

# The Role of Customer Engagement Strategy and Quantitative Investment Analysis: Sustainable MSMEs

(The Case of Street Vendors on Pendidikan Mangunjaya Tambun Street)

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## ABSTRACT

This study is a follow-up study on street vendors (PKL) on Jalan Pendidikan Mangunjaya Tambun and Perumas Tiga Kota Bekasi in 2022. They are still motivated to become sustainable micro, small, and medium enterprises (MSMEs). The purpose of this study is to analyze plans designed to build sustainable business relationships between street vendors and customers through various interactions. This creates customer loyalty, builds brand advocacy to create long-term value, or becomes an MSME. The research method is quantitative with a Quantitative Investment Analysis approach to analyze the relationship between factors in operational variables. The sampling technique is purposive sampling with a total of 6 (six) street vendors. Data collection uses a Likert scale questionnaire. Data analysis uses regression to analyze the strength of the relationship between variables and sub-variables. The results of the study show that the role of Customer Engagement Strategy and Quantitative Investment Analysis: Sustainable MSMEs partially affects Customer Engagement Strategy for Sustainable MSMEs from 5 (five) factors, 4 (four) factors are declared strongly positive and significant, and 1 (one) factor is declared moderately positive and insignificant. Capital on sustainable MSMEs from 3 (three) factors was declared to be very strong and significant overall. In the simultaneous results, Customer Engagement Strategy and capital on sustainable MSMEs were strong and significant.

**Keywords:** *Engagement Strategy; Investment Analysis; Quantitative; Sustainable MSMEs*

## INTRODUCTION

The paradigm attached to street vendors (PKL) in entrepreneurial activities is often dismissed as a nuisance to the streets where they do business. Sadly, they are also considered illegal vendors who sell their goods indiscriminately. They are considered ignorant in business management, relying solely on perseverance to earn a living. In 2020, researchers conducted a study on the phenomenon of Ramadan street vendors in Mangunjaya Tambun Village and Perumnas Tiga Kota Bekasi (Rustomo, 2022).

The interest and talent of street vendors in entrepreneurship are motivated by micro, small, and medium enterprises (MSMEs), but they are limited by knowledge and funding. Knowledge about MSMEs is essential for planning and implementing a series of tactics designed by businesses to build and maintain strong, positive, and sustainable relationships with customers, with the ultimate goal of increasing loyalty, advocacy, and long-term value, often referred to as CES (Customer Engagement Strategy) (Alvarez-Milán et al., 2018).

CES is a concept of customer engagement that fosters loyalty toward the products offered.

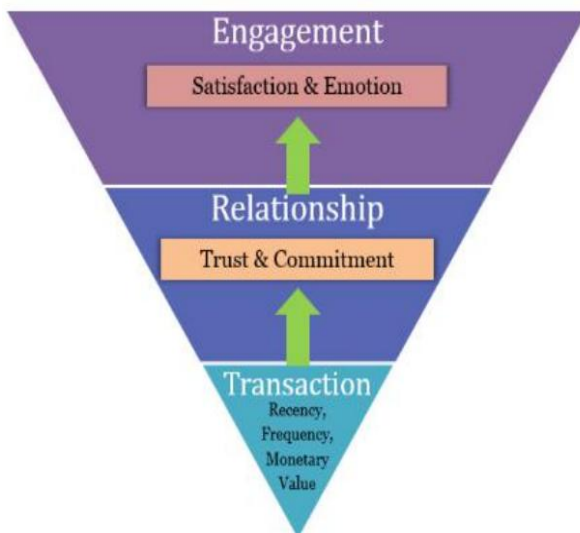


Figure 1: The Development of Customer Engagement

Initially, businesses interacted directly with consumers when they wanted to purchase a product. To increase consumer engagement, a salesperson, for example, could ask customers for feedback. Historically, marketing effectiveness has been assessed as a general indicator of engagement. However, this does not always result in sales or conversions in this case. Engagement can imply different things in different situations. This term is used to refer to “agreements” in the business world, but in management science literature, it is described as a series of internal actions by actors that serve internal interests (Hargyatni et al., 2022).

