

# INTRODUCTION

## 1.1 Overview

E-commerce is the process of selling and buying goods through the internet. Businesses have seen the benefits of using the internet to increment the number of customers and at the same time reduce their operations expenses. Therefore, IT companies are developing e-commerce platforms that can be used by any kind of business, from entrepreneurs to big companies. Content Management Systems are programs that allow the users create and update their websites without requiring strong programming skills. Some content management systems, such as WordPress, have increased their functionalities to allow their users create e-commerce site.

The aim of this thesis was to create the e-commerce site Mycart. Mycart is an online store that will sell products in India. Thus, it was required to create a site which handles online payments and multilingual content. The thesis report includes the theoretical information about e-commerce, content management systems and it described the development process of the site.

## 1.2 Purpose

The year 2020 has been a roller coaster ride so far. The continuous disasters, the spread of novel coronavirus, altogether, have created havoc among the people. The need for ecommerce has become more than essential now. People now know the importance as well as the benefits of online ecommerce. It has become a part of our daily lives. More and more people now order food, clothes, groceries, home appliances, and much more, online, using ecommerce. Moreover, the use of net banking, credit cards, UPI payment, and other online transactions is increasing, day after day. Ecommerce has been so integrated into our lives that it becomes near to impossible to imagine life without it. In this blog, we will be discussing ecommerce websites and the purpose it serves.

There are plenty of purposes of a website, most of which can be confined to one goal, earning profits. An ecommerce website implies a virtual store where visitors come to the store, pick the products of choice, and become customers by purchasing them. Individuals earlier visited the brick the mortar store that was promising and trustworthy, inclining more towards major brands. However, the online ecommerce business has opened doors to businesses of all kinds. All businesses can now sell online with the right use of the resource.

The first step to grab a visitor's attention is to create a beautiful website. You must invest

your time in genuine market research and in building a creative ecommerce website. If you are not technically armed, you can consider using ecommerce platforms such as Builderfly that can do the job for you. It is a completely customizable, do-it-yourself platform that provides you with ready-to-use templates and themes to design your store without being a technical expert. Moreover, you can create a mobile app with distinct design, manage your selling platforms, and focus on marketing, all from one dashboard.

The more you focus on your ecommerce website, the higher will be your revenue as well as profit generation. The earlier you enhance your conversion rates, the more you'll be able to benefit from your ecommerce website. As an online seller, you might already know that with the help of an ecommerce website, you can sell physical as well as virtual products. If you were selling in a brick and mortar store, you have the option to show different products to your visitors, explain them the features, help them compare products, and sell the products directly. However, in the case of online ecommerce, how do you plan to make your products reach the right customers? Here's when an ecommerce website comes handy. A sharp ecommerce website designing can help your products get the views of the right viewers that can potentially convert into your loyal customers.

An ecommerce website helps in reaching such remote customers which otherwise would not even know the existence of your physical store. You can say the world becomes your audience with an ecommerce website. All you must do is create a stunning ecommerce website and market it using the right strategies (including organic ways, paid advertisements, marketing campaigns). We have listed down a few points that dictate the purpose of ecommerce websites:

1. The online sellers can get a wide range of customers from around the globe.
2. You can get feedback for your services to improvise and boost your services.
3. The seller and the consumer can interact with each other regarding the products or services.
4. The consumers can get the details of the product you sell and your brand story (if you have invested your time in marketing).
5. It saves considerable time for the consumers; no endless walking to find products, no waiting in traffic jams, no hanging outside the trial rooms, and no waiting for billing.
6. Consumers can purchase online from anywhere at any time using your ecommerce website.
7. Websites help in marketing the products with detailed product descriptions, high-quality product images and videos, rich content, and sleek designing.
8. The right use of SEO and content can help in scoring the Search Engine Results Page (SERP).
9. With the use of cookies, you can collect consumer data including the demographics that can be used for target marketing.
10. You can add unlimited products to your ecommerce website and categorize them to sell

efficiently.

