

# The Influence of System Quality, Information Quality, Perceived Usefulness, User Competency, And Employee Performance on User Satisfaction of Accounting Information Systems at the Medan City Government

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## ABSTRACT

User satisfaction as an indicator of the success of the information system becomes very important if the information system is mandatory. This study aims to determine the effect of system quality, quality of information, perceived usefulness, user competency, and employee performance on the satisfaction of accounting information system users in the Medan City Government. This type of research is quantitative. Data sources were obtained by distributing questionnaires to employees in Medan City Government. In this study, the saturated sample was all employees who became information systems users in Medan Pemko, totaling 91 people. This study uses the Partial Least Square-Structural Equation Modeling (PLS-SEM) technique through SmartPLS software. The results of this study indicate that partially, the quality of the system, quality of information, perceived usefulness, user competency, and employee performance have a positive and significant effect on the satisfaction of accounting information system users. Simultaneously, the system, quality of information, perceived usefulness, user competency, and employee performance influence 94.8% in predicting the satisfaction variables of accounting information systems.

The remaining 5.2% are influenced by other variables not examined in this study.

**Keywords:** *system quality, information quality, perceived usefulness, user competency, employee performance, AIS user satisfaction*

## INTRODUCTION

The information system is essential with technological advances because, with the progress of the times and technology like this, someone must master technology if they do not want to be left behind by others. A computerized information system seems to be a necessity for a company. Along with progress in computer technology and information today, accounting information systems have developed into computer-based accounting information systems. Therefore, many companies have begun to develop and pay special attention to information technology as a source that facilitates the effective collection and use of information. One form of attention is using computer-based accounting information systems (accounting software) to facilitate the flow of company information. The company's accounting system depends on how the accounting software will be run. The application of accounting information systems in the company determines whether

the company has successfully implemented a system or, vice versa, experienced system failure. The success rate of applying accounting information systems (AIS) can be seen through the satisfaction of information systems users. Satisfaction from users of accounting information systems shows how far the user feels happy and trusting the information systems used to produce information that suits their needs (Tiara & Fuadi, 2018).

The phenomenon that occurs regarding satisfaction in the use of information systems, as stated in the study of Anastasya & Rohman (2021), i.e., in the BDS system is used to manage finances in BTN banks that aim in data collection and financial reporting that have recovery and record features that can detect errors or the presence of data manipulation. However, an error in the system can affect its performance and cause it to be not as expected. In addition, the use of information systems that experience problems, also stated in the study of Amarin & Wijaksana (2021) Reviews of Berrybenka Applications on the App Store or in the Play Store, many users who complain of applications often experience errors, cannot log in, slow applications and less responsive. It shows a problem with the Berrybenka application system.

The existence of a phenomenon regarding the unstable use of information systems in some of these companies is the basis of researchers to determine the optimization of the use of information systems in the Medan City Government related to the satisfaction of the information system user. Medan City Government is one of the offices of government agencies that have implemented accounting information systems. Applying accounting information systems in the Medan City Government in operational activities has increased the satisfaction of accounting information system users. One of the information systems Pemko Medan uses is SAP software to support employee performance and productivity. Based on the survey that researchers conducted on

employees related to the use of applications, it was found that using the applied accounting information system cannot be carried out optimally. It is influenced by the obstacles experienced by employees in inputting data that tend to be slow to cause secretion of the use of the system. In addition, the lack of socialization procurement causes new users to use SAP software, which does not have a sufficient level of authority and results in delays in data collection, so information is not on time.

Related to the satisfaction of using the accounting information system, researchers carried out the pre-survey satisfaction of using SIA on 30 employees in the Medan City Government who are directly involved in using the SAP software. The following are the results of the president that researchers have done:

**Table 1. Pre-Survey of Accounting Information Systems Satisfaction**

No.	Statement	Yes	%	No	%
1.	The use of SAP software makes it easy to input data to maximize employee performance	9	30	21	70
2.	The data entered by the input of SIA has never experienced an error, so the data is always accurate	10	33,33	20	66,67
3.	The use of SAP software is very effective in completing employee tasks	13	43,33	17	56,67
4.	Employee skills influence using SAP software	15	50	15	50
5.	The use of SAP software supports the quality of work, including the accuracy and linkages of work results	11	36,66	19	63,34
<b>Total</b>		<b>38,66%</b>		<b>61,34 %</b>	

