

# AD715 Quantitative and Qualitative Decision-Making Spring 2025

**Team Term Project 2** 

**Group 4** 

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## **Executive Summary**

Our research evaluates the strategic and financial outlook of setting up a new bar and microbrewery in East Austin, Texas, an emerging location for practitioners of the bar industry owing to its booming craft beer culture and music. Our capstone project revolves around the innovative customer brewhouse experience through the sale and servicing of beer for consumption on the premises with accompanying live performances. At the same time, we plan to open a wholesale distribution channel for our craft beer to bars, restaurants, and retailers. The viability of the business is evaluated through several simulation rounds, performance measurement, analytics components, and financial models.

Our extensive simulations show that the business in question is viable both financially and operationally. The presence of our key differentiators that include but are not limited to ownership of a broad product portfolio and market facing changes in supply levels leads us to conclude that the brewery will successfully compete in Austin's crowded craft beer market. The opportunity for the region is also quite adequately backed up by our SWOT and PESTLE analyses that point to strong capture local demand, seasonality dependent tourism, and favorable consumer movements. These results undoubtedly show that the brewery does fill a gap in the market while simultaneously positioning itself perfectly with the culture and consumer trends emerging within Austin.

The existing simulated operational cycles showcase that Cycle 7 was the most profitable, yielding a median net profit of \$4.32 million over 36 months. This was made possible due to stable cost structures, high margin premium products like Hazy IPA and Belgian Tripel, and customer retention. Contribution margins in this cycle surpassed \$5.6 million, with little change,

which demonstrates the strength and stability of the business model amid the varying operational circumstances.

Innovation in Cycle 7 with customized data-driven products, seasonal brews, and other brand differentiating changes increased average spend and bolstered brand identity which furthered profitability. Operational efficiency was enhanced through strategic build cuts, output changes during low-demand months, and concentrating on high-demand months, particularly March and October.

The investment decision level break-even point was achieved in 9.08 months with optimal strategies (Cycle 7). This marks increased early-stage financial sustainability. The business maintains the ability to reach a break-even revenue of \$2.1 million, demonstrating faster recovery of fixed and operational costs than the industry benchmark. This bodes well for investors as financial vulnerability is lessened.

From our break-even analysis, it's clear that high-margin products offer a more rapid payback on costs, while low-margin products are strategically sidelined or kept at a lower threshold. Our revenues helped take care of expenses during periods of low demand and enhanced profit margins during periods of surplus when we focused on balanced pricing strategy and comprehensive supply-demand equilibrium.

All factors considered point to the viability of the market, investment and operating financials indicating strong performance, as a foundation for earning attractive return on investment. This microbrewery-bar in East Austin stands as a prime candidate for investment given the clear strategy to generate profit fueled by low risk and achievable break-even within the first year.

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## **Background**

In TTP1, we detailed our business plan to open a new bar that combines a specialty restaurant and microbrewery in East Austin, Texas, USA. Austin is known for its thriving music culture and craft beer industry, making it an ideal place to develop this type of business. Our core concept is to combine high-quality home-brewed beer with local live music culture to create a unique social experience. With an 8-barrel microbrewery, we can brew eight flavors of beer at the same time, with up to 25 different flavors to flexibly respond to market changes and the diversity of customer tastes.

Our sales model adopts a "dual track system": on the one hand, we provide freshly brewed beer to customers in the store to enhance the consumer experience; on the other hand, we cooperate with local alcohol wholesalers to wholesale barrels of craft beer to other bars, restaurants and retailers to achieve scale expansion and brand communication. In terms of marketing, we use the "blue ocean strategy" to attract local residents and tourists with high-quality and reasonable price positioning, focusing on popular styles of IPA, Ale and Pilsner, while entering the boutique market as high-end wholesale products such as Belgian Tripel Beer and Russian Imperial Stout.

Our PESTLE and SWOT analysis revealed many market opportunities, such as seasonal consumption peaks driven by festivals and the brand promotion potential of social media, while also identifying risks such as declining sales in winter, regulatory restrictions and industry competition. Taking into account the bar area (400 square meters), seating capacity (112 seats) and annual production (more than 470,000 units), we set a goal of achieving 200% growth within three years and strive to become one of the most influential local craft beer brands in Austin.

## **Our Decision on Operation Management**

In cycle 5, we did not adjust the beer types because we had deeply analyzed the preferences of local consumers in Austin in the early product development stage to ensure that the selected product lines (such as IPA, Pilsner, etc.) can cover a wide range of tastes from conservative to adventurous customers.

