

Analysis Of Perception And Motivation Of Passengers Using Kualanamu International Airport With Service Innovation As A Mediating Variable

Faisal hakim^{1*}, Mesra B^{2*}, Elfitra Desy Surya^{3*}

Master of Management Student, Universitas Pembangunan Panca Budi, Indonesia

Universitas Pembangunan Panca Budi

Corresponden Author : mesrab@dosen.pancabudi.ac.id

Abstract

This research aims to determine and analyze perceptions, motivation and have a positive and significant influence on passengers' decisions to use Kualanamu International Airport mediated by service innovation. This type of research is quantitative descriptive research using Partial Least Squares- Structural Equation Modeling (PLS-SEM) data analysis. The data source comes from a questionnaire. The population in this study was all passengers at Kualanamu International Airport. The sampling technique used random sampling technique, the number of samples in the study was 150 passengers. The results of the analysis show that consumer perception has a positive and significant effect on passengers' decisions to use Kualanamu International Airport, consumer motivation has a positive and significant effect on passengers' decisions to use Kualanamu International Airport. The relationship is not shown in the consumer perception variable which has a positive and significant influence on Kualanamu International Airport passenger decisions mediated by service innovation. Consumer motivation variables have a positive and significant effect on Kualanamu International Airport passenger decisions mediated by service innovation.

Keywords:

Perception; Motivation; Passenger Decisions; Service Innovation

Introduction

The tourism sector is now one of the largest and strongest industries in the world that contributes significantly to income for both the community and the country. Various efforts have been made to improve this sector, one of which is the "*Visit Indonesia*" program, which was launched in 2008. The air transportation sector is one of the transportation services that is expected to be able to realize the mission of the program by providing a better travel experience for passengers.

Kualanamu International Airport is one of the main airports in Indonesia that serves as an entry point for domestic and international tourists managed by PT Angkasa Pura

II and has received a "4 Stars Airport" rating from SKYTRAX. This reflects the airport's motto, which is "To Be World Class Airport". The World Class Airport award is given by SKYTRAX based on a survey that assesses passenger service and facilities, as well as evaluates the passenger experience from check-in to immigration. Since its operation, the airport has undergone significant development in terms of infrastructure and services. In the context of growing tourism, passengers' decision to choose Kualanamu International Airport as a departure or arrival point is based on factors that affect the emergence of purchase decisions that are quite complex and intertwined.

Purchasing decision is an integration process that combines knowledge to evaluate two or more alternative behaviors and choose one of them (Sangadji & Sopiah, 2013). Kotler and Armstrong mentioned one of the factors that influence the purchase decision is the psychological factor. Psychological factors are factors that can encourage marketing stimulus, including perception, motivation, and attitude. This is also supported by previous research which states that perception, motivation, and attitude have a positive and significant effect on purchase decisions in each research object (Mawey, 2013, Tompunu, 2014, Saputra, 2013, Mauliansyah, 2015, Sepang & Joel, 2014). One of the factors that influence purchase decisions is consumer perception.

Perception is the process of individuals in selecting, organizing, and translating captured information to create a meaningful picture of the world (Mawey, 2013). Marketers will use consumer perception maps so that they know the attributes or characteristics of consumers associated with the product, so that marketers can make products accordingly (Diyarbakirlioglu & Durmaz, 2011). Perception often drives purchases because it is an interpretation of sensory information (Lindberg et. al., 2018). Passengers' perception of airports includes various aspects such as cleanliness, comfort, security and ease of access. Passengers who have a positive perception tend to prefer to use the airport.

One of the other important factors that can influence the onset of a purchase decision is consumer motivation. According to Kotler and Keller (2012) motivation is the urge for needs that are psychogenic in nature derived from psychological states regarding tensions such as the need for recognition, appreciation and belonging. On the other hand, travel motivation, whether intrinsic, such as the desire to go on vacation or explore new places, or extrit, such as ticket price promotions or ease of service, also plays an important role in decision-making. The decision to buy goods or services in meeting needs begins with the individual's views when obtaining information and the encouragement contained in the individual in determining the decision to make a purchase.

