Digital Retail Management

Dr.N. Baggyalakshmi, P. Kavya and Dr.R. Revathi

Abstract--- The store is a component of a bigger brand service chain that takes orders and delivers the things consumers want in person. The online store's manager cares deeply about both the smooth operation of the business and the happiness of its customers. Keeping the firm running, compiling records, and knowing the revenue from online purchasing is the most difficult portion of business making. The convenience of being able to keep track of purchases and take orders over the phone is, hence, the central focus of this research. Customers are given significant prominence in this report through the provision of discounts that are derived from their purchasing history. Consequently, the customer's value to the organisation grows in direct proportion to their level of engagement. This program's limited features, such as product reports, allowed it to partially manage product orders placed on a wide scale online, and it performed admirably across a variety of products. Customers can experience easy product ordering from any location if brand shopping offers an online portal.

Keywords--- Digital Retail, Online Store Management, Products, Customer.

I. Introduction

The back-end system that allows customers to purchase goods and services from a store online as well as in-person via a single point of contact. In reaction to a submission time, the system accepts the purchase order for the item from the customer [1]. Most people utilise this purchasing website to buy mobile phones online and do it all from the comfort of their own house.

There have been several advancements to the internet throughout its long history. The internet has recently emerged as a major channel for mass communication reaching enormous audiences [2]. Fast and efficient information distribution is within its power and capability. These days, consumers just do not have the time to physically go to stores to get the products they need, therefore this is an incredible opportunity to buy mobile phones online through multi-brand shopping. Customers can peruse all sorts of documents along with prices on the internet pages that sell mobile-related products, and they can choose from a wide variety of mobile brands [3]. One advantage of paying with an electronic bank is that customers have a variety of options for how to pay displayed on the page; they only need to

choose the one that best suits their needs. Following the customer's selection of the brand, the package will be sent to the address they gave on the website [4]. In order to make a purchase, customers must first create an account by providing basic personal information and then log in to the website. The administrator has access to all purchased client details, shipping details, sales and delivery location facts, payment details, and customer feedback pertaining to this benefit.

A large number of real-life clients persist, despite the proliferation of websites that allow users to play client. Which goes to indicate that many people would rather have experts handle the planning of their trips when it comes to spending money on them [5]. By outlining specific goals, you can ensure that your clients' travel expectations are met or surpassed, which will earn their trust.

Specific Objectives

- To manage the expedition and trekking work centrally.
- To promote organizational information via digitally.
- To provide Packages information that serve by company
- To provide Online Request System

Scope of the Study

- Scope of the study refers to the elements that will be covered in a research project.
- It defines the boundaries of the research.
- The main purpose of the scope of the study is that it explains the extent to which the research area will be explored and thus specifies the parameters that will be observed within the study
- it enables the researcher to define what the study will cover and the elements that it will not.
- Defining the scope helps the researcher acquire a high level of research and writing capability.

II. Literature Review

Wassan et al [6] proposed to utilize a hypothesis model to prove our claims because they assume. Additionally, we go into the aspect of consumer goods purchase behavior. We utilize a hypothesis model to prove our claims because they assume. Additionally, we go into the aspect of consumer goods purchase behavior. Our investigation yielded

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encouraging results, so we used these findings to formulate some recommendations and conclusions for our business colleagues.

Muschkiet et al [7] According to research, smart services have the ability to boost customer-oriented value creation by integrating customized physical and digital products to offset physical shops' competitive disadvantages. Nevertheless, the majority of strategies only address in-store offerings and ignore the broader retail buying environment. Thus, this study offers a retail smart service classification methodology that is assessed using 163 use scenarios and six service archetypes. This work suggests applying the concept of a holistic customer experience to service design in physical retail spaces and advances our understanding of pertinent parts of service design.

Grewal et al [8] The conceptual framework for comprehending novel and futuristic in-store technological infusions is presented in this research. First, we create a 2×2 typology of several cutting-edge and futuristic technologies, emphasizing how convenient and socially present they are for the user. We next present a set of proposals predicated on the notion that consumer involvement, elaboration, and vividness can be triggered by convenience and social presence, ultimately resulting in increased sales. In order to understand how these moderating factors could affect the vividness experienced through technology, the research then focuses on four moderating areas: consumer attributes, product/service dimensions, mental models, and social networks.

