

THE ROLE OF RECEIVING TECHNOLOGY ON EMPLOYEE PERFORMANCE: JOB SATISFACTION AS MEDIATION (STUDY ON THE GOVERNMENT OF TERNATE CITY)

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ABSTRACT

Introduction/Main Objectives: The development of information technology today has resulted in the acceptance of technology being strongly influenced by transformational leadership, system quality, and facilitating conditions, as well as how it can affect employee performance and job satisfaction. **Background Problems:** Research on how job satisfaction mediates the relationship between employee performance and acceptance still needs to be improved. This research discusses how transformational leadership, facilitating conditions, and system quality shape technology acceptance and employee performance, primarily determined by job satisfaction, especially the mediating effect of job satisfaction on the relationship between technology acceptance and employee performance. **Novelty:** Inconsistencies both in theory and empirically making it necessary to re-test transformational leadership, system quality, and conditions that facilitate technology acceptance and analyze the effect of technology acceptance on employee performance through job satisfaction, both directly and indirectly, in a study of the Ternate City Government. **Research Method:** 117 respondents were involved in this study. The respondents were determined through purposive sampling. The data were analyzed using partial least squares (PLS) version 3. Seven hypotheses were proposed in this study. **Findings:** The research findings indicate that system quality and facilitating conditions can predict technology acceptance and employee performance can predict job satisfaction. The results of this study confirm the indirect mediating function of job satisfaction in the relationship between technology acceptance and employee performance. **Conclusion:** The Municipal Government of Ternate must improve system information management and offer even better facilitating conditions for implementation to increase the acceptance of the technology.

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INTRODUCTION

Science and technology have experienced very rapid developments, due to the demand and the growing needs of humans in all fields. This is marked by increasingly sophisticated equipment that supports facilities and infrastructure to meet all human needs. One of the developments in technology is the advancement of Information and Communication Technology (ICT). ICT advances have had a major and significant impact on human life.

DeLone & McLean (1992) stated that measuring an information system's success is influenced by the quality of the system and the information which jointly or separately affects user satisfaction, and also the system's use itself, so that it will affect individual performance (individual impact) and ultimately affect organizational performance. This study attempts to examine the factors that can influence the successful implementation of a government management information system (SIMP) based on the three factors above, but according to Indrayani & Gatningsih (2013), the three factors are transformational leadership, system quality, and facilitating conditions. These three critical success factors (CSFs) are different from the measurement of the success of the information system developed by DeLone & McLean (1992). However, this study's purpose is the same, namely, to measure the extent to which the factors for the successful implementation of an information system will have an effect on employee performance, and how this will ultimately affect organizational performance. Information technology in an organization is used for improving the employees' performance and it is hoped that this will improve the organization's performance. Therefore, the application of information technology in an organization needs to pay attention to the extent to which the successful application of the system will improve

the performance of both individual employees and the organization as a whole.

System quality is one of the factors influencing user acceptance and IT satisfaction (Islam, 2012; Saba, 2012; Tajuddin et al., 2013) and it is a key factor in the acceptance of an IT system because of individual experiences. As for the consistency of the program, it may have a huge effect on the ability of the customer to adopt an information system (Park et al., 2012). System consistency refers to the quality of the information system component (Cheng, 2012), and refers to the precision, convenience, performance, versatility, durability, and sensitivity of the information system's functionality (Salameh, Ahmad, Zulhumadi, & Abubakar, 2018).

According to Tat-Kei Ho, (2002), the adoption of e-government would trigger a paradigm change in terms of public services, from the hierarchical model to the model of e-government in terms of structure, operational structures, administration, style of leadership, internal and external contacts, strategies and the values of its operations, and the provision of services. The implementation of e-government requires major changes in business processes and greater technical support than other forms of change in the public sector require (Husin, Loghmani, & Abidin, 2017).

According to Park & Rainey (2012) for the application of e-government, leadership that offers a strong vision and strategy will be an important success factor for determining and developing the values and ideas, and achieving the goals and strategies that will be implemented and shared with all the stakeholders. In line with the opinion of Park & Rainey (2012), Kim et al., (2009), Prybutok et al., (2008), Luk (2009), Cho et al., (2011), Arokiasamy et al., (2014) and Thannimalai & Raman (2018) also argue that strong leadership and/or management support is needed for the implementation and application of

e-government and ICT to be successful. Previous research has also mostly examined transformational leadership at the organizational level, such as a research by Ke & Wei (2008), Alshamaila et al., (2013), Shao et al., (2016) and Shao et al., (2017), so this research is specifically about transformational leadership's influence on technology acceptance at the individual level (Shao, 2019).

Regarding research on the variable facilitating conditions, research conducted by Aggelidis & Chatzoglou, (2009), Gu & Siu (2009), Laumer et al., (2010), Teo (2010) and Sambasivan et al., (2010) prove there is a positive influence between facilitating conditions and technology acceptance models. Different results found a trivial relationship between facilitating conditions and the intention to use technology (Fu et al., 2006), perceived benefits, and ease of use of technology on its acceptance (Fathema, Shannon, & Ross, 2015). One of the facilitating conditions is the extent to which one trusts that the organizational and technical infrastructure provided can support the system (Venkatesh, Morris, Davis, & Davis, 2003).

