



Artikel

# Implementation of Top Up & Refund Balance Application at FoodCourt

Agus Kusnawan<sup>1</sup>, Irma Pemasari<sup>2</sup>, Riki<sup>3</sup>

<sup>1</sup>Management, Universitas Buddhi Dharma, Banten, Indonesia

<sup>2</sup>Information System, Universitas Buddhi Dharma, Banten, Indonesia

<sup>3</sup>Information System, Universitas Buddhi Dharma, Banten, Indonesia

## SUBMISSION TRACK

Received 20 June 2018;  
Revised 10 July 2018;  
Accepted 10 September 2018;  
Available online 20 September 2018

## KEYWORD

Topup, Refund, FoodCourt, Cards

## KORESPONDENSI

Phone: 081807834703  
E-mail: riki@ubd.ac.id

## A B S T R A C T

effectiveness and efficiency in management of information systems are very important to determine the success and smoothness of the company. With the demands of transaction speed and ease of getting information. Waterfall is a method used in building this system, where the ease of use. With the application of a computerized system it is concluded that it can correct weaknesses and reduce the level of errors in making reports and To produce good reports, the transfer of data must be done carefully, because accuracy is expected to be required by the administration in data processing and also cooperation and a sense of responsibility. each personnel is expected to achieve maximum results.

## INTRODUCTION

The growth of technology, especially computer technology, is increasingly rapidly making every company must be able to quickly adapt and innovate to the company's operational activities. The computer is an important asset for the company because it can help in all fields of work such as communication, medicine, business, and others [1]. So that various existing purchase transactions can take place quickly, efficiently and accurately, we need a support system that can handle this. In normal day-to-day practices, transactions such as payments will be made using money while the exchange of information will be done using paper, so we

need a transaction mechanism that can save resources and improve the accuracy and security of the transaction itself [2].

The problems faced by FoodCourt are effectiveness and efficiency in management of information system which are very important to determine the success and smoothness of the company which can facilitate the administration and operational activities of the company. Food Court has several issues that must be considered, especially regarding the problem of the increasing number of competitors with similar businesses in the Tangerang area, thereby increasing the variety of attractiveness and purchasing power of customers who are also increasingly diverse and keep up with the times. Therefore, we need a technology and

information-based system development that can support the attractiveness of customers in order to continue to make FoodCourt as their place to eat, besides the system is also integrated with each other to facilitate the running of business processes, can facilitate customer service, and provide variety of services which is increasingly unique and attractive, and makes the sales process easier

## I. LITERATURE REVIEW

### **RFID (Radio Frequency Identification)**

Radio Frequency Identification (RFID) is an identification method using a facility called an RFID label or transponder to store and retrieve data remotely [3]. RFID label or card is an object that can be installed or inserted in a product, animal or even human for the purpose of identification using radio waves. The RFID label consists of a syconized microchip or antenna. Passive labels do not need power sources, while active labels need power sources to function.

RFID technology is the answer to various weaknesses that barcode technology has, in addition to being able to only be identified by bringing the barcode closer to a reader, also because it has a very limited data storage capacity and cannot be reprogrammed making it difficult to store and update data in numbers great for an item. One interesting solution that then emerged was to store the data on a silicon chip, this technology is known as RFID. Contact between the RFID tag and the rider is not made in direct contact or mechanized by sending electromagnetic waves. Unlike smart cards that can be used on telephone cards or bank cards that also use silicom chips, RFID tag codes can be read at a considerable distance. The RFID system as a whole consists of 3 components, namely:

1. RFID tags, can be stickers, paper or plastic in various sizes. Inside each of

these tags there is a chip that is able to store a certain amount of information.

2. RFID Reader Terminal, consisting of RFID-reader and antenna which will affect the optimal distance of identification. The RFID terminal will read or change information stored in the tag via radio frequency. The RFID terminal is directly connected to the Host Computer system.
3. Host Computer, a computer system that regulates the flow of information from items detected within the scope of the RFID system and regulates communication between tags and readers. The host can be a stand-alone computer or be connected to a LAN / Internet network for communication with the server.

### **Top Up and Refund**

Top-up is the process of replenishing or adding a certain amount of funds to an account to be able to make a transaction.

Refund is the process of exchanging or replacing a number of funds that have been paid to the customer [4].

## II. METHODS

### Research Analysis

1. Planning  
At this stage, understanding the problems that arise and defining them in detail, then determine the purpose of making the system and identify all obstacles that will be faced.
2. Analysis  
Summarize some raw data into information. Analysis illustrates patterns consistently in the data so that the results can be studied and translated in a short and meaningful way [5].
3. Design

Determine the process and data requirements for the new system to be designed, the steps are as follows:

- a. Prepare a detailed system design
  - b. Identify alternative system configurations
  - c. Evaluate alternative system configurations
4. Implementation

In designing a system it is very necessary to implement/implement the system of a company so that it can run well and in accordance with the wishes of the user. [6]

**Table 1. Process order**

Input	Process	Output
Card data	Balance Check	Card that has been filled with balance
	Balance Filling	Refund Balance
Order data	Order Recording	Bill
	Order Addition (Payment)	Card That Has Been Cut Off Saldonya
		Proof of transaction

In the previous stage, it has been explained about the system that is running on FoodCourt, with the manual system that is still used today, the authors found several problems faced by FoodCourt including:

1. Errors often occur in the calculation of the balance.
2. Ineffective reports.
3. The manual system is less efficient in satisfying customers and competent with other competitors.

