University of Ottawa

GNG 2101[C]: Group 2.3

Deliverable G – Business Model and Economics Report

Submitted by

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Abstract

This report for deliverable G covers the business model and economic report for Text2Speech's project based on product assumptions that would allow for analysis of the various costs associated with the mobile application and the standing of the product in the market.

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1 Introduction

In this deliverable, the team had to make the business model and economic report based on the assumption that the product is finalized and available to the market. The team compared various business models and decided to go with the subscription model since that is best suitable in this case. Furthermore, a model canvas was developed that highlights the key partners, key activities, customer relations and the resources to better analyze the target audience. The second part of this deliverable discusses the economic report which includes the 3-year income statement of our product along with the NPV analysis for those three years to determine the units needed to break even.

2   Business model description

A subscription-based business model type would be best suited to commercializing our team's product. This is because most of our revenue would be coming from the clients paying on a regular basis. As the subscription fee is minimal, the clients would not mind paying a monthly or an annual fee if it means an improved general well-being. Furthermore, the subscription business model means that the level of satisfaction could be evaluated, and the subscription fee could be adjusted accordingly, which would help increase our revenue streams provided the clients are happy with our services. Not to mention that the clients would have the choice to cancel their subscription at any time if they are not satisfied, eliminating thereby any fear in trying out and testing the application to assess whether or not it meets their needs. In summary, the fact that we use a subscription-based business model not only presents advantages for the team, but it also presents remarkable advantages for the clients.

3 Triple bottom line business model

Tripple Bottom Line Business Model Canvas

Field	Value
Designed for:	GNG 2101 [C]
Designed by:	4TextToSpeech
Date:	March 20th, 2022
Version:	1

Key Partners

- Investors
- Renowned ophtalmologists
- Quality assurance mobile appliction testers

Key Activities

- High level application development
- Communication with customers on a regular basis
- Constant work in improving the application

Key Resources

- Human (employees to ensure the good functionning of the firm)
- Designers and Developers
- Financial (Own funds, borrowed funds)

Value Propositions

- Easy to use application with minimal number of clicks
- Choice between different file types for text to speech
- Ability to access device's camera to take a picture and read out loud the extracted text
- Adjust the reading speed from the settings
- Choose from a selection of voices
- Multiple languages support

Customer Relationships

- Ask for customer feedback periodically to improve the application
- Reward loyalty program for engagement

Channels

- Play Store
- App Store

Customer Segments

- Individuals with visual impairment
- Individuals with a preference to listening over rading

Cost Structure

- Marketing the application through channels like Facebook, Instagram and Pinterest
- Equipment (high performance laptops)
- General and Administrative (salaries for administrative, management staff and HR)

Revenue Streams

- Subscription: 3$ per month / 36$ per year
- Contribution program to encourage the development of the application
- Very limited advertising

HOW ?
WHAT ?
WHO ?
HOW MUCH ?

4 Core assumptions in the business model development and feasibility

The core assumptions that were made include that we believe that our application will not only attract people with visual impairment but also individuals who prefer listening as compared to reading. In terms of the feasibility, when the client was asked about how satisfied they were about the application, they said they were very satisfied and that it would be an app they would use regularly. Furthermore, we have also assumed that we would be able to deploy our mobile application on both the Google Play store and the Apple store, meaning that we would be targeting even more individuals. Another assumption we have made is that the application would have all the required features from the client meaning that we implicitly assume we have enough time to complete the project. In practice, adjustments on the business model will need to be made based on the final product that is delivered.

5 Costs associated with our business

1. <u>List of costs</u>:

Type	Fixed costs ($)	Variable costs ($)	Semi-variable costs ($)	Direct costs ($)	Indirect costs ($)
Production materials				0	
Salaries			6,000		
Rent	20,000				
Electricity	3,000				
Overhead	3,000				

Total: 32,500$

6 3-Year Income Statement

Income statement: Jan 18, 2023 – Jan 18, 2024
Users: 300
Price: 10$/month

Type	Amount ($)	Sub-type
Sales	36,000	Revenue
Marketing	500	Operating expense
Electricity	3,000	Operating expense
Salaries	6,000	Operating expense
Overhead	3,000	Operating expense
Rent	20,000	Operating expense
Production materials	0	Material

- Costs of units sold each year: 0$
- Gross profit: 36,000$ - 0$ = 36,000$
- Operating expenses: 32,500$
- Operating income: 36,000$ - 32,500$ = 3,500$

Income statement: Jan 18, 2024 – Jan 18, 2025
Users: 360
Price: 10$/month

Type	Amount ($)	Sub-type
Sales	43,200	Revenue
Marketing	500	Operating expense
Electricity	3,000	Operating expense
Salaries	6,000	Operating expense
Overhead	3,000	Operating expense
Rent	20,000	Operating expense
Production materials	0	Material

- Costs of units sold each year: 0$

- Gross profit: 43,200$ - 0$ = 43,200$

- Operating expenses: 32,500$

- Operating income: 43,200$ - 32,500$ = 10,700$

Income statement: Jan 18, 2024 – Jan 18, 2025
Users: 400
Price: 10$/month

Type	Amount ($)	Sub-type
Sales	48,000	Revenue
Marketing	500	Operating expense
Electricity	3,000	Operating expense
Salaries	6,000	Operating expense
Overhead	3,000	Operating expense
Rent	20,000	Operating expense
Production materials	0	Material

- Costs of units sold each year: 0$

- Gross profit: 48,000$ - 0$ = 48,000$

- Operating expenses: 32,500$

- Operating income: 48,000$ - 32,500$ = 15,500$

7 Break-even point using NPV analysis

Assumptions:

