E-COMMERCE CLASS 1

DR. J.J.JEYAKUMARI, M.Com., M.Phil., Ph.D., PGDCA., MBA.,
Research Adviser & Asst. Professor Of Commerce,
Kunthavai Naachiyaar Govt. Arts College(W), Autonomous, Thanjavur-7.

Reference: J.J.Jeyakumari, E-Commerce, Anuradha Publications, Kunbakkonam.

Watch the virtual lectures of Dr.J.J.Jeyakumari by pressing Ctrl key and clicking the below link
https://www.youtube.com/channel/UCiU898qMMc_3zXNspJbgZEw

E-COMMERCE

- Electronic commerce is the business environment in which information for buying, selling and transportation of goods & services moves electronically.

- It includes any technology that enables a company to do business electronically.

- Electronic commerce is the general concept covering any form of business transaction or information exchange executed using information and communication technology, between companies, between companies and their customers or between companies and public administration. Electronic commerce includes electronic trading of goods, services and electronic materials.

SCOPE OF E-COMMERCE
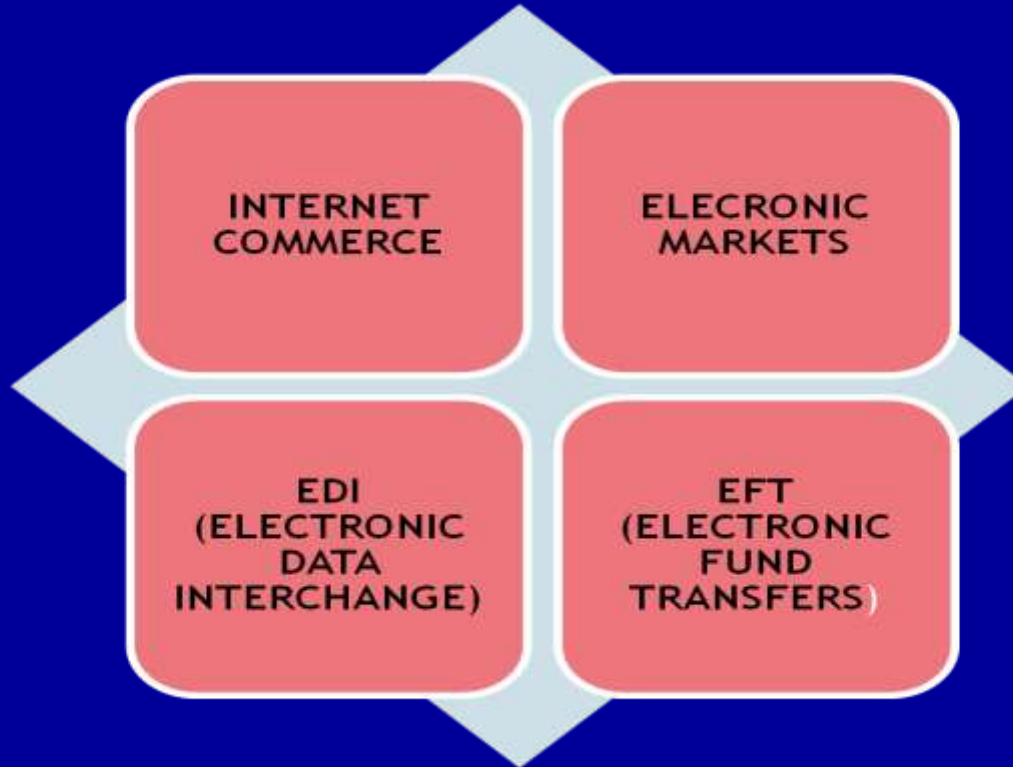
- **Internet Commerce** is buying, selling, advertising, paying etc., when done over the internet.
- **Electronic Markets** is the use of information and communication technology to present the range of offerings available in the market, enabling the purchaser to compare the prices and other attributes and finally to take a purchase decision,
- **Electronic Data Interchange(EDI)** is the standardised system of coding trade transactions so that it can be communicated from one computer system to another without the need for printed paper documents.
- **Electronic funds transfer (EFT)** is the electronic exchange/transfer of money from one account to another, either within a single financial institution or across multiple institutions, through computer-based systems.

On an average day on eBay India

every **1 min**
A Mobile Accessory
A Health or Beauty Product

every **7 min**
A Book or Magazine
A Fitness Product

every **2 min**
A Coin or a Note
A Kitchen Product
A Portable Storage
A Mobile Handset