*Source: Research Pre-Survey Results*

Based on the results of a pre-survey conducted by researchers on employees in the Medan City Government, it was found that user satisfaction with using SAP software was 38.66%. Only around 38.66% of employees are satisfied with using the SAP system. Conversely, 61.34% of employees feel dissatisfied with using the SAP system. This number includes most employees who participated in the survey, stating they were unsatisfied with the system. This finding shows that there is a significant

level of dissatisfaction among SAP system users in the Medan City Government. It raises special attention to the SAP system's quality, effectiveness, or suitability to the needs and expectations of users in the Medan City Government. The results of this survey can be an essential basis for evaluating and repairing SAP software in the organization. Problems related to system quality variables can be seen in the first statement, stating that using SAP software makes it easy to input data, thus maximizing employee performance and demonstrating the satisfaction of usage associated with indicators is easy to use (ease of use). The results show that the system quality variable is still experiencing problems. From the data obtained, only 30% of employees are satisfied with the ease of using the SAP system (9 people from the total number of employees who participated). At the same time, as many as 70% of employees (21 people) feel dissatisfied with the ease of using the system. This finding indicates that there is still significant dissatisfaction among employees regarding the ease of using SAP software. It reflects that system quality variables, especially related to easy-to-use indicators, need to get further attention and improvement to increase user satisfaction and the effectiveness of the use of the system. Problems in terms of being easy to use by employees can impact the overall organization's efficiency and productivity, so they must be resolved seriously.

Problems related to information quality variables appear in the second statement, where the data entered in the SIA (Accounting Information System) never experiences an error. Hence, the data is always accurate, reflecting the quality variables of the information on accurate indicators (accurate). The results show that there are problems in the quality of information variables. Only around 33.33% of employees are satisfied with the quality of accurate information (10 people from the total number of employees who participated). Conversely, as many as 66.67% of

employees (20 people) feel dissatisfied with the quality of information considered inaccurate. These results indicate a significant dissatisfaction among employees regarding the accuracy of data in SIA. It indicates the potential for problems in the accuracy of the system's information, which can impact the decisions based on the data. It is necessary to evaluate and improve the data collection system and the information management process to increase user trust and satisfaction with the accuracy of information provided by the accounting information system and improve the quality of information.

Problems related to the Perceived Usefulness Variable can be seen in the third statement, which states that using SAP software effectively completes employee tasks, representing the perceived usefulness variable in the effectiveness indicator. The results show that there are problems with the variable perceived usefulness. Only around 43.33% of employees were satisfied with perceived usefulness (13 people of the total number of employees participated). Conversely, 56.67% of employees (17 people) feel dissatisfied with the perceived use of the SAP Software. These results indicate a significant dissatisfaction among employees related to the effectiveness of using SAP software in completing tasks. It shows that the experience and benefits felt by employees in using the system have not yet reached the expected level. This problem needs to be further understood and improved so that the use of SAP software can provide more tangible benefits and increase the satisfaction and effectiveness of employee work in completing their tasks. Evaluation and improvement of the factors that affect perceived usefulness need to be done to optimize the benefits of SAP software.

Problems related to the User Competency variable can be seen in the fourth statement, which states that employee skills influence using SAP software. This statement is related to the user competency variable from the skills indicator. Pre-survey results show

differences in views among employees related to the influence of skills in using SAP software. As many as 50% of employees (15 people of total employees who participated) felt that their skills affect the use of SAP software. Meanwhile, as many as 50% of other employees stated that their skills do not affect the use of SAP software related to user competency. These results indicate differences in employee perception about how their skills affect the use of SAP software. It shows that some employees may feel their skills are adequate to use the software, while others may feel less competent and require increased skills in using the system. This problem indicates the importance of providing appropriate training and support to improve employee skills and competencies in operating SAP software so they can use the system more efficiently and effectively.

Problems related to employee performance variables appear in the fifth statement, namely, the use of SAP software supports the quality of work, including the accuracy and linkages of work results, which are representatives of employee performance variables seen from indicators of work quality. However, the results of the pre-survey show differences in views among employees related to the extent to which the use of SAP software supports the quality of their work, especially in terms of accuracy and linkages of work results. Only around 36.66% of employees (11 people of the total employees who participated) felt that the use of SAP software supported the quality of their work related to the accuracy and linkages of work results. Conversely, as many as 63.34% of other employees (19 people) state that they do not feel they have a significant influence or support from the use of SAP software in improving the quality of their work, especially in terms of accuracy and linkages of work results. These results indicate a need to pay more attention to employee performance and how the use of SAP software can further support them in achieving a higher level of accuracy and

increasing the linkages of work results. Further evaluation needs to be done to understand the obstacles that cause this perception and identify steps that can be taken to improve the contribution of the use of SAP software to the quality of employee work.

This research was motivated by the Research Gap in previous studies. Based on research conducted by Agustina et al. (2021) and Zubaida Abidin (2022) shows that the quality of the system has a positive and significant effect on the satisfaction of accounting information system users. Research conducted by Layongan et al. (2022) and Sari et al. (2022) showed that the quality of information positively and significantly affected user satisfaction with accounting information systems. Research conducted by Anastasya & Rohman (2021) and Rahayuningtyas (2022) showed that perceived usefulness positively and significantly affected the satisfaction of accounting information system users. Research conducted by Anastasya & Rohman (2021) and Marjulin (2019) showed that user competency positively and significantly affects the satisfaction of accounting information system users. Research conducted by Mulyani et al. (2021) and Nursiti & Fedrick (2020) shows that employee performance positively and significantly affects the satisfaction of accounting information system users.