In this increasingly competitive context, airports as the main gateway for international and domestic travel are faced with an urgent demand to innovate in every aspect of their services, given that innovation not only plays a crucial role in improving



operational efficiency but also in meeting the ever-evolving expectations of passengers, especially related to comfort, security and ease of access. Along with the rapid development of technology, many airports around the world have adopted innovative solutions such as automated check-in systems that speed up the boarding process, mobile apps that facilitate real-time travel management and improved customer service facilities designed to create a more enjoyable and efficient travel experience. The implementation of these technologies is expected to not only be able to optimize airport operations, but also provide significant added value for passengers, create higher loyalty, increase positive passenger perception and a more satisfying travel experience. Therefore, understanding how the influence of perception and motivation and its impact on the decision to use the airport is an important thing that needs to be considered, especially for the manager.

This study aims to analyze the influence of perception and motivation on passenger decisions in choosing Kualanamu International Airport, as well as to explore the role of service innovation as a mediating variable. By knowing the relationship, it is hoped that recommendations can be made for airport managers to improve the quality of service and passenger experience, as well as encourage the growth of the tourism sector in Indonesia and provide insights for further research in the field of airport management and tourism.

Literature Review

1. Definition Of Consumer Perception

According to Suryani (2012) in (Termini, 2020), consumer perception is the process by which a person selects and organizes in interpreting stimuli into something meaningful.

2. Definition Of Motivation

According to (Erdiansyah et al., 2024) explain that consumer motivation in buying includes motivation based on needs and achieving personal satisfaction. Consumer motivation in making purchases comes from unfulfilled desires.

3. Definition Of Purchasing Decisions

According to Riadi (2020) in (Anjani & Simamora, 2022) purchasing decisions are a form of behavior shown by a consumer when buying a product with several criteria, namely product type, form, brand and product quality.

4. Definition Of Service Inovation

According to Hall et al., (2006) in (Muslichati & Wartini, 2015).service innovation is a form of service/service provided using systematic technological methods.

Methods



Lisensi

Lisensi Internasional Creative Commons Attribution-ShareAlike 4.0.

This study uses a quantitative approach with a survey design to analyze the influence of perception and motivation on passenger decisions in using Kualanamu International Airport. The quantitative approach is an approach that emphasizes the analysis of numerical data processed by statistical methods. The quantitative approach method consists of observing or observing, collecting information and presenting analysis from the results of (Sugiyono, 2019). The analysis method applied is Structural Equation Modeling (SEM) using SmartPLS (Partial Least Squares) to test hypotheses and relationships between variables.

1. Operational Definition

In this study, the indicators used in the variables are as follows :

Table 1

No	Variable	Definition	Indicators
1	Perception (X1)	The cycle in which a consumer receives information according to what he gets (Tifany & Rustam, 2023)	1 Openness 2 Attention 3 Interpretation
2	Consumer Motivation (X2)	Hedonic motivation is the consumer's motivation to buy a product/service for personal pleasure (Erdiana & Lestari, 2023)	1. Product 2. Price 3. Servie 4. Location (Rahmat et al., 2024)
3	Buying Decision (Y)	A number of consumer decisions before making a purchase (Fakhrudin, 2020)	1. Recognize the problem 2. Searching for information 3. Buying decision 4. Post-purchase behavior
4	Innovation (Z)	A tool that can be used to determine business opportunities (Afriyani & Muhajirin, 2021)	1. Design changes 2. Technical innovation 3. Produk Development

2. Population and Sample

The population in this study were all passengers who used Kualanamu International Airport. Samples were taken randomly from passengers who were at the airport during the research period. The targeted sample size was 150 respondents to ensure sufficient data validity and reliability for analysis.

3. Data Collection



Data collection in this research used a questionnaire with a Likert scale ranging from 1-5 (Ghozali, 2014). Data was collected through a questionnaire consisting of three parts :

Part A : Demographic questions (age, gender).

Part B : Questions regarding perceptions of airport services and facilities used a Likert scale of 1-5 (strongly disagree to strongly agree).

Part C : Questions regarding travel motivation and service innovation implemented at the airport also used a 1-5 Likert scale.

Questionnaires were distributed directly at the airport and via online platforms to reach more respondents.

4. Data Analysis

The collected data will be analyzed using SmartPLS software. According to Jogiyanto and Abdillah (2013), PLS (Partial Least Square) is a variant-based structural equation analysis that can simultaneously test measurement models as well as test structural models. The analysis process is carried out in two stages :

The First Stage : Validity test to check the Average Variance Extracted (AVE) value with an AVE value > 0.5 (Sekaran, 2017). Then test the reliability of the instrument by checking the Composite Reliability value > 0.7 (Hair et al, 2017).