At the same time, we also fully considered the balance between operational efficiency and profitability when formulating the cut-off point. Specifically, we set the retail cut-off to 0.8 to maximize the turnover rate and customer selection space of each product on the basis of ensuring capacity utilization, reducing inventory pressure, and improving customer satisfaction.

According to the operational management principles outlined by Heizer et al. (2017), implementing suitable production limitations and scheduling strategies enhances resource allocation, while avoiding product redundancy and resource wastage. We have set the wholesale cut-off at 1.0 because this channel typically involves stable, high-volume procurement and requires an adequate supply to meet both the consistency expectations and the business reputation of our partners. Drawing on the insights of Slack et al. (2019), the service level in operations should align with the sales model to ensure a continuous supply and reduce the risk of sales losses. By applying different cut-off settings for retail and wholesale channels, we have enhanced overall operational flexibility and risk management, ensuring a stable and efficient link between production and sales. (See Table 1)

Product Name & Description									
Product ID	Product Distribution	Product Name	Material	Labor	Other	Price	Cut off	Units	Action
BR-1	retail	Pilsner	0.35	0.20	0.22	5.50	0.80	1.00	Edit   Delete
BR-2	retail	Porter	0.35	0.20	0.22	5.50	0.80	1.00	Edit   Delete
BR-3	retail	Light Wheat	0.35	0.20	0.22	5.50	0.80	1.00	Edit   Delete
BR-4	retail	Hazy IPA	0.35	0.20	0.22	12.00	0.80	1.00	Edit   Delete
BR-5	retail	Sour Ale	0.35	0.20	0.22	9.50	0.80	1.00	Edit   Delete
BR-6	retail	Hefeweizen	0.35	0.20	0.22	5.50	0.80	1.00	Edit   Delete
BR-7	wholesale	Belgian-Style Tripel	0.35	0.20	0.22	6.50	1.00	1.00	Edit   Delete
BR-8	wholesale	Russian Imperial Stout	0.35	0.20	0.22	7.00	1.00	1.00	Edit   Delete

(Table 1)

Based on more detailed monthly sales forecasts and combined with established cut-off standards, we have dynamically optimized and adjusted the output of various types of beer. Through the analysis of local consumer behavior, festivals and climate change in Austin, we identified March and October as the annual consumption peaks. In these two key months, we significantly increased the production of core products such as Hazy IPA and Pilsner, while ensuring that other products at least meet the minimum demand (1 barrel per month), achieving a reasonable allocation of production capacity and seasonal dynamic matching of product structure.

The data shows that the "supply-demand gap" of all products is controlled within ±10%. Among them, the difference between supply and demand of Hazy IPA, which is the main product, is only 0.52%. This highly accurate matching of production and sales effectively reduces the risk of excess inventory storage and discounted sales, and improves the marginal profit per unit of production. Related studies have shown that in markets characterized by seasonal demand, the combination of sales forecasting and rolling production adjustment strategies can help improve asset turnover efficiency and inventory matching (Babai et al., 2013). (See Table 2)

Summary of FY-1						
Product ID	Product Distribution	Total Demand	Total Supply	Total Excess Demand	Excess Demand vs Demand	
BR-1	retail	35733.58	33480.00	2253.58	6.31%	
BR-2	retail	17866.80	18600.00	-733.20	-4.10%	
BR-3	retail	17866.80	18600.00	-733.20	-4.10%	
BR-4	retail	53600.43	53320.00	280.43	0.52%	
BR-5	retail	35733.60	33480.00	2253.60	6.31%	
BR-6	retail	17866.80	18600.00	-733.20	-4.10%	
BR-7	wholesale	109185.99	102920.00	6265.99	5.74%	
BR-8	wholesale	109185.99	102920.00	6265.99	5.74%	

(Table 2)

## **Break-even analysis**

In terms of break-even analysis, we evaluated the cost structure and sales performance of each product in different sales channels. The analysis results show that high-priced, high-gross-margin products such as Hazy IPA and Belgian Tripel, although the brewing cost is slightly higher, have a break-even point far lower than the average sales volume, so they have stable profitability and are suitable for priority production. However, lower-priced products such as Light Wheat are difficult to reach the break-even point during the off-season, so they are limited to the minimum supply level. This practice of prioritizing product scheduling based on profit and loss performance effectively improves overall capacity utilization efficiency and profit margins.

