The Use of An Accounting Information System for Monitoring Website-Based Sales Call Activities in Garment Company

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Abstract—There are several ways that can be used to increase sales, one of which is using a sales call. At PT. Ricky Mumbul Daya, sales call is one of the main activities carried out to increase sales. Although the process of recording revenues and costs related to sales call activities at that company has used the system, but the process is still not optimal. This is because the data input process is only done by the cashier. Meanwhile, the monitoring process is still done manually. The purpose of this research is to create a Website-Based Accounting Information System for Sales Call Monitoring and tested whether the level of performance and effort expectations of the system has an influence on user behavioral intention. The system development method used is the System Development Life Cycle. Meanwhile, to test the level of the three variables, it will begin with collecting data with a questionnaire and then the data will be analyzed using several testing methods. The result of this research is that the information system created can complete the expected tasks and concluded that the level of performance and effort expectations of the system have an influence on the user’s behavioral intention.

Keywords—Sales Call, Monitoring, Performance Expectation, Effort Expectation, Behavioral Intention

1. INTRODUCTION

Sales is one of the important activities to increase revenue in a company. One way to increase sales is with a sales call. Sales call is one of the important activities used to increase sales of a company [1].

PT. Ricky Mumbul Daya is a business entity and one of the largest underwear distributors in Semarang. Consumers owned by PT. Ricky Mumbul Daya is the largest in various cities such as Kudus, Pati, and Solo. Because most of the sales activities in this business entity involve sales calls, therefore the process of monitoring these activities is important to keep the data provided accurate.

This company has used a system to assist the recording process related to sales call activities, but the process is still not optimal and seems to pile up because only the cashier is inputting data. While the monitoring process is still done manually. So the risk of human error is still high. Therefore we need an information system that can be used to solve these problems.

Information systems can be categorized into several types and one example is accounting information systems. This accounting information system functions to collect and process all data related to financial transactions. The impact of using this system is that the data processing process becomes more secure and accurate [2].

The purpose of this research is to create a sales call monitoring accounting information system at PT. Ricky Mumbul Daya which can produce output in the form of salesman performance reports and monitoring reports on the use of fuel oil. In addition, this study will also examine whether the level of performance expectancy and effort expectancy of this accounting information system has an influence on the level of behavioral intention of the system in the future.
II. LITERATURE

Sales call is one way that can be used to increase company sales. According to [1], the sales call is an effective way for the decision-making process related to consumers. In addition, sales calls can also be interpreted as visiting activities carried out by sellers to consumers with the main aim of generating sales for new consumers or increasing sales for old consumers.

Monitoring is used to detect and prevent an error from occurring. According to Aviani, monitoring activities are activities used to determine whether the goals of an organization can be achieved properly or not. The main purpose of this activity is to ensure whether all existing tasks can be done according to plan [3]. Through this activity, it is hoped that the information held will be more precise and accurate [4].

According to Bodnar G. H. and Hoopwood [5], a website-based information system is a series of components (procedures, users, and technology) that are interconnected to perform a particular task. There are advantages to designing a website-based information system, one of which is that it can be accessed anywhere and anytime [6].

Performance report is a report that has a function to briefly and completely explain the performance that has been achieved by a person or a particular company [7]. There are three ratios that will be used in this report:
1. Expenses to income: used to see the company's ability to manage expenses [8].
2. Profit Margin: used to describe the profits obtained from a sales activity. [9]
3. Average Deal Size: used to measure the total revenue earned in a period then divided by the number of bids successfully closed or completed in that period [10].

Fuel is a material that can be converted into energy. Fuels can be distinguished by type, one example is BBM (Fuel Oil). Fuel oil is fuel produced from the process of refining crude oil from the bowels of the earth [11].

III. METHOD

This research was conducted at PT Ricky Mumbul Daya as a business entity and one of the largest underwear distributors in Semarang, Central Java.