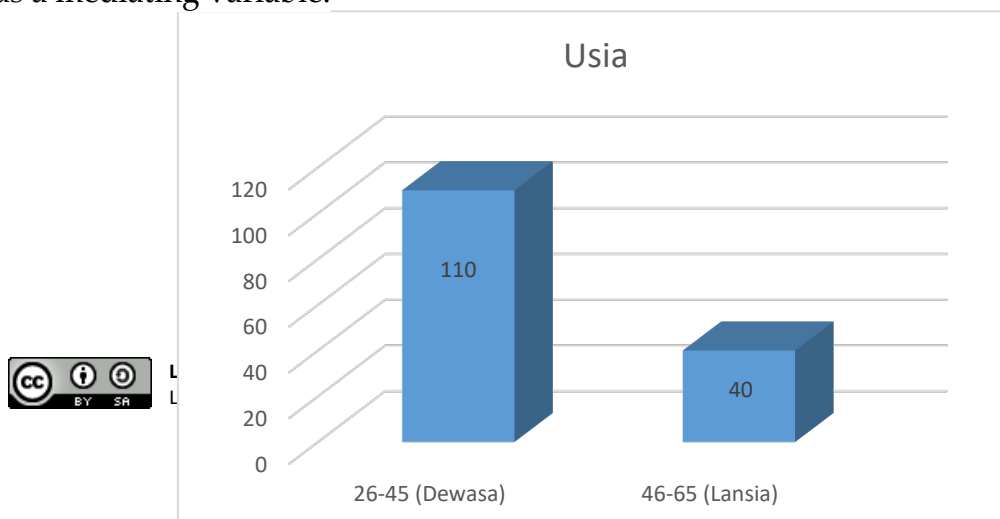
Second Stage : Structural model testing to evaluate the influence between variables (Hair et al, 2017). This analysis will provide results regarding the direct relationship between passenger perceptions, motivation and decisions, as well as the role of service innovation as a mediating variable.

5. Hyphotesis Testing

The research hypothesis will be tested by observing the path coefficient value and the significance value resulting from bootstrapping. The hypothesis is accepted if the p value is < 0.05 , indicating there is a significant influence (Kalnadi, 2013).

Results and Discussion

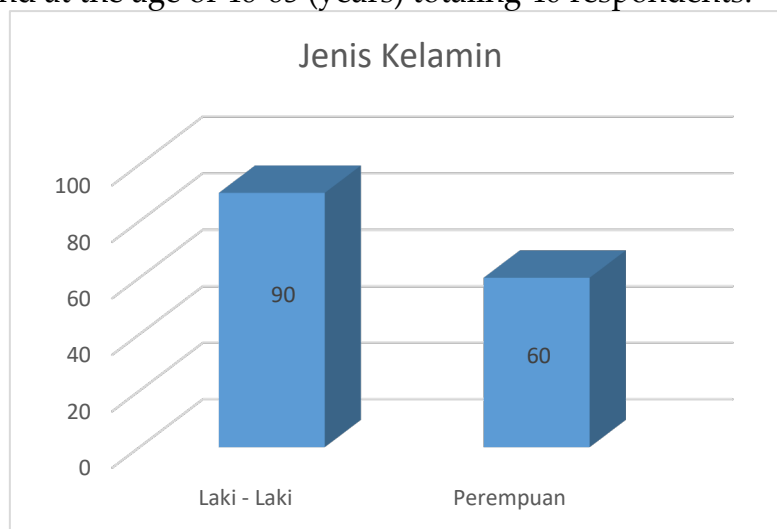
This research analysis uses a quantitative method approach where the analysis used is descriptive and partial least squares (PLS) hypothesis testing. The variables seen in this research are perception, motivation, passenger decisions, and service innovation as a mediating variable.



Picture 1

Respondent Demographics Based on Age

Based on the picture above, it shows that passengers' decisions in using Kualanamu International Airport are more dominantly influenced by consumer perception, consumer motivation and service innovation at the age of 26-45 (years) totaling 110 respondents and at the age of 46-65 (years) totaling 40 respondents.



