**Difference between Traditional Commerce and  E-commerce**

Electronic commerce refers to the buying and selling of goods or services using the internet, and the transfer of money and data to execute these transactions.

Traditional Commerce is the buying and selling of goods and services to the local customers through the setup of local stores. People need to physically visit the store for buying any products or booking the services. Traditional commerce requires physical presence through stores, office…

|  |  |
| --- | --- |
| **Traditional Commerec** | **E-Commerce** |
| Customers can easily identify and authenticate a merchant | Not easy to authenticate a merchant |
| Customers can directly talk to a merchant. | Communication is in the hands of a third party and conducted via the web |
| Not available all the time | Available 24\*7-365 days |
| Customers pay at the merchant premises where no personal information is given | Customers have to give their personal information when purchaing a product |

**E-Business**

•      E-Business is the process of using digital and communication technologies to buy and sell as well as servicing customers and collaborating with business partners”.

•      E-Business means connecting critical business systems directly to customers, vendors and suppliers- via the Internet, Extranet and Intranets.

E-commerce is a sub-set of e-business

|  |  |
| --- | --- |
| **Ecommerce** | **Ebusiness** |
| E-commerce refers to the buying and selling of goods or services using the internet, and the transfer of money and data to execute these transactions. | E-Business is the process of using digital and communication technologies to buy and sell as well as servicing customers and collaborating with business partners |
| Mandatory use of internet | Internet, Extranet and Intranet are used |
| Typically involves a website or application. | Ebusiness includes any online sales channels and internet-based software systems like CRM, ERP |
| It is more relevant in B2C, Business to customer context | This is more appropriate to B2B or Business to Business context |

**Impact of e-commerce on organizations**

* Structure

- Supply chain integration

- Elimination of the middleman

* Work routine
* International business
* 24 Hour / 365 Days Communications
* Increased Automation
* Marketing
* Information Technology

**Impact on Structure**

a.Supply Chain Integration –

Supply chain refers to the flow of materials, information, money, and services from raw material suppliers through factories and warehouses to the end customers.

Supply chains include organizations and processes that create and deliver products, information and services to the end customers

E-commerce technology ***provides information visibility* throughout the supply chain.** The integration of production planning, scheduling, and inventory control with procurement process makes the loop complete. ***Because of information visibility, suppliers possess the information of customer demands while customers can receive faster feedback of transaction status from their suppliers.***

b. Elimination of the Middleman

Ecommerce is a tool that brings producers of goods and services into direct contact with a huge potential buyer base, local, national and even global. Thereby, it is a means to eliminate the middleman who has traditionally acted as a gatekeeper

# The Advantages of Eliminating the Middleman - Cost savings

**Impact on Work Routine**

a. International Business

b. 24 Hour / 365 Days

 It means availability constantly and continuously throughout the year

c. Increased Automation

Ecommerce automation is software built to convert tasks, processes, or campaigns within a business to automations that intelligently execute exactly when needed

## Examples of ecommerce automations

* When an item is ready and in store, trigger an email or SMS or to the customer
* Un-publish out-of-stock products and send a message or email to marketing team so they can pause advertising

**Impact on Marketing**

### a. Multiple Touchpoints

Businesses now have multiple touchpoints especially on social media networks, to develop their brand

**b. Search engine optimization (SEO)**

Search engine optimization (SEO) is the process of**improving the ranking (visibility) of a website in search engines**. The higher (or more frequently) a web site is displayed in a search engine list (like Google), the more visitors it is expected to receive.

**Impact on IT**

**a. 24 / 7 Support**

**b. Connectivity**

Ensure connectivity is good.

This ensure that customers are able to

1. View products
2. Pay for products

**c. Data integrity**

`` When running an eCommerce business, data integrity is central to the smooth operations of the eCommerce ecosystem. From handling multiple merchant portals, to warehouse storage and the fulfilment process, to even payment gateways, having data that is accurate and consistent will help ensure that every element of the [eCommerce supply chain](https://www.janio.asia/services/ecommerce-logistics) is accounted for.

**d. Integration Projects**

- eCommerce integration is the synchronization of an eCommerce website with other systems, such as an ERP (Enterprise resource planning) or CRM (Customer relationship management) system.

