Article

The role of digital transformation and service quality of integrated passport system based on biometrics on user satisfaction (case study at the immigration department)

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Abstract: Research aims: This research aims to investigate the correlation between digital transformation (DT) and user satisfaction (US) and investigate the relationship between service quality (SQ) and user satisfaction (US) at the immigration department. **Methodology:** The research method used in this research is quantitative survey research which aims to determine the relationship between two or more variables. The population in this study were all immigration office employees. The analysis model was applied in this research, an analysis model is used Partial Least Square Structural Equation Modeling (PLS-SEM). In this study, the number of respondents was 676 senior immigration office employees. The sampling technique used in this research was simple random sampling. In this research, variables were measured, how data were collected, or the data collection method used was the online questionnaire method. The instrument used to measure this research variable is a 7-point Likert scale. Data processing in this research uses SmartPLS software. The stages of data analysis in this research are the outer model test which includes convergent validity, discriminant validity and composite reliability as well as inner model analysis, namely hypothesis testing. **Findings:** Based on the data analysis found that digital transformation has a positive and significant relationship with user satisfaction at the immigration department and service quality has a positive and significant relationship with user satisfaction (US) at the immigration department.

Keywords: digital transformation; service quality; user satisfaction; immigration; PLS-SEM

1. Introduction

The development of the digital era has encouraged advances in information technology. One of them is the development of digital technology, all daily activities are always related to digital technology. Starting from our activities at home to our work activities at the office (Asbari, 2024). Digital technology cannot be underestimated, especially for organizations/companies with digital technology, organizations/companies will be helped and experience extraordinary benefits, activities that were previously carried out conventionally manually, now is the time to start switching/transforming towards digital. The increasing development of the world of information along with the development of computer science and technology which can support various information needs and requests from users means that information has become a major need in companies (Fahmi et al., 2022). Therefore, fast and precise means of accessing, processing and storing information sources have become an inseparable part of business activities. With the software, it is hoped that existing data can be stored regularly so that accessing and processing data can be done more easily.

Located directly under the Directorate General of Immigration, the existence of the Immigration Office has a very important role. Especially in terms of public service in arranging matters such as travel documents, visas and facilities, residence permits and status, intelligence, investigation and prosecution, border crossing, and foreign cooperation and immigration information systems. Integrated Passport System Biometrics (SPTBB) is a database information system used by the immigration office to make passports, where the software is created and specially designed by the immigration service from the centre and implemented at immigration offices spread throughout Indonesia. The Biometric-Based Integrated Passport System itself is technically a complex application, which as software can help control many passporting activities (Heracleous and Wirtz, 2006). Research on service users of information systems departments supports a significant positive relationship between information user satisfaction and the responsiveness dimension of service quality (Akıl and Ungan, 2022; Eckert et al., 2022; Rumiyati and Syafarudin, 2021). Second, there are two significant factors as predictors of information system user satisfaction, namely the knowledge and involvement factors which are predictors of the original factors of traditional information user satisfaction instruments, and the assurance dimension of service quality. Third, the factors that influence user satisfaction with this information differ between staff and manager groups. Based on this background, the formulation of the problem in this research is whether there is an influence of the use of the SPTBB information system on user satisfaction at the Immigration Office (Sari et al., 2018).

Digital transformation is a process that organizations implement to integrate digital technology in all areas of business. This process fundamentally changes the way organizations deliver value to customers. Companies adopt innovative digital technology to make cultural and operational changes that better adapt to changing customer demands. The digitalization that has occurred in all aspects forces companies or businesses to continue to adapt, one of which is through digital transformation. Digital transformation has had a positive impact on various aspects of life (Hassan, 2024). Through digital transformation, companies can gain a new perspective on managing immigration, optimize immigration operations, and change the business model to be more efficient. So, it can be said that digital transformation is a business transformation in the modern era. This expression is becoming common in the era of digitalization. That's because every organization is increasingly dependent on data and technology to operate more efficiently and provide value to customers. With digital transformation, companies and businesses can survive in the competition against competitors (Kurniawan and Soediantono, 2022).

