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The Effect of the Implementation of "Veronika" Virtual Assistant Chatbot on Customer Experience and Satisfaction in Using Telkomsel Service

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Abstract

Technology development creates new media so humans can communicate with chatbots to meet the need for information. All customer needs, from submitting customer complaints to service access, can be done quickly using a chatbot. Currently, in Indonesia, several large companies have adopted chatbots to make it easier for customers to get customer service on a self-service basis or without human assistance. This study aims to analyze the effect of Veronika's chatbot implementation on self-service technology experience and the effect of self-service technology experience on self-service technology satisfaction in Telkomsel. This study uses a quantitative approach with a survey method. The results show that customer experience using chatbots is significantly influenced by perceived usefulness when interacting with Veronika's chatbot. This experience significantly influences customer satisfaction in using Telkomsel services.

Keywords

virtual assistant; chatbot; technology acceptance model; sel-service Technology



I. Introduction

Currently, technological developments have influenced changes in various aspects of life; one of the aspects affected is communication. Communication is one of the essential things in life for someone to interact and exchange information with each other. Technological developments make the way of communication feel distant and can be done quickly because interaction in communication can be done without having to meet face to face in the same place and time. The form of ease of interaction in communication from technological developments is the emergence of many new media such as social media and several online music services (Netti, 2018).

The emergence of various kinds of technology such as smartphones, computers, or other devices that use the help of the internet makes it very easy and makes someone to communicate; according to (Kamil, 2016), the technological developments above can change communication techniques that initially occurred only in a direct way then turned into a form of indirect communication. The development of this technology affects not only interpersonal communication but also communication in terms of customer service in a business service, where the customer is an individual or group who consumes or purchases products or services.

Communication in terms of customer service that is often encountered from the past until now is to submit complaints about the use of the products or services used, usually by telephone or email to the customer service centre or customer care of specific companies, but as a customer, the complaint process may often occur. There is a delay; customer service is less responsive because the telephone network is entire, or the incoming customer complaints are very dense. However, with current technological developments,

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companies are switching to using artificial intelligence in customer service communications.

From the data summarized by the 2019 databox above, it shows that there is a prediction that there will be an increase in the use of industrial robots in the next five years, and some jobs will begin to be replaced by this robot technology, where the data shows the largest field of work that is likely to be replaced by robots. Robots are data-related jobs, namely in the predictable work, data processing, and data collection sections. However, the data also shows that there will be an influence on the interaction area with stakeholders.

The implementation of artificial intelligence used by companies in the current era is chatbots. Chatbots are used to simulate conversations between humans, where the role of chatbots in customer service is to replace the role of a customer care provider in specific tasks (Carter & Knol, 2019).

The use of chatbots in customer communication today is also affected by the ease of communication using social media, where communication at this time is not limited by time, place, or the resources that perform it. With this chatbot, companies hope to improve operational processes, optimize costs, improve service quality, and improve customer experience in using their services (Ivanov & Webster, 2017).

A chatbot is a computer program created or designed by humans to be able to interact with humans with natural languages. The technology of this chatbot was invented and started in the 1960s, and the initial purpose of creating a chatbot was to try whether it could deceive users that they were really like humans or not. At that time, chatbots had been created not only to imitate conversations or entertain humans (Shawar & Atwell, 2007).

The functions of chatbots are divided into two broad categories, namely, conversations and functional activities. From the conversational perspective, online merchants can implement chatbots to increase engagement with customers continuously. However, from the practical side, it will act more complexly related to unique programming systems, payment automation, or other complex activities (Nabila, 2018). The main task of chatbots used in several industries in Indonesia is to answer basic and repetitive questions from customers (Setyowati, 2018).

According to research by Singgih and Retno Setyorini (2020), the compatibility variable can explain that a user's ability to adopt technology in online habits and lifestyle affects the perceived usefulness and perceived ease of use of the Serina chatbot. In addition, perceived ease of use or perceptions of ease of use has a positive influence on perceived usefulness or perceived usefulness and behavioural intention. Furthermore, perceived usefulness has a positive influence on behavioural intention, and behavioural intention affects actual use. This shows that users have a perspective that chatbots are a form of technology that makes it easy and valuable to search for the information needed online.