Yu and Duan [9] The system are well-designed and has practical modules for managing memberships, import and export of sporting goods, inventories, and ledger management. The head office can oversee the operation of each store, check the generated ledger at any time, create statistical reports, and direct the operation status of each store so that the stores can always modify their operating procedures and learn from one another. System operation can effectively handle the coordination work between the head office and stores. Instead of using single data, the system network management can create important data aggregates. The main office can quickly backup all of the data in order to give each store strong logistical support.

HR and Aithal [10] In the brick-and-mortar retailing paradigm, the concept of minimum display quantity (MDQ) is unavoidable. As a result, retailers must guarantee a certain level of inventory shown at each location, regardless of the income or inventory turns made by a specific store. It has been noted that most physical retailers in India make the following assumptions: (a) the current inventory management system is best for their store; (b) software solutions record accurate inventory movement; (c) it is risky or biased to involve the store management team in decisions related to inventory; and, most importantly, (d) stockouts will inevitably result in lost sales.

III. PROPOSED METHODOLOGY

Software for web-based applications is the suggested system. Customers are helped by the suggested system by means of an online storefront where they may see product galleries, get deals and discounts, and place orders. Customer online purchasing orders are the primary emphasis of this system. Benefits of the Suggested Approach

- Choose products faster and easier at one place.
- Good/Trusted & Tension free delivery services. Products bought online will be delivered to the footsteps of the buyer free of cost.
- Alerts and real time reporting through emails.
- Reports generated can be saved for future references.
- Shopping reports for the order on daily, monthly, yearly basis.

3.1. Services of Insource Technologies

Figure 1: Insource Technology

Web Design

Websites, both static and fully dynamic, can be built by Insource Technologies, giving our clients the power to reach their target audience faster. A creative approach to making a user-friendly website that is both aesthetically pleasing and functionally sound, allowing visitors to easily find the information they need. While style and images are part of web design, the overarching goal of any website is to convey some sort of message to visitors.

Web Development

In order to build a website that looks attractive and works well, strong and accurate web development is required. This ensures that the website's design is well-bound, and that the website's pages load without errors.

E-Commerce

To assist you generate business, Insource Technologies designs and develops e-commerce websites. An exciting new online store with cutting-edge features, tools, and analytics—one that looks great and works flawlessly on every device—is something Insource Technologies would love to build.

Mobile Application Development

Insource Technologies does more than only make websites; they also make apps for smartphones and tablets, including Android.

Search Engine Optimization

Insource Technologies use genuine, long term, non-tricks involved organic based SEO

Techniques that are approved and according to the guidelines provides by search engines like Google, Bing, Yahoo, etc.

Social Media Optimization

Insource Technologies offers social media optimization

and SEO services in Coimbatore.

Every company can benefit from the low-cost and high-impact online marketing strategy that is social media advertising. Being active on well-known social media platforms such as Facebook, Twitter, Google+, YouTube, etc., is a cost-effective approach to quickly reach both focused audiences and large numbers of individuals. Brand familiarity and awareness will grow, and website traffic will go up, too.

3.2. Technologies in IT Frame Technology

Laravel Framework

When it comes to building big, robust applications, Laravel has you covered with its accessible yet powerful capabilities. Create any kind of application you can imagine with the help of our top-notch inversion-of-control container, expressive migration mechanism, and fully integrated unit testing support.

PHP and MYSQL

When it comes to creating websites, PHP is by far the most used programming language. Plus, it's server-side, free, and open source. Structured Query Language is the backbone of MySQL, a relational database management system. On top of that, it's free and open source. With PHP and MySQL, the sky's the limit when it comes to building websites, from simple contact forms to massive corporate portals.

Bootstrap

Web development suite that is open source and uses HTML, CSS, and JS. Sass variables and mixins, a fluid grid system, a plethora of prebuilt components, and robust jQuery plugins allow you to rapidly prototype concepts or construct full apps.

