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INFLUENCE ARTIFICIAL INTELLIGENCE TO CUSTOMER EXPERIENCE (STUDY ON DRAIV USERS IN TUAL, MALUKU)

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ABSTRACT
Artificial intelligence (AI) technology gives marketers the ability to identify differences between consumers, understand various personas, and understand the factors that drive consumers to make purchasing decisions. Therefore, marketers use Artificial Intelligence to recognize and predict consumer habits. Information obtained from AI, marketers can provide a special experience for each consumer. The objective of this study is to determine and measure the impact of AI on customer experience using simple regression analysis. There are four AI indicators analyzed, namely mechanical intelligence, analytical intelligence, intuitive intelligence, and empathetic intelligence. In addition, there are four dimensions of customer experience that are evaluated, namely immersion, flow, cognitive fit, and emotional fit. From the results of observations of 116 people, it was concluded that Artificial Intelligence and Draiv's customer experience received a positive assessment, and Artificial Intelligence had a significant effect on customer experience.
Keywords: Artificial Intelligence, Customer Experience, Draiv Transportation

Introduction

Changes in the transportation sector in Indonesia have been experienced as a result of increasingly modern technological developments. The emergence of online application technology on smartphones, which has dramatically changed lifestyles, is one of the significant changes. The growth in the number of consumers downloading online transportation applications is driven by considerations of price and convenience. (Abadi, Nursyamsi, & Syamsuddin, 2020).

This evolution is in line with the emergence of online-based transportation models in Indonesia, especially through applications such as Draiv, which provides online ordering and payment services. Abadi et al. (2020) note that in transportation businesses such as Draiv, there is a high risk that consumers may switch to other service providers. This requires companies to anticipate potential consumer shifts by designing the right tactics, because the key to company survival in the midst of fierce disruption is to maintain customer satisfaction. Therefore, Draiv needs to continue to improve and optimize customer value and experience when using its products and services.

Draiv has made various efforts to compete in Indonesia and create a positive customer experience. These efforts include regular bug fixes, version updates, and digitization initiatives. Draiv also strives to build unique customer experiences by increasing business process efficiency, reducing time and optimizing costs.

In order to save business processes through technology, Draiv uses digitalization by utilizing Artificial Intelligence. The use of AI in the business world provides great opportunities, especially in the marketing field, because the advanced capabilities of Artificial Intelligence make it easier for companies to get to know consumers more closely (Arifin, 2019). Mogaji, Soetan, & Anh (2020) emphasized that through Artificial Intelligence, marketers can differentiate consumers into various personas customer motivation in making purchasing decisions. Marketers use Artificial Intelligence to recognize and forecast customer habits, and

from the information obtained, they can use stronger keywords and personalize consumer communications to create unique experiences for each consumer. According to the Ministry of Communication and Information of the Republic of Indonesia (KOMINFO) in 2018, the majority of developments in the AI field in Indonesia have achieved progress.

Some of the artificial intelligence (AI) implementations in the Draiv platform cover the end-to-end order flow and the entire customer journey. End-to-end order flow integrates the entire service system from upstream to downstream, providing a comprehensive solution. Meanwhile, customer journey refers to every stage of consumer interaction with Draiv, from getting to know the platform to post-usage activities.

AI in the Draiv system is applied to maximize the process of selecting driver partners according to consumer orders, as well as determining price adjustments based on demand and supply, providing recommendations, determining the best pick-up point for driver partners and users, as well as various other functions. By having twenty different services, each service is faced with unique challenges that can be solved through the application of AI technology (Draiv, 2023).

Draiv, through the use of AI, is committed to creating special customer experiences with more efficient time and lower prices. However, based on previous research, users still complain about unpleasant experiences when using the Draiv application, including processes completed by Artificial Intelligence in the Draiv application.

Literature Review

The implementation of machines that demonstrate aspects of human intelligence, known as Artificial Intelligence (AI), continues to be used in various services and is a source of recent innovation (Huang & Rust, 2018). AI can be thought of as a set of technologies that collect, process, and act on data, mimicking human intelligence. Like humans, AI is able to apply rules, learn over time through the acquisition of new data and information, and adapt to changes in its surroundings (Russell & Norvig, 2010).

AI has been adopted in various business processes and functions today, especially in various functional areas. One example is in the field of marketing, which is considered the core of business activities. The marketing landscape has undergone significant transformation thanks to the adoption of AI, and will continue to undergo profound changes in the future. Marketing is now one of the main applications of AI technology, which is applied to create value (Bughin in Shahid & Li, 2019).

