

Design and Implementation of Computerizing the Dealership Management Software using PHP

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Abstract

This paper which is useful for the automobile dealers to maintain the sales, service, spares, accounts details. This is commonly known as ERP Software which mainly focuses on the dealers and sub dealers of the automobile sector has some extra features. Software functionality is to deal with dealers follow up with customer after they purchase the vehicle. That vehicle requires the service after limited Kms they travelled. Or they can avail up to three free services in the warranty period. This information's are maintained in the service modules. By the way all the modules have some maintenance.

Keywords: *Software, sales, service, spares, dealers, PHP, SAP, DMS*

INTRODUCTION

A dealership management system (DMS) or auto dealership management system may be a bundled management system created specifically for automotive business automobile dealer ships or massive instrumentality manufactures. Competition for market share is at an all-time high with unprecedented pressure to increase customer

satisfaction, while making sales and service structures and processes more efficient. There's enormous growth potential in emerging markets as they rapidly expand; however, mature markets continue to stagnate. This trend is driving automotive companies to innovate. And with access to more information and choices than ever before, customers are becoming increasingly fickle and brand agnostic.

Problem Statement

By using the software we can track the sales, service, spares, accounts details. Which can be viewed based on the vehicle or by the customer name for the future activities. This involves the service we are giving to the vehicle based on the warranty or paid service. And the spares buying details which all maintained in the single software which gives the company growth as well as the proper system is maintained.

Challenges

Dealers and makers square measure perpetually yearning for ways in which to differentiate themselves to shoppers, by managing cost-efficient promoting and promotional campaigns and developing higher relationships. Once the

deal is finished, dealerships grasp they have to develop proactive, purposeful relationships with customers to stay them returning for service, after-market add-ons, and their next vehicle. Complicating matters further, manufacturers and dealers are experiencing complex market conditions, changing distribution networks, increased product complexity, and pressure on profit margins [4].

Statement of Assumption

By using the software we can track the sales, service, spares, accounts details. Which can be viewed based on the vehicle or by the customer name for the future activities. This involves the service we are giving to the vehicle based on the warranty or paid service. And the spares buying details which all maintained in the single software which gives the company growth as well as the proper system is maintained [5, 6].

AIM AND OBJECTIVE

Aim

The aim of the project is to auto dealer strength is in maintaining strong customer communications, which is vital in creating profitable long-term relationships. Auto dealer enables a dealer to sell more vehicles and maximize the profit from each sale. Auto dealer provides a single customer and vehicle database that is used across the entire dealership.

Objective

To planned an improved communication between totally different branches and with company to produce higher support to the

client. It is having an in depth management news for chase daily activities of the dealers and company like supported to do Analysis report company/dealer might determine frequently showing issues in vehicle. The main objective of this method is to stay records of the entire inventory. It support for inventory management helps you record and track materials on the idea of each amount and price.

Overview of the Proposed System

The paper suggests the fully a web based application which is used for tracking sales, services, reports, leads, accounts maintenance through online for automobile dealers. Better analysis of dealership profitability through retail sales, service and parts analysis.

The features included E-mail, SMS alerts, reports, sales, purchase details, transaction, leads and vehicle and parts ordering through E-mail. DMS Solution is designed for automotive industry and it fully supports all business processes of vehicle dealers, workshops and service companies, used card traders, vehicle importers and spare part traders.

SYSTEM ANALYSIS

Existing System

The existing system is not automated fully as only the accounts are automated with the accounting software. The Customer follow-ups are maintained in excel which will take more time to search from the long lists, service details are not maintained through system so it is very difficult to maintain the details. The customer details and feedbacks are maintained the manual record. As the current data is maintained through ledgers and excel sheet so there is no

proper reports for facilitation of the administration of the showroom.

Problems in existing system

As we know, manual system is quite tedious, time consuming and less efficient and accurate in comparison to the computerized system. So following are some disadvantages of the old system:

1. Time Consuming.
2. Less Accurate.
3. Less Efficient.
4. Lot of Paper Work.
5. Slow Data Processing.
6. Not user Friendly Environment.
7. Difficult to Keep Old Records.

