# IMPLEMENTATION OF DIGITALIZATION ON THE REVENUE CYCLE TO IMPROVE THE QUALITY OF DECISION MAKING MORE TIMELY IN INDONESIA

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**Abstract**
*Revenue from product sales is the most important component for a company where the role of the information system in the revenue cycle plays an important role on capturing any single information related to the market, customers, availability of supplies for sale, payment systems from customers, product delivery time to customers, and how quickly this information can be gathered to become an information that can support decision making. This researchintends to get certainty that the use of digitizing the revenue cycle process will create a very positive impact on companies with better, faster, more accurate, and safer business considerations, as decision-making materials that can be made faster at any time. The method in this research uses descriptive methods to present a complete picture of social conditions or is intended for exploration and clarification of a social phenomenon or reality, by describing a number of variables. Digitalization in the revenue cycle can be done by implementing a barcode system and adding the existing information in the company database to a cellular tablet which become a tool for the sales team, so that the system will mutually integrate and update information data after the sales execution process is carried out. Prior to the system implementation, information can only be received by decision makers within the next 2 working days after the sales execution process is carried out.*

**Keywords:** *Marketing information system, Revenue Cycle, Barcode system, Accounting information system.*

**JEL Codes:** *M41, M31, O33*

## 1. INTRODUCTION

Revenue from sales of products is the most important component for the company because it is related to the company's performance to find out how big their market share is, how long this income can be converted from real products to cash, how much product inventory can be sold and whether All types of products are available according to customer requests, up to the evaluation of whether the customer can be given a credit facility or not.

The revenue cycle is a method for defining and maintaining the process used for the completion of an accounting process in recording revenue generated from services or products provided by the company which includes the accounting process in tracking and recording transactions from the start, usually starting from receiving orders. of the customer or enter into an agreement with the customer, delivery the order to the customer and ends with receiving payment from the customer. The revenue cycle is a series of business activities related to processing business information in providing goods and services to customers and receiving cash as payment (Romney &Steinbart, 2015).

In accordance with the current development of information technology, the role of information systems plays an important role in finding out things related to the market, customers, availability of supplies for sale, payment systems from customers, how long it takes for the products to be delivered to customers, and how quickly this information can be collectedto support top management's decision making, which become a challenge for the management of the company to manage the information appropriately, quickly and integrated.

The FMCG (Fast Moving Consumer Goods) marketing management system is a business sector that is included in the competition category in the global market. The distribution channel of the company is crucial to the success of the company's marketing strategy. The distribution channel of the company at the beginning, can only choose one of the direct distribution systems or the indirect distribution system, whereas now the company can combine both for effectiveness and efficiency.

In today's digital era, FMCG companies should be able to provide services and distribution of their products rapidly, precisely and in the structured manner. The distribution information system is closely related with the Marketing Information System (MIS) in which this system consists of people, tools, and procedures to collect, select, evaluate, and distribute the required information quickly and accurately.

Distribution Information Systems are very important procedures and methods for collecting, analyzing, and presenting information used in decision making. In the distribution information system there is an internal recording system that can be used for distribution channel management and other internal parties in making internal reports regarding orders, sales, prices, costs, inventory levels, accounts receivable, assets in customers and so on, so it is very important to combine each information into a database. This will allow companies and analysts to easily analyze the information they have, to get a decision regarding production, sales, marketing and distribution.

For easierinformation obtained, regarding products and customers, companies can use a barcode system which is a medium for database storing related to customer data. This barcode system will make companies easier to quickly access related with customers during the visit. The company also will have a computerized information collection from Company's existing data sources, so the company can immediately access and work using that information.

The product distribution system, which is carried out with a good and orderly system, really depends on the ability of management of the company to manage all these activities properly and integrally. Every element involved in the product distribution management becomes interrelated with one another and works together in processing input and processing input so that the company can produce needed output. In a good, orderly and integrated product distribution system, it will produce distribution channels that provide maximum productivity until the product reaches consumers.

Currently, several FMCG companies in Indonesia have taken advantage of advances in digital technology to carry out processes related with the revenue cycle to be able to process the Accounting Information System starting with getting orders, product availability, product prices, product delivery until payment processing from customers. Prior to the implementation of digitization in the revenue cycle, decision makers had to wait for information related to accumulated transactions for 2 working days after the transaction was carried out and this did not really help in a fast and accurate business decision making process.

This study intends to obtain certainty that the use of digitalization of the revenue cycle process will create a very positive impact on companies with better, faster, more accurate, and safer business considerations, as decision-making materials that can be made faster at any time.

