

The Influence Of Digital Accounting On Cashier Performance In The Canteen Umkm Untag Surabaya

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Abstract. *The University of 17 August 1945 Surabaya is one of the universities that has a large number of students, lecturers and employees. It is not uncommon for sellers in the cafeteria to find it difficult to make transactions and errors often occur in calculating the number of transactions because they are still done manually.*

In this research, a payment system has been developed that uses the Bakoel POS application. Bakoel POS will utilize sensors to read data that will assist in the transaction process. Bakoel POS application design for the canteen payment system.

This application is designed as a transaction process in the canteen. Transactions in the canteen include ordering and payment processes. It can be concluded that the Canteen Digital Accounting System Using the Bakoel POS Application has been designed to make it easier for canteen keepers in carrying out the sales process and can increase time efficiency in making transactions. From the test results, it can be seen that this application functions well for the efficiency of payment transactions at the Surabaya Untag canteen cashier.

Keyword: *Accounting Manuals, Digital Accounting, and Surabaya UNTAG canteens*

I. INTRODUCTION1.

1.1 Background

In this era of modernization, efficiency is one of the things that is prioritized and can be said to be a primary need for some people. Bakoel POS application is one of the options to meet the needs of transaction efficiency. Not only transactions in large amounts but small costs such as payments at the canteen are also one of the transactions that require efficiency. University of August 17, 1945 Surabaya is one of the campuses that has a large number of students, lecturers, and employees, it is not uncommon for sellers in the canteen to find it difficult to make transactions and often there are errors in calculating the number of transactions because it is still done manually.

In this research, a transaction system has been developed using the Bakoel POS application. Bakoel POS will utilize sensors in reading data that will help in the transaction process. Based on the description above, we feel interested in developing a canteen payment system at Untag Surabaya to make it more modern and also make it easier for canteen guards and all people within the scope of Untag Surabaya in carrying out the transaction process. Our goal is to choose the title "The Effect of Digital Accounting on Cashier Performance at the Untag Surabaya

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Canteen" to support the payment process to be more efficient in making payment transactions. With this digital accounting application, we hope to overcome these problems and also speed up the transaction process.

1.2 Problem Formulation

Based on the background that has been stated previously, the problem formulations that can be made are:

1. How is the payment transaction to the Untag canteen cashier to be more effective and time efficient in queuing at the cashier?
2. What is the effect of the Bakoel POS application on Cashier Performance at the Untag Surabaya Canteen?

1.3 Problem Objective

The objectives to be achieved from the use of the Bakoel POS application are:

1. Time efficiency and not queuing
2. Assist cashiers in the process of recording and managing sales transactions.

II. LITERATURE REVIEW

1.2 Management Information System



Rapid advances in management information systems have enabled them to provide useful support to businesses. With rapid technological advances and the widespread use of computers in almost all aspects of modern life, this approach has gained universal acceptance among businesses. In general, an example of a management information system can be seen in the figure, as follows:

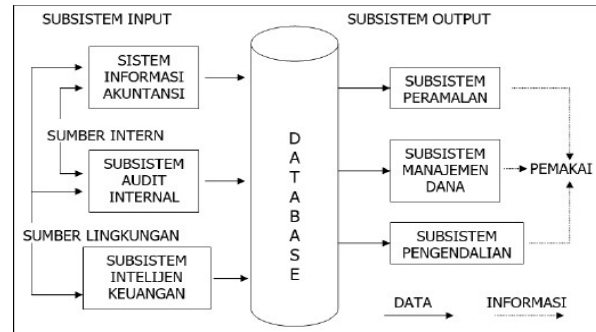
Key benefits of using an effective management information system:

- a. Having a holistic perspective of the company's operations is just one of the key advantages of a well-implemented management information system.
- b. Managers and business owners can obtain information about their performance in their positions.

c. Increased Efficiency Through the Use of Management Information Systems in Business

1.3 Financial Information System

Money-related data is available to employees anywhere in the company. Here is a chart that displays the outputs and inputs of a financial information system:



1.4 Cashier Performance

The cashier is the most important person in the Untag Surabaya Canteen, therefore of course as an excellent university really wants the cashier's performance to be more effective.

