Determinants Of Coffee Shop Business Income In Denpasar City

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Abstract

The number of coffee shops that appear in Denpasar City makes business competition in this city increasing. The increasing number of coffee shops makes the current market competition also increases, so it is important for coffee shop owners to pay attention to their business income factors so that business continuity is maintained. The purpose of this study is to analyze how; 1) The simultaneous effect of e-commerce utilization, working hours, technology, and capital on coffee shop income; 2) The partial effect of e-commerce utilization, working hours, technology, and capital on coffee shop income; 3) The role of capital in moderating the influence of technology on coffee shop income in Denpasar City. This study used a quantitative approach with associative explanation level. Data type that used was primary data with a population of 151 coffee shop businesses in Denpasar City. The sample in this study was 61 coffee shop businesses collected through observation, interview, and in-depth interview methods. The sample was selected through probability sampling technique with a simple random sampling approach. Data analysis technique methods used in this study include descriptive statistics, classical assumption test, and moderated regression analysis. The results of the analysis show that; 1) E-commerce utilization, working hours, technology, and capital has a significant simultaneous effect on income; 2) E-commerce utilization, technology, and capital has a partially significant positive effect on income, but working hours do not have a significant effect on income; 3) Capital variables do not moderate the influence of technology on coffee shop income in Denpasar City. Based on the results of the research, it is expected that the relevant government will routinely hold skills training programs and capital loans for recorded coffee shop business owners so that the sustainability of the coffee shop business in Denpasar City is maintained and developed.

Keywords: Income, E-commerce Utilization, Working Hours, Technology, Capital.

Introduction

The contribution of Micro, Small and Medium Enterprises (MSMEs) to economic growth in Indonesia is very large, with the amount reaching 99 percent of all business units. The contribution of MSMEs to GDP also reached 60.5 percent, and to employment was 96.9 percent of the total national employment (Ministry of Finance of the Republic of Indonesia, 2023). The large number of MSMEs reflects the huge potential that can be developed and increase the ability of MSMEs that can contribute more to this country. Strong MSMEs are closely related to healthy and financially successful businesses. According to Primiana (2009: 49) business success is that capital has been fulfilled, productive distribution and achievement of organizational goals. The success of a business is essentially the success of a business in achieving its goals, a business is said to be successful when it gets profit, because profit is the goal of someone doing business.

Micro, small and medium enterprises are a business that is in great demand by entrepreneurs throughout Indonesia, including in Denpasar City. The reason is because micro, small and medium enterprises are not too complicated to manage, and from various groups can have them, and in terms of costs do not require too large
costs (Safitri, 2018). One example of Micro, Small and Medium Enterprises or MSMEs that have recently experienced rapid development in Denpasar City, Bali is a business in the culinary and beverage sector, namely the coffee shop business. As the capital of Bali Province which means the center of local government, the center of economic traffic, and employment, Denpasar City is known as one of the cities with good economic growth in Bali Province. This can be seen from the Gross Regional Domestic Product (GRDP) data (Yunianto, 2021).

Figure 1 shows the per capita income of districts/cities in Bali Province for the last 3 years has experienced a downward trend in the majority of districts/cities of Bali Province, except Denpasar City which shows an increasing trend from year to year, which indicates that the people of Denpasar City have high purchasing power. The high purchasing power invites people to open businesses or produce goods/services to meet consumer demand (Kardha and Sukadana, 2019).

In addition to a good economic level, population growth is also a factor that influences the growth and development of economic businesses (Halim, 2020). Denpasar City is one of the cities that has the highest population density in Bali Province, which is 5,676 people/Km² because it has the smallest area but with the second largest total population after Buleleng Regency (BPS, 2020). With high purchasing power and a wide market, as well as quite diverse community activities make Denpasar City an ideal place to set up a business, as shown in Figure 2.
unemployed and who worked from 2019 to 2020. These things are caused as a domino effect of the covid-19 pandemic in Denpasar City.

The unilateral termination of work rights and the collapse of the national economy in 2020 – 2021 have an impact on the economic, population, and employment sectors of Denpasar City as seen from the decline in the percentage of people working from 2019 to 2020 (Table 1). Many people have changed their professions from the tourism sector to trading in the MSME sector to continue to be able to provide for themselves, which has an impact on the mushrooming of small and medium enterprises. However, after the implementation of the PSBB policy was relaxed, public demand for places to hang out and drink coffee increased again, and encouraged the recent emergence of coffee shops in Denpasar City.