The phenomenon regarding user satisfaction in the Medan City Government shows that system quality variables, information quality, perceived uses, user competency, and employee performance affect the satisfaction of SAP software users. It is seen in the pre-survey statement above. In line with Machmud's (2018) opinion, user satisfaction as an indicator of the success of the information system is vital if the information system is mandatory or mandatory. So, in this case, the researcher feels interested and needs to conduct research titled "The Effect of System Quality, Information Quality, Perceived Usefulness,



User Competency, and Employee Performance on the Satisfaction of Accounting Information Systems for Medan Pemko."

## **LITERATURE REVIEW**

### **User Satisfaction**

According to Kotler (2016), Consumer or user satisfaction is a feeling of happiness or disappointment that arises after comparing the product performance that is thought of as the expected performance. Quality products/services have an essential role in shaping customer satisfaction. The more quality the product/service provides, the higher the customer satisfaction will benefit the company. To provide customer satisfaction, the company must meet customers' satisfaction by itself.

Customer satisfaction depends on the estimated product performance in providing value relative to buyer's expectations. Customer satisfaction is the key to creating customer loyalty. The company receives many benefits, such as high customer satisfaction and increased customer loyalty. However, they can also prevent customer turnover, reduce customer sensitivity to prices, reduce marketing failure, reduce operating costs caused by increasing the number of customers, increase effectiveness in Advertising, and increase business reputation (Aisy & Gufron, 2017).

A user's reaction as a person who uses the system can be called user satisfaction. Other factors influence this, such as the quality of information, system quality, and service quality. Therefore, the tool used to interpret user satisfaction is testing the satisfaction level with the records or outputs of system providers, websites, and supporting services (Arisanti et al., 2022). Consumers who are satisfied with products and services tend to buy back products and reuse services when the exact needs reappear in the future. Customer satisfaction is a crucial factor for

consumers when making a repurchase, and it is the most considerable portion of the company's sales volume. As for Lupiyoadi (2018), providing customer satisfaction is one of the strategies to maintain the company's survival.

The user satisfaction indicator used in this study is (Kotler, 2016):

1. Experience, meaning an activity that has been done or experienced so that it can cause satisfaction.
2. Customer expectations, meaning the suitability between customer expectations and the actual performance of the company's products.
3. Needs, meaning the suitability between needs or needs with the available products. If all is fulfilled, satisfaction will arise.

### **System Quality**

System quality measures information system processes that focus on the results of interactions between the user and the system. System quality has attributes such as the availability of equipment, equipment reliability, ease of use, and response time, which determines why an information system is used or not used (Agustina et al., 2021). The quality of the information system can affect the satisfaction of accounting information systems. A good accounting information system will have accurate, relevant, and timely information and meet other sizes of the quality of information systems, which will influence user satisfaction (Anastasya & Rohman, 2021).

The quality of the system produces information that can be communicated to the recipient of the information. Information has stages: the information that is processed, then the use of information, and up to the information generated, affects the user or performance of the organization. People with a high level of satisfaction will show a high evaluation of system quality. In contrast,

people who show a low-quality system evaluation will have low satisfaction (Chung & Kwon in Prayanthi et al., 2020). These results align with the theory of organizational behaviour that emphasizes the importance of the relationship between organization and individuals. High-quality accounting information systems can strengthen positive relationships between organizations and users, increasing user satisfaction. It is supported by research conducted by Reza et al. (2020) and Prabowo (2020), which state that the system's quality significantly affects user satisfaction.

Indicators of system quality measurement according to what will be used in this study are:

1. Easy to use (ease of use)
2. Integration (Integration)
3. Flexibility (Flexibility)
4. Access speed (response time)
5. Security (security)
6. Reliability of the system (reliability)

### **Information Quality**

The quality of information is a measurement model that focuses on outputs produced by the system, as well as the value of the output for users by providing information presented in the form of reports can be used as a basis for decision making, so it is required to be able to present relevant, accurate and timely information (Jogiyanto, 2013).

The quality of information generated by the accounting information system can affect the user satisfaction of information systems. The user satisfaction dimension of the information system is reflected by the quality of information produced by the system. Suppose the information system user believes that the information generated from the system is optimal. In that case, they will feel satisfied using it, which aligns with the theory of organizational behaviour, which states that good quality of information positively impacts the user's decision-making

process in accounting. Accurate and relevant information facilitates effective decision-making, which can increase user satisfaction with accounting information systems.

It is also supported by research, which states that if the information system user is sure that the quality of the information system is good, they will feel satisfied using it. The higher quality of information produced by the accounting information system will increase user satisfaction based on their perceptions (Sari et al., 2022). Layongan et al. (2022) and Apsari et al. (2020) state that the quality of information positively affects user satisfaction.

Information quality indicators can be measured from 3 things: namely, information must be accurate, timely, and relevant.