Sterner (2017), as quoted by Mogaji et al. (2020), explains that in the digital and marketing world, businesses are assisted by AI to provide value through various customer relationship channels while making accurate and relevant decisions. The existence of AI is important to integrate into business practices, especially in digital marketing, because of the need for big data and increased computing capabilities. This enables companies to gain a deeper understanding of their clients and precisely reach them with customized digital communications (Dwivedi et al. in Mogaji et al., 2020; Haenlein and Kaplan in Mogaji et al., 2020). Marketing also experiences significant impacts from the introduction of new technologies, and these effects continue to grow in the future.

Customer experience or in the customer journey framework involves the stages of consideration, purchase, service and advocacy (Parise et al., 2016). A series of interactions between consumers and products, which can trigger emotions or give rise to certain actions and reactions, is referred to as customer experience. (Verhoef et al., 2009). Schmitt mentioned in Bagdare & Jain (2013) stated that customer experience functions as the main source of competitive advantage and differentiation, because every subjective experience is considered as something unique based on personal experience.

The existence of AI is crucial for integration into business practices, especially in digital marketing. This is due to the need for big data and increasing computing capabilities, which

enable organizations to better understand their customers and effectively target them with tailored digital messages (Dwivedi et al. in Mogaji et al., 2020; Haenlein and Kaplan in Mogaji et al. ., 2020). Marketing also experiences significant impacts from the introduction of new technologies, and these effects continue to grow in the future.

The importance of providing meaningful customer experiences is recognized as the key to achieving competitive advantage and customer satisfaction. Organizations that carefully manage customer experience are expected to achieve increased customer satisfaction, revenue growth, and higher levels of employee satisfaction (Mccoll-Kennedy et al., 2019). Immersive digital technology, according to Parise et al. (2016), has the potential to transform the customer experience by providing real-time, context-specific responses, when and wherever customers need them. Consumers now demand content, reliability and real-time customized solutions throughout their shopping experience. With self-service technology, consumers now better understand the products and services they want to buy.

Customer experience can be defined as "the quality of all consumer encounters with a company's products, services and brands" (Borowski in Behare, 2018). Significant results, such as an increase in the number of customers, higher usage, repeat purchases, and enhanced loyalty, can be achieved through a strong customer experience (Behare, 2018). According to Alma mentioned in Abadi et al. (2020), consumers want products that can provide satisfaction and suit their lifestyle, as well as provide valuable experiences. Facing increasingly fierce competition, service businesses need to start looking at implementing marketing strategies that are able to provide unique, positive and memorable emotional experiences to consumers.
Based on the description above, the hypothesis proposed in this research is that there is a positive influence of artificial intelligence on customer experience on the Draiv platform.

Research Methods

This research applies a verification approach using descriptive methods. The population focus is on all Draiv users in Tual who have used the service for at least one year and have used the three most commonly used features on Draiv.

The sample was selected using a purposive sampling technique, an approach to determining the sample based on certain considerations. Determining the sample size uses an iterative method, namely by taking random samples from the population in correlational research, with the aim that the research can be considered reliable (Singarimbun & Effendi, 2006). The use of iteration was chosen because the number of Draiv users in Tual cannot be known for certain, due to the lack of data underlying the number of Draiv users based on domicile. High user mobility causes the user's location to become unstable. By following the Guilford criterion of 0.3 ($\rho = 0.3$), a minimum sample size of 116 respondents was obtained.

The data collection process was carried out through the distribution of structured questionnaires to at least 116 Draiv users in Tual, accompanied by interviews as supporting data. Data analysis was carried out using a simple linear regression test, involving validity and reliability testing stages. Next, the correlation coefficient, coefficient of determination, and hypothesis testing were calculated using SPSS 25.0 software. The two main variables in this research are artificial intelligence and customer experience, measured using a four-point Likert scale (1 = strongly disagree to 4 = strongly agree).

Results and Discussions

Table 1 Recapitulation of Artificial Intelligence Variable Values

Dimensi	Skor	Skor Maks.	%	Ket.
Mechanical Intelligence	836	928	90,09%	Sangat Baik
Analytical Intelligence	758	928	81,68%	Sangat Baik
Intuitive Intelligence	1562	1856	84,16%	Sangat Baik
Empathetic Intelligence	2056	2784	73,85%	Baik
Total	5212	6496	80,23%	Baik

Source: Processed by researchers

Table 1 shows that a positive assessment was given to each dimension of artificial intelligence, indicating that the implementation of artificial intelligence on the Draiv platform is considered good by application users. Artificial intelligence is measured through four dimensions, including mechanical intelligence which is integrated in the Draiv application user interface via command buttons and keyword banks. Matching input commands and keywords with responses and search results is considered to maximize efficiency and reduce diversity, so as not to confuse users. Respondents' statements stated that they agreed that the commands and keywords they used in the Draiv application produced appropriate responses and search results, making it easier to use the application.

The analytical intelligence dimension discusses personalization in the Draiv application, making it easier for users to navigate. This personalization includes recommendations for Go-Food menus and pick-up or drop-off locations based on preferences and usage history. Respondents stated that recommendations tailored to their preferences and history help save time using the app, making it easier and more practical.

