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Investigating the role of information technology system integration, user acceptance and information technology satisfaction and security on efficiency and accuracy of immigration documents processing

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A B S T R A C T

Technological transformation not only changes the way we communicate and do business but also changes the way the government provides public services to the community. One manifestation of this transformation is the implementation of Information Systems (IS) for public services, to provide services that are more efficient, transparent, and responsive. By implementing an IS, the administration and data management process becomes more efficient. This research method uses a quantitative method approach, The research data are obtained by distributing online questionnaires via the Google Form platform and the respondents for this research were 576 senior employees of the immigration department in Indonesia who were determined using a simple random sampling method. Research data analysis uses structural equation modeling (SEM). The variables in this research are the dependent variables, namely information Technology System integration and Information Technology System Security (ITSS). The dependent variable is the Efficiency and Accuracy of Immigration Documents (EAID) and User Acceptance and Satisfaction (UAS). Based on data analysis, it is concluded that TSS integration had a positive and significant relationship with EAID, Information technology system integration had a positive and significant relationship with UAS, ITSS had a positive and significant relationship with EAID, ITSS had a positive and significant relationship with UAS and user acceptance and satisfaction had a positive and substantial relationship with the EAID. Implementing IS opens the door to more efficient, transparent, and responsive public services. By leveraging technology, governments can streamline administrative processes, increase citizen participation, and create an environment where every citizen can benefit from better public services. In carrying out this transformation, the government must remain focused on data security, privacy, and community empowerment so that people truly feel the positive impact of technological developments in public services.

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1. Introduction

Information technology security governance is a primary need for public agencies in the Industrial Revolution 4.0. The Industrial Revolution 4.0 is present in people's lives by bringing the trend of automation and the Internet of Things. An era where the use of technology, big data, and cloud computing supports the application of automation and building relationships to exchange information over the network (Ganbold et al., 2021). If an agency does not implement information technology governance well, it will encounter various obstacles in carrying out operational activities. Cyber security threats and disturbances are the shared responsibility of every public agency. Agencies need to build a commitment and culture of information security awareness starting from top-level management to technical employees. All parties in the agency must contribute optimally and proportionally according to their respective roles. Good information security can only be achieved through the implementation of several technical efforts supported by various appropriate management policies and procedures (Henningsson et al., 2018).

The role of information systems in business is important in this digital era. Advances in computer-based information technology in the last decade require every company owner to adopt information systems. In the digital era that continues to develop, information systems have become an integral part of all aspects of human life. In the business world, information systems have an important role in optimizing company operations. Information systems help companies collect, store, and manage information effectively (Taherdoost, 2018). Well-structured data can make good and timely decisions. For example, with a good information system, a company can integrate all information from various departments and offer decision-makers fast and easy access to important information. In general, information systems can be developed from scratch for purposes that differ significantly from standard electronic data processing systems (Oktal et al., 2016). However, there are still many business owners who do not try to apply the development of decision support systems.

In the digital era, information technology has an important role in improving performance management in modern organizations. The rapid development of information technology in the modern era cannot be separated from its function in creating, storing, conveying, and disseminating information. The use of electronic devices such as computers, televisions, and smartphones has made information technology much needed by the wider community. Especially in the business world, information technology makes it possible to expand business reach in various regions. With the application of information technology, information can be accessed anytime and anywhere, enabling wider and more efficient recognition (Isaac et al., 2018). The increasingly advanced development of information technology has great benefits for organizations and individuals. The use of information technology can affect the work of employees in an agency. Work can be completed well and quickly thanks to developments in information technology, which makes it easier to send and access data via telecommunications (Ratna et al., 2020). Apart from making work easier, information technology also allows employees to continue to improve their abilities and insight, saves costs, and provides other benefits. Therefore, information technology helps organizations improve capabilities that contribute to avoiding waste of materials, energy, manpower, money, and time when carrying out tasks (Hou et al., 2012).

