



Business Running Case: Investing in a New BrewPub Part 1

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Assignment 3 Part 1

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## **Executive Summary**

In an ever-changing marketplace, the combination of brewery and restaurant is becoming more popular. In order to attract a larger customer base, we have decided to improve and expand our current business by transforming it into a pub located on Main Street, New York, that provides both retail and wholesale brewing options, allowing us to stay competitive and potentially increase profits. To achieve that, it is necessary to conduct research before implementing both marketing and financial management strategies which are used to find optimal budget allocations for business operations.

Our market research is widely applied in our decision and adjustment in every stage of business running. With the research on each element of PESTEL analysis, we conclude that despite certain limitations to follow in New York Main Street, it is still an ideal neighborhood to develop our new microbrewery service due to the large population density and significant tourism traffic. Based on the analysis, we have been able to forecast the seasonal variations in demand for our brew which allow us to plan accordingly to optimize the supply chain. We also implement SWOT analysis to evaluate the internal strength and weaknesses along with external threats and opportunities, using it to decide our initial price of products, etc.

Furthermore, in marketing management decision making, we use Break-Even Point and What-If analysis to determine the optimal budget allocation for marketing strategies while avoiding delay in reaching the break-even point. We also conduct Sensitivity Analysis to ensure that our pricing strategy is appropriate for our target market. In financial strategies, we applied efficiency ratio analysis after conducting market research on business expenses to measure the potential risks and uncertainties associated with our financial decisions to ensure they are both effective and sustainable over the long term.

## **Managerial Report**

### **1.Introduction**

#### **1.1 Problem Statement**

Flushing Ale House is a restaurant located in Main Street, New York. To attract more customers and increase the competitiveness of the restaurant, the owner is considering investing in a new BrewPub system. The production of craft beer requires renting additional space and hiring additional production staff, sales force and department managers. The final package price was \$150,000.

For restaurant owners, Main Street is an ideal location for starting a BrewPub, as there are only a few restaurants and bars on the street. It also gets a lot of traffic, especially from sports enthusiasts, because it is surrounded by recreational facilities such as Queens Museum and Flushing Meadows Corona Park. For Flushing Ale House BrewPub, the biggest competitor on Main Street is The Recovery Room Sports Bar, a chain of restaurants across the U.S. that offers a total of 16 types of draft beers in its stores. There are also pubs like Tori O' Toole's, Cheap Shots Sports Bar, etc. and most of these bars are located alongside Queens Blvd.

Based on its unique location and the presence of a stadium, Flushing Ale House Pub's target consumers are sports enthusiasts. According to research, sports and beer are closely related, especially sports like football and baseball. (The Harris Poll, 2016) When the games in the nearby stadiums are over, there is a huge influx of sports fans to the bars around Main Street, which will bring a lot of traffic to Flushing Ale House Pub.

The customer numbers of the existing business is 52,800, and we assume that Flushing Ale House Pub will be operating for 360 days in a year, then the average number of customers per day will be 147. Considering the mobility of customers, we assume that the maximum flow

of customers is 100 at the same time, and if a table can accommodate four customers, at least 25 tables are needed.

In addition to site selection and traffic analysis, it is important to establish a new BrewPub to comply with the relevant laws and regulations. If beer is to be produced for sale in New York, it must be licensed by the State Liquor Authority (SLA) and a Brewer's Notice must be obtained through the federal Alcohol and Tobacco Tax and Trade Bureau (TTB). The maximum capacity of a 40 barrel BrewPub is 3840 barrels a year. Under the SLA, restaurants can apply for a brewer's license, which costs \$6,200 for an initial 12-month application; a cheaper option is to apply for a microbrewer's license, which limits annual production to 75,000 barrels and costs \$884 for an initial 12-month application. NYSLA (n.d.) A brewpub can make up to 75,000 gallons of beer per year, according to NYSLA rules and regulations. This equates to approximately 283,905 liters, which is greater than the turnkey system's planned annual capacity output of 225.4K liters. As a result, the planned capacity output falls within the legal limits established by NYSLA.