### **Perception of Usefulness**

Perceived Usefulness is a belief about the decision-making process. If someone feels the information system is valid, they will use it. Conversely, if someone believes the information system is less valuable, they will not use it (Jogiyanto, 2013). Perceived Usefulness shows individuals' attitude that using a new system or technology can improve performance and be used anywhere and anytime. Individuals will use a new system or technology if they feel it has positive benefits (Oktafiana et al., 2021).

If a system has no significant usefulness, the trust in the system is reduced. The system's usefulness is related to the effectiveness of the performance of accounting information systems. Trust in the accounting information system will impact satisfaction (Buana & Wirawati in Anastasya & Rohman, 2021). It shows that the more benefits felt from the information system, the more trust and satisfaction in accounting information systems (Krisnawati et al., 2022).

It is in line with the theory of

organizational behavior, which states that satisfaction or acceptance of a system depends on individual expectations of the results and values placed on these results. Suppose the user believes that using the system will provide valuable results. In that case, they are more likely to be satisfied with the system - Alfiani et al. (2022) state that perceived usefulness affects user satisfaction.

Perceived Usefulness can be measured using indicators namely (Tulodo & Solichin, 2019):

1. Useful.
2. Beneficial.
3. Effectiveness.
4. Productivity.

### **User Competency**

User Competency is an essential factor to study and develop to support the successful implementation of a competency system. That is necessary to run the system well according to the expected functions. Competent users will also be able to identify the needs and shortcomings of the system being applied to produce constructive inputs to improve the system (Makhfudloh et al., 2018). To succeed in the information system, users must have the skills to translate system functions that follow needs (Anastasya & Rohman, 2021).

Quality users are essential in implementing accounting information systems and using sophisticated information technology in the organization. Therefore, the quality of the user plays an essential role in the implementation and development of an information system, and the selection of the right person or team that has competence and experience in its field is a prerequisite in building an information system in a company (Surya & Hastuti, 2022).

It is aligned with the theory of organizational behavior that people tend to provide attributions or explanations for

their behavior. Users with high competence will be more likely to provide positive attribution to their behavior when using information systems. It is because they believe that they have used information systems correctly. Patria (2018) states that there are user competencies that significantly affect user satisfaction.

There are five competency indicators, namely motives, nature, self-concept, knowledge, and skills, along with the explanation (Wijayanti et al., 2020):

1. Motive.
2. Properties.
3. Self-concept.
4. Knowledge.
5. Skills.

### **Employee Performance**

Employee performance greatly influences the company's development because it can compete with other companies and even develop to achieve its primary goals when it has quality resources. Employee performance includes understanding or mastering the accounting information system to run effectively and efficiently (Saputri & Rachman, 2022).

Employee performance is a process of employee performance that will be evaluated by management to provide criticism and suggestions to employees individually. So, it can be said that the level of satisfaction is a function of the difference between performance felt and expectations. If the performance is below expectations, consumers feel dissatisfied with their performance, whereas if the performance is under expectations or even exceeds them, consumers will feel satisfied. The user will feel satisfied if the perceived performance exceeds expectations (Widya et al., 2023).

That aligns with organizational behavior theory, which states that employees who feel encouraged by their personal and professional needs may perform better. High job satisfaction can encourage

employees to perform better in tasks related to accounting information systems—Mulyani et al. (2021) said that employee performance affects user satisfaction.

Indicators used in measuring employee performance are as follows (Mangkunegara, 2017):

1. Quality of work
2. Quantity of work
3. Responsibility
4. Implementation of tasks

### Framework

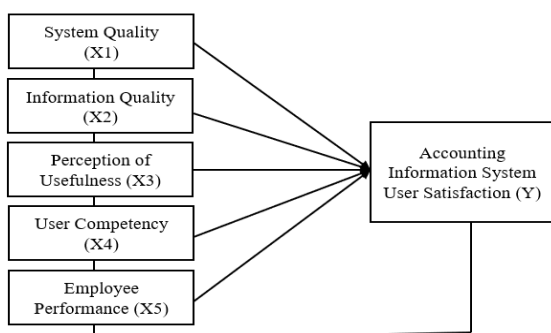


Figure 1. Conceptual Framework

H1: System Quality positively and significantly influences Satisfaction with Information System Users in the Medan City Government.

H2: Information Quality positively and significantly influences Satisfaction with Information System Users in the Medan City Government.

H3: Perceived Usefulness Has a Positive and Significant Influence on Information System User Satisfaction in the Medan City Government.

H4: User Competency Has a Positive and Significant Influence on Information System User Satisfaction in the Medan City Government.

H5: Employee Performance Has a Positive and Significant Influence on Satisfaction with the Use of Information Systems in the Medan City Government.

H6: System Quality, Information Quality, Perceived Usefulness, User Competency,

and Employee Performance Together Influence Information System User Satisfaction in the Medan City Government.

### MATERIALS & METHODS

This research is a quantitative research method because the data required from the object in this research is data expressed in the form of numbers and is the result of calculating and measuring the value of each variable. The population in this research is employees who are users of information systems in The Medan City Government, number 91 people. In this research, the sample selection technique used is the saturated sample technique, which is a sample selection technique if all population members are sampled Sugiyono (2018). So, the number of samples in this study was 91 people. The instrument used in this research is intended to produce accurate data using a Likert scale. This research uses the Partial Least Square-Structural Equation Modeling (PLS-SEM) technique to analyze data using SmartPLS version 4 software and Statistical Package for the Social Sciences (SPSS).