### III. RESULT

The proposed system procedure is as follows:

1. Before the customer makes an order transaction is expected to come to the cashier to fill in the topup of the card balance which is a transaction for the purchase of all food.
2. Customers come to the cashier topup balance.
3. The cashier asks if the payment will be through what type of payment, cash / debit card/flazz/credit card.
4. To enter the cashier topup or refund module, the cashier please input the ID provided by FoodCourt management.
5. To top up a customer, the cashier should scan both the new card and the card given by the customer.
6. If the card given by the customer is still active, you will see a blue ACTIVE CARD FLAG with the transaction balance printed on the screen.
7. If you are sure, the user can click SAVE and the system will save the topup transaction data and then print it on the available printer.
8. Customers start making purchases with cards that have been topped up before.
9. If the customer has finished making a card transaction that has been topped before and there is still a balance remaining, the card can be refunded / cashed back.
10. The customer comes to the cashier and then returns the card.
11. To make a refund, the cashier / user must scan the card given by the customer so that the nominal appear that can be refunded on the Redeem Amount box.
12. If it is ok, the user must click the save button to then the transaction is saved and the system will print to the available printer.

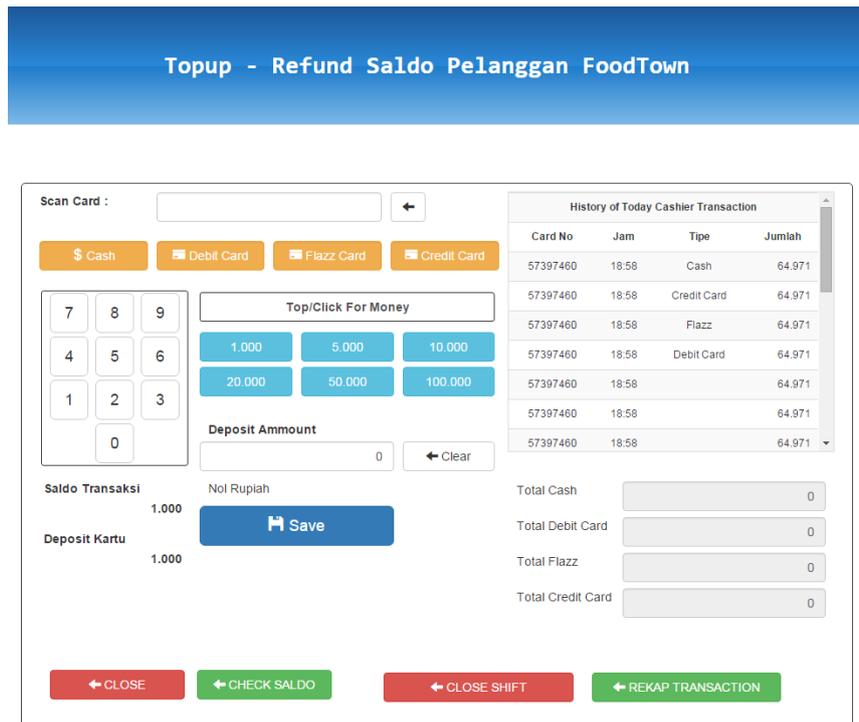


Fig 1: Top up Customer

this section the customer can fill in the card used to make payment transactions from merchants available in the food court. Where payments can be made by cash to cashiers directly, debit cards, credit cards and Flazz Cards (partners of BCA)

The top up quantity menu is also facilitated with several desired top up quantities.

In history, the cashier can see in detail the transactions used by customers to make payments

#### IV. CONCLUSION

Based on the research carried out and if the proposed system can be implemented properly then conclusions can be drawn for the implementation of topup & refund balance applications in foodcourt are as follows:

1. In a running system, weaknesses that can affect the image and performance of foodcourt can be taken, because the system is done manually, resulting in making reports manually ineffective and inefficient.
2. The process of inputting and controlling data at the company becomes easier to do.

3. With the application of a computerized system it is concluded that it can correct weaknesses and reduce error rates in making reports.

4. With the application of computerized systems to create work productivity that is precise, fast, careful in processing data and submitting reports.

## REFERENCES

- [1] A. Pataropura, R. Riki and A. Saputra, "Sales Analysis Using the Forecasting Method," *bit-Tech*, vol. 1, no. 3, pp. 146-149, 2019.
- [2] D. M. Kroenke, *Management Information System*, Yogyakarta: Andi, 2003.
- [3] J. A. O'BRIEN, *Introduction to Information System RFID*, New York: Mcgraw-Hill, 2003.
- [4] J. Hartono, *Sistem Teknologi Informasi*, Yogyakarta: Andi, 2004.
- [5] E. L. Norman , *Analisa Sistem Informasi*, Yogyakarta: Andi, 2004.
- [6] G. B. Davis, *Management Information System : Conceptual Foundation*, Jakarta: PT. Prenhalindo, 2003.

## BIOGRAPHY

**Agus Kusnawan** Graduated in the Management Study Program (S1) in the HRM in 1995, the Management Study Program (S2) in Human Resource Management. Currently as a Lecturer in the Management Study Program, Buddhi Dharma University

**Irma Permatasari** Graduated in Information Systems Program (S1) in Enterprise Information System Concentration in 2006.

**Riki** Graduated in Information Systems Study Program (S1) in eCommerce in 2006, Informatics Engineering Study Program (S2) in Management Information Systems. Currently as a Lecturer in the Information Systems Program, Dharma Buddhi University.