## **1.2 Overall Goals and Objectives of the Report**

The purpose of this managerial report is to provide a thorough analysis and evaluation of the feasibility of establishing a microbrewery business on New York's Main Street. The feasibility of investing in a BrewPub will be analyzed by conducting marketing management, financial management simulations. In addition, the report will identify the potential challenges, opportunities, and risks associated with this business venture through different decision tools.

In the starting stage of the project, we established our goal of achievement in the next 3 fiscal years. Based on the existing size and the location of our business, we have made an assumption that there will be a yearly increase of 5% in market penetration. However, once the

new brand is integrated, we expect a conservative projected increase of 210% in overall market penetration as we wish not to overproduce and generate waste. The sales will be divided into two parts: 31.53% of retail sales, with our new brew selling in the existing business, and 68.47% of new brewery wholesale. The predicted annual sales on the new brew services is expected to maintain at 3% increase in the following 3 years (Appendix diagram 3).

After conducting all simulations, this managerial report is intended to answer the following questions:

1. Whether to choose to accept the BrewPub System quoted at \$150,000
2. If this offer is not accepted, should the offer be readjusted to accept the new adjustment
3. Not to invest in BrewPub System

In addition to answering these questions, this report will define how different functional strategies, such as marketing, finance, etc., impact the overall corporate strategy. Through market research, the budget allocations for different functions are adjusted to maximize the benefits.

### **1.3 Structure of the Report**

The report will start from methodology of analysis of different functional areas such as marketing management and financial management, etc. The marketing management will analyze the external environment and internal strength and weakness through SWOT and break-even point. Through these decision tools we will be able to choose which products we are going to sell and at what price. Also, in the process of analysis, we can learn about the dynamics of competitors and changes in the market environment, and we make adjustments in subsequent simulations based on the results of the previous cycle. The financial management will focus on adjusting budgets and product prices using the PESTEL analysis and efficiency ratio analysis. These tools enable us to set reasonable prices of different products, as well as the budgets

allocating to employees, utilities, renting, and others. By the end of this report, we will conclude the final decision and recommendations for restaurant Flushing Ale House.

## **2. Managerial Decision Process for Selected Functional Areas**

### **2.1 Marketing Management and Decision Making**

For better decision making and business simulation, we conduct serious research on marketing management and financial management and formulate the preparation. In terms of marketing management and decision making, firstly, the marketing strategy and plans should be integrated with the company strategies as well as resources (Zlatev, 2023). According to the goals and objectives of the company, the company strategies will focus on the effective coordination of marketing resources. Second, we look at the environmental and industry levels to analyze the competitiveness and opportunities facing the company. The complex internal, external and interest relationship of the company requires us to combine the company's own business model and products with analysis by using scientific models and tools, including PESTEL Analysis, SWOT Analysis, Porter's Five Forces Model, and customer behavior research. Special attention should be paid to the licensing requirements and other legal restrictions related to the brewing industry in the United States. Based on our planned business requirements, not only does the company need the operation license from TTB, but it is also required to have both a pub brewery license and an on-premise pouring license from the ABCC to guarantee that the company can legally sell to wholesalers and customers off-premise or on-premise. According to the thinking points obtained by PESTEL Analysis and SWOT Analysis, taking into account Porter's Five Forces and customer behavior, therefore, we can better discover and focus on the customers and needs that the company's resources best match, so as to better target existing customers and potential customers and take their purchasing habits

and purchasing ability into our consideration. At the same time, the bargaining power of our products, our competitors, substitutes, potential new entrants, and suppliers will be comprehensively considered. Thus, combined with the company's core competitiveness and differentiation factors, according to our existing and potential products and resources, the products that can better meet the demand of the target market and provide more value for the company will be selected. After identifying the market segmentation to target our customers and link to our products, the Marketing Mix, 4Ps elements, include the following available variables:

Marketing Mix 4PS elements include:

Product	Product Variety, Quality, Design, Features, Brand Name, Packaging, Sizes, Services, Warranties, Returns
Price	List Price, Discounts, Allowances, Payment Method, Credit Terms
Place	Channels of Distributions, Coverage, Assortments, Inventory, Transport
Promotion	Sales Promotion, Advertising, Sales Force, Public Relations, Direct Marketing



We sorted out and analyzed the list one by one, and selected applicable variables to take into consideration. According to collaborative qualitative and quantitative research, our main product is American Pale Ale, and the company will increase marketing efforts and marketing expenses in the future, aiming at improving market penetration and delivering more suitable wine to more suitable customers.

## **2.2 Financial Management and Decision Making**

Financial management and decision making are closely related to marketing management. The management of competitive advantage relates to strategic positioning and the competitive scope, and therefore directly to price and cost strategies. Financial strategies and plans should also be consistent with the goals and strategies of the company. In order to make the results of the decision making more horizontal and vertical integration, financial opportunity analysis also needs to be considered. Based on the table '36-Mo-Fin-P' in the business simulation, sales forecasts and financial projections will be stated. Available external financing will also be considered. In addition, we try to analyze as many available factors as possible, including the index of employee costs, rent, utilities, supplies and other costs, marketing costs, debt, taxes, and other financial market indicators, to enable a comprehensive analysis of cost control. In line with its strategy and plan, the company will optimize the supply chain, control the growth of the supplies and employee costs, and increase marketing costs. In the sales forecast, we will make five decision cycles, among which fixed cost and revenue are the parameters we should pay attention to first. In order to better determine cost control and product pricing strategies, we choose to perform Sensitivity Analysis, Risk analysis, and What-If-Analysis, in order to analyze the impact of cost changes and revenue changes on the company's operation in the next few years. By tracking important parameters such as variable

costs per product and prices per product, quantitative and qualitative decision support methods help companies analyze important cost and pricing decisions.

### **3. Application of Decision Support Tools per Cycles**

#### **3.0 Methodology for Applying Decision Tools per Cycles**

For the marketing management function, SWOT analysis is applied before entering the assumptions, break-even point (BEP) and what-if analysis are adopted to help make the marketing decisions after the simulation.

For the financial management function, a PESTEL analysis is adopted prior to the entry of the assumptions, and efficiency ratio analysis is then conducted to help make the finance decisions after the simulation.

#### **3.1 Functional Area Marketing Management**

##### **3.1.1 Decision Tools (Applied Before Entering Assumptions)**

Prior to the entry of the assumptions, a SWOT analysis will be conducted for restaurant Flushing Ale House based on its internal capabilities and external environment.

**Strengths:** First, located in Main Street, Flushing Ale House is in a good strategic location with a tremendous amount of customer volumes and limited number of competitive restaurants and bars in the same street. Second, as a local brand, Flushing Ale House is reputable for its high quality beer products. Its product Pale Ale is especially welcomed by the local customers. Third, the seasonal beers provided by restaurant Flushing Ale House are also welcomed by the local consumers.

**Weaknesses:** First, compared to more established breweries, Flushing Ale House still has a relatively small financial base, which might hinder the new investment of the company.

Second, serving primarily local customers, the restaurant has a relatively small retail and wholesale distribution network. Third, compared to breweries that produce in large scales, restaurant Flushing Ale House may lose the advantages in price setting.

Opportunities: First, the market for craft beer products is increasing. According to the Brewery Association (n.d.), volume sales of craft brewer increased roughly 8% in 2021 in the US, in spite of a weak economy. Second, the federal laws and regulations are favorable for operating the BrewPub in the US. Third, the development of social media, website and KOL provide new platforms for restaurant Flushing Ale House to attract the new customers via posting ads and initiating marketing campaigns on different channels.

Threats: First, the competition from existing and new competitors is still fierce in the craft beer industry in the US. Second, the economic downturn in the post Covid-19 period can still have an adverse impact on beer consumption in the US.

