

## Study and Design E-Commerce Website

Saiesh Shekhar Patil<sup>1</sup>, Shridhar Suresh Patil<sup>2</sup>, Gourav Girish Shintre<sup>3</sup>, Swapnil Satish Sutar<sup>4</sup>,  
S. B. Holkar<sup>5</sup>

<sup>1,2,3,4</sup> Department of Information Technology, Dr. J. J. Magdum College of Engineering, Jaysingpur, India.

<sup>5</sup> Professor, Department of Information Technology, Dr. J. J. Magdum College of Engineering, Jaysingpur, India.

### How to cite this paper:

Saiesh Shekhar Patil<sup>1</sup>, Shridhar Suresh Patil<sup>2</sup>,  
Gourav Girish Shintre<sup>3</sup>, Swapnil Satish Sutar<sup>4</sup>,  
S. B. Holkar<sup>5</sup>, " Study and Design E-  
Commerce Website", IJIRE-V4I02-81-84.

Copyright © 2023 by author(s) and

5<sup>th</sup> Dimension Research Publication.

This work is licensed under the Creative  
Commons Attribution International License  
(CC BY 4.0).

<http://creativecommons.org/licenses/by/4.0/>

**Abstract:** business-to-consumer aspect of electronic commerce (e-commerce) is the most obvious commercial use of the World Wide Web. The main purpose of an e-commerce site is to sell goods and services online. The project involved the development of an advanced dynamic website for online sales. The system is implemented using a back-end database, a .NET framework, and a web browser as the front-end client. To develop an E-Commerce site, many technologies must be studied and understood. These include multi-tenant architectures, server-side and client-side scripting technologies such as programming languages, relational databases such as MS-SQL. In this project, the main objective was to demonstrate that better interaction with laptop and smart phone websites can increase online sales. It is a website that helps businesses to purchase various products over the Internet. It's useful because it makes it easier to buy and sell products online. E-commerce is an interactive e-commerce solution that provides users with the ability to buy and sell products. E-commerce is the leading online platform for trading new and used products in various fields.

**Key Word:** business-to-consumer, multi-tenant, e-commerce, scripting, relational database, dynamic.

### I. INTRODUCTION

The development of "online e-commerce system" ignores the common problems in the practice manual system. This software is supported to eliminate and, in some cases, reduce the problems experienced by this existing system. In addition, the system is designed to meet the specific needs of businesses to run their business smoothly and efficiently. The application is minimized as much as possible to avoid errors when entering data. It also provides error messages when invalid data is entered. No formal knowledge is required from the user to use the system. So, through it all, it proves to be user-friendly. As mentioned above, an online e-commerce system can lead to an error-free, safe, reliable and fast business system. This can help users focus on their other activities instead of focusing on record keeping. Hence, it will help the organization to better utilize the resources. Every organization, big or small, faces the challenge of overcoming and managing Item Categories Male, Female, Children, Shipping Address, Order Information Every online e-commerce system has different dietary needs, so we design dedicated staff to help you Manage system administration requirements. It is designed to facilitate strategic planning and to help ensure that your organization has the appropriate level of information and detail for your future goals. Plus, for busy managers who are always on the go, our system comes with remote access functionality, which will allow you to manage your workforce at any time. These systems will ultimately allow you to better manage your resources.

An online store is a virtual store on the Internet where customers can browse a catalog and select the products that interest them. Selected items can be collected in a shopping cart. At checkout, the items in the shopping cart will appear as an order. At this point in more information is needed to complete the transaction. Typically, customers will be prompted to fill in or select payment information such as billing address, shipping address, shipping options, and credit card number. When an order is placed, an email notification will be sent to the customer.

### II. PROPOSED SYSTEM

The E-commerce Management System has many advantages, compare to traditional store as one can compare the cost of a product with other e-commerce websites, and if a user dislikes any product, he/she can return it. While we can make use of the current technology to overcome the problem with the existing system. The e-commerce management system has many advantages over traditional stores, the cost of products can be compared with other e-commerce sites, and if a user does not like a product, he can return it. And we can use existing technology to overcome the problems of existing systems. The e-commerce management system provides customers with a better experience. When a user places an order without physically going there, the company ships the product to the location specified by the customer. It is a website that helps businesses to purchase various products over the Internet. It is very useful because it facilitates the purchase and sale of products online. E-commerce is an interactive e-commerce solution that provides users with the ability to buy and sell products.

E-commerce is the leading online platform for trading new and used products in various fields. On this site, we basically have 2 modules. The first module includes the client module and the second module includes the management module. Customers must register for any questions related to the product. A registered customer can see the detailed information of the product and he can buy and sell the product he needs. He must pay and he will be delivered. The

administration module contains access to the administration pages of the site. Administrators can change everything on the site. He has the ability to add, delete and update any product information.