The implementation of chatbots in Indonesia has been widely carried out by several industrial sectors such as e-commerce, banking, telecommunications and. Here are some companies that use chatbots in customer service in Indonesia:

Table 1. Chatbot Developer Industry in Indonesia

Industrial Sector	Developed Company / Chatbot		
Banking	 Bank BCA / VIRA Bank BNI / CINTA Bank Mandiri / MITA 		

	4. Bank BRI / SABRINA
Telecommunication	 Telkomsel / VERONIKA XL / MAYA Indosat Ooredoo / INDIRA

Source: Daily Social, 2021

As one of the largest telecommunications companies in Indonesia, Telkomsel has several service channels that can be reached by customers through the MyTelkomsel mobile application, chatbot virtual assistant Veronika, 24 stand-by call centres, and Telkomsel GraPari.

Veronika is a virtual chatbot assistant with a customer service concept that can chat through various Telkomsel service channels such as websites, social media, or the MyTelkomsel application. The function of the Veronika chatbot is to make it easier for customers to find information on Telkomsel products or services, such as checking quotas, exchanging Telkomsel points, checking Telkomsel Halo bills, finding GraPARI locations, purchasing credit and data packages, as well as other services on Telkomsel (Telkomsel, 2021).

According to research conducted by Rangga & Irwansyah (2019), Veronika's virtual assistant chatbot is a self-service service concept in Telkomsel, where a self-service concept is a form of service that is carried out without the help of agents/people. Veronika's chatbot offers various services that can be personalized and accessed anytime and anywhere. Veronika's chatbot is currently still in text form and uses artificial intelligence to define the intent and purpose of the customer. Rangga & Irwansyah (2019) stated that research related to virtual assistants in the world of communication, especially in the field of customer service, is still very minimal, so this research can be further developed to measure the effectiveness of virtual assistant communication, the level of customer satisfaction using virtual assistant services and others.

A chatbot is a chat robot developed with artificial intelligence or AI to be able to interact with users through various types of activities provided. The chatbot can answer user questions for 24 hours and is not time-bound (Yuniar & Purnomo, 2019). Chatbots are made to be able to interact with users in the form of text or voice messages so that they can be used as customer service or information service centres. In the context of this information service centre, chatbots are designed according to the topic of various customer problems for personal or business purposes. The first research related to chatbots was research conducted by Nurbaeti and Nugroho (2015), in this study resulted that chatbots proved to be quite effective in answering respondents' questions and respondents were satisfied with the use of chatbot applications. Furthermore, research conducted by Astiningrum, Saputra, and Rohmah (2018) results that chatbots are pretty effective in being used as a medium for virtual consultation regarding lactation between users and midwives.

Subsequent research is research conducted by Eka Yuniar and Heri Purnomo (2019) to find the results that chatbots can be used to assist question and answer activities between product or service owners and customers based on frequently asked questions by customers without a time limit and is one of the technological innovations in support activities based on information services to customers. The importance of chatbots as a customer service base is because customer service is at the forefront of the company and must be able to provide responses and directions quickly and effectively to any customer problems (Fathurrozi & Karimah, 2021). According to Yuniar & Purnomo (2019), there are three combinations contained in a chatbot, namely:

Table 2. Chatbot Components

Component	Description	
User Interface	The user interface is the interface that will be seen the user to interact with the chatbot through varie forms of applications or platforms.	
Artificial Intelligence	Artificial Intelligence functions as a machine that will make chatbots understand and respond to users from the information needed by users.	
System Integration	This system integration component will help the chatbot provide a comprehensive response because the chatbot does not stand alone but is also connected to various other applications or systems.	

Veronika's chatbot offers various services that can be personalized and accessed anytime and anywhere. Veronika's chatbot is currently still in text form and uses artificial intelligence to define the intent and purpose of the customer. In its implementation, it turns out that AI is still assisted by human resources in studying and understanding the intent of customer questions or statements. The implementation of Telkomsel's virtual assistant is found in social networks, the Telkomsel website, and the MyTelkomsel application. From the research that has been done, the researcher concludes that the population and sample that will be used in this study are not limited to customers who access Veronika through social networks but also customers who access Veronika's chatbot through the Telkomsel site or MyTelkomsel application (Perdana & Irwansyah, 2019).

The research conducted by Rangga & Irwansyah (2019) qualitatively states that the research that has been done can be developed on research on virtual assistants in the world of communication, especially in the field of customer service. From here, it can be measured by looking at the effectiveness of virtual assistant communication, the level of customer satisfaction using virtual assistant services and others.