The following is the performance of the cashier at the Untag Surabaya Canteen:

1. Serving the transaction process
2. The main responsibility of a cashier is to process payments received by students at Untag Surabaya, both in the form of cash and QR codes.
3. Checking and recording sales data
4. In this scenario, the cashier at the Surabaya Untag canteen will record all items that have been purchased. This will help the cashier determine which products are making the most money. For future stocking purposes at the UMKM Untag Surabaya concession stand.
5. Checking the product price list
6. Her future duties as a cashier will be expanded to include verifying that the price of each item matches the one listed. This is done to avoid overcharging customers or offering inferior products. For example, the original price of bread A (3,000) is now 5,000. This may have a negative impact on overall revenue.
7. Creating a sales report

Creating a sales report is the next step to be completed by the cashier.

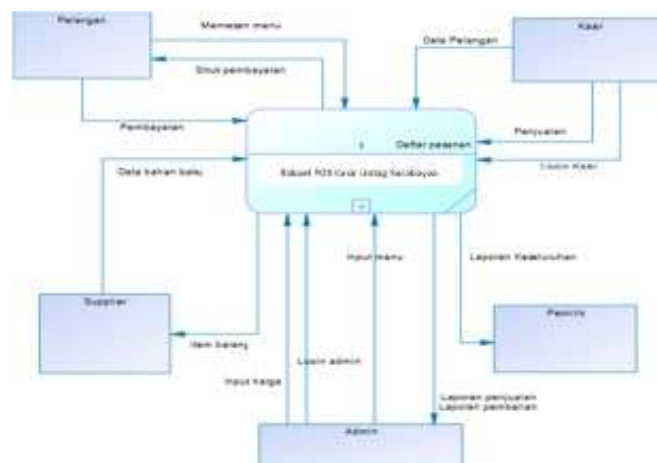
The sales of each Untag Surabaya MSME canteen outlet are tracked and summarized in this report on a daily, weekly, monthly, and annual basis.

Cashiers at the Untag Surabaya canteen do something similar to bookkeeping to facilitate

cashier duties and record sales data.

1.5 Bakoel POS

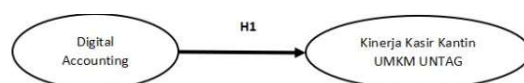
The Bakoel POS application is an admin computer application that is used for the transaction process, the cashier is used for the transaction process, and adds a food or beverage menu. The Bakoel POS application aims to facilitate cashiers in the process of recording and managing sales transactions and taking into account everything that is needed in it. The flowchart of the transaction process in the Bakoel POS application is as follows:



III. CONCEPTUAL FRAMEWORK

The conceptual framework is the relationship between the theories or concepts underlying the research that are used as guidelines for compiling a systematic study.

The following is a conceptual framework for the discussion discussed in this article



IV. RESEARCH METHODS

This research includes both quantitative and qualitative approaches. The researcher used a qualitative approach because it provides a deeper insight into the subject under study.

In addition, we use this technique because we are interested in how well the cashier's performance at SMEs in the UNTAG canteen. The reason researchers use quantitative methods is because the goal is to find out the influence between Digital Accounting on Cashier Performance at the Untag Surabaya Canteen. Researchers use quantitative methods using the SPSS application to test the significance of the influence between Digital Accounting on Cashier Performance.

The type of data used in this research is primary data. Primary data is data obtained from field research objects. To analyze the effect of Digital on manual testing, we use SPSS application-based static analysis.