every **3 min**
A Piece of Jewellery
A Piece of Apparel
An Auto Accessory

every **10 min**
A Toy
A Home Appliance

every **12 min**
A Digital Camera

every **5 min**
A Watch

every **4 min**
A Stamp

every **30 min**
A MP3 Player

every **34 min**
A TV

every **15 min**
A Tablet

every **16 min**
A Pair of Footwear

every **26 min**
A Pair of Sunglasses

every **35 min**
A Baby Care Product

Trends in E-commerce

- **E-market**
  - **2009 - 2.5 billion USD**
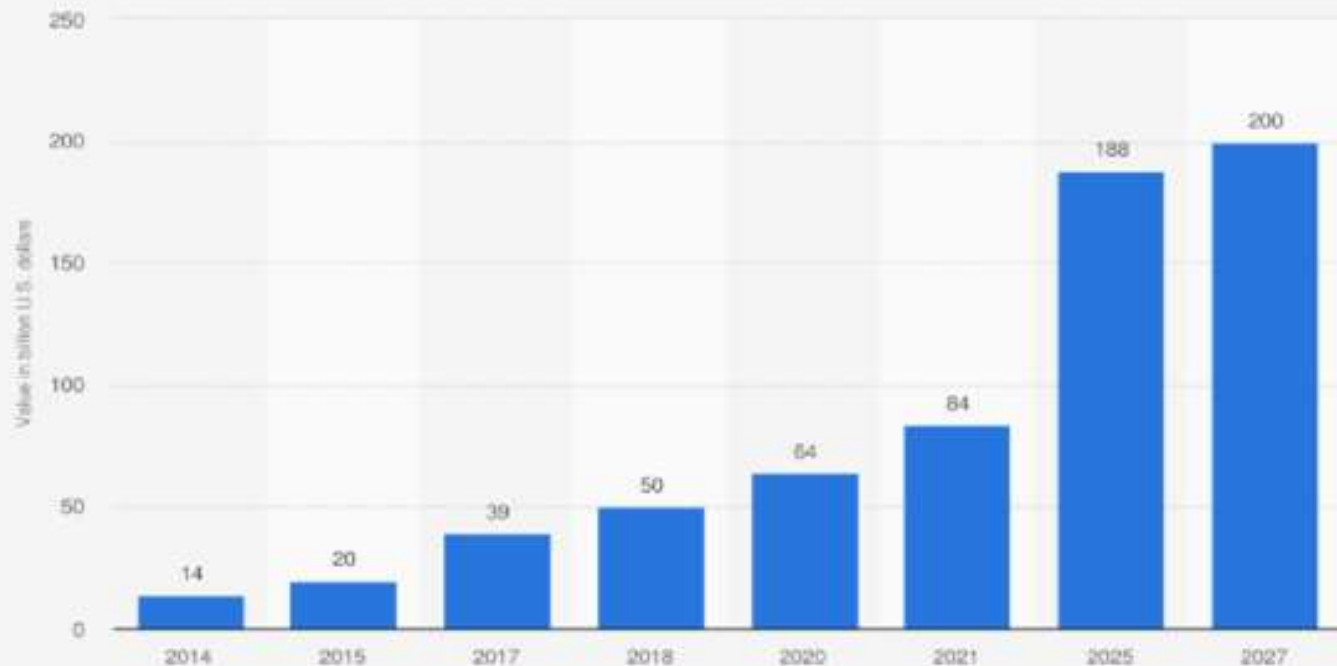 - **2011 - 6.3 billion USD**
  - **2013 - 16 billion USD**
- **Compounded Annual Growth Rate (CAGR) – 54.6 %**
- **Online shoppers – 10 million growing at 30 % every year.**

Growth of e-commerce market in India (USD bn)

Source: IAMAI, Aranca Research

Market size of e-commerce industry across India from 2014 to 2017, with forecasts until 2027 (in billion U.S. dollars)
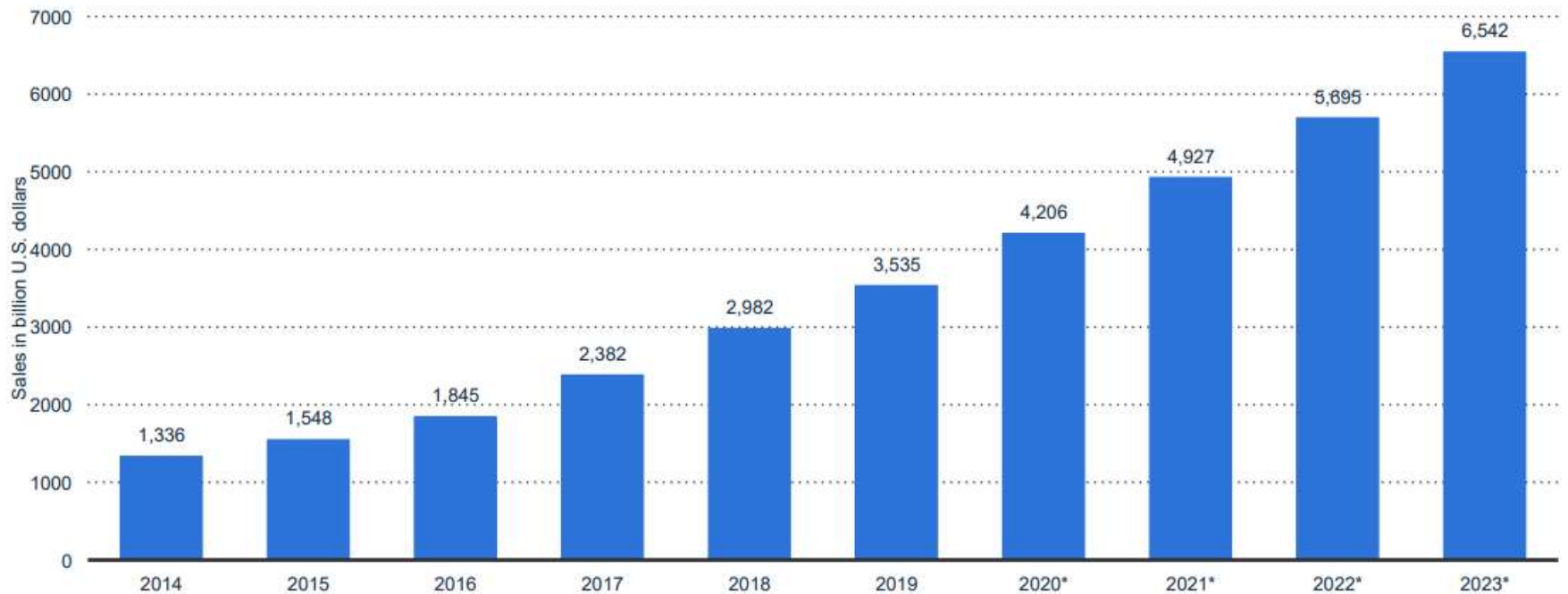
Retail e-commerce sales worldwide from 2014 to 2023 (in billion U.S. dollars)