<table>
<thead>
<tr>
<th>Table 1. Denpasar City Employment Statistics</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Description</strong></td>
</tr>
<tr>
<td>Labor Force Participation Rate (%)</td>
</tr>
<tr>
<td>Unemployment Rate (%)</td>
</tr>
<tr>
<td>Work (%)</td>
</tr>
<tr>
<td>Population 15 years and over who are employed (people)</td>
</tr>
<tr>
<td>Population 15 years and over who are unemployed (people)</td>
</tr>
</tbody>
</table>

Source: SP2020 Population Projections (BPS, 2022)

The increasing number of community activities in consuming coffee outside the home after the new-normal era makes coffee shop owners compete to present the best coffee shop concept that will end with customers who come continuously, but there are things that have the potential to be experienced by coffee shop business actors in doing their business. The phenomenon in the field that there are several coffee shops that have closed even though they have been established for long. This happens because the coffee shop loses its customers. Losing customers makes profits and sales decrease so that business performance decreases. This is due to coffee shops that lose in competing with their competitors. So far from every article that the author has read, there is no in-depth information discussing the factors that affect the sustainability of the coffee shop business, especially in Denpasar City after interaction activities returned to normal after the Covid-19 pandemic. The lack of scientific articles makes this research important to close the gap. According to Hamza and Agustien (2019), the success of a business can be seen from its income.

There are several factors that need more attention in maximizing income so that coffee shops succeed in competition such as capital, working hours, technology, and the use of e-commerce, especially in modern times like today. Capital is a factor that has an important role in the production process, because capital is needed when entrepreneurs want to establish a new business or to expand an existing business, without sufficient capital it will affect the smooth running of the business, so it will affect the income obtained (Utari, 2014). According to Li & Dongge (2015), if all resources used in the production process are utilized optimally with the help of the application of technology that will provide an increase in production yields. In addition to technology, media that can be used to improve the ease of distribution of coffee shop products is with the help of e-commerce. According to a survey conducted by the Indonesian Internet Service Providers Association (APJII) on Indonesia's Internet Profile in 2022, internet use by MSMEs has reached 87.43%. As many as 73.42% of MSMEs use the marketplace to sell and as many as 84.75% of MSMEs use social media to promote. According to research by Herina et al. (2021), one way that can be done so that coffee shops can still record sales despite community restrictions is to switch to e-commerce.

The way the coffee shop manages the factors that have been explained such as capital, working hours, technology, and the use of e-commerce will have an impact on income generation for the coffee shop itself. Therefore, it is important to know the factors that affect coffee shop income to face future business competition. Based on the background of the problems that have been raised, this research was carried out with the following objectives; 1) To analyze the simultaneous effect of e-commerce utilization, working hours, technology, and capital on coffee shop business income in Denpasar City; 2) To analyze the partial effect of e-commerce utilization, working hours, technology, and capital on coffee shop business income in Denpasar City; 3) To analyze the role of capital in moderating the influence of technology on coffee shop business income in Denpasar City.
**Literature Review**

**Income Theory**

The income of business actors is determined by two main factors, namely the amount of goods or services produced and the price per unit of goods sold (Basuki and Yuliadi, 2019). The amount of income received by business actors as a result of total sales is called Total Revenue (TR). Total revenue can be determined by multiplying the number of product units sold by the price per unit (Mankiw, 2018: 11). To compare businesses by their income level, total revenue does not always guarantee that the higher the value the better the business performance because the model does not include total costs. Total cost (TC) is the amount of money that must be spent to buy materials used by the company in the production process. Therefore, it needs to be calculated with a net income or total profit model. According to Mankiw et al. (2018: 270) total profit is a subtraction from total receipts (TR) with total costs (TC).

**Production Theory**

Production theory can be interpreted as the end result of an economic process or activity by combining several inputs to produce output (Salvatore, 1997). It is very important to determine the combination of production factors to be used in the production process in order to achieve optimal production results and in the most efficient way possible. Salvatore (1997) explains that the relationship between inputs and outputs in production theory can be described through the production function. The production function can mathematically be shown as follows:

\[ Q = f(K, L, R, T) \]  

Information:
- **Q** = Amount of production produced
- **K** = Total capital stock
- **L** = Total workforce
- **R** = Land rental cost
- **T** = Level of technology used.

**Human Capital Theory**

Frank & Bemanke (2007) argue that human capital is a blend of education, experience, training, skills, habits, health, energy and initiative that affect human productivity. Todaro (2000) revealed that human capital can be measured through the field of education. This can be explained if the higher a person's education or the more training they have, the higher their abilities and skills.