In this research, basic linear regression is applied for analysis. In this study, we used the following structural equation model:

$$Y = a + b \cdot X$$

Description: Y = Cashier Performance

X = Bakoel Pos (Digital Accounting)

Hypothesis: Ho = there is no effect of digital accounting

Ha = there is an influence of digital accounting on cashier performance

Before analyzing the data, there are data collection techniques that we have done on our research, namely as follows:

a. Questionnaire

The questionnaire is one of the techniques used to collect research data. In the study we distributed questionnaires to the cashiers concerned so that they filled out the questionnaire in accordance with the procedures given.

b. Observation

One of the techniques that can be used to find out or investigate nonverbal behavior is by using observation techniques.

In this study, there are procedures that we have done in surveying our research, namely as follows:

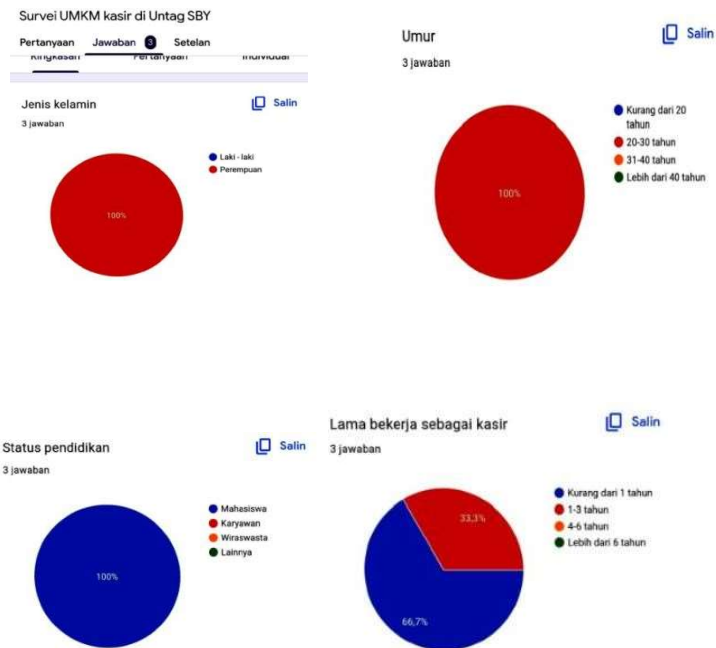
1. Research Preparation Stage, which is as follows:
 - a. Collecting data
 - b. Develop questionnaire guidelines
2. Research Implementation Stage
3. With the approval of the cashier, the researcher conducted the survey during the implementation stage. Each mobile device completed the survey via the internet.
4. Data processing stage

The researcher collected and evaluated the survey responses, and made the questions informative and accessible to the cashiers. Primary data from surveys and interviews with Untag cafeteria cashiers were used for this investigation.

