

Canteen Inventory System

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Abstract

The Inventory proportionality is the goal of demand-driven inventory management. The primary optimal outcome is to have the same number of days worth of inventory on hand across all products so that the time of run out of all products would be simultaneous. The secondary goal of inventory proportionality is inventory minimization. By integrating accurate demand forecasting with inventory management, replenishment inventories can be scheduled to arrive just in time to replenish the product destined to run out first, while at the same time balancing out the inventory supply of all products to make their inventories more proportional, and thereby closer to achieving the primary goal. Accurate demand forecasting also allows the desired inventory proportions to be dynamic by determining expected sales out into the future; this allows for inventory to be in proportion to expected short-term sales or consumption rather than to past averages, a much more accurate and optimal outcome.

Keywords: *Inventory System, Canteen*

INTRODUCTION

Till Automation- is nothing but simply a website to deal between the Customer and Seller.

- This is a medium between the clients and the whole-seller.

- The main objective of this project is to keep the record of the sale and purchase of the total items (i.e.-stock) in a firm with the help of a database.

- Initially all the items are stored in a database. And it will be changed according to the sale of a product.
- This is a not a customer end software, since it does not directly interact with the customer.
- Admin and the other authorized people are allowed to visit the database through their secure login id and passwords.

Here in this project, we have provided three main functionalities:-

- Invoice
- Database management
- Stock management
- From database not only we can keep eye on all the transactions of a company but also easily can keep a record of a stock (i.e- sold items, buy items and damaged items). Since damaged items is a loss to a firms in terms of money, so it's necessary to keep this record in order to calculate overall profit to a firm.
- Finally at the end this project will be boon for the firms where there is a lot of items and is difficult to keep their records.

- In this project all the items stored in the database with their latest MRP including GST (as per the rules decided by the Government of India).
- The invoice generated will also be based on latest rates of the items as applicable. This project includes various technologies such as "HTML, CSS, ANGULAR JS" as a front end and
- "RESTFUL WEB SERVICE, JAVA, MYSQL" as back end.

SURVEY OF DIFFERENT FEATURES OF TILL AUTOMATION ***Sell Configured to Ordered Products***

The system shall display all the products that can be configured.

The system shall allow user to select the product to configure.

The system shall display all the available components of the product to configure

The system shall enable user to add one or more component to the configuration.

The system shall notify the user about any conflict in the current configuration.

The system shall allow user to update the configuration to resolve conflict in the current configuration.

The system shall allow user to confirm the completion of current configuration

Provide comprehensive product details

The system shall display detailed information of the selected products.

The system shall provide browsing options to see product details.

Detailed Product Categorizations

The system shall display detailed product categorization to the user.

Provide Search facility

The system shall enable user to enter the search text on the screen.

The system shall enable user to select multiple options on the screen to search.

The system shall display all the matching products based on the search

The system shall display only 10 matching result on the current screen.

The system shall enable user to navigate between the search results.

Maintain customer profile

The system shall allow user to create profile and set his credential.

The system shall authenticate user credentials to view the profile.

The system shall allow user to update the profile information.

Provide personalized profile

The system shall display both the active and completed order history in the customer profile.

The system shall allow user to select the order from the order history.

The system shall display the detailed information about the selected order.

The system shall display the most frequently searched items by the user in the profile.

The system shall allow user to register for newsletters and surveys in the profile.

Provide Customer Support

The system shall provide online help, FAQ's customer support, and sitemap options for customer support.

The system shall allow user to select the support type he wants.

The system shall allow user to enter the customer and product information for the support.

The system shall display the customer support contact numbers on the screen.

The system shall allow user to enter the contact number for support personnel to call.

The system shall display the online help upon request.

The system shall display the FAQ's upon request.

Email confirmation

The system shall maintain customer email information as a required part of customer profile.

The system shall send an order confirmation to the user through email.

Detailed invoice for customer

The system shall display detailed invoice for current order once it is confirmed.

The system shall optionally allow user to

print the invoice.

Provide online Tax Calculations

The system shall calculate tax for the order.

The system shall display tax information for the order.

Allow Online Product reviews and ratings

The system shall display the reviews and ratings of each product, when it is selected.

The system shall enable the user to enter their reviews and ratings.

Offer online promotions and rewards.

The system shall display all the available promotions to the user.

