

Point of Sale system for Multiple Businesses

Prof.Ghughe G.D.¹, Samarth Gore², Ajinkya Kalange³, Krushna Gosavi⁴, Abhishek Nagare⁵

¹Lecturer, Dept. Of Computer Technology, Amrutvahini Polytechnic, Sangamner, Maharashtra, India

²⁻⁵Student, Dept. of computer Technology, Amrutvahini Polytechnic, Sangamner, Maharashtra, India

Abstract - The point of sale is typically where sales are made. These days, it's no longer a cash register but a mobile, cloud-based system that provides comprehensive business functions. As a result, many people in developing countries like Nigeria have been left behind in terms of the use of information technology.

A point of sale system is a computer program that takes advantage of the features of an electronic cash register. It allows you to store and manage client and supplier records, generate quotations, and keep track of inventory.

Sales are the activity of trading a customer's goods and services. Sales management is a key feature that helps small and medium-sized enterprises (SMEs) control and track inventory and coordinate transaction processing. The effectiveness of sales management depends on effective tools and tools, especially modern information and communication technologies. To do this, we need to create an interface on our web page that shows the total sales history, as well as the number of items purchased and sold. Anyone using the system as the CEO can see all data about the company's employees.

Key Words: Business, Good, Management, Billing, Record Keeping

1.INTRODUCTION

In today's scenario, technology plays an important role in many aspects of business operations. The retail sector has great potential to accommodate the latest technological gadgets. Known by the acronym POS, POS can certainly add feathers to your hat. This gives retailers access to a better platform and streamlines their retail business. This technology enables retailers and a variety of businesses to determine inventory levels, help customers and provide a rewarding experience. Because data is entered through an online system, Point of Sale (POS) has multiple input sources. Each input source has its own preprocessing. In this module, you will learn the concept of POS terminals, their functions and roles in modern retail. You can also learn about the various POS transactions, especially the POS wizards and interfaces. Retail sales are sales to the end consumer for household use by families and individuals. Retail Small and Medium-sized Enterprises (SMEs) play an important role in supporting Indonesia's economy, but must be coordinated with the use of information technology to run businesses. Information technology is used in particular to manage financial transactions and information. However, the majority of

small businesses today handle their transaction and financial records in a traditional way. The POS Information System is software designed specifically for transactional operations (supermarkets/minimarkets, restaurants, cafes, etc.), designed to help you create sales reports and provide sales-related information to customers, stakeholders and retail business managers. at the retail store. POS includes inventory management, procurement and sales reporting, customer and supplier management, transaction security standards (passwords), and returns processes.

1.1 Proposed System

POS systems allow businesses to accept payments from customers and track sales. This sounds simple, but customization can work differently depending on whether you're selling online, have a physical store, or both.

Point-of-sale system used by stores to assign cash registers. Today's point-of-sale systems are fully digitized, allowing customers to be identified from anywhere. All you need is a POS app and a network device such as a tablet or phone. Therefore, we will design the system according to different customer/user needs for POS system for different businesses evolving in this new technology era.

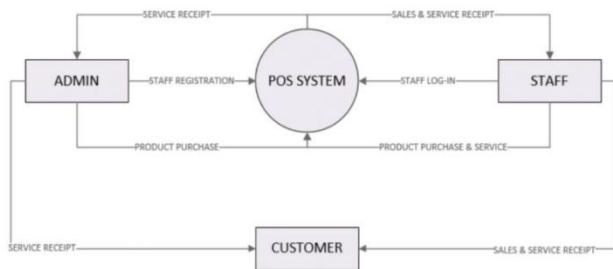
a) A customer decides to buy your product or service. If you have a physical store, you can ask the seller to call you. This employee can use a barcode scanner to determine the price of an item. Some POS systems, such as Square Point of Sale, can also use the device's camera to visually scan merchandise. For online stores, this step occurs when a customer has finished adding an item to their cart and clicks the checkout button.

b) Your POS system calculates the price of the item, including any sales tax, and then updates the inventory count to show that the item is sold.

c) Your customer pays. To complete a purchase, the customer must pay using a credit card, tab card, debit card, loyalty points, gift card or cash. Depending on the payment type selected, the customer's bank must authorize the transaction.

d) The point-of-sale transaction is finalized. It is the moment when you officially sell, the payment is made, a digital or printed receipt is generated, and the purchased item is sent or sent to the customer.

1.2 Proposed Model



2. System Modules

The point of sale has following modules:

- Daily Sales Record
- Daily Purchase Record
- Daily Expense
- Stock Record
- Barcode Prints
- Different Sales report including daily sales, monthly sales, summary, stock position, purchase detail, expenses, profit & loss print and barcode sticker printing.
- Catalogue style output with product description, stock numbers, and prices. Export of sales data to a spreadsheet program for further analysis

POS systems boast many features. In addition to accepting payments, you might find solutions that can handle.

Inventory tracking

Customer management

Invoicing and billing

Refunds and returns

Employee scheduling

Data analytics



3. Benefits of POS System

Accounting: The POS solution integrates directly with your accounting system and can automate the steps of preparing your tax returns.

