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ENTERPRISE RESOURCE PLANNING FOR AUTOMOBILES

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Abstract

Enterprise Resource Planning (ERP) software is considered as an information backbone for an organization's core business functions. World is heading towards digital economy, more and more enterprises have been implementing ERP software in part. ERP software is one the fastest growing section of the organization.

Implementing an ERP system is a major project requiring a significant level of resources, managing risk and changes throughout the organization. When ERP software implemented successfully it can yield in much reduction in the cost of operations / manufacturing and better control on business operations.

In this software dealer is going to feed all the data regarding its enterprise i.e. vehicle, spare parts, customer etc. So it reduces the stress of handling data manually. This DMS-ERP software is easy to understand and handle as compare to other ERP system because it provides reduction in complexity, save time. This software is going to provide an annual report on the basis of month and yearly transactions. So it will help the dealer to compare the sale of vehicle in several months.

KEYWORDS: Cost Leadership, Enterprise Resource Planning (ERP), CRM, modules, services,organization.

1. Introduction

ERP is an industry acronym for Enterprise Resource Planning. ERP refers to computerization and integration of a company's core business to help them focus on effectiveness and simplified success. A proper ERP solution has become a vital need of this era for the enterprises due to the market globalization and day by day growing opposition. For the very fact, the ERP solution has become mandatory for an enterprise to run the business in an effective and active way. But, before going for the performance of an ERP solution, an enterprise has gone through boundless hard-hitting times: choosing the right solution, planning, selection of performance team and managing the change. Whether it is an ERP performance or nonperformance, it should be well thought as its life spreads over many years.

Despite of the many reasons, the bulky challenges are choosing the right solution with the right vendor and its effective implementation according to the requirements of the business. Simultaneously the business environment is becoming increasingly complex with functional units requiring more and more inter-functional data flow for decision making, timely and efficient acquisition of product parts, management of itemization, accounting, human resources and distribution of goods and services. In this condition, management of organizations needs efficient information systems to improve competitiveness by cost reduction and better logistics[2].

2. Overview

ERP – Enterprise Resource Planning

Enterprise resource planning (ERP) is business management software—usually a suite of integrated applications—that a company can use to collect, store, manage and gather data from many business enterprise including:

- Product planning, cost
- Manufacturing or service delivery
- Marketing and sales
- Store management
- Shipping and payment

Dealership Management System (DMS)

A dealership management system (DMS) or auto dealership management system is a bundled management information system created specifically for industry car or large equipment manufacturers, such as motorcycle dealerships, and also adapted for cars, boats, RV, and power sports dealers. These systems often contain software that cater to the needs of thesales, parts, inventory and administration components of running the dealership. One of their functions can be computerization sales, procurement, services, etc.

DMS software typically includes flotation for all aspects of running a dealership such as:

- Tracking sales
- Parts inventory
- Follow-up

Dealerships use specific software to meet the complex requirements of their business. The advantage for dealers running a specialized system are numerous, however the primary outcome is a more economic dealership [1].

3. Problem Statement

Every business reaching out to its customers through a network of dealers, sub-dealers and retailers have a analytical need to stay on top of this critical component of its business action. Businesses therefore want to track the achievements of dealers very closely. In scenarios where dealers carry different brands, this task becomes all the more confront and important.

This feature helps us to build effective Dealer Management System that enable us achieve the following:

- Track primitive and at times secondary sales.
- Track product fulfillment with dealer, in comparison to dealer's overall business.
- Keep record of stock levels with dealers.
- Supply Chain executive ensuring that the dealer's always have sufficient stock.
- Compare dealer performances lively, and reward top dealers.

4. Proposed System

In today's world of internet handling the vast data for any enterprise or organization is complicated and a tough work. One has to deals with various problems in consumption of the data i.e. data regarding employees, goods and services also data regarding various dealers and whole sealers, etc. So to reduce stress of handling vast data manually or written we implemented the software for automobile dealers. They have to maintain large data regarding various vehicles, parts, there quantity, various colors available in each model, etc. ERP software is providing various service and facility from this vast handling of data.

This paper proposed five parts that are as follows:-

1. CRM
2. Sales
3. Service
4. Procurement

1.CRM: - In CRM, there is a section of enquiry. In that we are going to feed the data regarding the customers. This will include details of the customer and information asked about vehicle by that customer i.e. whether it is available in stock or not. This data is then saving in the database of the server. This will help us to use data of the customer whenever required for follow up procedure. As the data of customer is require for taking the follow up or else if customer comes back for purchase of vehicle then this saved data will help for further process which will ultimately save our time.