The previous research that is used as a reference in this study is the research conducted by Isolde & Nonhlanhla (2021), in this study; this study aimed to evaluate the perceived ease of use, perceived playfulness, and perceived usefulness of the use of chatbots on customer experience and how the customer experience affects user satisfaction in the context of market developments. The results of this study indicate that all positive research hypotheses and chatbots can influence user experience so that positive user experiences will result in customer satisfaction when using chatbots in self-service, and perceived usefulness variables are the variables that have the most decisive influence on user experience (Lubbe & Ngoma, 2021).

In the research that has been used by Isolde & Nonhlanhla (2021), researchers adopted the model used because, from this study, there were similarities in the concept of chatbots studied, namely chatbots that act as customer service. The differentiating factor of the research to be carried out by the researcher is the object to be studied, namely Veronika's chatbot.

Based on the research references above, it can be concluded that the development of AI, especially the use of chatbots, can provide convenience for humans in obtaining information and can be used as a solution in the concept of customer service in various sectors, such as health, business, economy, and other sectors. In customer service, chatbots

have the advantage of being able to respond to repeated customer questions without time and place restrictions; this makes it easier for customers to get 24-hour customer service as well as being another alternative to getting customer service without the need to make calls or come directly to the customer service centre that owns the service.

Although there are many advantages offered by chatbots, the computer or mobile device factor must be turned on continuously for 24 hours, a weak internet network will affect the chatbot's performance, and sometimes programs need to be monitored so that no errors occur (Falah & Syamsidar, 2021). Although previous research has a discussion concept that is almost the same as the research that will be carried out in this study, namely regarding chatbots and customer satisfaction, this study aims to measure how much influence the implementation of Veronika's virtual assistant chatbot in Telkomsel on Telkomsel's customer satisfaction and loyalty, which makes this research different from previous research.

Technological developments in the current era have greatly helped human life in various activities carried out by humans, whether they are individual activities or services within a company. One form of this technological development is to use chatbots as a substitute for human activities in the concept of customer service.

A chatbot is a form of artificial intelligence created by humans with the creation and analysis of intelligent software and hardware, which then makes the chatbot called an intelligent agent. The application and use of chatbots are not limited to a specific device but can also be implemented on workforce work tools to a very sophisticated operating system.

Today, chatbots are intelligent bots, interactive agents, digital assistants, or other entities in a digital conversation. This is due to creating a chatbot through a line of computer programming code that can respond to a conversation via text or voice. Chatbots can also understand human language because they are equipped with NLP (Natural Language Processing), which makes chatbots translate from every language used by humans (Adamopoulou & Moussiades, 2020, 373).

Natural Language Processing is a knowledge in the field of artificial intelligence that explores the manipulation of natural language text or speech by a computer so that the computer can respond to the desired task (Jung, 2019, 130-145).

From the explanation above, it can be concluded that a chatbot is a thing that is manipulated and formed from computer programming that functions to simulate or respond to a conversation with a human user on a particular task.

Self-service technology is a form of technology in a service that allows a customer to interact with a company or service owned by the company independently without the help of other humans.

This research study focuses on the role of chatbots in interacting with commands in the form of text. An example of the application of self-service technology is in the banking industry, where customers will make transactions easily with the snapscan method. In the snaps system, it is easy for customers to make payments and interact with chatbots using facial recognition systems, fingerprints, or voice messages (Taulli, 2019).

Data from BI Intelligence for 2020 show that around 80% of businesses will use chatbots in applications to increase customer engagement with interactive communication via text or voice messages. The use of this chatbot in a business is to help achieve the customer's final goal in a fast time, either to find information or make a sale (Taulli, 2019).

It can be concluded that this self-service technology is a form of customer service provided by the company so that customers can access services independently by utilizing the technology provided by service providers.

II. Research Method

The research method used in this study is a survey method with a quantitative approach that is causality research or cause and effect. Cause-and-effect research focuses on identifying the level and nature of the causal relationship between the independent and dependent variables (Sugiyono, 2017).

The independent variables in this study are perceived ease of use, perceived playfulness, and perceived usefulness. In contrast, the dependent variables are self-service technology experience and self-service technology satisfaction. It is hoped that the conclusion of this research is to analyze the effect of the implementation of Veronika's virtual assistant chatbot in Telkomsel on customer experience and satisfaction in using Telkomsel's services.