- **Supervising employees:** We have a POS system that can help with everything from scheduling to calculating payroll and processing rest requests..
- **Managing inventory:** Keeping up to date with events in your inventory is a time consuming task. Although POS technology can be used to easily track sales, returns and restocking.

- **Competitive analysis:** Get reliable data to grow your business with a POS system that provides charts, graphs and heat maps. You can use this information to benchmark your sales against your closest competitors and see how your company adheres to industry standards.

2.5 Advantages of POS System over existing Traditional System

- Better Inventory Management
- Simple Invoicing
- Quick Payments
- Customer Management
- Supply Order Management
- Security
- Increased Efficiency
- Time Saving

4. CONCLUSIONS

Functional test results of point of sale (POS) retail information systems are not valid and the interface of POS is as expected, which may help complete EDP for product data entry. , entering trade transactions and financial reports, especially sales reports. The owner or manager can easily view the results of the financial statements. The POS (Point of Sale) information system used by SMEs is efficient in terms of productivity, information generation, and POS procurement cost. POS can also control the behaviour of cryptographic and transactional error information in terms of cost incurred and time of use. In a nutshell, POS is acceptable because the service is faster due to the speed of receiving transaction receipts and sales reports. The highest level of efficiency is the service aspect. Because the key to the effectiveness of SOP sales information systems for small businesses is the cash desk that provides financial reports to owners or managers.

REFERENCES

- 1]. Andarwati, M., Zuhroh, D., & Amrullah, F. (2019). End User Satisfaction of Accounting Information System (AIS) Mobile Based for Small Medium Enterprises (SMEs): Actual Usage and TAM Approach. *Journal of Development Research*, 3(2), 37-42.
- 2]. Andarwati, M., Nirwanto, N., & Darsono, J. T. (2018). Analysis of factors affecting the success of accounting information systems based on information technology on SME managements accounting information end user. *EJEFAS Journal*, (98), 97-102.
- 3]. *Bersaing Perusahaan dan Organisasi Modern*. Penerbit Andi. Fatah, H. Al. (2008). Analisis dan perancangan sistem informasi. Yogyakarta: Andi Offset.
- 4]. Permadi, A. (2016). TA: Rancang Bangun Sistem Informasi Penjualan Ritel Untuk Usaha Mikro dan Kecil Berbasis Web (Doctoral dissertation, Institut Bisnis dan Informatika Stikom Surabaya).
- 5]. Supriyono, S., & Sutiah, S. (2019, February). Pengembangan Manajemen Proyek Pembelajaran Berbasis ICT Menggunakan Metode Accelerated SAP Pada Odoo ERP. In *Seminar Nasional Inovasi Teknologi e-ISSN* (Vol. 2549, p. 7952).
- 4]. Khan, M. E. (2011). Different Approaches to Black Box Testing Technique for Finding Errors. *International Journal of Software Engineering & Applications*, 2(4), 31.
- 5]. Kosasi, S. (2019). Perancangan Sistem Informasi Integrasi Aplikasi Point of Sale Mini Market. *TECHSI-Jurnal Teknik Informatika*, 7(1), 69-102.
- 6]. Nidhra, S., & Dondeti, J. (2012). Black box and white box testing techniques-a literature review. *International Journal of Embedded Systems and Applications (IJESA)*, 2(2), 29-50.
- 7]. Ningrum, F. C., Suherman, D., Aryanti, S., Prasetya, H. A., & Saifudin, A. (2019). Pengujian Black Box pada Aplikasi Sistem Seleksi Sales Terbaik Menggunakan Teknik Equivalence Partitions. *Jurnal Informatika Universitas Pamulang*, 4(4), 125-130.
- 8]. Nirwanto, N., & Andarwati, M. (2019). End-user satisfaction as an impact of the system quality, information quality, and top management support, upon the perceived usefulness of technology utilization.
- 9]. Nurudin, M., Jayanti, W., Saputro, R. D., Saputra, M. P., & Yulianti, Y. (2019). Pengujian Black Box pada Aplikasi Penjualan Berbasis Web Menggunakan Teknik Boundary Value Analysis. *Jurnal Informatika Universitas Pamulang*, 4(4), 143-148.
- 10]. Permana, SDH & Faisal. (2015). Analisa Dan Perancangan Aplikasi Point Of Sale (POS) Untuk Mendukung Manajemen Hubungan Pelanggan. *Jurnal Teknologi Informasi dan Ilmu Komputer*, 2(1), 20-28.

BIOGRAPHIES

Ganesh D. Ghuge,
Lecturer, Dept. of Computer
Technology, Amrutvahini
Polytechnic, Maharashtra, India



Samarth Gore
Student, Dept. CM
AVP Sangamner



Ajinkya Kalange
Student, Dept. CM
AVP Sangamner



Krushna Gosavi
Student, Dept. CM
AVP Sangamner



Abhishek Nagare
Student, Dept. CM
AVP Sangamner