Management providing information related to public resource management activities to parties who need the information is the key to making better decisions. Information technology allows managers to collect, analyze, and make better use of data. In addition, information technology also enables better team collaboration, faster communication, and access to information from anywhere, creating more adaptive and competitive organizations in the modern era (Chan et al., 2010). Many organizations rely on systems in their operational management, for example, how information systems can facilitate company activities, process finances, manage HR matters, and reach potential customers through digital marketing to build an online sales system. The era of the Internet of Things is changing the face of the world rapidly (Tessema & Cavus, 2024). When everything is connected and perfectly integrated into an information system, everything related to work and business is more easily accessible. In fact, without knowing the difference in place and time. The use of information systems has increased drastically in all lines of business. All to maintain the company's superiority so that it can continue to compete with its competitors. It is interesting to explore how companies emphasize the importance of integrated information systems and what benefits they provide for the continuity of their business (Laumer et al., 2017). In this digital era, information technology has a major impact on improving employee performance. Ease of access and available work tools help improve employee performance. However, to utilize information technology effectively, employees must understand and learn it well. In conditions where almost all activities are carried out digitally, understanding information technology becomes very important (Othman et al., 2022). Information technology enables more modern, efficient, and fast interaction between individuals in various aspects of life. The function of information technology includes increasing efficiency in daily activities. It involves data capture, storage, processing, transmission, retrieval, and data generation. Information technology allows organizations to objectively measure employee performance and optimize routine tasks, reduce administration, and increase productivity. The immigration department also needs integration of information systems that are used to facilitate the employee formation process, so that all aspects of work can be more effective and efficient (Zayed et al., 2021). Therefore, companies need to carry out digital transformation so that businesses can become more productive and profitable. In today's increasingly sophisticated and modern era, everything is perfectly integrated into an information system, and everything related to business work is easier to access.

2. Literature Review

2.1 Information Technology System Integration

Technology integration is the use of information and communications technology within general content areas in education to enable them to learn computer and technology skills (Park & Kim, 2014). In general, it is the curriculum that controls the use of technology, not the other way around. Information system integration is a technical process of combining various components or subsystems into one large unified system (Bhuasiri et al., 2016). This procedure connects several separate components that are sometimes produced by different vendors. Integrated systems also add value to a system by providing new functions. Integrated systems are the right solution for companies that have difficulty operating several separate subsystems (Yang et al., 2004). You also don't need to waste energy and waste time re-entering data into each system manually (Rukhiran et al., 2023).

Placing organization data centrally in one system and location will reduce operational costs, especially related to the installation, procurement, and maintenance of various systems. The costs to update or repair when problems arise are also cheaper (Chang et al., 2012). On the other hand, having all data stored in one location also saves computer storage space. You don't need to bother storing important company data on a laptop or PC (which sometimes takes up too much memory) because you can access it at any time from the system. System integration unites all processes in a large system from upstream to downstream (Simon, 2007). With centralized data placement, business stages can be simpler. Increased access to information and the ability to analyze data in detail provides benefits to businesses. Operational costs are reduced, sales increase, and profits are greater. In the end, the company can expand its business (Dehgani & Navimipour, 2019).

2.2 Information Technology System Security

An information system is a system used to manage data in an organization or company. Information systems are needed by an agency or company because they can make the work of a company or agency more systematic and focused (Sihombing, 2024). Many companies are also starting to use computer networks to store sensitive or valuable data as time goes by. The reasons are quite varied, ranging from ease of accessing data to larger storage capacity. Because its role is very important for the company, information system security needs to be maintained properly. Information system security itself is all actions taken to ensure that data in a system is protected from threats (Nhan et al., 2023).

Threats can come in the form of attacks from outside, such as hacking, viruses, or malware, or from within, such as data leaks by unscrupulous employees (Wang et al., 2003). These threats cannot be considered trivial because they can cause significant losses to the organization. Some of the losses include loss of important data and information, damage to the system, and even loss of reputation. In an increasingly advanced digital era, information systems play an important role in everyday life. Information systems are the foundation of various business activities, government, education, and even personal life (Meechang et al., 2020). However, increasingly sophisticated technology also brings new challenges in securing information systems from rapidly growing security threats. Information system security is a top priority in an increasingly complex digital era. Evolving security threats demand continued efforts to protect data and infrastructure (Mekadmi & Louati, 2018). By adopting appropriate security strategies and increasing awareness about cyber security among users, organizations can be better prepared to face threats and maintain the integrity of information systems (Sadoughi et al., 2013).

2.3 User Acceptance and Satisfaction

User satisfaction can be interpreted as efforts to fulfill something or make something adequate, or the basic needs and standards of users, as for the definition of user satisfaction (Kelly & Palaniappan, 2019). User satisfaction is the fulfillment of user information related to the user's response or attitude towards system interaction. User satisfaction is feeling satisfied after using the system 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 (Widiantoro et al., 2022). User acceptance can be defined as the desire of a group of users to utilize Information Technology (IT) designed to help their work (Sausi et al., 2021). Lack of user acceptance will greatly influence the success of a new Information System (IS). Therefore, user acceptance must be seen as a central factor that will determine the success or failure of an IS project. To predict user acceptance in the IS field, researchers created a model that can describe user acceptance.