Global retail e-commerce sales 2014-2023

Top 10 Indian's Favourite E-Commerce Sites

amazon.com	Famous with selling books online. Most of the products are affordable and delivery is fast.
Flipkart	Selling everything you can name of. Regularly offers good deals and lots of promotion.
snapdeal	Offering thousands of products such as electronics, computer gadgets, furniture, and clothing.
JABONG COM	Selling clothing, apparels, jewellery, footwear including all the lifestyle items with quick delivery.
HOME SHOP 18 .COM	Shopping here is easy with wide range of products at value for money prices. The range from kitchen to bathroom to bedroom.
ebay	This is the best site for merchants to source for all kinds of products at low price.
Quikr	One of the best platforms for buying or selling anything you want, be it a car, furniture, or even home.
Myntra	One stop online platform for lifestyle apparels, branded footwear, accessories & more.
OLX.in	OLX offers free local classified ads. one stop solution for buying and selling any commodity.
FASHION YOU Indulge Yourself	Latest fashion trends in online shopping in India for branded shoes, clothing, home decor & accessories for men & women.

DIFFERENCE BETWEEN TRADITIONAL COMMERCE & E-COMMERCE

By

Dr.J.J.JEYAKUMARI

Research Advisor & Assistant Professor of Commerce

K.N.Govt. Arts College for Women, (Autonomous), Thanjavur – 613 007

TRADITIONAL COMMERCE

Traditional commerce is the process of exchanging goods and services directly for cash, credit or other consideration

E-COMMERCE

E-Commerce is the process of exchanging goods and services in the form of digital mode facilitating online & offline payments.

S.NO	TRADITIONAL COMMERCE	E-COMMERCE
1.	Bound by geographical area	There is no geographical boundary. There is a world wide customer reach.
2.	Push Marketing: Available products marketed/sold to customers through salesmen.	Pull Marketing: Products as per customer requirements (Tailored to their needs) provided to them.
3.	Personal contact with the customer. Face to face contact.	No personal contact with the customer. Screen to face contact.
4.	There is no customer feedback except in case of defect	Immediate customer feedback is possible.
5.	Limited reviews assisting the customers.	Availability of more reviews help customers to choose the best product or service.
6.	The sensory inputs like real sight, touch, smell & taste is possible in conventional shopping.	Limited sensory information. Can't touch, smell or taste the products while shopping online.
7.	Cross promotional activity (for diversified products) is possible only to a certain extent.	Cross promotional activity for any number of products are services are possible online.

S.NO	TRADITIONAL COMMERCE	E-COMMERCE
8.	Anywhere, Anytime Purchase or Sale is not possible. Limited to shop working hours.	Anywhere, Anytime Purchase or Sale is possible. 24 x 7 Online shopping is possible.
9.	Heavy administrative and selling cost.	Very less administrative and selling cost. High cost is incurred only in the year of installation of an online store.
10.	Consumes more time.	Only less time is required.
11.	More documentation work.	Very less documentation work.
12.	Transactions are processed at low speed and less accuracy.	Transactions are processed at high speed and more accuracy.
13.	Literacy and Technical knowledge not required.	There is a need for certain amount of literacy and technical knowledge.
14.	No need of having electronic gadgets and network.	Need electronic gadgets with network facilities to purchase online.
15.	Shops need to maintain more inventory.	Less Inventory or Just-in-Time inventory can be maintained a per requirement or orders from customers.

S.NO	TRADITIONAL COMMERCE	E-COMMERCE
16.	The consumer goes with the goods once he/she finishes the shopping.	E-commerce transactions are made on trust. Delivery of goods and services takes place on a later date except in case of electronic material.
17.	More seller oriented as products are limited due to geographical boundary and limited possibilities of comparison.	More consumer oriented as consumers have a wide choice over the globe and could make comparisons on a larger scale.
18.	Suitable for all types of products and services.	Electronic commerce is not preferred to purchase all types of products and services.
19.	There is a proper commercial and legal system.	Lack of proper commercial and legal system. Prone to virus and security threats.
20.	There is no problem of privacy and security in case of direct purchases.	Lack of privacy and security of personal and payment details.

ADVANTAGES OF E-COMMERCE

BY

DR.J.J.JEYAKUMARI

RESEARCH ADVISOR & ASSISTANT PROFESSOR OF COMMERCE

K.N.GOVT. ARTS COLLEGE FOR WOMEN, (AUTONOMOUS), THANJAVUR – 613 007

1. Global Reach:
There is no geographical boundary. There is a world wide customer reach.

2. 24 x 7 operations:
Anywhere, Anytime Purchase or Sale is possible. 24 x 7 Online shopping is possible.

3. Time Saving:
Only less time is required. E-shopping can be done from home quickly and conveniently. It avoids the hassles of travelling, parking, queuing etc., that makes the shopping hectic in conventional shopping.