HTML5, CSS3

HTML and CSS are two of the core technologies for building Web pages. HTML provides the structure of the page, CSS the (visual and aural) layout, for a variety of devices.

Along with graphics and scripting, HTML and CSS are the basis of building Web pages and Web Applications.

JavaScript and JQuery

When used together, JavaScript and JQuery produce the same perplexion and disorientation. jQuery is a library that makes JavaScript writing easier. JavaScript is a very basic, flexible, and powerful language that is used to provide functionality to websites. They work well together to process data, add visual effects to websites, and more. It is only by utilising JavaScript and jQuery that dynamic styling and animation can be accomplished.

Mission and Vision Mission

1. To provide leadership and technical solutions to business needs and functions.
2. To provide leadership in purchasing hardware and software to maximize value.
3. To enhance communications, collaboration, and the flow of information.
4. To provide the public access to County services and information in an efficient manner to manage and optimize software licensing programs.
5. To manage technology vendor relationships and contracts.
6. To develop and implement beneficial information technology policies and procedures.
7. To provide access to new technology.
8. To provide efficient storage of data.
9. To provide a high level of cyber security and privacy.

Vision

Our vision is fueled by our commitment to provide our customers with **leading-edge technology**; supported by qualified and trained service professionals with our assurance of continual learning;We are not satisfied with status quo but rather a focus on technologies and solutions that deliver the advantages your company

The dedication of our service personnel to offer state-of-the-art technology backed by our promise of ongoing training is the driving force behind our vision. The current situation is unacceptable to us. We pledge to put our energy into developing technology and solutions that will provide your business the competitive edge it needs to thrive.
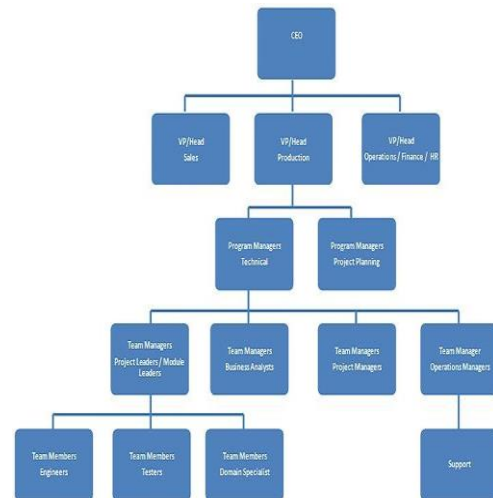

Figure 2: Architecture Diagram

3.3. Software Department

3.3.1. Business Analyst

This is one of the most underappreciated but crucial positions in every development team. Perhaps because the responsibilities are occasionally merged with those of the Project Manager role. Assuming the PM is a full-time PM with sufficient training and business understanding to interact successfully with the Product Manager, this could be suitable for an internal software development team. The Product Manager relies on the Business Analyst as a vital resource. In order to get features ready for development, they will polish and clarify them further, generally with the help of a Technical Lead.

Key Responsibilities

Clarify Features

'Protect' developers from Product and Business interruptions

Liaise with the Technical Lead and Product Manager to resolve queries

Project Manager

It is the responsibility of the Project Manager to implement the Product Manager's plan. Assuring the development team has all the necessary resources to complete their work is the responsibility of the project manager. They facilitate all meetings and correspondence and eliminate any obstacles.

Key Responsibilities

- Schedule, chair and document relevant meetings
- Analyze project and team performance to better understand where process improvements can be made
- Ensure the development team have the resources they need to deliver the work

Technical Lead

Because it suggests that this individual must be the team's "best" developer, the name of the position is frequently deceiving. That being said, it's not always the case. Without interrupting other developers, this job gives the Project Manager and Business Analyst a defined point of contact within the development team.

Key Responsibilities

- Protect the other developers from the Project Manager and Business Analysts questions
- Be knowledgeable about the features being developed in the sprint.

