

Measuring User Satisfaction of Participant Reporting Information System Services at the Tanjung Morawa Branch of the Employment Social Security Administration Agency

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ARTICLE INFO

Keywords: SIPP, EUCS, Content, Format, Accuracy

Received : 6, December

Revised : 18, December

Accepted: 19, January

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ABSTRACT

The purpose of this study is to use the End User Computing happiness (EUCS) approach to the Participant Reporting Information System (SIPP) service in order to ascertain and analyze the degree of user happiness. This study is based on the phenomenon of the reporting system's shift from a manual to an online one. Content, accuracy, format, usability, and timeliness are the dimensions that this research employs to measure user satisfaction. Using a quantitative technique, this research examines associations. The 273 participants who made up the population were personnel officials from the companies that were part of the BPJS Employment Tanjung Morawa Branch. This study drew from a total of 170 participants. A random sampling technique is employed, where each sample has an equal chance of being chosen. A linear regression analysis was performed on the collected data.

INTRODUCTION

Official operations of the Employment Social Security Agency, formerly known as PT. Jamsostek (Persero), began on January 1, 2014, following its establishment in accordance with Law No. 24 of 2011 pertaining to the Social Security Agency. As the state's social security organizer, BPJS Employment is responsible for four programs that safeguard the community's socioeconomic well-being: Old Age Security (JHT), Work Accident Security (JKK), Death Security (JK), and Pension Security (JP). The vision of BPJS Ketenagakerjaan itself is to realize a trusted, sustainable and prosperous employment social security for all Indonesian workers. In realizing its vision, BPJS Ketenagakerjaan strives to provide the best service for Indonesian workers, which is manifested in the ease of managing and accessing data. Thus, the satisfaction of Indonesian workers with BPJS Ketenagakerjaan services is the main priority that must be achieved optimally.

One of the main services of BPJS Ketenagakerjaan is the Participant Reporting Information System (SIPP). SIPP is an application service used to manage BPJS Ketenagakerjaan participant data mutation reports through the official website sipp.bpjsketenagakerjaan.go.id. The features available in the SIPP application are the new worker registration menu, deactivation of outgoing workers, updating or updating worker data, changes to worker wage data, printing participant cards, worker wage reports, incoming and outgoing worker data reports and fast and accurate contribution calculations. With this service, companies can also manage employee data so that employee welfare is more guaranteed and social security can be received evenly. Thus, SIPP is expected to be a solution for companies to avoid difficulties in managing participant administration and to create information that maintains quality, validity and integrity.

Referring to the description of the SIPP service above, BPJS Ketenagakerjaan actually relies heavily on this service in transforming employment data in Indonesia. The data sources provided by BPJS Ketenagakerjaan are also used by cross-institutions to fulfill social interests such as the Wage Subsidy Assistance (BSU) program by the Ministry of Manpower. The facts on the ground that are found are that every time the BSU program is implemented, there is still data that is not yet available or is not synchronized at all. As a result, the employment social service program cannot be realized or is delayed. In addition, the constraints of SIPP which have not been well integrated with population and civil registration data sources in Indonesia, are a problem that can affect the rights and obligations of workers, such as difficulties in registering workers by companies online, so that the manual mechanism alternative will be the last choice. Thus, the possibility of delays in registering workers will be even greater. This often creates a negative image of efforts to provide employment services, such as viral incidents on social media where the number is not small. For example, the most common failure in distributing the BSU program is the unavailability of worker accounts or the mismatch of the accounts with the worker's name (Ayufajari, 2022).

As of August 2022, the number of workers registered for the BPJS Ketenagakerjaan service is 54.40 million people (Ministry of Manpower of the Republic of Indonesia, 2022). This has the potential to cause problems in employment social security services if the workforce data is not managed properly, in this case through the use of online SIPP services. For example, if the company's personnel department does not understand or is able to use online SIPP, then employment social security services will be carried out manually by coming to the nearest BPJS Ketenagakerjaan office so that it will take longer, be ineffective and inefficient.

Prihastono (2012) stated that for every web-based service, measuring and monitoring user satisfaction is essential for its provider, in this case BPJS Ketenagakerjaan. The phenomenon found related to web-based SIPP services is that users of the BPJS Ketenagakerjaan online reporting system often assess whether the SIPP application is able to provide convenience, ease and speed in reporting compared to the manual system previously used. The issue that is an important point is whether the user experience of the online SIPP service, good or bad, can affect the level of satisfaction and ultimately affect the effectiveness of the system. Then, to what extent are users satisfied with this online reporting system and what factors most affect the level of satisfaction of SIPP service users. Therefore, researchers feel the need to measure user satisfaction with the SIPP service that is currently running.

