



Research Article

Analysis of Factors Affecting the Income of Micro Culinary Businesses in Denpasar City

I Wayan Danil^{1*}, Ida Ayu Gde Dyastari Saskara²

¹ Faculty of Economics and Business, Udayana University, Denpasar, Indonesia,
Email : wayandani1775@gmail.com

² Faculty of Economics and Business, Udayana University, Denpasar, Indonesia

* Corresponding Author: I Wayan Danil wayandani1775@gmail.com

Abstract: This study aims to analyze the influence of business capital, product pricing, and the utilization of e-commerce on the income of micro culinary business actors in Denpasar City. The background of this research is based on the crucial role of micro enterprises in economic development, particularly in the culinary sector, which is one of the largest contributors to the Gross Regional Domestic Product (GRDP) of Denpasar City. Despite the sector's significant growth, increasing competition and uneven adoption of technology remain key challenges in improving business income. This study employs a quantitative approach with an associative research design. The population includes micro culinary business actors spread across the four districts of Denpasar City. The sample was determined proportionally using the proportionate stratified random sampling technique, and respondents were selected using accidental sampling to ensure broad representation. Primary data were collected through direct observation and structured questionnaires, while secondary data were obtained from relevant government institutions such as the Department of Cooperatives and MSMEs and the Central Statistics Agency. The data analysis technique used was multiple linear regression, supported by classical assumption tests (normality, multicollinearity, heteroscedasticity), the F-test to determine the simultaneous influence of the variables, and the t-test to analyze the partial influence of each independent variable on income. The findings indicate that simultaneously, business capital, pricing, and e-commerce significantly influence the income of micro business actors. Partially, each of these variables also shows a positive and significant effect. Business capital provides the foundation for operational activities, pricing affects consumer demand and competitiveness, while e-commerce broadens market reach and improves efficiency. These results highlight the importance of strategic financial management, appropriate pricing strategies, and the adoption of digital platforms to support income growth and sustainability of micro culinary enterprises in Denpasar City.

Keywords: income, micro business, culinary, business capital, pricing, e-commerce.

Received: 16 June, 2025

Revised: 30 June, 2025

Accepted: 24 July, 2025

Published: 31 July, 2025

Curr. Ver.: 31 July, 2025



Copyright: © 2025 by the authors. Submitted for possible open access publication under the terms and conditions of the Creative Commons Attribution (CC BY SA) license (<https://creativecommons.org/licenses/by-sa/4.0/>)

1. Introduction

Denpasar City is one of the regions with the highest contribution to the Gross Regional Domestic Product (GRDP) at current prices in Bali Province, ranking second with a contribution of 21.91 percent, following Badung Regency at 24.93 percent (BPS Bali Province, 2024). This contribution significantly impacts the level of community consumption. As the capital of Bali Province and the administrative center, Denpasar serves as the hub of various activities. The high intensity of public activity drives increased demand for basic needs such as food, clothing, and housing, thereby positioning the culinary sector as a promising business opportunity. This condition creates substantial potential for the growth of the culinary sector. Various types of culinary businesses, ranging from traditional food stalls and street vendors to catering services, play a vital role in the economy of Denpasar City. This is also supported by data from the Department of Cooperatives and SMEs of Denpasar City Government, which indicates that micro-enterprises in the culinary sector represent the

largest number of business units, as shown in Table 1.

Table 1. Number of Micro Businesses Per Business Sector in Denpasar City in 2023

No	By business sector	Amount (Unit)
1	Culinary	10,487
2	Fashion	7,611
3	Education	293
4	Automotive	2,511
5	Agribusiness	5,883
6	Internet Technology	913
7	Others	3.306

Source: Denpasar City Cooperatives and UMKM Service, 2024

Based on data from the Denpasar City Cooperative and UMKM Service (2024), it states that culinary micro-enterprises are the sector with the most business units compared to other micro-enterprises in Denpasar City. The number of culinary micro-enterprises in Denpasar City in 2023 was 10,487 and fashion micro-enterprises numbered 7,611 units in second place after culinary micro-enterprises. The contribution of culinary businesses to economic growth in Denpasar City is very large and is one of the leading sectors. This event can be proven based on the following data:

Table 2. Contribution of Business Fields to the GRDP of Denpasar City in 2023

No	Business Field	2023
1	Agriculture, Forestry and Fisheries	6.57
2	Mining and Quarrying	-
3	Processing industry	6.45
4	Electricity and Gas Procurement	0.58
5	Water Supply, Waste Management, Waste and Recycling	0.23
6	Construction	11.13
7	Wholesale and Retail Trade, Car and Motorcycle Repair	10.05
8	Transportation and Warehousing	2.95
9	Provision of Accommodation and Food and Beverages	23.84
10	Information and Communication	4.73
11	Financial Services and Insurance	7.01
12	Real Estate	4.09
13	Corporate Services	2.04
14	Government Administration, Defense and Compulsory Social Security	4.99
15	Educational Services	10.96
16	Health Services and Social Activities	2.72
	Other Services	1.66
	Gross Regional Domestic Product	100.00