User satisfaction can be interpreted as meaning that users must be satisfied with certain things they want and need. This is to the opinion expressed by Schnaars, namely that the aim of forming a company is to create a sense of user or customer satisfaction (Hadi et al., 2023). 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 their expectations regarding that quality. 1 According to Kotler, the meaning of user satisfaction is a feeling of pleasure or disappointment that a person has which comes from the results of his impression between the perceived performance of a product and his expectations. It can be understood that satisfaction is a feeling of pleasure or getting what someone wants about something (Yusof et al., 2008).

Information system user satisfaction can be used as a benchmark for the success of an information system. End user satisfaction then becomes part of the development of subsequent information system success models (Su et al., 2023). User satisfaction with an information system is how the user views the information system in real terms, but not the technical quality of the system. If users are not satisfied with an information system, it is difficult to consider the success of an information system. If the results obtained exceed expectations, of course, the user will feel very satisfied. The success of a company's information system depends on how the system is run, the ease of the system for its users, and the use of the technology (Nelson et al., 2005; Alsyouf et al., 2023).

2.4 Efficiency and Accuracy

The concepts of efficiency and effectiveness have different meanings. Efficiency focuses more on achieving great results with as little sacrifice as possible. Meanwhile, the definition of effectiveness is more focused on the goals achieved without attaching importance to the sacrifices incurred (Aji et al., 2024). The concepts of efficiency and effectiveness have different meanings. Efficiency focuses more on achieving large results with as little sacrifice as possible. Meanwhile, the definition of effectiveness is more focused on the goals achieved without attaching importance to the sacrifices incurred. Effectiveness is the ability to choose the right goals or equipment to achieve the goals that have been set (Kim & Kim, 2024). Effectiveness is a condition that implies the occurrence of a desired effect or consequence, so the action is said to be effective if it causes the desired effect or achieves the intended purpose.

Effectiveness is a description of the level of success or excellence in achieving predetermined targets and the relationship between various values. This understanding of effectiveness is more output-oriented, while the problem of using input is less of a major concern. If efficiency is linked to effectiveness, then even though there is an increase in effectiveness, efficiency does not necessarily increase. Effectiveness is as follows, the communication process achieves the planned goals by the budgeted costs, the specified time, and the specified number of personnel (Purwanto et al., 2023).

Effectiveness is as follows: effectiveness is measurement in the sense of achieving targets or objectives. Efficiency is an effort in production to eradicate all waste of materials and labor as well as detrimental phenomena (Abugabah et al., 2009). Furthermore, the definition of efficiency continues to expand to cover almost all fields of science. Working efficiently is working with as little movement, effort, time, and fatigue as possible. Efficiency is the ability to minimize the use of resources in achieving organizational goals. A person who acts efficiently can minimize the cost of required resources. Work efficiency is the implementation of certain methods without reducing the objective, namely the easiest way to do it, the cheapest, the shortest in time, the lightest in load, and the shortest in distance. Work efficiency is also a comparison between work and the results achieved (Ganbold et al., 2021)Work efficiency is the implementation of certain methods without reducing the objective, namely the easiest way to do it, cheapest in cost, shortest in time, lightest in load and shortest in distance.

3. Hypothesis development

3.1 Relationship between Information Technology System Integration (ITSI) and Efficiency and Accuracy of Immigration Documents (EAID)

Several previous studies found that the ITSI variable had a positive and significant relationship with Efficiency and Accuracy (Henningsson et al., 2018). This result is supported by other research which concluded that ITSI had a positive and significant relationship with Efficiency and Accuracy (Praditya et al., 2023). Increasing ITSI will encourage increasing the Efficiency and Accuracy of variables. Implementing ITSI in organizations will encourage a significant increase in Efficiency and accuracy (Yusof et al., 2008). Empowering ITSI variables will encourage an increase in the Efficiency and Accuracy variables. Based on the results of previous research, this research hypothesis was prepared as follows

H_1: *ITSI has a positive and significant relationship to the EAID.*

3.2 Relationship between Information Technology System Integration (ITSI) and User Acceptance and Satisfaction (UAS)

Several previous studies found that the ITSI had a positive and significant relationship with UAS (Nelson et al., (2005). This result was supported by other research which concluded that ITSI had a positive and significant relationship with UAS. Increasing ITSI will encourage an increase in the UAS variables (Othman et al., 2022). Implementing ITSI in organizations will encourage a significant increase in UAS (Meechang et al., 2020). Empowering ITSI variables will encourage an increase in UAS variables.