Satisfaction is a person's feeling of pleasure or disappointment that arises when comparing between expectations and the reality of performance felt by customers (Kotler & Keller, Marketing management, 2016). If performance exceeds expectations, then customers will feel satisfied and vice versa. Wilkie (1994) stated that customer satisfaction is divided into 5 (five) parts, namely expectations, usefulness (performance), comparison (comparison), confirmation (confirmation) and discrepancy (discrepancy). Customer satisfaction is actually an evaluation of a product or service, where the service has met customer needs or has not met expectations. The four methods proposed by Kotler and Keller (2016) to measure consumer happiness are as follows: the complaint and recommendation system, lost customer analysis, customer satisfaction surveys, and ghost shopping. Customer satisfaction surveys are the most effective of the four ways to measure contentment because they allow businesses to collect honest opinions from end users while also showing their appreciation. There are several methods of measuring customer satisfaction with different contexts and specifications according to user needs. The first is the Technology Acceptance Model (TAM) method by Davis (1989) which emphasizes two main aspects, namely perceived usefulness (utilization of the system will improve its performance) and perceived ease of use (use of the system is quite easy). The second is the Task Technology Fit (TTF) method by Goodhue & Thompson (1995) which assesses the capability of information technology in supporting needs, tasks or jobs. The third is Human Organization Technology (HOT) Fit by Yusof, Kuljis, Papazafeiropoulou, & Stergioulas (2008) which assesses the interaction between human, organizational and technological aspects. The fourth is the End User Computing Satisfaction (EUCS) model proposed by Doll, WJ, and

Torkzadeh, G. (1988). This model places an emphasis on the factors that contribute to user satisfaction with applications or information systems. These factors include the system's legitimacy, correctness, format, timeliness, and content.

Among the four approaches described above, the End User Computing happiness (EUCS) metric stands out as the best fit for gauging BPJS Ketenagakerjaan SIPP app users' levels of happiness. This approach was chosen due to its focus on the application's use from the user's point of view. The other three models, on the other hand, place greater emphasis on getting people to buy into an IT system that the company built for its own internal purposes. In order to explain user satisfaction, the EUCS technique takes into account the following factors: content, accuracy, format, usability, and timeliness.

Sabon, SE, & Susanti, S. (2020) conducted an EUCS study using a research sample of employees at one company only, where the content variable affects the success of the SIPP application performance at PT. Gunung Amal Solution International. Facts in the field show that access to the use of the SIPP BPJS Ketenagakerjaan application is usually only given to the human resources (HR) department of a company, not to all employees of the company. Therefore, there is a population gap in the study, where to assess the satisfaction of users of the SIPP BPJS Ketenagakerjaan application should involve a number of companies that are users, not just one company. Thus, this population gap becomes a research gap in research on the satisfaction of SIPP BPJS Ketenagakerjaan users using the EUCS method. Therefore, the author will conduct research on "Measurement of SIPP Service User Satisfaction at BPJS Ketenagakerjaan Tanjung Morawa Branch", where similar research using a number of companies has never been conducted.

LITERATURE REVIEW

Marketing Services

Kotler & Keller (2016) stated that marketing is a social process in which individuals and groups try to achieve their needs by creating and offering valuable products freely to others. Specifically, Lupiyoadi & Hamdani (2006) stated that marketing is an effort to communicate with consumers as company customers, where the communication created creates a mutually beneficial relationship.

Meanwhile, according to Kotler & Keller (2016), services are activities of one party to another party, which have no form and do not give rise to elements of ownership. In other words, services have an intangible nature or do not have a physical form. Thus, services are services from one party to another party, either visible (explicit service) or only felt (implicit service) (Jasfar, 2005). Kotler & Keller (2016) further stated that there are 4 (four) characteristics of services, namely intangibility, inseparability, variability, and perishability.

User Satisfaction

Marketing activities carried out ultimately are to achieve a primary goal, namely user satisfaction. Satisfaction, according to Kotler and Keller (2016), is the emotion that a user has as a result of comparing their expectations with the actual

performance. The user will feel content if their expectations are met and dissatisfied otherwise. In general, there are three types of customer satisfaction: disappointment, satisfaction, and very high levels of satisfaction (Kotler & Keller, Marketing management, 2016).

