A Survey on E-commerce Websites

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Abstract : The internet's and technology's quick development has completely changed how businesses function, which has sparked the creation and broad use of e-commerce platforms. The creation of e-commerce websites is the main topic of this research study. The study highlights the important features and functionality of the websites while providing a thorough analysis of their design, development, and implementation. The study also addresses the advantages and disadvantages of utilizing e-commerce websites. The outcomes highlight the scalable and user-friendly nature of the e-commerce platform. The results add to our knowledge of e-commerce development and offer insightful information to developers and companies thinking about making e-commerce projects. Our study is highly advised because it includes articles from a variety of sources that will be useful to future scholars.

IndexTerms - **E-commerce Website Development, Online Shopping, Scalability, Security.**

I. INTRODUCTION

Customers can now access markets from the comfort of their homes, offices, and other locations that might otherwise prevent them from doing so, thanks to the development of the internet and numerous other computing devices. An important result of the internet is the emergence of e-commerce, or online shopping (Electronic Commerce).
These days, a lot of businesses invest heavily in e-commerce. Among the biggest players are Amazon, Shopify, AliExpress, Jumia, Konga, and so forth. The primary function of these significant organizations is to act as intermediaries, or online retailers, between consumers and manufacturers.The significance of this service lies in the fact that consumers are not always able to visit every market place at the same time to make purchases. As a result, these major players in the industry deal with goods from a variety of manufacturers from different industries, ranging from non-edible goods (such as computers and electronics, wears, and utensils) to edible goods (such as groceries and desserts). This supply chain procedure for goods is still the same as it always has been, saving customers the trouble of having to visit multiple markets to buy goods.[1]

E-commerce is the practice of utilizing any personal computer to purchase and sell goods and services over electronic networks. Through e-commerce, a vendor can connect with a large customers and also makes it easy for a buyer to select from a variety of products. For these reasons, the adoption of a digital lifestyle has been linked inlarge part to e-commerce. Rapid growth is essential given the daily rise in e-commerce to enable any company organization to create an effective and simple e-commerce

system. A proper e-commerce site needs to fulfill certain requirements in order to guarantee a user-friendly interface on the client side, robust server security, and other crucial aspects characteristics. Business to Business (B2B), Business to Consumer (B2C), or both types of e-commerce are possible. The creation of a website that is easily accessible from desktop and portable devices is the primary goal of the fast development of an e-commerce system.
A website is primarily composed of two parts: a frontend, where users interact, and a backend, which is mostly the server that handles all of the major logical operations.[2]

E-commerce has grown significantly in popularity in recent years. Global e-commerce sales were estimated to be \$4.9 trillion in 2021 and are projected to increase to \$6.5 trillion by 2025.[3]

Many technological factors must be taken into account when developing an e-commerce website in order to Guarantee a smooth user experience and effective functionality. Selecting an appropriate web development framework is essential to the accomplishment of these kinds of projects.

This study paper's goal is to present a thorough analysis of the planning, creation, and deployment of an e-commerce website. We will examine the many phases of the development process, such as choosing a framework, designing it, and putting it into practice for crucial functions like order management, payment processing, product listing, user authentication, and shopping cart functionality.[3]

What is e-commerce?

It implies using the internet and electronic media to transact for products and services. In order to engage in e-commerce, a business must have access to both the internet and IT.E-commerce is the trade of goods and services through an online vendor's website.To accept payments by credit card or debit cardthe gateway employs a wireless buy cart or purchase basket. An additional explanation is provided below: Value-generating relationships between persons and organizations are created, modified, and redefined through the use of digital information processes and electronic communications in business transactions.