Proposed System

In this proposed method of ours separately developing the dealership management software which is based on the requirements from the dealership peoples from the car and bikes dealers. By differentiating the sales, service and spares details. As well the business improvements also could be evaluated by adding up the accounts modules which gives the full details of accounts maintenance. A web based dealership management software to track the main dealer and sub dealers. Here the technology is used PHP, it can reduce the cost and increased efficiency, Reduction in errors and design changes,

Better record keeping and compliance, open source, time consuming, etc. and it is a secured. The scope of this technique is to supply user economical operating surroundings and additional output will be generated through this. This technique provides user friendly interface leading to knowing every and each usability options of the system. This technique helps in chase records so past records will be verified through them and one will build choices supported the past records. This technique completes, a really less time leading to less time consumption and high level of potency. This system is developed in such how that even a naïve user can even operate the System simply. The calculations are made very quickly and the records are directly saved into databases and the databases can be maintained for a longer period of time. Each record can be retrieved and can be verified for the future transactions. Also this system provides high level of security for data leaking as only admin people can access the database no changes can be made in it until it verifies the user login id and password. We also have operator login through which operator can take orders but cannot make changes in the database. Limited access is available to the operator.

Requirement Specification

The necessities specification is a technical specification of requirements for the package merchandise. It is a primary step within the necessities analysis method it lists the necessities of a specific code together with useful, performance and security necessities. The necessities conjointly give usage eventualities from a user, an operational and body perspective. The purpose of software requirements specification is to provide a detailed overview of the software project, its parameters and goals. This describes the project target audience and its user interface, hardware and software requirements. It defines how the client, team and audience see the project and its functionality.

LITERATURE REVIEW

Automobile Dealers with Applying Data Envelopment Analysis

This paper analyzes the operative performances of the twenty retailers of 2 Taiwanese automobile dealers supported the info enclosure analysis combined with the sensible expertise of the automotive trade. The paper selects vital input and output variables to gauge overall technical potency, pure technical potency, and scale potency for sleuthing the causes of unskillfulness and proposes the development comments on project management. The results indicate that there is a unit 5 retailers presenting relative potency at overall technical potency throughout the sample amount. The paper looks forward to constructing a complete business operating performance model for enhancing the

performances of retailers. The findings can provide useful suggestions for the managers of project management to focus on how to find out and develop the maximum effectiveness by allocating useful human resources fitly for enhancing the operating efficiency on performance.

Agility in Auto Dealers

Agile Supply Chain Management (ASCM) progressively becomes a good and vital live to reinforce competitive advantage of enterprises that desires the support of agile data system to integrate their provide chain more effectively and quickly. Associate in Nursing agile provide chain options model is developed to assist enterprises reach nimbleness in their provide chain management and integration by foretelling the important demand and choosing appropriate. This paper focuses on agility in distribution system of automobile industry, in particular in their auto dealers, which are the main distribution channel of auto companies. As a result, the paper shows how agility can effect on having an integrated distribution Chain Management for auto industries and a responsive SCM for auto dealers.

Applying Supply Chain Management to Improve Excellence Competitive at Car Dealer Company

This analysis target is to enhance excellence competitive of company, particularly Honda Auto mobile sale room residing in South Jakarta space. Chain management represent approach integrative or technique wherever knowledge sort used qualitative knowledge returning from

answered of questioner respondent that later are going to be was a quantitative knowledge. Results of this analysis is Setianita Megah Motor corporation higher to create a system of Supply Chain Management desegregation between merchandise current and knowledge

between division (from superior until the employees) and conjointly between company by provider. That way, information transfer can be done optimally so that excellence competitive owned company can be improved and service to consumer more optimal.