Based on the SWOT analysis, it is determined that Pale Ale will be the most welcomed product. Accordingly, we adjust the share of Pale Ale in retail distribution to be 22%. In addition, the summer seasonal products are Pilsner and Bavarian Lager, while the winter seasonal products are Pale Ale and Bock Dark.

### **3.1.2 Decision Tools (Applied After the Submission of a Cycle)**

After running a cycle in the simulation, break-even point (BEP) and what-if analysis are conducted to help the decision maker in Restaurant Flushing Ale House to make the marketing management decisions.

BEP analysis is used to help the restaurant owner identify the point when the total revenue equals the total cost. In addition, BEP analysis can help the restaurant owner understand the time period required to break even. From the simulation, when the total revenue achieves at

an amount of \$220,360, the new investment in the BrewPub can break even, with a total contribution margin of 74.74%, and will take 4.32 months to break even for this new investment.

What-If analysis is then conducted by changing the values of fixed costs to examine the impact on BEP. We increased the budget for marketing cost by assuming that 10% of the net revenue in the previous cycle will be used as the marketing cost, equaling \$63275.6. This means that the total fixed cost will change from \$207,391 to \$213,719 (refer to diagram 4). The simulation shows that an increase of \$63275.6 only results in the increase of break-even months from 4.32 to 5.36 months. Therefore, it may be reasonable to increase the marketing cost. However, as a start up stage and to avoid excess cost, we end up consuming less than 10% of the revenue. Combining with the SWOT analysis, we decide to allocate the marketing budget on web, KOL and trade show.

Additionally, before the next cycle, we also conduct sensitivity analysis (see Appendix diagram 5) to adjust our product price to its optimal value which maximizes our profit before diminishing. The maximum and minimum price of the product was determined by the price of market research. In the initial cycle, we set a relatively high price compared to the market level, but we reduce the price after implementing sensitivity analysis. This approach will make our business stay competitive in the market price.

### **3.2 Functional Area Financial Management**

#### **3.2.1 Decision Tools (Applied Before Entering Assumptions)**

Prior to the entry of the assumptions, a PESTEL analysis will be conducted for restaurant Flushing Ale House to help the owner better make the decisions for entering the assumptions in financial management.

Political: The craft beer industry is heavily relying on the taxation policy of the US government. According to the NYC Department of Finance (n.d.), the federal tax rate is 21% and tax rate in NYC is 8.85%. In addition, the craft beer industry is highly regulated with regard to production, distribution and advertisement.

Economic: The competition in the craft beer industry is intensive. There are already several pubs and bars located nearby, such as The Recovery Room Sports Bar, Tori O' Toole's, and Cheap Shots Sports Bar. Furthermore, the interest rate in the US is increasing in order to stabilize the consumption price (BBC News, 2023). The borrowing interest rate is in a range between 5.5% to 6% (Bank of America, n.d.). Moreover, craft beer producers face cost pressure primarily due to the increased cost of packaging materials and energy (Quartz, 2022). Last, during a recession time, the wage growth is slowing in more than 90% of the industries in the US (USA Today 2023)

Social: Craft beer is still a welcomed drinking product for the consumers in the US. However, consumers who are drinking too much can lead to health issues.

Technological: Investing in the new system can help restaurant Flushing Ale House offer new products to attract more consumers and can help the restaurant improve the production efficiency. However, as a small business, the capital for research and development is limited for Flushing Ale House.

Environmental: There is an increasing demand for the craft beer industry to produce in a more sustainable way. Green beer products become more welcomed by the consumers. For instance, recycling bottles and packaging materials are becoming increasingly important.

Legal: There are strict alcohol consumption laws in the US and the legal drinking age is set to be 21 in NYC. In addition, advertising and marketing of the beer products in the US is strictly regulated under the Federal Alcohol Administration Act (Alcohol.org, 2022).