B2B e-commerce is expanding quickly in the worldwide corporate sector due to the growing use of ICTs, particularly the Internet. Customers can compare costs across regions, see how they change based on request, and become aware of substitution as the Internet allows them to participate in the global market. The purchasers receive a clear benefit. Customers can easily compare e-commerce products from several websites because the market is open. If the business is

electronic, the competitors are just one click away from the client. Even faster than in traditional terms, customers can change their minds about certain e-goods, content, pricing, or services if they're uncomfortable with them. The merchants believe that they do not require a physical store.[8]

Are E-commerce and E-businesses the same:

Although a few people mix up the terms "e-business" and "e-commerce," they are two different ideas. ICT is utilized in business-to-consumer as well as inter-business or inter-organizational transactions in e-commerce.
ICT is utilized, however, to improve a business when it comes to e-business. It consists of any procedure that a government agency, non-profit, or for-profit corporate enterprise entity uses a computer-mediated network to do business. Another explanation of E-business would be "the conversion of an enterprise's procedures to provide extra maximizing consumer value via the use of computing, philosophy, and technology the new economy's paradigm."[12]

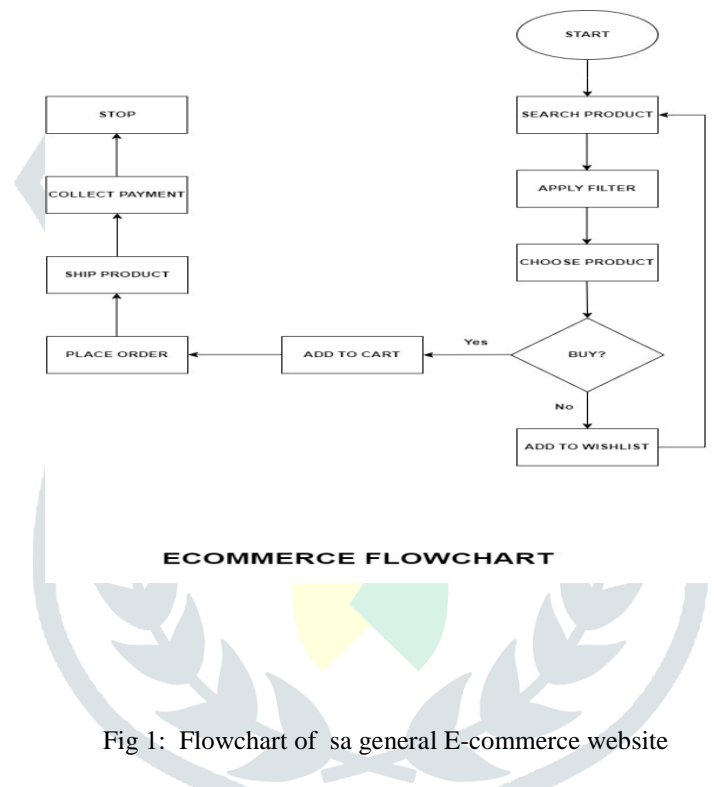A common methodology has been observed in all the papers pertaining to e-commerce websites and it is as follows:

Fig 1: Flowchart of sa general E-commerce website

This paper discusses how e-commerce websites can be made. This assisted us in knowing the best way we can make an e-commerce website according to our needs.
Here's how the remaining paper was decorated: In sections 1 and 2, the background, origins, and contemporary methods of e-commerce websites were discussed. The study article concludes at Section 3.

II. LITERATURE SURVEY

A writing survey is an expressive review that reveals the notion of online shopping based on a careful evaluation of previous major studies related to the various concepts of web-based shopping. It talks about the condition of internet buying right now, its significance and worries, the factors that affect it, and a critical analysis of the privacy and security risks associated with it.

Ling said that customers can shop online around-the-clock. Consumers can purchase goods and labor from anywhere at any time. Online shoppers find it easier to use than those who buy in physical stores because they can fulfill their needs with a few mouse clicks and never have to leave their homes. The consumer can use the store to search for products, modify their cart, remove items from them, and examine. Also, the client has the ability to change his own information, including names, addresses, and other details.[5]

According to the February 2021 IJSDR | Volume 6 Issue 2, we learned that e-commerce got its start in 1999. And Fabmart.com was the name of the first business to lead this industry this year.