The basic principle that emerges is that satisfaction will encourage users to use a product or service. Conversely, disappointment will encourage users to no longer use a product or service that has been tried before. The statement above is in accordance with the definition of user satisfaction proposed by Zeithaml, Bitner & Gremler (2013). They state that user satisfaction is a consumer who feels satisfied with the product or service used and will use it again.

End User Computing Satisfaction

Doll and Torkzadeh (1988) developed the End User Computing Satisfaction (EUCS) as a means of evaluating information systems holistically through the eyes of their end users. Content, correctness, format, timeliness, and system usability are some of the technological aspects that this approach evaluates to ensure user satisfaction.

If the system is comprehensive, meets user expectations (total satisfaction), and facilitates decision-making, then the outcomes of system measurements can satisfy users, according to Doll and Torkzadeh (1988). In contrast, EUCS is also a tool for comprehensively assessing user-centric information systems. (Wynne & Matthew, 2000).

Online Marketing Services

If you want to know what Chaffey (2022) means when they say "online marketing," it's when you use the internet and other digital technologies to further your marketing objectives. On the other hand, online marketing encompasses all the things done to promote goods and services and to establish connections with consumers using the internet (Kotler & Armstrong, 2018).

Kotler (2016) states that service is an intangible action or by offering work from one person to another and does not result in an exchange of ownership of something. Meanwhile, according to Valarie A. Zeithaml and Mary Jo Bitner, service is all activities that are not physical or construction that generally produce and consume together and then provide additional value such as entertainment, happiness, health or comfort (Irma, 2021).

BPJS Employment

Guarantees of protection are extended to all workers in Indonesia by the Social Security Administration Agency (BPJS) for Employment, a legal organization. This includes foreign nationals who have worked for at least six months. In compliance with the requirements of Law No. 24 of 2011 on the Social Security Administration Agency, BPJS for Employment is a merger of PT. Social Security for Employment (Jamsostek). The responsibility of administering the workers' social security program has been transferred to BPJS for Employment under this regulation.

BPJS Employment Participant Reporting Information System

The BPJS Employment Participant Reporting Information System (SIPP) is an application that functions to manage BPJS Employment participant data mutation reports (Sri, 2022). Law No. 24 of 2011 states that every company is required to obtain social security through BPJS Employment. Therefore, SIPP BPJS Employment becomes an online company data reporting channel, so that the workforce registration process becomes easier, without having to visit the office. In addition to being a registration channel, SIPP BPJS Employment also functions to manage company participant data, especially if the number is very large, reaching thousands and above. The participant data referred to above are such as company data, workforce data, wage data to fast and accurate wage calculations.

Conceptual Framework

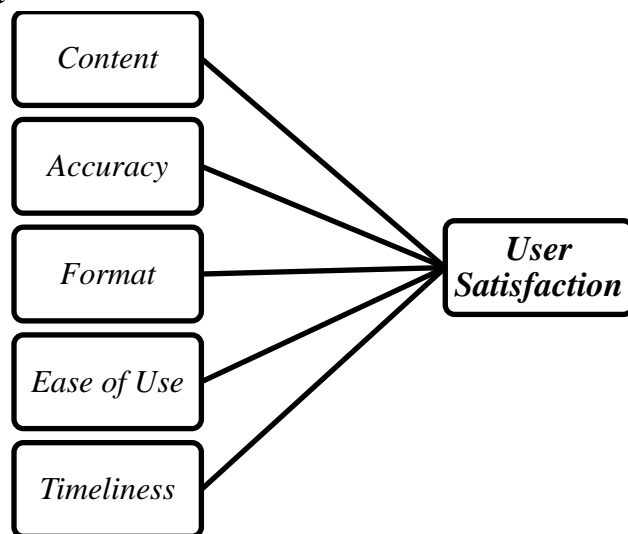


Figure 1. Research Concept Framework

METHODOLOGY

According to Sugiyono (2018), the purpose of this study is to employ a quantitative method to associative research in order to establish a connection between many factors. In addition, quantitative data is a positivistic (concrete) research approach that Sugiyono (2018) defines as research data in numerical form that will be measured using statistics as a calculation test tool. This data is relevant to the subject being examined and will be used to draw conclusions.

RESEARCH RESULT

Descriptive Statistical Analysis

Subjects included in this study's 23-item questionnaire were content, correctness, format, usability, timeliness, and user satisfaction. There are a total of eleven questions across the several variables: five for content, three for correctness, five for format, five for simplicity of use, three for timeliness, and two for user pleasure.