Source: Central Statistics Agency of Denpasar City, 2024

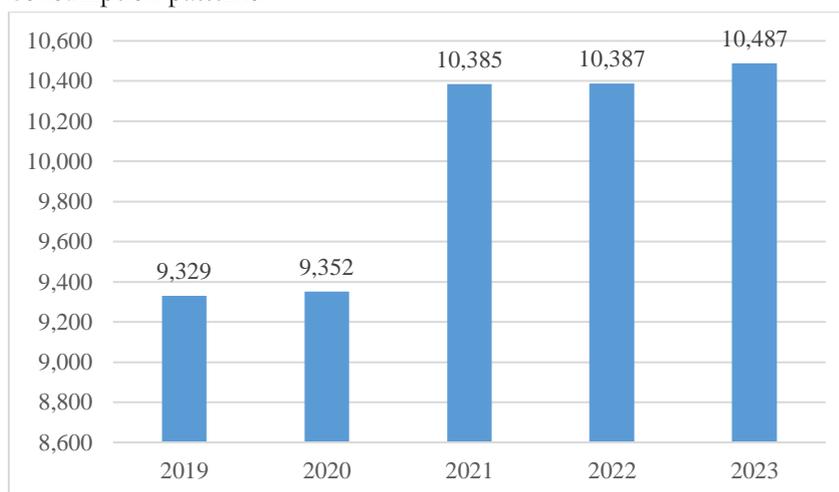
Table 2 shows that the provision of food and beverage accommodation in this case culinary is the largest contributor to the GRDP of Denpasar City, which is 23.84%. In 2020 and 2021, the growth rate of the GRDP of the food and beverage accommodation provision sector of Denpasar City was -19.99% in 2020 and -10.45% in 2021, but in 2022 it became 14.85% and in 2023 it was 17.28% (BPS Denpasar City, 2024). This shows that the culinary business is able to survive and has great potential to support economic recovery in Denpasar City after the pandemic.

Culinary is a processed product in the form of food and beverages. The term "culinary" comes from the English word culinary, which means related to cooking activities. Culinary is an important part of everyday life, because food is always a primary human need (Ariansyah et al., 2020). Currently, culinary has become part of the creative industry that has a large market in Indonesia. In Bali Province, culinary businesses play an important role in supporting the local economy while promoting the cultural heritage of the Island of the Gods (Mulyani & Indiani, 2024). Balinese cuisine has its own uniqueness, which is believed to be the result of creativity, taste, and wisdom of ancestors for centuries, and contains high cultural values. The distinctive taste and uniqueness of Balinese cuisine make it an attraction for tourists. This

specialty provides great added value for the development of the culinary tourism sector in Bali Province (Lumanaw, 2018).

Denpasar City offers a variety of culinary choices, from traditional to international dishes. This diversity is one of the main attractions for tourists, both domestic and foreign, who visit this city. This phenomenon has also encouraged more and more business actors to enter the culinary sector. The form of culinary businesses in Denpasar is very varied, including cafes, coffee shops, restaurants, food courts, to street vendors, each offering a unique culinary experience. Along with the increasing number of tourists who come every day, the culinary sector in Denpasar is a promising business opportunity and has the potential to provide great profits (Arifin & Mandala, 2019).

The existence of micro-businesses in the culinary sector in Denpasar City plays an important role in driving the regional economy. Along with this development, there has been a significant change in people's consumption patterns in buying food. If in the past cooking at home was the main choice, now buying ready-to-eat food is considered more practical and efficient. This shift is influenced by various factors, such as increasing community business and technological advances. Buying ready-to-eat food is now considered more cost and time efficient, because consumers no longer need to prepare ingredients, cook, or clean up after eating (Ufrida & Harianto, 2022). This condition further opens up opportunities for the culinary sector to develop, along with the increasing need for practical solutions to meet people's consumption patterns.



