Design of Form for Managing Green Line Canteen in PT. Infineon Technologies Batam

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Abstract—Canteen is a place to a group to gathering to eat some food. Generally, some company have a canteens for all their employees, and some time there’s available food that is come from caterers that have a cooperation contract with some company. In each order, clear, transparent, and up-to-date records are needed, so that there’s no loss between the two parties during the cooperation. In recording, form is needed as a recording media for recording order, and some of procedure require needed. In this case, PT. Infineon Technologies Batam requires a form, for record all their data. This study describes the design of form that use for recording canteen data, terms of order, actual order, and also the presence of caterers. This research will produce a form to recording data and to manage green line canteen based on Microsoft Access, which provided clearly, transparent, and up-to-date records.

Keywords: Canteen, Microsoft Access, Forms

I. INTRODUCTION

PT. Infineon Technologies is a German company engaged in semiconductors founded in April 1999, when the operation of its main company, Siemens AG, was broken down to make a new company.

At each break, PT. Infineon provides catering in Infineon canteen to be enjoyed by each employee without exception. By using 6-7 servants in the canteen, PT. Infineon uses a buffet system, for main dishes, vegetables, and the fruit is first placed on a plate and for the rice and drinks each employee can take according to taste or desire.

Canteen committee at PT. Infineon finally conducted an evaluation for repairing and improving the committee canteen performance and for a better canteen for PT. Infineon, and finally the committee canteen worked on the Green Line Canteen project.

The purpose of the committee canteen at PT. Infineon conducts the green line canteen project to control the canteen cycle planning, starting from vendor selection, food menu selection, to direct survey in the field. The benefits of green line canteen itself, among others, are more controlled planning, more transparent and able to control problems with appropriate and exact handling, and continuously means that the program will continue to run for an indeterminate time.

The canteen committee in implementing the Green Line Canteen project requires an operational form to record their data. And in its management, form that are useful for inputting data and supporting management of information systems is needed.

Based on the things above the constituents are interested in conducting research with the title "Design of Form For Managing Green Line Canteen in PT. Infineon Technologies Batam"

Problem Formulation

Based on the background above, the formulation of the problem from the research is:
1. How is the identification and evaluation of Green Line Canteen procedures at PT. Infineon Technologies Batam.
2. How designing form for the management of the Green Line Canteen at PT. Infineon Technologies Batam.
3. How the implementation of forms for the management of the Green Line Canteen at PT. Infineon Technologies Batam.
4. How is the evaluation of the application of forms for the management of the Green Line Canteen at PT Infineon Technologies Batam.

Research Benefits

There are two benefits of this research, practical benefits and theoretical benefits.

A. Practical Benefits

Help PT. Infineon Technologies Batam in realizing and implementing the Green Line Canteen project to be more transparent, accountable, develop the Green Line Canteen procedure flow, and can have a good influence and also improve the committee canteen performance.

B. Theoretical Benefits

1. For Students, Expand your horizons in the field of making Microsoft Access database applications and can implement it if there are similar cases.
2. For Readers, Adding knowledge about making Microsoft Access database applications and can also be used as a reference for research in the same case.

II. LITERATURE REVIEW

Empirical Study
1. According to [9], Sentosa & Junaedi (2018). Cash receipt application from deposits member at cooperative service employees July 12 West Java province.
2. According to [2], Puspitasari, Nurjayanti, & Handoko (2017) Outpatient Patient Medical Record Form.

3. According to [10], Putri, Merryana, & Susila (2016) The results show that the level of customer satisfaction is partly large included in the satisfied category (58%). Consumers who choose dissatisfaction are also quite high at 42%.

4. According to [1], Khan & Yunus (2016). The Cloud Computing system can be implemented in the canteen business scope both small and large. Through the user that is done in an interface does not require expertise or special training first and can use this application easily.

Framework
Framework show step of making the information system and form.

![Framework](image)

**III. RESEARCH METHOD**

**Design or Research Type**
The design or type of research is carried out with a software simulation approach. Simulation can be interpreted as a process of imitation of something tangible along with the state of affairs. The action of carrying out this simulation generally describes the key characteristics of a particular abstract system or physics system.

**Theoretical Review**

**Design**
According to [3], designing is the process of developing new specifications based on recommendations from system analysis.

**Form**
According to [3], forms can be defined as pieces of paper or media that have space to be filled with various information as a basis for recording transactions or economic activities of an organizational unit.

**Database**
According to [3], a database of interconnected and organized files or a collection of records that store data and relationships between them.

**Canteen**
Canteen comes from the Dutch language (canteen), which means a room in a public building that can be used by visitors to eat, both food brought alone or purchased there.