Digital transformation will also make it easier for users to obtain information related to the products or services offered without time and place restrictions. Service can also be carried out more optimally, both in the purchase transaction process, delivery, and complaints about obstacles that may occur and how to overcome them. That way, digital transformation will be able to increase user satisfaction. Digital transformation in the government sector in implementing an Electronic Based Government System (SPBE) requires a digital leadership role at all levels of the organization (Noori, 2022). The success of digital transformation requires support from leaders who have the commitment and awareness to make changes, prepare the

necessary policy schemes, understand and map the organization's service business processes, prepare digital talent human resources, foster a culture of innovation and collaboration with the digital community and adequate budget support for governance and provision of technology assets (Ait et al., 2022).

This research gap is based on previous research, namely according to Sari et al. (2018) and Syahril et al. (2022), digital transformation has a positive relationship with user satisfaction and is supported by the researches of Haudi et al. (2022) and Juwaini et al. (2022), which states that digital transformation has a positive relationship with user satisfaction in organizations. This result is contrary to the researches of Kettinger et al. (2022) and Ait et al. (2022), that digital transformation does not have a significant relationship with user satisfaction. Other researches (Kumalasari et al., 2022; Li et al., 2021; etc.) also states that digital transformation does not have a significant relationship with user satisfaction. According to several studies (Agarwal et al., 2021; Alfarizi and Dhingra, 2023; etc.), service quality has a positive relationship with user satisfaction, this result is supported by other researches (Harwina et al., 2021; Klinker et al., 2020; etc.), which also states that service quality has a positive relationship with user satisfaction, while other researches (Akıl and Ungan, 2022; Rumiyati and Syafarudin, 2021; etc.) states that service quality has an insignificant relationship with user satisfaction. This result supported by other researches (Eckert et al., 2022; Akmal et al., 2023; etc.) shows that service quality has an insignificant relationship with user satisfaction. Based on the previous analysis, several inconsistencies in the research results were found so further research was needed.

2. Literature review

2.1. Digital transformation

Digital transformation in Indonesia can be interpreted as a process of developing and using technology in the fields of information and communication. The aim is to make it easier for people to carry out activities, starting from the business world, government, and other needs. Digital transformation refers to the process and strategy of using digital technology to drastically change the way businesses operate and serve customers (Purwanto and Prayuda, 2024). This expression has become commonplace in the era of digitalization. Digital technology allows companies to adopt innovation and improve operational efficiency. The use of business software, cloud computing, and process automation has accelerated business operations, reduced costs, and increased productivity. Digital transformation is a process that organizations implement to integrate digital technology in all areas of business. This process fundamentally changes the way organizations deliver value to customers. Companies are adopting innovative digital technologies to make cultural and operational changes that better adapt to changing customer demands. The digitalization that has occurred in all aspects forces companies or businesses to continue to adapt, one of which is through digital transformation.

Digital transformation has had a positive impact on various aspects of life. Through digital transformation, companies can gain a new perspective on managing the company, optimize company operations, and change the business model to be more efficient (Purwanto and Juliana, 2022). So, it can be said that digital transformation is

a business transformation in the modern era. This expression is becoming common in the era of digitalization. That's because every organization increasingly relies on data and technology to operate more efficiently and provide value to customers. Digital transformation will also make it easier for consumers to obtain information related to the products or services offered without time and place restrictions (Prayuda, 2024). Digital transformation can be defined as the acceleration of business activities, processes, competencies and models to fully exploit digital technological changes and opportunities. Organizations need to evolve to address the changing business landscape. Organizations need technology that focuses on results, innovation and continuous improvement. Ideally, technology use is driven by business needs. Digital transformation is essentially business transformation. Some prefer to call it digital business transformation, which is more in line with the business aspect. Digital transformation is not just about change and innovation, but also about how these technologies are adopted and used (Praditya, 2024).