## 2. LITERATURE REVIEW

### 2.1. Accounting information system

The accounting information system (AIS) is a tool that can assist company management in improving its control over company operations and to improve its performance. The AIS process consists of identifying, collecting, processing data to produce accounting information for decision makers at all levels of the organization. AIS is also seen as a system that companies use to record the financial transactions of a company or organization. This system combines accounting methodologies, controls and techniques to track financial transactions and provides internal and external reporting data and assists in the preparation of financial reports with the ability to improve organizational performance (Pérez et al., 2010).

The effectiveness of AIS also depends on decision makers' perceptions of the usefulness of the information generated by the system to meet the information needs for operational processes, managerial reports, budgeting and control in organizations (Nwinee et al., 2016).

In organizations, accounting information systems function to collect and store data relating to organizational activities and transactions which are then processed into information that can be used in the decision-making process.

### 2.2. Marketing Information System

The distribution system is a component that is closely related to the Marketing Information System (MkIS). MkIS is a system that interacts continuously with humans, tools and procedures to obtain, classify, analyze, assess, and distribute the required information accurately and in a timely manner to marketing decision makers (Kotler & Keller, 2006).

In its implementation, every part in the system must be related to one another to get a decision for a marketing strategy. The distribution system is a very important procedure and method for gathering, analyzing, and presenting information used in decision making.

### 2.2.1. Distribution Channel Database

Distribution channels are one or more companies or individuals that participate in the flow of goods and services from producers to end users or consumers (Hill, 2010). So that in the distribution channel database there is an internal recording system that can be used in distribution channels and other internal parties in making internal reports regarding orders, sales, prices, costs, inventory levels, accounts receivable, assets, payment systems, and so on. Any information that has been collected in a company database will be easily analyzed to produce information for making decisions regarding production, sales, marketing and distribution.

### 2.2.2. Barcode System

With good infrastructure, software and hardware in place, "the automation provided by barcode systems greatly simplifies information gathering, processing and tracking" (Zebra, 2004b). The data collected can be easily distributed to all users and even to corporate partners using an advanced management system. Furthermore, user interaction with barcodes is very simple (Stephenson, 1998)

To facilitate the delivery of information relating to product distribution, companies can use a barcode system which is a tool for storing databases related to customer data. With this barcode system, all necessary records (data files) can be put together in one place (external data storage). In addition, the company will also have a computerized collection of information from existing data sources within the company. Companies can immediately access and work using the information they have.

## 3. METHODS

The method in this research uses descriptive methods to present a complete picture of social conditions or is intended for exploration and clarification of a social phenomenon or reality, by describing a number of variables.

## 4. RESULTS AND DISCUSSION

### 4.1. Results

The company's revenue cycle begins with taking requests for product purchases by customers through salesman, where this process is carried out by the salesman by visiting customers according to the schedule of visits that have been determined by the company weekly. The salesman is obliged to follow this rule even though in the end the customer does not make a purchase at the time of the visit because their product still hasn't sold at all, although this is very rare.
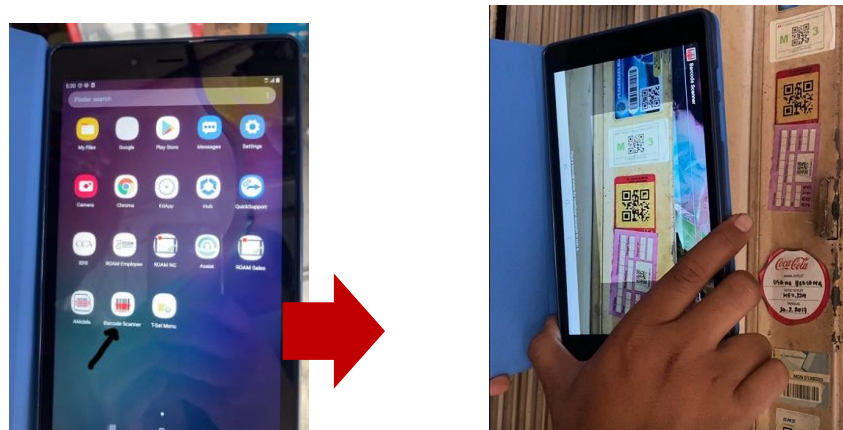