Source: Denpasar City Cooperatives and UMKM Service, 2024

Figure 1. Number of Micro Businesses in the Culinary Sector in Denpasar City 2019-2023

Based on Figure 1, it shows an increase in the number of micro-businesses in the culinary sector in Denpasar City from 9,329 units in 2019 to 10,487 units in 2023, which reflects significant growth in this sector. One of the problems faced in Denpasar City is the high level of competition in the culinary micro business sector. The increasing number of business actors that continue to emerge makes the competition increasingly tight, which ultimately has an impact on the income of business owners. This intense competition causes some business actors to have difficulty retaining customers and attracting new consumers. As a result, the competitiveness of culinary micro businesses is affected, where some business actors experience a decrease in income or are even forced to close down because they are unable to compete with larger or more innovative competitors. Business actors must compete to attract consumers through product innovation, services, and marketing strategies. In addition, the pressure to offer competitive prices without sacrificing quality, difficulties in accessing markets, and challenges in operational efficiency are obstacles that are often faced.

Research conducted by Rahmayanti et al. (2023) stated that micro-enterprises in the culinary sector in Denpasar City face increasingly tight competition challenges due to changes in the business environment characterized by increasing uncertainty and intensity of competition. The study emphasized that to improve business performance amidst high

competition, appropriate strategies are needed, such as improving service quality and utilizing information technology, in order to strengthen the competitiveness of micro-enterprises in the culinary sector. The competitiveness of a business refers to its ability to survive and compete effectively in the market by utilizing various internal and external factors. In the context of micro-enterprises in the culinary sector, competitiveness is greatly influenced by product quality, customer service, and the ability to adapt to technological developments (Pratama et al., 2024).

In the culinary business, many factors determine important factors in increasing income. Micro businesses are still faced with various challenges and obstacles in facing competition. The challenges and obstacles faced by micro entrepreneurs in improving their business performance, especially in terms of increasing business productivity, are the limited capital they have. Capital is one of the initial problems faced by micro businesses with limited access to financing sources from banking financial institutions (Suhartini, 2014). This is because if they use limited investment, the results obtained are also limited, while if they use larger funds, the potential for greater profits can be generated (Aji & Listya 2021). According to research by Prisilia et al. (2019) states that the capital invested in a business has a positive and significant impact on income. In other words, if business actors increase the scale of capital and diversify the products offered, their income will also increase. Conversely, if they reduce investment in business capital, the income obtained will decrease.

The second factor that affects the income of micro-businesses in the culinary sector is price, where the determination of product prices by MSMEs greatly influences buyer decisions. According to Nopiani & Rustariyuni, (2020) price is a controllable factor that can be handled by sales or marketing management. One strategy that can be done by entrepreneurs in providing prices to consumers is to provide cheaper prices compared to other competitors. Quality products at affordable prices will have many fans. Conversely, if the price offered does not match the product, consumers will think twice about buying it. This is also in line with Maulania's research (2020), where business capital and price together have a positive and significant effect on sugar cane ice income in Kedundung Village.

The use of technology such as e-commerce is also one of the factors that affect the income of micro businesses. Production factors consist of labor, capital, and technology. So in addition to capital and labor, technology also has an effect on accelerating the productivity of a business and increasing income. The use of e-commerce is the implementation of transactions in the form of sales, purchases, orders, payments and promotions of a product or service carried out by utilizing computers or electronic communication facilities (Helmalia & Afrinawati, 2018). However, not many micro business actors have utilized Information Technology (IT) facilities to support their businesses, namely for online marketing and sales via the internet or better known as Electronic Commerce (E-Commerce), even though one of the keys to business success is the availability of a wide and clear market for their business products (Tajuddin & Manan, 2017). In addition, with the existence of e-commerce, culinary sector entrepreneurs can now open their businesses at home.

2. Literature Review

Business Capital and Income

Capital is a fundamental determinant of micro-business performance. Limited access to financing sources often constrains productivity and growth (Suhartini, 2014). Larger capital investments enable diversification and expansion, thereby increasing income potential (Aji & Listya, 2021). Empirical evidence shows that capital has a positive and significant impact on micro-business income (Prisilia et al., 2019). In the culinary sector, sufficient capital supports operational activities, product innovation, and service quality, which are crucial for competitiveness.

Hypothesis 1 (H1): Business capital has a positive and significant effect on the income of micro culinary businesses in Denpasar City.

Pricing Strategy and Income

Pricing is a controllable factor that directly influences consumer purchasing decisions (Nopiani & Rustariyuni, 2020). Affordable yet quality products attract more customers, while mismatched pricing discourages purchases. Research indicates that capital and pricing jointly affect business income positively (Maulania, 2020). In competitive culinary markets, strategic pricing enhances demand and sustains profitability.

Hypothesis 2 (H2): Product pricing has a positive and significant effect on the income of micro culinary businesses in Denpasar City.