III. Result and Discussion

3.1 Validity and Reliability Test Results

The validity test in this study will be carried out in two ways, namely, the convergent validity test and the discriminant validity test. This is because this study uses the smartPLS three application to test its validity and reliability.

According to Ghozali and Latan (2015), in a convergent validity test, a questionnaire statement will be valid if the outer loading has a value of more than 0.7 and an AVE value of more than 0.5.

The next test is the reliability test. The reliability test was carried out by looking at the value of Cronbach's alpha and composite reliability > 0.7; if the value of each variable > 0.7, then the study is valid as a confirmatory study (Ghozali & Latan, 2015).

3.2 Respondent Profile Analysis

This section will describe the profiles of respondents in this study, where respondents who were able to complete filling out the questionnaire were Telkomsel customers and had interacted with the Veronika chatbot. This respondent's profile provides information related to age, awareness of Veronika chatbot customer service, experience interacting with Veronika chatbot, and the platform used by respondents to access Veronika chatbot customer service. The following is a respondent's profile containing the frequency and percentage of each component of the respondent's profile:

Table 3. Profile of Respondents

Respondent Profile Components	Category	Frequency	Percentage
Tallsome and assets many	Yes	232	93.93%
Telkomsel customers	No	15	6.07%
Total		247	100.00%
	13-18 years	3	1.21%
Respondent Age	19-34 years	199	80.57%
_	35-54 years	44	17.81%
	Over 55 years	1	0.40%
Total		247	100.00%
Awareness Layanan Chatbot	Know	232	100.00%

Veronika	Do not Know	0	0.00%
Total	232	100.00%	
	13-18 years	3	1.29%
Awareness Layanan Chatbot	19-34 years	186	80.17%
Veronika Berdasarkan Usia	35-54 years	42	18.10%
	Over 55 years	1	0.43%
Total	232	100.00%	
Interaction Experience with	Have Interacted	232	100.00%
Chabot Veronika	Never Interact	0	0.00%
Total	232	100.00%	
	13-18 years	3	1.29%
Interaction Experience with	19-34 years	186	80.17%
Veronika Chatbot by Age	35-54 years	42	18.10%
	Over 55 years	1	0.43%
Total		232	100.00%
	MyTelkomsel Mobile Application	166	71.55%
Veronika Chatbot Access	Facebook	28	12.07%
Platform	Line	5	2.16%
	Telegram	12	5.17%
	Website Telkomsel	21	9.05%
Total	,	232	100.00%

Source: Excel Data Processing, 2022

Based on the data in the table above, it can be seen that as many as 93.93% of respondents are Telkomsel customers, where the age of respondents who fill out the questionnaire is dominated by ages 19-34 with a percentage of 80.57%. The basis for using the age range in this study is based on data from internet user reports made by the Indonesian Internet Service Providers Association (APJII) in 2022 because Veronika's chatbot can only be accessed with the help of the internet.

Meanwhile, judging from the awareness and experience of interacting with the Veronika chatbot, it was found that as many as 232 or around 93.93% of the total respondents were aware of and had used the Veronika chatbot for Telkomsel's customer service needs. The dominance of the age group who is aware and has interacted with Veronika's chatbot is in the age range of 19-34 years with a percentage of 80.17%, while the age range that has deficient awareness and interaction with Veronika's chatbot is over 55 years of age with a percentage of 0. ,43% and ages 13-18 years with a percentage of 1.29%.

In the Veronika chatbot access platform category, out of 93.93% of respondents who have accessed Veronika's chatbot, 71.55% accessed it through the MyTelkomsel mobile

application, and at least Veronika's chatbot was accessed via Line with a percentage of 2.16%.

Research Hypothesis 1:

Ho1: The perceived ease of use variable has no significant effect on the self-service technology experience variable.

Hal: The perceived ease of use variable has a significant effect on the self-service technology experience variable.

Based on the table above, the t-statistical value of the perceived ease of use variable on the self-service technology experience variable is 4.091 with p-values of 0.000, where the t-statistic value is more significant than 1.97 and p-values less than 0.05 so that Ho1 is rejected and Ha1 is accepted, which means that perceived ease of use has a significant effect on the self-service technology experience.

Research Hypothesis 2:

Ho2: The perceived playfulness variable has no significant effect on the self-service technology experience variable.