Many studies conclude that an investment in information technology can lead to added value for the organization, but the consequences are not very clear for the end-users, in regard to their personal experience and their workplace satisfaction, as pointed out by Mariani et al., (2013). Furthermore, Mariani et al., (2013) explained that job satisfaction can also be influenced by changes in the adoption of new information systems that result in changes in business processes, work practices, and also relationships with colleagues. The inconsistencies in the previous research regarding technology acceptance and performance have caused researchers to use job satisfaction as an intervening variable. According to Rothman & Coetzer (2002), employee satisfaction with the

aspects of their work can affect their motivation, which will ultimately affect their performance. Although the relationship between job satisfaction and performance is often the subject of research in the organizational behavior literature (Barakat, Lorenz, Ramsey, & Cretoiu, 2015), in this study, the authors will examine the effect of technology acceptance on job satisfaction, which will ultimately affect performance.

Based on the results of research by Cheng, (2019), Mariani et al., (2013), Wamba & Bhattacharya (2015) and Attar & Sweis (2010), it can be said that a positive relationship between the application and acceptance of technology and job satisfaction does exist, but the opposite was found in research by Lee et al., (1995) who studied company employees in Nebraska, the United States. The results show that the direct effect of receiving information systems on job satisfaction is not significant, but indirectly, the role of satisfaction with information systems is mediated between the two.

One of the goals of the performance appraisals carried out by local governments is to increase their employees' satisfaction, while also including how effective the employee's performance is. Robbins & Judge (2009) stated that job satisfaction at work will affect performance. The research results of Hendri (2019), Maharani et al., (2013), Hayati & Caniago (2012), and Barakat et al., (2015) find that employee performance is positively and significantly influenced by job satisfaction, but different things were found by Pawirosumarto et al., (2017) for hotel and resort employees, while Kalkavan & Katrinli (2014) and Fu & Deshpande (2014), in case studies of insurance companies, found that there is an absent relationship and influence between job satisfaction and employee performance.

Based on the results of the descriptions, both theoretical and empirical, there are still inconsistencies in the results obtained by the previous

studies, which are an indication of a research gap in the literature. This is one of the reasons for re-analyzing the effect of transformational leadership, system quality, and facilitating conditions on technology acceptance as well as analyzing the effect of technology acceptance on employee performance through job satisfaction, either directly or indirectly, in a case study of the Ternate City Government.

LITERATURE REVIEW

This study investigates the relationship between transformational leadership, system quality, facilitating conditions, acceptance of information technology, job satisfaction, and performance. In other words, this study highlights six basic theoretical concepts that later will be elaborated on how they influence a few others.

Transformational Leadership

One of the main theoretical concepts of this research is transformational leadership. According to Korejan & Shahbazi (2016), Ahmad & Saad (2020) and Kurniawan, Kusnayain, Aulisaina, & Hakim, (2021), leaders who work to develop new concepts and viewpoints for their organization's growth and prosperity are said to be practicing transformational leadership. The term "transformational leadership" refers to a leader's actions, influential qualities, authority, and the environmental factors that positively affect employee performance, such as inspiring staff to put in more effort than is necessary and to take pleasure in their work, as explained by Hoxha (2015), Adi & Sukmawati, (2020) and Bak, Jin, & McDonald III, (2022).

System Quality

Furthermore, it is also necessary to highlight how the literature discusses the basic theoretical concept of system quality (Wang & Teo, 2020).

Although it seems that this concept is in line with the concept of product quality, due to the nature of the final product, this research directly focuses on a product that builds a system (Apridiyanti, Suharman, & Ardianto, 2020). System quality refers to an information system's desired features (Vijai, 2018). Others add "delivered" system quality and this refers to the condition of the product at the moment the consumer purchases it (Ambrose & Eynon, 1998).

Facilitating Condition

The next theoretical concept in this study is facilitating condition. The degree to which users perceive that organizations provide suitable infrastructure to make using the new technology easier is referred to as the "facilitating conditions." (To, Lee, & Lam, 2018). It is then obvious that this concept surfaces in the field of information systems (Miraz, Hasan, Rekabder, & Akhter, 2022; Purnamasari, Amran, & Hartanto, 2022). No wonder that the consumer's view of the tools and assistance at their disposal to carry out a behavior is referred to as the enabling state (Rahi, Ghani, Alnaser, & Ngah, 2018).

Technology Acceptance

Moving on to the next concept, this research also highlights the concept of technology acceptance. The adoption and usage of technologies in the manner for which they are intended is seen as technology acceptance, according to Koral Gümüsoglu & Akay (2017) and Wickramasinghe & Wickramasekara (2022). In other words, the willingness of a person to use technology for the purposes it is intended to be used for is referred to as technology acceptance (Teo, 2016; Alqudah et al., 2022).

Job Satisfaction

Numerous studies have discussed job satisfaction. This study, however, specifies this theoretical

concept in the area of information systems, where employees are satisfied with using the product of the information system. Hence, job satisfaction still needs to be highlighted briefly, so that its relevance to other concepts can be hypothesized. In general, the emotional attitude a worker has toward his or her job is referred to as job satisfaction (Negoro & Wibowo, 2021). According to Huang (2019) and Qing, Asif, Hussain, & Jameel (2020), job satisfaction is characterized as a positive emotional state brought on by an evaluation of one's work or professional experiences. Another opinion sees job satisfaction as a multifaceted positive or negative reaction to the work environment (Dalal & Credé, 2013; Ingsih, Prayitno, Waluyo, & Suhana, 2020; Fahri, Alting, Syahdan, Asril Arilaha, & Buamonabot, 2021).

Performance

The last theoretical concept in this research is performance. Similar to job satisfaction, performance has been frequently discussed over the last three decades. This research treats this concept as how performance is influenced by the use of information technology that is provided by, and its use mandated by, an institution. Performance is defined as the likelihood that future actions will be carried out successfully in order to meet the goals and targets (Lebas, 1995; Felício, Samagaio, & Rodrigues, 2021). Also, performance is the capacity to exhibit a complicated series of actions that have been learned through learning processes (Smith & Shirley, 1978; Huy & Phuc, 2020; Ahyaruddin & Akbar, 2016).