11. An ecommerce website can be responsive to provide customer convenience.
12. You can include live chats, messages, and provide other contact details of your business on the ecommerce website.
13. Including a feedback form can help you get direct feedback from your customers.
14. A good website design along with strong content can help you build online traffic to boost sales.
15. A website can help you in creating brand authenticity and consumer trust.

## **2 LITERATURE SURVEY**

### **2.1 Existing problem**

Traditional-Commerce is a traditional approach to buy goods and services in person which involves face to face dealing.

It is ancient and still in usage where the digital network is not reachable.

It can be followed by any person irrespective of education or knowledge.

It can be in any form which is non-electronic or manual form.

It is available during the limited time as prescribed by the law and based on the type of business.

Inspecting a product before purchasing is possible in a traditional commerce business model.

It involves face to face involvement of both buyer and seller

It is difficult to perform more business in this model

It is cost effective as display and showcase of the products are required to attract the customers

## 2.2 Proposed solution

An ecommerce website caters to the exchange of goods and services for electronic transaction of money as well as Cash-On-Delivery (COD). Trading has been practised for a long time serving to the demand and supply chain. Ecommerce website, unlike the traditional websites, helps in purchasing the products that are displayed in the product lists. People can visit the website, choose the products they like, enter the required details, make payment (or choose to pay later), and purchase goods and services in a jiffy. Ecommerce website facilitates online transactions with the use of data and fund transfer. Earlier ecommerce was managed partially using phone calls and emails. However, today, all the processes can be done with a single website.

Types of an ecommerce website:

There are mainly four types of ecommerce websites or better say, you can categorize ecommerce websites into four, they are as follows:

**B2B (Business to Business):** The electronic trading of goods and services between two businesses is facilitated by a B2B ecommerce website. Here, goods or services are sold by one business to other businesses.

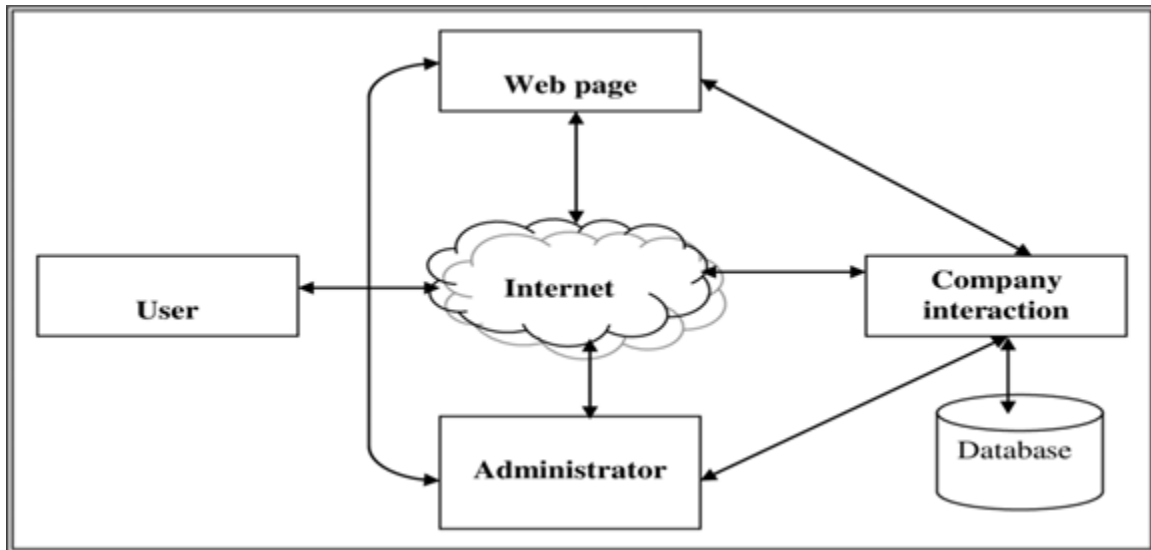
**B2C (Business to Consumer):** The electronic trading of goods and services between a business and a customer is catered by a B2C ecommerce website. Here, goods or services are sold by one business to a consumer.