Based on the results of previous research, this research hypothesis was prepared as follows

H_2: *ITSI has a positive and significant relationship with UAS.*

3.3 Relationship between Information Technology System Security (ITSS) and Efficiency and Accuracy of Immigration Documents (EAID)

Several previous studies found that the Information Technology System Security variable had a positive and significant relationship with Efficiency and Accuracy (Tessema & Cavus, 2024). This result is supported by other research which concluded that Information Technology System Security has a positive and significant relationship to Efficiency and Accuracy. Increasing Information Technology System Security will encourage increasing the Efficiency and Accuracy of variables (Wang et al., 2003). Implementation of Information Technology System Security in organizations will encourage a significant increase in Efficiency and Accuracy (Nelson et al., (2005). Empowerment of Information Technology System Security variables will encourage an increase in the Efficiency and Accuracy variables. Based on the results of previous research, this research hypothesis was prepared as follows

H_3: *ITSS has a positive and significant relationship to the EAID.*

3.4 Relationship between Information Technology System Security (ITSS) and User Acceptance and Satisfaction (UAS)

Several previous studies found that the Information Technology System Security variable had a positive and significant relationship with User Acceptance and Satisfaction (Bhuasiri et al., 2016). This result was supported by other research which concluded that Information Technology System Security had a positive and significant relationship with User Acceptance and Satisfaction (Fahmig et al., 2022). Improving Information Technology System Security will encourage an increase in the User Acceptance and Satisfaction variables (Ganbold et al., 2021) Implementation of Information Technology System Security in organizations will encourage a significant increase in User Acceptance and Satisfaction. Empowerment of Information Technology System Security variables will encourage an increase in User Acceptance and Satisfaction variables (Rukhiran et al., 2023). Based on the results of previous research, this research hypothesis was prepared as follows,

H_4: *ITSS has a positive and significant relationship with UAS.*

3.5 Relationship between User Acceptance and Satisfaction and Efficiency (UASE) and Accuracy of Immigration Documents (AID)

Several previous studies found that the UAS variables had a positive and significant relationship to Efficiency and Accuracy (Bhuasiri et al., 2016). This result was supported by other research which concluded that UAS had a positive and significant relationship to Efficiency and Accuracy. Increasing user Acceptance and Satisfaction will encourage increasing the Efficiency and Accuracy variables (Widiantoro et al., 2022). Implementing UAS in organizations will encourage a significant increase in Efficiency and Accuracy (Ratna et al., 2020). Empowering UAS variables will encourage an increase in the Efficiency and Accuracy variables (Praditya, 2019). Based on the results of previous research, this research hypothesis was prepared as follows,

H_5: *UAS have a positive and significant relationship to the EAID.*

4. Method

This research method uses a quantitative method approach, research data is obtained by distributing online questionnaires via the Google Form platform. The questionnaire is designed to contain statement items on a Likert scale of 1 to 7. A 7-point Likert scale can minimize measurement errors and be more precise. The Likert scale used in this research is (1) strongly disagree, (2) disagree, (3) quite disagree, (4) Neutral, (5) quite agree, (6) agree, (7) Strongly agree. The respondents for this research were 576 senior employees of the immigration department in Indonesia who were determined using a simple random sampling method. Research data analysis uses the partial least squares (PLS) structural equation modeling (SEM) approach with data processing tools using SmartPLS 4.0 software. The variables in this research are the dependent variables, namely information Technology System integration and Information Technology System Security. The dependent variable is the Efficiency and Accuracy of Immigration Documents and User Acceptance and Satisfaction. The stages of data analysis are validity testing, reliability testing, and significance testing or hypothesis testing.

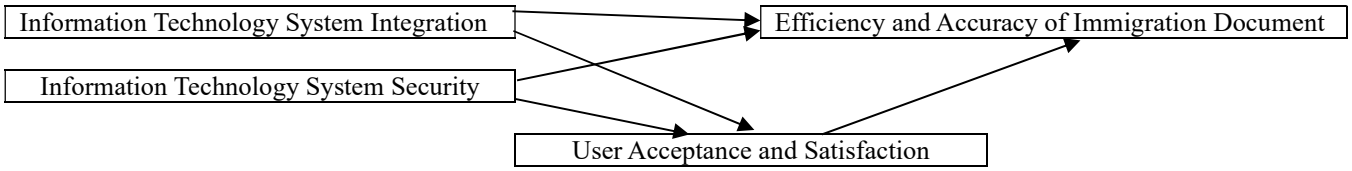

Fig. 1. Model of Causal Relationships Between Variables

5. Result and Discussion

5.1 Model of Causal Relationships Between Variables

The first stage of data analysis is creating a research model using SmartPLS 4.0 software. The variables in this research are the dependent variables, namely collaborative governance, and multiple stakeholder Involvement and the dependent variable is the quality of immigration services. The results of the research model are displayed in Fig. 1.

