our social media. All these factors gave us an insight that a big trend there has been established as far it may concerns our products and a need for our society in general is revealed.

Another insight that was revealed from our Marketing Dpt research, was that the optimum sales price of the product has been fixed at 19.99€ based on our costing method and simultaneously with a price that was affordable to our customers. Except individuals, plumbers, hoteliers and petrol station owners were well-disposed towards this price.

A five-year sales conservative prediction (Table 1) estimates a mixed profit starting from the first year of Flow ON operation. In the same year, we estimate net profits, without staff salaries included. They can be justified from 2023 and onwards. In 2022, we could enhance the sales channel of retail through the establishment of our E-commerce (e-shop). The marketing department's costs of operation have been estimated close to 5% of our sales. As the orders for raw materials increasing, we can get better prices from our suppliers, and as a result a decrease in manufacturing cost at the rate of 10% is a fact. This will benefit our customers. We choose this **pricing policy** so as to build stable relationship with our customers due to our corporate ethic which implies clarity, trust and respect to them.

Our break-even point is projected to be in 2021, at 40.3 pieces for the sale of 150 pieces priced at 19.99€ (Table 2). Self-financing of all our permanent manufacturing equipment is anticipated at the end of the upcoming five-year period.

The size of the domestic and global markets and the demand for our products justified optimistic forecasts but if we accept the cooperation proposal the forecasting will change.

Currently, we follow a direct sale model. Making use of various web marketing techniques, we aim to raise our visitors' interest in our products, to offer easily accessible information about ourselves and to publicly present our competitive advantages.

We utilise marketing tools (our Facebook and Instagram accounts), in order to communicate our values and philosophy to the public, as well as to promote our products to potential clients with minimal costs. Content Marketing, mainly the business video that we created, got us over 2500 views in less than a week. Also, we have created a commercial spot along with posters and flyers.

We also made good use of the media, with articles in the press, conferences, radio shows and TV interviews of our staff not only on national TV channels but also on radio stations.

Finally, participating in "Junior Achievement Greece" competition and winning the first place was a unique opportunity to promote our business.

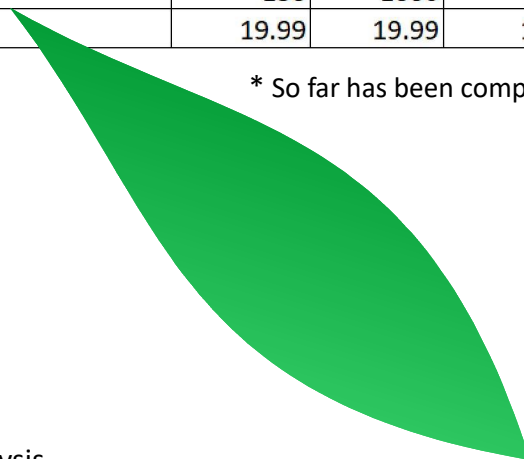
Table 1 Sales forecast

FLOW ON					
Sales forecast					
P&L Statement					
	FY 21	FY 22	FY 23	FY 24	FY 25
Sales	2418	16121	43524	87048	145081
Purchases	713	4753	11405	17100	28501
Production Wages	495	3303	7926	11883	19806
Cost of goods sold	1208	8056	19331	28984	48306
Gross Margin	50%	50%	56%	67%	67%
Gross Profit	1210	8065	24194	58065	96774
Operating Expenses					
Salaries, Commisions and Bonuses			-6944	-13888	-27255
Stationery	-10	-100	-200	-200	-200
Rent & Leasing		-500	-2000	-3000	-5000
Website maintenance Cost	-15	-15	-300	-300	-300
Marketing	-300	-806	-2176	-4352	-7254
Logistics		-200	-1200	-2500	-4000
Salesman Cost		-800	-1200	-1200	-2500
Total Cost	-325	-2421	-14020	-25440	-46509
EBITDA	885	5643	10173	32624	50265
	FY 21	FY 22	FY 23	FY 24	FY 25
Sales item Forecast	150	1000	3000	6000	10000
Pricing	19.99	19.99	19.99	19.99	19.99

* So far has been completed 22 orders from 150.

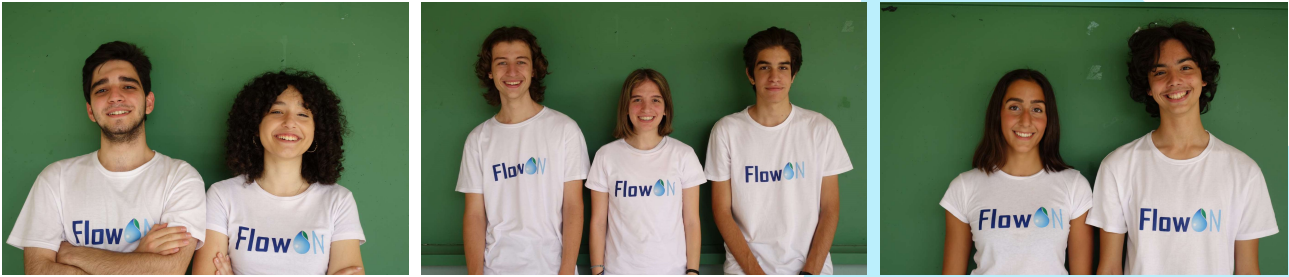
Table 2: Break Even Analysis

Break Even Analysis	P =19.99	P = 19.99	P = 17.99	P = 17.99	P = 17.99
Fixed Cost per Unit	325 €	2421	14020	25440	46509
Variable Cost per Unit	8	8	6	5	5
Sales	150	1000	3000	6000	10000
Break Even Point	40	300	1739	2629	4806
Total Revenues	2418	16121	43524	87048	145081
Total Costs	1208	8056	19331	28984	48306
Profit	1210	8065	24194	58065	96774
Gross Margin	50%	50%	56%	67%	67%



MANAGEMENT

Based on the model of a real business, we have staffed the departments according to our abilities, interests and future educational goals, and we have applied team-oriented leadership model.