**Price Incentive Model**

The basic postulates of the price incentive model are quite simple and are part of the best tradition in neoclassical theory of firms (Todaro and Smith, 2011: 324). Guided by economic principles, producers (enterprises and agriculture) are assumed to face a certain number of relative factor prices (e.g., capital and labor) and use a combination of capital and labor that minimizes the cost of producing the desired level of output.

**Capital Concept**

Capital according to the Big Dictionary Indonesian divided into two types, capital money and goods. Capital money is money whose main purpose is to trade or in another sense money used to increase wealth and produce something. While capital goods mean all types of goods used to do work in business. Capital plays a role as one of the factors in production. Without capital, a business will not be possible to start because it cannot buy land, labor machinery, and supporting technology (Mahayasa and Yuliarmi, 2017). It can be said that capital is the heart of a business (Nayaka and Kartika, 2018). In a business, be it a small, medium, or large business, capital is the main factor in determining the level of production and income of the business.

**Working Hours Concept**

According to the Central Statistics Agency (BPS), the number of working hours is all the time a person spends doing the entire work in units of time outside of official rest working hours and working hours used for things outside work for one week. Guidelines in determining working hours for employees are listed on Law No. 13 of 2003 concerning Employment, especially Article 77 to Article 85. Article 77 paragraph 1 of Law No. 13/2003 requires every employer to implement the provisions of working hours. According to Article 77 paragraph 2, Law...
No. 13/2003, the provisions for employee working time are 40 hours of work in one week which is divided into two options, including 7 hours of work in one day for 6 working days in one week or 8 hours of work in one day for 5 working days in one week.

Technology Concept
According to Martono (2012: 276) technology as knowledge about how to make or how to do something to do a job with high value, both the value of benefits and selling value. This is in line with Solow's model theory which argues that technological progress is the source of sustainable growth in income, and will increase labor productivity. David Ricardo also stated that increased productivity is likely to be caused by technological advances (Gregory Mankiw, 2018). According to the Cook's Illustrated article (2016), there are 7 categories of coffee brewing equipment, including: Automatic Drip Coffee Maker, Smart Coffee Maker, Manual Coffee Maker (French Press and Clever Dripper), Cold Brew Coffee Maker, Stove Top Coffee Maker (Moka Pot), Espresso Machine (Fully Automatic Espresso Machine and Hands-On Espresso Machine), and Manual Espresso Maker (ROK and Aeropress), and according to Angeloni et al. (2018) there is also filtered coffee (V60, Chemex, and Vietnamese Drip).

The Concept of E-Commerce Utilization
According to Kuswiratmo (2016: 163), E-commerce is the implementation of commerce in the form of sales, purchases, orders, payments, and promotions of a product of goods and / or services carried out by utilizing computers and digital electronic communication facilities or data telecommunications. E-commerce means the use of the internet in order to facilitate, execute, and process transactions in a business (DeLone and McLean, 1991). In measuring the utilization of e-commerce, one of them can be done by calculating the number of applications or software used in carrying out e-commerce transaction activities of a business (Thompson et al, 1991). The use of e-commerce for a business can be seen from the media used in selling goods/services such as websites, marketplaces (Tokopedia, Shopee, Bukalapak, etc.), social media (Facebook, Instagram, Twitter, etc.), instant messages (Whatsapp, Line, etc.), delivery platforms (GoFood, Shopeefood, and Grabfood) (BPS, 2020).

Micro, Small and Medium Enterprises (MSMEs) Concept
The definition of MSMEs in Indonesia according to the State Ministry of Cooperatives and Micro, Small &; Medium Enterprises and Law No. 20 of 2008, that what is meant by Micro Enterprises (UM) is those that have a net worth of at most Rp. 50 million or have annual sales of at most Rp. 300 million. Small Business (UK) is a unit that has net worth between Rp. 50 million to Rp. 500 million excluding land and buildings or having annual sales proceeds between Rp. 300 million to Rp. 2.5 billion. While Medium Enterprises (UM) are units that have a net worth between Rp. 500 million to Rp. 10 billion, excluding land and buildings or have annual sales proceeds between Rp. 2.5 billion to Rp. 50 billion.