Picture 2

Respondent Demographics Based on Gender

Based on the picture above, it shows that the dominant passenger's decision to use Kualanamu International Airport is influenced by consumer perception, consumer motivation and service innovation, with 90 male respondents and 60 female respondents.

Partial Least Square

Model testing in PLS consists of measurement model testing, structural model testing and mode goodness and suitability testing :

1. Measurement Model

This research uses formative and reflective measurement models. Where the variables are perception variables, customer motivation is measured reflectively and passenger decisions are measured formatively. According to Hair et al. (2021) in (Nugraha & Masithoh, 2023), evaluation of reflective measurement models requires a holding factor of more than 0.70, noting that this study uses a holding factor of more than 0.60 according to Chin (1998), the composite reliability and Cronbach alpha are higher. of 0.70, and the average variance extracted (AVE) was

more than 0.50. In addition, evaluate discriminant validity, which includes Fornell and Locker criteria, and is not more than 0.90. According to the formative measurement model testing, there is no multicollinear measurement item atar that is visible from outside the VIP below 5.

Table 2
Measurement Model

No	Variable	Indicator	Factor Loading (FL)	Composite reliability (CR)	Cronbach's alpha (CA)	Average variance extracted (AVE)
1	Perception (X1)	Openness (X1.1)	0.942	0,724	0.887	0.627
		Attention (X1.2)	0.953			
		Interpretation (X1.3)	0.277			
2	Consumer Motivation (X2)	Product (X2.1)	0.930	0,801	0.859	0.687
		Price (X2.2)	0.432			
		Service (X2.3)	0.946			
		Location (X2.4)	0.896			
3	Buying Decision (Y)	Recognize the problem (Y.1)	0.640	0,730	0.801	0.541
		Searching for information (Y.2)	0.808			
		Buying decision	0.652			
		Post-purchase behavior (Y.4)	0.818			
4	Innovation (Z)	Design Changes (Z1)	0.892	0,625	0.761	0.539
		Technical innovation (Z2)	0.601			

		Product development (Z3)	0.382			
--	--	--------------------------------	-------	--	--	--

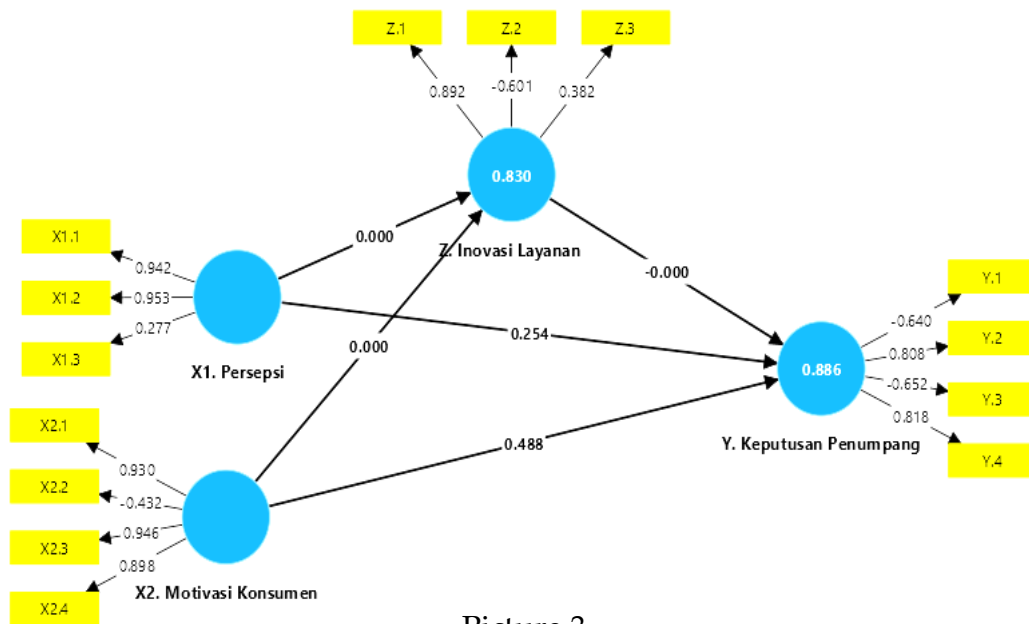
The perception variable is measured by 3 (three) measurement items, 2 valid and 1 invalid with an outer loading of 0.277 - 0.942, which means that the 2 measurement items are valid, reflecting the measurement of passenger perceptions at Kualanamu International Airport. The level of variable reliability is acceptable as indicated by Composite reliability (CR) and Cronbach's alpha (CA) values above 0.70 (reliable). The internal consistency is acceptable. The level of convergent validity indicated by the AVE value of $0.627 > 0.50$ meets the requirements for good convergent validity. Overall, the variation in measurement items contained by the variables reached a value of 62.7%. Among the three valid measurement items, passenger perceptions at Kualanamu International Airport appear to be stronger as reflected by X1.2 (LF 0.953), namely the attention indicator and X1.3 (LP 0.277) interpretation. So the attention indicator is an indicator that is often used for passenger perceptions at Kualanamu International Airport and needs to be maintained. Meanwhile, the interpretation indicators must be improved because they have little influence on consumer perceptions at Kualanamu International Airport.