### RESULT

#### A. Measurement Model Test (Outer Model)

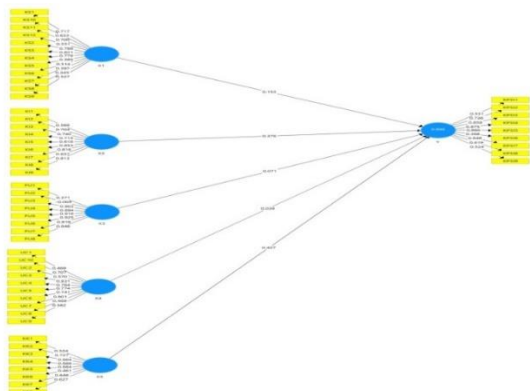
The measurement model test (outer model), also known as (outer relation or measurement model) can describe how each indicator block is related to its latent variable (Ghozali, 2020). The outer model test in this research was carried out with convergent validity, discriminant validity, and composite reliability. The results of the measurement model (outer model) test can be described as follows:

#### 1. Convergent Validity Test

The convergent validity test for reflective indicators can be carried out using the correlation between the indicator and construct scores (Ghozali, 2020). The



convergent validity test in this research is seen through the loading factor. The loading factor value can meet convergent validity if it has a loading value greater than 0.70.



Source: PLS Output Results, 2023.  
Figure 2. First Outer Loading Factor

Based on Figure 2, the first outer loading factor results show invalid construct indicators in the system quality variable (X1) in statement items 2, 3, 4, 10, 11, and 12. In the Information Quality variable (X2), construct indicators are invalid in question items 1 and 5. There are invalid construct indicators in the Perceived Usefulness (X3) variable, namely in question items 1 and 2. In the User Competency variable (X4), there are invalid construct indicators in question items 1, 3, 8,9, and 10. There are invalid construct indicators in the employee performance variable (X5) in question items 1, 6, 7, and 8. There are invalid construct indicators in the AIS user satisfaction variable (Y) valid in question items 1, 6, 7, 8, and 9.

The results of the convergent validity analysis through the outer loading factor value above show that there are question items that cannot meet the loading factor value so these question items will be discarded, and convergent validity testing will be carried out again. The results of testing the construct indicators in the next test after being discarded are as follows:

Table 2. Loading Factor/ Outer Model

Construct	r-count Validity	Expected Loading Factor (0.7)	Convergent Validity
<b>Technology (X1)</b>			
T1	0,819	0,7	Valid
T2	0,887	0,7	Valid
T3	0,838	0,7	Valid
T4	0,919	0,7	Valid
T5	0,914	0,7	Valid
T6	0,921	0,7	Valid
T7	0,921	0,7	Valid
T8	0,908	0,7	Valid
T9	0,921	0,7	Valid
T10	0,920	0,7	Valid
<b>Organization (X2)</b>			
O2	0,943	0,7	Valid
O3	0,929	0,7	Valid
O4	0,886	0,7	Valid
O5	0,928	0,7	Valid
O6	0,903	0,7	Valid
O7	0,825	0,7	Valid
O8	0,943	0,7	Valid
O9	0,927	0,7	Valid
O10	0,783	0,7	Valid
O11	0,835	0,7	Valid
<b>Environment (X3)</b>			
L1	0,774	0,7	Valid
L2	0,810	0,7	Valid
L3	0,769	0,7	Valid
L4	0,930	0,7	Valid
L5	0,863	0,7	Valid
L6	0,848	0,7	Valid
L7	0,931	0,7	Valid
<b>Digital Accounting (Y)</b>			
AD1	0,900	0,7	Valid
AD2	0,903	0,7	Valid
AD3	0,838	0,7	Valid
AD4	0,931	0,7	Valid
<b>Digital Literacy (Z)</b>			
LD1	0,931	0,7	Valid
LD2	0,992	0,7	Valid
LD3	0,939	0,7	Valid
LD4	0,920	0,7	Valid
LD5	0,915	0,7	Valid

Source: SEM PLS Data Processing Results, 2023

All indicators of technology, environment, and digital literacy must have a value above 0.7, meaning all indicators can be considered valid. In the organizational variable in the cost indicator, there is one questionnaire question with a value below 0.7, namely the O1 indicator of 0.657 (invalid) and the digital accounting variable with each AD5 indicator of 0.515 (invalid).