Transformational leadership and technology acceptance

Park & Rainey (2012) and Handayani, Pandansari, Aji, Wahyuni, & Hapsari, (2022) state that in the application of e-government, a

leader who has a strong vision and strategy will be an important success factor for determining and developing values, ideas, achieving goals and strategies that will be implemented and then shared with all the stakeholders. Cho et al., (2011) and Alameri & Alrajawy (2020) assessed that the success of implementing information systems is influenced by transformational leadership styles. Transformational leadership, according to Robbins & Judge (2009), demands a leader who inspires his/her subordinates to not prioritize their interests but rather the good of the organization, and has a tremendous impact on influencing the personalities of his/her subordinates. Research by Schepers et al., (2005), Cho et al., (2011), Elkhani et al., (2014) found a positive relationship between transformational leadership and technology acceptance models.

H₁: Transformational leadership significantly influences technology acceptance

System quality and technology acceptance

System quality is one of the factors that influence user acceptance of, and satisfaction with, information technology (Islam, 2012; Saba, 2012; Tajuddin et al., 2013) and is a main factor in the information system acceptance, because of individual experiences with regards to system quality that significantly impact on a user's willingness to accept the information system (Park et al., 2012; Stelter, Kaping, Oschinsky, & Niehaves, 2020). The quality of the system is perceived to be how smoothly the system performs tasks which are in line with the job's objectives (Venkatesh & Davis, 2000; Hawash, Mokhtar, & Yusof, 2021). Previous research by McFarland & Hamilton (2006), Ahn et al., (2007), Kim et al., (2008), Cheng (2012), and Alshibly (2014) found that there is a positive relationship with the construct on Technology Acceptance Model (TAM).

H2: The system's quality effect significantly affects technology acceptance

Facilitating conditions and technology acceptance

Facilitating condition is the extent to which one trusts that the organizational and technical infrastructure provided can support the system (Venkatesh et al., 2003; Alkhwalidi & Al Eshoush, 2022; Mulugo et al., 2020). Venkatesh et al., (2003) used indicators of available resources, such as the availability of manuals, users' knowledge of using information systems, compatibility with other systems, and someone's assistance if they encountered difficulties in using information systems. Research by Teo (2010), Aggelidis & Chatzoglou (2009), Gu et al., (2009), and Sambasivan et al., (2010) finds a positive relationship within the construct of the technology acceptance model.

H3: Facilitating conditions significantly influence technology acceptance

Technology Acceptance and Job Satisfaction

Mariani et al., (2013) explain that job satisfaction can also be affected by changes in the adoption of new information systems, which can result in changes to business processes, work practices, and also relationships with colleagues. This satisfaction is like any other reaction that can be impacted by the context of the job's duties and also elements of the work environment, with an equivalence to the information technology's tools (Kock & Moqbel, 2021). Luthans (2012) states that job satisfaction is a series of rules related to pleasant and unpleasant feelings related to a person's work. Likewise, with changes in the work processes caused by the application of new information systems such as state treasury and budget system SPAN (Kelerey, Djatmika, & Siswanto, 2020). Mariani et al., (2013), Wamba & Bhattacharya (2015) and Attar & Sweis (2010)

find a positive relationship between the application and acceptance of technology for individuals' job satisfaction.

H4: Technology acceptance significantly influences employee Job Satisfaction

Job Satisfaction and Employee Performance

Robbins & Judge (2009) and Holbert, Madhakomala, Saparuddin, & Timotius (2021) state that a workplace's job satisfaction will affect performance. The same thing is stated by Sutrisno (2011) and Abdirahman, Najeemdeen, Abidemi, & Ahmad, (2020) that job satisfaction is an important thing that must be considered with regard to performance. Research by Maharani et al., (2013), Hayati & Caniago (2012), and Barakat et al., (2015) finds that job satisfaction positively and significantly relates to employee performance.

H5: Job satisfaction significantly influences employees' performance

Technology Acceptance and Employee Performance

To ensure organizations achieve their goals, organizational leaders must ensure that their employees accept the use of technology in the workplace as a supporting tool for improving employee performance (Houger, 2006; Yamin, 2020). Goodhue & Thompson (1995) and Saleem, Malik, Qureshi, Farid, & Qamar (2021) state that an individual's performance achievement is related to the achievement of a series of tasks with the support of existing information systems. Ahearne et al., (2008) and Ali & Younes (2013) find that technology acceptance has a positive effect on employee performance. The role of the use and acceptance of information technology is what will determine employee performance.

H6: Technology acceptance significantly affects employees' performance

Technology Acceptance, Job Satisfaction, and Employee Performance

According to Makin et al., (1996), the employees' satisfaction with aspects of their work can affect their motivation, which will ultimately affect their performance. With the organizations' development of information systems that can be accepted by their users, it is hoped that this will increase employee job satisfaction through devices that support their work processes, which in turn will also improve the employees' performance (Almohtaseb, Almahameed, Sharari, & Dabbouri, 2021; Alsuwaidi, Alshurideh, Al Kurdi, & Salloum, 2021). With greater job satisfaction, employees are expected to provide greater performance so that the organizational goals will be achieved (Kelerey et al., 2020; Qureshi, Thebo, ur Rehman, Shahbaz, & Sohu, 2020).