4. Speed Accuracy and Easy Access to Documents:
Transactions are processed at high speed and more accuracy. The time required to create, transfer and process a business transaction between trading partners is significantly reduced. Human errors, problems like duplication of records etc., are eliminated. Data processing technology enables easy access of data/documents

5. Cost Savings:

Very less administrative and selling cost. High cost is incurred only in the year of installation of an online store. Also time saved results in cost savings. The cost saving is due to efficient communication, quicker turnaround time, just-in-time inventory and easy access to electronic market. Cost of acquiring and retaining customers is also very less in online shopping.

6. Pull Marketing:

Products as per customer requirements (Tailored to their needs) provided to them. The buyer is more powerful. Web stores largely employs self-service and the customer controls the search process.

7. Improved Customer Service:

Immediate customer feedback is possible. Their queries and grievances are addressed immediately by the sellers. This results in higher customer satisfaction and improved sales. Availability of more reviews help customers to choose the best product or service. More consumer oriented as consumers have a wide choice over the globe and could make comparisons on a larger scale.

8.Opportunities for new Business:
Business over the internet has a global customer reach. Hence there are endless possibilities for businesses to expand their customer base and diversify their product line. It's easy to start and manage a business online. Also Cross promotional activity for any number of products are services are possible online.

9. Improved productivity:
Improvement in speed and accuracy plus easier access to document and information would result in an increase in the productivity.

10. No intermediaries:
Using the internet, one can directly approach the customers and suppliers thus eliminating the lots of middlemen involved in conventional commerce.

11. Market Research and Development:
In E-Commerce there is a huge possibility to track and observe individual customer behaviour. In online marketing you can launch multiple campaigns like questionnaires, SMS, meetings, discussions, star rating etc., to reach a wide range of customers and to know the future needs and expectations of the customers.

Disadvantages of e-commerce

1. There is no physical contact with the customer. This in turn will affect the customer loyalty.

2. There is limited guarantee for quality due to limited sensory information. Also any one whether good or bad can start their business online easily. This may affect the ignorant customers to a large extent.

3. There is a need for certain amount of literacy and technical knowledge. Many firms have problem in recruiting and retaining the employees with the required technical knowledge and skills.

4. Need electronic gadgets with network facilities to purchase/sell online. This may result in technical and mechanical failures. Also there may be software issues which may affect the entire process.

5. The rapid changes and updates in technology too may resist business people and customers from shopping online.

6. The cost and benefits of e-commerce is hard to quantify unlike traditional commerce. Hence it's difficult to anticipate the expected return on investment before starting an e-business.

7. E-commerce transactions are made on trust. Delivery of goods and services takes place on a later date except in case of electronic material. There is uncertainty of delivery until it happens.

8. Electronic commerce is not preferred to purchase all types of products and services. It's not suitable for small denomination transactions as we need to bear a huge delivery cost. People don't prefer to buy perishable products online. Products of high value viz., automobiles, jewelry, real estate etc., normally require a combination of online and traditional shopping. Though there is a possibility for online matrimonial services it's credibility needs to be checked offline.

9. Lack of proper commercial and legal system. E-commerce is still in it's nascent stage in many countries. The legal environment in which e-commerce is conducted is full of unclear and conflicting laws.

10. Lack of privacy and security of personal and payment details. In e-commerce transactions, many issues arise towards the security of personal information and payment details. Many identity thefts are reported and the validity of contracts were found uncertain. E-Commerce is prone to virus and security threats. There is a lot of hackers in the internet waiting for opportunities, hence the e-commerce sites always have a risk of cyber attacks.

11. E-businesses face cultural and traditional obstacles. Most of the customers have a fear of sharing their debit/credit card details over the internet and some are uncomfortable viewing the merchandise on a mobile/computer screen.

E-COMMERCE BUSINESS MODELS

By
Dr.J.J.JEYAKUMARI
Research Advisor & Assistant Professor of Commerce
K.N.Govt. Arts College for Women, (Autonomous),
Thanjavur – 613 007

1. BUSINESS TO BUSINESS – B2B

- B2B E-Commerce involves transactions between organizations and their partners, channels, etc.

- B2B includes inter-organisational transactions.

- Business sells to other business through the internet.

- Facilitates business partnership by reducing processing cost and inventory cycle time.

- For example, www.indiamart.com connects suppliers and retailers.

2. BUSINESS TO CONSUMER – B2C

- **B2C E-Commerce involves direct relationship between the company and its customers over the internet.**

- **There are no intermediaries.**

- **Enables customers to purchase the desired product/service through online shopping sites**

- **From Necessities to luxuries, everything is available to the customer over the internet**

- **For example, www.amazon.in , www.flipkart.com sells products and services directly to the customers**

3. CONSUMER TO BUSINESS – C2B

- Consumer relationship driven business.

- The stress is on faster feedback from customer in order to generate opportunities for improvement of products and services offered by the company.

- The basic idea of this model is "Give the customer what he wants at the price he wants".

- For example, www.priceline.com provides airline tickets, hotel bookings, cruises, cars etc., at the price or any factor as demanded by the customers.

4. CONSUMER TO CONSUMER C2C

- **C2C E-Commerce is the cyber version of the good-old auction houses.**

- **If one wants to sell anything, he can just post a message on the website and the buyer will get in touch with him over the internet and would close the deal.**

- **For example, www.ebay.com , www.olx.in are third party market places and top auction sites where individuals can list goods for customers to bid on.**

5. E-GOVERNANCE

- **This has come into existence with the basic idea of having a smart government that facilitates easily accessible and efficient services such as tax collection, resource management and effective deployment, etc.**

- **For example Central Government sites viz., www.uidai.gov.in www.india.gov.in & State Government sites like www.tn.gov.in, www.kerala.gov.in.**

5.1. BUSINESS TO GOVERNMENT – B2G

- **B2G E-Commerce involves contact between business and government through the internet for filing tax returns, renewal of trade license, etc.**

- **For example, www.incometaxindiaefiling.gov.in, www.gstcouncil.gov.in**

5.2.CONSUMER TO GOVERNMENT – C2G

- C2G E-Commerce involves contact between consumer and government through the internet for getting certificates and licenses, filing income tax returns, payment of water tax, municipality tax, etc.