Table 3
Discriminant Validity

Indicator	Perception (X1)	Motivation (X2)	Passenger decisions (Y)	Service innovation (Z)
Fornel and Lacker Method				
Perception	0,811			
Motivation	0,746	0,835		
Passenger decisions	0,654	0,753	0,816	
Service innovation	0,601	0,684	0,613	0,734

Discriminative validation testing is testing a measurement model to ensure that the variables are theoretically different and tested empirically/statistically. The method used is the Fornell and Laker criteria. The perception variable has an AVE value of 0.811 which is greater than motivation (0.746) and has a smaller correlation with passenger decisions (0.654) and a greater correlation with service innovation (0.601).

Structural Model Testing



Picture 3

Diagram Path Coefficient dan P-Value

The consumer perception variable has a direct influence on passenger decisions with a value of 0.254. Meanwhile, looking at the indicators, attention (0.953) has the highest influence in strengthening consumer perceptions of Kualanamu International Airport. Likewise, the consumer motivation variable (0.488) has a direct influence on passenger decisions, where the product indicator (0.930) is the highest indicator in strengthening consumer motivation in using Kualanamu International Airport services.

Table 4

Test the Direct Effect Hypothesis

Hyphotesis	Parth Coefficient	P- value	95% Level of trust		f Squire
			Lower limit	Upper limit	
Passenger decision perception →	0,544	0,036	0,108	0,667	1,567

Passenger → decision motivation →	1,512	0,046	0,344	0,450	1,673
---	-------	-------	-------	-------	-------

Based on the hypothesis table above, the following results are obtained :

1. The first hypothesis (H1) is accepted, namely that there is a significant influence of consumer perception variables on passengers' decisions to use Kualanamu International Airport with path coefficient (0.544) and p-value ($0.036 < 0.05$). Every change in consumer perception will increase the influence of passenger decision formation. With a 95% confidence interval, the influence of consumer perception in forming passenger decisions is between 0.108 and 0.667. The existence of consumer perceptions in forming passenger decisions has a high influence at the structural level (f square 1.567). On the other hand, consumer perceptions can influence passenger decisions up to an increase of 0.667.
2. The second hypothesis (H2) is accepted, namely that there is a significant influence of consumer motivation variables on passengers' decisions to use Kualanamu International Airport with path coefficient (1.512) and p-value ($0.046 < 0.05$). Any change in consumer motivation will increase the influence of passenger decision formation. With a 95% confidence interval, the influence of consumer motivation in forming passenger decisions lies between 0.344 to 0.450. The existence of consumer motivation in forming passenger decisions mediated by service innovation has a high influence at the structural level (f square 1.673). On the other hand, consumer motivation can influence passenger decisions up to an increase of 0.450.

Table 5
Indirect Effect Hypothesis Testing

Hyphotesis	Parth Coefficient	P- value	95% Level of trust		f Squire
			Lower limit	Upper limit	
Passenger → decision perceptions of service innovation	0,918	0,014	0,071	0,120	1,217
Motivation → of passenger → decisions on service innovation	1,465	0,035	0,064	0,086	2,431

Based on the hypothesis table above, the following results are obtained :