H7: There is a significant effect between technology acceptance and employees' performance through job satisfaction's mediation

METHOD, DATA, AND ANALYSIS

This research was a quantitative study. The population in this study were employees who worked for the Ternate City Government. Determination of the sample was by using a purposive sampling approach with the condition that the respondents were civil servants, specifically in the financial unit section who operated the regional management information system (SIMDA) in 33 regional apparatus organizations (OPD) of the Ternate City Government. Respondents in this study gave their informed consent to be involved in this study.

Research Data

A questionnaire was distributed to 130 potential respondents, but only 117 replies from the respondents could be used and processed. The

validation of the data was carried out by looking at the results of the survey that had been entered based on the organizational unit, unit/section, and also the completeness of the data from the respondents. The profile of the respondents in this study is shown in Table 1.

Data Collection

The data were classed as primary data, which had been obtained from the respondents through a questionnaire survey. This questionnaire was divided into two sections: The first asked the respondents to fill out their profile information and the second requested them to fill in the questionnaire. The respondents in this study were State Civil Servants in the Ternate City Regional Apparatus Organization (OPD) who worked in the financial units and units in 33 OPDs. This population was selected because this city had the most accessible internet, so the technology they used was exposed. Using them as the population, it was expected to demonstrate how receptive they were to the level of technology that they used working for a state apparatus in a small urban city. As civil servants, they were expected to perform just as well as their counterparts in the big cities in Java.

Measurements of transformational leadership's effect on increasing the success of the information system were achieved through four I (4I), namely (1) ideal influence, transformational leaders instill confidence, pride, and respect in IS users by acting well and setting an example, (2) inspiring motivation, transformational leaders increase system user confidence in using IS by articulating an attractive vision and expressing high levels of hope and optimism about users' ability to use IS, (3) knowledgeable stimulation, transformational leaders can train or guide followers and provide individual support while listening to the concerns and needs of IS users, (4) personalized consideration, transformational

leaders can stimulate creative problem-solving skills of system users by challenging them to tackle old problems using new perspectives, making them take risks, and asking system users for ideas for better use of IS (Cho et al., 2011). The measurements for the quality of this system were its ease of access, along with the system's reliability, security, accuracy, and features. The measurement of these facilitating conditions also incorporated the availability of a user's manual, someone's help, user knowledge, and training. The measurement of the technology's acceptance consisted of its ease of use and perceived benefits. The factors that affected job satisfaction, according to Tsai et al., (2007) and SHRM (2014), were salary/compensation, the nature of the job and pressure, opportunities for individual career development, job security and protection, communication between superiors and subordinates, co-workers and the work itself. The employees' performance indicators (Minister of Finance Decree on Performance Management within the Ministry of Finance Number 467/KMK.01 / 2014) consisted of their service orientation, integrity, discipline, commitment, and cooperation. All these constructs were measured on a five-point Likert scale. All the measurement items were taken from previous studies after studying the development of the variables under study.

Convergent validity, discriminant validity, as well as reliability tests were carried out to measure both the inner and outer models. A model had good convergent validity if the outer loading value was > 0.6 (Chin & Newsted, 1999), and an average variance extracted (AVE) > 0.5 , according to Hair et al., (2010), and composite

reliability > 0.7 (Hair et al., 2011). Furthermore, Cronbach's alpha should be greater than 0.7 (Bougie & Sekaran, 2019) for each variable, indicating that they would all be sufficiently reliable and the fittest item for each variable. This can be seen in Figure 1 and Table 2.

Research Method

The data were analyzed using structural equation modeling (SEM) through the partial least squares (PLS) approach using the SmartPLS 3.0 program. SEM is a statistical system for testing and approximating underlying relationships by integrating factor analysis and path analysis (Wright, 1922).

RESULT AND DISCUSSION

Based on Table 2, the respondents in this study numbered 117 people, with the majority of the respondents being women, (73 people or 62%). With regard to their age, the majority of the respondents were between the ages of 31-35 (50% or 43 respondents), with most of them being university graduates in the bachelor category and most of the respondents have been employed for between 6 to 15 years (72% or 62 respondents).

The test results in Table 3 show that the AVE variable's root value was higher than the correlation value among the variables (Hair et al., 2016). Hence, it can be claimed that this measurement model met the discriminant validity. In several viewpoints of the assessment carried out on the construct's validity and reliability, it was concluded that the entire indicators could be used as measures of the variables in this study.

Table 1. Profile of Respondents

Profile	Description	Percentage	Frequency
Gender	Male	44	38
	Female	73	62
Age	< 25 y.o.	5	4
	26-30 y.o.	23	20
	31-35 y.o.	50	43
	> 36 y.o.	39	33
Level of Education	S3/Doctor	0	0
	S2/Master	6	5
	S1/Bachelor	83	71
	Diploma	10	9
	High School/equals	18	15
Organizational Tenure	< 5 years	20	17
	6-15 years	72	62
	> 15 years	25	21
Structural Position	Finance Head Unit	25	21
	Finance Sub-head Unit	36	31
	Planning Sub-head Unit	26	22
	Treasury	30	26

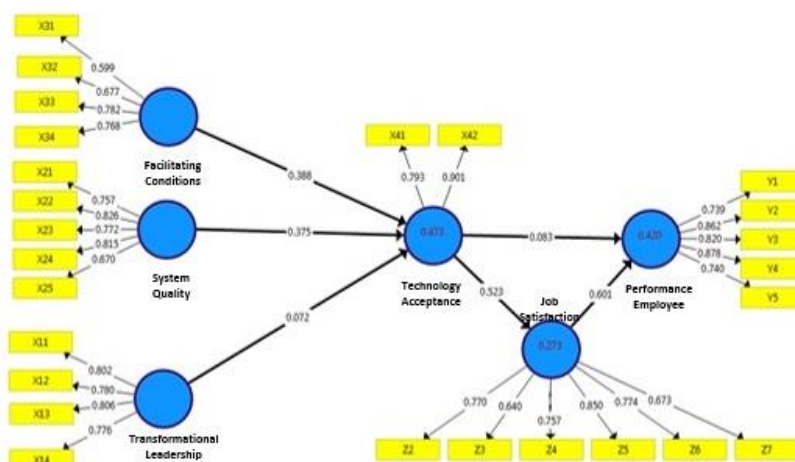
Source: Processed Data (2018)