- For example, www.services.india.gov.in , www.tn.gov.in provides numerous services to the citizens raging from payment of taxes to issue of certificates.

6. BUSINESS TO EMPLOYEE – B2E

- B2E E-Commerce uses an intra business network allowing companies to provide product/service to their employees.

- Typically, companies use B2E network to automate employee related corporate process like online supply request, employee benefit reporting, online insurance policy management, etc.

- For example, Online insurance policy management is made available to the employees via., entities like www.unitedhealthgroup.com , www.starhealth.in , etc.

REQUIREMENTS OF E-COMMERCE

By

Dr.J.J.JEYAKUMARI

Research Advisor & Assistant Professor of Commerce
K.N.Govt. Arts College for Women, (Autonomous),
Thanjavur – 613 007

REQUIREMNTS OF E-COMMERCE

CUSTOMER

E-SELLER
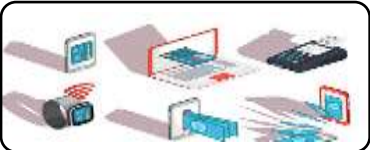
REQUIREMENTS OF E-COMMERCE FOR A CUSTOMER

Internet connectivity

An electronic gadget
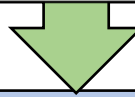
A customer/user account with the concerned e-seller

E-payment facilities
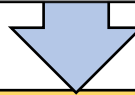
REQUIREMENTS OF E-COMMERCE FOR AN E-SELLER

STAGE I

BECOMING AN ONLINE SELLER (REGISTERING AS A SELLER ONLINE)

STAGE II

CREATION OF A WEBSITE / E-COMMERCE ACCOUNT

STAGE III

TAKING THE WEBSITE LIVE

STAGE I : BECOMING AN ONLINE SELLER (REGISTERING AS A SELLER ONLINE)

 Registration of the company/firm

 Obtaining Vendor's license, Patents and Copyrights

 Fulfilment of GST requirements and obtaining a GSTIN

 Creation of business mail ID

 Agreements with wholesalers/manufactures, if applicable

STAGE II : CREATION OF A WEBSITE / E-COMMERCE ACCOUNT

A business account in social media platforms (viz., Instagram business, Facebook business, Google business, etc.) might do good in case of small scale e-business with negligible capital.

A full-fledged e-business demands an E-Commerce website primarily, whose requirements are listed below:

- A unique Domain name
- A web developer
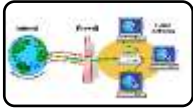
STAGE III : TAKING THE WEBSITE LIVE

Responsive design

Product/Service Catalogue

E-Marketing

Cyber Security (Firewall)

Shopping cart

Chatbot

Payment options

- Registration with E-Payment gateways
- COD facility

Warehousing, Packing, Shipping and Delivery

- Outsourcing a logistics partner
- Building own supply chain

BUSINESS-TO-BUSINESS E-COMMERCE

By
Dr.J.J.JEYAKUMARI
Research Advisor & Assistant Professor of Commerce
K.N.Govt. Arts College for Women, (Autonomous), Thanjavur – 613 007

B2B Transactions/Inter-Organisational Transactions

Business organizations constantly buy and sell goods ad services

- Shops buy products in bulk from suppliers and sell those goods in small quantities to their customers.

- Manufacturers buy raw materials or components from their suppliers, assemble them into new products and sell them to customers.

- Businesses purchase stationaries, office equipments, etc.

- Contract is made for various office amenities like security guard, water, maintenance etc., with different service providers.