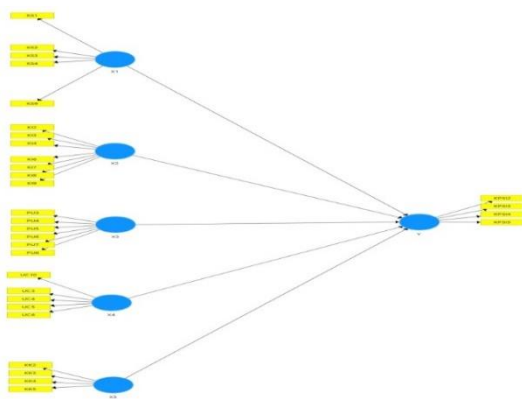
An invalid indicator must be expelled from the model and re-run the SmartPLS program, so indicators of the organization's variables and digital accounting are only represented by 1 question item. The results of the Smartpls program running after removing the invalid indicator will change the loading

factor value in other indicators.

**Table 3. Second Outer Loading Factor**

Statement Items	System Quality (X1)	Information Quality (X2)	Perceived Usefulness (X3)	User Competency (X4)	Employee Performance (X5)	AIS User Satisfaction (Y)
KS1	0,799					
KS2	0,884					
KS3	0,890					
KS4	0,804					
KS9	0,490					
KI2		0,675				
KI3		0,677				
KI4		0,678				
KI6		0,866				
KI7		0,862				
KI8		0,881				
KI9		0,857				
PU3			0,930			
PU4			0,925			
PU5			0,927			
PU6			0,937			
PU7			0,937			
PU8			0,843			
UC10				0,708		
UC3				0,933		
UC4				0,920		
UC5				0,918		
UC6				0,751		
KK2					0,772	
KK3					0,907	
KK4					0,927	
KK5					0,875	
KPSI2						0,782
KPSI3						0,926
KPSI4						0,931
KPSI5						0,834

Source: SEM PLS Data Processing Results, 2023



Source: PLS Output Results, 2023.

**Figure 3. Second Outer Loading Factor**

Table 3 shows that each construct indicator used for each variable through the loading factors presented shows that each construct indicator has a value above 0.70, so each construct indicator used can be declared valid. The results of the second outer loading factor in this research can be seen in Figure 3.

## 2. Discriminant Validity Test

The discriminant validity test aims to determine whether a reflective indicator is a good measurement for the construct of the latent variable used in the research.

Discriminant validity uses an average variance extracted (AVE) value of >0.50.

**Table 4. Discriminant Validity Test Results**

	Cronbach's Alpha	rho A	Composite Reliability	Average Variance Extracted (AVE)
System Quality	0,876	0,886	0,915	0,730
Information Quality	0,916	0,922	0,941	0,799
Perceived Usefulness	0,962	0,980	0,969	0,841
User Competency	0,902	0,934	0,929	0,725
Employee performance	0,893	0,896	0,927	0,761
AIS User Satisfaction	0,897	0,909	0,929	0,766

Source: PLS Output Results, 2023

The results of the discriminant validity test in this study were based on the average extracted value (AVE), which can be concluded as indicating that all variables indicate the AVE value is greater than 0.5. So, it can be concluded that all variables meet the average extracted value (AVE).

## 3. Composite Reliability Test

The composite reliability test aims to assess the extent to which the measuring instruments used in this research are reliable or trustworthy. The composite reliability test in this study used composite reliability and Cronbach's alpha with a value greater than 0.70.

**Table 5. Composite Reliability Test Results**

	Cronbach's Alpha	rho A	Composite Reliability	Average Variance Extracted (AVE)
System Quality	0,876	0,886	0,915	0,730
Information Quality	0,916	0,922	0,941	0,799
Perceived Usefulness	0,962	0,980	0,969	0,841
User Competency	0,902	0,934	0,929	0,725
Employee performance	0,893	0,896	0,927	0,761
AIS User Satisfaction	0,897	0,909	0,929	0,766

Source: PLS Output Results, 2023.

The results of the composite reliability test above show that all variables obtain a composite reliability value greater than 0.70, and the alpha Cronbach value is greater than 0.70. So, it can be concluded that all variables can be relied on.

## B. Inner Model Analysis

After evaluating the model and finding that each construct meets the requirements for Convergent Validity, Discriminant Validity, and Composite Reliability, the next step is to evaluate the structural model, which

includes the coefficient of determination (R<sup>2</sup>), Predictive Relevance (Q<sup>2</sup>), Goodness of Fit index (GoF), path coefficient and effect size.

### 1. Coefficient of Determination Test

The coefficient of determination test aims to determine the extent of the model's ability to apply variations in the dependent variable. The criteria for the R-square test are as follows: if the R-square value is 0.02, it indicates a small influence, a value of 0.15 indicates a moderate influence, and a value of 0.35 indicates a large influence at the structural level.

**Table 6. R-Square Test Results**

	R Square	Adjusted R Square
Accounting Information System User Satisfaction	0,948	0,945

Source: PLS Output Results, 2023.

Table 6 shows that an R-square value of 0.948 was obtained. It shows that the variables system quality, information quality, Perceived Usefulness, User Competency, and employee performance influence 94.8% in predicting the Accounting Information System user satisfaction variable, while the remaining 5.2% is influenced by other variables not examined in this research.