1. We are building n ≤ 1 mobile application
2. "Break-Even" occurs when cost(make) ≤ cost(buy)
3. Labour costs = 0$
4. 1-time fee for Flutter mobile application purchase is 150$

Component	"Make" n Andoid mobile application	"Make" n iOS Studio mobile application	Buy n mobile application
Mobile Application	0	0	n*$150.00
Flutter SDK	0	0	N/A
Android Studio IDE	0	N/A	N/A
Git Bash	0	0	N/A
Translator Dart Package	0	0	N/A
Text-to-Speech package	0	0	N/A
Image Picker package	0	0	N/A
Total Direct Material Cost	**$0**	**$0**	**n*$150.00**

For Android mobile application:

$0 \leq (\lceil n \rceil) (\$150.00)$
$(\$0 / \$150.00) \leq \lceil n \rceil$
$n \geq \lceil 0 \rceil$
$n \geq 0$

For iOS mobile application:

$0 \leq (\lceil n \rceil) (\$150.00)$
$(\$0 / \$150.00) \leq \lceil n \rceil$
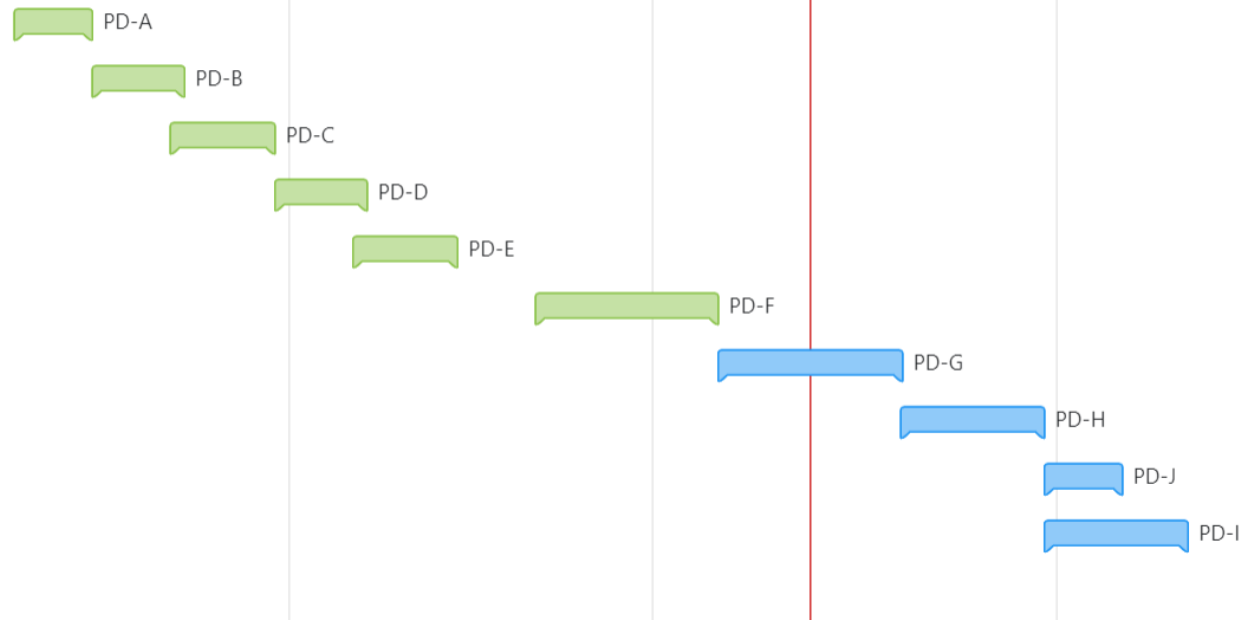$n \geq \lceil 0 \rceil$
$n \geq 0$

8   Assumptions Justification

While producing the economics report, there were some assumptions that we made considering that our product will be available to the market. In comparison, we had benchmarked our product with Live Text, Talkie OCR and Image to Speech. In terms of our target market, our primary target audience will be the individuals who deal with visual impairment, while the secondary target audience will be the individuals who prefer to listen rather than reading. Using these factors, our product can be compared with the benchmarked products in the market. Overall, if we consider the ability for the targeted audience who would like the ability to change the speech speed while they are listening to the speaker, then Text2Speech would have a leverage in the market. On the other hand, Text2Speech is assumed to be fully functional on Android and iOS platforms, whereas only Talkie OCR would be our only competitor that supports both platforms. Coming to the metric of monthly subscription cost, Live Text and Image to Speech are free applications while Talkie OCR is charging their users $4.49. In such a case, Text2Speech would be charging users a one-time fee of $150 based on the assumption that the user would like to buy the application to use it whenever or they can pay a monthly fee of $10.00 to use it month-to-month. Based on this preliminary research and comparison with our competitors, the expected % if the market that we would own is about 25% while Talkie OCR, Live Text, Image to Speech and others would include the remaining 75% of the market. The unit price for Text2Speech is strategically going to be priced based on a 7-day trial period which allows the user to test the application and decide to keep the application by paying a monthly subscription fee of $10.00 or pay $150.00 to keep the application for an infinite duration of time.

9 Project Plan

10 Conclusion

In conclusion, it is prominent that the subscription model was reasonably suitable for our product based on the core assumptions made by the various target markets. This allowed us to successfully develop an economic report that shows the Total Direct Material Cost is going to be zero upon doing the NPV break-even analysis. As a result, break-even point was achieved since the making cost was less than the buying cost. Furthermore, the number of units needed to break-even would be zero based on the assumptions that there are no costs.