Coffee Shop Concept
Coffee shop is a place that provides various types of coffee and other non-alcoholic beverages in a relaxed atmosphere, a comfortable place, and equipped with music, provides television and reading, typical interior design, friendly service, and some of them provide wireless internet connection (Herlyana, 2014: 190). According to Marsum (1993) in his book "Restaurant and Its Various Problems", Coffee shop is a place that is managed simply or structured management that provides good commercial service to its guests with various types of coffee dishes from various regions and others as well as equipment that supports the place.

Conceptual Framework
The conceptual framework describes the relationship between theories and variables that have been identified as problems in research. One of the problems usually faced by MSME actors related to their business income is limited capital. Capital has a positive and significant effect on the income of coffee shops in Denpasar City (Liani and Usman, 2018; Mahayuni and Widanta, 2021; Natha and the Goddess, 2020). In addition to capital, working hours also have a significant and positive effect on business income (Sasmitha and Ayuningsasi, 2017; Robiyanto, 2020; Mayahuni and Widanta, 2021). In addition to capital and working hours, technology also has a significant and positive effect on MSME income (Sidik, 2021; Arseto, 2019; Kumar and Ayedee, 2021). And finally, the use of e-commerce also has a positive and significant influence on business income (Ritz et al, 2019; Helmalina and Afrinawati, 2018; Aprilyan and Susanthi, 2022; and Puspaningtyas, 2018). According to Tariq et al (2019) and
Ramli et al. (2018), capital can moderate the relationship of technology to revenue in businesses. Based on the literature review and explanation above, the conceptual framework in this research can be seen in Figure 3.

![Conceptual Framework of Determinants of Coffee Shop Income in Denpasar City](image)

**Figure 3. Conceptual Framework of Determinants of Coffee Shop Income in Denpasar City**

Based on the literature review and conceptual framework that has been described earlier, the hypotheses proposed in this study include:

1) The use of e-commerce, working hours, technology, and capital simultaneously affects the income of the coffee shop business in Denpasar City.

2) The use of e-commerce, working hours, technology, and capital has a partial positive effect on coffee shop business income in Denpasar City.

3) Capital moderates the influence of technology on coffee shop business income in Denpasar City.

**Research Methods**

This study used a quantitative approach with associative explanation level. The type of data used includes primary data with a total population of 151 coffee shop businesses in Denpasar City which was then sampled in this study as many as 61 coffee shop businesses using the Slovin formula. Data were collected through observation, interview, and in-depth interview methods. Samples are selected through probability sampling techniques with a simple random sampling approach which is then randomized with the help of the Random Number Generator program.

To test the hypothesis, data analysis technique methods used in this study include descriptive statistics, classical assumption test, and moderated regression analysis. Classical assumption tests used include: 1) the Normality Test using the Kolmogorov-Smirnov approach; 2) Multicollinearity Test; and 3) Heteroscedasticity Test with the Glejser model. The Moderation Regression Analysis test used in this study aims to determine the relationship between the independent variables of capital, working hours, and technology to the dependent variable of coffee shop business income in Denpasar City with capital as a moderation variable through IBM SPSS 26 software with the following model:

$$Y = \alpha + \beta_1X_1 + \beta_2X_2 + \beta_3X_3 + \beta_4M + \beta_5X_3M + e \quad \text{........................................... (2)}$$

*Information:*

- $Y$ = Coffee shop revenue
- $\alpha$ = Intercept / Number Constant
- $\beta_1$...$\beta_5$ = Regression coefficient of each $X$
- $X_1$ = E-commerce Utilization
- $X_2$ = Working Hours
- $X_3$ = Technology
- $M$ = Capital
- $X_3M$ = Interaction between technology and capital
- $e$ = Variable confounding or residual interference
Results and Discussion

Characteristics of Respondents

Based on the results of this study, the characteristics of respondents who participated in filling out the research questionnaire were divided into groups of education level, position, and age.

Characteristics of respondents based on education level

![Pie chart showing education levels]

*Source: Primary data processed, 2023*

**Figure 4. Characteristics of respondents based on education level**

Figure 4 illustrates the characteristics of respondents based on their level of education. The results of the analysis showed 21 people (34%) of high school/vocational education and 40 people of higher education (66%). Of the 61 respondents, none of them had the last education at elementary and junior high school levels.