Related research also shows that in a resource-constrained environment, dynamic analysis of the break-even point can help companies achieve more flexible operational deployment (Farris et al., 2010).

### **Optimization Analysis**

We adopted the idea of optimization analysis and arranged production capacity allocation and product scheduling around "how to maximize profits under limited resources". We are initially

faced with limited brewing resources, as the number of brewing equipment and barrels available each month is fixed. This means that we need to prioritize and make trade-offs between different products. Products with high market demand and higher profit margins, like IPA and Tripel, are given precedence in the scheduling process. This approach helps us concentrate resources on more profitable products, avoiding "capacity dilution." Additionally, for monthly allocations, we focus on increasing production during peak seasons based on seasonal demand changes, while scaling back output during the off-season. However, we ensure that each product maintains a minimum supply to preserve the integrity of the product line. Rather than aiming for "full production" across all products, we use a cutoff value as an internal "optimization standard" to decide which products are worth greater resource investment. This optimization approach applies not only to production scheduling but also to inventory management and labor planning. We strive to minimize off-season inventory buildup by forecasting and procuring in advance, while also avoiding increased labor and refrigeration costs that result from excessive scheduling.

### **Our Decision on Innovation**

Innovation in the craft beer world is more than creative flair, it's the backbone of our strategic success. Cycle 7, which emphasized innovation-focused decision-making, clearly demonstrated that forward-thinking strategies deliver superior financial and operational performance. From enhancing customer engagement to expanding profit margins, this cycle stood out as the strongest performer based on our business simulation results (Rothaermel, 2023). It was about combining data-backed strategy with a deep understanding of market needs.

#### Why Innovation Made the Difference

Among all simulation cycles, Cycle 7 produced the highest total revenue and net profit, confirming that strategic innovation isn't just smart, it's essential. KPI 5, which measures our penetrated market share, rose significantly during this period, illustrating that our investment in creative, experience-driven offerings resonated with our target audience (Lombardo, 2025). With innovation, we saw an increase in average customer consumption, product diversity, and brand differentiation. This allowed us to charge slightly higher prices while still increasing volume. Financially, this cycle offered the fastest return on investment, reducing the break-even point and boosting profit margins consistently over the 36-month simulation.

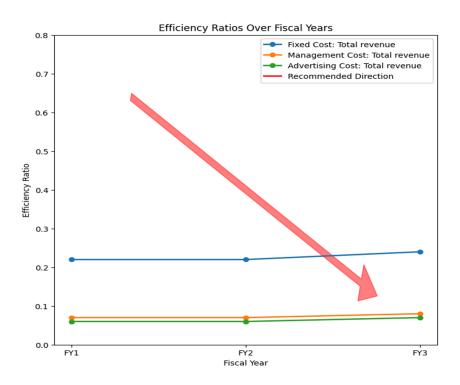


Table 3: Break-even Point Analysis – Showing Cycle 7 reaching profitability early.

## **How We Made It Happen**

To enhance product quality and optimize production efficiency, we decided to make a capital investment in purchasing a water purification system. This acquisition increased our fixed assets by \$6,000. In the short term, this expense put some pressure on our profits. However, the device substantially lowered the per-unit production cost, reducing the cost of each beer by \$0.20. More importantly, the introduction of the water purification system significantly improved the overall flavor stability and consistency of our beer, while also boosting our brand reputation and customer satisfaction.

From a long-term operational perspective, this investment is very worthwhile. On the one hand, it helps us establish stronger product competitiveness in the market; on the other hand, as production increases, the cost savings effect will gradually emerge and have a continuous positive impact on profit margins. This decision reflects that while we pursue high-quality products, we also focus on achieving sustainable cost control and profitability improvement through process optimization.

## **SWOT Analysis**

We anchored our innovation strategy using SWOT Analysis. Internally, we leveraged strengths such as a creative brewing team, tech-friendly operations, and a strong local reputation. We recognized weaknesses like seasonality and brewing complexity and addressed them with smarter production planning. Externally, we seized opportunities like Austin's booming events scene, seasonal product experimentation, and digital customer engagement. At the same time, we monitored threats including economic shifts, competitor saturation, and supply chain volatility (Kotler & Keller, 2021).

### **What-If Analysis**

To validate our innovation efforts, we used What-If Analysis. We modeled multiple innovation scenarios, ranging from introducing exclusive seasonal brews to integrating mobile-first digital menus. Cycle 7 consistently demonstrated stronger results across these scenarios. The analysis revealed that customers were more engaged, repeat visits increased, and our margin per pint improved substantially. This wasn't speculative—it was simulation-confirmed and measurable across all KPIs.

