A Study to Analyse E-Commerce Website Functionality, Features, Layout Models and Popular Platforms

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Abstract

This article titled "A Study to Analyse E-commerce Website Functionality, Features, Layout Models and Popular Platforms" aims to provide a thorough understanding of the essential elements of E-commerce websites and the different layout models that businesses can adopt. The article covers the key features that enhance user experience and drive conversions, such as product pages, shopping carts, search functionalities, and checkout processes. It also discusses the various design approaches, including grid and single-page layouts, and their advantages and disadvantages. The article serves as a valuable resource for business owners, marketers, and web designers seeking to create or improve their E-commerce websites.

Keywords: E-commerce, website design, website features, E-commerce website models

Introduction:

In today's digital age, the world of business is evolving at a rapid pace. E-commerce has revolutionized the way we shop, making it more convenient and accessible than ever before. With the rise of online shopping, businesses need to adapt and create an effective online presence to stay competitive in the market. One crucial aspect of building a successful E-commerce business is the design and functionality of the website. An E-commerce website serves as the virtual storefront, where customers can browse and purchase products or services. It is essential to have a well-designed website that is user-friendly, visually appealing, and optimized for conversions. This article is a study to analyse and delve into the key features and layout models that make up a successful E-commerce website. While starting a new online business or looking to improve an existing website, it is important to have information to make a suitable choice. This article will provide valuable insights and best practices to help you create an effective e-commerce platform.

Building a successful E-commerce website requires careful consideration of various aspects related to the task of the website. The article will explore various essential features that an E-commerce website should have, including intuitive navigation, responsive design, secure payment gateways, product catalogues, search functionality, customer reviews, and more. We will also discuss different layout models, such as grid, list, and hybrid layouts, and their respective advantages and use cases. By understanding the importance of these features and layout models, you will be able to create a website that not only attracts visitors but also engages and converts them into loyal customers. A well-designed E-commerce website can enhance the overall user experience, build trust, and ultimately drive sales.

Broad Classifications

There are two broad classifications of E-commerce software, based on the deployment model. They are:

➢ Located on-site : Installed on a local server or computer and managed on-site by a group responsible for manual updates, problem resolution, and general troubleshooting. Initially, online merchants opted for on-premise solutions because they permitted greater manual administration than hosted solutions.

➢ Software delivered as a service : Technically, SaaS or hosted solutions are the hands-off option because all updates, upgrades, and newly-released features are performed automatically or with a single click. The evolution of hosted E-commerce software to permit extensive customization and flexibility, which was formerly exclusive to on-premise solutions, has made it a sufficient option for the majority of online retailers. In addition, SaaS software can be launched rapidly and is available in reasonably priced packages.

What is the functionality of E-commerce software?

Although ecommerce software is capable of managing essential activities for operating a shop, it often incorporates other applications and services to facilitate various functions directly inside the system. E-commerce software has a comprehensive range of features and functions, with significant integration capabilities, hence establishing itself as a comprehensive and integrated platform which is capable of doing the following tasks :

The effective management of a customer's purchase, including the whole process from product selection through payment, checkout, and ultimately delivery, is of utmost importance. Each purchase is a sales transaction that has the potential to affect the financial performance of your organisation. Therefore, it is important to ensure that the task is executed with optimal efficiency and convenience for the consumer. E-commerce software is responsible for the management of orders, including the tracking of order, progress and facilitating prompt modifications as necessary. By itself or in conjunction with other third-party applications or services, this software has the capability to facilitate payment processing, maintain comprehensive transaction records, oversee customer data management, generate billing and invoicing documents, perform precise accounting tasks, provide analytical insights, and generate reports, among other functionalities.

