

E-Commerce: Shopme Website

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Abstract-

1. *This research paper gives a compressive review of the role of E-commerce and how it is attracting customers to Ecommerce sites.*
2. *E-commerce has given new definition to the business; product selling has completely changed.*
3. *Selling online can help your business reach new markets and increase your sales and revenues. If you are interested in selling to other businesses, you can use the Internet to find sales leads, announce calls for tender and offer products for sale either through your own website or through an e-marketplace site.*
4. *Customer buying pattern has got a completely new outlook, selling and distribution have completely taken a new swift. Ecommerce has become a vital and innovative invention of this decade. Ecommerce has impacted the business ecosystem in multiple ways. Searching for products and services online can save you time and money by allowing you to find the best prices without having to do all the legwork. You can use the Internet to find new suppliers, post buying requestor search for products and services. Online trading networks can also be used to support efficient information exchange between buyers and sellers.*
5. *This research paper gives a detailed understanding of e-commerce trends in the current decade. Ecommerce has become part of our life; it is reaching the expectations of customers by offering unique value of services. This research paper focuses on, how ecommerce sites working on customer engagement. Further,*
6. *our research paper gives a better idea about quality brand e-commerce websites.*

I. INTRODUCTION

In the past few years, we can notice a rapid change in technology. Technological changes in every industry have contributed a significant amount of difference, which result in customer advancement towards the services. Consumer behavior is changing rapidly, customers are empowered, connected and expect an unprecedented level of service and convenience. To bridge this gap many enterprises have been making incredible efforts to reach customer's expectation and willing to make proper engagement with the great customer's satisfaction. More than half of the world's population that is 4.5 billion people have access to the internet, the era of the

internet and technology has made the evolution in the E-commerce market. The term was coined and first employed by Dr. Robert Jacobson, Principal Consultant to the California State Assembly's Utilities & Commerce Committee, in the title and text of California's Electronic Commerce Act, carried by the late Committee Chairwoman Gwen Moore (D-L.A.) and enacted in 1984. Michael Aldrich was an English entrepreneur who invented online shopping in 1979. E-commerce is a process of selling and buying goods online. E-commerce is classified into few types such as; business to business, business to customer, customer to the business, and customer to customer. The growth of E-commerce made the endowment of many companies, now Amazon is the world's biggest e-commerce company followed by Just Dial, eBay, shopify, etc. The impact of ecommerce is phenomenal, the number of consumers purchasing online has increased gradually with the increased use of the internet. Customers are too busy nowadays to go and purchase goods by going to the market.

So, e-commerce has made their life more convenient. Customer's today search on e-commerce about the products they wish to purchase. Companies have a powerful search engine that shows hundreds of products matching consumer needs.

II. METHODOLOGY

2.1. Customer engagement: Importance of Customer Engagement According to an Indian marketing survey, Customers are communicating and buying through digital channels. Like Amazon.com, flipkart.com, Myntra, etc. These channels have increased and given growth to the importance of customer engagement strategy. 1. Discovering the factors that encourage customers to involve. Identifying the risk that, customers will not have any kind of issues. 2. Understanding customer needs and expectations. 3. Reducing Price and increasing retention and identify the sell opportunities which helps to enhance brand loyalty and company reputation. 4. Acquiring new customers through Digital marketing, word-mouth of marketing, and social media marketing. Customer engagement in e-commerce platform in India Despite the pandemic in 2020, e-commerce platforms had an exceptional increase in sales in India, with the help of customer engagement with their loyal customer's branding. The five stages of customer engagement are to Discover, Shop, Buy,

Own, and Advocate, this has helped in the increase of sales and marketing in the e-commerce websites, with the new product line ups. Digital marketing is the new key to the essential part of excessive customer engagement.

