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DEVELOPMENT OF ONLINE CASHIER AND DIGITAL PAYMENT APPLICATION FOR BUSINESS

Abstract

In this era, the world is increasingly developing towards digital offers various facilities for humans in various aspects of life. No exception in the business field. New business are becoming a trend in Indonesia with more than new 3000 new coffee shops as the sample. For many small businesses, creating a captivating retail experience is the key to success, and finding the right technologies to enable that experience is crucial for sustaining a competitive advantage. There are so many transactions done in a day from all the business. Technological developments are always applied to provide practicality in transactions. For example we can see in the development of the cashier machine. From time to time, there are always new innovations to produce a versatile cashier machine. As we know that nowadays almost everything is online, cashier machine also developed to be online. Modern cashiers use cashier software that can help business people in managing their business. The software is useful with many features to implement Point Of Sales (POS) to see the transaction reports, access real time sales, know the sales performances, tracking inventory with stock alert, and other features. The purpose of this study is to find out how important the transaction software in business and how Indonesian people in accepting or implementing online software application for their business and one of the best cashier online software in Indonesia named Pawoon.

Keywords: Transaction, Online Software, Application, Cashier Machine, POS

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I. INTRODUCTION

In the modern era such as today we are required to do work more quickly, precisely, and accurately, to complete human work requires tools and support systems that are made in accordance with their needs. Information systems are very important for companies or business activities and organization, because information systems are able to help and provide true, fast, and exactly as desired. Current developments in information technology has made the competition real develop types and business opportunities new and creative. Besides that together with the rapid development of the internet, give a significant influence in everything aspects of life, with the internet then interaction, communication and daily activities can be easily done. One of them is a trading process, with developments in information technology supported by global access via the internet be a great opportunity for the opening of the lane trade from all corners of the world.

Technological developments and global access through the internet provides motivation developments in the business world are wrong only in the process of sales transactions, that is where will it turn out to be digital economy using media computer or mobile phone connected to the internet at any location then the buyer can easily and quickly make a purchase transaction. All transaction in every business is the most important thing. Processing transaction data manually has a lot of weaknesses. These weaknesses such as security, accuracy, misinformation, and also human error. With the development of the information technologies, technology can support people with the system.

Financial information and transactions are important for every business, thus an application is developed that can provide financial information electronically, namely the cashier application, this development is carried out to avoid and minimize the risk of recording and calculation errors that may occur. new system applications can provide more valid information and high security with a password that is confidential. (Hartono, 2005). The cashier application is online based technology.

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According to (Mahargyarsa, 2016), cashier application is one of the instrument of accounting information system that useful for every business, any business whether it is a small or big business. This application is useful for internal or external, for internal the business owner can prevent any error, mistake, misinformation, accuracy, and also can track all of the transaction of their business. For external factors, the buyer or customer can receive the receipt to check and make sure all the products is correct based on the order.

There are three main systems that can increase the profitability of a business when updating from manual checkout processes. The first is a Point of Sale (POS) system, the second is an Inventory Management (IM) system, and the third is a Customer Relationship Management (CRM) system. Updating POS and IM systems are explored within the scope of this project. The initial POS system includes the technology used to complete and record sales transactions on the sales floor. Typically it involves barcoded items, scanning devices, a checkout interface or terminal, and additional features. This recorded information enters a database which is either stored on a company server (normally bought as a software package) or stored on a cloud-based server. A POS system is the foundation for the other two systems to function. (Widjajanto, 2001)

Inventory information collected by point of sale equipment is summarized into useful data by the Inventory Management system. The Inventory Management system tracks inventory levels for every item on the sales floor according to its stock keeping unit. It is able to produce accurate and current inventory counts based on sold and damaged items which is accessible from either a company computer (software package) or through a POS terminal (Software as a Service). An IM system is highly recommended because consistent item tracking helps improve inventory decisions and reduce inventory costs. These two system work well together: demand planning from the POS system can coincide with inventory levels and ordering policies from the IM system to greatly reduce costs.

The third system is the Customer Relationship Management system. This system manages interactions with current and future customers at both retail and wholesale

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levels by creating individual customer accounts. Each account links customer information with past purchases collected at the POS system. This information is accessible at any time and is used for marketing campaigns, post-purchase email reminders, newsletters, etc. The CRM system is meant to better serve customers, increase customer willingness to pay, and retain customer loyalty. It helps to keep the customer satisfied after a purchase and provides detailed records of individual customer histories. Automated email reminders can be sent to customers after a purchase with specific care instructions and product recommendations tailored to their purchase. However, this system does not affect the core operations of a business, and should be viewed as an extra benefit as opposed to a fundamental need. This paper will discuss more about the information system especially online cashier.