E-Commerce Utilization and Income

Technology adoption, particularly e-commerce, expands market reach and improves efficiency. E-commerce enables transactions such as sales, payments, and promotions through digital platforms (Helmalia & Afrinawati, 2018). Despite its potential, many micro-businesses have yet to fully utilize IT for online marketing (Tajuddin & Manan, 2017). Studies emphasize that leveraging e-commerce strengthens competitiveness and income growth in culinary MSMEs (Rahmayanti et al., 2023; Pratama et al., 2024).

Hypothesis 3 (H3): E-commerce utilization has a positive and significant effect on the income of micro culinary businesses in Denpasar City.

Conceptual Framework

The conceptual framework integrates three independent variables capital, pricing, and e-commerce with income as the dependent variable. Each variable is hypothesized to have a direct positive effect on income, while collectively they explain a substantial proportion of income variation among micro culinary businesses.

Framework Structure

Independent Variables: Capital (X₁); Pricing (X₂); E-commerce (X₃)

Dependent Variable: Income (Y)

Table of Hypotheses

Hypothesis	Statement	Supporting Literature
H1	Business capital has a positive and significant effect on the income of micro culinary businesses in Denpasar City.	Suhartini (2014); Aji & Listya (2021); Prisilia et al. (2019)
H2	Product pricing has a positive and significant effect on the income of micro culinary businesses in Denpasar City.	Nopiani & Rustariyuni (2020); Maulania (2020)
H3	E-commerce utilization has a positive and significant effect on the income of micro culinary businesses in Denpasar City.	Helmalia & Afrinawati (2018); Tajuddin & Manan (2017); Rahmayanti et al. (2023); Pratama et al. (2024)

Hypothesis Model

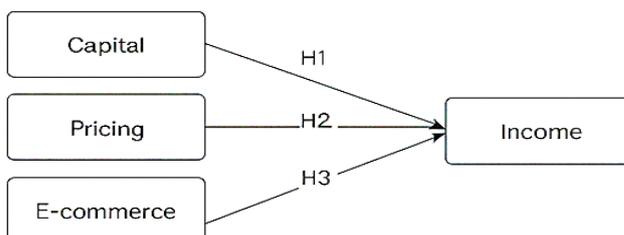


Figure 2. Conceptual Framework of the Research

3. Research Methods

This study uses a quantitative approach with an associative design that aims to analyze the effect of capital, price, and e-commerce on the income of micro-businesses in the culinary sector in Denpasar City. The research location was chosen based on Denpasar's strategic role as a center of trade and the highest contributor to Gross Regional Domestic Product (GRDP) in Bali, but with a relatively low number of MSMEs compared to other districts. The study population includes all micro-businesses in the culinary sector totaling 10,487 units in 2023. Through the proportional stratified random sampling method, 99 respondents were obtained from four sub-districts, with the final selection using the accidental sampling technique.

The variables in this study consist of one dependent variable, namely the income of culinary micro businesses (Y), and three independent variables, namely capital (X1), price (X2), and e-commerce (X3). Income is measured based on total monthly revenue in rupiah. Capital is calculated from the total monthly operational costs, price is measured through the average selling price of the main product/service, while e-commerce is measured using a dummy (1 = using e-commerce, 0 = not). Data were collected through non-behavioral observations, structured interviews with questionnaires, and documentation from related agencies. The types of data used include primary and secondary data, both in quantitative and qualitative forms.

Data analysis was performed using multiple linear regression, preceded by classical assumption tests such as normality, multicollinearity, and heteroscedasticity tests. Hypothesis testing was performed simultaneously (F test) and partially (t test) with a significance level of 5%. The regression model aims to test the magnitude of the influence of capital, price, and e-commerce on the income of culinary MSME actors. The results of the F test show the overall significance of the model, while the t test tests the contribution of each independent variable to the dependent variable. A valid regression model that is free from classical assumptions is expected to be able to provide an accurate empirical picture of the determinants of culinary MSME income in Denpasar City.

4. Results and Discussion

Results

Descriptive Statistical Analysis

Table 3. Results of Descriptive Statistical Analysis

	N	Minimum	Maximum	Mean	Std. Deviation
Capital	99	4000000.00	9950000.00	5978787.8788	1928982.64014
Price	99	10000.00	27000.00	16994.9495	4921.57627
E-commerce	99	.00	1.00	.5556	.49943
Income	99	8000000.00	17000000.00	12100303.0303	2393004.02728
Valid N (listwise)	99				

Source: Processed primary data, 2025

Based on Table 3, it shows that the number of observations in the study is 99 data. The number of independent variables in this study is three variables, namely capital (X1), price (X2), and e-commerce (X3), and one independent variable, namely income (Y).