**Figure 1**
Source: FMCG Company "order taking"
Barcode scanner

In Figure 1, the process carried out by the salesman, where before taking the order, the salesman is required to open their mobile tablet which is connected to the company's system via the internet, the salesman will scan the barcode that is already available to the customer by selecting the "barcode scanner" menu. Where the result is the salesman will be able to see information related to the customer, as well as information about the sales history of the previous weeks and the payment system of the customer.
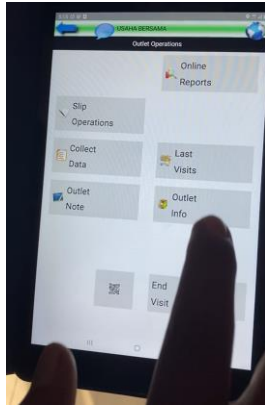
**Figure 2**
Source: FMCG Company "order taking"
Order Taking Menu

In Figure 2, the main menu available on the mobile tablet is related to the customers visited, this can only be seen after the barcode scanning process is carried out.
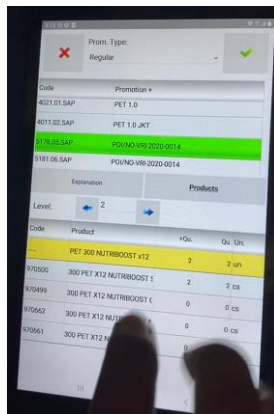


**Figure 3**
Source: FMCG Company "order taking"
End Process of Order Taking

In Figure 3, the product selection menu that will be offered to customers after clicking the "slip operations" menu in Figure 2. The menu also displays product prices and discount programs offered to related customers. In this menu, only available products or those in the warehouse are displayed.
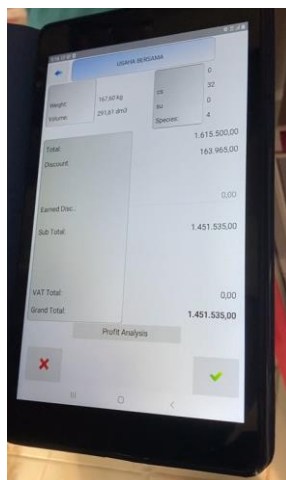


**Figure 4**
Source: FMCG Company "order taking"
Revenue/Sales Calculation

Figure 3. shows the cash value for orders placed by buyers, so that buyers can provide sufficient money (if the customer is a cash payment type) when the products are delivered the next day.

After the process in Figure 4 is completed, the process of taking requests to customers is completed and the salesman can move to visits the next customer. At the same time, all of the request data will be sent to the company database so that at any time the marketing decision makers can see the activities of their salesman, be it the effectiveness of visits to customers, how long time is spent on each customer, what products are ordered, and so on. The data sent will also notify the Distribution Center about the requests they have to send the next day because the delivery system is carried out 1x24 hours after the request is collected and the delivery is done by the deliveryman. In this case,

The application of the above system really helps decision makers to receive information quickly and accurately with regard to customer data, prices given, inventory levels, cash-inflow planning, the amount of accounts receivable, and so on, so that if there are obstacles or other findings in the market, decisions can be made immediately.

### 4.2. Discussion

The digitization of the revenue cycle is very important for FMCG companies, especially because market movements and competition are so tight. With the digitization system, all processes will be integrated and information that occurs in the market can be received immediately so that decisions can be made as quickly as possible with the information available in the company database, be it information about customers, price and discount programs, existing inventory levels, cash-inflow that will be available the next day, the amount of accounts receivable, and other information. The obstacle that might occur is an unstable internet signal or a signal that suddenly disconnects, and this will interfere with timely data reception so that the decision-making process will also be disrupted at that time.

The digitization of the revenue cycle is also very important for planning production, calculating the company's cash flow, to the need for labor if demand exceeds the usual volume, including the availability of transportation to distribute products. To support the continued process of this revenue cycle, companies must also use applications that are integrated with each other, so that the speed of this information can also be used by other partiesin the company.

## 5. CONCLUSION AND SUGGESTIONS

### 5.1. Conclusion

Digitalization in the revenue cycle can be done by implementing a barcode system and adding the existing information in the company database to a mobile tablet which is a tool for the sales team, so that the system will be mutually integrated and update the information data after the sales execution process is carried out.

The digitization of the revenue cycle is very helpful in a fast and accurate decision-making process, where before the implementation of this system, information can only be received by the decision maker within the next 2 working days after the sales execution process is carried out. However, with the application of this system, decision makers can receive this information when the execution process is carried out directly, so that decisions can be made immediately.

### 5.2. Suggestion

Some suggestions that can be conveyed in this research are:

1. Dependence on internet signals is an obstacle to implementing this system, so companies should consider using a backup service provider so that information reception is not interrupted immediately.

2. With this system, it is better if the company also implements a digital payment system from customers so that all deliverymen no longer need to bring money from sales and this will make them safer on their way back to the Distribution Center and will improve the internal control system.

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