The main object in Microsoft Access
1. Table
2. Relationship
3. Queries
4. Forms
5. Report
6. Switchboard

**Variable Operationalization**

| Variable/ Sub Variable | Variable Dimension | Indicators |
|------------------------|--------------------|------------|
| Forms                  |                    | 1. Vendor & Food Determination Criteria |
|                        |                    | 2. Order Amount |
|                        |                    | 3. Actual Amount |
|                        |                    | 4. Financial Report |
|                        |                    | 5. Purchase Report |

**Objects and Scope of Research**
The object to be examined by the author in accordance with the problem is the flow of the green line canteen procedure, starting from the process of determining the vendor to evaluating the procedure flow. And the scope studied is canteen management procedures, from food criteria, to vendor criteria.

**Types and Data Sources**

A. Primary data: data obtained directly through interviews and observation of research sites, PT. Infineon Technologies Batam.

B. Secondary Data: obtained indirectly from the object of research.

**Collecting Data Technique**
The techniques used to collect data include: Observation, Interview, and Documentation.

**Data analysis method**
The data analysis method used is the experimental research method, which serves to try and experimentation starting from the design of information systems and forms that use Microsoft Access.

**Research Time and Place**
This research will be carried out for ± 6 months, during January-July 2019. And takes the place at PT. Infineon Technologies Batam.

**IV. RESULT OF RESEARCH**

**Research Results and Discussion**

**Identification and Evaluation of Green Line Canteen Procedures**

1. Identification
During the implementation of the green line canteen procedure the authors found three things that were the focus in identifying this study, the first was the caterer selection...
procedure, the second was the procedure for taking food and the third recording the green line canteen trend.

a. In providing food for employees, PT. Infineon Technologies Batam works with catering, which is in Batam.

b. In distributing food for employees, PT. Infineon Technologies Batam uses a buffet system, where employees are free to choose the desired dish that will be provided by the waiter behind the shop window / steleng, while for vegetables, additional side dishes, and fruit are already available in ompreng which has been prepared in advance by the waiter, and for drinking water and spoons / forks and tissue, employees are free to take their own.

c. In conducting transactions in the canteen, both order transactions, actual order transactions, and time records for caterer attendance. The committee canteen records that called trend green line canteen.

2. Evaluation

After identifying, the author found several evaluations of the existing procedures, both the selection procedure for the caterer and the procedure for taking food and recording the green line canteen trend.

a. Vendor Selection Procedure

When conducting a survey at the caterer place, the canteen committee found it difficult to divide the time because in one time the proposal entered more than one caterer.

b. Food Collection Procedure

1) During the food retrieval process, the first evaluation is the employee who is a heavyweight do the queue, making other employees uncomfortable and disturbed.

2) Sometime it’s found where badges cannot tap, usually due to new employees or new internships or guests / visitors or employees who miss their badges to use temporary badges.

c. Trend Green Line Canteen

Data input is still manual.

3. SOP

A. SOP Flowchart Caterer Selection

1) Infineon Submits an Application to the Purchasing Department.

2) Purchasing will open marketing ads.

3) Vendor / Caterer submits a proposal to Infineon.

4) HR receives the proposal, then informs the Canteen Committee.

5) Canteen Committee & HR conduct surveys to vendor / caterer locations.

6) Canteen Committee & HR evaluates vendor / caterer.

7) Canteen Committee & HR negotiate the results of the assessment, if not then the Canteen Committee & HR repeat looking for vendor proposals, if Yes the Canteen Committee negotiates the contract with the Vendor / Caterer.

8) Finish.

B. Flowchart of SOP for Food Taking in the Canteen

1) Employees queue in the space provided.

2) The employee chooses the desired side behind the transparent window.

3) Employees do a badge on the taping provided, if the employee fails to report to the caterer, then caterer will manually record the badge number, if successful, the employee can take a spoon, fork, tissue and drink.

4) Employees take spoons, forks and drink according to taste.

5) Employees take rice according to taste.

6) The employee goes to the table to eat.

7) Finish.

Source: Data Processing Results

TABLE II. FLOWCHART CATERER SELECTION

| Vendor Selection Procedure | Flowchart of SOP for Food Taking in the Canteen |
|----------------------------|-----------------------------------------------|
| 1. Vendor Selection Procedure | 1. Employees queue in the space provided. |
| 2. Purchasing will open marketing ads. | 2. The employee chooses the desired side behind the transparent window. |
| 3. Vendor / Caterer submits a proposal to Infineon. | 3. Employees do a badge on the taping provided, if the employee fails to report to the caterer, then caterer will manually record the badge number, if successful, the employee can take a spoon, fork, tissue and drink. |
| 4. HR receives the proposal, then informs the Canteen Committee. | 4. Employees take spoons, forks and drink according to taste. |
| 5. Canteen Committee & HR conduct surveys to vendor / caterer locations. | 5. Employees take rice according to taste. |
| 6. Canteen Committee & HR evaluates vendor / caterer. | 6. The employee goes to the table to eat. |
| 7. Canteen Committee & HR negotiate the results of the assessment, if not then the Canteen Committee & HR repeat looking for vendor proposals, if Yes the Canteen Committee negotiates the contract with the Vendor / Caterer. | 7. Finish. |