2.2. Service quality

Service quality can be defined as focusing on meeting needs and requirements, as well as on timeliness to meet customer expectations. Service quality applies to all types of services provided by the company while the client is at the company (Sari et al., 2018). The objective of service quality is a) to grow consumer confidence in the products or services offered, b) to avoid demands from consumers, and c) to create consumer trust and satisfaction. To ensure that consumers feel that all their needs are taken care of creating customer satisfaction can provide benefits, including a harmonious relationship between the company and customers, customers will make repeat purchases to create customer loyalty and form a word-of-mouth recommendation that benefits the company. Service quality can be defined as focusing on meeting needs and requirements, as well as on timeliness to meet customer expectations (Syahril et al., 2022). Service quality applies to all types of services provided by the company while the client is at the company. Quality is the completeness of the features of a product or service that can provide satisfaction to a need. Service quality is defined as the actions or actions of a person or organization that aim to provide satisfaction to customers.

Quality service is an important component that must be considered in providing excellent service quality (Haudi et al., 2022). Service quality has a positive effect on customer satisfaction, which means that the higher the level of service quality, the higher the level of satisfaction felt by customers. There are 5 (five) dimensions of service quality, namely physical evidence (tangibles), reliability, and power. responsiveness, assurance and empathy, these dimensions greatly influence customer satisfaction. Service quality is the expected level of excellence and control over that level of excellence to fulfil customer desires. In this case, two main factors influence service quality, namely expected service and perceived service. If the service received or felt is as expected, then the quality of the service is perceived as good or satisfactory. If the service received exceeds customer expectations, then the service quality is perceived as ideal quality. Conversely, if the service quality received is lower than expected then the service quality is perceived as poor. In principle, the definition of

service quality focuses on efforts to fulfil customer needs and desires, as well as the accuracy of delivery to match customer expectations

2.3. User satisfaction

User satisfaction can be interpreted as meaning that users must get satisfaction in certain things that they want and need. User satisfaction can be interpreted as an effort to fulfil something or make something adequate, or the basic needs and standards of users, while the definition of user satisfaction is the fulfilment of user information related to the user's response or attitude towards system interaction. User satisfaction is feeling satisfied after using the system. This is because of the convenience of the system. In other words, the more users like a system, the more implicitly they feel satisfied with the system in question (Juwaini et al., 2022). That satisfaction user, namely the user's response to the use of information system output. User satisfaction can be interpreted as meaning that users must be satisfied with certain things they want and need. Achieving user satisfaction can be said to be successful if the user's response to the quality of library services is the same or more than what he expected for that quality. User satisfaction is a feeling of happiness or disappointment that a person has which comes from the results of his impression of the perceived performance of a product and his expectations. hope. It can be understood that satisfaction is a feeling of pleasure or getting what someone wants about something.

User satisfaction can be interpreted as an effort to fulfil something or make something adequate, or the basic needs and standards of users, while the definition of user satisfaction is the fulfilment of user information related to the user's response or attitude towards system interaction (Kettingeret al., 2022). User satisfaction is feeling satisfied after using the system. This is because of the convenience of the system. In other words, the more users like a system, the more implicitly they feel satisfied with the system in question. That satisfaction user, namely the user's response to the use of information system output. Service quality is the expected level of excellence and control over that level of excellence to fulfil customer desires. In this case, two main factors influence service quality, namely expected service and perceived service. If the service received or felt is as expected, then the quality of the service is perceived as good or satisfactory. If the service received exceeds customer expectations, then the service quality is perceived as ideal quality. Conversely, if the service quality received is lower than expected then the service quality is perceived as poor. In principle, the definition of service quality focuses on efforts to fulfil customer needs and desires, as well as the accuracy of delivery to match customer expectations (Ait et al., 2022).