THE CREDIT TRANSACTION CYCLE (OR) B2B E-COMMERCE TRADE CYCLE

The trade cycle for inter-organization transactions is generally a credit trade cycle.
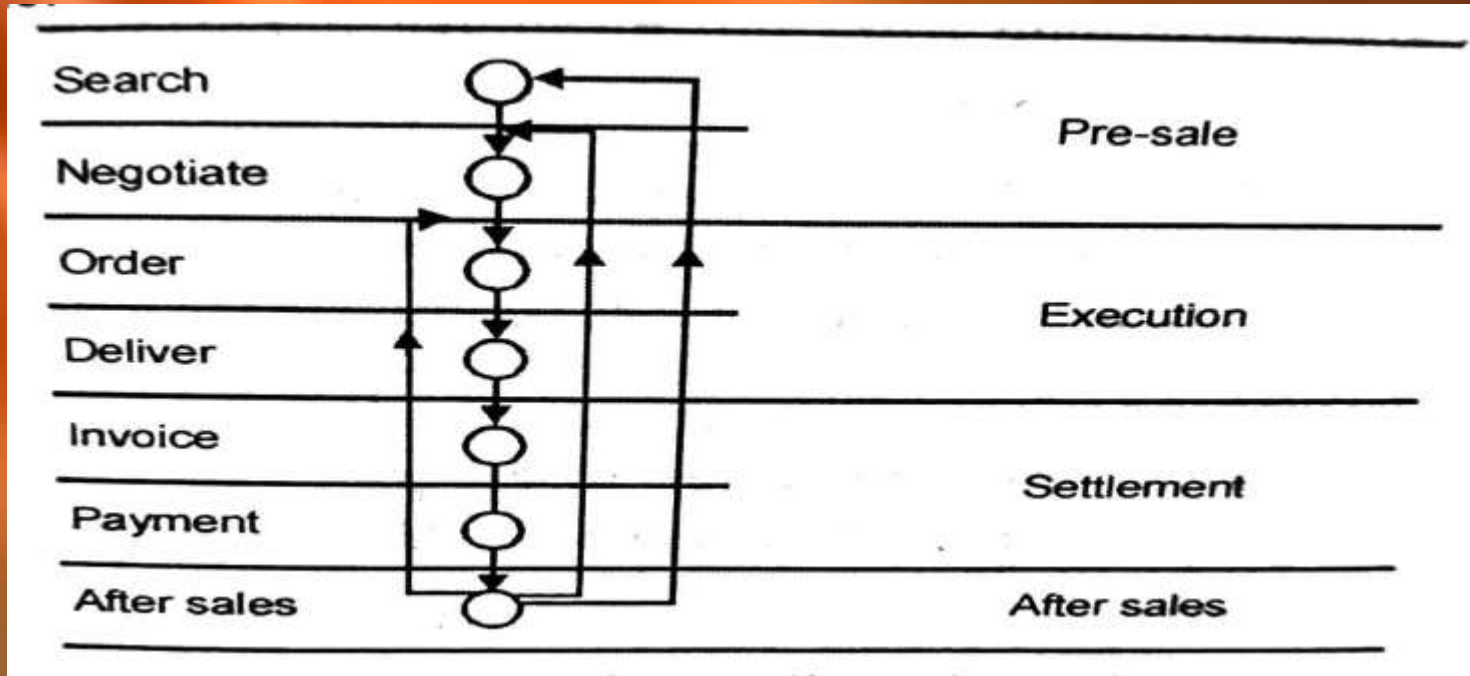
1. PRE-SALES

Before trading starts, the two organizations should contact **(search)** and agree the trading terms **(negotiate)**.

- The customer organization may issue a tender or it may contact a firm, which it knows.
- The supplying organization may check the credit worthiness of the customer.
- Both organizations make an agreement regarding the price of goods, conditions of delivery and terms of payment.
- Most of the supply contracts are in the nature of just-in-time manufacture, which requires quick response of the supplier. The supply contracts are based on specific/exact requirements. Example: Components of vehicles which are specific and have to be delivered in the sequence of cars on production and the lead time may be short as one hour.

2.EXECUTION

Execution consists of requesting the goods **(Order)** and then collecting or receiving them **(Delivery)**.

- Most of the supplies are of significant value and are purchased on regular basis.
- The firms will therefore have formal purchase procedures. (Orders originate from the purchase department through a purchase or stock replenishment computer application).
- The delivery of goods is also formalised. Goods come with a delivery note and it is cross-checked, manually or electronically, with the original purchase order to complete the execution stage.
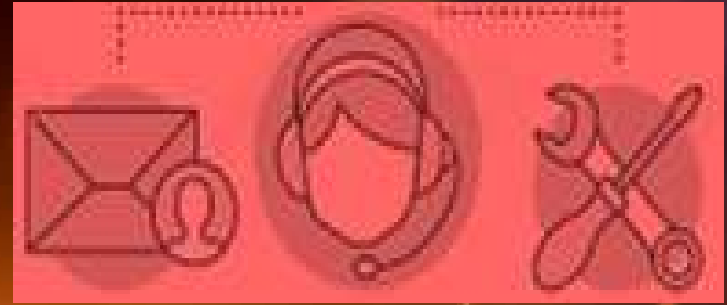
3. SETTLEMENT

The supplier of the goods has to be paid. In case of inter-organizational transactions **payments** usually take place after delivery.

- The supplier sends the **invoice** at the end of the month requesting payment.
- The customer at an agreed stage makes the settlement of accounts.

4. AFTER SALES

- For certain items like machineries, there will be an ongoing process of **warrantee or maintenance**.
- In certain transactions, there may be problems of damaged or faulty goods which needs to be sorted out. **(repair or return/exchange)**

Many of the inter-organizational transactions are repeated on a regular basis. In such case,

- The customer may require changes in process or other conditions of the contract on a periodic basis and here the loop goes back to the negotiation stage.
- The customer may switch (change) to an alternative supplier and hence here he may loop back to the search phase.