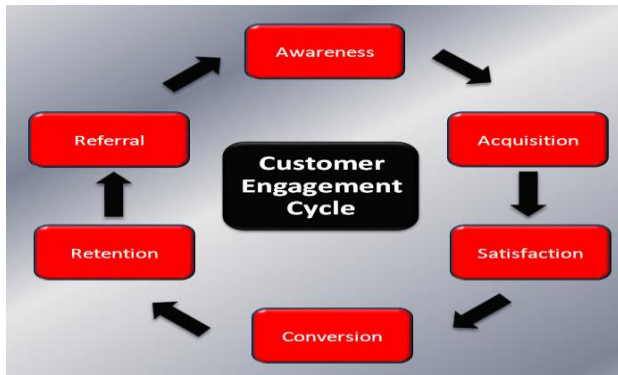


Fig: customer-engagement-cycle

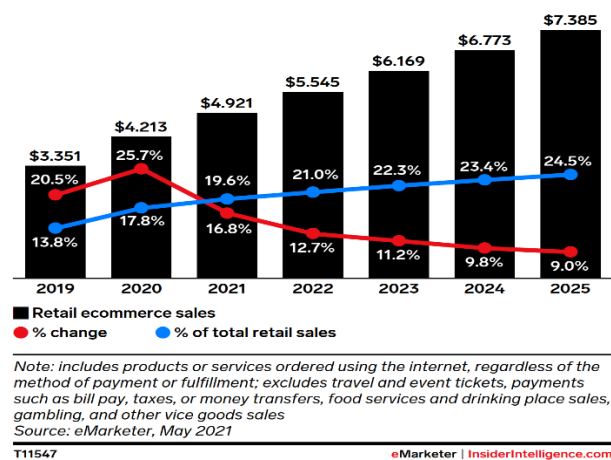
III. GLOBAL RETAIL E-COMMERCE MARKET SIZE 2014-2023

This online widened significantly in 2020 as a result of the corona virus pandemic. With brick-and-mortar stores shut to curb the spread of the virus, consumers flocked online to carry out their purchases. In fact, experts say the pandemic has accelerated the shift to online shopping by as many as five years.

As Harvard Business Review wrote: “Business leaders are scrambling to adjust to a world few imagined possible just a year ago. The myth of a borderless world has come crashing down. Traditional pillars of open markets—the United States and the UK—are wobbling, and China is positioning itself as **globalization’s staunchest defender.**”

The global ecommerce market is expected to total \$4.89 trillion in 2021. That figure is estimated to grow over the next few years, showing that borderless ecommerce is becoming a profitable option for online retailers. Two years ago, only 13.6% of sales were made from online purchases. Today, that number is expected to reach 19.5% in 2021, a 45.8% increase in ecommerce market share over two years. Growth is expected to continue, reaching 21.8% by 2024, which translates to an 8.2 percentage point increase in just five years. Two other countries round out the top five ecommerce markets: Japan is forecast at \$144.08 billion in 2021, and South Korea is expected to bring in \$120.56 billion.

Retail Ecommerce Sales Worldwide, 2019-2025
trillions, % change, and % of total retail sales



IV. DESCRIPTION OF SOFTWARE STRUCTURE

Model View Controller or MVC as it is popularly called, is a software design pattern for developing web applications. A Model View Controller pattern is made up of the following three parts:

- Model - The lowest level of the pattern which is responsible for maintaining data.
- View - This is responsible for displaying all or a portion of the data to the user.
- Controller - Software Code that controls the interactions between the Model and View. MVC is popular as it isolates the application logic from the user interface layer and supports separation of concerns. Here the Controller receives all requests for the application and then works with the Model to prepare any data needed by the View. The View then uses the data prepared by the Controller to generate a final presentable response. The MVC abstraction can be graphically represented as follows.

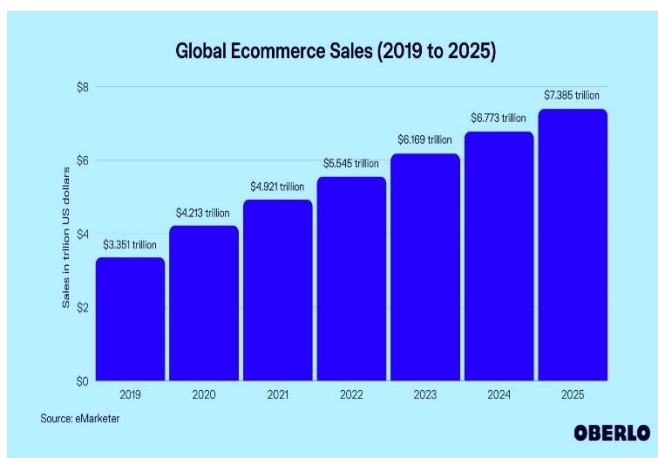


Fig: Global Ecommerce Explained: Stats and Trends to Watch in 2022

3.1 How big is the global ecommerce market?

MVC Design patter is one of the most fundamental architecture for web applications like J2EE, .Net, Rails and Struts etc.J2EE and JSP technologies are the fundamentals for spring framework.

This spring framework consists of MVC pattern as follows.