2.4. Hypothesis development

2.4.1. The correlation of digital transformation and user satisfaction (US)

The benefits of digital transformation are increasing efficiency and productivity at work. Facilitating access to information and speeding up decision-making. Improving the quality of products or services offered. Increasing customer satisfaction and customer loyalty. Expanding market reach and increasing business growth potential (Sari et al., 2018). Reducing operational costs and speeding up returns.

investment. Improving data security and privacy within immigration. Users will find it easier to find information on goods or services for a business with digital transformation, without time and place limitations. Digital transformation can also help improve the security aspects of businesses by enabling them to adopt advanced security measures such as multifactor authentication, encryption, and network segmentation (Kumalasari et al., 2022). Some researches (Klinker et al., 2020) digital transformation affects variables and other variables so that the results of business contributions research influence user satisfaction. Digital transformation is a change in handling work using information technology, some research concludes that customer satisfaction as an intervening variable indirectly mediates the positive relationship between digital transformation variables on user satisfaction. Based on previous analysis and research, a hypothesis is prepared as follows:

H1: Digital transformation (DT) has a positive and significant relationship with user satisfaction (US).

2.4.2. The correlation of service quality (SQ) and user satisfaction (US) at the immigration department

Service quality, namely providing perfection of money service, is carried out by service providers to meet customer needs and the accuracy of delivery to balance it expectations of customers or users (Li et al., 2021). User satisfaction is the degree to which users feel pleasure or disappointment resulting from comparing perceived product performance with their expectations. In essence, the goal of business is to create and retain users. All efforts are directed towards one goal, namely achieving user satisfaction to create user loyalty (Agarwal et al., 2021). If the service provided to customers is as expected, it will provide satisfaction. Thus, if service quality continues to be improved, customers will feel satisfied (Klinker et al., 2020). Service quality is an assessment that refers to the core of the service, namely the service provider itself or the entire service organization that can fulfil the requirements (Harwina et al., 2021). Users who not only prioritize quality products but users who prefer to enjoy the comfort of the services provided. Service quality is a dynamic condition relating to products, services, people, processes and environments that can meet or exceed user expectations. Service quality is the expected level of excellence and control over this level of excellence to fulfil user desires, thus service providers can increase user satisfaction by minimizing or eliminating unpleasant user experiences (Alfarizi et al., 2023). Service quality is the actions or actions of a person or organization to provide satisfaction to users. Service is an activity that occurs in direct interaction between a person and another person and provides satisfaction to users. Based on previous analysis and research, a hypothesis is prepared as follows:

H2: Service quality (SQ) has a positive and significant relationship with user satisfaction (US) at the immigration department.

The hypotheses of this research are:

H1: Digital transformation (DT) has a positive and significant relationship with user satisfaction (US) at the immigration department.

H2: Service quality (SQ) has a positive and significant relationship with user satisfaction (US) at the immigration department.

The correlation of service quality (SQ) and user satisfaction (US) for this research

is shown in **Figure 1**.
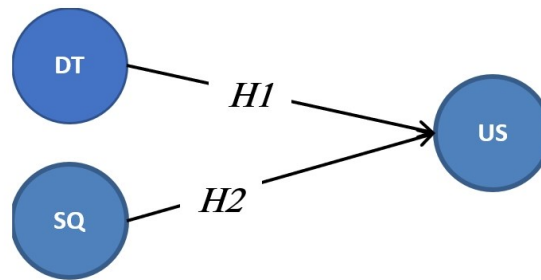
Figure 1. Research model.

Note: Digital transformation (DT), User satisfaction (US), Service quality (SQ).

3. Method

The research method used in this research is quantitative survey research which aims to determine the relationship between two or more variables. The list of questions included in the questionnaire can be observed in **Table 1** below. The population in this study were all immigration office employees. In this research, an analysis model is used Partial Least Square Structural Equation Modeling (PLS-SEM). In this study, the number of respondents was senior 676 immigration office employees. The sampling technique used in this research was simple random sampling. In this research, the data collection method used was the questionnaire method. The instrument used to measure this research variable is a 7-point Likert scale. Data processing in this research uses SmartPLS software. The stages of data analysis in this research are the outer model test which includes convergent validity, discriminant validity and composite reliability as well as inner model analysis, namely hypothesis testing.

Table 1. List of questions of questionnaire.