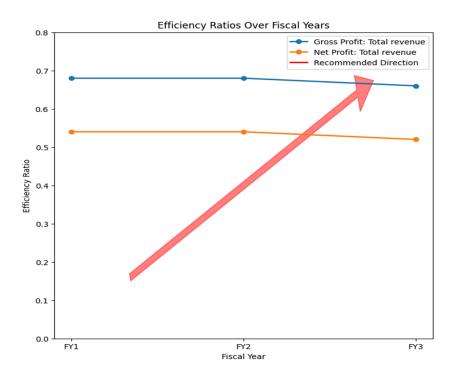


Table 4: Efficiency Ratios Over Fiscal Years – Gross and Net Profit Ratios.

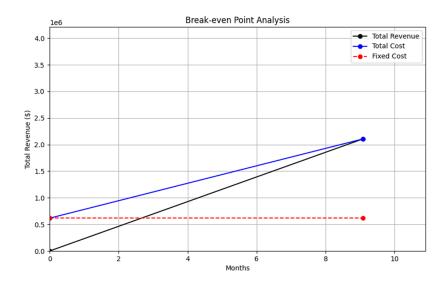


Table 5: Efficiency Ratios Over Fiscal Years – Cost components as a share of revenue.

### **Brewing the Future**

Cycle 7 taught us that innovation is more than a buzzword—it's a multiplier. Through a structured approach combining strategic frameworks and simulation analysis, we proved that innovation enhances profitability, customer loyalty, and brand longevity. From better product-market fit to improved process efficiency, every element of Cycle 7's strategy brewed value. It wasn't about gimmicks—it was about smart investment in creative growth. And in the world of craft beer, that's what keeps both the taps and profits flowing (Goekos, 2023).

## Our decision on Organization & HR Management

The goal that we set in Cycle 8 was to boost staff happiness by means of active HR procedures as well as boosting internal efficiency within the company. Specifically, we increased the annual salary increase for all of our important team members office assistants, salespeople, executives, and consultants from 5% to 7%. The change was brought about by current inflationary trends

and increased competition in the labor market. The goal was to reduce expenses associated with turnover, promote long-term staff retention, as well as preserve a competitive pay structure in the hospitality sector.

We also implemented a more efficient organizational structure at the same time. In these circumstances, team leads were granted more power, and communication became more level and cross-functional. In these circumstances, team leads were granted more power, and communication became more level and cross-functional made possible by this structural shift. As noted by Dessler (2020), flatter organizational models reduce bureaucratic delays and improve employee engagement, especially in fast-paced industries like food service.

## **What-If Analysis**

To assess the long-term feasibility of these changes, we used What-If Analysis to simulate scenarios involving wage increases and turnover fluctuations. We simulated situations that involve higher salaries as well as revenue shifts using What-If Evaluation with the goal to evaluate the long-term viability of these changes. Even with external pressures like a between 10 and 15% spike in typical marketplace wages, the computer models demonstrated that Cycle 8's tactics were going as both economically and operationally viable. This proactive planning is in line with modern HR management techniques that support skilled labor prevention as well as adaptive compensation models (Ulrich et al., 2019).

### **SWOT Analysis**

SWOT analysis additionally served to assess our outside obstacles as well as strengths within.

Our forward-thinking salary structure along with an inspired workforce had been our main

advantages; our reliance regarding consistent income sources and rising labor costs had been our disadvantages. Nevertheless, those fears have been balanced by the potential over time to increase employee loyalty and lower hiring expenses. The cultural and organizational shifts assisted mitigate external threats like wage inflation and turning labor market competition.

All things considered, Cycle 8 reaffirmed the idea that staff involvement along with a healthy organization constitute the cornerstones of profitable development. We concentrated on improving our internal environment rather than seeking growth via aggressive pricing strategies or external expansion. According to Armstrong and Taylor's (2020), performance outcomes in industries that interact with customers are strongly correlated with organizational effectiveness and employee satisfaction.

## **Performance**

Among all the simulation rounds, our strongest performance occurred in Round 7. In the following analysis, we will focus on key financial indicators from this round, including revenue, gross profit, and net income by using D-Analysis and Break-Even Point.