For the content variable, the average respondent's answer to each question has the following details in Table 7, namely Disagree (DS) for 1 question, Less

Agree (KS) for 1 question, Agree (S) for 2 questions and Strongly Agree (SS) for 1 question. This becomes interesting, when there is a question that has a disagree response, namely the question 'system information is useful for me'. This shows that respondents tend not to prioritize the information available in the SIPP application. On the other hand, there is a question that has a strongly agree response, namely the question 'system information is presented in a variety of ways'. This shows that respondents tend to like the various types of information available in the SIPP application system. The distribution of responses to questions on the content variable illustrates that respondents are more interested in the diverse, clear and quality contents of the SIPP application. Meanwhile, respondents also consider the contents of the SIPP application to be not very useful for their needs. In general, respondents gave an agree response for the content variable with an average value of 3.56.

Multiple Linear Regression Analysis

Based on Table 13, the multiple linear regression equation formula is as follows:

$$Y = -0.330 + 0.268X_1 + 0.036X_2 + 0.213X_3 + 0.167X_4 + 0.276X_5$$

Based on the equation data above, it can be explained that:

1. A negative value of 0.330 is assigned to the constant value (β_0). A non-unidirectional influence between the independent and dependent variables is shown by the negative sign. The user satisfaction value (Y) is -0.330 when the following variables – content (X1), accuracy (X2), format (X3), convenience of use (X4), and timeliness (X5) – are set to 0 or remain unchanged
2. The content (X1) variable has a regression coefficient value of 0.268. User satisfaction (Y) is positively (unidirectionally) affected by this value. This indicates that, everything else being equal, a one-unit increase in the content variable (X1) will result in a 0.268-unit increase in the user happiness variable (Y);
3. Third, X2, the accuracy variable, has a regression coefficient of 0.036. User satisfaction (Y) is positively (unidirectionally) affected by this value. Fourth, the format variable (X3) has a regression coefficient value of 0.213, which suggests that for all other factors held constant, a one-unit improvement in accuracy (X2) will result in a 0.036-unit increase in user satisfaction (Y) . User satisfaction (Y) is positively (unidirectionally) affected by this value.
4. Assuming all other variables stay the same, this indicates that a one-unit improvement to format (X3) will lead to a 0.213-unit increase to user satisfaction (Y);
5. The ease of use (X4) variable has a regression coefficient value of 0.167. User satisfaction (Y) is positively (unidirectionally) affected by this value. This indicates that, everything else being equal, a one-unit increase in the ease of use variable (X4) will result in a 0.167-unit rise in the user satisfaction variable (Y).
6. A value of 0.276 is the regression coefficient for the timeliness variable (X5). User satisfaction (Y) is positively (unidirectionally) affected by this value.

This indicates that, everything else being equal, a one-unit increase in the timeliness variable (X5) will result in a 0.276-unit increase in the customer satisfaction variable (Y).

Table 1. Results of Multiple Regression Analysis

Coefficients ^a						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	-0.330	0.265		-1.244	0.215
	X1 (Content)	0.268	0.076	0.223	3,536	0.001
	X2 (Accuracy)	0.036	0.061	0.039	0.591	0.556
	X3 (Format)	0.213	0.082	0.220	2.617	0.010
	X4 (Ease of Use)	0.167	0.087	0.159	1,920	0.057
	X5 (Timeliness)	0.276	0.070	0.285	3.939	0.000

a. Dependent Variable: Y

Source: Test results with SPSS

DISCUSSION

The influence of content on user satisfaction

Doll and Torkzadeh (1988) developed the End User Computing Satisfaction (EUCS) as a means of evaluating information systems holistically through the eyes of their end users. In order to gauge user happiness with a system's content, this approach places an emphasis on the technical component that evaluates the content dimension. The system's content consists of data generated by the system itself as well as user-accessible modules and functionalities. Another metric for determining if the system generates data that meets user requirements is the content dimension. User enjoyment is directly proportional to the system's informativeness and the depth of its modules. Based on the frequency distribution of responses to questions on the content variable (X1), with 170 respondents and 5 statements given, it can be seen that the mean value obtained is 3.56 which means Agree (S). This shows that the SIPP BPJS Ketenagakerjaan Tanjung Morawa Branch application in terms of content is a social security service system that is still acceptable. In general, most users describe the content variable (X1) in the SIPP application with good tendency results, so it can be concluded that by maintaining and improving content and optimizing all elements in the content will increase user satisfaction at the BPJS Ketenagakerjaan Tanjung Morawa Branch.

