

Auto Invoicing System

OBJECTIVE:

To automate routine work procedure in the vehicle Service Center, this in turn will help the vehicle service centers to manage the customer in a better way.

Auto Invoicing System automates the different activities of the various departments and sections, maintain the status of different processes. The system will help in reducing the time and effort in preparation quotation, invoice and reports.

Intended Audience: Users (Automobile Center)

Existing System

The company's (Quick Service Center) provides services to the vehicle owners of whose vehicles may fall under any category of vehicles like two wheelers, Four Wheelers, 3 stroke, 4 Stroke, Etc., the Quick Service Center Receives calls/ inquiries from the vehicle owners who generally ask for the details pertaining to the various services provided and the charges for various services and spares. The company purchases spare parts from different to meet the requirements of its customers. After having the information regarding the various services and charges, customer comes to the Quick Service Centers with his vehicle where the condition of the vehicle is tested by the technician and he gives the details of required services and spares that need to be used to repair the vehicle. Authorized employee of Customer Care Division prepares the quotation and forwards it to the customer for its approval. Approval of the Quotation is being collected and the Job Card containing the Details of technicians who will be working on the job will be recorded and distributed to the respective technicians for their reference.

Once the Vehicle is sent to the Repairs Section, Technicians will collect the required spares from the inventory and repair the vehicle.

After the Job is completed, Invoice is raised for the spares used and services provided including tax applicable and collect the amount from the customer.

Drawbacks of Existing System

1. The QSC is maintaining the records manually in the form of register entries.

2. The QCS was not in a position to monitor the different phase's activities.
3. Status of each and every document should be maintained which involves lot of manual process.
4. Reports for analysis were not available, readily.

BACKGROUND:

Service centers are the common need of every vehicle owner. In this competitive market customer expects quality service for his vehicle without spending more time. This project Auto Invoicing System is designed to provide quality services to the client. It maintains customer invoices which helps the service center to enhance the day to day activities with efficiency and correctness.

This system Auto Invoicing System provides user friendly interface with the functionalities similar to the one with which the current users are persisting with. This GUI based client/server application that will automate the different activities involved in the day to day activities.

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The company purchases spare parts from different to meet the requirements of its customers. After having the information regarding the various services and charges, customer comes to the vehicle Service Centers with his vehicle where the condition of the vehicle is tested by the technician and he gives the details of required services and spares that need to be used to repair the vehicle.

Customer Care Division of the servicing center prepares the quotation and forwards it to the customer for its approval. After getting the approval for the Quotation the job card will be prepared, the Job card containing the Details of technicians who will be working on the job will be recorded and distributed to the respective technicians for their reference. Once the Vehicle is sent to the Repairs Section, Technicians will collect the required spares from the inventory and repair the vehicle. After the Job is completed, Invoice is raised for the spares used and service provided including tax applicable and collects the amount from the customer.

Future Scope of the Project

The project has met the standards required to work at AUTO INVOICING SYSTEM.. If the business logic remains same the project can be ported to any Company with minor changes in the working

procedure of the project. The project can also be used for different companies with different business logic wherein the commonalities in certain areas remain the same at any business level. By using the common features in future development the development time as well as the cost of development can be decreased considerably.

FUNCTIONAL REQUIREMENT:

Module1: Quotations:

This module basically deals with generation of different types of quotations. Quotation can be classified as

- Quotation for General Service.
- Quotation for Spares.
- Quotation for Specialized Services.

Quotation is a temporary bill which is first given to the customer for his approval. Based on the customer's response further proceedings or activities depend, like a permanent invoice and a job card is generated based on that quotation.

If needed the customer can make changes to the quotation and ask for a new quotation or he can also completely cancel a quotation.

The reports that are generated in this module are:

- a) Quotation Bill wise
- b) Quotations Consolidated Between Dates
- c) Quotations Approved
- d) Quotations Rejected / Cancelled
- e) Pending Quotations

Module 2: Job Card:

This is the second module that purely succeeds the Quotation's Module where in after a customer has approved a quotation then only a job card is generated.

A Job card is task list which may include different jobs or tasks to be done by an employee or technical person on a customer's vehicle.

The other activities under this module are maintaining information about the employee attending particular task or job, checking the status of the job, whether the job successfully completed in time .

The reports that are generated in this module are

- a) Job Card for Each Employee (Online Bill)
- b) Employee wise Job Cards between Dates

Module 3: Invoice

This module deals with generation of invoices and maintenance of invoice details of all customers.

The process of invoice generation starts when a customer approves and quotation and agrees for jobs and services for his vehicle. Once a job is successfully finished the invoice is finally generated against the respective job or service provided.

If only some service is provided then an Invoice for the service is generated or if some spares are replaced then an Invoice for Spares is also generated.

The reports that are generated in this module are:

- a) Invoice Report Bill wise
- b) Consolidated Invoices between Dates
- c) Vehicle wise Billing Report between Dates
- d) Manufacturer wise Billing Report between Dates

Module 4: Inventory:

Inventory module deals with inventory management i.e. stock management of spare parts at the automobile service station.

This includes maintaining a detailed record of all the spares that are being used in the service station.

Whenever some spares are brought into or stock is added that record is maintained as stock inward and when spares are used or moves out, that record be also maintained as stock outward.

It is also responsible to generated reports, which would indicate the current stock of any spare at any moment of time.

The reports that are generated in this module are:

- a) Spares Inward Report Bill wise
- b) Spares Inward Between Dates
- c) Spares Inward Item wise
- d) Spares Outward Report Bill wise
- e) Spares Outward Between Dates

- f) Spares Outwards Item wise
- g) Inventory Status Report Current Balance
- h) Inventory Status Report between Dates
- i) ROL Report of Spares
- j) Group wise Spares List

Module 5: Vendors

This module deals with recording information of various vendors who are associated with the service station in supplying the required spares.

This includes maintaining the information of vendors their personal details and other information's. It also includes placement of enquires for requirement of spares as when required.

The reports that are generated in this module are:

- a) List of Vendors
- b) List of Vendors for Selected Item
- c) Vendor wise Purchases between dates

NON-FUNCTIONAL REQUIREMENT:

Scalability - The system can be scalable from small to a large business.

Availability – This management system will be available for 24*7 hours. It is a web based application and runs on the IIS server.

Usability – This system is very user-friendly. The UI design uses the HTML (Hyper-text markup language), CSS (cascade style sheet) for making the very user friendly design. Anyone can easily use this system with minimal training of work flow in it.

Security requirement - The system should take care of all required security of data and intellectual property of the organization. It have SSL security feature in it. And there will be login facility with password protection.