This business used both B2B and B2C segment models. We discovered that e-commerce is one of the best growing categories for research and development after visiting Volume: 07 Issue: 05 | May 2020 www.irjet.net. This is primarily due to its extremely high customer acquisition rate.[6]

E-commerce websites are important because they have revolutionized business operations and are now a necessary component of the contemporary marketplace. Scholars and industry specialists have acknowledged the importance of e-commerce websites in propelling company expansion, broadening market penetration, and offering convenience to customers.[3]

Types of E-commerce:

E commerce can be broadly classified into six categories:

Business to Business(B2B):

B2B can be explained as electronic commerce between businesses. This kind of e-commerce focuses on the connections between and among companies. This kind of e-commerce makes up around 80% of all e-commerce, and most analysts believe that B2B e-commerce will continue to develop at a higher rate than B2C e-commerce. E-markets and infrastructure are the two main parts of the B2B market.

The architecture of B2B is called infrastructure, and it mostly consists of:

Logistics - transportation, warehousing and distribution

Application service providers, such as Oracle and Link share, deploy, host, and manage packaged software from a single location.

The outsourcing of e-commerce-related tasks including Web hosting, security, and customer support software for auction solutions, such as MoaiTechnologies and OpenSite Technologies, is used to run and maintain live online auctions.

Business to Consumer(B2C):

Consumer-to-business(B2C) can be termed as commerce between businesses and consumers. It includes information gathering on the part of the customer, the purchase of tangible goods like books, etcssss. By giving customers more access to information and enabling them to compare prices for goods and services, business-to-consumer e-commerce lowers transaction costs, especially those associated with searches. Due to the fact that setting up and maintaining a website is far less expensive than establishing a "brick-and-mortar" location for a business, business-to-consumer e-commerce significantly lowers barriers to market entry. B2C e-commerce is even more alluring when it comes to information goods since it spares businesses from having to account for the extra expense of a physical distribution network. Furthermore, it is becoming more and more possible to distribute information commodities in nations with a sizable and expanding Internet population.

Consumer to Consumer(C2C):

All electronic trade between customers for goods or services is referred to as type C2C electronic e-commerce. Usually, a third party that provides an online transaction forum handles this exchange.

Consumer to Business(C2B):

In C2B, the typical setting of a products exchange is inverted. E-commerce businesses that rely on crowdsourcing very often employ this approach. People offer their products or services to businesses whose targets are specific categories of goods or services. Examples includevenues where artists arrange for multiple logo concepts, with the goal of selecting and purchasing just one successful submission. In this business sector, markets that offer images, media, and design elements for free are another well-liked medium.

Consumer to Administration(C2A):

Electronic transactions between governments and private citizens are included in the C2A paradigm. Highlights of the application are:

Education: includes information dissemination, online learning and more

Social Security: through disseminating information, processing payments, etc.

Taxes: paying taxes, filing returns, and so forth.

Health: scheduling visits, learning regarding ailments, paying for medical treatments, etc.

E-commerce Benefits:

From perspective of the user, the main benefits are the significant improvements, time savings, and ease of accessibility from anywhere in the world. The buyer is able to place the order whenever they like [7]. The main benefits for customers include:

Reduced trade prices among stock market participants.

Increased pliability: Purchase can be made sans having to come into direct contact through company twenty-four hours a day.

Conserve time: Customers can buy or sell anything instantly at any moment of the day by tapping, customers can more simply and constantly gain insight by searching for specifics across multiple pages. Consumer should be able to conduct business from their residence or place of business when making buying items. If the business's operations are subpar, switching to other companies and customers is simple.Customers may be able to purchase a given item that was not offered in their regional or national market and gave them exposure to a broader range than they hadpreviously.Prior to finalizing the order, a customer can read past customers' reviews.