Furthermore (Hargyatni et al., 2022) in the world of marketing, customer engagement is defined as actions taken by consumers towards a business. This has different connotations. Based on the method suggested by this study, a relationship will continue to exist until it reaches a point of satisfaction and strong emotional attachment (Energy Networks Australia, 2016).

Street vendors need to have sufficient knowledge to become professional entrepreneurs and must be supported by various business management studies. Indeed, educational limitations are a common obstacle if the literacy provided is insufficient for them to accept. Therefore, a strategy is needed in choosing products and places to sell their goods (Rustomo, et al., 2023).

An equally important strategy is to work around budget constraints to meet the needs of their business. This involves an approach to investment decision-making often referred to as QIA (Quantitative Investment Analysis) (Garcia et al., 2015) for both the short and long term. QIA analysis requires precision in calculating the desired figures and the importance of advocacy for prospective MSMEs (Paul, 2020).

Problem: Street vendors on Jalan Pendidikan Mangunjaya Tambun and Perumas Tiga Kota Bekasi have not yet formed customer engagement with product brands. They are still hesitant to join the MSME program organized by the local government. Entrepreneurial funding support, where loan facilities are provided, requires very complicated requirements. Various studies and motivation are needed so that street vendors can become successful MSMEs.

## RESEARCH METHOD

This study uses quantitative research, a scientific approach to collecting and evaluating numerical data, or numbers, with the aim of measuring correlations between variables, testing hypotheses, and extrapolating findings to a wider population. This method is systematic, objective, and uses statistical analysis to produce measurable and repeatable results, Sugiyono in (Syahputri, et.al., 2023:66-70).

The research population consisted of 45 street vendors on Jalan Pendidikan Mangunjaya Tambun and Perumnas Tiga Kota Bekasi who were consistent. The sampling technique used was purposive sampling with a sample size of 6 street vendors, which is a method of determining the sample that is not based on randomization but on certain considerations by the researcher to achieve specific research objectives. The researcher selected subjects based on criteria relevant to the research so that the information obtained was richer and focused on the group or individuals most relevant to the research objectives. By distributing questionnaires using a 1-5 Likert scale (Abdullah, 2022).

Regression data analysis with the process of collecting questionnaire data and analyzing data from various sources such as financial reports, market indices, and economic indicators to find patterns and trends (Tarumingkeng, 2025).

## RESULTS AND DISUSSION

Street vendors (PKL) have entrepreneurial characteristics, which are qualities or traits that are continuous and permanent and can be used to identify a person, an object, an event, an integration or synthesis of individual traits in the form of a person or personality, considered from an ethical and moral point of view.

Meanwhile, an entrepreneurial attitude is an attitude of someone who has high n-ach in their daily life or the characteristics of an entrepreneur, Faisal, 2002 in (Edwin, 2013). Maintaining entrepreneurship must be adapted to changing environmental conditions. The environment is everything outside the organization, (Stephen P Robbins, 1994).

## RESEARCH RESULTS

Quantitative analysis refers to the use of mathematical and statistical methods to understand or predict behavior in business, finance, or economics. Quantitative analysis involves the collection and analysis of numerical data, as well as the use of various mathematical and statistical techniques to process that data and make decisions based on it. Data on entrepreneurs/street vendors on Jalan Pendidikan Mangujaya Tambun and Perumnas Tiga Kota Bekasi.

Table 1: Street Vendor Respondents

Res	Type	Place	Capital	Time	Profit/ days	Compe- -titors	Production	Oppor- tunity (%)	Eligibility
1	Market Snacks (Martabak, Onde-onde, Risol, Ager-ager)	Cart, Roadside and Strategic	5,000,000	Every day	600,000	3	Own home production	36	Worthy
2	Drinks (Iced tea, Various Coffees, Various Juices)	Tents, Roadside and Strategic	8,000,000	Every day	760,000	4	Own home production	38	Very Worth It
3	Various Peanut Porridges	Cart, Roadside and Strategic	4,000,000	Every day	500,000	2	Own home production	25	Worthy
4	Gudeg Rice	Cart, Roadside and Strategic	8,000,000	Every day	650,000	1	Own home production	1	Very Worth It
5	Various Types of Rempyek	Cart, Roadside and Strategic	3,000,000	Every day	400,000	3	Own home production	40	Very Worth It
6	Various Bread	Tents, Roadside and Strategic	15,000,000	Every day	900,000	2	Own home production	12	Decent Enough

