

Project Deliverable G

Business Model and Economics Report

Submitted by

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1.0 INTRODUCTION

This deliverable will cover two issues, our business model, and an economics report. The business model section will describe our business model, it's feasibility and benefits as well as provide a triple bottom line business model canvas and describe the assumptions we made when analysing the business model. The economics report will include a list of the costs, a three year income statement and an NPV analysis.

2.0 BUSINESS MODEL

For our product we've decided to operate under a donation based non-profit business model in order to offer our product for free. Since our product is 100% software based, we have very few expenses to break even on, because of this, we think this business model is feasible. The reason this business model was attractive to us is because it is much more ethical than charging either a fee subscription or generating revenue through advertisements. We thought that those options would be unfair for our visually impaired users because our application is meant to be used as an aide for everyday life so should not be gated behind a paywall or force the user to listen to advertisements just to live their lives. Since our product is free it may also qualify for government or other non-government organization grant money.

Table 1: A triple bottom line business model canvas

| <u>Key Partners</u> | <u>Key Activities</u> | <u>Value Propositions</u> | <u>Relationships</u> | <u>Customer Segments</u> |
|--|------------------------------|--|-----------------------------|---------------------------------|
| -Application stores (Apple app store, Google Play store) | -Software Development | -Aides visually impaired people in using households appliances | | -Visually impaired people |
| | <u>Key Resources</u> | | <u>Channels</u> | |
| | -Access to | | -Smartphone | |

| | | | | |
|--|-----------------------------------|---|-------------|--|
| | computer and programming software | | application | |
| <u>Cost Structure</u> -App store fees | | <u>Revenue Streams</u> -Donations -Grant Money | | |
| <u>Social & Environmental Cost</u> -Electricity to develop and use app | | <u>Social & Environmental Benefit</u> -Makes lives of visually impaired people easier | | |

For our business model we made assumptions that we have access to the tools needed to develop our product, an application store to host our product, and that labor will be solely done by our founders so that we will not need to pay employees. We also assume that there will be an interested customer base who will use our product, and some form of donations or grant money to provide revenue to compensate us for our work. We think our business model is very feasible as the only risk we have is not getting the desired amount of social benefit for our time spent and the small app store fees.

Table 2: List of costs for Vissille

| Variable Costs | Fixed Costs | Direct Costs | Indirect Costs |
|---|---|---|---|
| The costs that might vary depending on the amount of work | The costs that is fixed from month to month of the software development | The costs that directly related to software development | The costs that is indirectly related to software development but it's still necessary for maintaining the project |
| Electricity cost | Development computers Utilities Salary of staff | Developer salaries Software cost Staff training | Project manager Employee insurance Internet charges |

Table 3: 3 Year Income Statement for Vissiolle

| | 2021 | 2022 | 2023 |
|---------------------------------|---------------|----------------|----------------|
| Number of Downloads | 100 Downloads | 1000 Downloads | 2000 Downloads |
| Sale Revenue | \$599 | \$5990 | \$11980 |
| Cost of App Sold | \$99 | \$990 | \$1280 |
| Gross Profit on Sales | \$500 | \$5000 | \$10700 |
| Operating Expenses: | | | |
| Development Necessities | \$30 | \$60 | \$70 |
| Electricity | \$80 | \$190 | \$210 |
| Internet Charges | \$100 | \$170 | \$170 |
| Salaries | \$300 | \$360 | \$420 |
| Total Operating Expenses | \$510 | \$780 | \$870 |
| Operating Income | \$-10 | \$4220 | \$9830 |

3.0 ECONOMICS REPORT

3.1 NPV ANALYSIS

Using a NPV analysis, determine the break-even point (it is highly unlikely that your operating income will be positive in the first year because of fixed costs).

The Discount Rate is 10%.

Table 4: NPV Analysis for Vissiolle

| Year | Cash Flow (\$) | Present Value (\$) | Cumulative NPV (\$) |
|------|----------------|--------------------|---------------------|
| 0 | -510 | -510 | -510 |
| 1 | 500 | 454.54 | -55.46 |
| 2 | 4220 | 3487.60 | 3432.14 |
| 3 | 9830 | 7385.42 | 10817.57 |

From this NPV analysis, we can conclude that the break even point for our business will be in its (Year) of operation. The fixed costs in the first year make it difficult to be profitable in the first year running, but with our business plan and marketing we expect to see a large increase in users from year one to two. The goal for the second year will be to expand Vissiolle outside of just Canada and give its services to the global market. The profits this generates will more than outway the losses occurred in the first year of running.

3.2 Economics Report Development

In order to construct a prediction of our three-year income statement as well as our NPV analysis, assumptions were made in our economics report. We looked into several parts of an online course for our income statement, such as Cost of Application and salaries.

Cost of Application:

The cost of the application will start at \$5.99 as most applications for visually impaired people on the market are free or less than five dollars. However, most applications do not contain the functions that Vissiolle has as Vissiolle is based on allowing the user to use household appliances. In Canada there are 800,000 people who are visually impaired or partially sighted. Furthermore, we are a small business who is starting up so the numbers are going to be quite low as being visually impaired starts from birth. During the second and third year, more notoriety

will be brought to Vissiolle and non-profits organization, or other movements and what it offers compared to the other competitors and would attract more users which we see as 1000 additional in the second year and another 2000 students in the third year.

Salaries:

We have one software administrator and two software engineers or computer scientists with varying pay in the first year. We'll have two software administrators and three software engineers or computer scientists in the second year, and two software administrators and four software engineers or computer scientists in the third year. As Vissiolle grows in popularity, more personnel will be needed to update and monitor the app, as well as provide assistance and support to visually impaired users. According to research, the typical salary for a web administrator software is around \$77,140 per year, while a computer scientist earns around \$68,824 per year.

4.0 CONCLUSION

To summarise, we learned how to and what to do with the economic aspects of a firm by following the three-part economics lectures, and we were able to complete three tasks using this information. This gave us new information to help us fully develop our product as well as the business part of our course endeavour. We were told to apply this knowledge to our product and business in this deliverable, which gave us real-world experience with economics.