Product details may be obtained via the use of Stock Keeping Units (SKUs) and variants, including attributes such as size, colour, and number, as well as names and photographs. This facilitates the systematic arrangement and categorization of things for organisational and cataloguing purposes. The user is also informed and alerted in the event of low stock levels, providing specific details on fast-moving goods that need replenishment. Streamline the concept of marketing. The incorporation of search engine optimisation (SEO) inside online shops enables them to achieve better rankings in organic search engine results, leading to enhanced online

visibility and discovery. Additionally, this integration helps to reduce customer acquisition expenses. This system automates the processes of shipping and taxes. Automating the process of generating shipping labels, computing sales taxes according to client location, and dispatching notification emails to consumers may provide enhanced efficiency and precision. It optimises the consumer experience as it is designed to facilitate the expeditious and effective discovery of desired products or services by clients inside an online retail establishment. Hosted solutions provide service-level agreements that ensure a 100% uptime and provide simple but resilient website maintenance, enabling the provision of an optimal online shopping experience to clients.

E-commerce series of stages and processes

E-commerce software manages a series of stages and processes involved in selling online via your website. What is E-commerce if not a method for streamlining processes? How do E-commerce applications operate? Typically, it proceeds as follows:

- ➢ A consumer visits your website, which displays products and categories imported and preserved in the database.
- ➢ The consumer adds items to a purchasing cart and creates an account with all data stored in a database.
- ➢ Once a consumer reaches the purchase page, the website typically enters a secure mode, displaying a lock icon and utilising an SSL certificate.
- ➢ The website may use third-party software or services during the transaction process to provide the consumer with delivery options, shipping rates, and an estimated delivery date.
- ➢ When a client enters a credit card number, the data is transmitted to a payment processor or gateway such as PayPal.
- ➢ All sensitive information is now retained with the payment processor (not the E-commerce website).
- ➢ The payment can either be deposited into your merchant account (a service typically offered by a payment gateway) or transmitted to your bank account.

The aforementioned stages, from order to payment processing, can be completed in mere minutes, providing you and your customer/shopper with the utmost efficiency and convenience. You need a robust E-commerce platform to ensure that your online store or website operates in the most flawless and responsive manner.

Essential E-commerce Website Features:

- ☐ User-friendly Navigation: Easy-to-use navigation menus and search functionalities allow visitors to find products quickly.
- ☐ Responsive Design: Ensuring your website is mobile-friendly is crucial for capturing a larger audience.
- ☐ Product Catalogue: Organize products into categories and subcategories, providing a seamless browsing experience.
- ☐ Clear Product Descriptions: Include detailed information, high-quality images, and customer reviews to build trust and facilitate purchasing decisions.

☐ Secure Payment Options: Utilize trusted payment gateways to offer a safe and seamless checkout experience.

☐ Shopping Cart and Wishlist: Allow customers to easily add items to their carts and save products for later.

☐ Customer Reviews and Ratings: Displaying authentic customer feedback helps build credibility and drives sales.

☐ Social Media Integration: Enable social sharing and seamless integration with popular social media platforms to expand your brand's reach.

☐ Order Tracking: Provide customers with real-time updates on their orders to enhance transparency and customer satisfaction.

☐ Customer Support: Offer multiple channels for customer inquiries, such as live chat, email, and phone support.

Examples of E-commerce software solutions that dominate the market

➢ NetSuite SuiteCommerce is an omnichannel E-commerce management platform that enables users to provide their consumers with an engaging purchasing experience by optimising website performance and employing responsive design technology. In addition, it includes modules for marketing, point-of-sale, and inventory management. As a result, it enables users to manage their E-commerce processes in a seamless manner, from attracting leads to monitoring stock levels. It includes reporting tools to help you evaluate the sales efficacy of your online store so you can make data-driven business decisions.

➢ Shipbob is a cloud-hosted order fulfillment application that integrates your E-commerce portal and inventory management system into a central centre. It integrates seamlessly with prominent E-commerce platforms, online marketplaces, and delivery services so it can quickly adjust to your processes no matter which platform you are selling on and which logistics business you frequent. In addition, it includes sophisticated inventory management tools such as product storage, delivery management, and distributed inventory consolidation. Thus, you can simply manage your inventory even if your products are sourced from multiple warehouses.