E-commerce Trends in India:

When buying anything on the web, customers are given the flexibility regarding time and location of their purchase while also being able to evaluate the product, the seller, and additional options. Capacity to research over the internet has completely changed the purchasing process. Nearly everything that can be bought at a store can be bought online, even perishable goods like food. And clients from all over the world have seized these chances. E-commerce continues to have an impact on every aspect related to industry, including consumer service and novel manufacturing processes. [9]. It provides fresh ways for businesses to interact and engage the public through online purchase, online customer assistance. E-commerce continues to be a part of the WWW, at least in part, during its buying life. Additionally, it might cut down on order processing expenses and communication with numerous suppliers and trading partners, both of which typical result in significant increases in the price of goods and services. E-commerce offers developing nations like India a plethora of prospects. In India, it is still in its early stages, but even the most pessimistic projections point to a boom. Large Indian websites have gone into e-commerce rather than advertising sales. Numerous goods and services, including greeting cards, flowers, grocery stores, multiplex tickets, mobile gadgets, machinery, and more, are now and offered in a variety of places. The growth of electronic the internet, growing acceptance of online shopping, and commerce. Smartphone online shopping is revolutionizing the industry. Its total sales are anticipated to come from up to 70% of m-commerce.[8]

Several studies have emphasized the benefits of online shopping, including its cost-effectiveness, time-saving nature, and accessibility to a vast array of products from any location at any time.

Security: Because e-commerce websites handle sensitive user data and enable online transactions, security is a top priority.

Performance: To provide a seamless user experience, e-commerce websites must have efficient performance. .

Scalability: Because e-commerce websites must support growing user counts and manage multiple transactions at once, scalability is an essential component.

Customization: To remain competitive, e-commerce websites must be able to be tailored to meet particular business needs.

Best Practices and Case Studies: Best practices, advice, and case studies are frequently found in the literature on developing e-commerce websites. These resources offer information on tried-and-true methods, performance optimization tactics, and actual case studies of prosperous e-commerce sites. Researchers have provided developers starting projects of a similar nature with invaluable advice by sharing their experiences, obstacles encountered, and lessons discovered during the development process.[3]

In a rapidly developing country like Bangladesh, information technology is becoming increasingly important to the future growth of the financial sector and commercial practices. Due to the growing use of cellphones as well as web as an emerging platform for business activities and commerce around the globe, there is a higher need to pay attention to e-commerce security in order to reduce fraudulent activities. All facets of human everyday life have undergone tremendous transformation due to the advancement of information and communication technologies.E-commerce offers numerous advantages that increase customer satisfaction in terms of consumer convenience wherever they are and provide the business with a competitive advantage over competitors.

Rising economies, according to this analysis, will face some challenges.

Online transactions are made in e-commerce. Customers can benefit from e-commerce in many ways, including reduced costs, a wider selection, and time savings. The two main subcategories of e-commerce are e-finance and e-merchandise. Both mobile and online commerce are widely used by communities, businesses, and organizations in India. E-commerce continues to develop at a staggering pace inside India. One factor in its growth has been the rise in internet usage. Despite having the second-largest user base in the world—after China (650 million, 48% of the population—e-commerce

penetration is low when compared to markets like the United States (266 million, 84%) or France (54 million, 81%). However, it is expanding at an unprecedented rate, with approximately 6 million new entrants every month. Industry consensus reflects that growth is poised to shift. Between 2009 and 2013, the Indian e-commerce market grew from $3.9 billion to $12.6 billion in value. The e- retail market was estimated to be worth $2.3 billion in 2013. More than 70% of India's internet retail sales are in the travel industry.