5.2 Validity test

The validity test shows that the outer loading value of each indicator meets the requirements, namely with a minimum value of 0.70, which means that the measurement item is valid, reflecting the measurement of each variable in the research. Fig. 2 shows the results of processing data using SmartPLS 4. All values are above 0.70, as seen from the value of the outer loading factor or correlation between constructs and variables. This states that there is a high relationship between the latent variables and the constructs and no constructs have been removed from the model. These indicators will then be evaluated to see whether they are appropriate or valid, and the study will proceed to the next validity testing stage.

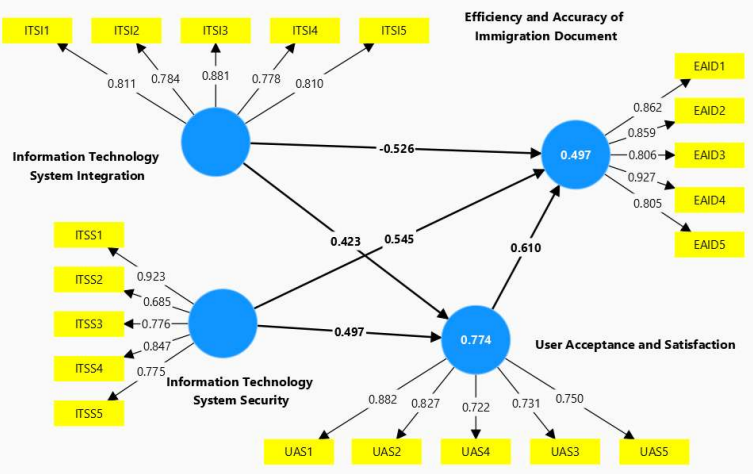

Fig. 2. Validity Testing

5.3 Reliability Test and AVE Value (Average Variance Extracted)

The reliability test can be seen from the minimum composite reliability value of 0.70, Cronbach's Alpha minimum value of 0.70, and AVE (Average Variance Extracted) with a value of more than 0.50, which means that the measuring tool or instrument as a whole is consistent or reliable in measuring variables.

Table 1
Reliability Test Results and AVE Values

	Cronbach alpha	Composite Reliability	AVE
Information Technology System Integration	0.824	0.832	0.712
Information Technology System Security	0.827	0.821	0.756
Efficiency and Accuracy of Immigration Document	0.812	0.812	0.723
User Acceptance and Satisfaction	0.864	0.872	0.732
	0.812	0.831	0.782

The model has good discriminant validity if the cross-loading value of each indicator on a latent variable has a value greater than the cross-loading value of other variables. From the results obtained, it can be said that the indicators used in this research have good discriminant validity. good where the indicator on that variable has a greater value than the indicators on other variables. The Cronbach's Alpha and Composite Reliability values obtained, obtained values for all variables above 0.70, indicating good reliability. These results show how stable and consistent the research instrument is. So all variables/constructs in this research are good, and each measurement statement for this variable has a high level of dependence.

5.4 Statistical Collinearity Test (VIF)

The statistical collinearity test can be seen from the VIF value which is <5, which means the measuring instrument meets the requirements and is reliable. Based on the results of the Collinearity Statistics (VIF) test, all indicators for each variable have a value < 5. So it can be concluded that all indicators meet the requirements and are reliable for use in this research.

5.5 Hypothesis testing

It will be determined whether there is a significant relationship between the independent and dependent variables in this hypothesis test (bootstrapping). Testing path coefficients, which represent coefficient parameters and significant t statistical values, is needed to test this hypothesis. Regarding the relationship between research variables, information will be provided by the significance of the parameters. The limit for accepting or rejecting the proposed hypothesis is Probability 0.05. Based on the results of data processing that has been carried out, we can answer the hypotheses in this research, namely by carrying out T-statistics tests and P-values. It can be said that the research hypothesis is accepted if the T-statistics value is > 1.96 and the P-values are < 0.05. The results of hypothesis testing are shown in Fig. 3.

