PROJECT REPORT

INTRODUCTION

a. PROJECT OVERVIEW :

- ○ Know fundamental concepts and can work on IBM Cognos Analytics
- ○ Gain a broad understanding of plotting different graphs.
- ○ Able to create meaningful dashboards

b. PURPOSE :

Too much inventory means working capital costs, operational costs and a complex operation, lack of inventory leads to lost sales, unhappy customers and a damaged brand.

LITERATURE SURVEY

EXISTING PROBLEM

- Coping with demand volatility in retail shop with the aid of big data exploration".Evaluation of the Wateen App in the Blood-Donation Process in Saudi Arabia (Tourkiah Alessa, April 2022).

- product demand in market.

- billing in retail stores.

REFERENCES

- Brown, C 2003, 'Managing the next wave of enterprise systems: leveraging lessons from IS,' MIS Quarterly Executive, vol. 2 no.1, pp. 1.

- Khosrow, M 2006, Emerging trends and challenges in information technology management, Idea Group Press, London.King, W 2000, 'Ensuring HRIS implementation success', Information Systems Management, vol. 6 no. 2, pp. 3.

- O'Brien, J 2011, Management information systems, McGraw-Hill, Irwin, York.

Due to manual inventory tracking, procedures across different software and spreadsheets are time-consuming, redundant and vulnerable to errors. Managing inventory with paperwork and manual processes is tedious and not secure. And it doesn't easily scale across multiple warehouses with lots of stock. Retailers can make them fulfil by analysis and visualization of stock data, they can meet the customer's need without running of stocks or carrying excess supply.

IDEATION & PROPOSED SOLUTION

PROPOSED SOLUTION

To notify the retailers about the Cognos analytic tool, which is used to maintain their stocks and to improve their business by increasing the profit.

PROBLEM SOLUTION FIT

- CUSTOMER SEGMENT(S) the customers are retailers, shop keepers, and the people who want to store the inventory and manage the inventory.

- JOBS-TO-BE-DONE / PROBLEMS • the details of the stock are visualized and analyzed properly.the stocks are tracked regularly the availability selling and non selling, out of stock products are analyzed

- The inventory is done automatically not manually

- The retailer will be notified about all the details.

YOUR SOLUTION

- Visualizing the stocks by different types of graph visualization using the IBM Cognos and analyzing the data.

- Visualizing the data using the different algorithms and analyzing the profit, loss, selling and the non-selling products.

- Finding the method to improve the sales and the profit percentage.

PROJECT DESIGN

DATA FLOW DIAGRAMS

A Data Flow Diagram (DFD) is a traditional visual representation of the information flows within a system. A neat and clear DFD can depict the right amount of the system requirement graphically. It shows how data enters and leaves the system, what changes the information, and where data is stored.

SOLUTION & TECHNICAL ARCHITECTURE

Technical Architecture: The Deliverable shall include the architectural diagram as below and the information as per the table1 & table 2 Example: Creating an E commerce website for ordering, delivering and knowing the products regions with its locations.

PROJECT PLANNING & SCHEDULING

SPRINT PLANNING AND ESTIMATION

In this activity we need to prepare the milestones and activity list of the project.

SPRINT DELIVERY SCHEDULE

Sprint 1-Data collection and Data preparation

Sprint 2-Data Exploration

Sprint 3-Dashboard Creation

Sprint 4-Report and Story Creation

RESULTS

ADVANTAGE

- An advantage of the retail inventory method is that it does not require a physical inventory.
- The retail inventory method only requires an organization to record the retail prices of inventory items.
- If an organization has multiple locations in different cities and states, performing a physical inventory can become a costly and time-consuming undertaking.
- By using retail inventory, an organization can prepare an inventory for a centralized location.

- The retail inventory method also allows the organization to create an inventory value report for budgeting or the preparation of financial statements.

- On the other hand, the retail inventory method is only accurate if all pricing across the board is the same and all pricing changes occur at the same rate.
- In most cases, this is not realistic in retail because of the many variations that exist in merchandise pricing.
- For example, depreciation, markdowns, product damage and theft can affect the price of the retail inventory.
- For this reason, any calculations made using the retail inventory method should serve only as an estimate.

CONCLUSION

Inventory management is an overspecified but essential part of the supply chain. An effective inventory management system helps to reduce stock-related costs such as warehousing, carrying, and ordering costs. As you have read above, there are different techniques that businesses can utilize to simplify and optimize stock management processes and control systems.

FUTURE SCOPE

1. Stock control for omnichannel retailing

2. Inventories that power experiential retail

3. Streaming Analytics

4. Advanced sales forecasting

5. Season-based product recommendations

6. New inventory management skills

APPENDIX
GitHub & Project Demo Link

IBM-EPBL/IBM-Project-51346-1660978320

PROJECT LINK