In addition, we have determined that 10% of our revenue should be allocated to employee salaries, based on our research. Initially, we prefer part-time employees to minimize costs. The cost of utilities and lighting for our pub will be calculated based on the estimated 100-square-foot expansion. We have also applied the average rent rate for businesses in Flushing, which is approximately \$35-\$80 (Loopnet, 2023), and have determined that our rent will be \$5,000 assuming a rate of \$50 per square foot (Appendix Diagram 6).

### **3.2.2 Decision Tools (Applied After the Submission of a Cycle)**

After running the cycle in the simulation, efficiency ratio analysis in Tab. Performance is conducted to help the decision maker in Restaurant Flushing Ale House to make the financial management decisions by analyzing the change of the efficiency ratios in comparison to the previous cycles.

From the simulation, Stout beer contributes the greatest to the total margin in 3 years, with a percentage of 28.05%. And Bock Dark beer ranks second in the total margin, with a percentage of 25.01%. From the cost perspective, the efficiency ratio is calculated based on fixed costs, compensation and marketing costs, separately. From year 1 to year 3, fixed cost/total revenue ratio is increasing from \$0.28 to \$0.30, and the compensation/total revenue is also increasing from \$0.10 to \$0.11. An increase in cost efficiency ratio indicates that the decisions on fixed cost and compensation are not very successful. (Local advertising + Trade shows)/Total revenue ratio remains unchanged at \$0.08 in 3 years, indicating no improvement in efficiency in the marketing cost decision. From the profit perspective, profit before taxes/total revenue is used

to assess the efficiency of financial decisions. In the three-year period, the overall profit before taxes made for the overall sales of the beer products decreased from \$0.47 to \$0.45. A decrease in profit efficiency ratio indicates that the decisions on financial management are not very successful.