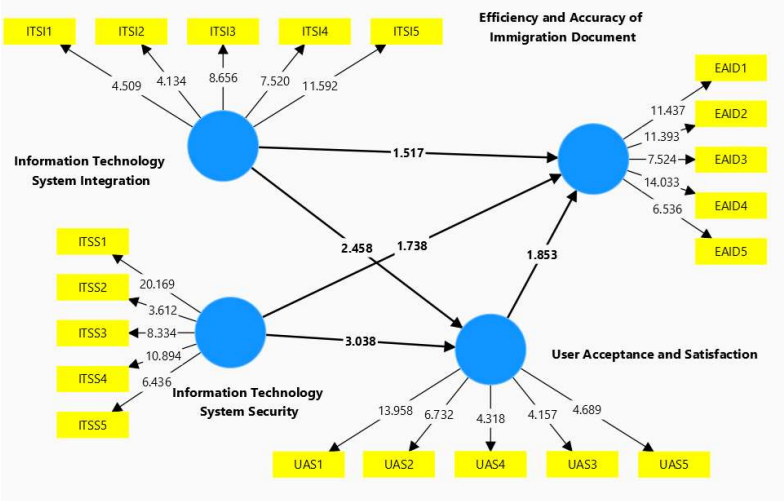

Fig. 3. Hypothesis Testing

Table 2
Data hasil Path Coefficient

Hypothesis	T Value	P Value	Result
H1: ITSI → EAID	1.517	0.000	Supported
H2: ITSI → UAS	2.458	0.000	Supported
H3: ITS → EAID	1.738	0.000	Supported
H4: ITSS → UAS	3.308	0.000	Supported
H5: UAS → EAID	1.853	0.000	Supported

5.5.1 Relationship between ITSI and EAID

Based on the results of the partial least square structural equation modeling (PLS-SEM) analysis, the p-value of 0.000 is smaller than 0.050, so it is concluded that the ITSI variable had a positive and significant relationship with EAID. This result is supported by other research which concluded that ITSI had a positive and significant relationship with EAID (Othman et al., 2022). Increasing ITSI will encourage increasing the Efficiency and Accuracy of information. Implementing ITSI in organizations will encourage a significant increase in Efficiency and Accuracy. Empowering ITSI factors will encourage an increase in the Efficiency and Accuracy variables.

Technology integration has changed the landscape of business and daily life dramatically, not only from an economic but also from a social perspective. This article has discussed the social and economic impact evaluation that comes with technology integration, detailing how data is a key element in this evaluation process. Additionally, we will dive into the significant benefits that technological advances provide in increasing productivity in various sectors. The integration of technology has shaped a new social order by changing the way society communicates, interacts, and engages (Zayed et al., 2021). Social impact evaluations include not only changes in communication patterns but also implications for social structures, work culture, and digital inclusivity. Economically, technology integration has become a catalyst for growth and efficiency. The economic impact evaluation includes

increasing productivity, reducing operational costs, and creating new jobs. However, these impacts also raise questions regarding economic inequality and shifts in employment structures (Bhuasiri et al., 2016). Data elements play a central role in evaluating the social and economic impacts of technology integration. Data helps measure behavioral changes, analyze consumer trends, and empirically assess economic impact. By carefully collecting and analyzing data, we can better understand how technology shapes society and the economy. Technological advances provide significant productivity benefits (Yang et al., 2004). Automation, artificial intelligence, and data analysis help companies improve operational efficiency. On the other hand, it also allows workers to focus on tasks that require human intelligence, increasing the value of work and creativity. Technology integration not only impacts economic aspects and productivity but also paves the way for innovation that can improve the quality of life. In the fields of health, education, and the environment, technology provides new solutions and empowers society to achieve its maximum potential.

5.5.2 Relationship between ITSI and UAS

Based on the results of the partial least square structural equation modeling (PLS-SEM) analysis, the p-value of 0.000 is smaller than 0.050, so it is concluded that the ITSI had a positive and significant relationship with UAS. This result was supported by other research which concluded that ITSI had a positive and significant relationship with UAS (Chang et al., 2012). Increasing ITSI will encourage an increase in the UAS variables. Implementing ITSI in organizations will encourage a significant increase in UAS. Empowering ITSI variables will encourage an increase in UAS factors.

There are many productivity benefits offered by technology integration, we can continue to optimize these benefits while maintaining a balance between technological progress and its impact on society. Through evaluating social and economic impacts, we can capture the complex dynamics that arise from technology integration (Sihombing, 2024). Changes in consumer behavior, the formation of new markets, and the emergence of creative industries are the focal points in understanding the economic transformation that is taking place. Technology has also become a driver of digital inclusion, providing wider access to information and opportunities. However, it should be noted that unequal access to technology is still a challenge. This evaluation provides a basis for formulating policies that ensure the benefits of technology can be felt by all levels of society. In the context of productivity, technology integration provides inevitable benefits (Sausi et al., 2021). Process automation and data analysis improve a company's operational efficiency, enabling more timely and accurate decision-making. Meanwhile, increasing productivity also has a positive impact on overall economic growth.

5.5.3 Relationship between ITSS and EAID

Based on the results of the partial least square structural equation modeling (PLS-SEM) analysis, the p-value of 0.000 is smaller than 0.050, so it is concluded that the ITSS variable had a positive and significant relationship to Efficiency and Accuracy. This result is supported by other research which concluded that ITSS has a positive and significant relationship with Efficiency and Accuracy (Oktal et al., 2016). Increasing ITSS will encourage increasing the Efficiency and Accuracy of variables. Implementation of ITSS in organizations will encourage a significant increase in Efficiency and Accuracy. Empowerment of ITSS factors will encourage an increase in the Efficiency and Accuracy variables.