### 2. Predictive Relevance or Cross-Validated Redundancy (Q<sup>2</sup>)

Cross-validated redundancy (Q<sup>2</sup>) or Q-square test was used to assess predictive relevance. A Q<sup>2</sup> value > 0 indicates that the model has accurate predictive relevance for a particular construct, while a Q<sup>2</sup> value < 0 indicates that the model lacks predictive relevance.

**Table 7. Cross-validated redundancy test (Q<sup>2</sup>)**

	SSO	SSE	Q <sup>2</sup> (=1-SSE/SSO)
Accounting Information System User Satisfaction	637,000	326,176	0,488

Source: PLS Output Results, 2023.

Based on the Cross-validated redundancy (Q<sup>2</sup>) test results, the Q<sup>2</sup> test results obtained

a result of 0.488, which means the Q<sup>2</sup> value > 0, indicating that the model has accurate predictive relevance.

### 3. Goodness of Fit Index (GoF)

The Goodness of Fit (GoF) index is a single measure to validate the combined performance of the measurement and structural models. GoF is obtained from the square root of the average communalities index multiplied by the average R<sup>2</sup> model value. The GoF value ranges between 0 and 1 with the interpretation of the values 0.1 (small GoF), 0.25 (moderate GoF), and 0.36 (large GoF). The GoF value in PLS-SEM is searched manually.

$$GoF = \sqrt{\frac{(AVE \times R^2)}{6}} = \frac{0,730+0,799+0,841+0,725+0,761+0,766}{6} = 0,770$$

$$R^2 = 0,948$$

$$GoF = \sqrt{(0,770 \times 0,948)}$$

$$Gof = 0,8318 = 0,832$$

Based on manual Goodness of Fit (GoF) calculations, with an average AVE value of 0.770 and an R<sup>2</sup> value of 0.948, a GoF value of 0.832 was obtained. Thus, the level of suitability of the research model (Goodness of Fit) is classified as large because the results exceed 0.36.

### 4. Path Coefficient

Path coefficient is the value of the path coefficient or the magnitude of the relationship or influence of the latent construct. Details of the results of the path coefficient can be seen in the table below:

**Table 8. Path Coefficient Test**

	Original Sample (O)
System Quality -> Accounting Information System User Satisfaction	0,196
Information Quality -> Accounting Information System User Satisfaction	0,518
Perceived Usefulness-> Accounting Information System User Satisfaction	0,042
User Competency-> Accounting Information System User Satisfaction	0,045
Employee Performance-> Accounting Information System User Satisfaction	0,273

Source: PLS Output Results, 2023.

Table 8 above shows that the highest path coefficient value in the relationship between Information Quality and Accounting Information System User Satisfaction is 0.625. At the same time, the lowest is found in the relationship between Perceived Usefulness and Accounting Information System User Satisfaction, which is 0.038.

### 5. Effect Size

The effect size is calculated as the absolute value of the individual contribution of each predictor latent variable to the F-Square value of the criterion variable.

**Table 9. Effect Size Test**

	F-Square	Category
System Quality -> Accounting Information System User Satisfaction	0,173	Big
Information Quality -> Accounting Information System User Satisfaction	1,271	Big
Perceived Usefulness-> Accounting Information System User Satisfaction	0,028	Weak
User Competency-> Accounting Information System User Satisfaction	0,033	Weak
Employee Performance-> Accounting Information System User Satisfaction	0,230	Medium

Source: PLS Output Results, 2023.

Effect sizes are grouped into three categories, namely weak (0.02), medium (0.15), and large (0.35). The results show that the influence of effect size on the Perceived Usefulness and User Competency variables on accounting information system user satisfaction is very weak. However, the information and system quality variables affecting the accounting system's user satisfaction-> are very large. Meanwhile, the employee performance variable on AIS user satisfaction is categorized as moderate.

### 6. T-Statistic Significance Test

The significant t-statistic test shows how much influence one explanatory or independent variable has in explaining variations in the dependent variable (Ghozali, 2018). The t-statistical significance test in this research is seen by comparing the calculated t-value with the t-table and using a significance level of 0.05.

**Table 10. Significant T-Statistic Test**

	Original Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	T Statistics (O/(STDEV))	P Values
System Quality -> Accounting Information System User Satisfaction	0,196	0,190	0,062	3,146	0,002
Information Quality -> Accounting Information System User Satisfaction	0,625	0,639	0,098	6,378	0,000
Perceived Usefulness-> Accounting Information System User Satisfaction	0,520	0,517	0,092	2,764	0,000
User Competency-> Accounting Information System User Satisfaction	0,194	0,192	0,035	2,056	0,001
Employee Performance-> Accounting Information System User Satisfaction	0,273	0,312	0,136	2,015	0,047

Source: PLS Output Results, 2023.

