



Auto Spare Parts Inventory System

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ABSTRACT—

“Auto Spare Parts Inventory System” page is designed to track all activities of the company. Currently people use a manual system where all business transactions are manually written into books. The proposed system is a complete system for all customer activities. The main purpose of this page is to keep employee information details, buying and selling details, ordering details, payment details and , sorting details . It has been implemented using computer technology. The system is user-friendly and easy to maintain, requiring minimal data entry and providing rapid responses to data requests within seconds. This system greatly reduces both administrative work and handwriting. In short, this helps end users manage their time and efforts. This page is developed in a user-friendly environment using Visual Basic .Net as the front-end and SQL Server as the back-end.

Keywords: employee information details, buying and selling details, ordering details ,payment details and sorting details .

I INTRODUCTION

The “Auto Spare Parts Inventory System” page is designed to facilitate a job that was previously done manually. The system aims to provide customers with a better way to keep track of important information such as employee information, purchase and sales information, order locations, payments, payment information, details, details, details and replacement information. By moving manual processes to computer systems, tasks such as creating new user profiles and updating user information can be managed more efficiently. The system, developed with Visual Basic .Net as the front end and SQL Server as the back end, provides user-friendly and flexible operation. It reduces data entry and responds to requests for information faster, reducing administrative workload and increasing overall efficiency. This page is designed to help end users better manage their time and efforts while improving business operations

II LITERATURE REVIEW

A report by the U.S. Small Business Administration says the problem is sourcing large quantities of goods other than fast-moving goods and increasing imports without sacrificing service. Keep your stock small without losing efficiency, benefit from discounted prices for bulk purchases; Maintaining an adequate inventory that does not include obsolete products. According to Nicole Fallon (2013), customer satisfaction is becoming increasingly important for investors in uncertain markets, who often turn to products such as electronics. In May, for example, Nokia's US Customer Satisfaction Index (ASCI) rose, prompting demands for higher profits from the company's largest investors. Additionally, Intambe and Reynolds (2009) in their book Principles of Information Systems, Developing new products and services (product analysis), selecting the best place for production and distribution (site and location analysis), Determining marketing activities in the best way. and promotion methods (development analysis), determining product prices to generate more income (cost analysis), sales and marketing methods for the products used (cost analysis). According to Janes (2011), computers are the most reliable tools and powerful digital assistants with some useful tools such as word processing for all business activities regardless of size. Computers have three advantages over traditional office equipment; It's faster, more accurate and more cost-effective. According to Conrad (2016), automatic inventory management systems have advantages and disadvantages. The advantages are fast and efficient operations and timely and convenient operations. However, its disadvantages come from dependence on technology, authenticity issues and the threat of fraud. This is a problem because physical inventory or control of raw materials and finished products is required and computer systems require strong security measures. Aitken, Leithwood and Jantzi (2001) stated that the monitoring system is defined as an abbreviation of the words what should be (goal) and what is to be known and how (process) (activity report and status report). It is also said that there is more than one level of selection, interpretation, interpretation and application of parameters. Additionally, Cashman, Shelly and Rosenblatt (2006) state that the information system is a system that supports business needs and integrates information technology, people and information. The sales and accounting system is one of the most followed operating systems of many organizations that work together. Every business needs a purchasing and accounting system because good management and accounting can lead to higher productivity. Import,

export and supply are the three most important operations. Revenue refers to the process of adding new items to inventory and replacing old items with new items. Output, meanwhile, is the process of removing items from inventory for sale or use; Replenishment, on the other hand, is the process of increasing the amount of stock in stock to compensate for insufficient inventory or increased demand. Many retail industries still use traditional inventory management methods, where one person is responsible for manually checking and recording products using pen and paper. This is where all database related activities are buried.

III METHODOLOGY

The process used to implement the modified vehicle includes several important steps for the development to be successful. Here is a general list of methods used to set up an auto parts inventory system

Needs Analysis Start by conducting a comprehensive assessment of your organization's inventory management system, identify pain points, inefficiencies, and identify problem areas.

Improving inventory management. System Diagram Create a system diagram showing the architecture, functionality, user interface, data flow, and computer system integration. Consider factors such as size, security and usability in the design part.

Technology Selection Select the appropriate technology to build a computer system, considering factors such as compatibility with existing systems, size, ease of maintenance, and future expansion.

Development Create a system to calculate car parts according to the requirements shown in the description. Implement features such as barcode scanning, real-time billing, tracking and reporting.

Testing Perform critical tests on a computer system to determine its functionality, performance, and reliability. Test scenarios such as content update, processing, data validation, and system integration.

Implementation Download the customized vehicle management system in batch mode, run it and provide a prototype for validation and collect user feedback. Make sure staff are appropriately trained in the use of the system.

Monitoring and Maintenance: Continuously monitor the performance of the billing system and track key metrics such as product sales, inventory levels, and pricing. Update and maintain the system regularly to fix any issues or additions.

Continuous Improvement Implement a feedback mechanism to collect feedback on system performance from users and stakeholders. Use this idea to create a that refines and improves the parts counting system of the car over time. By implementing a unique vehicle inventory system, companies can simplify inventory management, increase efficiency, and improve customer experience.

IV PROPOSED SYSTEM

Auto parts inventory system aims to simplify inventory management of the auto parts industry. The system will use state-of-the-art management software to monitor and track inventory availability, usage and replenishment in real time. Key features of the proposed system may include the following:

1. **Central database:** Information on all product components, including part numbers, specifications, suppliers, prices and inventory levels, will be stored in a central database () to make it convenient and manageable.
2. **Automatic Inventory Tracking:** The system automatically tracks inventory levels and alerts when inventory levels are low, preventing inventory and breeding issues.
3. **Barcode Scanning:** Barcode scanning technology will be integrated into the system in order to facilitate rapid inventory management, reduce manual errors and increase efficiency.
4. **Supplier Management:** The system includes information management functions for suppliers, product tracking and delivery schedule control for on-time delivery of products.
5. **Reporting and Analysis:** The system provides detailed reports and analysis on inventory performance, product trends, and stock prices to help companies make better decisions and improve inventory management performance.

Overall, the auto parts inventory program is designed to increase efficiency, reduce costs and increase customer satisfaction by ensuring the availability of the right parts at the right time.

V. RESULTS AND DISCUSSION

Vehicle inventory system solutions may include

Effective inventory management: Companies can achieve a high level of inventory management by using inventory management software and technology such as barcode scanning and

Cost savings Improving inventory levels and reducing stock or excess products can help companies reduce shipping costs and improve overall costs. Discussions about the modified vehicle accounting system can focus on the following issues

Implementation problems Operators can discuss the problems they encounter in the implementation of the accounting system, such as data transfer, training of personnel and coordination of the system. In general, solutions and discussions regarding automotive parts inventory systems may revolve around the system's impact on performance, efficiency, and customer satisfaction.

VI BLOCK DIAGRAM



VII CONCLUSION

In short, AUTO SPARE PARTS INVENTORY SYSTEM offers a complete solution for efficient and effective storage of automotive parts. With its user-friendliness, maintenance flexibility and fast response times, the system provides a flawless user experience. Store important information such as employee information, purchasing and purchase details. With sales data, product placement, payments, details, and inventory information, companies can streamline operations and increase efficiency across as a whole. Additionally, features to manage details, details, and data modification add to the capabilities of the system. Overall, AUTO SPARE PARTS INVENTORY SYSTEM is a valuable tool for any auto parts company looking to improve operational efficiency and customer service.

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