II. LITERATURE REVIEW

A. Information System

Information systems (IS) is the study of complementary networks of hardware and software that people and organizations use to collect, filter, process, create, and distribute data. Information systems are combinations of hardware, software, and telecommunications networks that people build and use to collect, create, and distribute useful data, typically in organizational settings. (Romney, 2015)

B. Technology

Technology can be thought of as the application of scientific knowledge for practical purposes. From the invention of the wheel to the harnessing of electricity for artificial lighting, technology is a part of our lives in so many ways that we tend to take it for granted. As discussed before, the first three components of information systems – hardware, software, and data – all fall under the category of technology. Each of these will get its own chapter and a much lengthier discussion, but we will take a moment here to introduce them so we can get a full understanding of what an information system is. (Kenneth, 2012.)

C. Cashier

A cashier is a person who scans items through a machine called a cashier that a customer wants to buy at a retail store. Goods already scanned, the cashier then collects payments (cash, check or by credit / debit card) for exchanged goods or services, record the amount received, make changes, and receipt or ticket issues for customer. The cashier will record the amount received and earned prepare transaction reports, read and record totals displayed on the cash register and verifies cash. Cashier to find out the value and features of items for which money

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is received, it can cash checks, may provide cash refunds or problem credit memorandum to customers for goods merchandise returns, and can operate ticket-dispenser machines and the like. In one form or another, cashiers have been around for thousands of years.

D. Point of Sales

POS is a system that allows for transactions, that is it includes the use of a cash register. Within the POS scope, a cash register does not stand alone but is included in the software support and other devices. The POS system does more than sell transactions buy, in it can also be integrated accounting calculations, management of goods and stock, employee payroll modules, accounts payable accounts, and various other functions. (Hendry, 2010.)

E. Customer Relation Management

This definition for CRM regards it as the ability to use technology in the dealing domain customers (Parvatiyar & Sheth, 2002) mention that CRM is a comprehensive strategy that includes the process of gaining certain customers, looking after them and working with them to create something special value for the company and customers. This strategy requires the integration of marketing functions, sales, customer service and exposition chains to achieve the highest competence and efficiency in Indonesia provide value to customers. As shown, this definition considers CRM as a strategy with a primary goal provide different values to customers through increased marketing productivity.

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III. DISCUSSION

This paper will concern to discuss the online based cashier transaction system. As explained on the introduction, this system can help people to reduce error, reduce the misinformation, increase the accuracy, and make business easier to control. This paper will discuss about one of the best cashier online system that already running in Indonesia. The new business and franchise is increasing from the year of 2014 in Indonesia. The new business have so many transaction in a day. They are really need the systems for the accuracy of their hectic transactions.

A. The Method of Online Cashier Application

Online cashier application is using POS system. The common model of POS systems is a computerized cash registers which are traditionally used by retailers to ring up customer's purchase. There are several advantages to POS systems, besides the use of sales data from a POS system for marketing purposes, time consuming administrative activities like ordering, customer management, stock control, can be reduced. POS systems replace the cash register in a retail store. A standard EPOS (Electronic Point of Sales) can easily handle payment systems, updates inventory and provides instant reports on sales and stocks. The POS machine consists of several components such as input, process and output, we can choose the input device such as Barcode/RFID/NFC Reader, processing unit such as Personal Computer, Mini PC, Tablet or Smartphone, and output peripheral such as thermal printer and cash drawer. The POS machine can be stand alone or connected to the network such as LAN or the Internet. The components as illustrated in the figure 1. Mobile POS or MPOS is a Mobile or Portable POS that can be moved easily without affecting its functions. MPOS can be defined as a smartphone, tablet or dedicated wireless device that performs the functions of a cash register or electronic point of sale terminal.