Variable	Item	Questions of questionnaire
Digital transformation (DT) (Sari et al., 2018; Syahril et al., 2022)	DT1	Organizations utilize digital technology to process data into information for decision-making
	DT2	Organizations use digitalization for product optimization
	DT3	Practice operational activities are carried out digitally
Service quality (SQ) (Alfarizi et al., 2023; Harwina et al., 2021)	SQ1	Employees are optimal in serving consumers
	SQ2	Employees can provide services according to consumer needs
	SQ3	Timely employee service responsiveness
User satisfaction (US) (Annamalai et al., 2011; Bismo et al., 2018)	US1	Users are satisfied with the service
	US2	Service quality meets user expectations
	US3	The organization provides facilities and services that suit user needs

4. Result and discussion

The characteristics of the research sample can be observed in **Table 2** below.

Table 2. Characteristics of the research sample.

Characteristics		Total	%
Age	<20 years	23	3.40%
	20–30 years	256	37.87%
	31–40 years	234	34.62%
	>40 years	163	24.11%
Gender	Male	434	64.20%
	Female	242	35.80%
Working period	<1 years	56	8.28%
	2–5 years	256	37.87%
	6–10 years	321	47.49%
	>10 years	43	6.36%
Education level	High school	54	7.99%
	Diploma	278	41.12%
	Post graduate	289	42.75%
	Master	55	8.14%

4.1. Outer model analysis

Outer model analysis is an evaluation of the relationship between variables and their indicators. **Table 3** following is a display of the SmartPLS output results:

Table 3. Validity and reliability testing.

Variable	Item	Loading	CR	AVE
Digital transformation (DT)	DT1	0.821	0.834	0.754
	DT2	0.815		
	DT3	0.823		
Service quality (SQ)	SQ1	0.809	0.823	0.732
	SQ2	0.843		
	SQ3	0.812		
User satisfaction (US)	US1	0.818	0.821	0.712
	US2	0.832		
	US3	0.816		

Note: CR means composite reliability; AVE means the average extracted.

4.2. Convergent validity

To test convergent validity, the outer loading value is used. An indicator is declared to meet convergent validity in the good category if the outer loading value is > 0.7, but an outer loading value between 0.5–0.6 is considered sufficient. The outer loading value of each indicator in the research variable appears in **Table 3**.

4.3. Discriminant validity

Discriminant validity is looking at and comparing discriminant validity and the square root of the average extracted (AVE). If the AVE square root value for each construct is greater than the correlation value between the construct and other variables

in the model, then it is said to have good discriminant validity values and the expected AVE value is >0.5. The AVE value for each variable is presented in **Table 3**. Based on the data presented in **Table 3** above, it is known that the AVE value for all variables is >0.5. Thus, it can be stated that each variable has good discriminant validity.

4.4. Forner-Larcker criteria (AVE root value and correlation between constructs)

Discriminant validity testing is carried out to prove whether indicators on a construct will have the largest loading factor on the construct it forms compared to the loading factor with another construct. This can be known through the Forner-Larcker criteria value or you can also use the value in the cross-table loadings. In this research, values are used from the Forner-Larcker criteria table (**Table 4**).

Table 4. Fornell-Larcker criterion analysis for checking discriminant validity.

Construct	Digital transformation	Service quality	User satisfaction
Digital transformation	0.786	-	-
Service quality	0.564	0.723	-
User satisfaction	0.456	0.453	0.715

Based on the results of convergent validity testing in **Table 3** above, it can be obtained that the value of the correlation between variables in each latent construct in this study has a higher value. high when compared to the correlation between other variables contained in this research. So, it can be seen that there is no multicollinearity problem between latent variables.

4.5. Composite reliability

Composite reliability is an index that shows the extent to which a measuring instrument can be trusted to be relied upon. Data that has composite reliability >0.7 has high reliability. The composite reliability value of each variable is shown in the following table. Based on the data presented in **Table 3** above, it can be seen that the composite reliability value for all variables is >0.7. These results indicate that each variable has met composite reliability so it can be concluded that all variables have a high level of reliability.