When planning a data security system, data security aspects must be taken into account so that our privacy is guaranteed. Based on the main principles of the scientific basis for information system security, there are 3 main principles. If these three principles are adhered to, then information security can be guaranteed (Laumer et al., 2017). These 3 principles are: 1. Confidentiality: only authorized users can see the information 2. Integrity: Only authorized users can edit data. 3. Availability: Authorized users can access data whenever they request it. The risk of damage, loss, or exposure of data to unwanted third parties increases the more company data is stored, managed, and shared. As a result, maintaining information security is very important (Bhuasiri et al., 2016). Data leaks and system failures can impact business profitability and productivity/efficiency, therefore organizations must maintain the security of their information assets. To ensure business continuity, reduce company losses, increase return on investment, and maximize business potential, data security protects information from various risks. Information can now be sent electronically, so systems are needed to ensure the right users receive and send the information.

Business information security to prevent fraud or detect fraud in information-based systems. Digital security is a measure to protect online identity, data, and digital assets such as photos, passwords, and PINs (Sohirin et al., 2024). Although often equated with cyber security, digital security is broader and includes the protection of all aspects of information technology and networks, where the information itself has no physical meaning. Information Security aims to ensure and ensure the integrity, availability, and confidentiality of information management. Information security management must begin when an information system is built, not just as a complement to a system.

5.5.4 Relationship between ITSS and UAS

Based on the results of the partial least square structural equation modeling (PLS-SEM) analysis, the p-value of 0.000 is smaller than 0.050, so it is concluded that the ITSS variable had a positive and significant relationship with UAS. This result was supported by other research which concluded that ITSS had a positive and significant relationship with UAS (Ganbold et al., 2021). Improving ITSS will encourage an increase in the UAS factors. Implementation of ITSS in organizations will encourage a significant increase in UAS. Empowerment of ITSS variables will encourage an increase in UAS factors.

Information System Security Objectives Currently, the role of information technology in a company or other organization is no longer limited to supporting/assisting the company's business processes. However, information technology has become the driving wheel of business processes in the form of implementing information systems in the company (Kamaruddin et al., 2024). Apart from this, information has also become an important company asset. Therefore, security is needed which aims to ensure the continuity of the information system in a company and guarantee the integrity and confidentiality of information produced by the system used. Information system security is very important. Now, anyone can access an unlimited variety of information just by having an internet connection and a supporting device (Taherdoost, 2018). Even though it is very profitable, the ease of accessing this information can also be dangerous. Many irresponsible parties often abuse this convenience. Even though it harms various parties and violates other people's privacy and security, cybercriminals never hesitate to attack. Therefore, information system security must be implemented, especially for companies that store a lot of valuable data.

5.5.5 Relationship between UAS and Efficiency and Accuracy of Immigration Documents (AID)

Based on the results of the partial least square structural equation modeling (PLS-SEM) analysis, the p-value of 0.000 is smaller than 0.050, so it is concluded that the UAS variables had a positive and significant relationship to Efficiency and Accuracy. This result was supported by other research which concluded that UAS had a positive and significant relationship to Efficiency and Accuracy (Oktal et al., 2016). Increasing user Acceptance and Satisfaction will encourage increasing the Efficiency and Accuracy variables. Implementing UAS in organizations will encourage a significant increase in Efficiency and Accuracy. Empowering UAS variables will encourage an increase in the Efficiency and Accuracy variables. The use of communication technology today is also very important. Apart from bringing service providers closer to service recipients, technology can also speed up the process without being hindered by time and place (Isaac et al., 2018). Paperless, reducing face-to-face, saving on transportation costs (reducing traffic density), less parking required, and much more can be saved by utilizing information technology.
Discussion

Information systems are an important part of every modern organization or company. With the development of information technology, information system security has become more important than before. Information system security refers to the protection of data and information stored and processed by information systems (Zayed et al., 2021). It is important to know and understand how information system security can be improved to protect data and information from possible threats. In managing information system security, it is also important to have an information security policy that is clear and can be understood by all users. The policy should cover preventive actions, corrective actions, and responses to security incidents. Apart from that, organizations must also carry out information security training for information system users so that they understand how important information system security is and how to maintain that security. With today's technological advances, information security is an important concern for individuals, businesses, and governments (Meechang et al., 2020). The digital era brings many benefits and opportunities, but it also presents complex security challenges. Information security is not only a matter of protecting sensitive data but also ensuring the integrity of information and the systems that store, process, and transmit it.