FY-1 lotal	
Metric	Value
Total Quantity	381,920
Total Revenue	\$ 2,838,360
Total Expense	\$ 286,440
Total Contribution	\$ 2,551,920
Total Fixed Cost	\$ 616,906.86
Gross Profit	\$ 1,935,013.14
Net Profit	\$ 1,528,660.38

FV 1 T-4-1

FY-2 Total

Metric	Value
Total Quantity	381,920
Total Revenue	\$ 2,838,360
Total Expense	\$ 286,440
Total Contribution	\$ 2,551,920
Total Fixed Cost	\$ 627,787.5
Gross Profit	\$ 1,924,132.5
Net Profit	\$ 1,520,064.68

FY-3 Total

Metric	Value
Total Quantity	360,840
Total Revenue	\$ 2,672,820
Total Expense	\$ 270,630
Total Contribution	\$ 2,402,190
Total Fixed Cost	\$ 648,344.63
Gross Profit	\$ 1,753,845.37
Net Profit	\$ 1,385,537.84

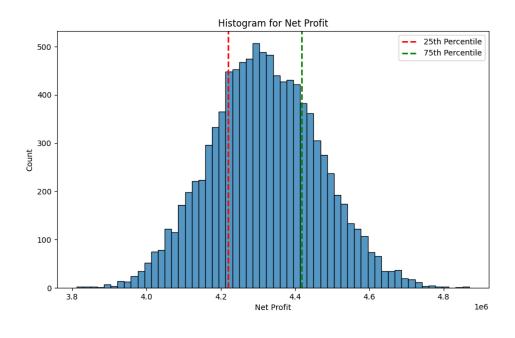
(Table 6)

## **D-Analysis**

Of all the simulation rounds, Round 7 exhibits the best financial performance, with a significant advantage in net profit in particular. Based on the results of the histogram and the five-number generalization, the overall distribution of net profit for this round is relatively concentrated with a slight right skew, which indicates that most of the simulation results are concentrated around the median, while there are still a few significantly higher than average results that show the potential for growth with optimal decision making. The median net profit is \$4,315,192.29, the 25th percentile and the 75th percentile are \$4,219,131.53 and \$4,418,245.56, respectively, with an interquartile range of about \$199,114.03, which suggests that the range of fluctuations in the financial performance of the current round is small and stable. In addition, the maximum net profit of \$4,869,004.44 further indicates that better profitability results can be achieved with certain combinations of strategies. Overall, Round 7 not only achieved a high level of

profitability, but also excelled in risk control and performance consistency, providing a strong reference for subsequent business decisions.

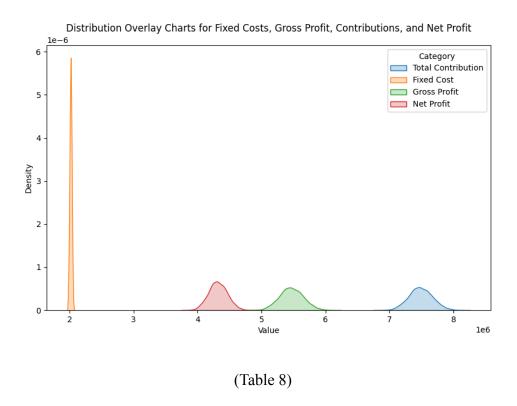
Compared to the previous simulation rounds, Round 7 performed much better in terms of key financial indicators. According to the charts, the net profit for Round 7 ranged from a low of \$3,812,086.42 to a high of \$4,869,004.44, compared to the previous round's net profit range of approximately \$3.74M to \$4.77M. The median for Round 7 was \$4,315,192.29, which is much closer to the high end of the range of \$4.14M to \$4.34M, indicating a more favorable level of overall profitability. This shows that the overall profitability level is more favorable. Meanwhile, the interquartile range of the seventh round is about \$199,114.03, which is similar to the previous round's \$195,369.67, indicating that the volatility of the net profit is relatively low and the financial performance has good stability. Although both rounds show a trend close to normal distribution, the seventh round is slightly skewed to the right, indicating that there is a higher potential for profitability under some combinations of strategies.