The content variable (X1) in this study has a coefficient of 0.268 and a tcount value bigger than ttable ($3.536 > 1.974$), according to the data. The value that was produced for the significance value is less than the degree of confidence ($0.001 < 0.050$). Thus, it can be concluded that there is a positive and statistically significant relationship between user happiness (Y) and the content variable (X1). User satisfaction (Y) is directly proportional to the change in the content variable

(X1). According to Sabon and Susanti's (2020) 'Analysis of the Success of SIPP Application Performance Using the EUCS Method at PT. Gunung Amal Solution International' and other comparable studies, the content variable is positively and significantly correlated with the success of SIPP application performance. Measurement of User Satisfaction with a Voter Data Information System Using the EUCS Model (Dewima et al., 2020) Content has a substantial beneficial influence on SIDALIH KPU user satisfaction, according to the Surabaya General Election Commission. Users will be more satisfied with SIDALIH material if it is better and more comprehensive. Using the same EUCS approach, Arribe and Aulia (2022) found that, while not all hypotheses are accepted, the factors of content, form, timeliness, and simplicity of use do impact user satisfaction variables.

The influence of accuracy on user satisfaction

When it comes to the technical side of things, EUCS places an emphasis on user satisfaction with the accuracy dimension as a measure of data accuracy throughout input and processing (Doll & Torkzadeh, 1988). The frequency with which the system returns the intended result after processing user input is a good indicator of its accuracy. It is also possible to observe the frequency with which data processing problems occur. With 170 respondents and 3 assertions provided, the frequency distribution of responses on the accuracy variable (X2) shows that the mean value obtained is 3.39, meaning Less Agree (KS). The majority of SIPP BPJS Ketenagakerjaan Tanjung Morawa Branch users typically provide inaccurate descriptions of the accuracy variable (X2).

With a t-count value of $0.591 < 1.974$, this study reveals that the accuracy variable (X2) has a coefficient value of 0.036. With a value of $0.556 > 0.050$, the obtained significance value is higher than the degree of confidence. This demonstrates that there is a positive but insignificant effect of the accuracy measure (X2) on user satisfaction (Y). "Analysis of the Success of SIPP Application Performance using the EUCS Method at PT. Gunung Amal Solution International" (Sabon & Susanti, 2020) found that there is a negative correlation between the accuracy variable and the success of SIPP application performance. This is interesting because there is a negative correlation between the outcomes of this study and the outcomes of Sabon & Susanti's (2020) investigation. The accuracy dimension ought to contribute positively to user happiness, as per the theory of user satisfaction put forward by Doll and Torkzadeh (1988). Our might be because the research samples used in the two studies are different in terms of the characteristics they contain. For example, our study used data from multiple companies, whereas Sabon & Susanti (2020) used data from just one. Officers from Karang Tengah Puskesmas were not entirely satisfied with the SIMPUS application, particularly when it came to accuracy, according to Golo et al. (2021), who conducted research entitled "Analysis of the Level of Satisfaction of Puskesmas Information System Users Using the End User Computing Satisfaction (EUCS) Method at Puskesmas."

The influence of format (form) on user satisfaction

The format dimension is also an aspect used to assess user satisfaction in the EUCS method (Doll & Torkzadeh, 1988). The format displayed by the system is assessed from the form of the system interface, whether it is attractive and easy for users. Therefore, indirectly, the format dimension can affect the level of user effectiveness. Based on the frequency distribution of responses to questions on the format variable (X3), with 170 respondents and 5 statements given, it can be seen that the mean value obtained is 3.36 which means Less Agree (KS). In general, most users describe the format variable (X3) in the SIPP BPJS Ketenagakerjaan Tanjung Morawa Branch application with poor results, although the mean value indicated by the format variable of 3.36 actually has a slight difference from the agree category of 3.40.

The results of this study indicate that the format variable (X3) has a coefficient value of 0.213 with a calculated t value greater than t table ($2.617 > 1.974$). For the significance value, the value is smaller than the degree of confidence in this study ($0.010 < 0.050$). This shows that the format variable (X3) partially has a positive and significant effect on user satisfaction (Y), which means that if the format variable (X3) increases, user satisfaction (Y) will increase significantly.

Dewima et al., 2020 in a study entitled 'User Satisfaction Measurement of Voter Data Information System With EUCS Model In Surabaya General Election Commission' also revealed that the format has a significant positive effect on SIDALIH user satisfaction at the Surabaya KPU. This proves that the better the display design, the higher the user satisfaction. Research conducted by Arribe & Aulia (2022) also states that the form variable affects the user satisfaction variable.