**C2B (Consumer to Business):** The electronic trading of goods and services between a consumer and a business is hosted by a C2B ecommerce website. Here, consumers sell goods or services to other businesses.

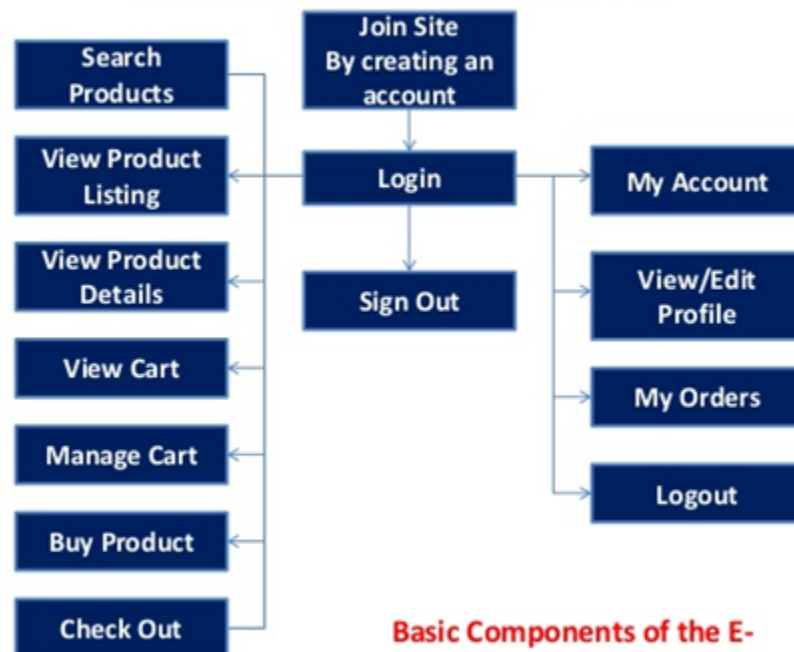
**C2C (Consumer to Consumer):** The electronic trading of goods and services between consumer and another consumer is done on a C2C ecommerce website. Here, one consumer sells goods to services to other consumers.

## **3 THEORITICAL ANALYSIS**

### 3.1 Block diagram



## System Block Diagram



Basic Components of the E-Commerce Website



## Domain name

The domain name is a group of characters or words which identifies a website inside the internet. It is easier for humans to remember a sequence of words which has a meaning, rather a sequence of numbers; that was the reason Domain Names were created.

From a business perspective, the Domain name can be considered as the digital business card. It is the name that the users will be using when they are looking for a specific website. When choosing a domain name, it is important to keep in mind to use a short name that describes the product or service that is being provided to the customer. This way it will help the user to remember your site. Also, it will increment the visibility of the website in the internet since more users will be available to find it.

## Hosting service providers

After selecting the name of your domain. It is the moment to choose a company that will make the website available online. The companies that offer that service are known as hosting service providers. The hosting companies use specialized computers known as servers, which are connected to the internet. To use their service, you are required to have a domain name, which they will provide in case it has not been acquired yet.

Depending on the amount of capacity and features available from the server, there are four types of hosting plans. The most basic option is known as shared hosting. It is the cheapest one since the website shares the same server with other websites. Therefore, the performance and security of the site can be affected by the other websites located in the server.

The second type of web hosting plan is known as dedicated server. When using a dedicated server, the user can use the whole server for the site. This way the server can be configured per the needs of the project. Due to its price, it is recommended for websites that have a considerable amount of online traffic.

There is another hosting plan that combines the characteristics of the dedicated servers and shared hosting. This service is known as virtual private server. The server is divided into virtual servers where each user can configure it per their needs the same way as if they were using a dedicated server. This gives the users more control over the server, but the performance of their site might be affected by the other virtual servers.

Cloud hosting is the last type of hosting service. This is a new service that consists of a group of servers

connected to handle high amount of traffic. Depending on the usage of this service will dictate the amount of money it is required to pay.