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## Appendice

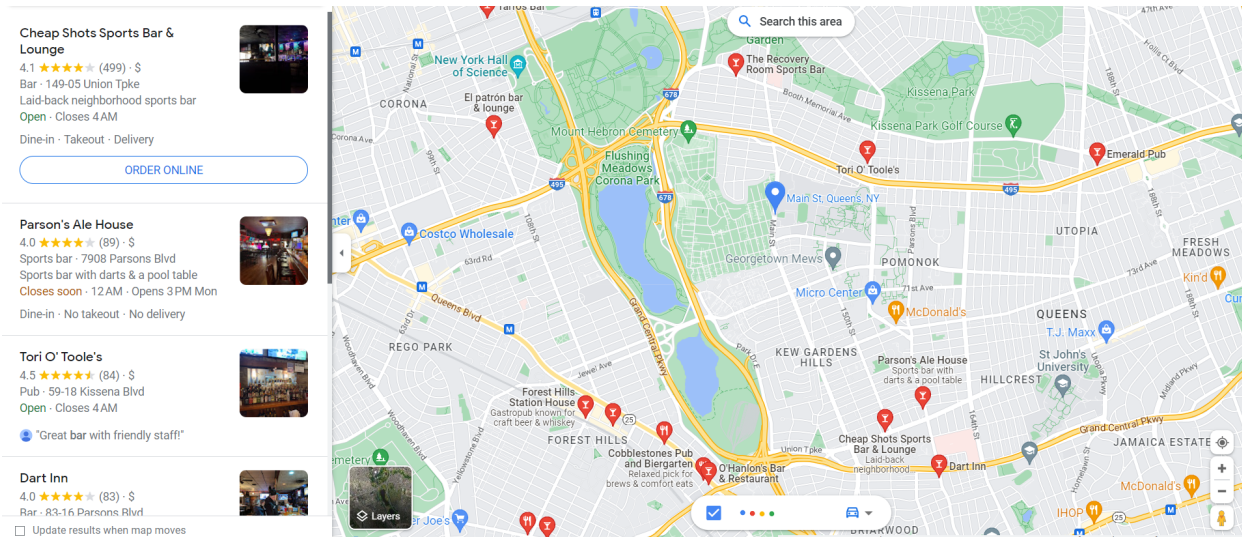


Diagram 1 - Bars near Main Street



Diagram 2 - Logo

From Project-Start		FY-0	FY-1	FY-2	FY-3	FY1+FY2+FY3
KPI 1:	Actual size of the local market	[units]	10,000,000	103%	106%	110%
KPI 2:	Number of customers- existing business	[customers]	52,800			
KPI 3:	Average consumption per existing customer	[units]	1.5			
KPI 4:	Size of the penetrated market - without new project	[%]	0%	105%	110%	115%
		[units]	79,200	83,160	87,120	91,080
KPI 5:	Overall increase of the penetrated market - with new project	[%]				210%
KPI 6:	Projected structure of the annual sales, new penetr. market	[%]		31.00%	33.00%	36.00%
	Projected sales, new brand	[units]		170,145	181,122	197,588
KPI 7:	Projected consumption in the existing business, new brand only	[%]		31.0%	31.5%	32.0%
		[units]		52,745	57,054	63,228
	Projected beer consumption (new brand % of all)	[%]		63%	65%	69%
	Wholesale distribution (new brand)	[%]		69%	69%	68%
		[units]		117,400	124,069	134,360
KPI 8:	Capacity of the new technology (max units/year)	[units]	476,160	476,160	476,160	476,160

Diagram 3 - Starting the Assumption

Increase to:	Total Fixed Costs	[\$]	\$213,719									
	Price/unit	[\$]		\$9.00	\$9.00	\$8.00	\$8.00	\$8.00	\$8.00	\$3.30	\$3.30	\$6.00
	Variable cost/unit	[\$]		\$1.16	\$1.10	\$1.10	\$1.10	\$1.10	\$1.10	\$1.06	\$1.06	\$1.10
	Contribution/unit	[\$]		\$7.84	\$7.90	\$6.90	\$6.90	\$6.90	\$6.90	\$2.24	\$2.24	\$4.90
	Contribution margin	[%]	75.79%	87.11%	87.78%	86.25%	86.25%	86.25%	86.25%	67.88%	67.88%	81.67%
	Sales Volume	[quantity]		6,193	6,575	3,228	5,512	4,960	3,038	47,812	62,024	3,580
	Revenue	[\$]	\$632,756	\$55,739	\$59,178	\$25,824	\$44,095	\$39,680	\$24,305	\$157,778	\$204,679	\$21,478
	% of Sales	[%]		8.81%	9.35%	4.08%	6.97%	6.27%	3.84%	24.94%	32.35%	3.39%
	Expense	[\$]	\$153,192	\$7,184	\$7,233	\$3,551	\$6,063	\$5,456	\$3,342	\$50,680	\$65,745	\$3,938
	Contribution	[\$]	\$479,564	\$48,555	\$51,945	\$22,273	\$38,032	\$34,224	\$20,963	\$107,098	\$138,933	\$17,541
		[%]		10.12%	10.83%	4.64%	7.93%	7.14%	4.37%	22.33%	28.97%	3.66%
	Break-Even Point (BEP)	Months	5.35									
		Revenue	\$281,989									

Diagram 4 - What-If analysis in marketing budget allocation

Product ID	Distribution	Name	Variable Costs per Unit				Prices
			Materials	Labor	Others	Overall	
BR01-01,	[retail]	Pilsner	0.56	0.30	0.30	\$1.16	\$8.00
BR01-02,	[retail]	Bavarian Lager	0.50	0.30	0.30	\$1.10	\$8.00
BR01-03,	[retail]	Light Wheat	0.50	0.30	0.30	\$1.10	\$7.50
BR01-04,	[retail]	Red Wheat	0.50	0.30	0.30	\$1.10	\$7.50
BR01-05,	[retail]	Pale Ale	0.50	0.30	0.30	\$1.10	\$7.50
BR01-06,	[retail]	Bock Dark	0.50	0.30	0.30	\$1.10	\$7.50
BR01-07,	[wholesale]	Pilsner	0.56	0.24	0.26	\$1.06	\$3.30
BR01-08,	[wholesale]	Bavarian Lager	0.56	0.24	0.26	\$1.06	\$3.30
BR01-09,	[retail]	Special Offer	0.52	0.29	0.29	\$1.10	\$6.00