The results of the t-statistic significance test in this study use the degree of freedom (df) formula to determine the t-table value, then  $df = n - k = 91 - 6 = 85$ , so that the t-table value is 1.98827. The t-table significance test results -Statistics can be seen in the table below:

1. The system quality variable on AIS user satisfaction shows that a t-statics value of 6.378 is greater than 1.98827 (t-statics  $6.378 > t_{table} 1.98827$ ) with a P-value of 0.000, which is smaller than 0.05 ( $0.000 < 0, 05$ ), this shows that the system quality variable has a positive and significant effect on user satisfaction of the accounting information system.
2. The information quality variable on accounting information system user satisfaction shows that a t-statics value of 6.378 is greater than 1.98827 (t-statics  $6.378 > t_{table} 1.98827$ ) with a P-value of 0.000, which is smaller than 0.05 ( $0.000 < 0, 05$ ), this shows that the information quality variable has a positive and significant effect on user satisfaction of accounting information systems.
3. The perceived usefulness variable on accounting information system user satisfaction shows that a t-statics value of 2.764 is greater than 1.98827 (t-statics  $2.764 > t_{table} 1.98827$ ) with a P-value of 0.000, which is smaller than



0.05 ( $0.000 < 0, 05$ ), this shows that the variable perceived usefulness has a significant and influential effect on user satisfaction of accounting information systems.

4. The user competency variable on accounting information system user satisfaction shows that a t-statics value of 2.056 is greater than 1.98827 (t-statics  $2.056 > ttable 1.98827$ ) with a P-value of 0.001, which is smaller than 0.05 ( $0.001 < 0, 05$ ), this shows that the user competency variable has a significant and influential effect on user satisfaction of accounting information systems.
5. The employee performance variable on user satisfaction of accounting information systems shows that the t-statics value of 2.015 is greater than 1.98827 (t-statics  $2.015 > ttable 1.98827$ ) with a P-value of 0.047 which is smaller than 0.05 ( $0.047 < 0, 05$ ), this shows that employee performance variables have a significant and influential effect on user satisfaction of accounting information systems.

### 7. Simultaneous Test (F Test)

For the F test using the SPSS application, the F statistical test shows whether all the independent variables (X) consisting of system quality, information quality, Perceived Usefulness, User Competency, and employee performance included in the model have an influence simultaneously (simultaneously) in explaining the information content of the dependent variable on user satisfaction of the Accounting Information System at the Medan City Government.

Taking satisfaction of the F test can be done in two ways, namely:

1. If  $sig > 0.05$ , then  $H_0$  is accepted; if  $sig < 0.05$ , then  $H_0$  is rejected.
2. If  $Fcount < Ftable$ ,  $H_0$  is accepted, and if  $Fcount > Ftable$ , then  $H_0$  is rejected.

**Table 11. Simultaneous Test (F Test)**

ANOVA <sup>a</sup>						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	4833.818	5	966.764	227.330	.000 <sup>b</sup>
	Residual	361.479	85	4.253		
	Total	5195.297	90			
a. Dependent Variable: Y						
b. Predictors: (Constant), X5, X4, X3, X2, X1						

Source: PLS Output Results, 2023.

Simultaneous test results in this research Ftable values were obtained based on the df (degree of freedom) formula.  $df 1 = k-1 = 6-1 = 5$  and  $df2 = n-k = 91-5 = 85$  So the Ftable value is 2.32.

The F test (simultaneous) results in Table 11 above obtained a calculated f value of 227.330 with a significance value of 0.000. It shows that the Fcount value is greater than Ftable ( $227.330 > 2.32$ ), and the significance value is smaller than 0.000 ( $0.000 < 0.05$ ). So it can be concluded that system quality, information quality, Perceived Usefulness, User Competency, and employee performance positively and significantly affect user satisfaction with accounting information systems among Medan city government employees.

### CONCLUSION

Based on the research results that have been described, the conclusions in this research are as follows:

1. System quality positively and significantly affects user satisfaction with the Accounting Information System at the Medan City Government.
2. The quality of information has a positive and significant effect on user satisfaction of the Accounting Information System at the Medan City Government.
3. Perceived Usefulness positively and significantly affects user satisfaction with the Accounting Information System at the Medan City Government.
4. User Competency positively and significantly affects user satisfaction with the Accounting Information System at the Medan City Government.

- significantly affects user satisfaction with the Accounting Information System at the Medan City Government.
5. Employee performance has a positive and insignificant effect on user satisfaction of the Accounting Information System at the Medan City Government.
  6. System quality, information quality, Perceived Usefulness, User Competency, and employee performance simultaneously positively and significantly affect user satisfaction with the Accounting Information System at the Medan City Government.

## SUGGESTION

Based on the discussion that has been described, there are suggestions in this research, namely as follows:

### 1. Theoretical Suggestions

This research is expected to provide references to a comprehensive literature review on system quality, information quality, perceived usefulness, user competency, and employee performance regarding user satisfaction with accounting information systems.

### 2. Practical Advice

It is hoped that the results of this research will provide valuable insight for the Medan City Government in increasing user satisfaction with accounting information systems. It is hoped that the Medan City Government can pay attention to these factors to increase user satisfaction with accounting information systems.

## Declaration by Authors

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