



e-ISSN: 2319-8753 | p-ISSN: 2347-6710

IJRSET

International Journal of Innovative Research in
SCIENCE | ENGINEERING | TECHNOLOGY

INTERNATIONAL JOURNAL OF INNOVATIVE RESEARCH

IN SCIENCE | ENGINEERING | TECHNOLOGY

Volume 11, Issue 10, October 2022

ISSN INTERNATIONAL
STANDARD
SERIAL
NUMBER
INDIA

Impact Factor: 8.118

9940 572 462

6381 907 438

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www.ijirset.com



Ecommerce and Its Prospects

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ABSTRACT: E-commerce (electronic commerce) is the activity of electronically buying or selling of products on online services or over the Internet. E-commerce draws on technologies such as mobile commerce, electronic funds transfer, supply chain management, Internet marketing, online transaction processing, electronic data interchange (EDI), inventory management systems, and automated data collection systems. E-commerce is in turn driven by the technological advances of the semiconductor industry, and is the largest sector of the electronics industry. 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.

E-commerce typically uses the web for at least a part of a transaction's life cycle although it may also use other technologies such as e-mail. Typical e-commerce transactions include the purchase of products (such as books from Amazon) or services (such as music downloads in the form of digital distribution such as iTunes Store). There are three areas of e-commerce: online retailing, electronic markets, and online auctions. E-commerce is supported by electronic business. The existence value of e-commerce is to allow consumers to shop online and pay online through the Internet, saving the time and space of customers and enterprises, greatly improving transaction efficiency, especially for busy office workers, but also saving a lot of valuable time.

KEYWORDS: ecommerce, internet, marketing, online, electronic, enterprises, auctions, supply chain

I. INTRODUCTION

E-commerce markets are growing at noticeable rates. The online market is expected to grow by 56% in 2015–2020. In 2017, retail e-commerce sales worldwide amounted to 2.3 trillion US dollars and e-retail revenues are projected to grow to 4.891 trillion US dollars in 2021. [1,2] Traditional markets are only expected 2% growth during the same time. Brick and mortar retailers are struggling because of online retailer's ability to offer lower prices and higher efficiency. Many larger retailers are able to maintain a presence offline and online by linking physical and online offerings.

E-commerce allows customers to overcome geographical barriers and allows them to purchase products anytime and from anywhere. Online and traditional markets have different strategies for conducting business. Traditional retailers offer fewer assortment of products because of shelf space where, online retailers often hold no inventory but send customer orders directly to the manufacture. The pricing strategies are also different for traditional and online retailers. Traditional retailers base their prices on store traffic and the cost to keep inventory. Online retailers base prices on the speed of delivery.[3,4]

There are two ways for marketers to conduct business through e-commerce: fully online or online along with a brick and mortar store. Online marketers can offer lower prices, greater product selection, and high efficiency rates. Many customers prefer online markets if the products can be delivered quickly at relatively low price. However, online retailers cannot offer the physical experience that traditional retailers can. It can be difficult to judge the quality of a product without the physical experience, which may cause customers to experience product or seller uncertainty. Another issue regarding the online market is concerns about the security of online transactions. Many customers remain loyal to well-known retailers because of this issue.

Security is a primary problem for e-commerce in developed and developing countries. E-commerce security is protecting businesses' websites and customers from unauthorized access, use, alteration, or destruction. The type of threats include: malicious codes, unwanted programs (ad ware, spyware), phishing, hacking, and cyber vandalism. E-commerce websites use different tools to avert security threats. These tools include firewalls, encryption software, digital certificates, and passwords[5,6]



For a long time, companies had been troubled by the gap between the benefits which supply chain technology has and the solutions to deliver those benefits. However, the emergence of e-commerce has provided a more practical and effective way of delivering the benefits of the new supply chain technologies.

E-commerce has the capability to integrate all inter-company and intra-company functions, meaning that the three flows (physical flow, financial flow and information flow) of the supply chain could be also affected by e-commerce. The affections on physical flows improved the way of product and inventory movement level for companies. For the information flows, e-commerce optimized the capacity of information processing than companies used to have, and for the financial flows, e-commerce allows companies to have more efficient payment and settlement solutions.