4.6. Cronbach's alpha

The reliability test with composite reliability above can be strengthened by using Cronbach's alpha value. A variable can be declared reliable or meets Cronbach's alpha if it has a Cronbach's alpha value >0.7. The Cronbach's alpha value of each variable appears in **Table 5**. Based on the data presented below in **Table 5**, it can be seen that Cronbach's alpha value of each variable is >0.7. Thus, these results can indicate that each research variable has met the requirements for Cronbach's alpha value, so it can be concluded that all variables have a high level of reliability.

Table 5. Cronbach's alpha testing.

Variable	Item	Loading	Cronbach's alpha
Digital transformation (DT)	DT1	0.821	0.712
	DT2	0.815	
	DT3	0.823	
Service quality (SQ)	SQ1	0.809	0.717
	SQ2	0.843	
	SQ3	0.812	
User satisfaction (US)	US1	0.818	0.734
	US2	0.832	
	US8	0.816	

4.7. Hypothesis testing

Based on the analysis of the data that has been processed, the results can be used to answer the hypothesis in this research. Hypothesis testing in this research was carried out by looking at the *t*-statistic values and probability values. The research hypothesis can be declared accepted if the *t* statistic is > 1.96 and the probability value is < 0.05. The following are the output results from SmartPLS shown in **Table 6** and **Figure 2**.

$\beta = 0.241$, $t\text{-value} = 2.200$

$\beta = 0.522$, $t\text{-value} = 3.167$
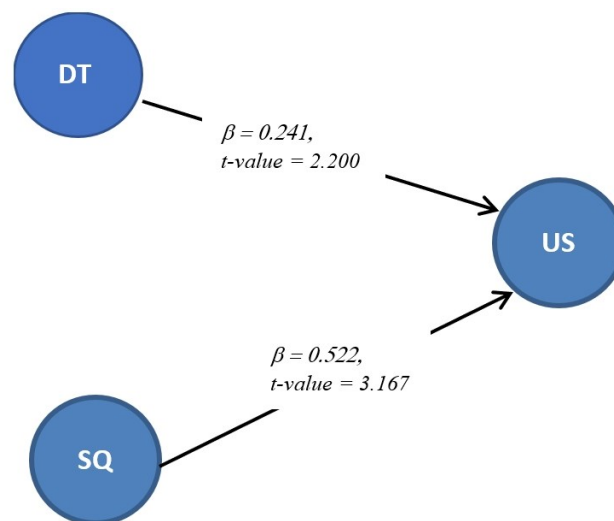
Figure 2. Hypothesis testing.

The results of hypothesis testing on the influence of each independent variable on the dependent variable can be described as follows in **Table 6**.

Table 6. Direct effect analysis.

Hs	Path	β	*p*-value	*t*-value	supported
H_1	LB → EC	0.241	0.000	2.220	Yes
H_3	CS → EC	0.522	0.000	3.167	Yes

4.8. The relationship between digital transformation and user satisfaction

Based on the results of data analysis, it was obtained that the *p*-value was 0.000, less than 0.050, so it was concluded that there was a positive and significant relationship. Digital transformation will also make it easier for users to obtain information related to the products or services offered without time and place restrictions. Service can also be carried out more optimally, both in the purchase transaction process, delivery, and complaints about obstacles that may occur and how to overcome them. That way, digital transformation will be able to increase user satisfaction. After the transformation, all systems will be computerized and integrated (Akıl and Ungan, 2022). Service to users and marketing can also run more optimally. Apart from that, the possibility of human error can also be minimized. This is an effective and efficient effort, not only in time and costs but also in energy. Digital transformation will make it easy to access all information about the products and services offered. You can get the latest information updates and after-sales services in real-time, which will certainly make customers comfortable and satisfied with your information service. Digital transformation in the workplace refers to the process of using digital technology to change the way work is done and improve business efficiency in the work environment (Rumiyati and Syafarudin, 2021). The benefits of digital transformation are increasing efficiency and productivity at work. Facilitating access to information and speeding up decision-making. Improving the quality of products or services offered. Increasing customer satisfaction and customer loyalty. Expanding market reach and increasing business growth potential (Eckert et al., 2022). Reducing operational costs and speeding up returns. investment. Improving data security and privacy within immigration. Users will find it easier to find information on goods or services for a business with digital transformation, without time and place limitations. Apart from that, services in the purchasing transaction process will be easier and can be done anywhere. So, this will increase user satisfaction in obtaining the goods or services offered (Akmal et al., 2023). As digital technology develops today, of course, organizations/companies will easily see changes in user behaviour in existing market segments. In this way, organizations will easily provide innovative solutions to user needs, for example; during a pandemic like this, you will see the tendency of users to buy online, so the immigration will provide free shipping services with certain conditions if users buy online. The results of this research are in line with other research stating that digital transformation affects variables and other variables so that the results of business contributions research influence user satisfaction. Digital transformation is a change in handling work using information technology, The results of this research conclude that customer satisfaction as an intervening variable indirectly mediates the positive relationship between digital transformation variables on user loyalty.

