

Capstone Public Project Summary

Financial and Strategical Analysis of Business Operations and Product Portfolio

Extensive business analysis of a bicycle designing and manufacturing company.

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Introduction

The document intends to capture a brief summary of the fundamental objectives, methodology, elemental outcomes and educational results of my Capstone project. The assignment has been developed for my master's degree in Master of Science in Finance – Department of Economics and Business at the Central European University. In respect of confidentiality measures, the company's name associated with the project will not be disclosed. The company will be referred to as "ABC" and abbreviations will be used when referring to product models going forward. ABC is a young and vibrant company established in 2018 focusing on designing, manufacturing and selling premium bicycles. Their models combine traditional elements with modern geometry, unique materials and innovative solutions.

Fundamental Objectives

Formerly the primary focus of ABC was to establish its presence in domestic and foreign markets. During the past couple months, the company has arrived at the crossroads and encountered numerous strategic concerns. In order to facilitate sufficient decision making, ABC has requested analytical assistance in specified areas which are subject of this project. The scope of the report covers multiple individual fields of ABC's business based on its previous two years of activity. The key objectives of the assignment are to provide the company with a detailed product line performance evaluation and comprehensive business analysis with specific target areas determined by company management.

In terms of product line sales performance, the company required more color on how its model portfolio has been performing. The goal of the company is to restructure its list of available bicycles based on the findings with initiatives to cease production or introduce modifications to unsuccessful models and promote prosperous ones. An additionally expected outcome is a better insight in to domestic and foreign market preferences and distribution.

ABC is legally a subsidiary of a larger parent company which carries out business activities in vastly different and multiple industries which made consolidating ABC related figures from the parent company's financial statements problematic. ABC's management requested the preparation of a high-level set of financial statements (Profit & Loss, Balance Sheet, Cash Flow) which would provide the company with a coherent view of its situation. Furthermore, the company has asked for forecast figures covering the upcoming five years with special attention on EBITDA figures and the expected break-even point.

The company is registered in Hungary which involves HUF expenses however the manufacturing processes include materials and parts which originate from foreign countries as well with various currencies which leaves ABC exposed to three foreign currencies (NTD, USD, EUR) on the expense side. Meanwhile the revenue stream of the company is bilateral which involves HUF and EUR based purchases. The various exchange rate exposures ABC is facing has raised concerns in the company's management and they would like to understand

its magnitude and which potential solutions could assist them in decreasing their exposure to exchange rate risk.

The final two areas where the company would like to receive more information on is related to their inventory management and pricing measures compared to peers. They would like to know how their inventory levels were changing in the past two years and how they could optimize their current inventory management tool. The company also requested a brief comparison between their model pricings versus key peer competitor's prices.

Methodology

The initial phase of the project was focusing on acquiring more comprehensive details of the desired outcome and on exact procedures specified by the company. After the high-level outline of the assignment has been developed the following phase was solely driven by data gathering. My company contact provided me with multiple files and insight into how the business was operating. The collected information was consolidated, and the extensive analysis has been carried out. The first drafts of the final report were prepared and specific segments such as the exchange rate exposure model, financial statements, forecast figures and sales analytics were revisited on several occasions. Finally, based on my company contact's recommendations certain areas were finetuned in order to better align them with the company's needs.

Elemental Outcomes

The product line sales performance analysis concluded significant takeaways and clear trends were recognized during the examination. The two the best-selling bicycles since launch are the model T and model B. The 8 gear hub versions of these models are head-to-head in sales however since model T is customizable to a 11-gear hub this option gives it a slight edge over model B.

In terms of seasonality, in 2019 73% of the orders were placed in the first half of the year and 27% in the second half. The first half is mainly driven by activity during the spring and early summer months which is expected to continue in the following years considering the nature of the business. Based on year-to-date figures, 2020 is foreseen to be a strong year even with considering a 71% drop of sales in April versus March driven by the impact of COVID-19 which was partially offset by large orders in May.

In 2018 all orders were domestic and in 2019 while still domestic dominant, 13% of the orders were foreign. As per 2020 year-to-date data, the situation has altered as foreign orders dominate with 56% versus the 44% of domestic orders. Furthermore, not only that foreign orders overtook domestic ones, but they specifically result in higher tier purchases on average.

The requested set of financial reports including Profit & Loss, Balance Sheet and Cash Flow statements were prepared for the company. They are summarizing the actual figures from 2018 (half year), 2019 (full year) and 2020 (year-to-date) as of the end of May 2020. The full

year forecast figures for five years (2020-2024) were computed based on inception-to-date business activity, expected seasonality and anticipated growth rates. Considering the significant increase of sales during first half of 2020, forecasted sales is expected to increase by approximately 90%. The EBITDA margin of the company is predicted to fall within the 30%-35% range in the upcoming years. The break-even point for ABC is forecasted by the end of 2023 the latest.

The three main general solutions identified for hedging exchange rate risk has been either engaging in derivative contracts, matching cost and revenue currencies and finally capturing exchange rate fluctuations in the price of products. In the case of ABC, the latter approach has been recommended. Calculating the impact of exchange rate fluctuations from the prior month and effectively incorporating adjustments based on the results in next month's prices would sufficiently bridge the exchange rate exposure.

Additionally, an Excel based model has been built to monitor exposure on an ongoing basis with modifiable inputs and scenarios. In order of significance, ABC is the most sensitive to EUR, HUF and NTD exchange rate fluctuations according to the calculations. The results conclude that based on the current levels of business activity, the exchange rate exposure of the company is negligible. However, after a couple years, if sales increase as forecasted and if the trend of dominating foreign orders reach peak levels, ABC's EBITDA figure can be impacted by +/- 20%-25% by 10% appreciation/depreciation of the EUR.

Several upgrades were added to the company's existing inventory managing tool such as linking updated prices to show accurate figures, adding in stock/out of stock aggregations and including detailed mechanical breakdown for all models which resulted in a more transparent, effective and optimized approach. The quarterly figures from 2018 and 2019 show ABC's inventory levels were steadily increasing by roughly 10% per quarter which is in line with expectations.

After an extensive market research three key peers were identified. These companies are all based in Germany and have a nearly identical profile compared to ABC. The model portfolios are similar as well with certain products including the exact same mechanical parts. The results show that ABC's prices are on average 27% below the prices offered by their key peers.

Educational Results

During the past nearly two months I have become familiar with how small businesses operate especially at their early stages of life cycle. Due to the timing of my Capstone project I could witness how a small business dealt with the COVID-19 pandemic in 2020 and how it affected its business. Furthermore, I have become aware of how the bicycle industry operates both in domestic and in foreign markets. I have also learned how bicycles are manufactured and became familiar with all the types of different mechanical parts which build up a complete model. Additionally, I was able to deepen the knowledge I have acquired during my CEU studies in real grounds regarding financial management, data analysis, business operations, financial reporting, risk management and entrepreneurial finance.