TRADE CYCLE DOCUMENT EXCHANGE
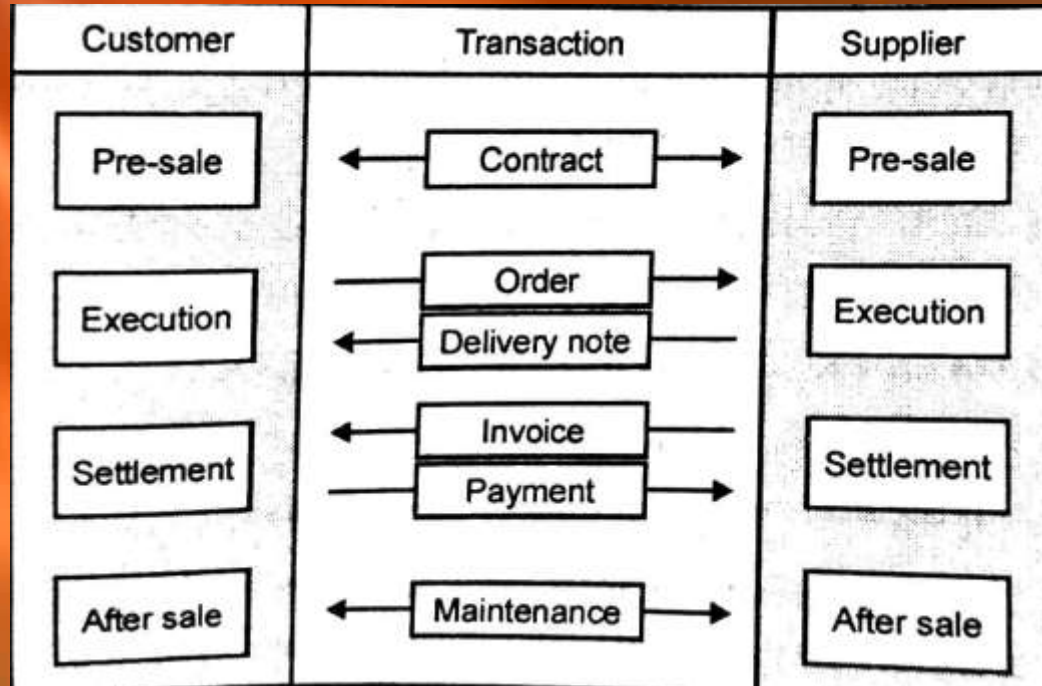
The following document exchanges are for simple transactions. The transactions are complex in nature in case where transport of goods is in the hands of third party (requires consignment notes, bill of lading etc.,) and in case of export transactions (requires custom declaration etc.,). In such cases more number of documents would be exchanged.

- At the time of pre-sales a **contract** is signed by both the parties.
- The business customer places the order by sending an **order** to supplier in a prescribed format
- On executing the order the supplier sends a **delivery note** to the customer.
- The customer will check for delivery of goods and record it in his system.
- The supplier sends the **invoice** to the customer.
- The business customer makes the **payment** which is documented.
- The supplier integrates the order entry system with stock control or production control and checks payment against invoices that are issued.
- Finally the **maintenance contract** is executed.

B2B E-COMMERCE TRENDS

By
DR. J.J.JEYAKUMARI, M.Com., M.Phil., Ph.D., PGDCA., MBA.,
Research Adviser & Asst. Professor Of Commerce,
Kunthavai Naachiyaar Govt. Arts College(W), Autonomous,
Thanjavur-7.

B2B E-Commerce trends in 2020 and beyond

1. Fully personalized online shopping experiences arrive

2. B2B voice commerce takes its first steps

3. Online marketplaces find their niche

4. Augmented and virtual reality (AR and VR) provide functional opportunities in B2B

5. B2B e-commerce becomes eco-conscious

6. Progressive web apps (PWAs) development

1. Fully personalized online shopping experiences arrive

E-commerce functionalities such as **predictive ordering**, **personalization** and **artificial intelligence** (AI) to assist in buying decisions are already present as a top 5 priority for between 18% and 20% of B2B customers. As a result of this growing demand, personalization and predictive analytics will continue to get smarter in 2020.

Combining browsing behaviour, order history, demographics and other available data, e-commerce sites will provide fully customized online shopping experiences. **Users will be served customized product catalogs and even entirely personalized websites, navigation experiences and checkout processes** — all tailored to their individual needs.

2. B2B voice commerce takes its first steps

As the adoption of voice assistants and consequently voice commerce surges voice ordering in online B2B is emerging..

Compared to B2C orders, those in B2B tend to be more complex, but also more repetitive. This provides both challenges and opportunities for B2B voice commerce. On the one hand, buyers often require detailed images and descriptions to explore new products and make the correct selection. On the other, voice commerce lends itself very well to repetitive ordering, where visual aids and long descriptions are no longer needed. It allows repeat customers to quickly and easily place orders hands free, while completing other tasks.

3.B2B online marketplaces find their niche

Online marketplaces will continue to appeal to B2B sellers and customers in 2020. As Sapio's 2019 research into the B2B buying process revealed, only 6% of B2B buyers do not currently use online marketplaces.

Consequently, a sub-trend we're noticing are specialized **niche marketplaces**. Instead of shopping on platforms such as Amazon, where even specific product searches return thousands of hits, niche platforms will provide a more tailored experience and simpler user journeys.

4. Augmented and virtual reality (AR and VR) provide functional opportunities in B2B

When B2B customers shop online, they look for straightforward, quick and accurate experiences. Therefore, in B2B, a big opportunity for AR and VR technology is to serve a functional role: to help customers virtually try out and identify the correct products quickly and easily. This can come in especially handy when it comes to purchasing spare parts and custom designs.

5. B2B E-Commerce becomes eco-conscious

With people across the world and across demographics becoming more conscious of environmental issues at home and at work, displaying and offering more sustainable options in the web store will **give B2B companies a competitive edge**.

Not only that, but companies often also have to report on their emissions and other environmental impact. Optimizing their delivery chain and other e-commerce processes can be key to meeting such targets. This is where e-commerce software and the right system integrations can play a significant role, not only to reduce environmental impact, but also to **increase the efficiency and cost-effectiveness** of ordering and fulfillment processes.