DESIGN OF THE SYSTEM System Architecture

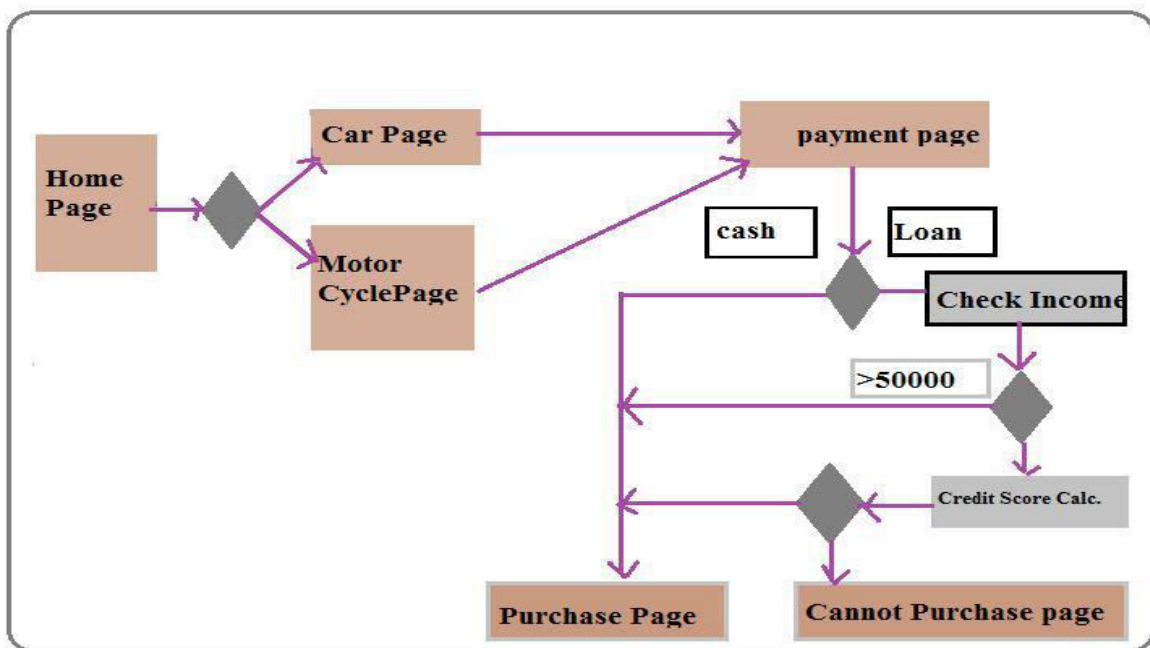


Fig. 1: System Architecture.

Methodologies

Modules

1. User Design.
2. Master Management.
3. Sales Management.
4. Purchase Details.
5. Transaction Management.
6. Stock Details.

7. Reports Management.
8. Leads Management.
9. Settings.

Feasibility Analysis

As we know, each and every project needs to have a feasibility study for the complete understandability of the project. We will

consider 3 types of feasibility study they are technical feasibility, operational feasibility and economic feasibility.

Technical Feasibility

This new system needs 6 totally trained individuals to run the system dead. One admin person to take care of information and alternative five to handle the system interface and order creating things. As our existing system is only manual, thus would like a past investment of Rs 4 Lacs for the acquisition of six computers, five invoice printers, an electrostatic printer, AC and networking etc. It needs approx. 10 Lacks PA as a disbursal. With the on top of details our system is technically possible as when finance 14 Lacs during a year, the corporate continues to be saving Rs 15 Lacs PA.

Operational Feasibility

The new solution is feasible in all sense but operationally it is not. The new system demands the expulsion of at least 15 people from the company. It creates an environment of joblessness and fear among the employees. It can lead to an indefinite strike in the company also. So, the management must take corrective actions prior in advance in order to start the further proceedings.

Economic Feasibility

With the manual system the disbursal of the system is concerning 60 Lacks P.A. This price contains regular payment of twenty five folks, stationary, building rent, electricity, water, phone etc. However, with the new system this

reoccurring price comes bent be concerning 20 Lacks P.A. then the new system is economically possible.

IMPLEMENTATION OF THE SYSTEM

Introduction

For optimal sales and inventory management processes, you need robust functionality for managing your logistics facilities. Support for inventory management helps you record and track materials on the basis of both quantity and value. PHP and using java scripts management functions cover internal wed based html movements and storage. Using this software we can reduce costs for PHP-open source software, transportation, order fulfillment, and material handling-while improving customer service. You can significantly improve inventory turns, optimize the flow of goods, and shorten routes within your open source software or distribution center. Additional benefits of inventory management include improved cash flow, visibility and decision making. This software is user friendly and hence easy to use.

Advantage of Dealer Management System

1. Standardize Business Process at Head.
2. Enhance Dealer Revenue and Profitability.
3. Better Customer Relation.
4. Increase Customer Satisfaction.
5. Increase Dealership Efficiency.
6. Improve ability to Manage Performance with enhance Brand Value.
7. Easy accessibility of Data and Reports.