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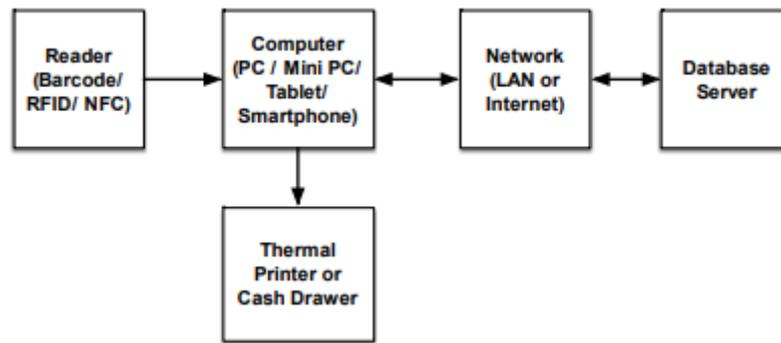


Figure 3.1 POS Components

B. Case of Inaccuracy Transaction Data

Accuracy on recording transactions for every business is very important. Manual method of recording the transaction leads to misinformation, human error, and less accuracy. If the transaction recording is inaccurate, this is very dangerous for the business, can create problems and even losses. In order to reduce inaccuracy that can create losses for the business, online based cashier application is become important for every business. Here are several cases of inaccuracy in business.

1. PT Indomarco Prisma Tama

PT Indomarco Prisma Tama experienced inaccuracy of transaction data from their own employee. The minimarket is located at Kecamatan Anggana, Kabupaten Kutai Kartanegara. At first, the manager of minimarket auditing and investigating the business income. The manager checking the transaction report, the amount of money in the safe is different from the item expenditure data or the number of items sold. The manager received a report that there was a difference in cash from store totaling Rp. 64,454,442. The minimarket cashier is arrested by police, after darkening or fraud company money in the value of Rp. 64 Million.

2. PT Sumber Alfaria Trijaya

PT Sumber Alfaria Trijaya also experienced inaccuracy of transaction data from their employee. The minimarket is located at Sultan Agung, Bekasi. The manager

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found the manipulation from the employee. The employee succeeded to manipulate transaction data, the money of the minimarket he send to his own bank account. The total of losses from the business Rp 177,876,800. The employee use the minimarket money for daily needs. He purchase electronic devices such as cellphones, washing machines, and others

3. PT Jaya Central Indo

PT Jaya Central Indo also experienced the issue from their own employee. The cashier suspected of fraud or embezzlement of company money. The employee adds money to the receipt of purchase of goods and adds to the purchase of goods even though there is no purchase in fact. the employee reportedly made a fake receipt. The employee did this for about 6 months. For this incident PT Jaya Central Indo suffered a loss of Rp 47 million.

From the several cases above, the case can be happened because lack of integrated system application in their business. With online application and integrated data, the employee can't falsify transaction data collection. The report of transaction is easier to detect if there is any violation done by the employee.

C. Pawoon

Pawoon is the startup that exist in Indonesia, with providing point of sales (POS) services for users of the application since 2015. The founder is Ahmad Gadi, Pawoon is an Indosat Ideabox dropout that has received enough attention from SMEs. This startup provides an application for recording orders or purchases for cafe and restaurant owners. In addition to recording transactions, Pawoon's app also has stock management and cash recapitulation features.

The results of subsequent records are stored in the cloud and can be accessed by the owner of a cafe or restaurant in real time. Thus, the owner of a cafe or restaurant can find out the performance of their businesses wherever and whenever.

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Figure 3.2 Pawoon Logo

Figure 3.2 shows the logo of one of the best online cashier application called Pawoon. Pawoon is the cashier application based in West Jakarta, Indonesia, their pride team Pawoon Rangers consisting of various cultures and backgrounds, has a noble aspirations to create solutions that are useful for Indonesian businesses, namely online-based (cloud) point of sale cashier applications. The diversity in our team gave birth to unique perspectives, especially regarding retail business in the digital age. Pawoon has a vision that strives to understand our consumers, not only about being interesting and interactive but also about how to make their customers more loyal. They are strive to provide consumers with the best, most appropriate and accessible products to improve their business. With the experience of their team, these things are no longer a dream.

Pawoon Features

Point of Sale App

Pawoons are very practical and easy to use by your cashier staff. The initial setup process is fast, in just a few minutes you can already sell and use Pawoon as a cash register. Transaction receipt can be printed on the printer or sent via email, as needed. Pawoon can still be used offline, so your business operations are not interrupted. All transaction data are stored securely in the application and will be transferred to the system after getting an internet connection. This will help the business to record all of their transaction.

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Pawoon Order

The consumer can directly order with the application, so there will be no errors in writing the order. There is no need to wait between the waiter and the chef, the service process is more efficient because the order is directly connected to the kitchen printer. Look professional and the latest in front of your customers with technology that makes it easy to order products. Order with the system is help consumer to order with the efficient time.