(Table 7)

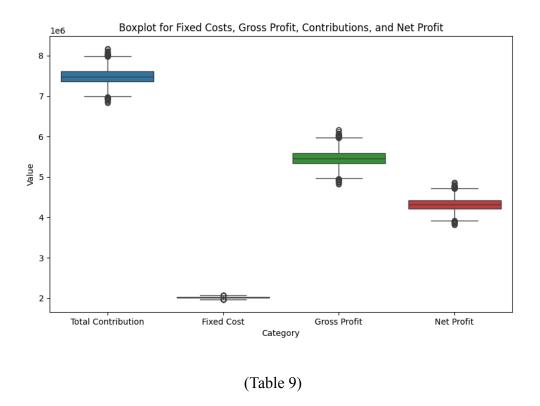
From the distribution overlay chart of this simulation, it can be seen that the key financial indicators show obvious differences in distribution. The distribution of Fixed Cost is the most concentrated, with a value around \$1.9M, indicating that the cost control in this round is relatively stable, with minimal volatility; this provides a good basis for profitability predictability. The distribution of Gross Profit is in the middle, mainly around \$5M, indicating that product sales are still highly profitable after deducting direct costs. Total Contribution has the highest distribution peak, concentrated in the range of \$7M to \$8M, indicating that sales revenue has formed a strong marginal profit margin after covering variable costs. The distribution of Net Profit is slightly to the left, mainly around \$4M. Although positive returns are still achieved under the control of various revenues and expenditures, the center of gravity of its distribution is slightly lower than that of contribution and gross profit, suggesting that there is still room for optimization of fixed costs or other overhead expenses.

Comparing the financial performance of the two simulation rounds, the current round has an advantage in terms of cost control and profit structure. Fixed costs in the current round are about \$1.9M, which is a concentrated distribution and shows stronger cost control, while the previous round is \$2.02M, which is relatively high. Although the gross profit of the previous round is higher (\$5.36M vs. \$5M for the current round), the difference in net profit is not significant, indicating that its operating costs are heavier and its profit conversion is less efficient. The gross contribution value of the current round is distributed in the range of \$7M-\$8M, which is slightly higher than the previous round's \$7.38M, reflecting better sales performance and profit margins. Overall, although the gross profit of the previous round is higher, the current round performs better in terms of cost structure optimization, sales contribution and profitability stability, and has stronger potential for sustained profitability.



According to the box plot and statistics, this simulation round shows good structure and stability in all financial indicators. The median Gross Contribution is \$7,480,626.79, while the median Gross Profit and Net Profit are \$5,462,268.73 and \$4,315,192.29 respectively, reflecting a healthy path of profitability after costs. Fixed costs remain at a low level of \$2,019,321.06, effectively protecting profitability. In terms of interquartile range (IQR), the IQR of net profit is \$199,114.04 and the IQR of gross profit is \$252,043.08, which indicates that these two core profitability indicators are less volatile and more stable in terms of financial performance. Although there are some upper and lower outliers, such as the upper and lower bounds of net profit with 18 and 33 sample points respectively, the overall distribution is concentrated, indicating that most of the simulation results are within the acceptable range. In summary, this round of simulation shows a financial structure of high contribution, low cost and stable profit, reflecting strong profitability and operational resilience.

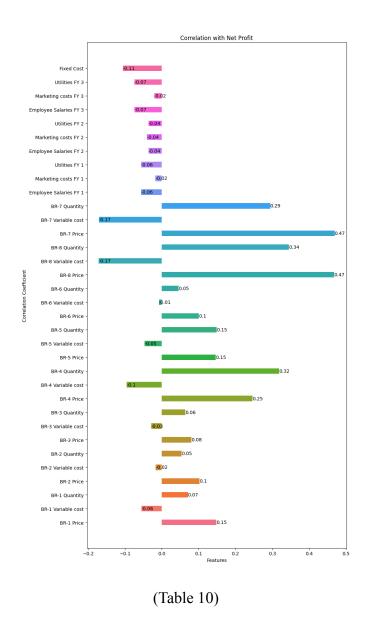
Compared to the previous rounds, the current round is slightly better than the previous round in terms of Median Net Profit, Fixed Cost Control, Contributing Value Performance and Outlier Control, even though both rounds have similar quartile spacing and little volatility in Net Profit. In particular, the current round's Median Net Profit is higher by about \$75,000 and the number of low outliers in Net Profit has decreased (from 20 to 18), demonstrating better risk tolerance while maintaining returns. In addition, the current fleet has fewer fixed cost outliers, indicating a more stable control of day-to-day operating expenses, further improving the consistency and predictability of overall financial performance.



The correlation analysis of the Round 7 simulation shows that net profit is most significantly affected by product pricing and sales volume. The prices of BR-7 and BR-8 (both with a correlation coefficient of 0.47) contribute the most to the profit improvement, indicating that the pricing strategy of high selling price products is extremely critical. Secondly, the sales volume of

BR-8, BR-4, and BR-7 are also significantly positively correlated, indicating that sales growth has a direct impact on profits. Among the negatively correlated variables, BR-7 and BR-8's variable costs (-0.17 each) and fixed costs (-0.11) constitute a major inhibitor to profits, highlighting the importance of cost control. Others, such as employee salaries, utilities and marketing expenses, have less of an impact but may accumulate pressure in the long term. In summary, boosting prices and sales of high value-added products while controlling key costs is the core strategy to optimize net profit.

