GNG2101

Project Deliverable G

Economics Report

Submitted by

PERSONAL SAFETY. D01, Team 1.5

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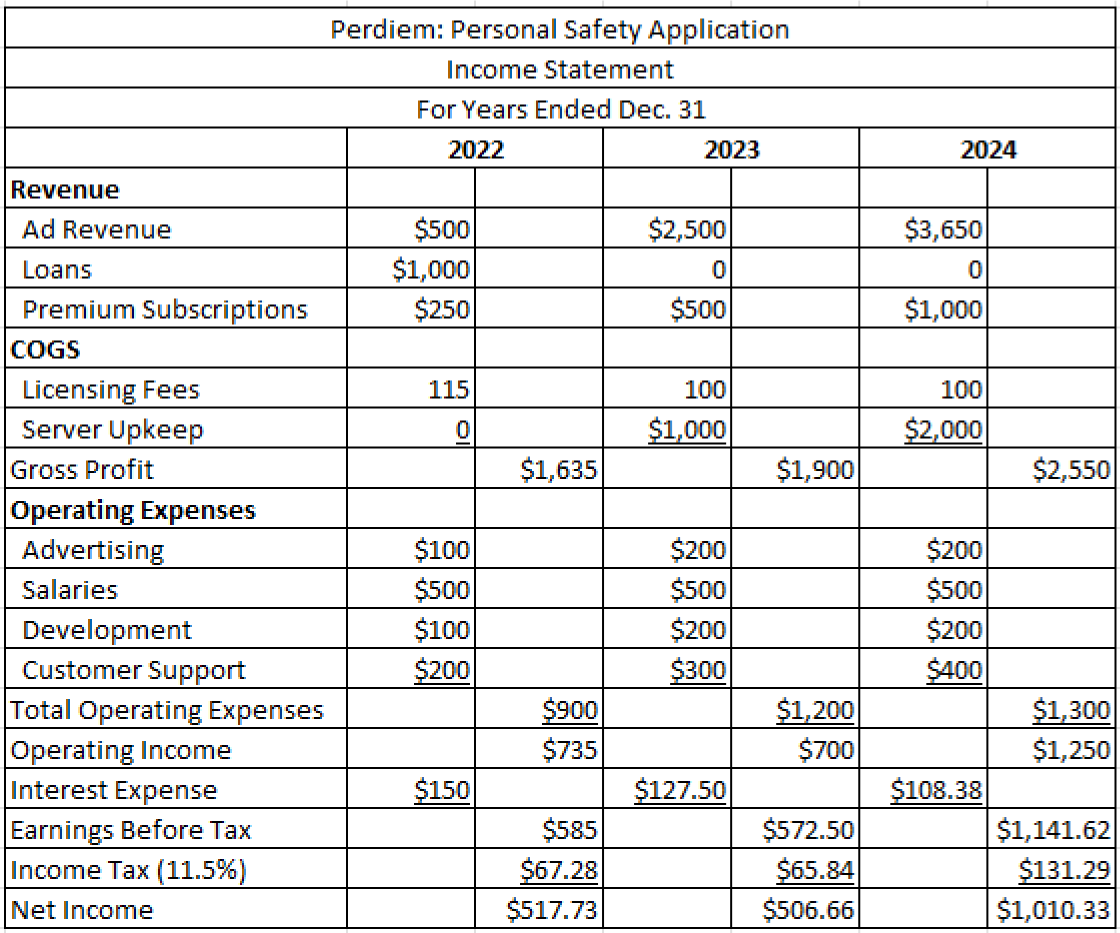
1. List of Costs

Costs	**Classification**
Marketing	
Future Development	Direct
Salaries	Fixed
Server Upkeep	Semi-Variable
Customer Support	Variable
Licensing Fees	Fixed
Advertising	Variable
Interest	Indirect
Income Tax	Indirect

2. Income Statement

https://d.docs.live.net/1e8ba8aa8760a30d/Documents/3-year%20Income%20Statement.xlsx



Perdiem: Personal Safety Application
Income Statement
For Years Ended Dec. 31

	2022		2023		2024	
Revenue						
Ad Revenue	$500		$2,500		$3,650	
Loans	$1,000		0		0	
Premium Subscriptions	$250		$500		$1,000	
COGS						
Licensing Fees	115		100		100	
Server Upkeep	0		$1,000		$2,000	
Gross Profit		$1,635		$1,900		$2,550
Operating Expenses						
Advertising	$100		$200		$200	
Salaries	$500		$500		$500	
Development	$100		$200		$200	
Customer Support	$200		$300		$400	
Total Operating Expenses		$900		$1,200		$1,300
Operating Income		$735		$700		$1,250
Interest Expense	$150		$127.50		$108.38	
Earnings Before Tax		$585		$572.50		$1,141.62
Income Tax (11.5%)		$67.28		$65.84		$131.29
Net Income		$517.73		$506.66		$1,010.33

3. Break-Even Analysis

Due to the structure of the product, a break-even point cannot be determined through a calculation of units sold, as the units have no monetary worth. Instead, to determine this point, the metrics that must be used are those related to ad revenue, and premium subscriptions.

The revenue earned through advertisements on the application can be roughly estimated through the projected number of users per day. This metric is measured in RPM, or revenue per 1000 impressions. For example, if there were 10,000 users daily, every day for a year, that would result in 3,650,000 impressions, which would then translate into ~$3650 generated.

From this definition, the break even point for the first year, relative to the projected costs, would be ~$900. From this, it can be derived that approximately 2466 impressions daily every year would be required to break even.

Similar calculations can be performed for the second and third years, but would be redundant to include in this report.

4. Justifications

It was decided previously that the application would be released onto a store for free. Revenue would be earned through running advertisements, and allowing for the purchase of premium services within the app. These would be the primary channels through which revenue could be earned. The values used for these quantities were determined through market research, as well as from experience within the team.

The list of costs were determined through an understanding of the industry cross referenced through research conducted into what costs a business like this one would have to deal with. The costs determined to be directly related to the continued existence of the application were labeled to be COGS, while those related to the function of the business were placed in operating expenses.

The values used for the expenses and COGS sections of the income statement were approximated from what an application new to a store would generally be expected to deal with. Given the nature of the product, it can be safely assumed that any revenue obtained from it would not be the primary income of any one person involved in the creation and continued development. Because of this, the cost for salary could consistently remain relatively low, and would be allocated depending on involvement in the business. This is not a good pay structure, and would have to evolve later on, but it would serve its purpose so long as the business remains small scale.

The most important semi-variable cost, server upkeep, would be entirely dependent on the current popularity of the app at any one time. The server is supported on FireBase, which charges its users proportional to the current usage of their application. The licensing fee fixed cost refers to the cost of putting an application up on the apple/play store. To put an app up on the google owned play store, there is a single payment of $15, and to keep an app on the apple store, there are yearly payments of $100.

Given that the magnitudes of the primary sources of revenue, and the costs stated above, are almost entirely reliant on the traffic of the app, they all increase as the years go on. The level to which they increase may not be strictly accurate, but should approximately reflect how the app would evolve.