Since it is the first time the Mycart website will be online. It is expected to have a low amount of traffic. Therefore, the most suitable hosting service is a shared host.

#### Secure socket layer certificate

Since e-commerce sites handle sensitive information of the clients, such as the client's personal information and credit card numbers, it is important to provide a safe environment where their data stays confidential. One way of offering a protection layer to an e-commerce site is by installing a Secure Socket Layer (SSL) certificate in the server where the e-commerce site is located. An SSL certificate is a digital document issued by Certificate Authority. This certificate contains the information of the organization who was provided the SSL certificate, the authority who issued the certificate, the expiration date of the certificate and a cryptographic key. This key is used for encrypting the information that is transmitted between the certified site and the client's browser key.

#### Installing WordPress

Installing WordPress is well known for its 5 minutes' installation process. The first step is to create a database where all the data from WordPress will be stored. This can be done by accessing the Cpanel of the website and selecting the option "MYSQL databases". From there the database and the user of the database are created. Then, it is required to download the folder that contains all the WordPress files from the website [wordpress.org](http://wordpress.org). After downloading WordPress, the user needs to upload all the files that are inside the WordPress folder to the public folder of the web host. This can be done by using the FTP client program or through the Cpanel "file manager" tool. Finally, the user just need to go to the website address where WordPress will be installed and follow the installation process. During the installation, the user need to provide the name, user and password of the database it was previously created.

#### MYCART DEVELOPMENT

The process of development the e-commerce site was divided in two phases. The first phase of the project consisted in creating the look of the Mycart. This phase involved selecting and modifying the theme of the Mycart. On the second phase of the project the e-commerce functionalities were integrated into Mycart, which consisted on installing and configuring the required plugins. This process is described

in this chapter.

Since the goal of the project was to create an e-commerce site, a theme designed for e-commerce sites was selected. This was done by using the keyword e-commerce in the search option. After looking through different themes, it was decided to choose the theme called “store”. This theme was chosen because it had a simple and clear layout that it was appropriate. Another reason why this theme was selected was because it had a responsive layout. In other words, the layout of the site would react per the size of the browser or the size of the screen in which the website is viewed. Having a responsive layout was an important aspect to consider while choosing the theme of the site because nowadays there is a wide range of devices of different size and resolutions. Thus, it was important to have an e-commerce that can be browsed through any device; otherwise the number of users who access the website would be affected.

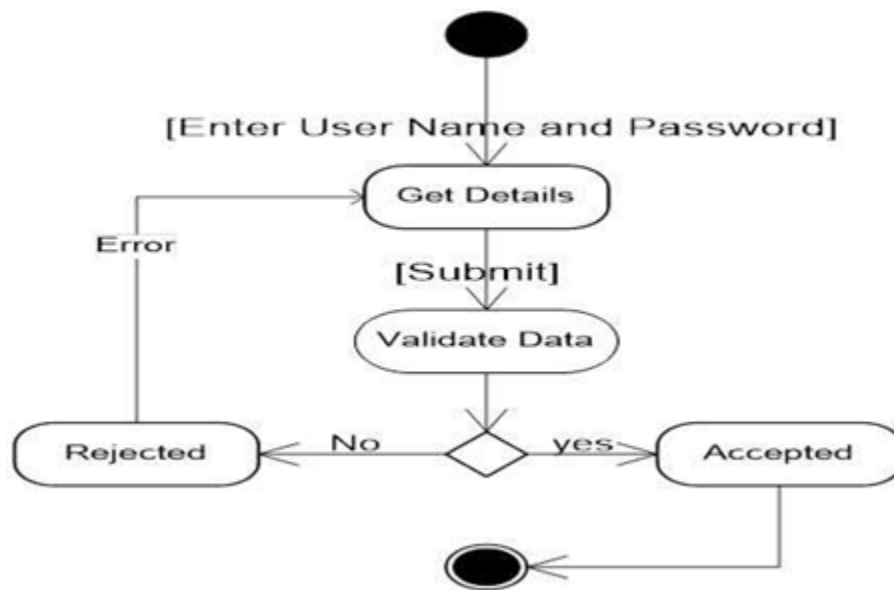
#### **4 EXPERIMENTAL INVESTIGATIONS**

After developing the whole site using WordPress, we have tested several times the display of webpages and the payment gateway which we included on the site for convenience of the customers. Our investigations reveal that the whole process of payment and other features of the site are working in perfect manner and there are no errors.