Characteristics of respondents by Job Position

![Pie chart showing job positions]

*Source: Primary data processed, 2023*

**Figure 5. Characteristics of respondents by Job Position**

Figure 5 illustrates the characteristics of respondents based on their level of position. The results of the analysis of business owners as many as 17 people (28%), as managers or confidants as many as 19 people (31%), and as employees as many as 25 people (41%). The majority of business owners are not in place when the interview takes place, to still get accurate answers related to the variables studied, it is necessary to connect by telephone or short message to business owners through on-site employee intermediaries.
Characteristics of respondents based on Age

```
<table>
<thead>
<tr>
<th>Age Group</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>45+</td>
<td>1</td>
</tr>
<tr>
<td>40 – 44</td>
<td>4</td>
</tr>
<tr>
<td>35 – 39</td>
<td>5</td>
</tr>
<tr>
<td>30 – 34</td>
<td>9</td>
</tr>
<tr>
<td>25 – 29</td>
<td>23</td>
</tr>
<tr>
<td>20 – 24</td>
<td>17</td>
</tr>
<tr>
<td>15 – 19</td>
<td>2</td>
</tr>
</tbody>
</table>
```

Source: Primary data processed, 2023

Figure 6. Characteristics of respondents by age

Figure 6 illustrates the composition of 61 respondents by age level. The results of the analysis showed that the age group of 25-29 years was the largest at 23 people (38%). Followed by the age group of 20-24 years as many as 17 people (28%). The majority of parties involved in the coffee shop business in Denpasar City are filled by young people (aged 20 years to 30 years).

Description of Research Variables

This study analyses the determinants of coffee shop business income in Denpasar City with variables of e-commerce utilization, working hours, technology, and capital. The data obtained by this study is based on the results of interviews with 61 coffee shop business units in Denpasar City. The results need to be described to give a clear interpretation of the data. The following is a description of each research variable.