6. Progressive web apps (PWAs) grow their foundations

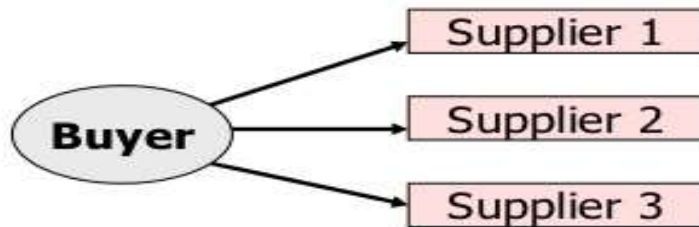Progressive web applications or apps (PWAs) are expected to become a significant B2B e-commerce trend in 2020.

Unlike mobile apps, which are built specifically for Android, IOS etc., PWAs are delivered through the web, and are designed to work across all mobile devices and operating systems. This provides benefits for both companies, who only need to create and maintain a single, generic app; and customers, who no longer need to download and install the app from the app store. PWAs also offer better performance, as well as offline capabilities.
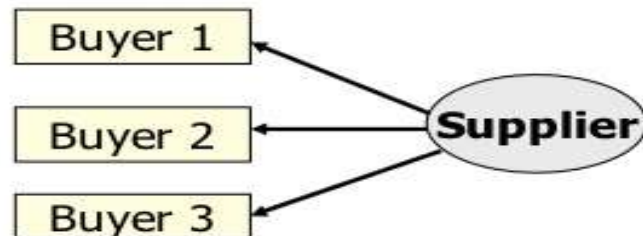
Reference:https://www.sana-commerce.com/blog/b2b-ecommerce-trends/

Basic Models of B2B EC (1)
(Onwership Structure)

Architectural models in B2B e-commerce

- **Buyer Oriented marketplace(eProcurement)** − In this type of model, buyer has his/her own marketplace or e-market. He invites suppliers to bid on product catalogs. A Buyer company opens a bidding site.

- **Supplier Oriented marketplace(eDistribution)** − In this type of model, a common marketplace provided by supplier is used by both individual customers as well as business users. A supplier offers an e-stores for sales promotion.

- **Intermediary Oriented marketplace(eExchange)** − In this type of model, an intermediary company runs a market place where business buyers and sellers can transact with each other.

Four C's

Dr.J.J.Jeyakumari,
Research Adviser & Asst. Professor of Commerce,
K.N.Govt. Arts College (W), Autonomous, Thanjavur-7.

1. <mark>Convergence</mark>

- Convergence is bringing together. Convergence of 3 C's Computing, Consumer electronics and Communication that would make any device with a microprocessor to communicate with every other devices. (Ex. Microwave oven refrigerator, AC etc., being operated from a cell phone etc.).
- Convergence is using a single connection (network) for all types of communication. (Ex. Getting video, internet and phone calls on the same connection).
- Convergence is vital for e-commerce. Usage of standard EDI software by different companies makes convergence possible.

Types of Convergence

1. Product Convergence: Product Convergence include voice signals, videos, news, database etc., which may use the same IP. (Internet Protocol).
2. Network Convergence: Deals with convergence of telephone, coaxial cable, broadcast and wireless networks involved in sending and receiving digital signals.
3. Market Convergence: Involves convergence of Telephone companies, cable operators, Internet service providers etc..
4. Process Convergence: Deals with integration of different processes. For example integration of marketing research process with production process can be done. When online advertisement gets an immediate feedback, it can be used to modify production process.

2. Collaborative Computing

Collaborative computing involves collaboration of various tools and software that helps to accomplish or manage joint work activities. In e-commerce they use non-proprietary uniform business standards which has opened up a world wide market and has broken the geographical boundary. The following e-business collaboration and innovative strategies are used in e-commerce for collaborative computing:

PKM - Product Knowledge Management which includes product-data management tool.

CPC - Collaborative Product Commerce which includes a tool that centre's on non-proprietary standard based technologies.

EDA - E-Design Automation also called Electronic Computer-aided design is a category of software tool for designing electronic systems.

3.Content Management

Content is anything contained on a web including files, software, information, graphics etc.. Content management is the system and method by which the content is updated, changed or reported to the website.

Internet consumers love good content, If good content is provided they are likely to stay in the webpage and learn what is provided, If content is good they would also be visiting the webpages frequently. Content management systems allows for:

- Easy modificataion,
- Updation.
- Distribution of information and tasks between various business solutions,

The Content management activities include:

A. **Content Partnership** - Customisation of content and presentation can be controlled interactively. Supply chain and distribution applications can work in partnership.
B. **Content Repositories** - Through advanced servers contents are stored and are retrieved through queries, license etc., and are put to use by many companies requiring the same data.
C. **Content convergences** - Involves translation of all types of information contents. For example transfer of books, business documents, movies, music etc., into digital information so that it can be easily processed, searched, sorted, filtered, enhanced, compressed, encrypted and transmitted in ways convenient to the e-commerce solutions.
D. **Content providers** - They maintain database where they store the contents and are paid by way of subscriptions and advertisements.

E. Web Traffic and Traffic Management - Web traffic refers to visits to a website. Web traffic jam occurs when the number of visits to a webpage is extraordinarily large and is at the same time. Traffic gives the world an indication of the number of visitors to a website and the information can be used to charge for advertising, to predict companies value, to select the best page to advertise etc. Web traffic could be managed by :

- Increasing server capacity.
- Segregate the time of visit for different user requirements. (ex. IRCTC AC & Non AC bookings)

4.Call Centre

A call centre provides customers with a human voice to talk for service, support and sales information. They operate on a toll-free helpline in most cases. Call centres are used to answer and satisfy customer queries in a best possible way. There are two types of call centres:

- Inbound call centres - Deals with incoming calls.
- Outbound Call Centres - Generates outgoing calls. (ex. Telemarketing, campaigns etc.)