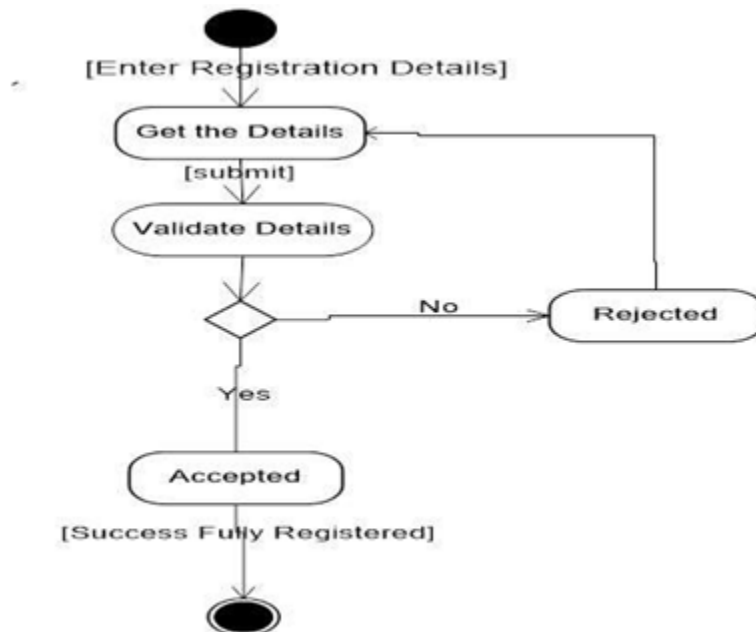
#### **5 FLOWCHART**

Login activity

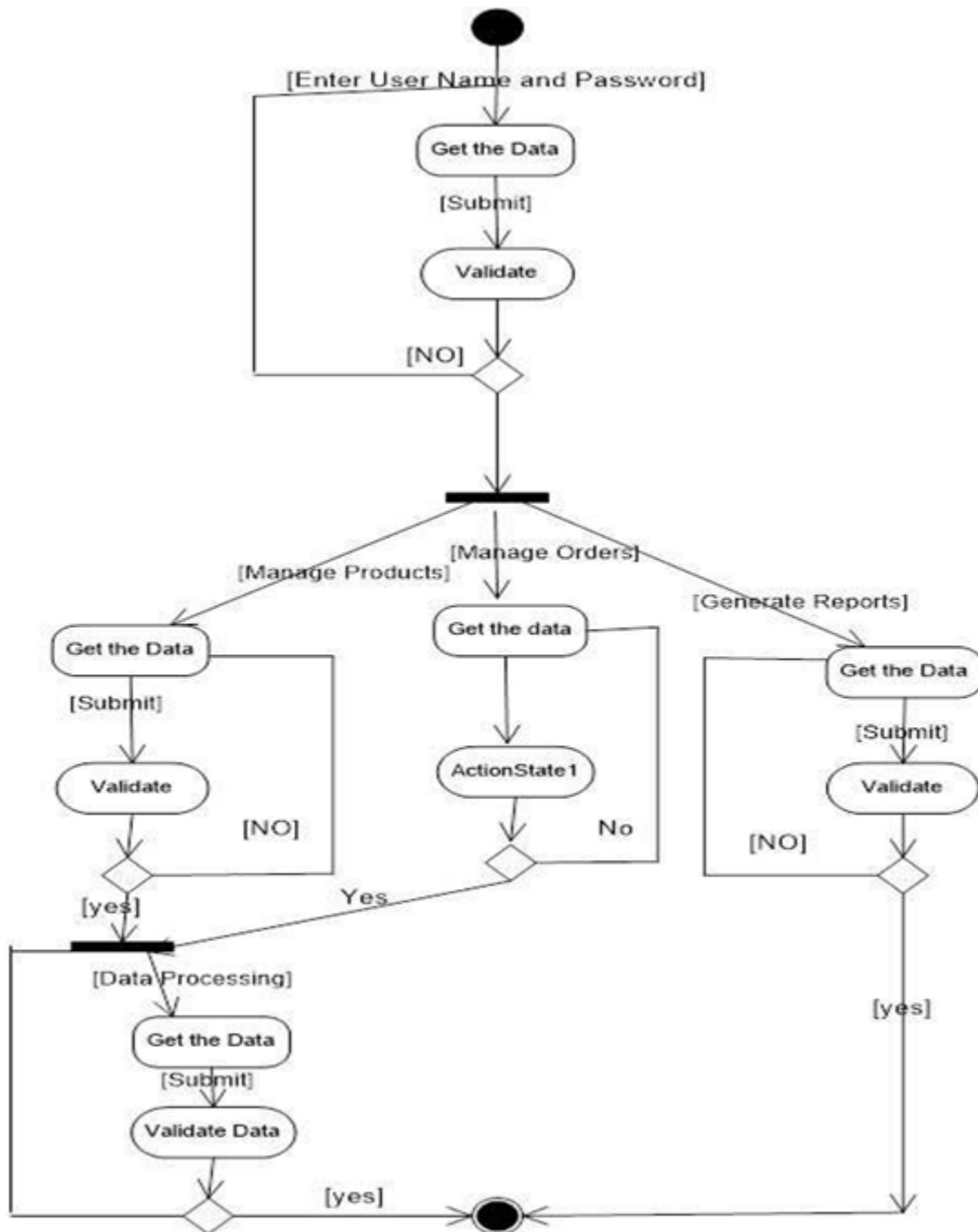




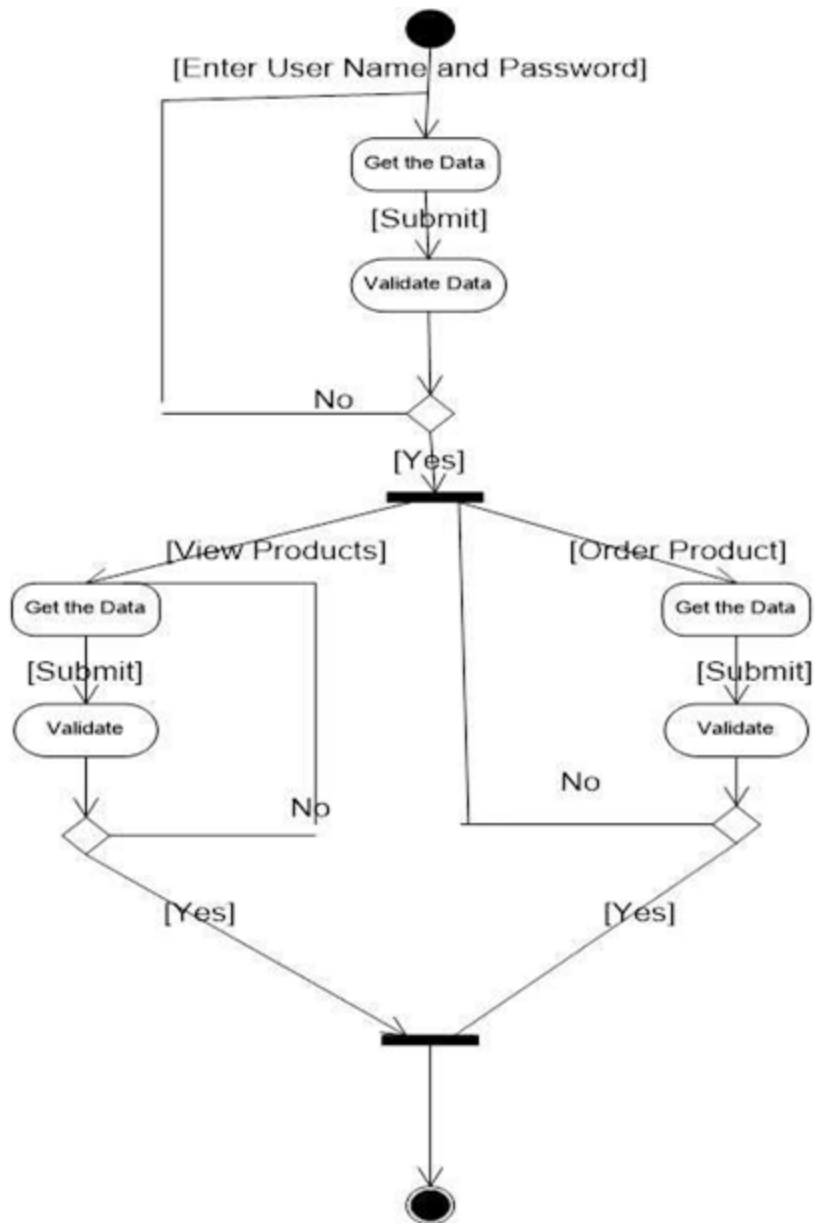
Registration



Admin activity



User activity



## **6 RESULT**

The result of this thesis was a responsive e-commerce site. This website could handle online payments and change its content in different languages. The site was tested in physical devices, it was tested through a website that simulates the screen of different devices.

## **7 ADVANTAGES & DISADVANTAGES**

### **Advantages:**

E-commerce offers many benefits to the owners of a business and to their consumers. From the consumer's perspective, e-commerce allows the users to buy a product from the commodity of their home. This can save them the time it takes to go to the shop and pay for the product, which at the end they can utilize in another activity. Another benefit is the product availability. With the internet, the users can visit online shops from a business that is in other countries, allowing them to buy products that they would not have access to otherwise.