### III.SYSTEM DESIGN

Building an e-commerce website might be easier than you think. There are now e-commerce solutions that will do most of the work for you, but you still need to understand what's on offer and what your website needs. If you do enough research, you can make the decision to create a beautiful website that will grow and evolve with you for years to come. E-commerce website design is the method of forming codes, modules for designing, interface and system information in HTML, CSS3, JavaScript and Bootstraps to meet simple needs.

#### HTML5

HTML (Hypertext Markup Language) is the basic structural block of a web page. It is a text markup system on World Wide Web pages to define colours, styles, images, etc. get. It defines the meaning of web content and also defines the structure of web content. Many technologies other than HTML are commonly used to describe the appearance (CSS) or function (JavaScript) of web pages. Links that connect web pages within the same website or between websites are called "hypertexts". Links are a fundamental aspect of web pages. By downloading content from the Internet and linking to pages created by others, you become an active participant on the World Wide Web. HTML uses "tags" to annotate text, images, and other content for display in a web browser.

#### CSS

Cascading Style Sheets, affectionately known as CSS, is a simple design language designed to simplify the process of rendering web pages. CSS deals with the appearance of web pages. Using CSS, you can control text colour, font style, paragraph spacing, column size and arrangement, background image or colour used, layout, display variations on different devices and screen sizes. and various other effects. CSS is easy to learn and understand, yet it offers powerful control over the presentation of HTML documents. Most commonly, CSS is used in conjunction with HTML or XHTML markup languages.

#### JAVASCRIPT

JavaScript is a lightweight interpreted programming language. It is designed for building web-centric applications. It complements and integrates with Java. JavaScript is integrated with HTML, which is much simpler to implement. JavaScript is the most popular programming language in the world, which makes it a great choice for programmers. It is open and cross-platform. Once you learn JavaScript, it can help you develop great front-end and back-end software using different JavaScript-based frameworks like jQuery, Node.JS, etc.

#### ASP.NET

ASP.NET is a common language that is runtime-based programming framework that can be used to build and design powerful web applications on the server. ASP.NET has many advantages for programmers and end users as it is compatible with .NET Framework. ASP.NET allows programmers to develop web applications that connect to databases. The advantage of ASP.NET is that it is object-oriented and has many programming tools that allow faster development and more functionality. .NET automatically recovers from memory leaks and errors to ensure your website is always available to your visitors. ASP.NET also supports code written in over 25 .NET languages (including VB.NET, C#, and JavaScript).

#### MS-SQL

MS SQL Server is developed by Microsoft Corporation. It is a relational database management system. The product is designed for basic data storage and retrieval functionality required by other applications. It can be run on the same computer or on another computer on the network. This manual explains some basic and advanced SQL Server concepts, such as creating and restoring data, creating connections and backups, assigning permissions, and more. Each subject is explained using examples to facilitate understanding.

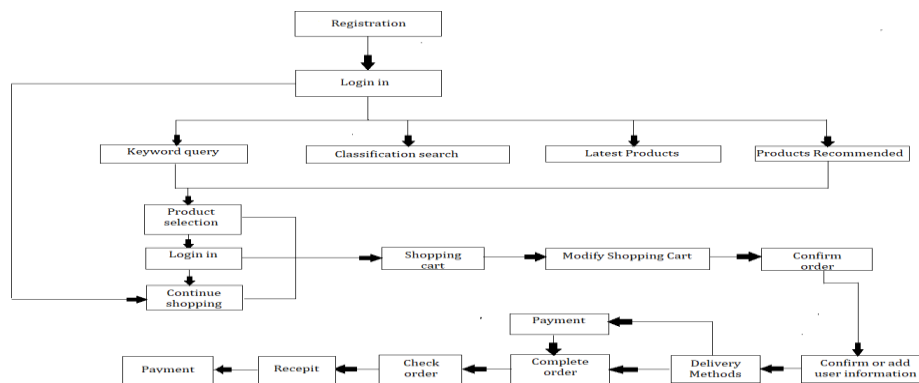
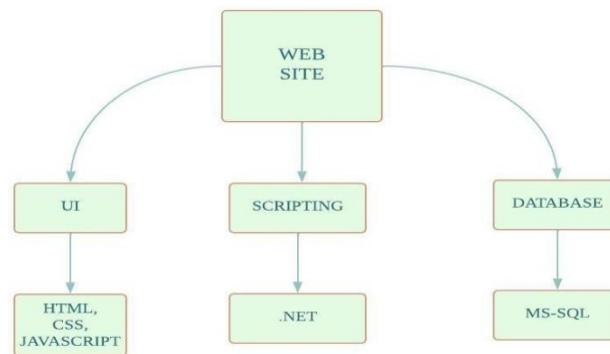


Fig.1 Process Path Diagram of Website



*Fig.2 Steps to Create Website*

#### **IV.METHODOLOGY**

For consulting firms to effectively develop e-commerce strategies for their clients, they must have a structured approach to these projects. However, like any approach, this strategic approach to e-commerce must evolve to incorporate new experiences and keep pace with change. The aim of the project is therefore to develop a first version of the e-business strategy methodology, to implement it with the client and to make the necessary modifications to the methodology once the client project has been completed.