Table 2. Results for Discriminant Validity

Construct	F C	S Q	TL	T A	J S	PE
FC	(0.710)					
SQ	0.460	(0.770)				
TL	0.431	0.345	(0.791)			
TA	0.592	0.578	0.459	(0.849)		
JS	0.551	0.428	0.368	0.523	(0.747)	
PE	0.436	0.339	0.442	0.397	0.644	(0.810)

Abbreviation: FC (**F**acilitating **C**onditions), SQ (System Quality), TL (Transformational Leadership),TA (**T**echnology **A**ceptance), JS (**J**ob **S**atisfaction), EP (**p**erformance **e**mployee)

Figure 1



Source: Processed Data (2018)

Table 3. Convergent and Reliability Test

Transformational Leadership (CA: 0.806; AVE: 0.626; CR: 0.870)		Job Satisfaction (CA: 0.840; AVE: 0.558; CR: 0.883)	
• Leaders give good examples	• 0.802	• The nature and pressure of work does not affect the quality/quantity of work	• 0.770
• Leaders instill confidence in employees	• 0.780	• Be satisfied with the career development opportunities provided/offered by the organization	• 0.640
• Leaders motivate employees with high optimism	• 0.806	• Organization provides work protection against risks in the workplace	• 0.757
• Leaders communicate the organization's vision well, with regard to the importance of SIMDA	• 0.776	• There is good communication with superiors at work.	• 0.850
		• Co-workers always help to complete tasks	• 0.774
System Quality (CA: 0.830; AVE: 0.593; CR: 0.879)		• The work material provided is in accordance with one's ability	• 0.673
• SIMDA is sufficiently responsive for data processing.	• 0.757	Performance (CA: 0.867; AVE: 0.656; CR: 0.904)	
• SIMDA is reliable for data processing	• 0.826	• Understanding the importance of the role of stakeholders in the organization	• 0.739
• Satisfied with SIMDA's performance	• 0.772	• Developing good relationships with stakeholders is needed	• 0.862
• SIMDA has a high level of security	• 0.815	• Understanding the code of ethics at work	• 0.820
• SIMDA is accurate when processing data	• 0.670	• Prioritizing official interests rather than personal and/or group interests	• 0.878
Facilitating Conditions (CA: 0.703; AVE: 0.505; CR: 0.801)		• Attempting to find various ways to improve the quality of the work	• 0.740
• The organization provides a manual about how to use SIMDA	• 0.599		
• The organization provides experts to teach how to use SIMDA	• 0.677		
• Owning knowledge to use SIMDA	• 0.782		
• The organization has a training program to study SIMDA	• 0.768		
Technology Acceptance (CA: 0.622; AVE: 0.721; CR: 0.837)			
• Easy to use	• 0.793		
• Easy to learn	• 0.901		

Abridgement: CA=Cronbach's Alpha, AVE=Average Variance Extracted, CR=Composite Reliability
Source: Processed Data (2018)

The model's fit was assessed from several calculations such as the coefficient of the model's determination (R^2), the goodness of fit index (GoF), and the value of f squared (f^2). The determination coefficient of the model was calculated employing the entire determination coefficient (R^2) from the model (Table 4). The R^2

value for the technology acceptance variable was 0.473. This value showed that the disparity in technology acceptance could be explained by transformational leadership, system quality, and the facilitating conditions at 47.3%, while the remainder would be explained by other variables. The R^2 for the job satisfaction variable was 0.273.

This value reflected that the difference in job satisfaction could be explained by technology acceptance at 27.3%, while the rest would be explicated by other variables. The R² for the employee performance was 0.420, indicating that the variation in employee performance was explained by technology acceptance and job satisfaction at 42.0%, while the remaining variables would be explained by others.

Hair et al., (2014) stated that overall, the determination coefficient would be considered to be low if it was 0.20, while the results of this model found the three coefficients to be more than 0.20. So that based on these results, the fit of the model was quite good. Calculating the model fit was done with the following formula:

$$R_m^2 = 1 - (1 - R_1^2) \dots (1 - R_n^2)$$

$$R_m^2 = 1 - (1 - 0.473)(1 - 0.273)(1 - 0.420)$$

$$R_m^2 = 1 - 0.222$$

$$R_m^2 = 0.778$$

The result showed that the inner model's Rm² value was 0.778, meaning that this study's model had a high model fit. The model's accuracy was 77.8%, which meant that the model's contribution to explaining those six variables' structural relationship was 77.8% and the rest would be expounded by other unstudied variables.

Table 4. R-Square

	R ²
Technology Acceptance	0.473
Job Satisfaction	0.273
Performance	0.420

Source: Processed Data (2018)

The model's fit was also obtained through the goodness of fit index. The fitness index (GoF) is defined as the geometric mean or root of the communality mean and the mean of R² for all the endogenous structures (Tenenhaus, Esposito, Chatelinc, & Lauro, 2005). The value of commonality was the same as the value of AVE.