Developer

The core of the team, which could consist of anything from one to seven persons, are developers. Dividing a development team of eight or more into two groups should increase efficiency. Developers are in a prime position to influence the team's success because they are the ones responsible for creating the necessary features. Their time is valuable and ought to be honoured.

Key Responsibilities

- Develop the features laid out in the sprint
- Update the Technical Lead and Project Manager on progress in stand up meetings
- Focus and be brilliant

Web Designer

Design sprints are a great way for web designers to get everything done quickly before moving on to the next feature or project. From start to finish, they should be a part of the delivery process. After developers have failed to make a feature fit the Product Manager's needs, designers are frequently pulled back into the process. When that happens, the product is no longer effective. Regardless of your opinion on the amount of design work involved in a feature or how effectively it has been prototyped beforehand, it is beneficial to include a design professional in your backlog refinement meetings (for more on meetings, check out our upcoming blog post). If you know in advance whether or not they will be required to guarantee the features' details deliver, you can plan accordingly.

Key Responsibilities

- Turn the project or product vision into a visual thing
- Work with the Product Manager to create a user experience that meets requirements
- Support the development team through the build process

QA / Tester

The deciding factor in the success or failure of a project or product. The success of a product or project depends on the work of quality assurance. Nevertheless, the entire product, project, or company's reputation could take a hit if things go wrong. Take your time with this. Testing is an investment that will pay off. Because of their job, testers have extensive knowledge about the items they test, but this also makes them an ideal resource for more general questions. Leave them alone to ensure the product's success while you shield them from the business with a combination of product managers and business analysts.

Key Responsibilities

- Understand feature requirements defined by the Product Manager and Business Analyst
- Ensure features built by developers meet the criteria defined in the requirements
- Engage with development teams to agree and understand QA processes

3.3.2. Sales Department

- The sales manager is responsible for the year sales. After the final process of insource technology, the insource is properly covered in polythene cover and weighted.
- The sales of machine may be of three types
- Direct sales
- Consignment sales
- Depot sales

Direct Sales

A sale contract in writing is established and sent through the buyer for approval directly or through agent. The invoice is prepared as per the sales contract and dispatched to the buyer. The buyer settles the lull and exact value of the invoice raised by the company.

Consignment Sale

A consignment sale agreement is duly signed by the company and the consignment sale merchant with the following classes. The merchant request the company for a particular count pattern mentioning the quantity required and also indicates the market price. I he dispatches for the

requested goods to the merchant on consignment sale through a Performa invoice at the price mentioned by the merchant. The merchant settles up to 80% of value receipt of goods. On the receipt goods the merchant sells the materials as per the prevailing price which might be higher or lower from the indicated price subject to the approval of the company. As per the statement furnished the merchant takes responsibilities and pays the company their dues along with the sales tax involved and the freight.

Depot Sales

The company authorizes the person as a depot manager in the particular state/district and the register their depot with the sales tax authorities of the particular state/district. The goods from the company are transferred the depot under the following. The material is sold as per the prevailing market by the authorized person of the depot and the manager takes all responsibilities regarding sales tax involved in that particular state/district as per the governing rules of the sales tax and remits the tax collected. The depot is an extension of the company; hence the value of the goods is determined as per prevailing market and all sales tax formalities arc accomplished.

Export

The price is negotiated with the overseas buyer under these Categories FOB, C&F, GIF.

FOB- Freight on Board

- The price is quoted on ex-mill basis and transport charge is covered up to the port. C&F- Cost and Freight
- The price is quoted on the ex-mill basis and transport cost is covered up to the buyer's port.

3.3.3.   Accounts Department

The industry maintains proper accounts in all aspects. As a matter of fact accounts department is diligent, duteous and energetic. The directors of the management are well versed with accounts and hence this department leads the organization in an excellent manner. The following books are maintained in accounts department:

General Journal

The journal book is used for recording the transaction. Journal is called the book of original entry; journals are prepared for the purpose of rectification of errors, transfer entries and recording the purchase of assets. All the transfer entries must be approved by the managing administration.