Sales Report

The manager or the owner of the business can access all sales reports in real-time from smartphones, tablets or computers. Anytime and anywhere! The owner also can track the cost of sales for each product and raw materials that he has. Earnings Report Based on HPP, can immediately know the gross profit from sales based on each cost of the product quickly and concisely, without the need for manual calculations that take up a lot of your time. Figure 3.3 shows the sales report in Pawoon systems

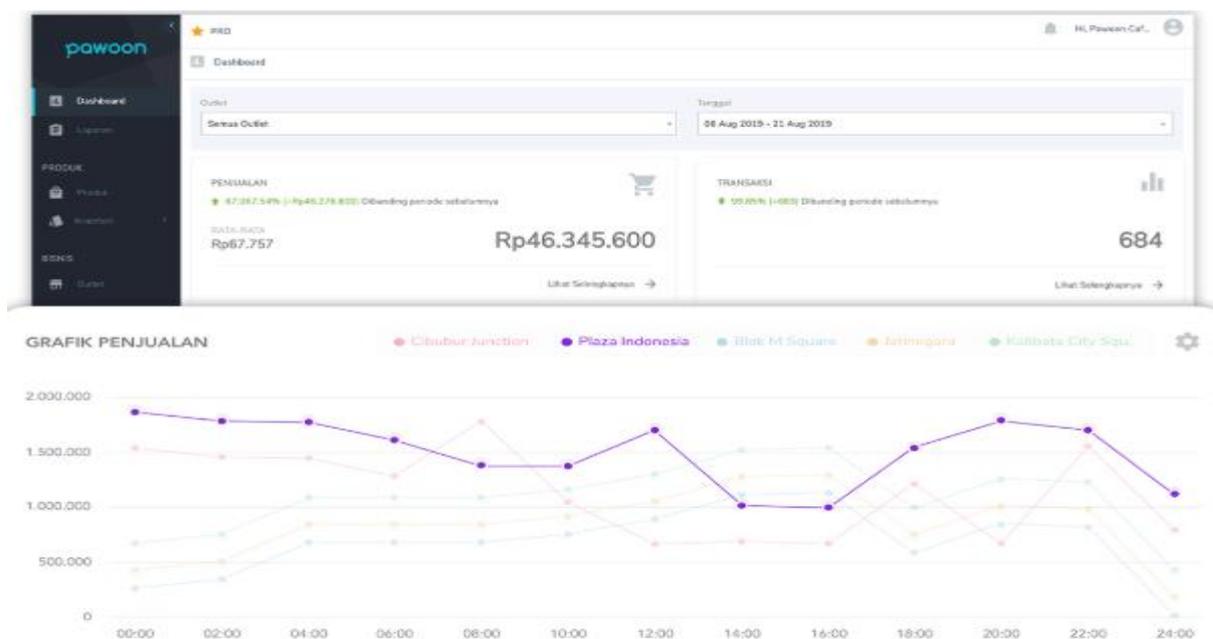
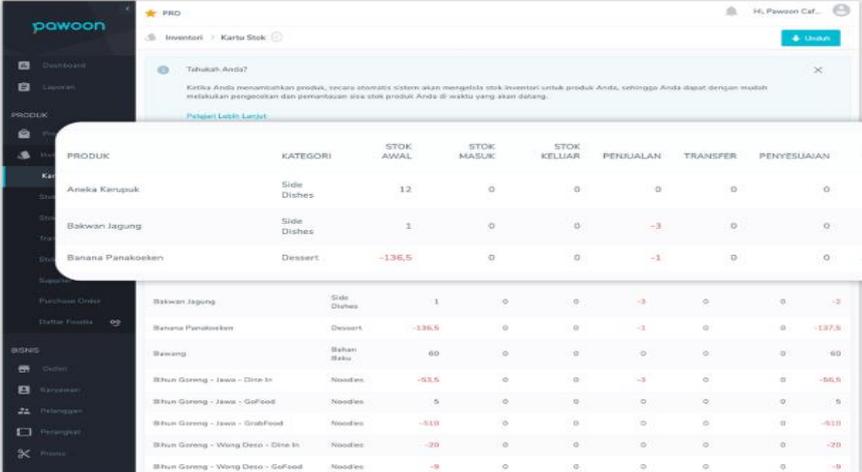


Figure 3.3 Sales Report from Pawoon App

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Stock Management

With Pawoon, the manager can easy to manage the inventory. With the Pawoon cashier system, they can add stock, transfer stock between branches, send POs to suppliers to carry out routine stock taking. Neat stock registering can provide a deeper understanding of business needs. Pawoon can save all the raw materials used for a product. Automatically, the stock of raw materials will change if a transaction occurs on the product concerned. The stock management display on the Pawoon app shown in figure 3.4.