- a. User Interface component as views
- b. Application logic as Model
- c. Control functions as Controller

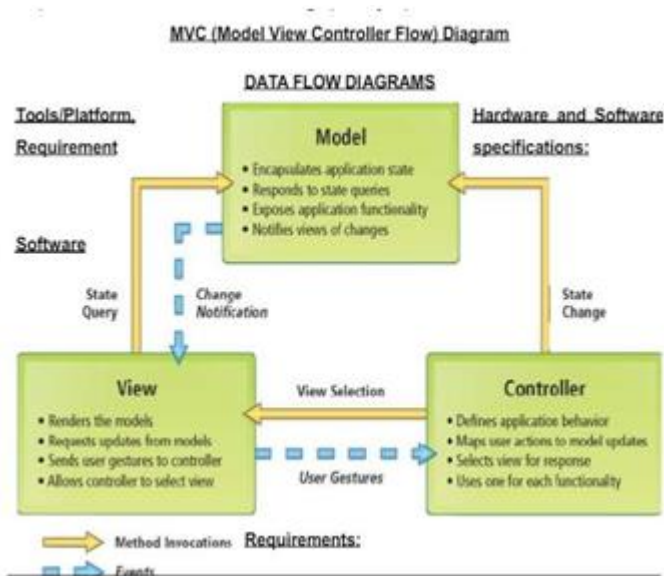


Figure displays a MVC structure.

V. E-COMMERCE FEATURES AND SERVICES

The following summarizes many of the basic and advanced features and services our e-commerce website.

5.1.Shopping Cart: Shopping carts vary considerably. Features may include progress indicators to help customers understand where they are in the transaction process, automatic calculation of tax and shipping, customizable design and layout.

5.2.Product Catalogue: Check to see how many products the online catalogue is able to manage. Consider how easy it is to add products and to upload an existing product database.

5.3.Security Features:(e.g. Secure Socket Layer (SSL), password protection, access privileges for site administration, data centre security, risk tools that can help flag fraudulent orders, etc.)saved to the disk, along with a plot of error and loss over training. .

VI. USER INTERFACE DESIGN

A few user interface designs were constructed to visualize the user interaction with the system as they browse for products, create a shopping cart and purchase anything. The user interface design will closely follow our Functional Decomposition Diagram. Figures 1 - show the initial designs of the web pages.

The screenshot shows a user authentication form titled 'Shopme Control Panel - Copyright © Shopme'. The form includes:

- Input fields for E-mail, First Name, Last Name, and Password.
- A 'Roles' section with radio button options:
 - Admin manage everything
 - Editor manage product price, customer,shipping orders and sales report
 - Salesperson manage categories, brands,products,articles and menus
 - Shipper view products,view orders and update order status
 - Assistant manage questioss and reviews
- An 'Enabled' checkbox which is checked.
- A 'Photos' section with a 'Choose File' button and 'No file chosen' text, and a user profile icon.
- 'Save' and 'Cancel' buttons at the bottom.

Figure 2-Authentication of the user

It is a critical component of an online store, so let's take a look at the key features of an e-commerce website customer account page.



The screenshot shows a login form titled 'Access to Shopme Control Panel'. It includes:

- Input fields for E-mail and Password.
- A 'Remember Me' checkbox.
- A blue 'Login' button.

Shopme Control Panel - Copyright © Shopme

IX. CUSTOMER LOGIN PAGE

Login creates a user account. This means that users are uniquely identifiable within your product.

For users this frequently means that they can see their own profile and information, change that information, and keep track of what are the identifiers on their account (profile picture, username, etc.)

For companies this means that user data can be linked to an individual profile. This profile probably contains all the information the user inputs, and can also be a home for any other data that a company chooses to attach to that profile (type of device, for example).

X. SECURITY AND ACCOUNTABILITY

Enabling a user to create an account and log in, is equipping them with security for and control over their information.

When a user can see the information they've given you in their user profile, they understand what you're using to connect with them. So when a user gets, for example, a promotional email, they know where it came from. They can simply go into their settings, change their email, check and unsubscribe from promotions.

Otherwise, users might be wondering what happened to the email address they used to make an in-app purchase.

If they want, they can also change privacy settings, update personal information, and delete their projects and

profile, leaving no question about what is hanging around in your product.

For your users: Accounts help put users in the driver's seat for their data.

For your company: Letting users see and control their data builds trust with users, which helps foster transparency about what information is stored by a company (especially when nobody reads terms and conditions).

XI. ENTERPRISE CONCERNS

Login is also incredibly important for enterprise customers, for a number of reasons.

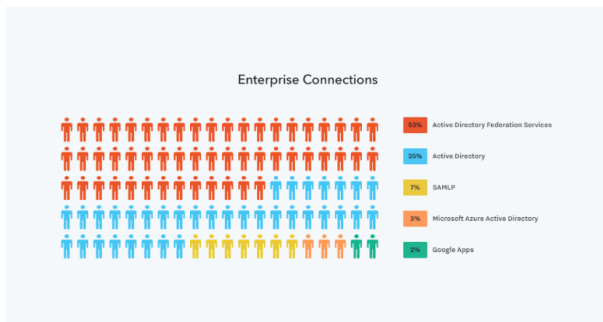
Security: Enterprise customers want to have everything within their system secured, which means providing a sign up that works with enterprise login requirements.