Google India reports that 35 million Indians made purchases online in 2014. By 2020, it is projected that India will generate $100 billion from online retail sales, amongst which $35 billion is expected to stem through the country's projected four-fold increase in clothing sales. The examination of multiple research studies on the effects of e-commerce on Indian consumers led to the creation of this report.[4]

This paper centres on merchants, as we firmly believe that their offerings are significantly unique in terms of the customer experience—that is, the journey customers take from the moment they land on the website until they pay for the good or service. It's a critical factor when judging how well a e-commerce website performs, but it is difficult to identify, assess, and evaluate, and there is a dearth of research attempting to quantify and/or objectively measure it.

This study offers a model that attempts to assess the user experience of an eCommerce website in order to close this gap. The five primary stages a customer goes through when making a purchase via B2C eCommerce websites—landing, product identification, product display, cart, order fulfillment, and payment—are represented in the Customer Journey Map, which serves as the model's foundation. Each of the phases has been thoroughly examined, with at least fifteen drivers and features considered.

In order to compare a B2c eCommerce website's customer experience to that of other retailers and pinpoint the key areas that need to be addressed in order to outperform rivals, the reader will discover a methodology for quantitatively evaluating the consumer experience on the website.

In this article, we concentrate upon the characteristics regarding offerings provided by online retailers because we firmly believe that their offering is highly unique when it comes to both consumer experience and consumer service quality. In order to judge whether an eCommerce website will be successful, these two fields are crucial. The latter is crucial in judging an eCommerce website's success, but it is difficult to identify, assess, and evaluate, and there haven't been many efforts to measure it in a quantitative or objective manner.

This study offers a model that attempts to assess the user experience of an eCommerce website in order to close this gap. The following features of the model are present:

• It has a structured framework at its foundation that divides the eCommerce user experience into five major phases;

• It identifies the most significant drivers for each phase and offers a set of parameters to evaluate each driver's attributes;

• It offers a quick and efficient tool for quantitatively assessing the client experience.

Using the model's output, the following can be done:

• compare the user experiences of other websites to establish a clear benchmark and pinpoint the primary differences with rivals;

• Recognize and comprehend the most important stages and aspects of any internet store that require enhancement.

This section of the paper explains how assessments and benchmarking across various online retailers can be carried out using the Customer Journey Map. The user interface is divided under five main phases in this eCommerce Customer Journey Map: arriving and landing on the site, exploring the catalogue and finding products, choosing and customizing products, managing shopping carts, and checking out. Every phase has a number of macro-drivers, and each of them makes use of anarray of functionalities and attributes that have an impact on conversion rates and user experience.

The model has ten to thirty distinct primary drivers and parameters for each phase. Overall, they make up a matrix of 150 / 170 factors (about; they may differ depending on the goals of the research or the market sector), which is an ideal compilation of all the elements of eCommerce. Although there is always room for refinement and modification, particularly when examining individual items, the general structure of this parameters list appears sound and dependable.

Let's examine each of the model's five phases in greater detail:

Site entry and landing: this stage focuses on the points of entry for the user experience, namely how they arrive at the website and begin to interact with it. The user experience for eCommerce begins off of the eCommerce website. This thought highlights how crucial it is to utilize a variety of tactics to draw customers away from the online store and direct them to appropriate homepage. This stage encompasses primary attributes/features that direct users to the website and influence their initial interaction with it. There are several ways to find a B2C eCommerce website: using search engines, subscribing to the website's newsletter, running a communication campaign, or just typing the address into the address bar.

"Search Engine Positioning," "Newsletter," "Communication," and "Homepage" are primary motivators. Nowadays, "Search Engine Positioning" is crucial for driving visitors to a website (search engines account for 90% of all traffic, according to Politecnico di Milano's B2C Observatory). The positioning is evaluated by the model using a search

simulation: assuming website consistently appears in first five positions and on the first page of results, it receives a high score (i.e. 1). Another significant source of traffic is "The Newsletter," whose model considers the essential characteristics of a successful newsletter, such as periodicity, accurate product and service information, lucid images, etc.

