

Sales Performance, Business Product Feasibility, and Consumer Repurchase Intention Analysis of Munchcupp Products in the Market Day Capstone Project Using Descriptive Statistics and One-Sample T-Test

Joe Funny Puteri Alrijanto*¹, Salsa Nabila², Muhammad Rehan Renaldy³
Rion Audrey Basuni⁴, and Vino Ezra Caninno⁵

^{1,2,3,4,5}*Digital Business Study Program, Telkom University, Bandung, Indonesia*
(corresponding author: joefunnyputeri@student.telkomuniversity.ac.id)

Abstract

Purpose - This study evaluates the sales performance, business product feasibility (BPF), and consumer repurchase intention (RI) of Munchcupp, a food product marketed during the Market Day Capstone Project of the Digital Business Study Program, addressing the need for data-driven evaluation of student-run business ventures.

Design/Methodology/Approach - A descriptive quantitative approach was employed using actual sales data and survey responses from 30 consumers collected through a five-point Likert scale. Business product feasibility and repurchase intention were examined through a One-Sample t-Test with a test value of 4.00 at a significance level of 0.05. **Findings** - Munchcupp generated total revenue of Rp2,400,000 and a net profit of Rp432,000, resulting in a profit margin of 18.00%. Statistical testing showed that both business product feasibility ($t = 10.094$; $p < 0.001$) and repurchase intention ($t = 15.545$; $p < 0.001$) were significantly higher than the benchmark value, indicating that consumers perceive Munchcupp as commercially viable and are inclined to purchase it again. **Originality/Value** - This research offers a practical, replicable framework for evaluating student entrepreneurship projects by combining descriptive sales analysis with inferential testing of consumer perception, providing evidence-based guidance for further business development of Munchcupp and similar Capstone Project ventures.

Keywords: *business product feasibility; descriptive statistics; market day; one-sample t-test; repurchase intention*

1. Introduction

The accelerating transformation of the digital economic landscape requires universities to design learning experiences that are not merely theoretical but oriented toward measurable practical competence. In response to this challenge, the Digital Business Study Program integrates a Capstone Project approach into its curriculum as a vehicle for multidisciplinary synthesis, in which students are challenged to design, produce, and market real products to actual consumers through an activity known as Market Day.

The Market Day activity does not merely function as an entrepreneurship simulation arena; it also generates primary data in the form of actual sales transaction records and direct consumer feedback. Such data carries significant scientific value when processed systematically using appropriate statistical instruments. Descriptive statistics allow researchers to summarize and interpret the distribution of sales data comprehensively, covering total units sold, revenue composition, cost structure, and product-level profitability. Meanwhile, hypothesis testing through the One-Sample t-Test provides a robust inferential basis for assessing whether consumer perceptions of product attributes statistically exceed a predetermined feasibility threshold.

Data-driven evaluation is becoming increasingly crucial, given that business development decisions based solely on intuition risk producing misleading conclusions. The product analyzed in this study is Munchcupp, an innovative culinary product developed by a student group from the Digital Business Study Program. The product is offered in three variants - Wonton, Dimsum, and a Mix Wonton & Dimsum package - at a uniform selling price of Rp15,000 per portion.

Based on the description above, this study aims to: (1) describe Munchcupp's sales performance during the Market Day activity using descriptive statistics; (2) test the business feasibility of the Munchcupp product based on consumer perception through a One-Sample t-Test; and (3) test the level of consumer repurchase intention toward the Munchcupp product using a One-Sample t-Test.

2. Literature Review

2.1 Market Day and Capstone Project

The Capstone Project is a form of project-based learning designed to integrate the knowledge and skills students have acquired throughout their coursework. Through this activity, students do not merely study theory but apply learned concepts to situations that are more realistic and relevant to the world of work and business. In the Digital Business Study Program, the Capstone Project is implemented through the Market Day activity, a direct product-selling event held for consumers within the campus environment.

The Market Day activity gives students the opportunity to gain experience in planning, producing, marketing, and evaluating the products they offer. Beyond serving as a vehicle for entrepreneurship learning, the activity also generates data that can be used for analysis and evaluation purposes. Such data is important because it provides insight into product performance and consumer response to the products marketed.

In its implementation, the Market Day activity produces two main types of data: actual sales data obtained from sales transactions, and consumer perception data collected through questionnaires. Sales data is used to examine product performance based on units sold and revenue generated, while questionnaire data is used to determine consumer assessments of the products offered. By utilizing both types of data, product evaluation can be conducted more comprehensively, covering both the sales aspect and consumer response to the product.