Furthermore, this study has results that are inversely proportional to the results of research on user satisfaction of SIPP application services by Sabon & Susanti (2020). The study stated that the format variable has a significant negative relationship with the user satisfaction variable. This is contrary to the theory proposed by Doll & Torkzadeh (1988), which states that the format dimension has a positive influence on user satisfaction, especially related to digital-based information services.

The influence of ease of use on user satisfaction

The EUCS method emphasizes user satisfaction on the technological aspect that assesses the ease of use dimension (Doll & Torkzadeh, 1988). To measure user satisfaction in terms of ease of use, aspects such as data entry, data processing and information search are important points. Based on the frequency distribution of responses to questions on the ease of use variable (X4), with 170 respondents and 5 statements given, it can be seen that the mean value obtained is 3.49 which means Agree (S). This shows that most SIPP application users describe the ease of use variable (X4) with good tendency results.

The results of this study indicate that the ease of use variable (X4) has a coefficient value of 0.167 with a tcount value smaller than ttable ($1.920 < 1.974$). For the significance value, the value obtained is greater than the degree of confidence ($0.057 > 0.050$). This shows that the ease of use variable (X4) partially has a positive but insignificant effect on user satisfaction (Y), which means that if

the ease of use variable (X4) increases, user satisfaction (Y) will not increase significantly.

Sabon & Susanti (2020) in a study entitled 'Analysis of SIPP Application Performance Success using the EUCS Method at PT. Gunung Amal Solution International' stated that the ease of use variable has a significant negative relationship with user satisfaction of SIPP application services. This is contrary to the theory proposed by Doll & Torkzadeh (1988), where the ease of use dimension should have a positive effect on user satisfaction of information systems.

The influence of timeliness on user satisfaction

Doll and Torkzadeh (1988) state that the timeliness dimension is the last component of the EUCS technique that measures user satisfaction. The system's capacity to efficiently provide the user with the data and information they require is a key performance indicator (KPI) for measuring user satisfaction. In a timely system, all user inputs and requests are processed instantly, and the results are shown without delay; this is known as a real-time system. With 170 respondents and 3 statements provided, the frequency distribution of replies to questions on the timeliness variable (X5) yields an average value of 4.14, indicating Agree (S). As a result, the majority of people think the SIPP BPJS Employment Tanjung Morawa Branch application service's timeliness variable is good.

This study found that the timeliness variable (X5) had a calculated t value greater than the t table value ($3.939 > 1.974$), and a coefficient value of 0.276. There was a lesser result found for the significant value ($0.000 < 0.050$) compared to the research confidence level. So, if the timeliness variable (X5) goes up, user satisfaction (Y) will go up greatly as well. This is because the timeliness variable (X5) partially has a positive and considerable effect on user happiness (Y).

When compared to other instruments, the ease of use instrument had a significantly greater impact on user happiness (Rahayu, 2020, "Analysis of the Level of Satisfaction of UG In Your Hand Application Users Using the End User Computing Satisfaction (EUCS) Method"). At the same time, Sabon and Susanti (2020) found that there is a negative correlation between the timeliness variable and the performance success of SIPP applications. This goes against what this study found and what Doll and Torkzadeh's EUCS theory suggests (1988).

CONCLUSIONS AND RECOMMENDATIONS

Based on the results, the researchers came to these conclusions:

- a. Content, usability, and timeliness were scored as agree (S) by the majority of respondents. On the other hand, respondents gave a less agree response (KS) for the variables accuracy, format and customer satisfaction;
- b. The variables of content, accuracy, format, ease of use and timeliness simultaneously have a positive and significant effect on customer satisfaction in the SIPP services of BPJS Employment, Tanjung Morawa Branch;
- c. The content variable partially has a positive and significant effect on user satisfaction with the SIPP BPJS Ketenagakerjaan Tanjung Morawa Branch service;

- d. The accuracy variable partially has a positive but insignificant effect on user satisfaction with the SIPP BPJS Ketenagakerjaan Tanjung Morawa Branch service;
- e. The format variable partially has a positive and significant effect on user satisfaction with the SIPP BPJS Ketenagakerjaan Tanjung Morawa Branch service;
- f. The ease of use variable partially has a positive but insignificant effect on user satisfaction with the SIPP BPJS Ketenagakerjaan Tanjung Morawa Branch service;
- g. The timeliness variable partially has a positive and significant effect on user satisfaction with the SIPP BPJS Ketenagakerjaan Tanjung Morawa Branch service.

ADVANCED RESEARCH

Further research could also consider using more diverse research methods, such as experiments, case studies, or big data analysis, to gain a deeper understanding of the phenomenon under study.