PRODUK	KATEGORI	STOK AWAL	STOK MASUK	STOK KELUAR	PENJUALAN	TRANSFER	PENYESUAIAN	STOK AKHIR
Aneka Kerupuk	Side Dishex	12	0	0	0	0	0	12
Bakwan Jagung	Side Dishex	1	0	0	-3	0	0	-2
Banana Panakoecken	Dessert	-136,5	0	0	-1	0	0	-137,5
Bakwan Jagung	Side Dishex	1	0	0	-3	0	0	-2
Banana Panakoecken	Dessert	-136,5	0	0	-1	0	0	-137,5
Bawang	Bahan Baku	60	0	0	0	0	0	60
Bhun Goreng - Jawa - Dip In	Noodles	-53,5	0	0	-3	0	0	-56,5
Bhun Goreng - Jawa - GdFood	Noodles	5	0	0	0	0	0	5
Bhun Goreng - Jawa - GndFood	Noodles	-5,0	0	0	0	0	0	-5,0
Bhun Goreng - Wong Deso - Dip In	Noodles	-20	0	0	0	0	0	-20
Bhun Goreng - Wong Deso - GdFood	Noodles	-8	0	0	0	0	0	-8

Figure 3.4 Stock Report from Pawoon App

Secure & Integrated App

To increase the security of the business, all staff / cashiers can use the Pawoon application with access rights that you can set yourself according to the needs of each staff / cashier. Pawoon also have the PIN number and password to secure the business confidential data.

Customer Relation Management (CRM)

Customers are the spearhead of business success. Pawoon can save the customer information when making transactions for promotions and other offers in the

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future. Make it easy for business people to analyze who are loyal customers and best-selling products in the business. the owner can see product sales trends based on the customers as well as analyze customer habits to develop better business strategies. Figure 3.5 shows the CRM analysis in the application.

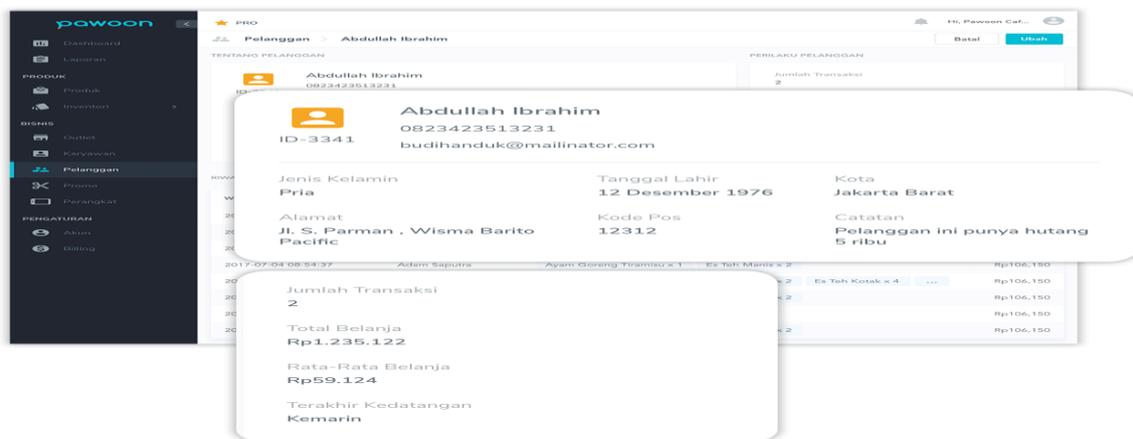


Figure 3.5 CRM Report from Pawoon App

That's the several features on Pawoon Application. With this application, the owner can be easier to control their business. The price of the application also affordable, they also offer the free trial for the new business. The systems are integrated and accurate with the modern display of report.

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IV. Conclusion

With this globalization era, with the technology that develop continuously, the cashier online software application can help the business owner to run their business. There is no manually method that increase misinformation, less accuracy, and human error chances. The technology is made to help people to run their activites. Pawoon is one of the best cashier online application in Indonesia that already help for more than 100.000 business units in Indonesia. With so many features in their application, believed that business owner can develop their business and the consumer satisfaction will increase with this simple and great technology.

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