2.2 Business Product Feasibility

Business product feasibility refers to a product's capacity to meet market requirements in terms of sales value, alignment with consumer preferences, and prospects for business sustainability (Kotler & Keller, 2016). A product is considered business-feasible if it is able to create perceived value for consumers that exceeds their baseline expectations. Ghozali (2018) asserts that quantitative assessment of product feasibility can be conducted by comparing the mean consumer perception score against a test value representing the minimum feasibility standard. In this study, business product feasibility is measured through three indicators: product sales value (BPF1), product suitability with consumer needs (BPF2), and the product's development potential after the Market Day event (BPF3).

2.3 Consumer Repurchase Intention

Repurchase intention is defined as consumers' behavioral tendency to make a repeat purchase of the same product or brand in the future, as a manifestation of consumption satisfaction. It is identified as a core dimension of consumer loyalty, influenced by the quality of the consumption experience, perceived value, and the intention to recommend the product to others. In this study, the repurchase intention variable is operationalized through three indicators: consumers' intention to repurchase the Munchcupp product (RI1), consumers' willingness to buy if the product is remarketed (RI2), and consumers' willingness to recommend the product to others (RI3).

2.4 Descriptive Statistics

Descriptive statistics is a branch of statistics that summarizes, organizes, and presents a set of data concisely and comprehensibly without generalizing or making inferences to a broader population. In the analysis of business sales performance, descriptive statistics encompasses measures of central tendency such as the mean and median, measures of dispersion such as the standard deviation, and the presentation of frequency distributions in the form of tables and charts. Applying descriptive statistics to Market Day sales data enables the systematic identification of top-performing products, revenue distribution patterns, and profitability structure.

2.5 One-Sample t-Test

The One-Sample t-Test is a parametric hypothesis-testing procedure used to compare the mean of a sample group against a predetermined constant value. This method is appropriate when data is measured on an interval or ratio scale and the population distribution is assumed to be normal, or when the sample size is adequate based on the central limit theorem. The test statistic used is:

$$t = (\bar{x} - \mu_0) / (s / \sqrt{n})$$

Where $\bar{x}$ is the sample mean, μ_0 is the predetermined test value, s is the sample standard deviation, and n is the sample size. The decision to reject H_0 is made when the probability value (p-value) falls below the predetermined significance level α . In this study, the test value was set at 4.00 with $\alpha = 0.05$.

3. Method

This study employs a descriptive quantitative approach using two complementary primary data sources. The first is actual sales data, recorded systematically during the Market Day Capstone Project. The second is questionnaire data collected from consumers who purchased or sampled the Munchcupp product on the day of the Market Day event.

Table 1. Research Methodology Components

Component	Description
Research type	Descriptive quantitative
Research object	Munchcupp product (Wonton, Dimsum, Mix Dimsum & Wonton)
Respondents	Consumers who purchased and sampled the Munchcupp product
Number of respondents	30 people
Data type	Actual sales data and consumer questionnaire data
Measurement scale	Likert 1-5 (1 = Strongly Disagree, 5 = Strongly Agree)
Analysis technique	Descriptive statistics and One-Sample t-Test
Test value	4.00
Significance (α)	0.05

Source: Research data, 2025

The business product feasibility (BPF) variable is measured using three statement items: BPF1 (the product has good sales value), BPF2 (the product matches consumer needs or wants), and BPF3 (the product has the potential to be developed after Market Day). The BPF value is calculated as the arithmetic mean of the three items: $BPF = (BPF1 + BPF2 + BPF3) / 3$.

The repurchase intention (RI) variable is likewise measured through three statement items: RI1 (I am interested in repurchasing this product), RI2 (I am willing to buy this product if it is resold), and RI3 (I will recommend this product to others). The RI value is calculated as: $RI = (RI1 + RI2 + RI3) / 3$. Hypothesis-testing decisions follow the rule: if $p\text{-value} < 0.05$, H_0 is rejected; if $p\text{-value} \geq 0.05$, H_0 fails to be rejected.

4. Results

Munchcupp is an innovative culinary product developed by a student group from the Digital Business Study Program as part of the Market Day Capstone Project. The product is offered in three variants, each designed to meet a different consumer taste segment: Wonton, Dimsum, and Mix Wonton & Dimsum (a combination package bringing both variants together in a single serving). The uniform selling price of Rp15,000 per portion was set based on an analysis of the purchasing power of the target segment - students and campus-area visitors - while accounting for an adequate profit margin.