In addition, e-commerce has a more sophisticated level of impact on supply chains: Firstly, the performance gap will be eliminated since companies can identify gaps between different levels of supply chains by electronic means of solutions; Secondly, as a result of e-commerce emergence, new capabilities such implementing ERP systems, like SAP ERP, Xero, or Megaventory, have helped companies to manage operations with customers and suppliers. Yet these new capabilities are still not fully exploited. Thirdly, technology companies would keep investing on new e-commerce software solutions as they are expecting investment return. Fourthly, e-commerce would help to solve many aspects of issues that companies may feel difficult to cope with, such as political barriers or cross-country changes. Finally, e-commerce provides companies a more efficient and effective way to collaborate with each other within the supply chain.[7,8]

E-commerce helps create new job opportunities due to information related services, software app and digital products. It also causes job losses. The areas with the greatest predicted job-loss are retail, postal, and travel agencies. The development of e-commerce will create jobs that require highly skilled workers to manage large amounts of information, customer demands, and production processes. In contrast, people with poor technical skills cannot enjoy the wages welfare. On the other hand, because e-commerce requires sufficient stocks that could be delivered to customers in time, the warehouse becomes an important element. Warehouse needs more staff to manage, supervise and organize, thus the condition of warehouse environment will be concerned by employees

E-commerce brings convenience for customers as they do not have to leave home and only need to browse website online, especially for buying the products which are not sold in nearby shops. It could help customers buy wider range of products and save customers' time. Consumers also gain power through online shopping. They are able to research products and compare prices among retailers. Also, online shopping often provides sales promotion or discounts code, thus it is more price effective for customers. Moreover, e-commerce provides products' detailed information; even the in-store staff cannot offer such detailed explanation. Customers can also review and track the order history online.[9,10]

E-commerce technologies cut transaction costs by allowing both manufactures and consumers to skip through the intermediaries. This is achieved through by extending the search area best price deals and by group purchase. The success of e-commerce in urban and regional levels depend on how the local firms and consumers have adopted to e-commerce.

However, e-commerce lacks human interaction for customers, especially who prefer face-to-face connection. Customers are also concerned with the security of online transactions and tend to remain loyal to well-known retailers. In recent years, clothing retailers such as Tommy Hilfiger have started adding Virtual Fit platforms to their e-commerce sites to reduce the risk of customers buying the wrong sized clothes, although these vary greatly in their fit for purpose.^[52] When the customer regret the purchase of a product, it involves returning goods and refunding process. This process is inconvenient as customers need to pack and post the goods. If the products are expensive, large or fragile, it refers to safety issues[11,12]

In 2018, E-commerce generated 1.3 million short tons (1.2 megatonnes) of container cardboard in North America, an increase from 1.1 million (1.00) in 2017. Only 35 percent of North American cardboard manufacturing capacity is from recycled content. The recycling rate in Europe is 80 percent and Asia is 93 percent. Amazon, the largest user of boxes, has a strategy to cut back on packing material and has reduced packaging material used by 19 percent by weight since 2016. Amazon is requiring retailers to manufacture their product packaging in a way that doesn't require additional shipping packaging. Amazon also has an 85-person team researching ways to reduce and improve their packaging and shipping materials. Accelerated movement of packages around the world includes accelerated movement of living things, with all its attendant risks. Weeds, pests, and diseases all sometimes travel in packages of seeds. Some of these packages are part of brushing manipulation of e-commerce reviews.



II. DISCUSSION

In recent years India has experienced a boom in internet and smartphone penetration. The number of internet connections in 2021 increased significantly to 830 million, driven by the 'Digital India' programme. Out of the total internet connections, ~55% of connections were in urban areas, of which 97% of connections were wireless. The smartphone base has also increased significantly and is expected to reach 1 billion by 2026. This has helped India's digital sector and it is expected to reach US\$ 1 trillion by 2030. This rapid rise in internet users and smartphone penetration coupled with rising incomes has assisted the growth of India's e-commerce sector. India's e-commerce sector has transformed the way business is done in India and has opened up various segments of commerce ranging from business-to-business (B2B), direct-to-consumer (D2C), consumer-to-consumer (C2C) and consumer-to-business (C2B). Major segments such as D2C and B2B have experienced immense growth in recent years. India's D2C market is expected to reach US\$ 60 billion by FY27. The overall e-commerce market is also expected to reach US\$ 350 billion by 2030, and will experience 21.5% growth in 2022 and reach US\$ 74.8 billion.[13,14]

The simple ability to make purchases online has changed our lives forever. And despite having unclear definitions, ecommerce is here to stay. The ecommerce industry is growing exponentially, more ecommerce businesses are emerging, and the digital economy is continuously expanding while reaching every corner of the world that has internet access.

- By January of 2022, there were around 4.95 billion internet users worldwide, which is 62.5% of the global population (while the urbanization rate is 57%).
- In 2021, retail ecommerce sales amounted to 4.9 Trillion U.S dollars worldwide. And it's forecast to grow over 50% within the next four years. People are buying products online, and they'll only buy more.
- Google reports that more than 80% of customers conduct their research online before making a purchase decision. Which means most of Google searches are made with a purchase intention.
- In 2021, \$3.56 Trillion in retail sales were made from mobile devices. Ecommerce businesses have been optimizing for mobile commerce for several years.