##### **1.Scoping and Planning**

This phase focuses on planning the general direction of the project, including defining the project scope, objectives and schedule. The deliverable of this stage is the design proposal. An e-commerce business plan is a document that outlines your business and its goals, analyses your industry and competitors, and identifies the resources needed to execute the plan.

##### **2. Conceptual design and research**

During this phase, the conceptual design of the method is developed and a study of an existing method is carried out. Research conducted by independent research companies such as Gartner Group, Forrester Research. These research firms sometimes publish methods used by consulting firms. Consulting company websites are another source for researching strategic approaches to e-commerce.

##### **3. Development phase**

The method itself is developed at this stage. A detailed description of each method task is documented, including objectives, inputs, methods, relevant models, appropriate tools and techniques, outputs, and all references. The method must be documented in an appropriate format, either a Word document or an HTML page.

##### **4. Implementation of Website**

This method will be implemented with the client. This phase includes the marketing and closing of sales of e-commerce strategy development services, followed by the actual implementation. Setting up e-commerce includes all the steps related to launching, updating and maintaining an online store. E-commerce allows businesses to sell products anytime, **anywhere** and connects businesses with new customers who were previously out of reach due to distance and hours of operation. Additionally, implementing e-commerce solutions enables the collection of better customer data and demographic information that can be used to increase the conversion rate of marketing and sales leads.

##### **5. Testing**

Confirming that reviews of the online store are carried out at various stages of the task, I checked the reliability of all functions. The tests are client/user and snap-in based. Customer testing has proven that accounts can be created, connections can be made, products can be loaded into shopping carts, and customers can pay after they shop. Administrators can create an account and log in. Admins can then manage all store content.

#### **V.CONCLUSION**

E-commerce is still a profitable business model if done right, and even if the stock market and commodities are down, e-commerce can still survive and get high trades. E-commerce offers huge opportunities when doing business or doing business in Malaysia. Moreover, it is also the introduction of new techniques and styles in the craft. The widespread use of e-commerce in the internet world can actually better benefit individuals or countries. It is undeniable that electronic commerce has become an important part of our society. The successful businesses of tomorrow will be those that take e-commerce seriously and devote sufficient resources to its development. E-commerce is not an IT problem, but the whole business. Companies that use this as a reason to completely redesign their business processes are likely to benefit the most. Moreover, e-commerce is a useful technology that allows consumers to reach companies and businesses around the world.

**References**

1. N. Md Zainudin, W. F. Wan Ahmad and K. N. Goh, "Designing e-commerce user interface," 2010 *International Conference on User Science and Engineering (I-USER)*, 2010, pp. 163-167, doi: 10.1109/IUSER.2010.5716744.
2. M. M. V. Sai Nikhil, A. Sarrin, G. S. Nair and M. Supriya, "Design and Implementation of E-commerce Website using Automata Theory," 2022 *6th International Conference on Trends in Electronics and Informatics (ICOEI)*, 2022, pp. 957-963, doi: 10.1109/ICOEI53556.2022.9777191.
3. J. Xiang and X. Chen, "Customer Satisfaction of E-Commerce Websites," 2009 *International Workshop on Intelligent Systems and Applications*, 2009, pp. 1-5, doi: 10.1109/TWISA.2009.5072797.
4. R. K. Jamra, B. Anggorojatin, Kautsarina, D. I. Sensuse and R. R. Suryonos, "Systematic Review of Issues and Solutions for Security in E-commerce," 2020 *International Conference on Electrical Engineering and Informatics (ICELTICs)*, 2020, pp. 1 -5, doi: 10.1109/ICELTICs50595.2020.9315437.and Related Disorders. 2009;7(3):221–230
5. Y. Du, L. Qi and M. Zhou, "Analysis and Application of Logical Petri Nets to E-Commerce Systems," in *IEEE Transactions on Systems, Man, and Cybernetics: Systems*, vol. 44, no. 4, pp. 468-481, April 2014, doi: 10.1109/TSMC.2013.2277696
6. K. Wei, J. Huang and S. Fu, "A Survey of E-Commerce Recommender Systems," 2007 *International Conference on Service Systems and Service Management*, 2007, pp. 1-5, doi: 10.1109/ICSSSM.2007.4280214.
7. L. Salvatori and F. Marcantoni, "Social commerce: A literature review," 2015 *Science and Information Conference (SAI)*, London, UK, 2015, pp.257-262, doi: 10.1109/SAI.2015.7237152.
8. S. Abdelsalam, N. Salim, R. A. Alias and O. Husain, "Understanding Online Impulse Buying Behavior in Social Commerce: A Systematic Literature Review," in *IEEE Access*, vol. 8, pp. 89041-89058, 2020, doi: 10.1109/ACCESS.2020.2993671.