1. The first hypothesis (H1) is accepted, namely that there is a significant influence of consumer perception variables on passengers' decisions to use Kualanamu International Airport mediated by service innovation with path coefficient (0.918) and p-value ($0.014 < 0.05$). Every change in consumer perception will increase the influence of passenger decision formation and be mediated by service innovation. With a 95% confidence interval, the influence of consumer perception in forming passenger decisions lies between 0.071 to 0.120, mediating with service innovation. The existence of consumer perceptions in forming passenger decisions mediated by service innovation has a high influence at the structural level (f square 1.217). On the other hand, consumer perceptions can influence passenger decisions up to an increase of 0.120 mediated by service innovation.
2. The second hypothesis (H2) is accepted, namely that there is a significant influence of consumer motivation variables on passengers' decisions to use Kualanamu International Airport mediated by service innovation with path coefficient (1.465) and p-value ($0.035 < 0.05$). Any changes in consumer motivation will increase the influence of passenger decision formation and be mediated by service innovation. With a 95% confidence interval, the influence of consumer motivation in forming passenger decisions lies between 0.064 to 0.086, mediating with service innovation. The existence of consumer motivation in forming passenger decisions mediated by service innovation has a high influence at the structural level (f square 2.431). On the other hand, consumer motivation can influence passenger decisions up to an increase of 0.086 mediated by service innovation.

Conclusion

Consumer perception has a positive and significant effect on passengers' decisions to use Kualanamu International Airport, consumer motivation has a positive and significant effect on passengers' decisions to use Kualanamu International Airport. The relationship is not shown in the consumer perception variable which has a positive and significant influence on Kualanamu International Airport passenger decisions mediated by service innovation. Consumer motivation variables have a positive and significant effect on Kualanamu International Airport passenger decisions mediated by service innovation.

References

- Abdillah, W., & Jogyianto. (2013). Partial Least Square (PLS) Alternatif SEM dalam Penelitian Bisnis. Yogyakarta: Andi Offset.
- Anjani, E. R., & Simamora, V. (2022). Pengaruh Influencer, Harga Dan Kualitas Produk Skincare Scarlett Whitening Terhadap Keputusan Pembeli Generasi Z, DKI Jakarta. *Jurnal Ilmiah Manajemen, Ekonomi, & Akuntansi (MEA)*, 6(3), 1293–1308. <https://doi.org/10.31955/mea.v6i3.2547>
- Afriyani, Y., & Muhajirin. (2021). Pengaruh Inovasi dan Kreativitas terhadap



- Kepuasan Konsumen pada UKM Dina Kelurahan Ntobo. *Target: Jurnal Manajemen Bisnis*, 3(1), 79–90. <https://doi.org/10.30812/target.v3i1.1175>
- Diyarbakirlioglu, I., & Durmaz, Y. 2011. A Theoritical Approach To the Role of Perception on the Consumer. *Asian Journal of Business and Management Sciences*, 1(4), 217–221.
- Erdiana, A., & Lestari. (2023). Analisis Pengaruh Word Of Mouth, Diskon Dan Motivasi Hedonis Terhadap Pembelian Impulsif Produk Fashion Pada Konsumen Wanita. *Surakarta Management Journal*, 5(1), 52–62
- Erdiansyah, Irfan, M. A., & Robyardi, E. (2024). Pengaruh Media Sosial dan Motivasi Konsumen Terhadap Keputusan Pembelian Produk Din's Nusantara di Desa Tugumulyo Kecamatan Lempuing Kabupaten OKI. *Jurnal Media Wahana Ekonomika*, 20(4), 675–688. <https://doi.org/10.31851/jmwe.v20i4.14589>
- Fakhrudin, A. (2020). Pengaruh Persepsi Harga dan Pelayanan terhadap Keputusan Penumpang Menggunakan Maskapai Sriwijaya Air. *ISOQUANT: Jurnal Ekonomi, Manajemen Dan Akuntansi*, 4(2), 145–156. <https://doi.org/10.24269/iso.v4i2.450>
- Ghozali, Imam. 2014. Aplikasi Analisis Multivariate dengan Proram SPSS, Cetakan Pertama. Semarang : Badan Penerbit Universitas Dipenogoro.
- Joseph F Hair, Jr. G. Tomas M. Hult, Christian M. Ringle, M. S. (2017). A Primer on Partial Least Squares Structural Equation Modeling (PLS-SEM) 2nd edition. Sage Publications.
- Kalnadi, D. 2013. Pengukuran Penerimaan dan Penggunaan Teknologi Pada UMKM Dengan Menggunakan Metode UTAUT. Jurusan Adm. Bisnis, Fakultas ISIP, Universitas Lampung.
- Kotler, P., & Amstrong, G. (2012). Manajemen pemasaran. Jakarta: PT. Indeks Kelompok Gramedia.
- Lindberg, U., Salomonson, N., Sundström, M., & Wendin, K. 2018. Consumer perception and behavior in the retail foodscape—A study of chilled groceries. *Journal of Retailing and Consumer Services*, 40(August 2017), 1–7. <https://doi.org/10.1016/j.jretconser.2017.09.001>
- Mauliansyah, R. 2015. Analisis Pengaruh Motivasi, Persepsi Kualitas dan Sikap Konsumen terhadap Keputusan Pembelian Sepeda Motor Honda di Kota Langsa. *Jurnal Manajemen Dan Keuangan Unsam*, 4(1), 317–328.
- Muslichati, E. Z., & Wartini, S. (2015). Pengaruh Kualitas Layanan Dan Inovasi Layanan Terhadap Kepuasan Konsumen Pada Rumah Sakit Buah Hati Kudus. *Management Analysis Journal*, 4(4), 341–347. <http://journal.unnes.ac.id/sju/index.php/maj>
- Mawey, H. E. 2013. Motivasi, Persepsi, Dan Sikap Konsumen Pengaruhnya Terhadap Keputusan Pembelian Produk Pt. Rajawali Nusindo Cabang Manado. *Jurnal Riset Ekonomi, Manajemen, Bisnis Dan Akuntansi*, 1(4), 791–801.
- Nugraha, B. S. P., & Masithoh, D. (2023). Partial Least Squares-Structural Equation