The GoF index showed the predictive power of the overall model. The GoF value had an interval from 0 to 1. GoF values that were close to the number 1 indicated a good path model estimate (Akter, Ambra, & Ray, 2011). The lowest limit for providing good fit recommendations was 0.33. The GoF index for this research model was 0.487. Therefore, the structural model explaining the relationship between these three variables had good predictive power (fit). The inner model's analysis showed a good fit for the model in this study, which could then proceed to the next step, the testing of the hypotheses.

To better determine the density of the results of testing the hypotheses, the t-test was tested using a significance of 5% or 0.05 and 1% or 0.01. Each hypothesis would be supported if the t-value was above the t-table value. The t-table value was 1.96 at a significance level of 0.05, while the t-table value was 1.96 for a significance of 0.01. The beta coefficient (0 sample estimate) had a positive value, explaining the relationship between the two variables studied. In general, the results showed that five of the hypotheses proposed in this study were supported (H₂, H₃, H₄, H₅, and H₇) and two were not supported (H₁ and H₆).

Transformational leadership did not have a significant effect on technology acceptance, meaning that higher or stronger transformational leadership would not guarantee or affect the level of acceptance of the technology. The success factor of implementing the Regional Management Information System (SIMDA), in the form of transformational leadership, did not provide a significant increase in technology acceptance in the Ternate City Government. Transformational leadership in the environment of the Ternate City Government was not able to motivate the users of SIMDA, who were, on average, 35 to 45 years old, to improve their ability to learn new information systems. The age factor was an

intrinsic factor affecting the use of the new information system. The older a person is when learning an information system, the more difficult it is for them to process the complex stimuli and allocate attention to the information (Plude & Hoyer, 1986). The failure of the leadership to motivate the employees also resulted in the absence of the effect of this transformational leadership on technology acceptance. Many of the leaders in the regions feel that they do not quite understand the direction of policies that will be taken by the central leadership with the implementation of SIMDA in the future, so that leaders in the regions, especially in the City

Government of Ternate, have not been able to provide good examples in the success of SIMDA. This study's results are different from research conducted by Elkhani et al., (2014) which shows that the role of transformational leadership has a significant direct effect both on perceived benefits and on the ease of use of the dimensions of the Technology Acceptance Model (TAM). Although there was a difference in the way the variables were taken, the results supported the research by Schepers et al., (2005) and Cho et al., (2011), which showed that transformational leadership had no significant impact on technology acceptance.

Table 5 Results of Testing the Path Coefficient on the Inner Model

Relationship	Path Coefficient	Standard Deviation	t statistic	P
Direct Influence				
Transformational Leadership → Technology Acceptance	0.072	0.097	0.741	0.409
System Quality → Technology Acceptance	0.375	0.084	4.453	0.000
Facilitating Condition → Technology Acceptance	0.388	0.089	4.381	0.000
Technology Acceptance → Job Satisfaction	0.523	0.066	7.911	0.000
Technology Acceptance → Performance	0.083	0.088	0.946	0.325
Job Satisfaction → Performance	0.601	0.066	9.159	0.000
Indirect Influence				
Technology Acceptance → Performance	0.314	0.060	5.195	0.000

Source: Processed Data (2018)

The results showed that system quality impacted positively and significantly on technology acceptance. This meant that the higher and the better the quality of the SIMDA system was, the higher or better the acceptance of the technology was. The perception of the respondents, in terms of the most influential indicator of the quality of this system's variables, was the level of security, with an average value of 4.00. The respondents had a high level of confidence in the level of security of the SIMDA system. A high level of security was one of the most crucial factors for SIMDA's management, considering that SIMDA is a State Financial Management Information System that provides a database of all the state's financial transactions, so it must be safe from all forms of abuse, whether

viruses, spyware, attacks by hackers or abuse caused by users; all of which could cause losses to the state's finances or leakage of information regarding the existing data that could be misused and lead to criminal acts. Based on the loading factor value for the system's quality, the system's reliability indicator had the highest value, of 0.86. Even though it did not get a high average value for the respondents' perceptions, this indicator was important to build influence for the technology acceptance, so that the Ternate City Government must further improve the reliability of the SIMDA system so that it is even better at processing data. This finding supports the research conducted by McFarland & Hamilton (2006), Ahn et al., (2007), Kim et al., (2008), Cheng (2012) and Alshibly (2014), which showed

that system quality positively and significantly affects technology's acceptance. The finding in this study was not in line with Park et al., (2012) who found no influence between the quality of the system and the ease of use and its perceived benefits.

This study proved that the facilitating conditions had a positive and significant effect on technology acceptance, indicating that the better the technical and organizational facilitation conditions provided by the organization were, the better and higher the acceptance of the technology would be within the city's government. To reduce the barriers and problems in SIMDA's implementation, the provision of support and a high organizational role were some of the crucial factors that supported the successful implementation of the new information system. Organizations must quickly and precisely follow up on all the problems that occur when using SIMDA. The respondents' perceptions, in terms of the indicator that had an important influence on the facilitating conditions for technology's acceptance was the availability of a manual on how to use the SIMDA system, with an average value of 4.26. The respondents considered that the manual was important as a guide and learning tool for using SIMDA. The respondents could get information/knowledge directly from the manual, which was written using language and explanations that were easy and understandable even for laymen and those who were new to the information system. However, this manual must always be updated quickly if there is also an update to the system. As for the loading factor value of the facilitating conditions, the indicator of a person's or group's assistance was important for building a relationship with technology's acceptance, with a value of 0.85. This indicated that when studying how to use SIMDA, the assistance of experts who could also provide solutions to problems that arose was very

important. For this reason, the Ternate City Government must be able to improve the quality and number of their experts, to help their employees learn to operate SIMDA more easily and quickly.