Ha2: The perceived playfulness variable has a significant effect on the self-service technology experience variable.

Based on the table above, the t-statistical value of the perceived playfulness variable on the self-service technology experience variable is 3.123 with p-values of 0.002, where the t-statistic value is more significant than 1.97 and p-values are smaller than 0.05, so Ho2 rejected and Ha2 accepted, which means that perceived playfulness has a significant effect on the self-service technology experience.

Research Hypothesis 3:

Ho3: The perceived usefulness variable has no significant effect on the self-service technology experience variable.

Ha3: The perceived usefulness variable has a significant effect on the self-service technology experience variable.

Based on the table above, the t-statistical value of the perceived usefulness variable for the self-service technology experience variable is 7.126 with p-values of 0.000, where the t-statistic value is more significant than 1.97 and p-values are less than 0.05, so Ho3 rejected and Ha3 accepted, which means that perceived playfulness has a significant effect on the self-service technology experience.

Research Hypothesis 4:

Ho4: The self-service technology experience variable has no significant effect on the self-service technology satisfaction variable.

Ha4: The self-service technology experience variable has a significant effect on the self-service technology satisfaction variable.

Based on the table above, the t-statistical value of the self-service technology experience variable on the self-service technology satisfaction variable is 53.379 with p-values of 0.000, where the t-statistics value is more significant than 1.97 and p-values are smaller than 0.0.05, so that Ho4 is rejected and Ha4 is accepted, which means that self-service technology experience has a significant effect on self-service technology satisfaction.

3.3 Research Findings

Based on the results of testing hypothesis 1 above, it was found that perceived ease of use had a significant effect on self-service technology experience with a large effect of 4.091 and p-values of 0.000. This indicates that the value of t-statistics is more significant than 1.97, and p-values are smaller than 0.05. Hence, the hypothesis that "perceived ease of use has a significant effect on self-service technology experience" is accepted.

This means that the more users feel the ease of using self-service customer service in the Veronika chatbot, the greater the customer experience will be using the chatbot self-service technology. The findings of this study are supported by research conducted by Isolde & Nonhlanhla (2021), where the study aims to analyze the effect of experience using chatbots in emerging market industries in South Africa on satisfaction with using chatbot technology. In this study, it was found that perceived ease of use influenced the self-service technology experience, so it can be said that the factor for the formation of a good experience in using self-service technology in the form of a chatbot is influenced by the ease with which users feel in using the chatbot.

In addition, the findings in this study are also supported by the results of research conducted by Singgih and Retno Setyorini (2020); this study was conducted to analyze the effect of acceptance or adoption of technology on the LINE SMB chatbot for service complaints of new students, students, and parents through Line messenger application. In this study, it was found that perceived ease of use had a positive effect on behavioural intention.

Based on the findings of the three studies above, it can be concluded that perceived ease of use can not only affect the self-service technology experience but can also affect the process of technology adoption or acceptance on behavioural intention variables or behavioural tendencies in the interest in using chatbot technology for personal needs—customer complaint service.

Furthermore, hypothesis 2 indicates that perceived playfulness has a significant effect on self-service technology experience, with a large effect of 3.123 and p-values of 0.002. This value indicates that the t-statistic value is more significant than 1.97 and the p-value is smaller than 0.05, so the hypothesis "perceived playfulness has a significant effect on self-service technology experience" is accepted.

Then, hypothesis 3 in this study indicates that perceived usefulness has a significant effect on self-service technology experience with a large effect of 7.126 and p-values of 0.002. This value indicates that the t-statistic value is more significant than 1.97 and the p-value is smaller than 0.05, so the hypothesis "perceived usefulness has a significant effect on self-service technology experience" is accepted.

This means that when users feel the usefulness of Veronika's chatbot service in customer service, it will affect the formation of a good experience in using chatbot self-service technology. The findings of this study are supported by the results of research conducted by Isolde & Nonhlanhla (2021), where the study aims to analyze the effect of the experience of using chatbots in emerging market industries in South Africa on the satisfaction of using chatbot technology. In this study, it was found that perceived usefulness has an effect on self-service technology experience, so it can be said that the factor for the formation of a good experience in using self-service technology in the form of chatbots is influenced by the usefulness of services felt by users in using the chatbot.

In addition, the findings in this study are also supported by the results of research conducted by Singgih and Retno Setyorini (2020). This study was conducted to analyze the effect of acceptance or adoption of technology on the LINE SMB chatbot for service complaints of new students, students, and parents through the Line messenger application.