**e. Security**

- eCommerce security refers to the**actions that online store owners take to protect their businesses and customers from cyber threats**. It includes ensuring a safe online transaction and preventing data breaches. The more effort invested in security, the more trust gained from customers.

**Appropriateness of electronic technology in business processes**

It is important to identify which business processes can be streamlined using e-commerce technologies. Some processes make effective use of traditional commerce and cannot be improved upon using technology. Therefore, using technology when it is not necessary or helpful can be a costly mistake.

**Processes well suited for e-commerce**

Business processes that are well suited for e-commerce include commodity items, i.e. a product or service that has become standardized.

These may include:

• Online delivery of software

• Advertising and promotion of travel services

• Online tracking of shipments

• Sale/purchase of new books

**Processes well-suited for traditional commerce**

In this category fall products that buyers prefer to touch, smell or otherwise closely examine and these include:

• Sale/purchase of high fashion clothing

• Sale/purchase of perishable food products

• Sale/purchase of expensive jewellery and antiques

**Processes well suited for a combination of both**

Some business processes can be handled well using a combination of electronic and traditional methods and these include:

 Sale/purchase of auto mobiles

 Online banking

 Sale/purchase of investment or insurance products

**Databases and E-Commerce**

What is a database?

- A database is a computerized collection of interrelated stored data that serves the needs of multiple users.

-A system used to store and organize data

In the context of ecommerce applications, data falls into two categories:

* Site content
* Transaction data

### Site Content

Site content is what one sees when browsing a storefront.

* Content pages - about us, contact, FAQ, and shipping policies;
* Product pages - show details — price, dimensions, weight, color, size — for the items you sell;
* Category pages  - grouping similar products.

### Transactional Data

Is a result of users taking action on a page. e.g. when shoppers purchase products

Examples of transactional data include:

* Customer orders: customer name, address, phone, email, products purchased;
* Inventory updates: items sold, replenished, out of stock.

### Databases for Ecommerce

**a. Track transactions.**One of the most important jobs of the database is to track and manage transactions. It needs to keep track of every order along with the details needed to process the transaction. This functionality dominates most ecommerce databases.

### b. Organizing Products

There may be thousands of products on an eCommerce store. One of the primary functions of the database is to organize these products according to different styles and variants.

**c. Providing structure to store data.** Putting structure around vast amounts of data is one of the strengths of a database. It makes creating the code to access that data easier.

**Databases for E-Commerce**

**1. Relation database**

In a relational database, you only have to update information in one place instead of multiple locations.

The benefit of this is that when the customer data changes, you only have to update one piece of data. For example, if a customer obtains a new email address, you only have to update the one row in the customer table and not all of the rows in the orders table. All orders for that customer automatically relate to the new email address.

Relational databases work well for transactions and non-product content.

### 2. Document Databases

In document databases each piece of data is given a name, called a “key.” That key is used to find and retrieve that data.

One can design what types of data to include. This makes document databases flexible and powerful

This flexibility can be difficult to manage, though. If one needs to change how the data is stored, one could end up having to update every piece of data in the database. Thus, document databases usually require long-term thinking when deciding how to structure and store the data.

### Document databases work well for product catalogs and non-product content, such as blog posts and “about us” pages.

### 3. Cloud Databases

Cloud databases are not a true database type, but more of hosting process.

Cloud databases are hosted by a third party, typically at a very large scale. This can benefit an ecommerce storeowner, as they will not have to worry about hosting or growing the database as the store grows.

But cloud databases have risks. For one, a storeowner must ensure that the third party is trustworthy since it is holding company and customer data. A storeowner should also make sure that the host is a viable business and will be around as long as the store is.

## Applications of Ecommerce:

*E-Marketing*

E-Marketing also known as Internet Marketing, Online Marketing, Web Marketing.

It is the marketing of products or services over the internet.

E-Marketing ties together the creative and technical aspects of the internet, including design development, advertising and sales.

*E-Advertising*

It is also known as online advertising it is a form of promotion that uses internet and World Wide Web to deliver marketing messages to attracts customers.

Example: Banner ads, Social network advertising, online classified advertising etc.