The capital variable has a minimum value of 4,000,000 and has a maximum value of 9,950,000 which means that the smallest or lowest capital owned by micro-entrepreneurs in the culinary sector in Denpasar City is IDR 4,000,000, while the largest or highest capital owned by micro-entrepreneurs in the culinary sector in Denpasar City is IDR 9,950,000. The capital variable obtained an average value (mean) of 5,978,787.87, which means that the average capital owned by micro-entrepreneurs in the culinary sector in Denpasar City is IDR 5,978,787.87.

The price variable has a minimum value of 10,000 and has a maximum value of 27,000 which means that the lowest or smallest price owned by micro-entrepreneurs in the culinary sector in Denpasar City is IDR 10,000, while the largest or highest price owned by micro-entrepreneurs in the culinary sector in Denpasar City is IDR 27,000. The price variable

obtained an average value (mean) of 16994.9495, which means that the average price owned by micro-entrepreneurs in the culinary sector in Denpasar City is Rp16,994.94.

The income variable has a minimum value of 8,000,000 and has a maximum value of 17,000,000 which means that the smallest or lowest income owned by micro-entrepreneurs in the culinary sector in Denpasar City is IDR8,000,000, while the largest or highest income owned by micro-entrepreneurs in the culinary sector in Denpasar City is IDR17,000,000. The income variable obtained an average value (mean) of 12,100,303.03, which means that the average income owned by micro-entrepreneurs in the culinary sector in Denpasar City is Rp12,100,303.03.

Multiple Linear Regression Analysis

Table 4. Multiple Linear Regression Test Results

Coefficients ^a					
Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
1 (Constant)	6029668.582	503055.692		11,986	<.001
Capital	.580	.088	.467	6,575	<.001
Price	95,050	35.136	.195	2,705	.008
E-commerce	1782017.529	297400.355	.372	5,992	<.001

a. Dependent Variable: Income

Source: Processed primary data, 2025

Based on the results of the regression test in the table above, the regression equation model that can be created is as follows:

$$Y = 6029668.582 + 0.580X_1 + 95.050X_2 + 1782017.529X_3$$

Classical Assumption Test Results

1) Normality Test Results

Table 5. Normality Test Results

	Unstandardized Residual
N	99
Test Statistics	0.064
Asymp.Sig. (2-tailed)	0.200

Source: Processed primary data, 2025

Based on Table 5, the significance value is 0.200. The significance value of the Kolmogorov-Smirnov test (0.200) is greater than the significance level (0.05), so it can be concluded that the residuals of the regression equation model are normally distributed. Thus, the assumption of normality in the regression analysis has been met, so that the regression model used can be said to be valid in describing the relationship between the independent variables and the dependent variables.

2) Collinearity Test

Table 6. Collinearity Test Results

Variables	Tolerance	VIF	Information
Capital (X ₁)	0.587	1,704	Free from multicollinearity
Price (X ₂)	0.568	1,762	Free from multicollinearity
E-commerce (X ₃)	0.769	1,300	Free from multicollinearity

Source: Processed primary data, 2025

Based on Table 6, the results of the multicollinearity test show that all variables have a tolerance value above 0.1 and a variance inflation factor (VIF) value below 10. Capital (X₁) has a tolerance value of 0.587 with a VIF of 1.704, price (X₂) has a tolerance value of 0.568 with a VIF of 1.762, and e-commerce (X₃) has a tolerance value of 0.769 with a VIF of 1.300. Since all tolerance values are greater than 0.1 and the VIF is less than 10, it can be concluded that there is no multicollinearity in the regression model.

3) Heteroscedasticity Test

Table 7. Results of Heteroscedasticity Test

Variables	Prob.	Information
Capital (X1)	0.216	Free from heteroscedasticity
Price (X2)	0.391	Free from heteroscedasticity
E-commerce(X3)	0.154	Free from heteroscedasticity

Source: Processed primary data, 2025

Based on Table 7, the results of the heteroscedasticity test show that all variables have a probability value (Prob.) greater than the significance level of 0.05. Capital (X₁) has a probability value of 0.216, the price (X₂) of 0.391, and e-commerce (X₃) of 0.154. Since all probability values are greater than 0.05, it can be concluded that this regression model does not experience heteroscedasticity problems.