V. DATA ANALYSIS

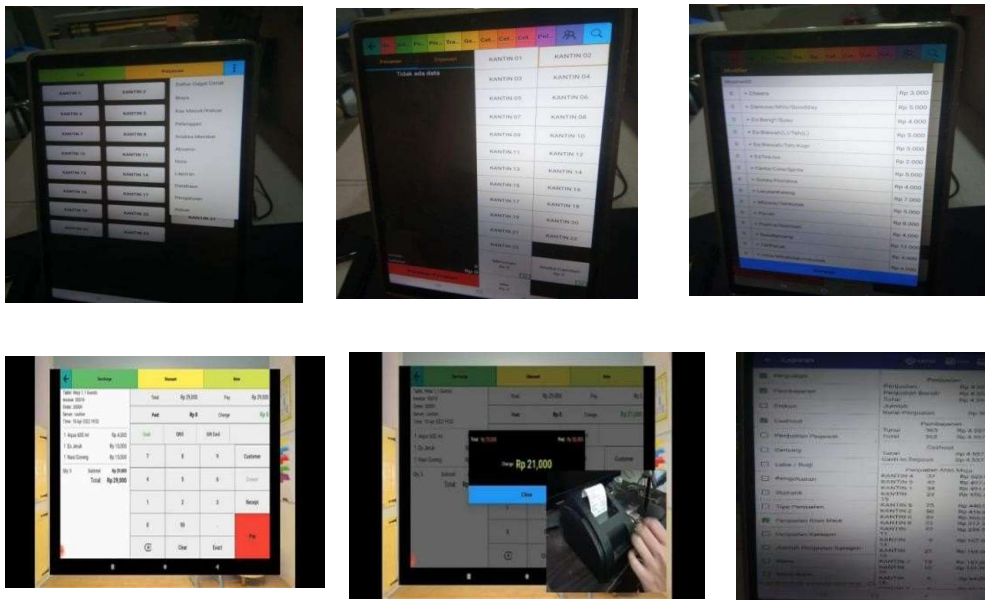
5.1 Cashier Data Analysis

The evaluation of the cashier is as follows:



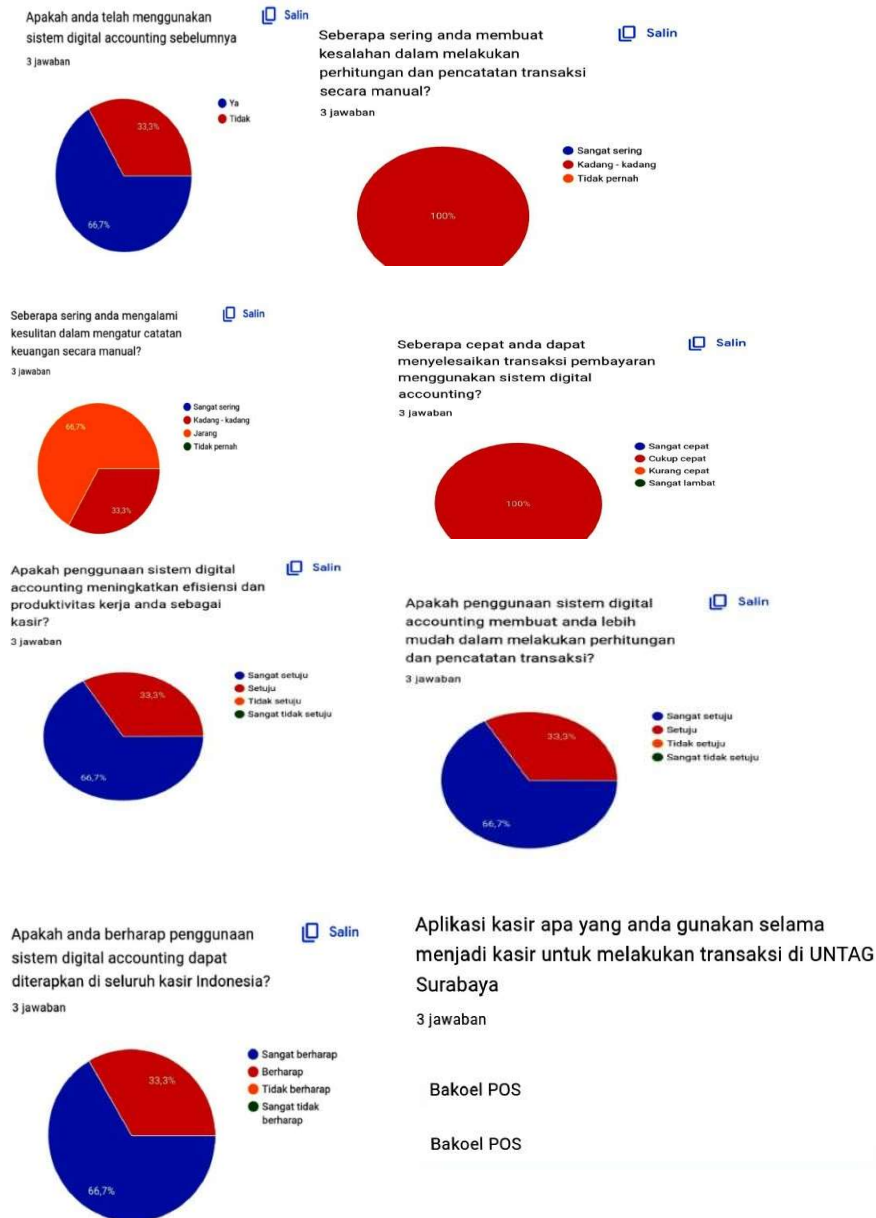
5.2 Analysis of the Ease of Officer Using the Bakoel Pos Application Menu