Diagram 5 - Prices after conduct Sensitivity Analysis

	FY-1	FY-2	FY-3
Employees salaries	61500	66615	77013
Utilities&Other	25000	33675	36135
Marketing Costs	51500	51200	59145
Rent	5000	5400	6264
Loans Payments	21698	21698	21698
<b>Total Fixed Costs</b>	<b>\$164,698</b>	<b>\$178,588</b>	<b>\$200,255</b>

Diagram 6 - Annual Fixed Cost

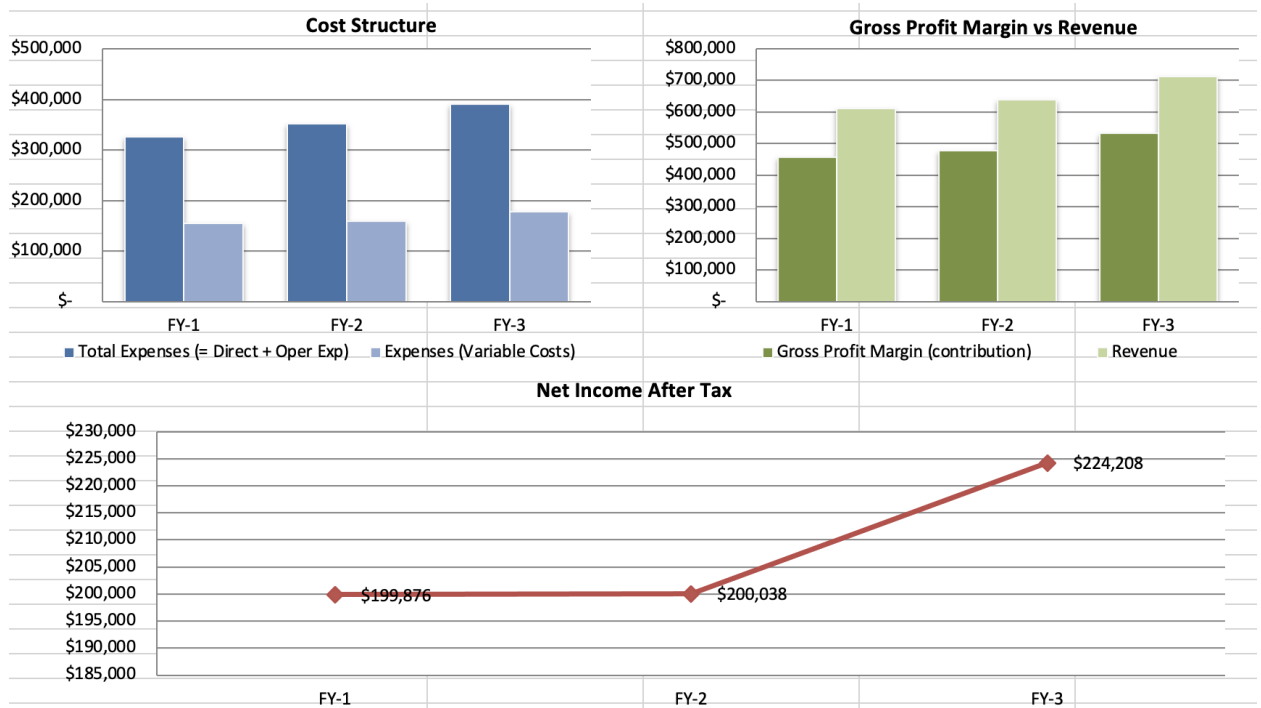


Diagram 7 - Profit Analysis