Not only the consumers are benefited from electronic commerce; businesses get benefited from e-commerce too. The main advantage is that it can increase sales. They can sell their products to a broader audience of customers that are located around the world. E-commerce allows the use of different payment methods, which permit people from different backgrounds to acquire the products offered in their online shops. (Schneider 2007, 17.)

Another important benefit of e-commerce is that it reduces the cost of a business. E-commerce permit businesses to operate with a little amount of economical and human resources. With a properly established e-commerce site, it is no longer necessary to have a physical store. This reduce the amount of economic resources needed to pay for fixed expenses, such as rent and electricity. (Schneider 2007, 17.)

As we can see there is a considerable amount of benefits that e-commerce brings to the consumers and owners of a business. These benefits motivate consumers to use more the internet as a platform to buy products; and the businesses to sell their products online.

## **Disadvantages**

Although there is a considerable amount of reasons to start implementing an e-commerce site, it is important to know the risks that the users can face. One of the main risk of e-commerce for businesses is the information security (visually, cited 14.05.2016). Nowadays the amount of cyberattacks has increased. During these attacks, valuable information from customers can be stolen, such as credit card information. This, in turn, will affect the image of a business. Information Privacy is an issue that customers are considering while selecting what site they will shop in. Therefore, it is important to consider certain security practices that will reduce the chance of been attacked. This can be achieved by updating the e-commerce platform to the latest version and by using third party software's that will maintain safe the server where the e-commerce site is hosted.

Other risk that can occur to ecommerce sites is related to its technology (Visually, cited 14.05.2016). For example, there could be a problem in the server where the site is located. This will cause that the site will not be accessible to the clients anymore. To minimize this risk, it is recommendable to look for a reliable host provider who can guarantee that the website will be online most of the time.

## **8 APPLICATIONS**

### **1. Retail and Wholesale**

E-retailing or online retailing refers to the transaction of goods and services through online stores from businesses to consumers. It is achieved through means such as virtual shopping carts and e-catalogs. The applications of e-commerce in this sector is numerous.