"Communication" encompasses a broad range of options, including multichannel promotions, viral marketing campaigns, traditional internet campaigns, and alliances with other eCommerce companies. Having a strong "URL strategy" is crucial for generating direct traffic, which is defined as people inputting the website address into the URL bar. Some examples of this include choosing a name that is easy for users to remember, associating the website name with a well-known brand, and using different domain names such as.it,.com, and.org.

The "Landing page" of an e Commerce website makes the initial impression. The model contains characteristics such as rate of downloading, being able to navigate the page's content without scrolling, among others followed by the possibility of adapting the Homepage according to the user's need. This is assuming for the sake of simplicity that the page where users land tends to be the Homepage. Product discovery and catalogue browsing: this step focuses on how people search for and find products on the website. This phase, which includes website exploring and selecting items, revolves around the way customers find items within the store, pick things they want, as well as reduce their options to a small number of products. During this stage, the user attempts to learn how to navigate the website, become acquainted with its layout, and initiate the search function. There can be a minimum of two methods.

In the first, the user is already aware of the thing he wants to buy, so he just uses site's search option or peruses categories and subcategories menu in an attempt to discover it. In the second scenario, the user needs to
choose from a wide range of products offered by the online store, and the user only has a general notion of the product that they may find appealing. There is a very high risk that he will become uncertain because of the abundance of options.

To be thorough, we incorporated the features and tools necessary to enable the two distinct routes that were previously described in this phase (and, more broadly, to support the website's navigability). All of the primary functions of the internal search engine, including searching, result classification, and other features are included in the "Search & Filtering" driver.

Product demonstration: A customer's choice is greatly influenced by how a product is presented, which aims to compensate for the lack of in-person interaction with the product. All of the key components and factors that influence how precisely, fully, and with attention the product is presented have been incorporated in this phase.The "Product description" can be very extensive or generic (to aim at presenting an overview of the product so the consumer can readily understand if the product suits his needs). The product page should always make the "Price & the other options"—such as the price of delivery—clear.Then, "Images & other media" and "Reviews & Recommendations" (which include user feedback and/or opinions posted in the online forum) can be used to finish the product description. Lastly, the term "Product configuration" refers to the availability of cross- and up-selling options in addition to the ability to customize the product or service.

Cart management: this stage, which spans from product selection to purchase, focuses on how customers choose items, put them in their carts, and keep track of their shopping lists before completing the transaction. This stage of the buying process is the most crucial because it has the highest cancellation rate along with lowest conversion rate. User typically only sees the final prices of the things he has selected as well as total cost of what he has bought in his shopping list.Additionally, user's cart or bag serves as a crucial decision-supporting aid in the process of making the majority of purchases. Numerous elements and factors can influence the outcome. "Cart Management" encompasses primary motivators as well as functionalities, taking into account cart's display along with accessibility across the website.All of the primary additional services (such as "Recommendation," "Wish list," and "Other services"), as well as "Shipping options" and associated costs, must be prominently shown in the basket. The primary factors that are considered are the manner in which the various costs are displayed to the customers.

Order preparation and checkout procedure: this stage considers the instruments and solutions needed to fulfil the order quickly and securely. The checkout and payment procedures must be finished as quickly and simply as possible because every step in the process increases the chance that the customer will leave (there is always a drop rate). The intricacy of the checkout procedure and the quantity of obstacles the user must go past have a direct impact on the "speed" and fluidity of the purchasing transaction. Several factors are involved, such as the quantity of clicks, intricacy of online forms, process phases, anonymous purchase versus registration, and so forth. The notion that a one-page checkout is the ideal option has gained traction, but it's important to weigh the trade-off between the amount of information on each page and the number of sites to view. Only when the procedure is simple and well-organized—that is, when there are only a few tasks the consumer must complete—does the one-page check-out appear to be a suitable substitute. Although the client appreciates "order options" (such as numerous deliveries to different locations, the ability to modify the delivery date, etc.), the procedure shouldn't be unduly complicated by them. The various ways to support an online transaction are included in the "Payment options" (credit card, bank transfer, etc.).[11]