4.1 Descriptive Statistics of Sales Data

Table 2. Munchcupp Sales Recap - Market Day Capstone Project

No.	Product variant	Price/portion	Units sold	Revenue	Cost	Profit
1	Wonton	Rp15,000	58	Rp870,000	Rp713,400	Rp156,600
2	Dimsum	Rp15,000	54	Rp810,000	Rp664,200	Rp145,800
3	Mix Dimsum & Wonton	Rp15,000	48	Rp720,000	Rp590,400	Rp129,600
Total	-	-	160	Rp2,400,000	Rp1,968,000	Rp432,000

Source: Munchcupp Market Day actual sales data, 2025

Table 3. Summary of Descriptive Statistics for Sales Data

Statistical Indicator	Value
Sales period	4 weeks
Total units sold	160 portions
Total revenue	Rp2,400,000
Total cost	Rp1,968,000
Total profit	Rp432,000
Profit margin	18.00%
Best-selling product	Wonton (58 portions)
Average sales	40 portions/week
Highest weekly sales	46 portions (Week 4)
Lowest weekly sales	32 portions (Week 1)

Source: Processed Munchcupp sales data, 2025

Based on Tables 2 and 3, Munchcupp sold a total of 160 portions across the three variants offered during the sales period. Total revenue reached Rp2,400,000 against a total production cost of Rp1,968,000, resulting in a net profit of Rp432,000, equivalent to an 18.00% profit margin. This margin reflects a reasonably efficient use of capital for a student-run startup venture.

Regarding the distribution of sales by variant, Wonton showed the highest sales performance with 58 portions sold, contributing 36.25% of total sales. Dimsum followed with 54 portions sold (33.75% contribution), while the Mix Wonton & Dimsum variant sold 48 portions (30.00% contribution). In terms of sales volume, Wonton was the most favored variant among consumers during the observation period, indicating a relatively stronger consumer preference for it, although all three variants contributed in a fairly balanced manner to Munchcupp's overall sales.

4.2 Descriptive Statistics of Questionnaire Data

The questionnaire was distributed to 30 respondents who were actual consumers that purchased or sampled the Munchcupp product during the Market Day event. Respondents rated six statement items covering the Business Product Feasibility variable (BPF1, BPF2, BPF3) and the Repurchase Intention variable (RI1, RI2, RI3) using a 1-5 Likert scale.

Table 4. Descriptive Statistics of the BPF and RI Variables

Variable	N	Min	Max	Mean (μ)	Std. Dev (s)
BPF (Business Product Feasibility)	30	3.00	5.00	4.76	0.41
RI (Repurchase Intention)	30	3.00	5.00	4.88	0.31

As shown in Table 4, the mean BPF score across the 30 respondents was 4.76 with a standard deviation of 0.41, well above the 4.00 test value set as the feasibility threshold. For the RI variable, the mean score was 4.88 with a standard deviation of 0.31, likewise exceeding the test value. The relatively small standard deviations for both variables indicate that respondents' perceptions were homogeneous and consistent, with no significant disparity of assessment among the surveyed consumers.

4.3 One-Sample t-Test Results - Business Product Feasibility (BPF)

The business product feasibility hypothesis test is formulated as follows:

$H_0: \mu_{BPF} \leq 4.00$ (the questionnaire results are not sufficiently strong to conclude that consumers agree Munchcupp is feasible to develop as a business)

$H_1: \mu_{BPF} > 4.00$ (the questionnaire results indicate that consumers agree Munchcupp is feasible to develop as a business)

Table 5. One-Sample t-Test Results for Business Product Feasibility (BPF)

Variable	N	Mean	Test Value	t-value	df	p-value (Sig.)
BPF	30	4.76	4.00	10.094	29	0.001

The analysis in Table 5 shows that the One-Sample t-Test on the BPF variable produced a t-value of 10.094 with 29 degrees of freedom (df) and a p-value of 0.001. Based on the decision rule that H_0 is rejected when $p\text{-value} < \alpha$ (0.05), H_0 is rejected and H_1 is accepted. This means that the mean consumer rating of Munchcupp's business product feasibility ($\mu = 4.76$) is statistically significantly higher than the test value of 4.00. Sufficient empirical evidence therefore exists to conclude that consumers regard Munchcupp as feasible to develop into a sustainable business product.

This finding aligns with Kotler and Keller (2016), who argue that products perceived to have high sales value, relevance to consumer needs, and development potential tend to receive strong consumer support for business continuity. BPF3, which measures the opportunity for product development after Market Day, recorded the highest average score among the three BPF items, suggesting consumer optimism about Munchcupp's expansion prospects beyond the campus environment.