Variable Distribution of E-Commerce Utilization

```
<table>
<thead>
<tr>
<th>Channels</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>8</td>
<td>2</td>
</tr>
<tr>
<td>7</td>
<td>4</td>
</tr>
<tr>
<td>6</td>
<td>11</td>
</tr>
<tr>
<td>5</td>
<td>12</td>
</tr>
<tr>
<td>4</td>
<td>7</td>
</tr>
<tr>
<td>3</td>
<td>7</td>
</tr>
<tr>
<td>2</td>
<td>4</td>
</tr>
</tbody>
</table>
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Source: Primary data processed, 2023

Figure 7. Distribution of respondents according to the variable of e-commerce utilization

Based on Figure 7, the range of e-commerce utilization of coffee shop business is between 2 to 8 e-commerce channels. The number of e-commerce uses most often used by coffee shops is 5 e-commerce channels (34%), then followed by the number of e-commerce channel utilization with 4 channels (20%), and the least is the use of e-commerce with 8 channels (3%).
Variable Distribution of Working Hours

Source: Primary data processed, 2023

Figure 8. Distribution of respondents according to working hour variables

Referring to Law No. 13 of 2003 concerning Manpower Article 77 which says that the total working hours in one week (6 working days or 5 working days) are 40 hours. If you look at Figure 8, of course, almost all coffee shops operate above the time specified in the Law. This is because the majority of coffee shops implement 2 work shifts in one day in order to maximize sales.

Technology Variable Distribution

Source: Primary data processed, 2023

Figure 9. Distribution of respondents according to technology variables

Based on Figure 9, the amount of technology used by coffee shops in making coffee drinks varies from 1 to 6 tools. The number of most commonly used tool combinations is 3 tools (44%), while the least used tool combinations are 1 tool only (3%) per coffee shop. There are differences from one place to another regarding the use of coffee beverage production technology due to efficiency reasons.

Variable Capital Distribution

Source: Primary data processed, 2023
Figure 10. Distribution of respondents according to capital variables

Based on Figure 10, the range of capital used by coffee shops in operating their business varies from 80 million rupiah to 385 million rupiah. The largest capital group is between 131 million rupiah to 181 million rupiah (25%), while the least capital group is in the range of 386 million rupiah to 436 million rupiah (5%). Most of the capital in the coffee shop business is used for the purposes of selling coffee drinks such as espresso coffee machines, grinder machines, kitchen knick-knacks and other essential needs such as; tables, chairs, and decorations.

Data Analysis
Descriptive Statistical Results

Table 2. Descriptive Statistical Test Results

<table>
<thead>
<tr>
<th>Variable</th>
<th>N</th>
<th>Range</th>
<th>Min</th>
<th>Max</th>
<th>Mean</th>
<th>Std. Dev.</th>
</tr>
</thead>
<tbody>
<tr>
<td>E-commerce Utilization (X&lt;sub&gt;1&lt;/sub&gt;)</td>
<td>61</td>
<td>6</td>
<td>2</td>
<td>8</td>
<td>4.79</td>
<td>1.404</td>
</tr>
<tr>
<td>Working Hours (X&lt;sub&gt;2&lt;/sub&gt;)</td>
<td>61</td>
<td>70</td>
<td>42</td>
<td>112</td>
<td>84.75</td>
<td>19.256</td>
</tr>
<tr>
<td>Technology (X&lt;sub&gt;3&lt;/sub&gt;)</td>
<td>61</td>
<td>5</td>
<td>1</td>
<td>6</td>
<td>3.20</td>
<td>1.209</td>
</tr>
<tr>
<td>Capital (M)</td>
<td>61</td>
<td>350</td>
<td>80</td>
<td>430</td>
<td>219.84</td>
<td>90.921</td>
</tr>
<tr>
<td>X&lt;sub&gt;2&lt;/sub&gt;Z (Moderation)</td>
<td>61</td>
<td>1910</td>
<td>-1</td>
<td>25</td>
<td>11.18</td>
<td>6.482</td>
</tr>
</tbody>
</table>

Source: Data processed, 2023

Table 2 shows that the sample in the study numbered 61. The average e-commerce utilization variable was 4.79 pieces. The variable working hours had an average value of 84.75 hours per week with a deviation of 19.25. The technology variable has an average of 3.2 with a deviation of 1.209. The variable capital has an average of 219.84 with a deviation of 90.921. The last variable income has an average of 11.18 million rupiah with a deviation of 6,482.

Classic Assumption Test Results
Normality Test

Table 3. Normality Test Results

<table>
<thead>
<tr>
<th>Unstandardized Residual</th>
</tr>
</thead>
<tbody>
<tr>
<td>N</td>
</tr>
<tr>
<td>Test Statistic</td>
</tr>
<tr>
<td>Asymp.Sig. (2-tailed)</td>
</tr>
</tbody>
</table>

Source: Data processed, 2023

Based on Table 3, it is known that the significance value is 0.200. Since the significance value of the Kolmogorov-Smirnov test (0.200) is greater than the real level (0.05), it can be concluded that the residuals of the regression equation model are normally distributed.

Multicollinearity Test

Table 4. Multicollinearity Test Results

<table>
<thead>
<tr>
<th>Variable</th>
<th>Tolerance</th>
<th>VIF</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>E-Commerce Utilization (X&lt;sub&gt;1&lt;/sub&gt;)</td>
<td>0.588</td>
<td>1,700</td>
<td>Multicollinearity free</td>
</tr>
<tr>
<td>Working Hours (X&lt;sub&gt;2&lt;/sub&gt;)</td>
<td>0.873</td>
<td>1,145</td>
<td>Multicollinearity free</td>
</tr>
<tr>
<td>Technology (X&lt;sub&gt;3&lt;/sub&gt;)</td>
<td>0.116</td>
<td>8,652</td>
<td>Multicollinearity free</td>
</tr>
<tr>
<td>Capital (M)</td>
<td>0.085</td>
<td>11,789</td>
<td>Multicollinearity happen</td>
</tr>
</tbody>
</table>

Source: Data processed, 2023

Based on Table 4, there is a symptom of multicollinearity, namely in the Capital (M) variable because it has a VIF number above 10 and a Tolerance value below 0.1. However, in the classical assumption test in this study, the multicollinearity test can be ignored. This is due to the moderation variable in the study. Thus, there will be a correlation of an independent variable based on other independent variables in the research model (McClelland et al, 2017).