F Test

Table 8. Simultaneous Test Results (F)

ANOVA

	Model	Sum of Squares	df	Mean Square	F	Sig.
1	Regression	402912374933484.750	3	134304124977828.250	80,809	<.001b
	Residual	158085627086716.880	95	1664059232491.757		
	Total	560998002020201.600	98			

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.847a	.718	.709	1289984.19854

Source: Processed primary data, 2025

Based on table 8, it is known that the Fcount value is 80.809. Meanwhile, the Ftable value at a significance level of 5 percent is determined through the formula $F_{table} = F_{\{(k-1), (n-k)\}}$ so that $F_{table} = F_{\{(3),(95)\}}$, then the Ftable value is 2.70. These results indicate that $F_{count} = 80.809 > F_{table} = 2.70$ or a significance value of $0.000 < \alpha = 0.05$ so that H₀ is rejected. Thus, it can be concluded that capital (X₁), price (X₂), and e-commerce (X₃), simultaneously have a significant effect on income (Y). This shows that the regression model used is able to explain the relationship between the independent variables and the dependent variables well.

Based on the determination coefficient value (R²) of 0.718, it can be interpreted that 71.8% of the variation in the income of micro-businesses in the culinary sector in Denpasar City can be explained by a combination of capital variables (X₁), price (X₂), and e-commerce (X₃). Meanwhile, the remaining 28.2% is caused by other factors not included in this research model, which could include external variables or factors that are not measured in this analysis.

Partial Test (t-Test)

The t-test is conducted to evaluate the extent to which each independent variable individually (partially) influences the dependent variable. This test is conducted by comparing the calculated t value obtained from the calculation with the t-table value in the t-distribution. If the calculated t is greater than the t-table, then the independent variable has a significant influence on the dependent variable. Conversely, if the calculated t is smaller than the t-table, then the independent variable does not have a significant effect on the dependent variable. This t-test is useful for determining the contribution of each variable in the model separately, so that it can be identified which variable most influences the research results. The following are the results of the t-test analysis.

1) The Effect of Capital on Income

The capital variable (X₁) obtained a tcount of 6.575. If the ttable value for $t_{\{\alpha, (n-k)\}} = t_{\{(0.05); (94)\}} = 1.66105$ is known, then $t_{count} (6.575) > t_{table} (1.66105)$. This test uses a one-way approach (single-tailed t-test), so the significance value of the capital variable does

not need to be divided by two. The Sig value (0.001) is smaller than α (0.05), so H_0 is rejected. This result means that capital (X1) has a positive and significant partial effect on income. The regression coefficient of the capital variable of 0.580 states that every one million increase in capital will increase income by Rp580,000 assuming other variables remain constant.

2) The Effect of Price on Income

The price variable (X2) obtained a tcount of 2.705. If the ttable value for $t\{\alpha, (n-k)\} = t\{(0.05); (95)\} = 1.66123$ is known, then $tcount (2.705) > ttable (1.66105)$. This test uses a one-way approach (single-tailed t-test), so the significance value of the price variable does not need to be divided by two. The Sig value (0.008) is smaller than α (0.05), so H_0 is rejected. This result means that price (X2) has a positive and significant partial effect on income. The regression coefficient of the price variable of 95.050 indicates that every one thousand increase in price will increase income by Rp95,050 assuming other variables remain constant.

3) The Impact of E-commerce on Revenue

The e-commerce variable (X3) obtained a tcount of 5.992. If the ttable value for $t\{\alpha, (n-k)\} = t\{(0.05); (95)\} = 1.66105$ is known, then $tcount (5.992) > ttable (1.66105)$. This test uses a one-way approach (single-tailed t-test), so that the significance value of the e-commerce variable does not need to be divided by two. The Sig value (0.001) is smaller than α (0.05), so H_0 is rejected. This result means that e-commerce (X3) has a positive and significant partial effect on income. The regression coefficient of the e-commerce variable of 1782017.529 indicates that the income of micro-businesses in the culinary sector that use e-commerce is Rp1,782,017.529 higher than those that do not use e-commerce.

Discussion

The Effect of Capital on Income

The results of multiple linear regression analysis indicate that capital has a positive and significant effect on the income of culinary micro-enterprises in Denpasar City. This finding suggests that the greater the capital invested, the higher the income earned by business owners. Capital serves as a crucial factor in both large-scale and small-scale businesses, representing an investment expected to generate returns and profit. The average capital among micro-entrepreneurs in Denpasar is Rp5,978,787.87, with 60.6% of respondents investing below the average and 39.4% above it. Questionnaire data show that those allocating higher capital tend to achieve greater income, indicating that invested capital influences production capacity, product quality, marketing effectiveness, and competitiveness. More substantial capital allows entrepreneurs to access higher-quality resources such as raw materials, skilled labor, and supporting technology, ultimately driving revenue growth. Conversely, limited capital often constrains production scale, distribution, and promotion, resulting in lower income.