Although both rounds show a strong positive correlation between pricing and sales volume of high margin products (BR-7 and BR-8) on net profit, the current round reflects the influence of multiple positive and negative variables in a more systematic way, and the correlation structure of the variables is clearer and more hierarchical. Meanwhile, the current round focuses more on key products and control strategies, providing more operational optimization directions (e.g., variable cost control and refined pricing). Therefore, it can be judged that the correlation results of the 7th round are more practical and strategically informative, and better than the previous performance.



## **Break-Even Point**

From the analysis of the break-even point, the projects in the seventh round performed better than the previous round, reflecting higher operational efficiency and cost recovery ability. The data shows that the break-even point of the projects in the seventh round is 9.08 months, which is slightly shorter than that of the previous round, which is 9.13 months, indicating that the projects are able to achieve break-even earlier under the financing strategy of this round. In addition, the break-even return of the projects in the seventh round was US\$2,105,716.34, which was slightly

higher than that of US\$2,091,189.46 in the previous round, but considering its shorter payback period, it indicated that the profitability per unit of time had been improved. Overall, the Round 7 projects not only achieved stable financial returns, but also performed better in terms of payback efficiency, which provides positive signals and a practical basis for enterprises' future investment decisions.

Break Even Point		
Break Even Point: Months	9.13	9.08
Break Even Point: Revenue	\$ 2,091,189.46	\$ 2,105,716.34
Break-Even-Point Plot	[Visualization]	[Visualization]

## (Table 11)

## **Conclusion**

A comprehensive analysis of the results of the seventh round of simulation shows that the project demonstrates strong feasibility and stability in terms of financial performance, cost control and profit structure. The median net profit reaches \$4.32M, with a small fluctuation range and a limited number of outliers, indicating stable overall profitability. The high level of contribution value and gross profit indicates that the product sales have good marginal earning capacity; meanwhile, the proper control of fixed costs helps to minimize financial risks. In addition, correlation analysis shows that net profit is mainly driven by the price and sales volume of high margin products (e.g. BR-7 and BR-8), while variable costs, employee salaries and fixed expenses are the main negative factors. Based on this result, our brewery can further optimize a few aspects:

**Focus on high-margin products:** Prioritize the sales strategy and pricing flexibility of BR-7 and BR-8 to maximize value through differentiated positioning and product promotion.

Optimization of cost structure: Strengthening the control of variable costs for high gross profit products, especially controlling variable costs to enhance marginal profits; meanwhile, reasonably controlling fixed costs and manpower expenses to maintain profitability stability.

Optimize marketing strategies: Use the verified highly relevant variables in the simulation to develop precise sales and promotion plans to maximize the efficiency of resource utilization.

Continuous monitoring: focus on potential causes of profit fluctuations, such as seasonality, operational efficiency or expense structure, and make timely adjustments to operational strategies.

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# Appendix

Table 1

	Product Name & Description								
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BR-5	retail	Sour Ale	0.35	0.20	0.22	9.50	0.80	1.00	Edit   Delete
BR-6	retail	Hefeweizen	0.35	0.20	0.22	5.50	0.80	1.00	Edit   Delete
BR-7	wholesale	Belgian-Style Tripel	0.35	0.20	0.22	6.50	1.00	1.00	Edit   Delete
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Product ID	Product Distribution	Total Demand	Total Supply	Total Excess Demand	Excess Demand vs Demand	
BR-1	retail	35733.58	33480.00	2253.58	6.31%	
BR-2	retail	17866.80	18600.00	-733.20	-4.10%	
BR-3	retail	17866.80	18600.00	-733.20	-4.10%	
BR-4	retail	53600.43	53320.00	280.43	0.52%	
BR-5	retail	35733.60	33480.00	2253.60	6.31%	
BR-6	retail	17866.80	18600.00	-733.20	-4.10%	
BR-7	wholesale	109185.99	102920.00	6265.99	5.74%	
BR-8	wholesale	109185.99	102920.00	6265.99	5.74%	