Based on the documentation, we asked the Untag Surabaya Cashier to display the Bakolel POS Application menu, which is as follows:



Furthermore, we conducted a survey to the cashier about the ease of using the digital accounting application above. The results of the questionnaire answers were then processed

using a Likert scale with the following scores:



A. Queue analysis.

From the observation data, in general the number of queues has decreased, but in certain cases there is still a queue for payment (see image). This is due to the large number of students who transact purchases. In addition, there are still students who make payments manually.

B. SPSS Statistical Analysis to Test the Effect of Digital on Manual

To analyze the effect of Digital on manual testing, we use SPSS application-based static analysis.

The results based on SPSS are as follows:

	manual	digital
1	7.0	3.0
2	9.0	5.0
3	8.0	4.0
4	8.0	4.0
5	9.0	5.0
6	8.0	4.0
7	9.0	5.0
8	7.0	3.0
9	8.0	4.0
10	8.0	4.0
11	9.0	5.0
12	8.0	4.0
13	8.0	4.0
14	9.0	5.0
15	10.0	5.0
16	8.0	4.0
17	7.0	3.0
18	9.0	5.0
19	8.0	4.0
20	7.0	3.0

Descriptive Statistics

	Mean	Std. Deviation	N
digital	4.150	.7452	20
manual	8.200	.8335	20

Correlations

		digital	manual
Pearson Correlation	digital	1.000	.966
	manual	.966	1.000
Sig. (1-tailed)	digital	.	.000
	manual	.000	.
N	digital	20	20
	manual	20	20

Variables Entered/Removed^a

Model	Variables Entered	Variables Removed	Method
1	manual ^b	.	Enter

a. Dependent Variable: digital

b. All requested variables entered.

Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	95.0% Confidence Interval for B		Correlations			Collinearity Statistics		
		B	Std. Error	Beta			Lower Bound	Upper Bound	Zero-order	Partial	Part	Tolerance	VIF	
1	(Constant)	-2.932	.449		-6.534	.000	-3.875	-1.989						
	manual	.864	.054	.966	15.860	.000	.749	.978	.966	.966	.966	1.000	1.000	

a. Dependent Variable: digital

Activate Windows

ANOVA^a

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	9.845	1	9.845	251.535	.000 ^b
	Residual	.705	18	.039		
	Total	10.550	19			

a. Dependent Variable: digital

b. Predictors: (Constant), manual

Model Summary^b

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics					Durbin-Watson
					R Square Change	F Change	df1	df2	Sig. F Change	
1	.966 ^a	.933	.930	.1978	.933	251.535	1	18	.000	2.416

a. Predictors: (Constant), manual

b. Dependent Variable: digital

Coefficient Correlations^a

Model		manual	
1	Correlations	manual	1.000
	Covariances	manual	.003

a. Dependent Variable: digital

Collinearity Diagnostics^a

Model	Dimension	Eigenvalue	Condition Index	Variance Proportions	
				(Constant)	manual
1	1	1.995	1.000	.00	.00
	2	.005	20.236	1.00	1.00

a. Dependent Variable: digital

Casewise Diagnostics^a

Case Number	Std. Residual	digital	Predicted Value	Residual
15	-3.561	5.0	5.705	-.7045

a. Dependent Variable: digital

Residuals Statistics^a

	Minimum	Maximum	Mean	Std. Deviation	N
Predicted Value	3.114	5.705	4.150	.7198	20
Residual	-.7045	.1591	.0000	.1926	20
Std. Predicted Value	-1.440	2.160	.000	1.000	20
Std. Residual	-3.561	.804	.000	.973	20

a. Dependent Variable: digital

VI. FINDINGS AND DISCUSSION

Based on the data analysis above, the findings are evaluated and discussed as follows:

6.1 Questionnaire to find out the convenience of cashiers using Digital applications.

Based on the results of the questionnaire that we have obtained, 3 samples or 3 cashiers were found in this study. Here are the results of our questionnaire:

Information	Cashier		
	1	2	3
Gender	P	P	P
Age	20-30 years	20-30 years	20-30 years
Education Status	Student	Student	Student
Work Experience	< 1 year	1-3 years	1-3 years
Users of Digital Accounting Systems	yes	yes	not
Often make mistakes in making manual transactions	sometimes	sometimes	sometimes
Often have difficulty in managing financial records manually	infrequently	infrequently	sometimes

Information	Cashier		
	1	2	3
Speed in completing payment transactions using digital accountingsystems	pretty fast	pretty fast	pretty fast
Digital Accounting System makes iteasier for cashiers to calculate and record transactions	agree	Totally agree	Totally agree
Digital Accounting System canincrease the efficiency and productivity of cashier work	agree	Totally agree	Totally agree
The use of Digital Accounting System can be applied in all cashiersin Indonesia	Hope	very hopeful	very hopeful
Application used by cashiers to make transactions at UNTAG Surabaya	Bakoel Post	Bakoel Post	Bakoel Post

A. Interviews with Students Who Use Manual Payment Methods

Based on interviews we have conducted with students who often canteen and pay at the Untag Surabaya cashier, we found a problem that is still long queues, making it inefficient for students who make payment transactions at the cashier.

This is because sometimes there are still students who pay for transactions manually.

B. Queue

In the queue analysis, we analyze based on observations and images below:



Based on this picture, there are still students who queue for transactions.

To overcome the queue problem, students should use online payments or use the QRScode, so that this can make it easier for cashiers to manage finances and there are no obstacles in giving change. This aims to be time efficient and not queue long.

6.2 SPSS Statistical Analysis to Test the Effect of Digital on Manual

I. Hypothesis Development

In addition to saving advertising and rental costs, cashiers at Untag Surabaya will appreciate how easy it is to process payments with the Bakoel Pos application.

This is evidenced by research showing that the use of Digital Accounting applications significantly increases cashier efficiency and productivity.

Hypothesis: H_0 = there is no effect of digital accounting

H_a = there is an influence of digital accounting on cashier performance

a. Data Analysis Technique

In this investigation, basic linear regression was applied for analysis. In this investigation, we used the following structural equation model:

$$Y = a + b \cdot X$$

Description: Y = Cashier Performance

X = Bakoel Pos (Digital Accounting)

b. SPSS Analysis Results

Persamaan Regresi : $Y = a + b \cdot X$
 $Y = -2,932 + 0,864 \cdot X$

a = angka konstanta dari Unstandardized coefficient yaitu sebesar -2,932
 Angka ini merupakan angka konstanta yang mempunyai arti bahwa jika tidak ada digital (X), maka waktu manual (Y) adalah sebesar -2,932

b = angka koefisien regresi sebesar 0,864
 Angka ini mengandung arti bahwa setiap penambahan tingkat digital (X) sebesar 1 menit, maka waktu manual (Y) akan meningkat sebesar 0,864

Untuk mengetahui besarnya pengaruh waktu digital (X) terhadap waktu manual (Y) dalam analisis regresi linear sederhana, kita dapat berpedoman pada nilai R yang terdapat pada Output SPSS bagian Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				Durbin-Watson	
					R Square Change	F Change	df1	df2		Sig. F Change
1	.966 ^a	.933	.930	.1978	.933	251.535	1	18	.000	2.416

a. Predictors: (Constant), manual

b. Dependent Variable: digital

Dari Output diatas diketahui nilai R sebesar 0,966
 Artinya : bahwa pengaruh waktu digital (X) terhadap waktu manual (Y) adalah sebesar 96,6%
 Sedangkan 3,4% (100% - 96,6%) adalah waktu manual (Y) dipengaruhi oleh variabel yang lain yang tidak diteliti

Koefisien Korelasi sebesar 0,966 menunjukkan korelasi yang sangat kuat, artinya : Efek penggunaan aplikasi digital accountinga mempunyai korelasi yang sangat kuat terhadap kinerja kasir.