➢ Simple Fulfilment is a provider of third-party logistics services for E-commerce enterprises. The platform includes automated order fulfilment, FBA preparation, shipping administration, and returns and exchanges processing tools. Additionally, it can integrate with over 50 purchasing cart applications and marketplaces to help you streamline your back-office E-commerce processes.

➢ Omnisend is an omnichannel marketing automation platform designed specifically for E-commerce companies. It helps you attract and engage customers by optimising your email, SMS, and social media marketing campaigns. In addition, it helps you increase sales through automated emails for abandoned shopping carts, product suggestion choices, and cross-selling capabilities. This platform also includes campaign reporting and A/B testing tools, allowing you to ensure that your E-commerce marketing efforts are as effective as possible.

➢ Payability is a financing solution for E-commerce and marketplace vendors. This seeks to resolve cash flow deficits so that online vendors can replenish their inventory more quickly and maintain business continuity. This allows you to transmit your earnings via automated clearing house (ACH) or wire transfer on the same day. This is notably beneficial for Amazon sellers, as they can avoid the 14-day payment delays. Additionally, this solution offers quick, risk-free financing, as it is primarily dependent on the health of your Amazon account rather than your credit score.

➢ ShipHype is an ecommerce fulfillment solution created to assist international retailers in importing and exporting goods to and from North America. This 3PL platform integrates seamlessly with online sales channels, such as Amazon, eBay, and Shopify, where your consumers can buy your products directly. The purchased items will then be transported to ShipHype's warehouses in the United States, Canada, and other regions, where they will be packaged and dispatched to your customers. To ensure that you are aware of the shipping status of your products, you can access ShipHype's real-time interface, where you can also modify the status of orders based on the circumstances.

➢ Bright Data is a sophisticated proxy platform that facilitates the collection of competitor data by E-commerce enterprises. Through the platform, you can simply conduct competitive research and discover the current prices offered by competitors for identical SKUs. This allows you to effortlessly establish the correct price for each product on each channel. You can also use Bright Data to identify new competitive categories and be notified when competitors launch a new product line. The software provides up-to-date, comprehensive datasets and incorporates multiple data sources, so you can be certain of the data's veracity.

➢ A2X is cloud-hosted ecommerce software that consolidates and integrates your transactional data from various sales channels to your accounting platform. It features a general ledger, real-time transaction history, an inventory accounting system, and import/export capabilities for data. Additionally, it supports multiple currencies, which makes it ideal for international businesses. With this, reconciling your finances for bookkeeping and accounting purposes is simplified.

➢ Wix is a cloud-based website development platform that enables users to design, develop, and administer their websites. Using a variety of designer-made templates, you can create your own website, modify its layout, and add any business-specific tools and features. The platform is also equipped with advanced SEO tools to improve your search engine rankings on Google. In addition, it enables you to select custom and professional domains that correspond to your brand and business.

➢ Salesforce Commerce Cloud is a market-leading E-commerce platform that integrates your online and offline channels onto a single AI-driven platform. This top-rated software enables you to sell more quickly and intelligently and provide a consistent customer journey across multiple touchpoints. This will assist you in producing more conversions and expanding your business. Business-to-consumer (B2C) and business-to-business (B2B) retailers are served by Salesforce Commerce Cloud. Whether you're just getting started with your online business or want to digitise your sales process, there's a Salesforce Commerce Cloud plan for your business size.

➢ Shopify is a multi-award-winning ecommerce platform that is widely acknowledged by both experts and business owners as one of the finest E-commerce solutions on the market today. Packed with a multitude of features and functions to help businesses create and administer online stores and even run conventional retail businesses, it is used by over 120,000 stores worldwide. Among other features, you can quickly and easily set up an attractive and responsive store using a variety of professionally designed themes, import large catalogues, automatically recover abandoned carts, receive 24/7 customer support, have your own payment gateway, and utilise powerful marketing tools.

➢ Volusion is a scalable ecommerce and purchasing cart platform designed with one-of-a-kind features and tools to support the selling operations of small and medium-sized businesses, as well as solitary proprietors and freelance entrepreneurs. Its functionality comprises four essential modules, each of which targets a distinct aspect of the E-selling process, such as establishing a custom-built portal, personalising and optimising content, enhancing the customer experience, and bolstering marketing campaigns. Similarly, it provides self-generated internal services, secure checkouts, analytics, and integration with third-party apps and services, such as prominent social media sites.