The Effect of Pricing on Income

The findings also show that pricing has a positive and significant effect on income. Competitive prices aligned with consumers' purchasing power can attract more customers and foster loyalty. This aligns with Haryanto (2019), who emphasized that effective pricing strategies are key to increasing MSME revenue. According to Bernik (2019), price is a marketing element directly linked to revenue generation through sales. The average product price in this study was Rp16,994.94, with 45.5% of respondents setting prices below and 54.5% above the average. The data suggest that higher pricing correlates with higher income, possibly due to added product value such as quality, branding, innovation, or effective marketing strategies. On the other hand, lower prices may result in smaller profit margins or suboptimal sales volumes, leading to reduced income.

The Effect of E-commerce on Income

Multiple regression analysis confirms that e-commerce has a positive and significant impact on income. Limited market access has compelled entrepreneurs to innovate by adopting technology to sustain their businesses. Most respondents reported using e-commerce platforms for sales and marketing to ensure product visibility and accessibility. Entrepreneurs cited benefits such as flexible sales and promotions, time efficiency, and ease of payment. E-commerce also supports product distribution, contributing to business stability and, in many cases, increased revenue. Questionnaire results reveal that higher-income entrepreneurs are generally more active in utilizing e-commerce than those with lower income. This indicates a strong positive correlation between digital technology adoption—especially e-commerce—and business income. E-commerce expands market reach, improves transaction efficiency, and enables more strategic and measurable product promotion. High-income business owners tend to be more digitally literate and adaptive, while lower-income entrepreneurs may face barriers in technological access, digital understanding, or resource availability. These findings underscore the importance of digital literacy and technological support in enhancing business performance in the digital economy era.

5. Conclusion

The findings of this study confirm that business capital, product pricing, and e-commerce utilization significantly influence the income of micro culinary businesses in Denpasar City. Capital was found to be the most dominant factor, underscoring its role as the foundation for operational sustainability and growth. Adequate capital enables entrepreneurs to invest in raw materials, equipment, and innovation, which in turn enhances productivity and competitiveness. This aligns with prior research emphasizing that limited capital restricts business expansion and income potential, while sufficient investment fosters resilience and profitability.

Pricing also demonstrated a positive and significant effect on income, highlighting its importance as a strategic tool in consumer decision-making. In highly competitive culinary markets, entrepreneurs must balance affordability with perceived product value. The results suggest that appropriate pricing strategies not only attract customers but also sustain long-term profitability. This finding reinforces the notion that pricing is not merely a financial decision but a marketing strategy that directly shapes demand and customer loyalty.

E-commerce utilization emerged as a critical driver of income growth, reflecting the transformative role of digital platforms in expanding market reach and efficiency. Businesses that adopted e-commerce reported higher revenues compared to those relying solely on traditional sales channels. This underscores the importance of digital integration in modern micro-business operations, particularly in urban centers where consumer behavior increasingly favors online transactions. Collectively, the regression model explained 71.8% of income variation, demonstrating strong explanatory power and validating the combined influence of capital, pricing, and e-commerce in sustaining micro culinary enterprises. These results contribute to the academic discourse by bridging traditional business determinants with digital transformation in the context of micro-enterprises.

Managerial Implications

Based on the findings, several actionable insights can guide micro-business owners, policymakers, and support institutions:

- 1) **Capital Allocation Strategy:** Entrepreneurs should prioritize structured capital planning to ensure sufficient operational funding. Access to microfinance or cooperative-based credit schemes can be expanded to support this need.
- 2) **Pricing Optimization:** Culinary micro-businesses must adopt pricing strategies that balance affordability with perceived value. Training in cost-based and competitor-based pricing models can help owners make informed decisions.
- 3) **Digital Integration:** E-commerce adoption significantly boosts income. Stakeholders

should facilitate digital literacy programs and provide access to online marketplaces, especially for traditionally offline vendors.

- 4) Policy Support: Local government and MSME agencies should design targeted interventions that combine financial assistance, pricing education, and digital onboarding to enhance micro-business resilience and scalability.

Future Research Directions

To deepen understanding and broaden applicability, future studies may consider:

1. Expanding Variables: Incorporate additional predictors such as marketing strategies, customer satisfaction, innovation capability, and location-based factors to capture more nuanced determinants of income.
2. Longitudinal Analysis: Conduct time-series or panel data studies to observe income dynamics over time, especially in response to policy changes or digital transformation trends.
3. Comparative Sectoral Studies: Compare culinary micro-businesses with other sectors (e.g., fashion, agribusiness) to identify sector-specific drivers and constraints.
4. Qualitative Enrichment: Use interviews or focus groups to explore entrepreneurial behavior, decision-making processes, and barriers to e-commerce adoption from the perspective of micro-business owners.
5. Geographic Replication: Replicate the study in other urban centers or rural areas to assess the generalizability of the model and identify regional variations in micro-business performance.