Heteroscedasticity Test

Table 5. Heteroscedasticity Test Results

<table>
<thead>
<tr>
<th>Variable</th>
<th>Sig</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>E-Commerce Utilization</td>
<td>0.300</td>
<td>Heteroscedasticity free</td>
</tr>
<tr>
<td>Working Hours (X_2)</td>
<td>0.845</td>
<td>Heteroscedasticity free</td>
</tr>
<tr>
<td>Technology (X_3)</td>
<td>0.402</td>
<td>Heteroscedasticity free</td>
</tr>
<tr>
<td>Capital (M)</td>
<td>0.457</td>
<td>Heteroscedasticity free</td>
</tr>
</tbody>
</table>

Source: Data processed, 2023

Based on Table 5, the significance level is above 0.05 where the value of Sig. E-commerce utilization is 0.300, working hours are 0.845, technology is 0.402, and capital is 0.457. Thus, it can be said that in this regression model there are no symptoms of heteroscedasticity.

Moderation Regression Analysis Test Results

The effect of variable utilization of e-commerce, working hours, technology, and capital on coffee shop business income in Denpasar City is processed with the help of the SPSS 26 program whose output can be seen in Table 6, Table 7, and Table 8 as follows:

Table 6. Coefficient of Determination Test Results

<table>
<thead>
<tr>
<th>Model</th>
<th>R</th>
<th>R Square</th>
<th>Adjusted R Square</th>
<th>Std. Error of the Estimate</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>0.868a</td>
<td>0.753</td>
<td>0.731</td>
<td>3.362</td>
</tr>
</tbody>
</table>

Table 7. Results of Simultaneous Moderation Regression Analysis

<table>
<thead>
<tr>
<th>Model</th>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Regression</td>
<td>5</td>
<td>379,895</td>
<td>33,617</td>
<td>0.000</td>
</tr>
<tr>
<td></td>
<td>Residual</td>
<td>55</td>
<td>11,301</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>60</td>
<td>2521,016</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 8. Results of Partial Moderation Regression Analysis

<table>
<thead>
<tr>
<th>Model</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>Std. Error</td>
</tr>
<tr>
<td>1</td>
<td>(Constant)</td>
<td>-9.029</td>
</tr>
<tr>
<td></td>
<td>E-commerce Util</td>
<td>0.702</td>
</tr>
<tr>
<td></td>
<td>Working Hours</td>
<td>0.026</td>
</tr>
<tr>
<td></td>
<td>Technology</td>
<td>2.112</td>
</tr>
<tr>
<td></td>
<td>Capital</td>
<td>0.035</td>
</tr>
<tr>
<td></td>
<td>Interaction X_3M</td>
<td>0.000</td>
</tr>
</tbody>
</table>

Based on the results of moderation regression analysis in Table 6, Table 7, and Table 8, the regression equation is obtained as follows:

\[ \hat{Y} = -9.029 + 0.702 X_1 + 0.026 X_2 + 2.112 X_3 + 0.035 M + 0.000 X_3M \]
\[ Se = (3.868) (0.403) (0.024) (1.056) (0.016) (0.004) \]
\[ t = (-2.335) (1.742) (1.087) (2.000) (2.123) (0.073) \]
\[ Sig = (0.023) (0.087) (0.282) (0.050) (0.038) (0.942) \]
\[ R^2 = 0.753 \]
\[ F = 33.617 \]
\[ Sig = 0.000 \]

Simultaneous Regression Coefficient Test Results (F Test)

Based on Table 7 because $F_{table} > F_{table}$, 33.617 > 2.38 with a value of sig. $0.000 < 0.05$, then $H_0$ is rejected. The use of e-commerce, working hours, technology, capital, and moderation interactions between capital and
Partial Regression Coefficient Test Results (t Test)

Based on Table 8, testing the effect of e-commerce utilization variables on coffee shop income obtained the results of the $t_{test}$ (1.742) > $t_{table}$ (1.673) so that $H_0$ was rejected. This means that the use of e-commerce has a positive and partially significant effect on coffee shop income in Denpasar City. Testing the effect of variable working hours on income obtained the results of the $t_{test}$ (1.087) > $t_{table}$ (1.673) so that $H_0$ is accepted. This means that working hours do not have a partial significant effect on coffee shop income in Denpasar City. Testing the effect of technological variables on income obtained test results $t_{test}$ (2.000) > $t_{table}$ (1.673) so that $H_0$ is rejected. This means that technology has a positive and partially significant effect on coffee shop income in Denpasar City. Testing the effect of capital variables on income obtained the results of the $t_{test}$ (2.123) > $t_{table}$ (1.673) so that $H_0$ was rejected. This means that capital has a positive and partially significant effect on coffee shop income in Denpasar City. And the variable moderation interaction between capital and technology in two-way testing gets the value $t_{table}$ (-2.004) < $t_{test}$ (0.073) < $t_{table}$ (2.004) then $H_0$ is accepted. This means that capital does not moderate the influence of technology on coffee shop income in Denpasar City, but only has a predictor moderation relationship.

Discussion

The results showed that the variable of e-commerce utilization has a positive and significant influence on coffee shop business income in Denpasar City. These results provide empirical evidence that the more e-commerce channels a coffee shop uses, it will enlarge its market so as to increase sales which will increase their income. There is a consideration that with the increasing number of e-commerce channels, this can increase the reach of more audiences so that it is hoped that the promotions carried out can increase sales and increase business income. This is supported by similar research on the effect of e-commerce utilization on MSME income by Helmalia and Afinawati (2018), Aprilyan and Sasanti (2022), Pramelia and Erawati (2022), and Puspaningtyas et al (2018) explaining that the use of e-commerce has a significant and positive effect on MSME income.