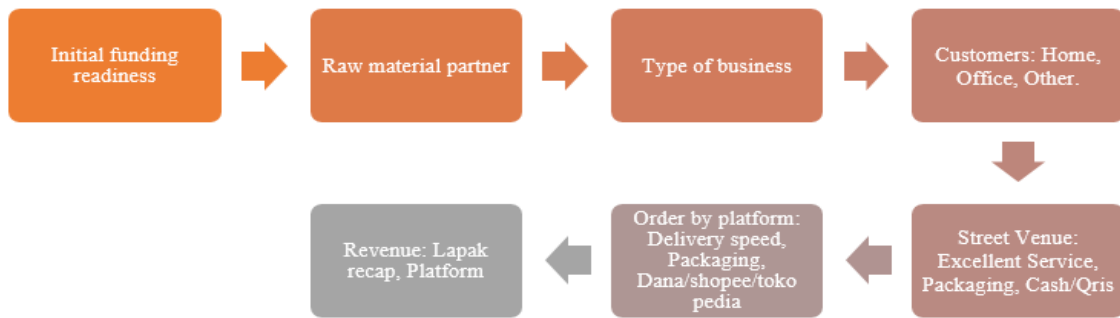
Source: Respondent Data Observation, January 2025

Table 1 shows the results of observations followed by requests for data regarding the respondents' entrepreneurial activities. In the business world, every activity that requires the processing and analysis of numerical data, such as operations management, financial analysis, budgeting, and forecasting, utilizes the power of quantitative analysis. PKL can build their business well with the power of capital, profit, and competitors. The business feasibility interval is 0–10 (poor), 11–20 (fair), 21–30 (good), and above 30 (very good) (Bate'e et al., 2024), (Purnomo et al., 2017).

### Customer Engagement Strategy Framework

The customer engagement strategy framework is a comprehensive framework that outlines methods, approaches, and actions for building and maintaining solid relationships between entrepreneurs and consumers at various touchpoints, from before to after purchase, in order to generate a satisfying experience, increase loyalty, and achieve specific business

objectives. With this approach, businesses can better understand, interact with, and provide value to consumers across multiple channels (Mahmud & Qonnan, 2019) (Garcia et al., 2023).



Matrik 1: Strategy Framework

Matrix 1 illustrates the framework for street entrepreneurship, which relies heavily on initial budget readiness. As a first step, raw materials must be purchased. Next, consider what types of businesses can be run based on experience with loyal customers for the product. Various facilities and supporting tools for selling are also available. Next, calculate or summarize the results based on the available tools to prepare for the next steps.

The strategy has been used by street vendors (entrepreneurs) on Jl Pendidikan Mangunjaya Tambun and Perumnas Tiga Kota Bekasi. They have high hopes of having sufficient capital so that they can distribute their products as sustainable MSMEs. With easy access to loans and having a brand/patent in order to promote their superior products in their respective fields.

**Quantitative Investment Analysis**

Identifying Factors: Identifying factors requires the use of Multiple Linear Regression econometric techniques on several factors that can influence the CES (Customer Engagement Strategy) and the adequacy of capital owned by PKL in order to build sustainable MSMEs. By comparing the relationship levels in the correlation coefficient interpretation table covering 5 (five) indicators.

Table 2: Interpretation of Correlation Coefficients

Interval	Tingkat Hubungan
0,00 – 0,199	Very Low
0,20 – 0,399	Low
0,40 – 0,599	Moderat
0,60 – 0,799	Strong
0,80 – 1,000	Very Strong

Source: Sugiyono in (Paramita, et al., 2021:66)

Partial analysis of the influence of Customer Engagement Strategy with five indicators: place, emotional interaction, social interaction, trust, and value for customers towards sustainable MSMEs with the following results.