4.4 One-Sample t-Test Results - Repurchase Intention (RI)

The repurchase intention hypothesis test is formulated as follows:

H_0 : $\mu RI \leq 4.00$ (the questionnaire results are not sufficiently strong to conclude that consumers agree to repurchase the Munchcupp product)

H_1 : $\mu RI > 4.00$ (the questionnaire results indicate that consumers agree to repurchase the Munchcupp product)

Table 6. One-Sample t-Test Results for Repurchase Intention (RI)

Variable	N	Mean	Test Value	t-value	df	p-value (Sig.)
RI	30	4.88	4.00	15.545	29	0.001

* $p < 0.05 \rightarrow H_0$ rejected | Source: Processed data, 2025

Table 6 shows that the One-Sample t-Test on the RI variable produced a t-value of 15.545 with $df = 29$ and a p-value of 0.001. Since the p-value ($0.001 < \alpha$ (0.05)), H_0 is rejected and H_1 is accepted, indicating that the mean consumer repurchase intention toward Munchcupp ($\mu = 4.88$) is statistically significantly higher than the test value of 4.00. This finding provides empirical confirmation that consumers were not only satisfied with their initial consumption experience but also hold a strong intention to repurchase should the product be remarketed.

This result is consistent with Oliver (1999), who states that consumer satisfaction is a key predictor of repurchase intention. The freshness of raw ingredients, authentic flavor, and price-value alignment likely served as the main drivers of the high RI score. RI3, which measures consumers' willingness to recommend the product to others, carries significant strategic implications for developing word-of-mouth-based marketing networks in the future.

5. Discussion

Overall, the statistical results present a highly promising picture of Munchcupp's business sustainability prospects. From a financial standpoint, the 18.00% profit margin achieved at a limited production scale indicates that Munchcupp's business model rests on a solid economic foundation. Further optimization of the raw-material supply chain - particularly for the Mix Wonton & Dimsum variant, which recorded the lowest profit (Rp129,600) - could meaningfully improve the overall margin.

From a marketing perspective, the simultaneous acceptance of H_1 in both the BPF and RI tests places Munchcupp in a strategically strong position. The product is not only regarded by consumers as a viable business entity (BPF, $\mu = 4.76$) but has also generated a strong repurchase intention (RI, $\mu = 4.88$). This combination is a fundamental prerequisite for long-term business growth, consistent with Zeithaml et al. (1996), who argue that consumer loyalty underpinned by strong repurchase intention yields an optimal customer lifetime value.

These findings point to several managerial implications. First, the Dimsum variant, which recorded the highest profit, should be positioned as the hero product in menu placement strategy. Second, the Mix Wonton & Dimsum variant should be re-evaluated in terms of pricing or ingredient composition to improve its profit margin. Third, given the high RI3 score related to product recommendation, referral-based marketing or a simple loyalty program should be explored to maximize word-of-mouth effects. Fourth, digital market penetration through online food-delivery platforms could serve as an effective growth accelerator, given that the target consumer demographic is dominated by students.

6. Conclusion

This study successfully analyzed the sales performance, business product feasibility, and consumer repurchase intention of the Munchcupp product during the Market Day Capstone Project through a descriptive quantitative approach and One-Sample t-Test. The findings indicate that Munchcupp achieved positive sales performance and generated a profitable business outcome during the observation period, suggesting that the product has strong market acceptance and further development potential.

In terms of business product feasibility, consumers rated Munchcupp favorably: the product was seen as having sales value, relevance to consumer needs, and considerable room for further development. This indicates that Munchcupp meets the key aspects that support business sustainability from the consumer's perspective as the target market.

The study further found that consumers show a strong tendency to repurchase and recommend the product to others. High repurchase intention reflects consumer satisfaction with the product offered, forming an important asset for sustainable business growth through customer loyalty.

Overall, the results indicate that Munchcupp holds promising prospects for continued development as a business product. Efforts to improve product quality, strengthen brand identity, leverage digital media for promotion, and develop marketing strategies oriented toward customer experience and satisfaction represent relevant next steps to expand market reach and enhance product competitiveness. Munchcupp therefore has the potential not only to succeed within the Market Day activity but also to grow into a sustainable culinary business.

References

- Field, A. (2018). *Discovering statistics using IBM SPSS statistics* (5th ed.). SAGE Publications.
- Ghozali, I. (2018). *Aplikasi analisis multivariate dengan program IBM SPSS 25* (9th ed.). Diponegoro University Press.
- Helle, L., Tynjälä, P., & Olkinuora, E. (2006). Project-based learning in post-secondary education: Theory, practice and rubber sling shots. *Higher Education*, 51(2), 287-314. <https://doi.org/10.1007/s10734-004-6386-5>
- Kotler, P., & Keller, K. L. (2016). *Marketing management* (15th ed.). Pearson Education.
- Oliver, R. L. (1999). Whence consumer loyalty? *Journal of Marketing*, 63(4_suppl1), 33-44. <https://doi.org/10.1177/00222429990634s105>
- Zeithaml, V. A., Berry, L. L., & Parasuraman, A. (1996). The behavioral consequences of service quality. *Journal of Marketing*, 60(2), 31-46. <https://doi.org/10.1177/002224299606000203>