The variable working hours in this study did not have a partial influence on coffee shop income in Denpasar City. This result is contrary to the hypothesis that states working hours have a positive and significant effect on coffee shop business income in Denpasar City. Based on the results of an in-depth interview with the resource person as the owner of Sekian Kopi Dewata coffee shop, the reason underlying working hours does not partially affect income is because the failure of the coffee shop to understand the time of busy customer visits and failure to determine the target market to be targeted causes entrepreneurs to lose potential income due to these mistakes. This phenomenon is in line with Utami’s research (2022) and Husaini and Fadhilani’s (2017) research which explains that working hours do not have a significant effect on income.

The Influence of Technology on Coffee Shop Income in Denpasar City

The technology variables in this study have a positive and significant influence on coffee shop business income in Denpasar City. These results provide empirical evidence that the greater the amount of technology used in making coffee beverages, the more it can increase business incomes. This is in accordance with what was conveyed in the research of Hasanah et al (2020) stated that the higher the application of technology, the greater the income obtained by a business unit. Apart from the high application of technology, the better business actors use technology, the more production will automatically increase income (Marfuah and Harliyah, 2019). This is in line with research which states that technology partially has a positive and significant effect on MSME income (Sidik dan Scientific, 2021; Arsesto, 2019; Kumar and Ayedee, 2021).

Capital variables in this study have a positive and significant influence on coffee shop business income in Denpasar City. This provides empirical evidence that the more capital used in the coffee shop business, the greater the business income that will be obtained, and vice versa. This is in line with research conducted by Natha and Dewi (2020) saying that capital partly has a positive and significant effect on coffee shop income in Denpasar City. The same thing is also supported by Liani and Usman’s (2018) research and Mahayuni and Widanta’s research, (2021) which states that capital directly has a positive and significant effect on income.

The results of research related to the relationship between capital and...
technology on income show that capital is unable to moderate the relationship of technology to coffee shop business income in Denpasar City. This is contrary to hypotheses such as research by Tariq et al. (2019) and Ramli et al (2018) which say that capital can moderate the influence of technology adoption on MSME performance. The technology and capital variables in this study only act as moderation predictors which means that these moderation variables only act as independent variables in the relationship model formed (Utama, 2016: 150). In this study, the amount of coffee beverage production technology used has positive benefits on coffee shop business income, but does not depend on how much business capital is spent. This is in line with research conducted by Ferede et al. (2018) in evaluating the influence of information technology on the performance of manufacturing companies in Ethiopia which explains that information technology has a significant positive impact on the performance of manufacturing companies in Ethiopia, but business capital does not moderate the relationship between information technology and company performance.

Conclusion and Recommendation

Based on the results and discussion of the research that has been described, the conclusions that can be drawn are as follows: 1) The use of e-commerce, working hours, technology, and capital simultaneously affects the income of the coffee shop business in Denpasar City. 2) The use of e-commerce, technology, and capital has a positive and significant effect, while working hours do not have a partial effect on coffee shop income in Denpasar City. 3) Capital does not moderate the influence of technology on coffee shop income in Denpasar City, but only as a predictor of moderation (independent variable)

Suggestion

Based on the results of the analysis, discussion, and research conclusions, the recommendation that can be given to parties in need are as follows: 1) Business owners are expected to pay attention to the technological variables used in producing their coffee drinks in order to increase their business income. This is related to the efficiency and consistency of the coffee beverage products produced to be optimal. This also applies to the e-commerce channels used because in today's all-digital era it is crucial to develop e-commerce media that are used to increase business income and maintain business continuity. 2) Business capital has an important influence to be considered by business owners in order to be more careful in getting capital, especially for coffee shops that have recently opened so that they can accelerate development and increase business income. And for the government, especially for the Cooperative and MSME Office of Denpasar City to routinely hold training programs and capital loans for coffee shop business owners listed in the Denpasar City Cooperative and MSME Office. 3) For future research should consider variables outside this study, because then the next researcher will be able to provide a more specific picture of coffee shop income in Denpasar City. For example, when viewed from research data, it turns out that there is a tendency for newly pioneered businesses to have smaller incomes compared to coffee shop businesses that have been established for a long time.

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