Sampling in this study was conducted using non-probability sampling technique with saturated sampling type. This is because all members of the population will be used as samples, as many as 30 consisting of: the cashier section is 1 person, the salesman section is 13 people, the consumer section is 16 people.

This study uses three main variables consisting of two independent variables and one dependent variable. The following is an explanation of these variables:
1. Performance Expectancy
   According to Venkatesh, et al., performance expectancy is a condition where users feel helped by the use of a particular system [12].
2. Effort Expectancy
   According to Venkatesh, et al., effort expectancy is the level of ease experienced by users when using a particular system [12].
3. Behavioral Intention
   According to [13], behavioral intention is a condition where users are willing and willing to use an information system because they are satisfied with the benefits offered.

This study uses primary data and secondary data as well as qualitative data and quantitative data. The data collection techniques used are as follows: (1) Literature study, (2) Interviews, (3) Observation, and (4) Questionnaires.

The questions in the questionnaire will be made using a numerical scale with answer options 1-5, where 1 is strongly disagree and 5 is strongly agree. The questions in this questionnaire will be divided into 3 parts: (1) There are 9 questions about performance expectations, (2) 6 questions about effort expectations, and (3) 5 questions about behavioral intention.

The data that has been successfully collected will then go through several testing processes such as validity test, reliability test, correlation test, and descriptive statistical analysis. The hypotheses formulated are as follows:
H0 = Performance Expectancy level or Effort Expectancy level of a website-based sales call information system does not affect the level of behavioral intention of users.

H1 = Performance Expectancy level of a website-based sales call information system affects the level of behavioral intention of users.

H2 = Effort Expectancy level of a website-based sales call information system affects the level of behavioral intention of users.

Figure 1: Hypothesis Model

As for the system development method used is the System Development Life Cycle which consists of stages [14]:

1. Planning is used to collect all information related to sales call activities in the company.
2. Analysis is used to determine the goals, objectives, and needs of the new system to be created.
3. Logical design is used to design the system in terms of logic by using flowcharts, activities, use cases, entity relationships, and data flow diagrams.
4. Physical design is used to create a design of the system page display that will be created.
5. Implementation is used for the system testing process that has been completed.
6. Maintenance is the stage used to maintain the system in the long term. [15]

IV. RESULT AND DISCUSSION

There are several features in this system. The first feature is revenue recording. This feature will begin with the creation of a billing list by the cashier, after that proceed with the creation of a sales order by the salesman, and end with the creation of a purchase order by the consumer. The second feature is cost recording. This feature begins with making a temporary bill by the cashier or salesman and then ends with the process of entering cost data by the salesman. The third feature is the recording of fuel usage. In this feature the salesman will enter data related to the use of BBM when making sales call activities and then the cashier will check the data. Lastly is the performance report generation feature. In this feature there will be some information related to sales and cost data. In addition, in this feature there is also a ratio calculation related to the calculation of the salesman performance ratio.

A. Result

Use case diagrams are used to describe the access rights of each party involved in this system. Based on figure 2, there are 3 main users (cashier, salesman, customer) who will be involved in this system. Each user has different rights.

Figure 2: Use Case Diagram
Entity Relationship diagram (figure 3) is used for the data modeling process to organize the data to be entered into the system [16]. This diagram has a function to explain the relationship between one data and other data based on the relationships they have.

Figure 3: Entity Relationship Diagram

Activity diagrams are used to describe the activities that will occur in this information system. Figure 4 is an activity diagram used for the process of recording revenue related to sales call activities.

Figure 4: Revenue Recording Activity Diagram

Figure 5 is an activity diagram used for the process of recording costs related to sales call activities.

Figure 5: Cost Recording Activity Diagram

Sequence diagrams are used to describe the objects involved and the process of sending messages or data that occurs in the system. Figure 6 is a sequence diagram for the process of recording costs and figure 7 is a sequence diagram for the revenue recording process.

Figure 6: Sequence Diagram of Cost Recording Activity

Figure 7: Sequence Diagram of Revenue Recording Activity
Flowchart diagrams are used to describe the flow of procedures from a system. Figure 8 is a flowchart diagram for the revenue recording activity.