8. Better Sales Forecasting and Business Analysis.
9. Vehicle and Parts Ordering Through E-mail.

Technologies Used

Introduction to PHP

PHP could be a server-side scripting language designed for internet development, however, conjointly used as a general programming language. As of Jan 2013, PHP was put in on quite 240 million websites (39% of these sampled) and a pair of.1 million internet servers. Originally created by Rasmus Lerdorf in 1995, the reference implementation of PHP is currently made by The PHP cluster whereas PHP originally stood for private home page, it currently stands for PHP: machine-readable text Preprocessor. PHP code is originally designed to be understood by an internet server with a PHP processor module that generates the ensuing website. PHP commands will be embedded directly into a hypertext markup language supply document instead of line Associate in nursing external file to method knowledge. It is conjointly evolved to incorporate command-line interface capability and may be utilized in standalone graphical applications. PHP is free software system discharged underneath the PHP License. PHP has been wide ported and may be deployed on most net servers on virtually each package and platform, freed from charge. PHP development began in 1994 when the developer Rasmus Lerdorf wrote a series of Common Gateway Interface (CGI) Perl scripts, which he used to maintain his personal homepage. He rewrote these scripts in C for

performance reasons, extending them to add the ability to work with web forms and to communicate with databases, and called this implementation "Personal Home Page/Forms Interpreter" or PHP/FI.

PHP 6 and Unicode

PHP received mixed reviews because of lacking native Unicode support at the core language level. In 2005, a project headed by Andrei Zmievski was initiated to bring native Unicode support throughout PHP, by embedding the International elements for Unicode (ICU) library, and representing text strings as UTF-16 internally. Since this might cause major changes each to the internals of the language and to user code, it had been planned to unleash this as version half-dozen of the language, together with alternative major options then in development.

PHP 5

- PHP is an acronym for "PHP Hypertext Preprocessor".
- PHP is a widely-used, open source scripting language.
- PHP scripts are executed on the server.
- PHP costs nothing, it is free to download and use.

Basic things to understand

- HTML
- CSS
- JavaScript

PHP is an Amazing and Popular Language!

- It is powerful enough to be at the core of the biggest blogging system on the web (Word Press).

- It is deep enough to run the largest social network (Facebook).
- It is also easy enough to be a beginner's first server side language.

PHP File

- PHP files can contain text, HTML, CSS, JavaScript, and PHP code.
- PHP code is executed on the server, and the result is returned to the browser as plain HTML.
- PHP files have extension ".php".

The PHP Platform

- PHP runs on various platforms (Windows, Linux, Unix, Mac OS X, etc.).
- PHP is compatible with almost all servers used today (Apache, IIS, etc.).
- PHP supports a wide range of databases.
- PHP is free. Download it from the official PHP resource: www.php.net.
- PHP is easy to learn and runs efficiently on the server side.

Screen Shots

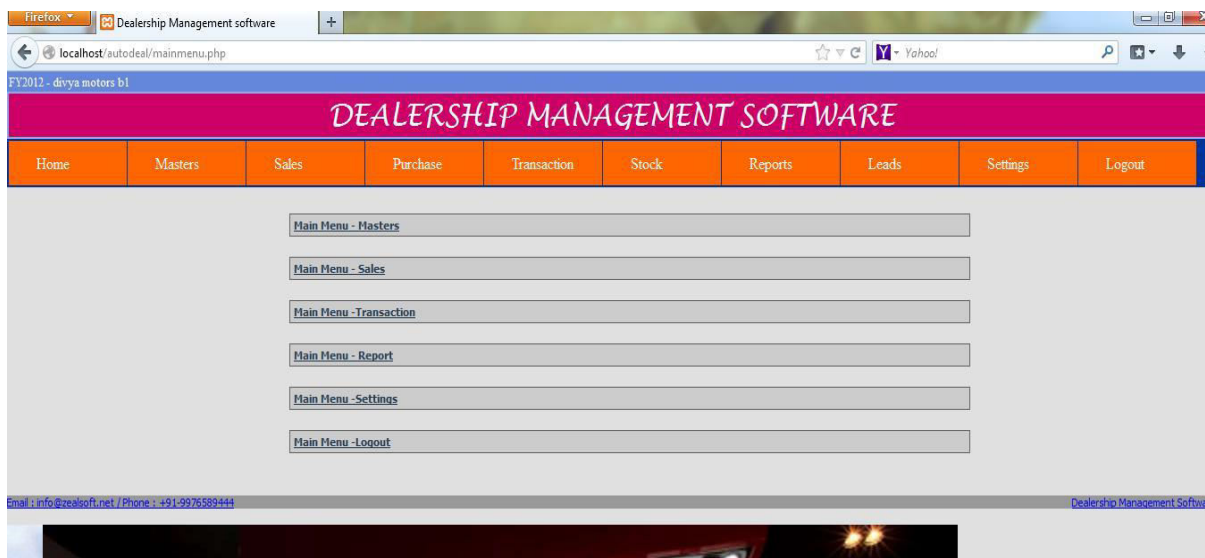


Fig. 2: Main Page.