## 2. Finance

Finance and e-commerce is more connected today than ever. Banks and stock markets use e-commerce significantly in their operation. Online banking provides provisions such as balance check, bill payment, money transfer, etc. Online stock trading enables people to carry out trading electronically by giving information about stocks such as performance reports, analysis, charts, etc. through websites.

## 3. Manufacturing

In manufacturing, e-commerce forms a medium for companies to execute the electronic exchange. Combined buying and selling, sharing market status, inventory check information, etc. enables groups of companies to fluidly carry out their operations.

## 4. Auctioning

Applying e-commerce to auctions takes it to a more significant level where people can participate without any geographical boundaries. That leads to more participation, more negotiation, and helps to make auctions successful.

## 5. Marketing

Marketing activities such as pricing, product features, and building customer relationships can be strengthened using e-commerce to provide users an enhanced and customized shopping experience. Digital marketing strategies have become a significant way to promote businesses.

## 6. Online Shopping

The shopping preferences of people have undergone a massive change in the last few years. “Go online” has become a mantra for all businesses to succeed. Online shopping is comfortable, convenient, and at most times, cost effective. The prosperity of online shopping apps such as Flipkart, Amazon are

proof of this.

## 7. Mobile and Web Applications

Popularly called mobile commerce or m-commerce applications, this is a subset of retail e-commerce. Mobile or web application development has become a staple for brands to showcase their business capabilities. The consumer carries out purchases through mobile or web applications that are optimized for the retailer. These applications also ensure payment security through safe e-payment methods.

## 8. Online Booking

Travel and tourism is a thriving industry today, and online booking is an ecommerce application that is growing as a result of it. Online booking helps people book travel essential services like train/flight tickets, hotel rooms, tourism packages, transportation services, etc. It makes travel very convenient and easy for people as everything can be set from the tip of the fingers.

## 9. Online Publishing

Digital magazines and e-books are slowly replacing traditional printed books. It has several advantages such as portability, lightweight, accessible from everywhere, etc. They are also environment friendly as they help in reducing paper and saving trees. Due to these reasons, online publishing or e-publishing has been seeing a rise in popularity.

## 10. E-banking

E-banking or internet banking is an e-commerce application that has simplified time-consuming and complex banking processes for people. It enables bank users to perform transactions easily online without having to wait in long queues in banks. Every major bank has its own online application today to provide virtual banking services to its customers.

## **9 CONCLUSION**

The Internet has become a major resource in modern business, thus electronic shopping has gained significance not only from the entrepreneur's but also from the customer's point of view. For the entrepreneur, electronic shopping generates new business opportunities and for the customer, it makes comparative shopping possible.

As per a survey, most consumers of online stores are impulsive and usually decide to stay on a site within the first few seconds. "Website design is like a shop interior. If the shop looks poor or like hundreds of other shops the customer is most likely to skip to the other site.

Hence, we have designed the project to provide the user with easy navigation, retrieval of data and necessary feedback as much as possible. In this project, the user is provided with an e-commerce web site that can be used to buy all types baby products online.

E-commerce has reached most of the target audience now as the digital devices can be available at lowest prices and lot of competitive sellers, this has also become easier and day by day the connectivity to the digital world is also getting increased due to the efforts being done by the e-commerce industry. Both E-commerce vs Traditional commerce models are still popular based on the availability, requirement, and emergence of the requirement to the customers.

## **10 FUTURE SCOPE**



E-commerce has bloomed over the years and is one of the fastest-growing domains in the online world. Though it took some time for this to be accepted by the end-users, today we are at a point where the majority of the people love to shop online. There were numerous concerns revolving around online shopping at its launch, but over years people tend to have started trusting E-commerce for all their shopping needs.

In India, people prefer shopping online these days rather than having to visit the physical store. The payment features that are smart and secure as well as the cash on delivery (COD), which makes the payment, even more, safer with hassle-free shipping, easy returns and reach out.

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