The results are also in line with the results of research by Teo (2010), Aggelidis & Chatzoglou (2009), Gu et al., (2009) and Sambasivan et al., (2010), which stated that facilitating conditions had an influence technology acceptance. This finding was not in line with research by Fu et al., (2006) and Fathema et al., (2015) which found that the facilitation conditions did not have a significant relationship with technology acceptance.

Any changes in the application of information systems in the work environment would also result in changes to the way people work. This would also impact on the job satisfaction of the users of the information system itself (Mariani et al., 2013). DeLone & McLean (1992) also stated the same thing; using the information system would also affect individuals' job satisfaction. The results also showed that technology's acceptance positively and significantly influenced employees' job satisfaction in the Ternate City Government, meaning that the higher and better the level of technology acceptance was, the higher the job satisfaction of employees was. The perception of the respondents, in terms of the indicators for the technology acceptance variables that had the highest average and also the highest loading factor was the perceived benefit, with a value of 4.04, which meant that the respondents believed that using SIMDA would make their work easier, more useful, increase their productivity, increase their effectiveness and could also improve the users' performance. This perceived benefit indicator was important for building a relationship with the employees' job satisfaction. The employees believed that using SIMDA helped to support the smooth running of

their work. Therefore, this indicator of the benefits perceived by the users was the most important factor for technology acceptance, resulting in the employees' high job satisfaction. Although SIMDA is a mandatory information system (a system that is mandatory to use to support work), when designing an information system, the main beneficial role of making the system is a major concern. If the use of an information system provides little or no benefit, the users will be reluctant to use the information system, but on the other hand, if the users feel that the perceived benefits of using the information system are of great use, they will always use/utilize the information system to support their work. This study's results supported research conducted by Mariani et al., (2013), Wamba & Bhattacharya (2015) and Attar & Sweis (2010) which stated that technology acceptance positively and significantly affected job satisfaction. However, this study's results differ from the results of a study conducted by Lee et al., (1995) which found that the direct effect of receiving information systems on job satisfaction was not significant, but required a mediating role for satisfaction with the information system between the two.

DeLone & McLean (1992) state that the use and utilization of information systems will affect user satisfaction and ultimately affect individual performance. Job satisfaction will affect performance (Robbins & Judge, 2009), and this is the most important thing that must be considered regarding employee performance (Sutrisno, 2011). The Society for Human Resource Management (SHRM), which is the largest member organization for human resources (HR) in the world, always conducts surveys on which factors affect employees' job satisfaction. These factors are used by the organization as a preference/reference that must be considered when the organization develops and enhances initiatives for

the progress of the organization. Therefore, employee job satisfaction is the most important factor and this has always been a major highlight that demonstrates the success of an organization in managing its HR, which is an essential asset for the company in achieving its organizational goals (SHRM, 2014). The results showed that the level of job satisfaction of the employees of Ternate City's government positively and significantly impacted on the employees' performance. This indicates that the higher the employees' job satisfaction was, the higher their performance was. A satisfied employee will have an impact on psychological maturity which will lead to passion and enthusiasm in performing their jobs, achieving higher performance than an employee who is not satisfied (As'ad, 2004). The respondents' perceptions of the indicators for the job satisfaction variable that had the highest average values were coworkers and superior communication with subordinates with values of 4.21 and 4.08 respectively, while for the loading factor value for job satisfaction, communication indicators between superiors and subordinates had the highest scores, amounting to 0.778, which was important for building a relationship with the performance of the employees. This meant that in the implementation and completion of the daily tasks, colleagues were the most important thing because cohesiveness and support from them, and good communication between superiors and subordinates were also important things in completing their work. After all, good communication would minimize the occurrence of conflicts and support the smooth running of the work. It would also create a conducive atmosphere so that employees would feel comfortable at their work, which would increase employee performance as well. The results of this study are in accordance with research conducted by Maharani et al., (2013), Hayati & Caniago (2012), and Barakat et al., (2015), who found that

job satisfaction had a positive and significant relationship with employee performance, however Kalkavan & Katrinli (2014) and Fu & Deshpande (2014) found an absence of any influencing relationship between job satisfaction and performance.

To achieve organizational goals, organizational leaders must ensure that the employees accept the usage of technology in the workplace, as a supporting tool for improving employee performance (Houger, 2006). Goodhue & Thompson (1995) state that individual performance achievement is related to the achievement of a series of tasks with support from existing information systems. Therefore, the acceptance of technology by the employees of the Ternate City Government is needed to support and improve their performance. The results showed that technology's acceptance had not had a significant impact on the performance of the employees. This meant that a higher level of technology acceptance did not improve the performance of the employees of the Ternate City Government. The respondents assumed that the system was still not easy to use, and it was difficult to learn how to use it because this required more effort spent studying it, and it was also very different from the old systems/applications that were previously used. These constraints interfered with and hindered the acceptance of the technology, which resulted in no improvement in the employees' performance. This study's results do not support a study conducted by Ahearne et al., (2008) and Ali & Younes (2013), which indicated a significant positive effect between technology's acceptance and an individual's or an employee's performance. However, this study is in line with the research of Lucas Jr & Spitler (1999) who highlighted that the performance of the employees is not supported by using TAM.