*Finance*

Banks and other financial institutions are using e-commerce to a significant extent. Customers can check account balances, transfer money to other accounts held by them or others, pay bills through internet banking, pay insurance premiums, and so on. Individuals can also carry out trading in stocks online, and get information about stocks to trade in from websites that display news, charts, performance reports and analyst ratings of companies.

*Online Booking*

This involves booking hotels, holidays, airline tickets, travel insurance, etc. These bookings and reservations are made possible through an internet booking engine or IBE.

*Auctions*

Online auctions bring together numerous people from various geographical locations and enable trading of items at negotiated prices, implemented with e-commerce technologies. It enables more people to participate in auctions.

### ***Online Publishing***

Digital newspapers, magazines and e-books are slowly replacing traditional printed articles. It has several advantages such as portability, lightweight, accessible from everywhere, etc.

*Online shopping*

“Go online” has become a mantra for all businesses to succeed. Online shopping is comfortable, convenient, and at most times, cost effective.

#### *Education -*

#### *E-learning*

*Entertainment*

**Tools &Technologies for E-Commerce**

•      Electronic data interchange (EDI)

•      Bar codes

•      Electronic mail

•      Internet

•      Electronic forms

•      **Electronic Data Interchange (EDI)**

 EDI is the computer-to-computer exchange of structured business information in a standard electronic format. Information stored on one computer is translated by software programs into standard EDI format for transmission to one or more trading partners. The trading partners’ computers, in turn, translate the information using software programs into a form they can understand.

•      **Bar Codes**

 Bar codes are used for automatic product identification by a computer. They are a rectangular pattern of lines of varying widths and spaces. Specific characters (e.g. numbers 0-9) are assigned unique patterns, thus creating a "font" which computers can recognize based on light reflected from a laser.

•      **Electronic Mail**

 Messages composed by an individual and sent in digital form to other recipients via the Internet.

•      **Internet**

 The Internet is a global network of millions of diverse computers and computer networks. These networks can all "talk" to each other because they have agreed to use a common communications protocol called TCP/IP. The Internet is a tool for communications between people and businesses. The network is growing very, very fast and as more and more people are gaining access to the Internet, it is becoming more and more useful.

•      **Electronic Forms**

 Electronic form is a technology that combines the familiarity of paper forms with the power of storing information in digital form. Imagine an ordinary paper form, a piece of paper with lines, boxes, check-off lists, and places for signatures. To the user an electronic form is simply a digital analogue of such a paper form, an image, which looks like a form but which appears on a computer screen and is filled out via mouse, and keyboard.

 Behind the screen, however, lie numerous functions that paper and pencil cannot provide. Those extra functions come about because the data from electronic forms are captured in digital form, thus allowing storage in data bases, automatic information routing, and integration into other applications.

## Success factors for E-Commerce site

## 1. Store Experience

A good store experience is a must have for Ecommerce success.

**2. Multi-Channel Marketing**

There are opportunities lying everywhere in Internet.

An ideal marketing strategy should focus on number of marketing channels e.g. Email Marketing, social media, SEO

## Encourage Customer Loyalty Through Incentives

## ECommerce stores need to do everything they can to encourage customer loyalty. This is usually done through incentives, such as special offers and discounts.

**4. Speed**

How long it takes for webpages to load is one of the [most important factors](http://www.smallbizviewpoints.com/2016/04/14/why-website-loading-speed-is-critical-for-success-in-2016/) to focus on. The longer this takes, the more customers lost.

Factors that can affect speed include the number of pages, file sizes

1. **Security**

One of the main concerns with ecommerce for both entrepreneurs and consumers is the issue of security. With personal and financial information being handled online, there is always the potential for ecommerce websites being compromised and customer data stolen

1. **Taking advantage of mcommerce**

The mobile user base has grown exponentially over the last few years, thereby the need for online stores to become mobile commerce ready is very important

Some of the things that make an online store optimized for m-commerce are things like responsive design with easy-to-use navigation menus, solid mobile search features, and easy checkout and payment, all done over mobile.

1. **User friendliness**
2. **Internet connectivity**
3. **Chat box feature**

## ****Web Design****

[Web design](https://www.startupguys.net/web-design-dos-and-donts/) determines the way visitors perceive a brand. A web design should captivate and prompts visitors to stay and learn about a brand.

In addition, web designs that are easy to navigate, improve user experience.