Managing roles: With potentially hundreds of employees all needing to access your product, enterprise customers want to be able to designate and manage roles. The head of marketing might need admin access to an analytics platform, but a sales person definitely doesn't.

Tracking employee data: When each employee has an account, it's easy to track who is making changes, who are working on what projects, and how teams are working together. Enterprise companies especially are interested in keeping track of who is doing what, so anything that comes up down the line, whether mistake or triumph, can be properly attributed.

For your users: Accounts and login helps enterprise customers trust your product and integrate it with their existing tools.

For your company: If you are considering working with enterprise customers, you will need to implement a sign on feature. Truthfully, we've only scratched the surface of what enterprise customers expect out of their login — it can be make or break for you if you don't have a login to fit their needs, no matter what your product.



XII. PRODUCT REVIEWS

Product reviews are the opinions or feedbacks of customers for a particular product. Many online businesses put up a review section on their website to allow customers to rate and review the product they purchased.

A product review helps other users get a clear idea of the product before purchasing it. They can read the reviews and make their mind clear, and decide whether the product is worth purchasing or not.

If you have not added a product review section on your ecommerce website, only because of fearing negative reviews, you are losing out on a huge number of potential customers.



When a user lands on your website with the intention of making a purchase, the first thing that they look for is reviews.

A product having good reviews would surely be able to help the prospect in his/her buying decision. They would likely put their trust in your products as well as your Brand.

Amazon displays average ratings for products based on customers' feedbacks, right on the top of the product page,

and at the bottom are the customer's reviews. Whenever a prospect visits the product page, they are straight away displayed the product ratings along with the number of people who rated that product.

XIII. PAYMENT SYSTEM

Generally, businesses view payments as just another form of customer touch point, but the tremendous shift in the technology has proved that the electronic payments are going to create a lot of opportunities for the businesses to grow faster. Because of the constant technical advancements, electronic payments have witnessed a sudden revolution. With an electronic payments system, you do not need to go to your banks frequently to deposit your payment.

Electronic payments are becoming a seamless, fast and simple way for making payments. But many businesses still have not accepted the electronic payments because they do not know much about it. In this blog, we will discuss with you the advantages of electronic payments and also show you how it can be the best bet for your business.

1. Instant Payment

Electronic payments are much faster than the traditional methods of payments such as cash or cheques. In the case of online payments, you do not have any constraint of time or location. You can easily make payments at any time from anywhere across the globe.

E-payment systems have eliminated the need for going to the banks to make payments. Now your customers do not have to waste their time standing in the long lines at banks. They can easily pay you by using an electronic payment app.

2. Higher payment security

Despite its robust features, electronic payments systems has not become so popular among the merchants. They are still using the same old methods for accepting payments. Due to which, they are missing out the opportunity for serving more customers.

Electronic payment systems offer you multiple ways of securing your payments such as tokenization,



encryption, SSL, etc. Now your customers do not have to enter their card details every time as they can save their card details or complete their transactions by using a One Time Password.

3. Better customer convenience

Electronic payments can help you to provide convenient payment experience to your customers. It allows your customer to purchase goods on credit by offering them with the pay later facility. Instead of sending constant reminders for payment to your customers, you can automatically collect money after a specific period.

4. Saves processing costs

If you want to provide payment services to your customers then you first need to tie up with a card processor. The processor will provide you with a payment gateway for processing and in exchange, it will charge a fixed cost from you. This cost is very high.



XIV. CONCLUSION AND FUTURE WORK

In this project, we have is guided by four principles: customer obsession rather than competitor focus, passion for invention, commitment to operational excellence, and long-

term thinking. Customer reviews, 1-Click shopping, personalized recommendations.

Our mission is to continually raise the bar of the customer experience by using the internet and technology to help consumers find, discover and buy anything, and empower businesses and content creators to maximize their success

REFERENCES

- [1] D. Metaxas. Sign language and human activity recognition, June 2011. CVPR Workshop on Gesture Recognition.
- [2] M. Ranzato. Efcient learning of sparse representations with an energy-based model, 2006. Courant Institute of Mathematical Sciences.
- [3] S. Starker. Segmentation-robust representations, matching, and modeling for sign language recognition, June 2011. CVPR Workshop on Gesture Recognition, Co-authors: Barbara Loeding, Ruiduo Yang, Sunita Nayak, Ayush Parashar.
- [4] X. Teng. A hand gesture recognition system based on local linear embedding, April 2005. Journal of Visual Languages and Computing