With many participations and awards in programming and robotics competitions, our **Production Department** designed, developed and assembled our product.

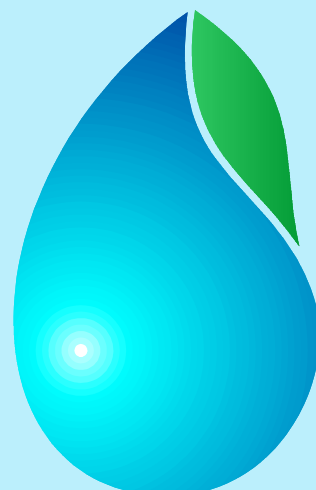
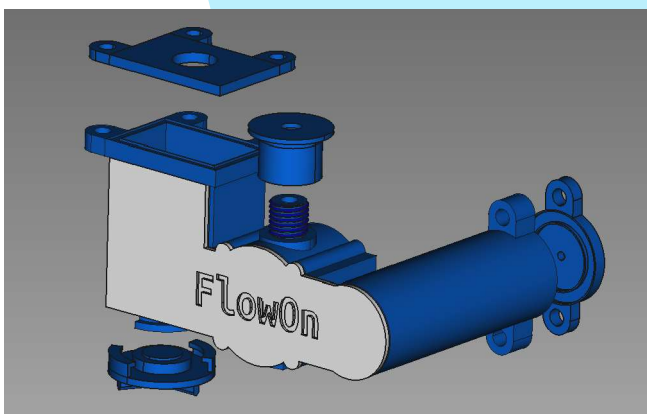
The **Financial Department** secured the necessary funds and has implemented the business's financial analysis.

Our **IT Department** created our website, which they are managing alongside with our social media.

The **Commercial and Public Relations Department** ensured the business's outreach to public authorities and to many potential clients.

In order to improve ourselves and develop the necessary skills, we have utilised knowledge gained by taking part in the Economy Club of our school. We studied relevant material and participated in many JA webinars. Last but not least, we had the support and consulting of many experts (academic, electricians and plumbers, the creators of London's public Bronze Drinking Fountains). In order to get in touch with our future clientèle such as public authorities, we organised meetings with mayors from various Greek municipalities.

The quarantine made the coordination of our team particularly difficult. We had to apply teleworking practices, which provide the additional advantage of lower operational costs in the future. Under challenging circumstances, the commitment to a common goal, the specifically assigned responsibilities as well as the excellent working environment, which was created over the internet, became the guiding forces towards our success.



FINANCE

It was decided that the first batch of products that will be produced (to be used as samples) will be 12 pieces.

All the departments are operated by our staff, working without pay and offering their services remotely. Also, our commercial techniques due to our technical means of our IT Dpt had zero cost.

In the future, FlowON will be a very profitable company. Its financing needs have been calculated to be around 20,000€. Possible sources of capital are: Sponsorships from non-profit institutions, prize money from competitions, EU program funds, micro-financing and crowd funding. We will also be leasing the necessary equipment to reduce our fixed costs.

Profit & Loss Account FY 21

Sales	2418
Purchases	713
Production Wages	495
Cost of Sales	1208
Gross Profit	1210
Stationery	10
Website maintenance Cost	15
Marketing	300
Total Expenses	325
Operating Profit (or Loss)	885
Miscellaneous Income	0
Net Profit (or Loss)	885
Corporation Tax Payable	580
Profit after Tax	304
Balance should be null	304

Flow on

Balance Sheet

Assets		Liabilities	
Cash	704	Accounts Payable	100
Inventory	100	Unearned revenue	-
Total current assets	804	Total current liabilities	100
		Shareholder's Equity	
Intangible assets	-	Invested capital	704
Total other assets	0	Total Shareholder's Equity	704
Total Assets	804	Total Liabilities & Shareholder's Equity	804

PROSPECTS

We have also designed, and will soon produce, models that take advantage of the flow of water and solar power to recharge its self. These models will, in some cases, be able to operate without having to be recharged manually.

Additionally, we already have a patent pending using the prize money from the Greek JA competition. Our expansion in the global markets is one of our future goals. Our product, although it currently can only be used for outdoor taps in Greece, was intentionally designed in such a way that makes it very easy for us to adapt it to fit any tap in the world.



Consciously and with a sense of responsibility, we "Change the Flow of Things".



To us, sustainability is a choice.

We serve and strive to accomplish UN's goals for clean water, good health, sustainable cities and communities, responsible consumption and production.

We support the circular economy model, promoted by the EU.

We protect our citizens' health.



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