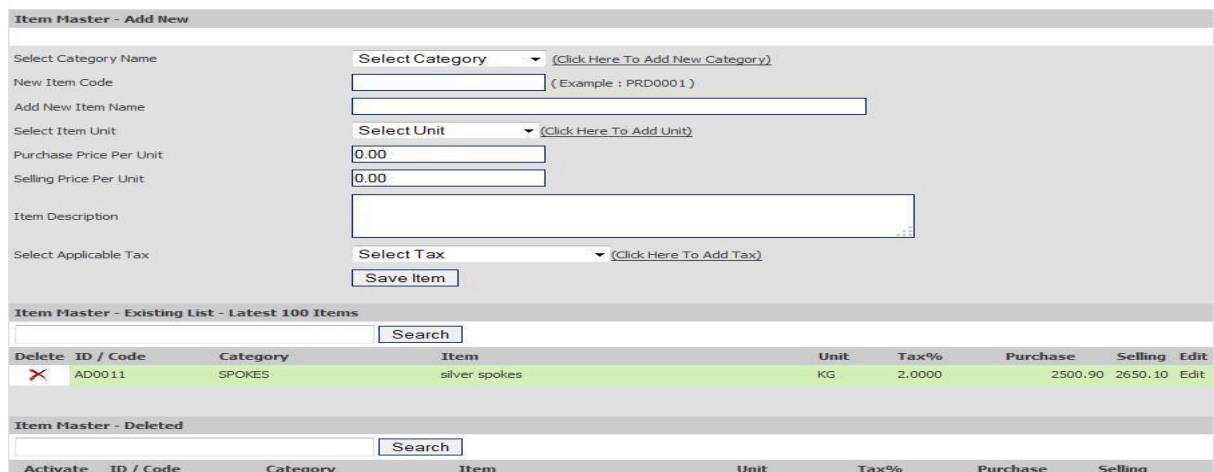


Fig. 3: Masters-Item.

Home	Masters	Sales	Purchase	Transaction	Stock	Reports	Leads
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Sales Bill Prefix: [] Bill No.: [7] Postfix: [] Bill Date: 2014-04-25 Tax: Select Default Tax

Customer * [] Alt+M Code: [] Delivery []

Address 1 [] Area [] TIN No. [] Address []

City [] Pincode [] CST No. []

No.	Code	Item Name	Rate	Qty	Disc%	Disc	Tax%	Total	ReverseTax
1			0.00	1	0.00	0.00	0.00	0.00	Add 0.00

Description: [] Current Stock: []

All Item Discount Percent Apply: 0.00 %
 Sub Total Discount Percent %: 0.00 %
 Sub Total Discount Amount: 0.00

VAT @ 5.00 %: 0.00
 VAT @ 14.50 %: 0.00
 TAX: 0.00
 CST @ 2.00 %: 0.00

Sub Total: 0.00
 Sub Total After Discount: 0.00
 Total After Tax: 0.00
 Packaging Charges: 0.00
 Delivery Charges: 0.00
 Round Off: 0.00
 (Should Equal With Nett Amount) Total Amount: 0.00

Your Order No: [] Despatched To: []
 Sent Through: [] L R / R R No.: [] Remarks: [] Credit Days: 0

Alt+B Select Bill Type: SELECT BILL TYPE
 Nett Amount: 0.00

Clear All Customer Alt+M Item Alt+S Print Bill No: [] Print 40 View 40 View A4 View A5

Fig. 4: Sales.

Fig. 5: Settings-Bill.

Honda
 Near Water Tank
 Vallalar
 Vellore - 632005

BILL
 ORIGINAL
 BILL NO.: 7
 DATE: 25-APR-2014
 CASH BILL

customer
 KANNA
 THIRU NAGAR
 ROUNTANA VELLORE, TN - 632 001

SN	Product Name	Rate	Qty	Unit	Tax%	Total
1	-	0.00	1		0.00	0.00
2	-	2300.00	1		0.00	2300.00
Sub Total						2300.00
Discount @ 3.00%						69.00
Total After Discount						2231.00
Total After Tax						2231.00
Total						2231.00

Fig. 6: Print-Bill.