Apart from protecting personal data, good information security services also can help immigrants avoid cyber attacks. They will implement a strong security system in the company, such as an intrusion detection system, firewall, and antivirus software. Another way is to prevent unauthorized access to systems and networks (Syahril et al., 2022). With strong authentication measures in place, companies can ensure that access to sensitive systems and data can only be carried out by authorized personnel. Computers can become slow when viruses enter them. This will disrupt work efficiency. This results in a lot of time being wasted due to attacks on the system and causing losses to the company. Securing computers from cyber attacks will increase productivity because working hours can be utilized to the maximum.

6. Managerial implications

Technological transformation not only changes the way we communicate and do business but also changes the way the government provides public services to the community. One manifestation of this transformation is the implementation of Information Systems for public services, to provide services that are more efficient, transparent, and responsive. By implementing an Information System, the administration and data management process becomes more efficient. We can access public information and services anytime and anywhere through online platforms. Tax payments, business permits, and submission of administrative documents can be done easily without having to come directly to a government office. This not only reduces time and costs but also increases

the accessibility of public services for the community, especially those in remote areas. Furthermore, the implementation of Information Systems for public services brings greater transparency in the decision-making process and allocation of public resources. Information regarding government policies, budgets, and performance can be openly accessed by the public. In this way, citizens can better understand how the government uses public funds and measure its performance. This encourages accountability and active community participation in the decision-making process. Through Information Systems, the government can develop public services that are better and in line with community needs. Data and feedback from citizens can be used to analyze trends, understand needs, and design more effective policies. For example, this system can help in managing health services, education, and infrastructure more carefully based on data collected in real-time. One of the main challenges in implementing Information Systems for public services is data security and privacy. Therefore, protecting citizens' data must be a top priority. Governments must ensure that these systems are equipped with strong security measures, such as data encryption and double authentication mechanisms, to protect citizens' personal information from potential cyber security threats. By providing easier access and transparency of information, citizens can play an active role in the decision-making process and monitoring government performance. Online public participation, such as through discussion forums and electronic voting, can be a means of increasing citizen involvement and understanding of public issues. Implementation of Information Systems opens the door to more efficient, transparent, and responsive public services. By leveraging technology, governments can streamline administrative processes, increase citizen participation, and create an environment where every citizen can benefit from better public services. In carrying out this transformation, the government needs to remain focused on data security, privacy, and community empowerment so that people truly feel the positive impact of technological developments in public services.

7. Practical Implications

The immigration department can come up with new methods and innovative techniques. There is a lot of constant change and evolution of preferences and requirements that customers want to apply. Business owners must of course be able to provide customer requests, and implementation of information systems must be able to provide many benefits in business, not only that, information systems can help in controlling internal and external processes. A well-organized business information system needs to be improved by the Immigration Department. Apart from that, to reach large numbers of customers, business information systems can provide a strong grip for the future. Information systems can help in analyzing independent processes and enable organized work activities. Therefore, information systems make it easy for companies to understand how companies can produce, develop, and sell goods and services.

Information systems can store activity logs, these logs are used to store various problems experienced by the company as well as solutions to face the same problems. Information systems also make it easier to store operational data, important documents, and other forms of data. Storing data manually involves a lot of time, effort, and money. Sophisticated information systems can store them in databases; therefore, the data search process can be simplified. The role of the immigration department's information system in business can be implemented effectively by implementing good communication between superiors and subordinates. Information systems work better because they store documents and files in folders that can be accessed and shared by employees. Therefore, the flow of information between management and lower-level employees can be continuously monitored. Employees are also part of the recruitment process; this convenience leads to an increase in human resources who feel motivated and committed to carrying out their tasks.

8. Conclusion

Based on data analysis, it is concluded that information technology system integration has a positive and significant relationship to the efficiency and accuracy of immigration documents, Information technology system integration has a positive and significant relationship to user acceptance and satisfaction, Information technology system security has a positive and significant relationship with efficiency. Accuracy of immigration documents, information technology system security has a positive and significant relationship with user acceptance and satisfaction and user acceptance and satisfaction has a positive and significant relationship with the efficiency and accuracy of immigration documents. Technological transformation not only changes the way we communicate and do business but also changes the way the government provides public services to the community. One manifestation of this transformation is the implementation of Information Systems for public services, to provide services that are more efficient, transparent, and responsive. By implementing an Information System, the administration and data management process becomes more efficient. Implementation of Information Systems opens the door to more efficient, transparent, and responsive public services. By leveraging technology, governments can streamline administrative processes, increase citizen participation, and create an environment where every citizen can benefit from better public services. In carrying out this transformation, the government needs to remain focused on data security, privacy, and community empowerment so that people truly feel the positive impact of technological developments in public services.

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