The system shall allow user to select available promotion.

Usability

Graphical User Interface

The system shall provide a uniform look and feel between all the web pages.

The system shall provide a digital image for each product in the product catalog.

The system shall provide use of icons and toolbars.

Reliability & Availability

Back-end Internal Computers

The system shall provide storage of all databases on redundant computers with automatic switchover.

The system shall provide for replication of databases to off-site storage locations.

The system shall provide RAID V Disk Stripping on all database storage disks.

Performance

The product shall be based on web and has to be run from a web server.

The product shall take initial load time depending on internet connection strength which also depends on the media from which the product is run.

The performance shall depend upon hardware components of the client/customer.

Security

Data Transfer

The system shall use secure sockets in all transactions that include any confidential

customer information.

The system shall automatically log out all customers after a period of inactivity.

The system shall confirm all transactions with the customer's web browser.

The system shall not leave any cookies on the customer's computer containing the user's password.

The system shall not leave any cookies on the customer's computer containing any of the user's confidential information.

Data Storage

The customer's web browser shall never display a customer's password. It shall always be echoed with special characters representing typed characters.

The customer's web browser shall never display a customer's credit card number after retrieving from the database. It shall always be shown with just the last 4 digits of the credit card number.

The system's back-end servers shall never display a customer's password. The customer's password may be reset but never shown.

The system's back-end servers shall only be accessible to authenticated administrators.

The system's back-end databases shall be encrypted.

SYSTEM DESIGN

The information contained within project plan will likely change as the project progresses. While change is both certain and required, it is important to note that any changes to the project plan will impact at least one of three critical success factors: Available time, Available resources(financial, personal),or project quality.

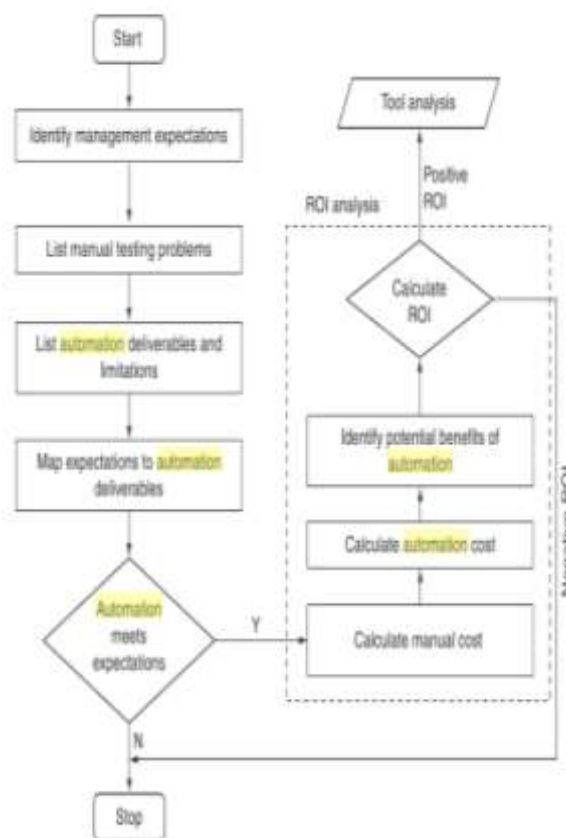


Figure of Need analysis and ROI calculation process

TECHNICAL STEPS

Fixed Automation Costs	Recurring/Variable Automation Costs
- Automation environment maintenance - Scripting tools - Tool and environment licenses - Tool training - Tool introduction and ramp up	- Test results analysis - Defect reporting - Test results reporting - Test execution savings - Business knowledge capture cost

Fixed Automation Costs	Recurring/Variable Automation Costs
- Hardware - Testware software licenses - Testware software support - Automation environment design and implementation	- Test case design for automation - Test maintenance - Test case execution

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HARDWARE REQUIREMENTS

- Windows 7 or above.
- A browser which supports HTML, CSS, ANGULAR JS.
- Internal Memory (RAM) must be 4GB.

SOFTWARE REQUIREMENTS

- **Operating System:** We have chosen Windows operating system for its best support and user-friendliness.
- **Database:** MYSQL database in order to manage stock of items.
- **Restful Web Services:** A software user to work best on the web.
- **ECLIPSE:** An integrated development environment

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