The rise of ecommerce giants like Amazon and Alibaba in the mid -1990s changed the face of the retail industry. They essentially capitalized on the global internet penetration and digitalization of the financial system, which contributed to the decline in retail sales for many brick-and-mortar stores.

After that, Google's growth and its massive traffic made it possible for business owners to pay for ads, do performance-based marketing with more data than ever, and attract customers organically through search engine optimization (SEO) to make their websites rank for high-valuable keywords.

Plus, the rise of social media brought the attention of business owners, too, replicating the same phenomenon as Google but with a social layer and making the online experience more interactive and targeted.[14,15]

Ecommerce has also impacted the retail workforce. The U.S Bureau of Labour Statistics (BLS) has revealed that from 1997 to 2016, employment in the ecommerce sector increased by 80%. And today, in 2022, there are already 787,104 U.S employees in the ecommerce space.

Today, anyone can start an ecommerce business from scratch using platforms like Shopify or BigCommerce without coding or having any technical skills at all. And if you know how to code, there are plenty of open-source platforms you can use to build any business you want.

In the future, ecommerce might simply become "commerce" once it becomes the default method to buy groceries for your home—offline commerce will become a different but just optional experience.



III. RESULTS

Looking at the parties participating in the e-commerce transaction is another way in which ecommerce sites can be classified. These typically include:

1. Business to consumer (B2C)

As the name suggests, the B2C model represents a business that sells products or services to individual consumers. B2C ecommerce is the most common business model among both physical and online retailers, as the number of potential customers is larger and scalability is higher.

An example of a B2C business is Cocokind. A B2C ecommerce brand that sells skin care products online to the people who are going to use them. Thus, you can see them enhancing their customer experience with quizzes, routine builders, and blogs to incentivize their target audience to purchase their products for personal use.

2. Direct to consumer (D2C)

The popular D2C brands are those businesses that sell products to customers and also manufacture it—cutting out intermediaries within the brand and the end consumer. The key here is that these brands can interact and build relationships with the people who are using their products, get feedback, build an audience, and make shipping more efficient. JOI is an excellent example since they offer a “unique” product for making plant-based milk that isn’t 98% water. Instead of recurring to intermediaries or amazon to sell their product, JOI builds its brand and owns its distribution so they can sell directly to the people they’re trying to help in the first place. And if you take a look at their website, you’ll notice that they’ve built a very particular brand that no intermediary would’ve ever done justice to. [16,17]

3. Business to business (B2B)

In the B2B model, both parties involved are businesses. Here, one company provides the other with products or services. B2B companies are often service-based or software companies (and they’d simply be referred to as “agencies” or “SaaS,” respectively). B2B businesses that sell products also exist, and they’re often vendors or manufacturers selling to retail stores or manufacturers—depending on their place in the productive chain. A simple example is Avery Dennison’s store. It sells labelers and attachers for business customers who are often packaging stuff. Its catalog is extensive enough to cover everything you might need as a busy retailer.

4. Consumer to business (C2B)

The C2B business model represents a transaction in which individuals create value for businesses. Unlike the traditional business-to-consumer model, consumers provide companies with products or services, co-operate on projects, and ultimately help companies increase their profits. Shutterstock comes to mind as a great C2B example. It allows professional photographers to sell royalty-free photos that businesses might use for their marketing efforts. This model allows regular individuals to make money by helping businesses with high-quality media that might result in greater productivity.

5. Consumer to consumer (C2C)

C2C ecommerce happens when the two parties involved are consumers that trade with one another. They typically are marketplace platforms where individuals can communicate and agree on deals with each other. eBay and Craigslist are the most basic examples, as their platforms allow any individual to sell or buy anything to anyone in the world in one place without having to purchase from a business.

Now, let’s go over “what” and “how” ecommerce businesses can sell online. And these include:



1. Retailers selling physical goods

These are your typical online retailers selling clothing, furniture, tools, and accessories. Shoppers can buy a physical product through online stores by visiting the stores' websites, adding items to their shopping cart, and checkout. [18,19]

Most of these are B2C or D2C brands selling products. But they can also be B2B vendors.

A good example is H&M's ecommerce store and the clothes they sell on their website. They're entirely focused on attracting customers to add products to their cart and make a purchase.

H&M owns multiple physical stores throughout the world, but their website allows anyone to buy from them without problems.