Cash Book

Cash book records the transactions relating to cash payments and cash receipts. Every payment or receipt are to be supported by a cash voucher.

General Ledger

The ledger contains all the accounts relating to the journal transactions. The subsidiary books are closed and the figures are

Purchase Book

All he credits purchase bills are recorded in this book the auditors check the bills carefully to its correctness by verifying the endorsee. The purchase returns is recorded in purchase returns book.

Sales Book

This book records the invoices details raised or the sales of furnished goods. The auditors should get the price list of the concern containing prices of its products. The quantity marked in the invoice should tally with the quantity marked in the deliver)' note.

Bank Book

When a cheque is issued a payment voucher is prepared by enclosing the related documents for requisition. The voucher should be passed by the accounts officer. The head of the account which the payment is to be debited to be written on the payment voucher for all bank transaction. Then the voucher is recorded in bank book.

Petty Cash Book

This book is only necessary when petty cash payments are made. Otherwise the entries can be made in the rough cash book itself and the petty cash book can be discontinued. All petty cash payments are entered in this book from petty cash vouchers.

Trial Balance

The trial is that of a journal. Instead of a book, loose papers are issued here for the entries are made in the paper from the ledger for every account. The totals of credit balances and debit balances should tally. In any case, such records accounts for only a small portion of the accounts section.

Product and Market

The company is producing machine, which is being supplied to various markets, The company product of 30s and 40s arc the leading brands, which is consumed for making machine.

Pricing

The cost of pricing to the product is depends on the cost of production and market range.

IV. SYSTEM SPECIFICATION

Hardware Specification

Table 1: Hardware Requirement

Processor	Intel Core2dual
Memory	4 GB RAM
Hard disk Requirement	Free 500GB on installation drive

Software Specification

Table 2: Software requirement

Operating System	Windows10
Scripting Language	PHP
Database	MYSQL

V.   RESULT AND DISCUSSION

Input Design

Web forms built using HTML, JSP, and PHP constitute the project's input design. There is little difference between dealing with Windows forms and web forms. The key distinction, though, is that we'll be using web forms to build browser-accessible web pages. The user interface of a web application is a web form, which is a web page. Any client device or browser can access the data presented on a web form page, which uses server-side code to execute application logic.

Output Design

Producing the intended output in a predetermined manner for the end user is the fundamental goal of any information system. The majority of users do not enter data into the system or operate it in any way; instead, they just receive the information it provides. Simplifying and including completeness into the output design is essential for avoiding ambiguity.

Data content and rough layout inform the output design. The data needed by upper management is also considered. For the user, the outputs are both the most crucial and immediate source of data. When the output is well-designed, it strengthens the connection between the system and the user and aids in decision-making.

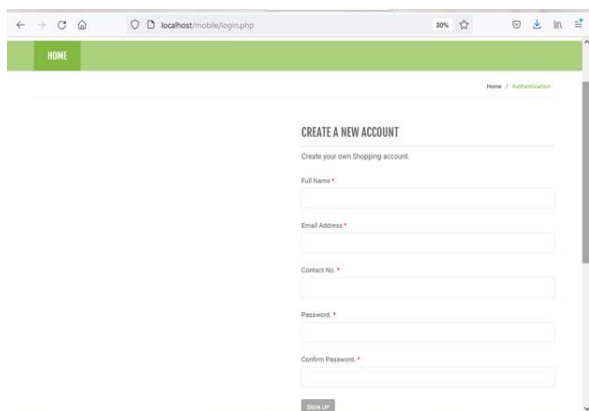*Sample Screen User Registration Form*

Figure 3: User Registration Form
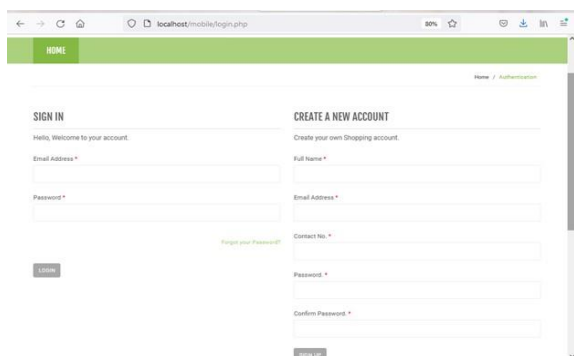
User Login Form