Employee satisfaction with aspects of their work can affect their motivation, which in turn

will affect their performance (Makin et al., 1996). The development of information systems by organizations that can be accepted by their users is expected to increase the employees' job satisfaction with the devices that support their work processes, which in turn will also improve the employees' performance. Higher employee job satisfaction is expected to provide higher employee performance, so that the institutional goals will be attained. The results indicate that employees' job satisfaction mediates between technology's acceptance and employees' performance, which is tested through Hypothesis 7. There is an ancillary effect from technology's acceptance on the performance of employees through job satisfaction. Testing the direct effect between technology acceptance and employee performance showed insignificant results, and indirect testing through the mediation of the job satisfaction variables showed significant results. According to Baron & Kennys (1986), there is full/perfect mediation. Based on the existing findings, job satisfaction is an important variable that successfully mediates technology acceptance and employee performance. This means that employees who can adopt technology properly will increase their job satisfaction by using the technology, so that in the end their performance will increase. Information system changes will result in changes in working methods, which will affect the job satisfaction of the users (Mariani et al., 2013). The better and happier an employee is when utilizing an information system, the higher his/her job satisfaction will be. Conversely, if an employee is reluctant or not happy to use the information system, this will decrease his/her perceived job satisfaction. Greater job satisfaction will lead to greater efforts to achieve a higher performance as well (As'ad, 2004). The function of job satisfaction is very important in improving performance and the acceptance of new technology. The employees of the Ternate City Government feel that if they were better at

accepting and using technology, they would be more satisfied with their work, so that in the end they would improve their performance, because greater job satisfaction could improve the employees' performance and their acceptance of the new system that has been implemented and used by the Ternate City Government. Greater job satisfaction would also increase the employees' performance, which could affect the progress of the organization. This is in line with the opinion of Mariani et al., (2013), who stated that the implementation of an information system would affect job satisfaction.

CONCLUSION AND SUGGESTION

Theoretical Implications

By referring to this study's findings, the theoretical implications of this research are first, this study built a theoretical model regarding the effect of technology acceptance on employee performance and the variables that influence it. This model can explain the variables in the successful implementation of the Regional Management Information System (SIMDA), which has an important effect on technology acceptance, and it is also found that the job satisfaction variables have a mediating role in the variables' acceptance of the technology on employees' performance. Second, this study also built a new model regarding the factors influencing the triumph of SIMDA's implementation, which may apply to other objects. Third, the results of this study indicate that to improve the performance of employees in organizations facing a change in, or the adoption of, information technology, a high level of job satisfaction is required to build a relationship between the two. Fourth, the research results also prove that the quality of the system and good facilitating conditions are factors that can increase the acceptance of a new technology system in an organization.

These four highlighted points from the findings are seen to strengthen the elaboration of the theoretical concepts of transformational leadership, the system's quality, the facilitating conditions, the acceptance of information technology, job satisfaction, and performance. Figure 1 emphasizes the position of facilitating condition, system quality, and transformation leadership for influencing performance. However, this condition should consider the technological acceptance and job satisfaction of the employees. In short, while previously these theoretical concepts have been explained individually, this model explains how they interact with each other.

Practical Implications

Based on the findings, the practical implications are, first, the quality of the system and the conditions for facilitating it influence the acceptance of new technology. This indicates that the Municipal Government of Ternate must be able to improve the quality of the system and provide even better-facilitating conditions for the implementation, to increase the acceptance of the technology. Increasing the quality of access to, and the smoothness of, the network, along with making the system's quality more reliable, improving its features and making an attractive user interface design, increasing the support provided by responsive and competent experts who can provide fast and precise solutions when problems occur, and also equitable and continuous training for all the users, it is possible all this could improve the technology acceptance. Second, the role of transformational leadership does not affect technology acceptance. Although it does not influence directly on technology acceptance, the role of inspirational motivation from a transformational leader who has a high and strong vision of the mission will directly improve the performance of the employees of the Ternate

City Government. Each leader must be able to mobilize each employee so he/she is able to optimize his/her abilities and motivate him/her to be able to successfully face any changes that occur, so that the employees can accept the new information system properly and smoothly. Optimism and the role of high levels of support from all parties will affect the success of the implementation of the new information system. Third, the results of this study imply that the job satisfaction variables are needed to improve employees' performance and technology's acceptance. The higher and better the levels of acceptance of the technology are, the greater the employees' job satisfaction will be, which in turn will improve their performance. The employees will feel more satisfied if they can accept the better technology, which will also improve their performance. Fourth, the role of its ease of use and perceived benefits are important factors in the successful acceptance of information technology. Making an easy-to-use information system that also has high-value benefits is very important when implementing an information system. Therefore, the developer or application programmer must create a system that can improve the employees' performance and simplify their work by also paying attention to the ease of use of the system. Fifth, the highest policymakers in the central government must be able to raise the technology's acceptance level when building new information systems, and raise the level of employee job satisfaction even higher to improve their performance, so that the implementation of SIMDA will be successful.

Limitations

This research collected data from a survey of the civil servants (employees) of the Ternate City Government. The research objective, in general, was to look at the impact of transformational leadership, the system's quality, the facilitating

conditions, technology acceptance, and job satisfaction on employees' performance. This research is inseparable from several limitations that result in imperfect research. Some of the limitations of this study are, first, this study is cross-sectional, meaning that it is only conducted at one time. It is not longitudinal, in the sense that comparing the perceptions of the workers over a continuous period can provide additional information, or descriptions of the phenomena in the study. Second, this study only took samples from Ternate City Government employees. The study did not take a broader view, so that the generalization of the results is only specific to the Ternate City Government. Third, it was necessary to use various leadership theories, not only transformational leadership, to obtain information on the types of leadership that can affect the successful acceptance of a technology system in an organization. Fourth, the absence of the characteristics of the respondents, including their income, meant there was no comparison of the salary/compensation indicators of the job satisfaction variables, so that the researchers did not know the effect of the income received by the respondents on their ability to improve their performance.

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