Figure 9 is a flowchart diagram for the activity of recording costs.

After the design process is complete, the next stage is the creation of the system. The following is a display of the system that was successfully created:

a. Salesman Report View Page

Figure 10 is a page display that is used to see the total sales and costs of each salesman.

b. Purchase Order Print Page

Figure 11 is the page used to print consumer purchase order data.
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c. Cost Details Print Page

Figure 12 is a page used to print cost data used by salesmen.

d. Performance Report Page

Figure 13 is the page used by the cashier or salesman to see the performance of each salesman.

B. Discussion

Descriptive Statistics

In table 1, information is obtained that there is 1 respondent or 3.3% who has a role or part as a cashier. Then there are 13 people or 43.3% who have a role as a salesman and the remaining 16 people or 53.3% who have a role or part as a consumer.

Table 1: Statistical Table of Respondents’ Role Data

<table>
<thead>
<tr>
<th></th>
<th>Frequency</th>
<th>Percent</th>
<th>Valid Percent</th>
<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cashier</td>
<td>1</td>
<td>3.3%</td>
<td>3.3%</td>
<td>3.3%</td>
</tr>
<tr>
<td>Salesman</td>
<td>13</td>
<td>43.3%</td>
<td>43.3%</td>
<td>46.7%</td>
</tr>
<tr>
<td>Consumer</td>
<td>16</td>
<td>53.3%</td>
<td>53.3%</td>
<td>100.0%</td>
</tr>
<tr>
<td>Total</td>
<td>30</td>
<td>100.0%</td>
<td>100.0%</td>
<td></td>
</tr>
</tbody>
</table>

Validity Test

Validity test serves to measure the extent to which a research instrument can carry out its duties in obtaining data.

In the first phase of the validity test, it was found that the validity test on the PE, EE, and BI variables contained invalid data because the values were in separate components. Therefore, it is necessary to test the validity of the second stage so that this instrument can be said to be valid. The second phase of the validity test was carried out by eliminating several questions, including PE1, PE4, PE6, PE7, PE8, PE9, EE1, EE2, BI1, BI2, BI5. Table 2 is the result of the second stage of the validity test carried out. Based on the table, it can be concluded that all the variables used have positive values (> 0.4) and are collected in the same component.

Table 2: Table of Second Phase Validity Test Results (System Testing)

<table>
<thead>
<tr>
<th>Component</th>
<th>PE2</th>
<th>PE3</th>
<th>PE5</th>
<th>EE3</th>
<th>EE4</th>
<th>EE5</th>
<th>EE6</th>
<th>BI3</th>
<th>BI4</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>.848</td>
<td>.770</td>
<td>.601</td>
<td>.105</td>
<td>.113</td>
<td>.671</td>
<td>.192</td>
<td>.580</td>
<td>.582</td>
</tr>
<tr>
<td>2</td>
<td>.223</td>
<td>.103</td>
<td>.214</td>
<td>.716</td>
<td>.842</td>
<td>.410</td>
<td>.653</td>
<td>.658</td>
<td>.419</td>
</tr>
</tbody>
</table>

Reliability Test

Reliability test is used to measure the consistency of a questionnaire or the data used in conducting the test.

a. Performance Expectancy

The table below (table 3) is the result of the reliability test for the PE variable. From these data, it can be seen that the alpha value is 0.690.

Table 3: Table of Reliability Test Results of PE Variable System Testing

<table>
<thead>
<tr>
<th>Cronbach’s Alpha</th>
<th>Items</th>
<th>N of Items</th>
</tr>
</thead>
<tbody>
<tr>
<td>.690</td>
<td></td>
<td>3</td>
</tr>
</tbody>
</table>

b. Effort Expectancy

The table below (table 4) is the result of the reliability test for the EE variable. From these data, it can be seen that the alpha value is 0.727.
c. Behavioral Intention
The table below (table 5) is the result of the reliability test for the BI variable. From these data, it can be seen that the alpha value is 0.812.