Figure 4: User Login Form

Database Design

The building of tables, which are stored as files in a physical database, is an integral part of database design. They are independent beings. With rows representing records with linked information and columns representing fields of data of the same type, tables are composed of these two components. A null value can also be entered in certain places in the table.
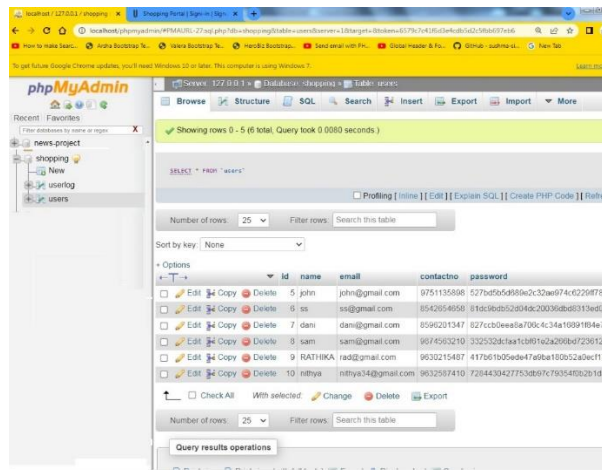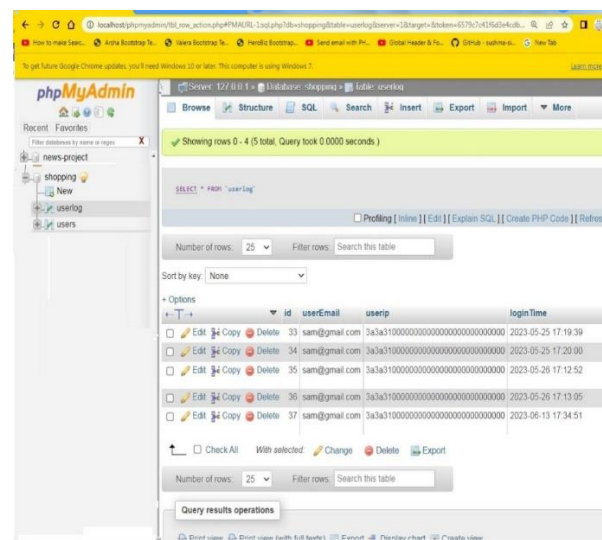

Figure 5: User Registration

Figure 6: User Login

Table 3: Name: Admin Primary Key: Aid

Field name	Data type	Width	Description
aid	integer	11	Admin identification
aname	varchar	12	Admin name
pwd	varchar	12	Password

Table 4: Name: User Registration Primary Key: Uid

Field name	Data type	Width	Description
uid	integer	11	User identification
fname	varchar	12	Full name
mail	varchar	15	Mail id
cno	integer	10	Contact number
pwd	varchar	12	Password
cpwd	varchar	12	Confirm password

Table 5: Name: Sub Category Primary Key: Sid

Field name	Data type	Width	Description
sid	integer	11	Sub category id
cat	varchar	12	Category name
scat	varchar	12	Subcategory name
desc	varchar	20	Description

VI. CONCLUSION

Looking back, I can say that my internship was a fantastic and satisfying experience. The intern has met and networked with numerous people who will undoubtedly be able to assist with future opportunities. The ability to prioritise tasks and stay motivated are two of the most important abilities that interns will gain from this experience. After the intern understood their responsibilities, they made sure not to waste time by overlapping or squandering tasks. The intern had to gain self-motivation from the long hours spent in the workplace as part of their internship and time management. Interns at Insource Technologies gain valuable experience while learning new skills and contributing to the development of support systems. Participate in the system's development while acquiring expertise in both the technical and non-technical domains. Which I found was equally significant. It was a blessing that the team at Insource Technologies was so kind; it was easy for a newcomer like myself to settle in.

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