UJI SINGNIFIKAN

Hipotesis :
 Ho : Tidak ada pengaruh waktu digital (X) terhadap waktu manual (Y)
 Ha : Ada pengaruh waktu digital (X) terhadap waktu manual (Y)

Syarat Ho diterima : Ho :
 Ho > 0,05
 Tidak ada pengaruh waktu digital (X) terhadap waktu manual (Y)

Model	Unstandardized Coefficients		Standardized Coefficients		t	Sig.	Confidence Interval for B		Correlations			Collinearity Statistics	
	B	Std. Error	Beta				Lower Bound	Upper Bound	Zero-order	Partial	Part	Tolerance	VIF
1													
	(Constant)	-2.932	.449		-6.534	.000	-3.875	-1.989					
	manual	.864	.054	.966	15.860	.000	.749	.978	.966	.966	.966	1.000	1.000

a. Dependent Variable: digital

Berdasarkan Output diatas diketahui , sebagai berikut : nilai t waktu manual = 15,860 dengan nilai signifikasi (Sig.) sebesar 0,000 < 0,05
 nilai t waktu digital = - 6,534 dengan nilai signifikasi (Sig.) sebesar 0,000 < 0,05
 Maka Ho ditolak dan Ha diterima, yang berarti : Ada pengaruh waktu digital (X) terhadap waktu manual (Y)

Based on the SPSS Output, it can be concluded that there is an influence between manualtime (X) and digital time (Y). This also affects the performance of cashiers in serving students to be more time efficient and not queuing long.

6.3 CONCLUSION AND SUGGESTION

A. CONCLUSIONS

1. Improving the Management Information System helps Company Performance to be more efficient and effective. The cashier digital accounting system is one of the efforts to improve the Management Information System.
2. All cashiers can complete payment transactions quickly using digital accounting. All cashier officers using the digital accounting system are easier to record and calculate. The use of a digital accounting system increases work efficiency and productivity.
3. There are still students who queue for transactions. This is because they still make payments manually. This condition slows down the cashier's service because there are obstacles in giving change. So that the cashier service becomes less time efficient and a long queue arises
4. Based on the SPSS static analysis output, the correlation coefficient of 0.966 shows a very strong correlation, meaning: The effect of using digital accounting applications has a very strong correlation to cashier performance.
5. Based on the SPSS static analysis output above, it can be concluded that there is an

influence between manual time (X) and digital time (Y). This also affects the performance of cashiers in serving students to be more time efficient and not queuing long. This means that the use of digital accounting applications has an influence on improving cashier performance. From the test results and discussion above, it is found that the Bakoel POS (digital accounting) application has an influence on the performance of canteen cashiers at Untag Surabaya.

The increasing use of the Bakoel POS (digital accounting) application will make it easier for cashier transactions to serve Untag Surabaya students.

B. SUGGESTIONS

1. Considering that in the Untag Surabaya canteen there is still 1 cashier who has not used the digital accounting application, it is better to immediately apply the digital accounting application. This is important considering the application has the following benefits:

- All cashiers can complete payment transactions quickly using digital accounting.
- All cashiers use a digital accounting system so that it is easier to record and calculate
- All cashiers use a digital accounting system to increase work efficiency and productivity
- Make it easier for cashiers to manage finances and be effective and time efficient in serving Untag Surabaya students.

2. Students transact using online payments or QRS codes and it is hoped that all cashiers in Indonesia will implement a digital transaction payment process so that there are no long queues.

3. To support the Company's Management Information System, digital accounting applications need to be implemented in all cashiers in Indonesia.

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