The new features developed by the Draiv application from time to time show success in applying artificial intelligence with good intuitive intelligence. These developments, ranging from ticket purchasing services (GoTix) to financial technology (GoPay), reflect a positive response from users. Respondents are aware of updates to the application and think it makes it easier for them to fulfill their needs through the Draiv application.

However, there are situations where the information on the app is not always real-time, such as when ordering food through Draiv and finding that the restaurant is closed or the menu is not available. Users suggested increasing the frequency of information updates to improve the quality of user experience.

The success of artificial intelligence in the Draiv application is also seen in its ability to respond to texts sent by users in chat, with appropriate context. Respondents stated that the Draiv application spoke smoothly and interactively, providing a sense of security in its use. However, users feel that the Draiv app is not designed to provide entertainment, as most usage is based on urgency to fulfill needs rather than entertainment.

Table 2 Recapitulation of Customer Experience Variable Values

Dimensi	Skor	Skor Maks.	%	Ket.
Immersion	1398	1856	75,32%	Baik
Flow	1004	1392	72,13%	Baik
Cognitive Fit	1109	1392	79,67%	Baik
Emotional Fit	2122	2784	76,22%	Baik
Total	5633	7424	75,88%	Baik

Source: Processed Data, 2023

Table 2 illustrates that immersion in this research can be identified through the user's tendency to choose the Draiv application as the frequently used online transportation provider. Respondents agreed that the Draiv application is an online platform that they use regularly. Respondents' interest in finding out more about the features provided by Draiv was visible, although there was not always the opportunity to use all of these features. However, if the opportunity arises, they express interest in trying out the additional features offered by Draiv.

The flow dimension in this research reflects the ability of the Draiv application to operate without errors and lag. In general, the Draiv application is able to run smoothly, although it sometimes experiences lag during peak hours, which can cause frustration because users often need the service at those times. Some respondents also experienced lag because the Draiv application capacity was too large for their old smartphones, but they still used the application out of necessity.

Cognitive fit in this research emphasizes the suitability between user expectations of online applications and the functionality of the Draiv application. This compatibility increases user confidence in choosing Draiv as a consistent transportation solution. Users want a Draiv app that meets their expectations of an online app, especially when it comes to transportation. Expectations for affordable rates are also accommodated by Draiv, although respondents noted that sometimes external factors such as promotional discounts from Draiv competitors that are easier to obtain with greater frequency, influence their perceptions regarding Draiv rates.

Emotional fit in this research is illustrated through the visualization aspect of the Draiv application. Respondents considered the visual design themes, typefaces and animated characters used by Draiv to be attractive. Despite this, the top half of the Draiv app was deemed too dense. According to respondents, this crowded display can confuse users, especially after updating the application. Even so, the top of the Draiv app is still considered more organized and attractive compared to its competitors. Thus, respondents concluded that the Draiv application had a better and more attractive application appearance, which was one of the reasons they chose to use Draiv. Overall, this shows that users have experienced a satisfactory customer experience when using Draiv.

Table 3 Regression Equation

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	24.135	3.849		6.274	.000
	Artificial Intelligence (X)	.579	.083	.573	7.458	.000
a. Dependent Variable: Customer Experience (Y)						

Source: Processed Data, 2023

Based on the table above, the regression equation is as follows:

$Y = a + bX$ 1)

$Y = 24{,}135 + 0{,}579X$ 2)

The second equation explains that every one point increase in the artificial intelligence variable (X) will result in an increase in the customer experience variable (Y) of 0.579. On the other hand, if the artificial intelligence value is zero, or is said to have no effect on the Draiv customer experience, then the customer experience value will be 24.135.

Table 4 Correlation Coefficient Analysis

		Artificial Intelligence	*Customer Experience*
Artificial Intelligence	Pearson Correlation	1	0.573**
	Sig. (2-tailed)		0,000
	N	116	116
Customer Experience	Pearson Correlation	0.573**	1
	Sig. (2-tailed)	0,000	
	N	116	116
*****. Correlation is significant at the 0.01 level (2-tailed).***			

Source: Processed Data, 2023

There is a significant relationship between the artificial intelligence variable (X) and the customer experience variable (Y), which is expressed by the Sig (2-tailed) value between X and Y of 0.000, which is less than 0.05. Pearson correlation has a value of 0.573 or 57.3%, according to Sugiyono (2013), this value shows that the relationship between artificial intelligence and customer experience can be categorized as moderate.

In this context, the coefficient of determination value of 0.328 indicates that artificial intelligence can explain 32.8% of Draiv customer experiences. The remainder, namely 67.2%, is explained by other factors that are outside the company's control, such as word-of-mouth and interactions between consumers and the surrounding environment, in accordance with the concept outlined by Kranzbühler et al. (2018) in Ribamar, Molina, & Losada (2020).

