

Central European University  
Department of Economics and Business  
MS in Finance program



Capstone project summary:

# **Strategic and financial planning for an early-stage startup company**

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## 1. Introduction

The purpose of this writing is to summarize and present my Capstone project that I created for my Master of Science in Finance program at the Central European University. First, I will introduce the client, Water MiniLab, their short history, the phase of their development when I started working with them and the reasons why my Capstone project could create value for the company. After that I will focus on the key considerations and challenges of the project and provide an insight into the main outcomes of my work. Lastly, I will summarize my learning experience and provide my brief evaluation of the project.

## 2. The client: Water MiniLab

Water Minilab is a startup company founded in the beginning of 2020 with the aim of developing innovative water-testing solutions. To decide whether their idea was worth developing, the founders challenged themselves at a university-wide startup competition in late 2019. Consequently, the company received their first investment which was planned for a year. As they proceeded, their original idea developed into a new concept, their funds were depleting and a new investment round was needed, however due to the founders engineering background profound business knowledge was lacking. As Water Minilab's solution developed intensively since the idea was born, their business plan and financial plan had become outdated. I was required to develop a new business plan basically from scratch to present the current state and potential of the company.

## 3. Project details

### A. Scope

The original scope of the project was based on two pillars: a business plan and a supporting financial plan according to the templates of Water MiniLab's previous investor, Hiventures. The business plan had to include an executive summary, the introduction of the company, its innovative product and service mix, short Hungarian and European market analysis, sales and marketing plan, risks and their mitigation plan, available resources, and future investment needs and their uses. The financial plan was required to present a monthly breakdown for the first year and yearly breakdown for another 2 years. The main objective of the project was to create an investor package which clearly proves that Water MiniLab is worth investing in. Later, as both sides were satisfied and enjoyed the joint work, the scope of the project was extended for an investor pitch as well. In this sense, under my Capstone project – with the great help and support of the founders and the company mentor – I basically executed the whole process of raising capital for Water MiniLab.

### B. Main challenges

#### i. Active shaper of the strategy

When I joined Water MiniLab, the company was in the middle of a significant pivot, a change of direction in their solution. While the issue – obsolete water measurement techniques – remained the same, their product and supposed clientele changed dramatically: from a B2C phone application Water MiniLab moved towards an internally developed product and service provided for industrial uses. Although a high-level concept and a goal was in front of the founders, a clear, presentable strategy as well as a detailed plan was missing. Thanks to the trust and support of the founders, instead of just structuring their ideas and creating the connecting financial plan I was given noteworthy responsibility to co-construct the aforementioned elements of the company. This, however, clearly meant a much larger pressure and dedication as well.

## ii. Bringing in learnt materials

From the beginning of joining the company I tried to utilize the concepts learnt at MS in Finance as much as possible. One of the fields where it could have provided the most added value was the exploration of alternative funding opportunities, but the concepts had to be adjusted for the realities of the European/Hungarian business scene and startup nature of the company. I had learnt about optimal capital structure and different ways of financing at the courses of Entrepreneurial Finance and Financial Management as well, so I also encouraged the founders to look for different options besides their previous investor who worked with quite favorable, yet inflexible terms. There are few angel investors and private equity firms who work with startups at such an early stage, and debt was also out of reach. I still managed to set up meetings with three potential professional investors and signed the company up for a startup competition/incubation program organized by a large telecommunications company. Regarding this latter one, Water MiniLab was selected for investment out of a hundred teams based on my presentation. For the consequent negotiations a company valuation was asked from us, so I prepared a basic DCF valuation, weighting in the terms of Hiventures already in place. This, nonetheless, was significantly more difficult than expected due to the high number of assumptions which leads to the next chapter: lack of data.