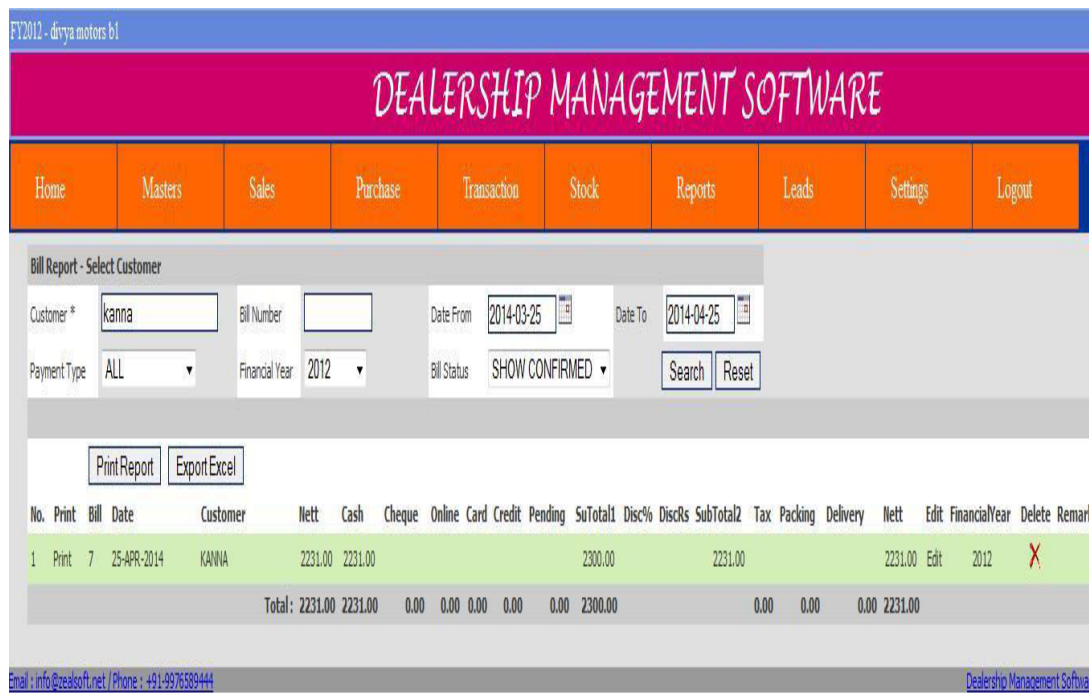


Fig. 7: Bill Report- Select Customer.

Fig. 8: Data Bases.

CONCLUSION

A web based application which is used for tracking sales, services, reports, leads, accounts maintenance through online for automobile dealers. Better analysis of dealership profitability through retail sales, service and parts analysis. The features included E-mail, SMS alerts, reports, sales, purchase details, transaction, leads and vehicle and parts ordering through E-mail. DMS Solution is designed for automotive industry and it fully supports all business processes of vehicle dealers, workshops and service companies, used card traders, vehicle importers and spare part traders. It is completely web based solution so it does not require at software to be installed on different branches. The scope of the project includes

that what all future enhancements can be done in this system to make it more feasible to use: Databases for different products range and storage can be provided, multilingual support can be provided so that it can be understandable by the person of any language, More graphics can be added to make it more user-friendly and understandable, manage and backup versions of documents online.

Benefits

1. Manages Track Sales.
2. Manages Contacts.
3. Manages Accounts.
4. Manages Opportunities.
5. Track Product Issues.
6. Track Product Features.
7. Manage Product Life Cycle.

REFERENCES

- [1] T. T. Lin, C.C. Lee, F.T. Chang. A performance management on automobile dealers with applying data environment analysis; 2010.
- [2] C.S. Lai. The effects of influence strategies on dealer satisfaction and performance in Taiwan's motor industry. *Industrial Marketing Management*. 2007; 36(4): 518-527p.
- [3] C. Lakshman, R.C. Parente. Supplier-focused knowledge management in the Automobile industry and its implications for product performance. *Journal of Management Studies*. 2008; 45(2): 317–342p.
- [4] Dr. Rajagopal. Effects of customer services efficiency and market effective on dealer Performance. *International Journal of Services and Operation Management*. 2009; 5(5): 575–594p.
- [5] A.T. Flegg, D.O. Allen. Congestion in the Chinese automobile and textile industries revisited. *Socio-Economic Planning Sciences*. 2009; 43(3): 177– 191p.
- [6] H. Choi, O. Inha. Analysis of product efficiency of hybrid vehicles and promotion Policies. *Energy Policy*. 2010;38(5):2262–2271p.