Table 3

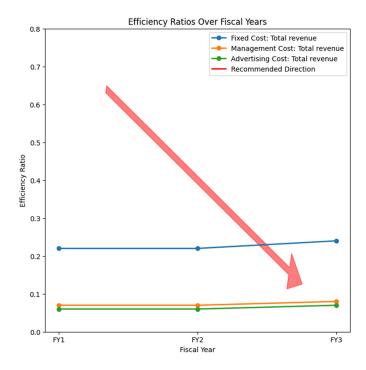


Table 4

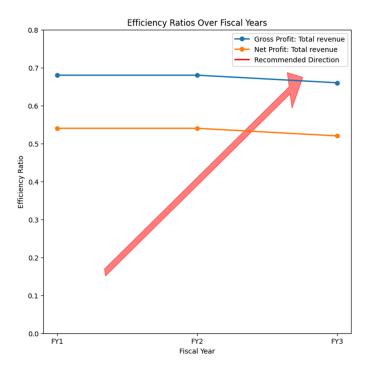


Table 5

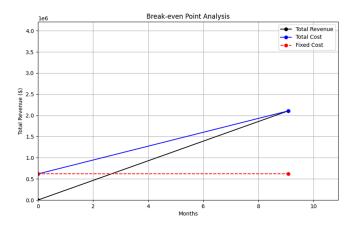


Table 6

FY-1 Total

Metric	Value
Total Quantity	381,920
Total Revenue	\$ 2,838,360
Total Expense	\$ 286,440
Total Contribution	\$ 2,551,920
Total Fixed Cost	\$ 616,906.86
Gross Profit	\$ 1,935,013.14
Net Profit	\$ 1,528,660.38

FY-2 Total

Metric	Value
Total Quantity	381,920
Total Revenue	\$ 2,838,360
Total Expense	\$ 286,440
Total Contribution	\$ 2,551,920
Total Fixed Cost	\$ 627,787.5
Gross Profit	\$ 1,924,132.5
Net Profit	\$ 1,520,064.68

FY-3 Total

Metric	Value
Total Quantity	360,840
Total Revenue	\$ 2,672,820
Total Expense	\$ 270,630
Total Contribution	\$ 2,402,190
Total Fixed Cost	\$ 648,344.63
Gross Profit	\$ 1,753,845.37
Net Profit	\$ 1,385,537.84

Table 7

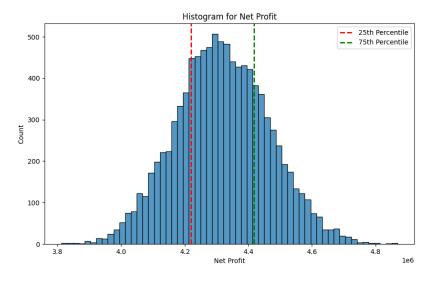


Table 8

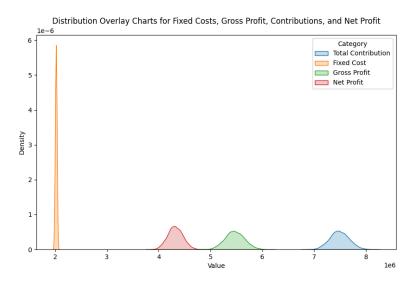


Table 9

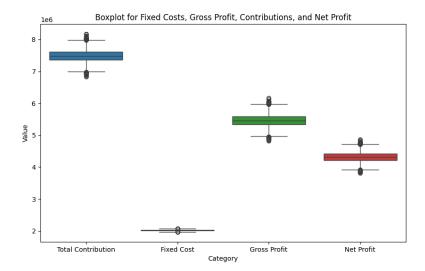
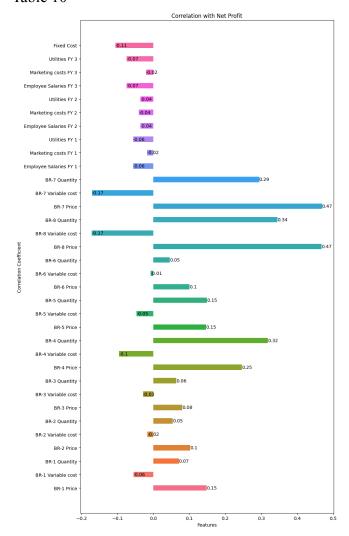


Table 10



# Table 11

Break Even Point		
Break Even Point: Months	9.13	9.08
Break Even Point: Revenue	\$ 2,091,189.46	\$ 2,105,716.34
Break-Even-Point Plot	[Visualization]	[Visualization]