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Fig 2. Flowchart Food Taking
Designing the Green Line Canteen Form
Forms design include:
1. Order Form
2. Caterer Attendance Form
3. Actual Order Form

Implementation of Green Line Canteen Forms
Information System Interface and Green Line Canteen Form:
1. Splash screen Form
   The splash screen form is the initial display when opening a green line canteen database. Here is the splash screen form preview:

   ![Splashscreen Form](image)

   Fig. 3. Splashscreen Form

2. Login Form
   The login form is used to enter the system. If the Admin Name and Password are filled in correctly, the user will enter the system. Here is the login form preview:

   ![Login Form](image)

   Fig. 4. Login Form

3. Main Menu Switchboard
   The main switchboard menu is the main menu display when opening the green line canteen information system and form. The following is the preview of the main switchboard menu:

   ![Main Menu](image)

   Fig. 5. Main Menu Switchboard

4. Menu Switchboard Menu Admin
   The menu switchboard admin menu is the main menu display when going to open the admin form. This is the admin menu's switchboard preview:

   ![Menu Admin](image)

   Fig. 6. Menu Switchboard Menu Admin

5. Menu Switchboard Menu Caterer
   The caterer menu switchboard menu is the main menu display when opening the add new caterer form. This is the preview:

   ![Menu Caterer](image)

   Fig. 7. Menu Switchboard Menu Caterer

6. Menu Switchboard Order
   The switchboard menu order is the main menu display when opening the order form. This is the preview:

   ![Menu Order](image)

   Fig. 8. Menu Switchboard Order

7. Menu Switchboard Actual Order
   The menu switchboard actual order is the main menu display when it will open the actual order form. This is the preview:

   ![Menu Order](image)

   Fig. 9. Menu Switchboard Actual Order

8. Caterer Attendance Switchboard Menu
   The switchboard menu for caterer attendance is the main menu display when you open the Caterer Attendance form. This is the preview:

   ![Caterer Attendance](image)

   Fig. 10. Menu Switchboard Caterer Attendance

9. Menu Switchboard Report
   The switchboard report menu is the main menu display when opening a report. The report menu functions as
an introduction in entering the report. This is the preview:

![Image](image_url)

Fig. 11. Menu Switchboard Report

Evaluation of Application of Green Line Canteen Forms
After the information system and form are completed, then it is submitted to the person who will use it, namely Mr. Rizki Satria, during using this application, he found several things that became evaluations of the information system and this form, such as:
1. Use of the Application: in the report section, it’s found when doing the report a long process is needed, it cannot do a report in a short way, so that the report requires more attention to avoid mistakes.
2. Completed Features, in the report section. The available features are not as easy and practical as the other menus.
3. Satisfaction in the Use of the Application (Achieved / Not), in terms of satisfaction, Mr. Rizki Satria feels comfort and satisfaction in using this application because the expected goals of this application have been achieved. And will plan to use this application continuously.

Discussion
According to[2], this research is in look same with the results of the research as for the design of this form in, the design of this form was designed and based on the identification of the form design that occurred previously adapted and adjusted based on what needs are needed in designing this form, with the aim of reducing and avoiding errors in the design process of this form.
According to[3], the difference from the results of identification of the design process of forms and with the previous research is the variable in the study, which takes variable cloud computing, while the researcher takes the database variable form.

From international journals (King, 2009), which is explained in this journal that an overview of how to build realistic data using applications and features found in Microsoft Access and Microsoft Excel to query development.
In the previous system, it was identified and evaluated, and it was found that the canteen green line trend recording system was still done manually through Microsoft Excel.
With the results of these evaluations, the authors design forms, which aim to record the canteen green line trend.

After the form have been designed, then this forms is submitted to Mr. Rizki Satria who will test this application.

After carrying out the implementation, it was found an evaluation. When going to do a report the steps that need to be done require a step that is quite long, because the report will be done on a monthly basis and for this, more accuracy and attention is needed, so that when doing the report there is no error.

V. CONCLUSIONS

Conclusions
Based on the results of research on the design of information systems and forms for the management of green line canteen at PT. Infineon Technologies Batam conclusions can be taken such as:
1. Evaluation related to case that have been carried out at this time and found some shortcomings and things that become obstacles in managing forms.
2. This research has succeeded in designing a form based on Microsoft access for inputting the green line canteen data.

Suggestions
Based on the research that has been done, suggestions that can be taken into consideration for the company in the future are as follows:
1. Web-based information system, because by using the web, information systems can be connected, and so that in the future it can be used multistorer or more than one user.
2. Further development of the green line canteen forms, can use an appropriate system so that information systems can be more developed and easier to use.

Limitations
The limitations of the research that has been done are as follows:
1. Research conducted focus on designing information systems using Microsoft access and only applied to PT Infineon Technologies Batam.
2. as an application to information systems.

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