Table 1: Comparison of Different E-commerce Platforms

Stack	Backend	Frontend	Database	Strengths	Weakness
WooCommerce	WordPress plugins, Self-hosted	WordPress(PHP)	MySQL	Cost-effective, Open-source	Security concerns
Magento	Self-hosted, Enterprise-grade platform	PHP frameworks(Zend, Symfony)	MySQL, PostgreSQL	Scalable, High security	Steep learning curve
BigCommerce	Open API, Headless architecture	SaaS platform	MySQl, MongoDB	Cloud-based, Scalable	Limited built-in features
MEAN Stack	Node.js, Express.js	Javascript frameworks(Angular, ReactJS, VueJS)	MongoDB	Fast development, Secure	Security concerns
LAMP Stack	PHP frameworks (Laravel, Symfony)	HTML, CSS, Javascript	MySQL	Cost-effective, Secure	Can be slow
Microsoft .NET Stackl	C#, VB.NET	ASP>NET MVC, Razor Pages	Microsoft SQL Server	Robust, Secure	Less open-source resources
Python Full Stack	Django, Flask, FastAPI	Django Templates, Jinja2, ReactJS, VueJS	PostgreSQL, MySQL, MongoDB	Open-source, Flexibility	Security concerns

III. CONCLUSION

This study examined how E-commerce websites can be made with different set of features. This study covers severalpapers each telling us about the background information of e-commerce. It also tells us what one should look for while making ane-commerce website and each of these websites offer a little different set of features making them unique. This paper will assist researchers planning on building an e-commerce website in general by offering its well evaluated research and guidance.

REFERENCES

[1] Busari O. A., Adebisi O. A., Adeaga I. I., Oni A.   A., Development of an Online Shop with Python Web Framework (Django), International Journal of Advanced Research in Science, Engineering and Technology Vol. 8, Issue 5 , May 2021 http://www.ijarset.com/upload/2021/may/01-busari-30.PDF

[2] Ahmed Yunus , Md Masum, Design and Development of an E-Commerce System in a Rapid Organized Way, International Journal of Science and Research (IJSR) ISSN: 2319-7064 ResearchGate Impact Factor (2018): 0.28 | SJIF (2019) https://www.researchgate.net/publication/340280125_Design_and_Development_of_an_E Commerce_System_in_a_Rapid_Organized_Way

[3] Vinayak Gupta , Ashwin Singh , Aditya Singh , Abhinay Pratap, E-commerce Web-Application with Django, © June 2023| IJIRT | Volume 10 Issue 1 | ISSN: 2349-6002 https://ijirt.org/master/publishedpaper/IJIRT160535_PAPER.pdf

[4]Palvi, Pankaj Verma, Dr. Sunita, Web Application for e-commerce Using Django Framework, International Journal of Trend in Scientific Research and Development (IJTSRD) Volume 7 Issue 3, May-June 2023. https://www.ijtsrd.com/papers/ijtsrd57520.pdf

[5]Venkatesh Babu AB, Ms. Komala Devi K, E-COMMERCE WEBSITE USING DJANGO, International Research Journal of Modernization in Engineering Technology and Science (Peer-Reviewed, Open Access, Fully Refereed International Journal) Volume:04/Issue:07/July-2022 Impact Factor- 6.752 www.irjmets.com

[6]　Mamta Narwaria, Aanya Tiwari, Ankit Singh, SHOPIFY ONLINE E-COMMERCE WEBSITE,s International Research Journal of Modernization in Engineering Technology and Science (Peer-Reviewed, Open Access, Fully Refereed International Journal) Volume:04/Issue:03/March-2022 Impact Factor- 6.752 www.irjmets.com

