

1 Business and Financial Planning for a FinTech Start-up

Capstone Project Summary

Gergely Szlobodnyik

Introduction

This project is centered around the business and financial planning for a FinTech start-up closely linked to CEU. TraceRiser is a developing SaaS solutions for Audit Data Analytics. It employs artificial intelligence and machine learning approaches to identify red flag transaction in high volumes of financial transaction records. The capstone project's purpose is to build the core of the business and financial plan that can be used in fundraising. In the business plan I covered several significant aspects, such as service and product, market opportunity, marketing and sales, business organization, implementation schedule. In the financial plan I focused on planning of the costs arising in the first 5 years in order to identify the financial needs TraceRiser requires. A key challenge was to build sustainable a financial plan. Beyond planning, I took a significant role in product development in order to deploy some new functional features of TraceRiser's AI Audit platform.

Outline of the work

Auditor professionals are exposed to an exponentially growing volume of financial transaction records. Even in the case of a small-to-mid scale regional company, the number of transaction records generated in a year can easily exceed 50,000-100,000. In international companies it is not rare that 10,000 transaction records are generated on a single day. Clearly, handling thousands of transaction records manually is infeasible. However, this is commonly the case in the practice of external and internal audit. Auditors perform manual or semi-automated sampling procedures and elementary rule-based risk-identification methods. Sampling is a procedure that selects and evaluates less than 100% of a population to estimate some characteristics of the population. Regardless of its specific type, sampling inherently conveys significant disadvantages. Sampling and the related activities take several days of high workload, this way requires significant cost, effort and time. Even if a fraudulent transaction is detected, the significant time-consumption associated to sampling procedures limit the auditors chance to act in time. Another significant disadvantage is sampling risk: the risk that an auditor reaches an incorrect conclusion based on drawing an unrepresentative sample. Rule based auditing refers to the procedure of identifying and evaluation transactions of well-specified attributes. For example, transactions entered during

the weekend or out of business hours might be suspicious. Rounded numbers are also relatively rare in large population and spurs auditor to scrutinize them. Unfortunately, employing simple rule-based fraud detection methods does not allow for filtering for a considerably small subset of relevant transactions. Using simple rules provides auditors with large set of transactions records to be evaluated. This way auditing remains inefficient in terms of time-consumption, cost and efforts. It is also important to emphasize that experienced fraudsters can easily hide their fraud-related transactions from that of defined by simple rules. It is commonly said nowadays that frauds get more and more complex that can be hardly captured by simple rules.

The first challenge was to understand the service of TraceRiser. Given a clear vision of the service, working together with a marketing expert Elen Mikayelyan, we identified key market segments: internal audit and external (financial) audit. Once the market segments were outlined, my task was to build up a business plan proposal. In the business plan I considered the service so that to capture its potential competitive edges compared to the specific features of the competitors. I was responsible for the internal market segment. I provided a conservative estimation and a sub-segmentation procedure in this specific segment. The estimation of the size of this segment was the starting point of the financial planning procedure. In my capstone project (final deliverable) I embedded the final form of the Profit & Loss statement. The key challenge was to identify the needs of the start-up for a sustainable financial planing over a 5-year-long time horizon. An in-depth understanding of the operation of the service was required in order to outline all the direct costs. Indirect cost structuring was partially performed by Elen, as the marketing expert responsible of the external audit segment. I performed cost structuring with respect to the internal audit segment. It was feasible as these segments are relatively independent of each other.

Working with financial auditor domain experts, I needed to identify significant features to be implemented and prioritize them according to different competing factors. I have had meetings with Augustine Eizefule and Anthony Njeru on weekly basis. We discussed the new features, tested them together. Based on their feedback I communicated the issues with the software development team.

Summary

The experiences learned along the project are summarized as follow. I learnt some important aspects of business and financial planning. It was interesting and important to see and understand how different aspect of a complex business plan are linked to each other to formulate a complex strategy. I learned and practiced accounting procedures and financial planning. As a part of the product development team I learned much domain expertise from financial and internal audit. In addition to the mentioned points, I was exposed to practical financial data analytic (audit data analytics) problems which were very interesting and challenging.

Acknowledgment

I would like to thank all my teachers and colleague students at CEU the help and inspiring learning environment I was involved in. I am especially grateful to Peter Szilagyi for giving

me the opportunity to learn at CEU. This year made me much closer to my goal of building up my start-up with an educated financial mindset. I am very thankful for Gabor Baranyai, his lectures provided me with extremely important sources for business and financial planning, fundraising and related topics. Over the last 6 months I works in the TraceRiser project with some great fellow students: Elen Mikayelyan, Anthony Njeru and Augustine Eizefule. They were tremendous help in the initial implementation of the vision of TraceRiser. Elen took the role of marketing and digital content manager. Anthony and Augsutine served the project as product development leads and domain experts testing the platform. I would like to then all their efforts, it moved TraceRiser from the idea stage to the point of aving our Minimal Viable Product.