4.9. The relationship between service quality and user satisfaction

Based on the results of data analysis, it was obtained that the *p*-value was 0.000, less than 0.050, so it was concluded that there was a positive and significant relationship. Service quality has a positive effect on customer satisfaction, which means that the higher the level of service quality, the higher the level of satisfaction

felt by customers. Service quality is an important factor and root that can provide satisfaction for customers which is related to the results of word-of-mouth behaviour such as complaints, Recommendations and exchanges or transfers explains customer satisfaction is part of marketing and plays an important role in the market (Annamalai et al., 2011). A customer-oriented marketing strategy requires companies to understand customer behaviour and meet customer needs to achieve customer satisfaction (Khan et al., 2020). Service quality is an effort to create comfort for customers so that customers are expected. Customer expectations are an important factor, service quality that is closer to customer satisfaction will provide more expectations and vice versa. Service quality, namely providing perfection of money service, is carried out by service providers to meet customer needs and the accuracy of delivery to balance it expectations of customers or users (Eckert et al., 2022). Service quality is an important thing that needs to be considered and maximized so that it can survive and become a choice for users. User satisfaction is the degree to which users feel pleasure or disappointment resulting from comparing perceived product performance (or results) with their expectations. In essence, the goal of business is to create and retain users. All efforts are directed towards one goal, namely achieving user satisfaction to create user loyalty (Akmal et al., 2023).

If the service provided to customers is as expected, it will provide satisfaction. Thus, if service quality continues to be improved, customers will feel satisfied (Sari et al., 2018). Service quality is an assessment that refers to the core of the service, namely the service provider itself or the entire service organization that can fulfil the requirements (Syahril et al., 2022). Users who not only prioritize quality products but users who prefer to enjoy the comfort of the services provided. Service quality is a dynamic condition relating to products, services, people, processes and environments that can meet or exceed user expectations. Service quality is the expected level of excellence and control over this level of excellence to fulfil user desires, thus service providers can increase user satisfaction by minimizing or eliminating unpleasant user experiences (Haudi et al., 2022). Service quality is the actions or actions of a person or organization to provide satisfaction to users. Service is an activity that occurs in direct interaction between a person and another person and provides satisfaction to users (Juwaini et al., 2022). Referring to the definition of service quality, the concept of service quality is the responsiveness and reality of the services provided by the immigrants.

4.10. Theoretical, practical and managerial implications

In starting digital transformation, it is important to involve all parties involved such as management, employees and business partners. Digital transformation can run smoothly and achieve the desired goals by involving all related parties, such as management, employees and business partners (Kumalasari et al., 2022). In the increasingly developing digital era, digital transformation in the workplace can be the key to success for companies to remain competitive and grow. However, starting digital transformation is not easy and needs to be done carefully (Rahman et al., 2021). Evaluating needs and objectives, selecting the right technology, employee training, implementation and testing, as well as regular monitoring and maintenance are the

stages that need to be carried out to achieve success. Therefore, companies need to involve all parties involved in this process and take appropriate actions to start digital transformation in the workplace. Strong digital capabilities can help companies optimize performance, and increase productivity and competitiveness. Digital transformation opens up various new business and economic opportunities. Companies can take advantage of these opportunities by conducting market research and identifying the right market segments so that they can create products and services that are innovative and in line with customer needs. In facing digital transformation, companies must be able to adopt the right strategy to optimize new business and economic opportunities, and at the same time face existing challenges. Creating user satisfaction is very important for a person or immigrants to form a good image of immigration.