In this study, it was found that perceived ease of use had a positive effect on behavioural intention.

Based on the findings of the three studies above, it can be concluded that perceived usefulness can affect not only the self-service technology experience but also the process of technology adoption or acceptance of behavioural intention variables or behavioural tendencies in the interest in using chatbot technology for complaint service needs. Customer.

Furthermore, hypothesis 4 shows that self-service technology experience has a significant effect on self-service technology satisfaction with a large effect of 53,379 and p-values of 0.000. This value indicates that the t-statistic value is more significant than 1.97 and the p-value is smaller than 0.05, so the hypothesis "perceived playfulness has a significant effect on self-service technology experience" is accepted.

This means that customer satisfaction in using self-service technology will be influenced by a good experience using Veronika's chatbot service. A good experience here is strongly influenced by the perceived convenience, fun, and usefulness factors when using chatbot self-service technology. The findings of this study are supported by the results of research conducted by Isolde & Nonhlanhla (2021), where the study aims to analyze the effect of the experience of using chatbots in emerging market industries in South Africa on the satisfaction of using chatbot technology. In this study, it was found that self-service technology experience has an effect on self-service technology satisfaction, so it can be said that the factor for the formation of customer satisfaction in using chatbot technology in emerging markets in South Africa is influenced by good experience in using self-service technology in the form of chatbots and a good experience in using self-service technology here are strongly influenced by the factors of convenience, fun, and perceived usefulness when using chatbot self-service technology.

Based on the research process that has been carried out and the findings from the analysis results, here are some exciting things to discuss in this research. Based on the characteristics of the respondents, there are two exciting things to review. First, it can be seen that all respondents who are Telkomsel customers, as many as 232 of a total of 247 respondents, know and have interacted with the Veronika chatbot. This shows that Telkomsel's customers are aware of the existence of the Veronika chatbot.

Second, based on respondent characteristics data, it was found that of all respondents who had interacted with Veronika's chatbot, 71.55% of them accessed Veronika's chatbot service more through the MyTelkomsel mobile application compared to using other platforms. So, it can be assumed that most respondents actively access the MyTelkomsel mobile application. However, due to the low access to Veronika's chatbot apart from using the MyTelkomsel mobile apps platform, it may be possible to validate the causal factors in further research so that if there are access constraints on other platforms, the quality of service on platforms other than the MyTelkomsel mobile apps can be improved.

IV. Conclusion

This study aims to analyze the effect of the implementation of Veronika's virtual assistant chatbot in Telkomsel on customer experience in using Telkomsel's services. In addition, to analyze the effect of the experience of using the Veronika chatbot on customer satisfaction. The research results show a strong relationship between perceived ease of use, perceived playfulness, and perceived usefulness when using Veronika's chatbot with experience using self-service technology. -service technology experience) chatbot Veronika. However, perceived usefulness has the most vital relationship compared to other

variables in the experience of using Veronika's self-service technology experience. Then there is a solid relationship between the experience of using self-service technology experience (self-service technology experience) with customer satisfaction in using the self-service technology satisfaction chatbot, Veronika. This strong relationship occurs because there is a strong relationship between the variables connected in the variable. Experience using self-service technology experience. Also, all hypotheses in this study are accepted, where the statistical t-test value for each hypothesis is more than 1.97. 21This is indicated by the value of the statistical t-test results for the perceived ease of use variable. The self-service technology experience variable is 4.091, the perceived playfulness variable to the self-service technology experience variable is 3.123, the perceived usefulness variable to the self-service technology experience variable is 7.126, and the selfservice technology experience variable to the self-service tech variable. nology satisfaction is 53,379, thus making all the hypotheses in this study accepted. Furthermore, the perceived usefulness variable or perceived usefulness when using Veronika's chatbot service has the most robust relationship among the others. It has the most significant influence on the self-service technology experience or experience using Veronika's chatbot self-service technology. The most useful felt by 66.81% of respondents on average is that it does not take long to get customer service and information needed through the Veronika chatbot so that it can increase the productivity of respondents.

Based on the research findings above, it can be concluded that there is a significant effect of the Veronika chatbot implementation on customer experience in using Telkomsel services, and there is a significant influence between customer experience using Veronika chatbot on customer satisfaction in using Telkomsel services.

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