Table 3: Data Analysis Results  
Factor Correlation Determination Anova

Faktor	Korelasi	Determinasi	Anova
Place	0.78	0.61	0.020
Emotional interaction	0.81	0.66	0.000
Social	0.52	0.27	0.060
Trust	0.64	0.41	0.040
Customer value	0.83	0.69	0.000

Table 3 shows the results of data analysis of the CES (Customer Engagement Strategy) customer engagement strategy, indicating that location choice and trust level have a strong and significant positive relationship. Emotional interaction and customer value also have a strong and significant positive relationship. Social value has a moderate positive relationship that is not significant.

Partial capital analysis is generally essential in business for the sustainability/innovation of both short-term and long-term ventures. The role of the three capital indicators is used to measure the availability, use, and challenges in obtaining the funds needed to start and run a business (Aulia & Hidayat, 2021).

Table 4: Data Analysis Results  
Factor Correlation Determination Anova

Faktor	Korelasi	Determinasi	Anova
Availability	0.83	0.69	0.000
Usage	0.81	0.66	0.000
Challenges in obtaining	0.41	0.17	0.000

Table 4 shows the results of data processing on the relationship between capital, consisting of availability and use, and sustainable MSMEs, which has a very strong and significant positive relationship. Meanwhile, the difficulty of obtaining capital shows a moderate and significant positive relationship with sustainability in MSMEs.

The simultaneous analysis of the CES (Customer Engagement Strategy) and capital adequacy in sustainable innovation in MSMEs is as follows.

Table 5: Data Analysis Results  
Factor Correlation Determination Anova

Faktor	Korelasi	Determinasi	Anova
CES	0.76	0.58	0.000
Capital	0.72	0.52	0.000

The CES (Customer Engagement Strategy) and capital adequacy in MSME sustainable innovation are positively strong and significant.

## DISCUSSION

Experience in street vending as an entrepreneur is initial capital. Business history is very important in continuous innovation towards consistent MSMEs in various internal and external situations.

An important note for entrepreneurs (street vendors) is a compilation that shows the potential and depth of knowledge of a person, group, or organization by displaying their experiences, work, achievements, and training. Portfolios are very important in the business process to increase credibility and differentiate oneself from other competitors.

Entrepreneurs (PKL) on Jalan Pendidikan Mangujaya Tambun and Perumnas Tiga Kota Bekasi have demonstrated adequate portfolios, so the government is entitled to provide them with easy access to funding. This is demonstrated by the consistency of respondents from year to year who remain committed to entrepreneurship.

Capital is very important for PKL on Jl Pendidikan Mangujaya Tambun and Perumnas Tiga Kota Bekasi to have support for popular brands in order to develop and innovate their products and become sustainable MSMEs. This is demonstrated by their undoubted ability to implement a Customer Engagement Strategy (CES). Even with limited capital, they still manage to survive in their business.

The limitations of the Customer Engagement Strategy (CES) in social indicators remain vulnerable, necessitating experience in social activities to ensure their products are recognized by the local community and even globally.

Simultaneous CES (Customer Engagement Strategy) and capital in quantitative techniques require extensive data on assets and possible entrepreneurial characteristics (PKL),

as well as advanced software to handle data analysis and optimization tasks. Although quantitative analysis is the core of factor-based investment, it is important to note that the success of factor-based strategies also depends on data quality, model assumption suitability, and the skills and expertise of entrepreneurs.

### CONCLUSION

The drive for PKL investment is essentially a long-term strategy. Although certain factors have shown better performance than the market at large over the long term, better performance in the short term is limited to financial capabilities.

1. Entrepreneurs (PKL) prioritize five CES (Customer Engagement Strategy) factors as their competitiveness and existence.
2. It is possible to reevaluate which framework (Strategy Framework) is more profitable in this modern era.
3. A sufficient initial budget is essential to maintain partnerships with raw material suppliers.
4. Quantitative Investment Analysis is a very helpful tool for entrepreneurs (PKL) to determine which factors are weak in order to make improvements.

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