Hypothesis test

Based on a sample of 116 respondents with a significance level of α = 0.05, it was found that artificial intelligence has a significant positive influence on customer experience. This is proven by the calculated t value of 7.458, which is higher than the t table value of 1.98099 at an error rate of 5%. Therefore, it can be concluded that the use of artificial intelligence in the Draiv application has a positive influence in creating a pleasant customer experience for users.

Research findings show that artificial intelligence's ability to collect and analyze consumer preferences, provide responses and recommendations according to these preferences, and predict consumer actions responsively, creating efficient and responsive services, can have a positive impact on the overall user experience when using applications.

The results of this research are in line with previous research, such as Verma, Sharma, Deb, & Maitra (2020), which states that the use of artificial intelligence and predictive analysis is the key to providing a customer experience that builds advocacy and creates loyal customers. Apart from that, these findings also support the results of a study conducted by Bowen and Borosan in Prentice & Nguyen (2020), which stated that artificial intelligence is able to extract true value from available consumer information, which can be used to improve customer experience through customized services.

Conclusion (Penutup)

Based on the research results, Draiv in Tual is considered good, and there is a significant influence of artificial intelligence on customer experience on the platform. Correlation coefficient analysis shows that the relationship between artificial intelligence and customer experience is in the medium category. In the analysis of the coefficient of determination, it was found that artificial intelligence influences customer experience. The results of hypothesis testing also state that there is a significant influence of artificial intelligence on customer experience. Given these findings, marketers are advised to pay special attention to, involve, and build artificial intelligence into their business operations. Improving customer experience can have positive impacts, such as increasing the number of customers, consumption, repurchase and customer loyalty.

Even though the overall customer experience at Draiv gets a good score, the flow dimension, especially the seamless indicator, gets the smallest score. Respondents complained about errors and lag in the Draiv application, which could cause irritation and negative experiences. Therefore, it is recommended that Draiv improve its product design strategy, especially in the expected product aspect. This can be done by increasing the response speed of the application, so that the application can run more smoothly, creating a pleasant customer experience, and avoiding negative experiences for customers.

References

Abadi, R. R., Nursyamsi, I., & Syamsuddin, A. R. (2020). Effect of Customer Value and Experiential Marketing to Customer Loyalty with Customer Satisfaction as Intervening Variable (Case Study on Gojek Makassar Consumers). *The Asian Journal of Technology Management*, *13*(1), 82–97.

Adriansyah, D., & Saputri, M. E. (2020). Pengaruh Promosi Penjualan Terhadap Kepuasan Pelanggan Melalui Keputusan Pembelian Sebagai Variabel Intervening pada Pengguna Go-Food di Kota Bandung. *Journal of Entrepreneurship, Management and Industry (JEMI)*, *3*(3), 123–128.

Arifin, S. H. (2019). *Pemasaran Era Milenium*. Yogyakarta: CV. Budi Utama.

Bagdare, S., & Jain, R. (2013). Measuring retail customer experience. *International Journal of Retail & Distribution Management*, *41*(10), 790–804. https://doi.org/10.1108/IJRDM-08-2012-0084

Behare, N. (2018). A Theoretical Perspective on Customer Experience (CX) in Digital Business Strategy. *International Conference on Research in Intelligent and Computing in Engineering (RICE)*, (Cx), 1–7. https://doi.org/10.1109/RICE.2018.85090 79

Fachrurrozy, M., & Rachmawati, I. (2017). Analisis Kualitas Pelayanan Pada Gojek Bandung Analysis of Service Quality At Gojek Bandung. *E-Proceeding Of Management*, 2506–2510.

Huang, M., & Rust, R. T. (2018). Artificial Intelligence in Service. *Journal of Service Research*, 2–6. https://doi.org/10.1177/109467051775245 9

InfoKomputer. (2019). Begini Cara Gojek Memanfaatkan Teknologi *Artificial Intelligence*. Retrieved March 1, 2020, from https://infokomputer.grid.id/read/121840841/begini-cara-Gojek-memanfaatkan- teknologi-artificial-intelligence?page=all

KOMINFO. (2018). *Artificial Intelligence* Sebagai Penggerak Industri 4.0 dan Tantangannya Bagi Sektor Pemerintah dan Swasta. Retrieved August 5, 2020, from https://mti.kominfo.go.id/index.php/mti/ar ticle/view/144

Liputan6. (2019). Kontribusi Mitra Gojek untuk Perekonomian Bandung Tembus Rp 2,1 Triliun. Retrieved August 4, 2020, from https://www.liputan6.com/regional/read/3997794/kontribusi-mitra-gojek-untuk- perekonomian-bandung-tembus-rp-21- triliun