Table 5: Table of Reliability Test Results of BI Variable System Testing

<table>
<thead>
<tr>
<th>Cronbach's Alpha Based on Standardized</th>
<th>N of Items</th>
</tr>
</thead>
<tbody>
<tr>
<td>.812</td>
<td>2</td>
</tr>
</tbody>
</table>

Table 6 is the range of test values for the results of reliability tests on a particular variable.

Table 1: Table of Reliability Value Range

<table>
<thead>
<tr>
<th>Cronbach's alpha</th>
<th>Internal consistency</th>
</tr>
</thead>
<tbody>
<tr>
<td>α ≥ 0.9</td>
<td>Excellent</td>
</tr>
<tr>
<td>0.9 &gt; α ≥ 0.8</td>
<td>Good</td>
</tr>
<tr>
<td>0.8 &gt; α ≥ 0.7</td>
<td>Acceptable</td>
</tr>
<tr>
<td>0.7 &gt; α ≥ 0.6</td>
<td>Questionable</td>
</tr>
<tr>
<td>0.6 &gt; α ≥ 0.5</td>
<td>Poor</td>
</tr>
<tr>
<td>0.5 &gt; α</td>
<td>Unacceptable</td>
</tr>
</tbody>
</table>

Table 7 shows that the PE variable has an internal consistency questionable, the EE variable has an acceptable internal consistency, and the BI variable has an internal consistency good.

Table 7: Table of Reliability Test Results (System Testing)

<table>
<thead>
<tr>
<th>Variabel</th>
<th>Cronach's Alpha</th>
<th>Internal Consistency</th>
</tr>
</thead>
<tbody>
<tr>
<td>PE</td>
<td>0.690</td>
<td>Questionable</td>
</tr>
<tr>
<td>EE</td>
<td>0.727</td>
<td>Acceptable</td>
</tr>
<tr>
<td>BI</td>
<td>0.812</td>
<td>Good</td>
</tr>
</tbody>
</table>

Correlation Test
Correlation test is used to test as well as find the relationship between the variables used in the study. Variables or data that are correlated with each other are marked with a significant value (2-tailed) less than 0.05. In the results of the correlation test below (table 8) it can be seen that:

a. PE is correlated with BI with a significant value of 0.001 (the value is less than 0.05).
b. EE is correlated with BI with a significant value of 0.000 (the value is less than 0.05).

Table 2: Table of Correlation Test Results (System Testing)

<table>
<thead>
<tr>
<th>Variabel</th>
<th>SPE Pearson Correlation</th>
<th>SEE Pearson Correlation</th>
<th>SBI Pearson Correlation</th>
</tr>
</thead>
<tbody>
<tr>
<td>SPE</td>
<td>.468*</td>
<td>.007</td>
<td>.001</td>
</tr>
<tr>
<td>N</td>
<td>30</td>
<td>30</td>
<td>30</td>
</tr>
<tr>
<td>SEE</td>
<td>.825**</td>
<td>.000</td>
<td>.000</td>
</tr>
<tr>
<td>N</td>
<td>30</td>
<td>30</td>
<td>30</td>
</tr>
</tbody>
</table>

IV. CONCLUSION
Based on the results of the research that has been done, several conclusions were obtained as follows:

1. Making a website-based sales call monitoring accounting information system at PT. Ricky Mumbul Daya started by conducting observations and interviews, then doing a logical and physical design, and ending with the system testing process. In addition, this system is also considered to have been able to carry out its duties properly, such as entering master data, making purchase orders, making temporary receipts, and other tasks.

2. The level of performance expectancy of the website-based sales call monitoring accounting information system at PT. Ricky Mumbul Daya has an influence on the level of behavioral intention of users.

3. The level of effort expectancy of the website-based sales call monitoring accounting information system at PT.
Ricky Mumbul Daya has an influence on the level of behavioral intention of users.

REFERENCES