Organizations will benefit from digital transformation, including increasing customer satisfaction, customers will easily access all information about the products and services offered. Can get the latest information updates and after-sales services in real-time, which of course will make customers comfortable and satisfied with information services. Can find out changes in consumer behaviour. As digital technology develops today, of course, organizations/companies will easily see changes in consumer behaviour in existing market segments. In this way, organizations will easily provide innovative solutions to consumer needs, for example; during a pandemic like this, you will see the tendency of consumers to buy online, so the company will provide free shipping services with certain conditions if consumers buy online. Saving time and budget, the company uses digital technology so that all documents are in digital form without having to spend money on paper and storage space budgets. Apart from that, it can save time, when you have to coordinate between units, without any distance and time restrictions, all activities can be carried out simultaneously between units in the company. Without having to wait for news from other units, everything can be immediately seen and executed together, making it more effective and efficient. From the description above, digital transformation is not just the application of technology in organizational/company activities. However, digital transformation must enable the organization to change and develop every aspect of the organization by applying existing digital technology so that it can achieve the organization's vision and mission.

4.11. Research limitations

This research has limitations, namely that only 3 variables are analyzed, namely digital transformation, service quality and user satisfaction and there is still the potential for many variables that contribute to user satisfaction. This research method is quantitative and the research results are not necessarily the same if analyzed using qualitative methods. The population of this study is all immigration office employees and the results will not necessarily be the same as those of other populations and in other organizations. Analysis model used in this research, the analysis model used is Partial Least Square Structural Equation Modelling (PLS-SEM) and the results are not necessarily the same if analyzed using CB SEM. The sampling technique used in this research is simple random sampling and the results may not be the same if other

sampling methods are used. The instrument used to measure this research variable is a 7-point Likert scale and the results are not necessarily the same if using another Likert scale. Data processing in this research uses SmartPLS software and the results are not necessarily the same if analyzed using other software.

5. Conclusion

Based on the data analysis found that digital transformation has a positive and significant relationship with user satisfaction at the immigration department and service quality has a positive and significant relationship with user satisfaction (US) at the immigration department. Digital transformation is a process of fundamental change in an organization or business in the use of digital technology to increase value for customers and stakeholders as a whole. This digital transformation can change the way a business works, including management, operations and marketing. Digital transformation is very important to maintain the existence and growth of businesses and the economy. Emerging challenges and opportunities must be faced with strong digital capabilities and the use of the latest technology. With the right steps, businesses and the economy in Indonesia can grow and develop in this digital era. Thus, quality service does not guarantee that users will be satisfied because the quality of service in other companies that are the object of research has a very weak influence on user satisfaction so it does not create loyalty to users. The cause of the very weak influence of service quality can be analyzed because other factors outside the service quality factor have a stronger influence on creating user satisfaction and thus loyalty. Based on several studies that have been conducted, it indicates that service quality can have a direct influence on user satisfaction, but the service quality factor may have a very weak influence compared to other factors outside the service quality factor which of course has a stronger influence on user satisfaction. Creating user satisfaction is very important for a person or immigrants to form a good image of immigration. If the immigration's image is good, it will certainly increase interest in customers to buy products from the immigration or in this case department stores, understanding satisfaction among users can be used to improve marketing strategy to win the competitive market. The researcher suggests that this research can be used as a reference for subsequent research and further develop other variables that influence user satisfaction, such as price or product quality variables so that later it can be known how much the contribution of other variables influences user satisfaction. This research provides recommendations to the immigration department to implement digital transformation and service quality to achieve user satisfaction. Increasing user satisfaction with the integrated passport system will be achieved by implementing digital transformation variables and improving service quality. This digital transformation in public services is solely to be able to continue to answer the needs of society which continues to develop while still providing public services that are easy, fast and responsive. Hopefully, all public service delivery units can continue to be committed to providing excellent public services to the community.

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