➢ Brightpearl is a prominent omnichannel management solution that retailers can use to manage their orders, inventory, accounting, reporting, and consumer data. In addition, the software provides real-time reporting on customer purchasing behaviour, profitability by SKU and channel, financial flow, and inventory. The app integrates with E-commerce platforms such as Bigcommerce, Shopify, Magento, and online marketplaces such as eBay and Amazon in order to provide users with access to numerous new channels and help them expand their businesses.

➢ BigCommerce is a scalable ecommerce platform that includes enterprise-level features. Its intuitive page builder has a drag-and-drop interface and multiple templates that can be modified to create a storefront that precisely reflects your brand. With its intelligent and convenient inventory management tools, BigCommerce also makes adding products and keeping track of stock a breeze. In addition, the solution integrates with multiple payment gateways and transportation services, enabling order fulfilment on a single platform. In addition, it facilitates marketing, sales, and customer service by integrating with popular business applications such as Salesforce, MailChimp, and Zendesk.

➢ WooCommerce enables businesses and individuals to create their own online stores from scratch or by leveraging an existing WordPress website or blog. It includes a plugin with a comprehensive set of tools and an intuitive and powerful interface designed to help you swiftly and easily set up your store and get started. It has an onboarding wizard to guide you through the configuration within five minutes. Due to the fact that it is fueled by WordPress, WooCommerce enables website proprietors to sell online using a familiar platform. They can utilize an extension library for features such as payment gateways, transportation calculators, subscription administration, and anti-fraud.

E-commerce Website Layout Models:

- ➢ Minimalistic Design: Simplified layouts with ample whitespace, clear typography, and intuitive navigation create a clean and modern aesthetic.
- ➢ Grid-based Layout: Optimize product display by using a grid structure to showcase a large number of products in an organized manner.
- ➢ Storytelling Design: Engage customers by incorporating visual storytelling elements, such as compelling images and videos, to create an immersive shopping experience.
- ➢ Single-page Design: Provide a seamless browsing experience by condensing all essential information onto a single long-scrolling page.
- ➢ Card-based Design: Utilize card-style layouts to highlight individual products, improving visual appeal and ease of navigation.
- ➢ Content-focused Design: Combine E-commerce functionality with content-rich elements, such as blogs and educational resources, to attract and engage customers.
- ➢ Personalization Design: Tailor the website experience to individual users by offering personalized recommendations based on their browsing and purchasing history.
- ➢ Interactive Design: Incorporate interactive elements, such as quizzes, polls, and 360-degree product views, to enhance customer engagement.

Conclusion:

Creating a successful E-commerce website requires a thoughtful approach to features and layout models. By incorporating essential features and drawing inspiration from various layout models, you can build an attractive, user-friendly, and conversion-driven online store. Remember to prioritize the needs and preferences of your target audience throughout the design process. There are numerous E-commerce technologies and instruments. It's always beneficial to be aware of the precise resources required to create an E-commerce store from the ground up. Professional Ecommerce website design process is a documented outline of the steps required from beginning to end, which divides and categorises the work and then separates these high-level sections down into tasks and resources. After reading the comprehensive guide to the technologies required for constructing an E-commerce website, however, things will become simpler and more systematic, and your E-commerce development process will become fluid and streamlined. While much work has been done on the growth and development of E-commerce, there are still aspects of the technology that need to be uncovered.

References:

- ● E-Commerce Website Features (2023 List)](https://www.outerboxdesign.com/web-design-articles/ecommerce-website-features)

- ● 25 Best eCommerce Websites With Fantastic Designs (2023)](https://www.hostinger.com/tutorials/ecommerce-website-examples

- ● Best Ecommerce Website Design: Best Practices + Examples](https://www.bigcommerce.com/articles/ecommerce/best-ecommerce-website-design/