2. Service-based businesses

You can also purchase services online. And they can include people who offer specialized services to businesses, such as freelancers, agencies, and consultants. Due to how services can vary, the buying process for services depends on the merchant. Depending on the service, some may allow you to purchase their services straightaway from their website, or require you to get in touch with them first (i.e., book a consultation) to determine your needs. Most service-based businesses are B2B, offering specialized marketing, coding, or design work for other brands, such as Contently, as it offers content marketing for your business and has its own platform for the payments, the onboarding, and so on. Digital B2C services still exist too. If you go to Fiverr, you'll find people offering all kinds of services, going from the most professional side, such as relationship therapy, to the most mundane, like coaching for online games like League of Legends.

3. Digital products

Digital products refer to all items that are in a digital format, including ebooks, online courses, graphics, and virtual goods. Businesses selling these types of products fall into this category. Course marketplaces, niche sites with info products, or premium newsletters are among the businesses selling digital products. They offer a product that doesn't require shipping, and they can scale without stock limitations. Skillshare is a course marketplace, for example. And it offers a tremendous amount of educational courses for learning any skill you want, including cooking, carpentry, and even public speaking. Skillshare is catered toward the general public (B2C), so its pricing and platform are set for anyone to use it—like Netflix for courses.

4. Wholesale vendors

These are businesses that sell products in bulk. Often, to retailers who sell them to the end consumer. You could categorize them as B2B ecommerce since they sell products to businesses, but their role is simply to act as vendors for the brands who put those products on the market. Alibaba, for example, is a classic ecommerce wholesale vendor. They provide products from Chinese suppliers to thousands of ecommerce stores selling products through dropshipping—and they only need to order products from their website. [20,21]

5. Dropshipping

Dropshipping is a sale method where the retailer sells a product online, and the supplier handles the shipping. Therefore, a dropshipping business is an online store where you only need to take care of the online sales and not worry about logistics or inventory management.

It's not surprising that this method is trendy due to how accessible it is to build an ecommerce business this way. Dropshipping apps like Oberlo and AliExpress make it as easy as installing an app.

There are thousands of online stores doing dropshipping. Warmly, for example, simply sells home decor. Its website is a pretty organized catalog of domestic products you can buy, and the fact that they're a dropshipping store means that they don't manufacture those products—they only sell them.

6. Crowdfunding

Crowdfunding is the collection of money from potential consumers to help bring a product to the market. They're often businesses that facilitate businesses to raise funds for their projects.



What's interesting about crowdfunding is that the upfront money allows the business owners to develop the product under specific conditions given by their audience—building some sort of relationship right away without making the first transaction.

A popular crowdfunding platform is Kickstarter, where you can either make your ideas public or invest in the development of other products. Thanks to this platform, multiple businesses have risen as this platform makes it easy to publish an idea or donate.

7. Subscription-based businesses[22,23]

These are businesses that “rent” online services for a monthly price. Most of the time, these are software-as-a-service businesses (SaaS) that offer access to a software product for a recurrent payment—often with a variety of subscription plans and different price ranges. The SaaS industry has its own world and best practices, such as freemium plans, free trials, onboarding processes—so it is a very different business model from an online store that sells t-shirts. Hubspot is the typical example of a subscription-based business. Its main product is a CRM for sales teams, but it also offers plenty of marketing features for email marketing, SEO, blogging, etc. They have a basic free plan for people who need a simple CRM. However, once you start growing and requiring more capacity/features, you'll have to upgrade your plan and start paying a subscription to use the software in full.

IV. CONCLUSIONS

Online shopping evolves and shifts daily. People shop from their computers, phones, tablets, and other devices. They patronize websites, visit social media pages, and participate in thriving virtual channels. Here's an overview of three distinct methods of conducting ecommerce today.

M-commerce

Online transactions that take place on mobile devices are known as mobile commerce or “m-commerce.” With portable devices in the hands of consumers worldwide, it's no wonder m-commerce is expected to overtake non-mobile commerce in 2021.[24,25]

Many people now do their product research and online purchasing through their phones. This trend shows no signs of slowing, so it's essential to optimize your online store for mobile.

Enterprise ecommerce

Enterprise ecommerce is the buying and selling of products to large companies or organizations. If a large business sells many different types of products or has multiple brand lines and transitions into selling online, then it is participating in enterprise ecommerce.

Social media ecommerce

Social media can help you market and promote ecommerce stores to a broad audience. Just as social media enables you to connect with friends and family, it also has the potential to attract customers to your business. Done well, social media marketing engages customers in an informal setting.[26,27]

Social media can help you:

- Attract new customers
- Build brand awareness
- Generate online sales[28]

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INNO SPACE
SJIF Scientific Journal Impact Factor
Impact Factor: 8.118



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