2. SALES: -In sales module there are two main parts i.e. sales order and sales invoice where invoice is simply billing of the purchased vehicle. After selection and payment of the vehicle, employee adds the detail of the vehicle that is vehicle name, vehicle color, chassis number, engine number, model number etc. Then the system will generate the invoice by adding the service taxes such as transportation tax, service tax etc. After adding all the taxes it will generate final invoice which has two copies in which one is given to customer and other is kept will organization itself and t will be saved at main server.

3. SERVICES: -This module will contain the services provided after sales of vehicle. This will proceed by creating job card of that particular vehicle and give one mechanic which will take care of further maintenance and service of the vehicle. Now depending on the service provided charges may be different say when we buy any new vehicle we get some coupon for free servicing so it will not require any charges but if it is paid once then it will charge according to the service provided.

4.PROCUREMENT:-In this module there is a section of purchase invoice i.e. billing of the vehicle that are ordered from the company .In various case, it will be possible that the vehicle required by the customer is not available in the stock. Then the employee generates the request of purchase to the company for that vehicle which will also generate a purchase order statement. As soon as vehicle is available in stock, customer has been called and purchase invoice is generated. In this process, the details regarding the company, vehicle, order are stored in the database .The number of quantity of vehicle, colors of vehicle, their chassis number, engine number of each vehicle is feed and this data is stored in the database at the server site.

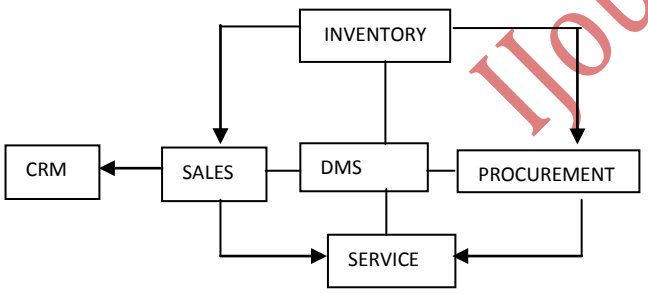

Figure: - Dependency of parts

5. Conclusion

This is to study major economic variables and the improvement in their cost effectiveness after the implementation of ERP software for the Dealership management system and its effects on efficiency of business processes.

In order to develop a better perspective results arrived at during the course of the present study were compared to past performance and it was revealed that it is economically feasible to implement ERP software and if implemented successfully, yields reduced operational cost and operating margins.

Therefore, ERP implementation improves business performance, reduces various costs, Standardizes Centralized business processes, and enhances the decision support system.
This ERP system concludes that:-

- There is a reduction of time factor, reduction in the number of employee and reduction in operational cost.
- It reduces the complexity of handling vast data of an organization or enterprise.
- There are several problems in handling a written data so to avoid such conflict ERP system is provided for a large enterprise.

6. Reports Generated

In our project it will also generate reports regarding enquiry vs sales so that we can get all the details and we can analyze we are having profit or loss. Monthly statement,Monthlyreport, yearly report is also generated to see whether the target is completed or not and human resources provided to this job are really working hardly or not.

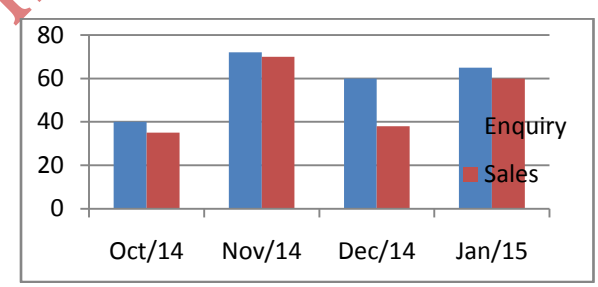

Fig: - Report of Enquiry VS Sales

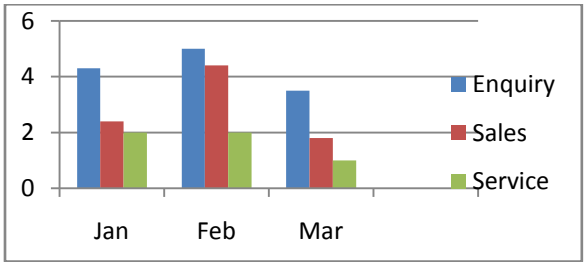

Fig: - Report of Enquiry VS Sales VS Service

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