## iii. Real-life issues: lack of data

Generally, as a very newly founded business, lack of trustworthy data prevailed in many spheres of planning. While in some subjects – despite being very specific – benchmarking helped, there were questions in which it was impossible to even guess. One of such cases came up during the creation of the pricing structure. In order to provide a low capex intensive development opportunity for customers, as well as a stable revenue flow for Water MiniLab, I proposed a mixed structure of a relatively lower price for the water analyzing product and a higher one for the monthly service which included frequent maintenance and materials necessary for a fixed number of measurements. It is fairly simple to model how different prices for the product and the service affects revenue. For example, if a certain lifetime of the equipment is verified, the product itself could be given free of any initial charges, and the contract for the service be priced in a way that satisfies margin expectations. However, as the product was at the phase of early development and had never been tested in its expected industrial environment it was impossible to determine how often the product needs maintenance or after how many years it is worth replacing with a new one, therefore the optimum price of the product and the service had to rely on serious assumptions as well.

## C. Outcomes

The main deliverable was the business plan which totals 24 pages and includes all required topics: an executive summary, a detailed description of the company's activities (covering its product, service, and R&D), a market analysis, sales plan, future risks and their mitigation, key resources and partners and the short explanation of the financial model. This latter one, the financial plan satisfied the requirements as well and was presented to and accepted by all shareholders. As mentioned earlier these documents were complemented with an investor pitch as well, including a PowerPoint presentation of more than forty slides.

## 4. Benefits to the client

I believe I contributed substantially to the development of Water MiniLab's business, not only by leading the investment process and raising capital, but also through co-crafting its future strategy. I took an active role in both cases, working very closely, often discussing for hours with the CEO of Water MiniLab and its mentor. Water MiniLab works on an important issue and has all the resources to become a huge success, but due to the founders' history, their public image and business considerations fell short

earlier. I think I helped a lot in transforming abstract and undefined issues into actionable plans and an attractive business opportunity. Regarding the investment process, besides the concrete deliverables, I also expanded the company's choices by bringing in potential industrial partners and investors. After several presentations and negotiation rounds the original investor, Hiventures was chosen for the next round of investment, but it was essential to map other options. With some investors we built quite good relations, some even expressed their future intent to invest in another round.

## 5. Learning experience

I especially liked my Capstone project because not only could I provide value to the client but learn invaluable lessons myself as well. I can divide my learning experience into three categories: A) personal, B) general business and C) specific financial knowledge.

### A. Personal

My Capstone project has clearly contributed to my personal development as I realized a very significant element of my life: I like stability a lot and am not that flexible than I might have thought. This realization stems from another one, namely that I found the startupper life very unpredictable and unpleasant. It is important because previously I imagined my life exclusively in the Hungarian/European startup scene, which changed dramatically during my project. While very exciting and motivating on the one hand, it is also very stressful and carries enormous personal risks that I do not intend to take at my current phase of life.

### B. General business

I also learned and improved general business skills such as how to communicate and cooperate more effectively in small groups. It was interesting to see that communication channels as well as knowledge centers were absolutely not in place at the company, organizational knowledge basically did not exist and everyone turned to the CEO with any issues. It is partly understandable as so far the team was very small but with their expected growth, a less horizontal organizational structure, and more importantly knowledge centers must be developed. I started this process with the very simple step of at least creating a common G-Suite platform where the main documents can be shared and reached by anyone. I planned some team building activities as well, but unfortunately these remained plans due to COVID-19 restrictions. Other general business skills that I improved include negotiation techniques, project management and presentation skills.

### C. Specific financial

Implementing financial concepts in real life highly helped my understanding of them. By the development of a financial model I had to apply previously acquired knowledge in an entirely new setting and that was the process which truly put the pieces in place and made me understand why certain points were highlighted during class. I also had to study and entirely apprehend the terms of the investment contract including such options as the drag-along or tag along rights.

## 6. Conclusions

All, in all I enjoyed my Capstone project a great deal, it provided both ample of challenges and successful, enjoyable moments. I was given the responsibility and opportunity to carry out meaningful work, to thoroughly understand a complex issue and its solution and improve a startup's business to my best knowledge. I enthusiastically took on the challenge and believe that during my Capstone project both I and Water MiniLab progressed a lot. I hope the company founders would also agree that we not only achieved our previously stated goals but outperformed our initial expectations.