REFERENCES

- Arribe, E., Aryanto, & Aulia, S. (2021). Analisis Tingkat Kepuasan Pengguna Aplikasi Signal Nasional Menggunakan Metode End User Computing Satisfaction (EUCS) (Studi Kasus : Badan Pendapatan Daerah Provinsi Riau (BAPENDA). 86-95.
- Ayufajari, N. D. (2022, September 19). *Bisnis.com*. Retrieved from <https://ekonomi.bisnis.com/read/20220919/9/1578760/menaker-ungkap-penyebab-pekerja-gagal-dapat-bsu-subsidi-gaji-rp600000>
- BPJS Ketenagakerjaan . (2023, Desember 19). Retrieved from <http://smile.bpjsketenagakerjaan.go.id/smile/main.bpjs>
- Dalimunthe, N. (2016). Analisis Tingkat Kepuasan Pengguna Online Public Access Catalog (OPAC) Dengan Metode EUCS (Studi Kasus : Perpustakaan UIN SUSKA Riau. *Jurnal Rekayasa dan Manajemen Sistem Informasi*, 2, 71-75.
- Davis, F. D. (1989, September). Perceived Usefulness, Perceived Ease of Use, and User Acceptance of Information Technology. *MIS Quarterly*, 13(3), 319-340.
- Dewima, A., Amrozi, Y., Milad, M. K., & Rohman, A. (2020). User Satisfaction Measurement of Voter Data Information System With EUCS Model In Komisi Pemilihan Umum Surabaya. *Proceeding 1st International Conference on Business & Social Sciences (ICOBUSS)*, 64-75.
- Djunant, R. A. (2018). Analisis Kepuasan Penerimaan Pengguna Akhir Sistem Branch Delivery System (Bds) Pada Layanan Teller Cash Recycler (Tcr) Menggunakan End User Computing Satisfaction (EUCS) dan ISO/iex12207:2008 Pada Perusahaan Bank di Indonesia. *Jurnal Sistem Informasi Indonesia*, 3, 1-14.
- Doll, W. J., & Torkzadeh, G. (1988). The Measurement of End-User Computing. *MIS Quarterly*, 2(1213512), 259-274.

- Golo, Z. A., Subinarto, & Garmelia, E. (2021). Analisis Tingkat Kepuasan Pengguna Sistem Informasi Puskesmas Menggunakan Metode End User Computing Satisfaction (EUCS) di Puskesmas. *Jurnal Rekam Medis dan Informasi Kesehatan*, 4(1), 52-56.
- Goodhue, D. L., & Thompson, R. L. (1995, June). Task-Technology Fit and Individual Performance. *MIS Quarterly*, 19(2), 213-236.
- Hidayah, N. A., Fetrina, E., & Taufan, A. Z. (2020). Model Satisfaction Users Measurement of Academic Information System Using End User Computing Satisfaction (EUCS) Method. *Applied Information Systems and Management (AISM)*, 3(2), 119-123.
- Husain, T. (2018). Analisis End - User Computing Satisfaction (EUCS) dan WebQual 4.0 Terhadap Kepuasan Pengguna. *JatISI*, 4, 164-176.
- Irawan, H. (2008). *Membedah strategi Kepuasan pelanggan* (Vol. Cetakan pertama). (P. Paramitha, Ed.) Jakarta: Kelompok Gramedia.
- Izzati, V. A., & Firmanto, Y. (2021). Analisis Kepuasan Pengguna Aplikasi Kesehatan HALODOC melalui Model End User Computing Satisfaction Selama Masa Pandemi. *Jurnal Ilmiah Mahasiswa Fakultas Ekonomi dan Bisnis*, 9(2).
- Jasfar, F. (2005). *Manajemen Jasa Pendekatan Terpadu*. Bogor: Ghalia Indonesia.
- Kementerian Ketenagakerjaan RI. (2022, Agustus). *Kementerian Ketenagakerjaan RI*. Retrieved from <https://satudata.kemnaker.go.id/data/kumpulan-data/401>
- Kotler, P. (2005). *Manajemen Pemasaran. Jilid 1 dan 2*. Jakarta: PT Indeks Kelompok Gramedia.
- Kotler, P., & Armstrong, G. (2018). *Principles of Marketing Global Edition 17th Edition*. London: Pearson Education.
- Kotler, P., & Keller, K. L. (2016). *Marketing management* (15th Edition ed.). New Jersey, Upper Saddle River: Pearson Education Inc.
- Lupiyoadi, R., & Hamdani, A. (2006). *Manajemen Pemasaran Jasa* (Edisi Kedua ed.). Jakarta: Salemba Empat.
- Monroe, A., Van Riel, C. R., & et al. (2005). Marketing Antecedent of Industrial Brand Equity: An Empirical Investigation in Specialty Chemical. *Industrial Marketing Management*, 12, 841-847.
- Munap, R., Bayaah, S. N., Hamid, S. A., Beg, M. F., & Beg, M. T. (2018). The Influence of End User Computing System (EUCS) on User Satisfaction: The Case of a Logistic and Courier Service Company. *The International Journal of Social Sciences and Humanities Invention*, 5(12), 5103-5110.
- Ngurah, W. &. (2017). Analisa Tingkat Kepuasan Pengguna Elearning Menggunakan EUCS dan Model Delone and Mclean. *IJSE - Indonesian Journal on Software Engineering*, 100.
- Prihastono, E. (2012, Januari 01). Pengukuran Kepuasan Konsumen pada Kualitas Pelayanan Customer Service Berbasis Web. *Dinamika Teknik*, VI(I), 14-24.
- Putera, W. A., & Candiasa, I. M. (2021). Analysis of e-learning user satisfaction itb stikom bali using end user computing satisfaction (eucs) method. *Journal of Physics: Conference Series*(1810 012017).