- Modeling, Kebiasaan Baru Masa Pandemi Covid 19 Dan Perubahan Perilaku Konsumen Terhadap Penguatan Karakter Sociopreneur. *Jurnal Economina*, 2(6), 1233–1246. <https://doi.org/10.55681/economina.v2i6.593>
- Rahmat, E. L., Atina, K., & Sutaguna. (2024). *Pengaruh motivasi konsumen terhadap keputusan pembelian makanan organik di bali buda ubud bali*. 8(1), 264–276
- Sangadji, E. M., & Sopiah. 2013. Perilaku Konsumen. Yogyakarta: C. V. Andi Offset.
- Saputra, R., & Semuel, H. 2013. Analisa Pengaruh Motivasi, Persepsi, Sikap Konsumen Terhadap Keputusan Pembelian Mobil Daihatsu Xenia di Sidoarjo. *Jurnal Manajemen Pemasaran*, 1(1), 1–12.
- Sekaran, U. (2017). Metode Penelitian Untuk Bisnis. In (Anita Nur Hanifah, Ed.) (6th ed). Selemba Empat.
- Sepang, J., & Joel, G. 2014. Pengaruh Motivasi, Persepsi Harga, Dan Kualitas Produk Terhadap Minat Beli Konsumen Sepeda Motor Matic Merek Yamaha Mio Di Kota Manado. *Jurnal Riset Ekonomi, Manajemen, Bisnis Dan Akuntansi*, 2(3), 1463– 1472.
- Silva, P. M. 2017. Pengaruh Persepsi Konsumen Dan Motivasi Konsumen Terhadap Keputusan Pembelian Polis Asuransi. *Psikoborneo*, 5(3).
- Sugiyono. (2019). Metode Penelitian Pendidikan : Pendekatan Kuantitatif, Kualitatif, dan R&D. Bandung: Alfabeta.
- Tompunu, M. M. 2014. Analisis Motivasi, Persepsi, Pembelajaran, Dan Sikap Konsumen Pengaruhnya Terhadap Keputusan Pembelian Di Kfc Bahu Mall Manado. *Jurnal Riset Ekonomi, Manajemen, Bisnis Dan Akuntansi*, 2(3), 610– 621.
- Tifany, & Rustam, T. A. (2023). Pengaruh Persepsi dan Perilaku Konsumen terhadap Kepuasan Pelanggan di PT. Brani Lintas Samudera. *Journal of Management & Business (SEIKO)*, 6(2), 216–230.
- Viora, P., & Suyanto, A. 2020. Keputusan Pembelian Berdasarkan Persepsi, Motivasi, Dan Sikap Pada Marketplace. *Jurnal Riset Bisnis dan Manajemen*, 13(1), 16-22.