[7]　M. Fan, J. Stallaert and A.B. Whinston, The Design and Development of a Financial Cybermarket with a Bundle Trading Mechanism, International Journal of Electronic Commerce 4(1) (1999) 5–22. https://doi.org/10.1080/10864415.1999.11518354

[8] Vipin Jain, Bindoo Malviya, Satyendra Arya, An Overview of Electronic Commerce (e-Commerce), Journal of Contemporary Issues in Business and Government Vol. 27, No. 3, 2021

[9] Beat F. Schmid (1997) Requirements For Electronic Markets Architecture, Electronic Markets, 7:1, 3-6, https://doi.org/10.1080/10196789700000002

[10]　Tian, L., Vakharia, A.J., Tan, Y. and Xu, Y. (2018), Marketplace, Reseller, or Hybrid: Strategic Analysis of an Emerging E-Commerce Model. Prod Oper Manag, 27: 1595-1610. https://doi.org/10.1111/poms.12885

[11] Riccardo Mangiaracina, The eCommerce Customer Journey: A Model to Assess and Compare the User Experience of the eCommerce Websites, Journal of Internet Banking and Commerce, December 2009, vol. 14, no.3 (http://www.arraydev.com/commerce/jibc/)

[12] Anjali Gupta, E-COMMERCE : ROLE OF E-COMMERCE IN TODAY'S BUSINESS, International Journal of Computing and Corporate Research, 2014 https://www.ijccr.com/January2014/10.pdf

[13]　YannisBokos, Erik Brynjolfsson,Bundling and Competition on the Internet,Marketing Science 2000 19:1, 63-82 https://doi.org/10.1287/mksc.19.1.63.15182

[14]　E S Soegoto1, M A S Marbun and F Dicky, Building the Design of E-Commerce, IOP Conf. Series: Materials Science and Engineering 407 (2018) 012021 https://iopscience.iop.org/article/10.1088/1757-899X/407/1/012021/pdf

[15] Rajaraman. V, Building blocks of e-commerce. Sadhana,(2005). https://doi.org/10.1007/BF02706240

[16]　E S Soegoto and A Suripto, IOP Conf. Series: Materials Science and Engineering 407 (2018) 012008. https://iopscience.iop.org/article/10.1088/1757-899X/407/1/012008

[17]　M. Hossain, M. Habib, M. Hassan, F. Soroni and M. M. Khan, "Research and Development of an E-commerce with Sales Chatbot," 2022 IEEE World AI IoT Congress (AIIoT), Seattle, WA, USA, 2022.https://ieeexplore.ieee.org/document/9817272

[18]　S. Tyagi, S. Yadav, U. Singhal and H. Chaudhary, "Analysis and Development of E-Commerce Web Application," 2022 Fifth International Conference on Computational Intelligence and Communication Technologies (CCICT), Sonepat, India, 2022 https://ieeexplore.ieee.org/abstract/document/9913557

[19]　Xiaolin Lin, Xuequn Wang & Nick Hajli, Building E-Commerce Satisfaction and Boosting Sales: The Role of Social Commesrce Trust and Its Antecedents, International Journal of Electronic Commerce, 23:3, 328-363, 2019, https://doi.org/10.1080/10864415.2019.1619907

[20]　Hatem Bugshan, Razaz Waheeb Attar, Social commerce information sharing and their impact on consumers,Technological Forecasting and Social Change, Volume 153,2020, https://doi.org/10.1016/j.techfore.2019.119875

[21] L. Orman, Electronic Markets, Hierarchies, Hubs, and Intermediaries, Information Systems Frontiers 4(2) (2002) 207–222. https://doi.org/10.1023/A:1016007020846

[22] Severin Borenstein and Garth Saloner, Economics and Electronic Commerce, Journal of Economic Perspectives—Volume 15, Number 1—Winter 2001— Pages 3–12 https://pubs.aeaweb.org/doi/pdf/10.1257/jep.15.1.3