- Rahayu, E. F. (2020). Analisis Tingkat Kepuasan Pengguna Aplikasi UG In Your Hand Dengan Metode End User Computing Satisfaction (EUCS). *Core Raharja Open Journal System*, 6(2), 213-226.
- Rini, D. P. (2019, November). Analisis Tingkat Kepuasan Pengguna Akhir terhadap Layanan 'LinkAja' di Indonesia Melalui Pendekatan End User Computing Satisfaction (EUCS) dan Reputasi Perusahaan. *Jurnal Ekonomi dan Bisnis*, 13(3), 189-207.
- Sabon, S. E., & Susanti, S. (2020). Analisis Keberhasilan Kinerja Aplikasi Sipp Menggunakan Metode EUCS Pada PT. Gunung Amal Solution International. *eProsiding Sistem Informasi (POTENSI)*, 1(1), 145-151.
- Setyadi, R., & Baqi, M. H. (2021). Analysis of The Use of The Bebung Application Using End-user Computing Satisfaction Model. *Jurnal Teknologi Informasi dan Pendidikan*, 14(2), 83-87.
- Setyoningrum, N. R. (2020). Analisis Tingkat Kepuasan Pengguna Sistem Informasi Kerja Praktek dan Skripsi (SKKP) Menggunakan Metode End User Computing Satisfaction (EUCS). *Journal of Applied Informatics and Computing (JAIC)*, 4(1), 17-21.
- Situmorang, S. H. (2023). *Analisis Data Untuk Riset Manajemen dan Bisnis* (5th ed.). USU Press.
- Sri, R. (2022, Juli 29). *Finansialku.com*. Retrieved from <https://www.finansialku.com/sipp-bpjs-ketenagakerjaan/>
- Sugiyono. (2009). *Metode Penelitian Kuantitatif, Kualitatif dan R&D*. Bandung: Alfabeta.
- Tjiptono, F. (2014). *Pemasaran Jasa – Prinsip, Penerapan, dan Penelitian*. Yogyakarta: Andi Offset.
- Undang-Undang No. 24 Tahun 2011 tentang Badan Penyelenggara Jaminan Sosial.
- Wilkie, W. L. (1994). *Consumer Behavior (third edition)*. New York: John Willey & Sons, Inc.
- Wynne, C. W., & Matthew, L. K. (2000). A Proposed Model And Measurement Instrument For The Formation of Is Satisfaction: The Case of End-User Computing Satisfication. *Twenty-First International Conference on Information System*, (pp. 553-563).
- Yazid. (2001). *Pemasaran Jasa: Konsep dan Implementasi*. Yogyakarta: Ekonisia.
- Yusof, M. M., Kuljis, J., Papazafeiropoulou, A., & Stergioulas, L. K. (2008, June). An evaluation framework for Health Information Systems: human, organization and technology-fit factors (HOT-fit). *International Journal of Medical Informatics*, 77(6), 386-398. doi:<https://doi.org/10.1016/j.ijmedinf.2007.08.011>.
- Zeithaml, V. A., Bitner, M. J., & Gremler, D. D. (2013). *Services Marketing: Integrating Customer Focus Across the Firm* (6th Edition ed.). Boston: Mc.Graw Hill.