References

- Ariansyah, M. Najib, and J. M. Munandar, "Faktor-Faktor yang Memengaruhi Niat Konsumen untuk Membeli Produk Melalui E-Commerce," *J. Manajemen dan Organisasi*, vol. 11, no. 2, pp. 83–90, 2020.
- Dinas Koperasi dan UMKM Kota Denpasar, "Jumlah UMKM per Bidang Usaha tahun 2023," 2024.
- F. Arianti and K. Azzahra, "Faktor - Faktor Yang Memengaruhi Literasi Keuangan: Studi Kasus UMKM Kota Tangerang Selatan," *J. Manajemen dan Keuangan*, vol. 9, no. 2, pp. 156–171, 2020.
- Fachrizal, "Pengaruh modal dan tenaga kerja terhadap produksi industri kerajinan kulit di Kabupaten Merauke," *Ilmu Agribisnis dan Perikanan*, vol. 9, no. 2, 2016.
- Firmansyah and R. Husna, "Pengaruh E-commerce Terhadap Peningkatan Pendapatan Usaha Mikro Kecil dan Menengah (Studi Kasus Usaha Keripik di Kabupaten Bireuen)," *Variasi: Majalah Ilmiah Universitas Almuslim*, vol. 13, no. 3, 2021.
- H. Habriyanto, B. Kurniawan, and D. Firmansyah, "Pengaruh Modal dan Tenaga Kerja terhadap Pendapatan UMKM Kerupuk Ikan SPN Kota Jambi," *J. Ilm. Univ. Batanghari Jambi*, vol. 21, no. 2, pp. 853–859, 2021.
- H. Hamad, I. Elbeltagi, and H. El-Gohary, "An empirical investigation of business-to-business e-commerce adoption and its impact on SMEs competitive advantage: the case of Egyptian manufacturing SMEs," *Strategic Change*, vol. 27, no. 3, 2018.
- H. Helmalia and A. Afrinawati, "Pengaruh E-Commerce Terhadap Peningkatan Pendapatan Usaha Mikro Kecil dan Menengah di Kota Padang," *J. Ekonomi dan Bisnis Islam*, vol. 3, no. 2, pp. 237–246, 2018.
- M. Alzahrani, "The impact of e-commerce adoption on business strategy in Saudi Arabian small and medium enterprises (SMEs)," *ResearchGate*, 2019. [Online]. Available: <https://www.researchgate.net/publication/328796869>
- N. Hanum, "Analisis Faktor-faktor Yang Memengaruhi Pendapatan Pedagang Kaki Lima di Kota Kuala Simpang," *J. Samudra Eknomika*, vol. 1, no. 1, 2017.
- R. L. Hasanah, D. N. Kholifah, and D. P. Alamsyah, "Pengaruh modal, tingkat pendidikan dan teknologi terhadap pendapatan UMKM di Kabupaten Purbalingga," *J. Ekonomi dan Manajemen*, vol. 17, no. 2, pp. 305–313, 2020.
- R. S. Ahmadi, H. Nining, and S. Luthfi, "Peningkatan Volume Penjualan Pada UMKM Industri Kreatif Makanan, Minuman Melalui E-commerce di Kota Bandung," *J. Ilmu-Ilmu Sosial dan Humaniora*, vol. 22, no. 2, 2020.
- S. Alamro and S. A. Tarawneh, "Factors affecting e-commerce adoption in Jordanian SMEs," *Eur. J. Sci. Res.*, vol. 64, no. 4, pp. 497–506, 2011.
- S. Fitriyani, T. Murni, and S. Warsono, "Pemilihan Lokasi Usaha dan Pengaruhnya Terhadap Keberhasilan Usaha Jasa Berskala Mikro dan Kecil," *Management Insight*, vol. 13, no. 1, 2018.
- T. Haryanto, "Pengaruh Harga dan Promosi Terhadap Pendapatan UMKM," *J. Ekonomi dan Bisnis*, vol. 15, no. 2, pp. 120–130, 2019.
- T. S. Agustina, *Kewirausahaan: Teori dan Penerapan pada Wirausaha dan Penerapan UMK di Indonesia*. Jakarta: Mitra Wacana Media, 2015.
- W. Aji and S. P. Listyaningrum, "Pengaruh Modal Usaha, Lokasi Usaha, Dan Teknologi Informasi Terhadap Pendapatan UMKM Di Kabupaten Bantul," *J. Ilm. Akuntansi Indonesia*, vol. 6, no. 1, 2021.
- W. Ibrahim et al., "E-Commerce Adoption and Growth of SMEs in Uganda," *Int. J. Business and Management*, vol. 14, no. 1, pp. 46–54, 2019.