

Introduction

Definitions

- Internet:
 - A collection of computers that speak a common language TCP/IP.
 - The computers are all connected to each other.
 - Information can pass from one computer to another through several other computers.
- World Wide Web (Web):
 - A collection of multimedia hypertext documents that reside on computers, and that can be accessed by other computers on the Internet.

History of The Internet

- Started as a US government project in 1969.
- The purpose was to create a net that can function even if one center is destroyed in a military attack.
 - “Hub and spokes” can be useless if the hub is destroyed.
 - Network can continue to be functional even if some nodes are destroyed, as long as information can pass through other nodes.
- The Arpanet became effective in 1971 with computers on both coasts of the US.

TCP/IP Protocol

- Allows any two computers to communicate and exchange data.
- The Internet transfers data packets among computers.
- Each packet is identified by the sender address and a receiver address.
- The sender's computer transfers the data packet to another computer on the Internet, which transfers it to a chain of other computers until it reaches the final destination.

In the 1980's

- Personal computers or terminals were connected to a server.
- The server was a mainframe, or connected to a mainframe computer.
- The mainframe was connected to another mainframe of the company in another location via dedicated lines.
- Only large companies could afford the expense and investment in equipment.

Today

- Each country has a backbone - computers that are connected by very fast lines.
- Connections across countries and continents is done through dedicated fast lines.
- A company may have one local network (LAN) in NY, which is connected to the Internet through a Regional network.
- The regional network is connected to the backbone.

Today

- The LAN in Latin America is connected to the regional network, and to the country's backbone.
- The country's backbone is connected to the US backbone via dedicated lines.
- In effect, the company was able to create a network (an Intranet) at very low costs.

Web

- Multimedia documents:
 - Text
 - Images
 - Sounds
 - Drawings
 - Video
- Hypertext:
 - Links to other documents
 - Can begin execution of a program

Web Browsers

- Computer programs that can:
 - Display Web documents
 - Follow links
 - Execute other programs
 - Enhance applications such as real-time audio or video
- Netscape and Internet Explorer
- The Microsoft legal trouble due to the Explorer.

Web Servers

- Computers that run server software.
- A server waits for request to arrive from a user.
 - The request is typically for a document.
- The server sends (serves) the document to the requesting computer.
- Sometimes the server allows a user to fill in information on a document, and then transfers the information to another program or a server.

Information on Users and Sites

- Web log file
 - User information
 - Requested documents
- Cookies
 - Information stored on a PC's hard drive by the site.
 - Enables the site to identify the user.
 - Enables profiling.
 - Enables targeted advertising.

E-Commerce

- Transformation of economic activity into digital media
 - Exchange information, content, agreements, and services among parties that are connected to through the Internet.
- Enables new ways of creating, delivering and capturing value to customers.
 - Superior information
 - Convenience

The Evolution of New Businesses

- Infrastructure
 - Telecommunications, hardware, cable, ISP
- Supporting services
 - AOL, browsers, payment and banking systems, directories, security of systems and transactions.
- Content
 - Media, portals, exchanges (EBAY)

Old Economy Firms

- Brick and Mortar companies need to adopt to the new economy
 - Create a new Internet company.
 - Create a new subsidiary.
 - Invest in an Internet competitor.
 - Buy the technology from a consultant.
 - Work with other firms to create an exchange.
 - Integrate with suppliers and or customers.

Old Economy Firms

- Failure of old economy companies to adopt may result in:
 - Loss of market share.
 - Inability to meet new economy competitors' prices.
 - Reduced profits and cash flows.
 - Inability to raise new financing.
 - Loss of control in an acquisition by a new economy firm.

Summary

- The Internet revolutionized ways of doing business.
- Entrepreneurs found ways to exploit market failures and earn economic rents.
- New businesses were created that were not feasible earlier.
- The new economy poses threats to old economy firms that do not wish to adapt.
- The transformation is still in process. The evolution continues.

E-Commerce and E-Business

Commerce

- Commerce is a division of trade or production which deals with the **exchange of goods and services from producer to final consumer.**

Question?

- The Internet provide a better Opportunity for doing business for :
 - Large firms
 - Small firms
 - Equally for both

E-Commerce and E-Business

- People mean different things when talk about e-commerce.
- You must define what YOU are talking or writing about!.

E-Commerce

- E-Commerce covers **outward-facing** processes that touch customers, suppliers and **external** partner, including sales, marketing , delivery, or customer service, that take place over an electronic network.

E-Business

- E-business involves
 - Digital enablement of transactions and processes *within a firm*, involving information systems under the control of the firm.

Definition for e-commerce

- A universally accepted definition does not exist.
- The following definition is appropriate:
 - *Exchange goods and services over the internet.*

Electronic Commerce

- Is it just a technology?

- Is it just a methodology?

Electronic Commerce

- Technology (Tools) *that enable* Methodology (Processes).
- Tools like WWW , Java , ASP , PHP , Web Service
- Processes Like Supply chain integration , Just time inventory , electronic markets.

History of e-commerce

- Doing business electronically existed before the Internet burst onto the business scene.
- EDI (electronic data Interchange) preceded e-commerce
 - EDI is the electronic exchange of structured document between trading partners across private networks.

Impact of the Internet

- The internet is ubiquitous because it is affordable technology and it's widely accepted standards.
 - *Easy, spreading and publish.*

E-commerce: A Brief History

- 1995–2000: Innovation
 - Key concepts developed
 - Dot-coms; heavy venture capital investment
- 2001–2006: Consolidation
 - Emphasis on business-driven approach
- 2006–Present: Reinvention
 - Extension of technologies
 - New models based on user-generated content, social networking, services

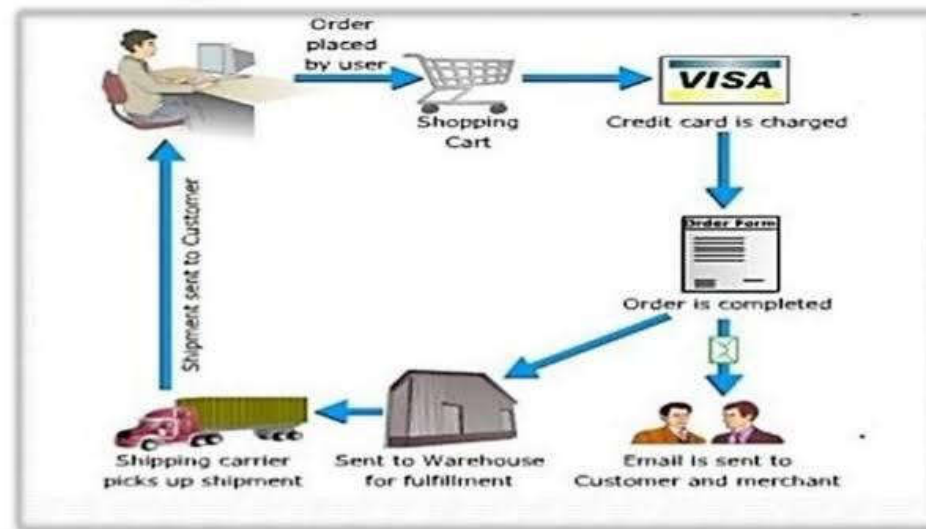
Why e-commerce?

- It is the achievement of **COMPETITIVE ADVANTAGE** Which lies at the core of Strategic management.

The process of E-commerce



Process of E-commerce



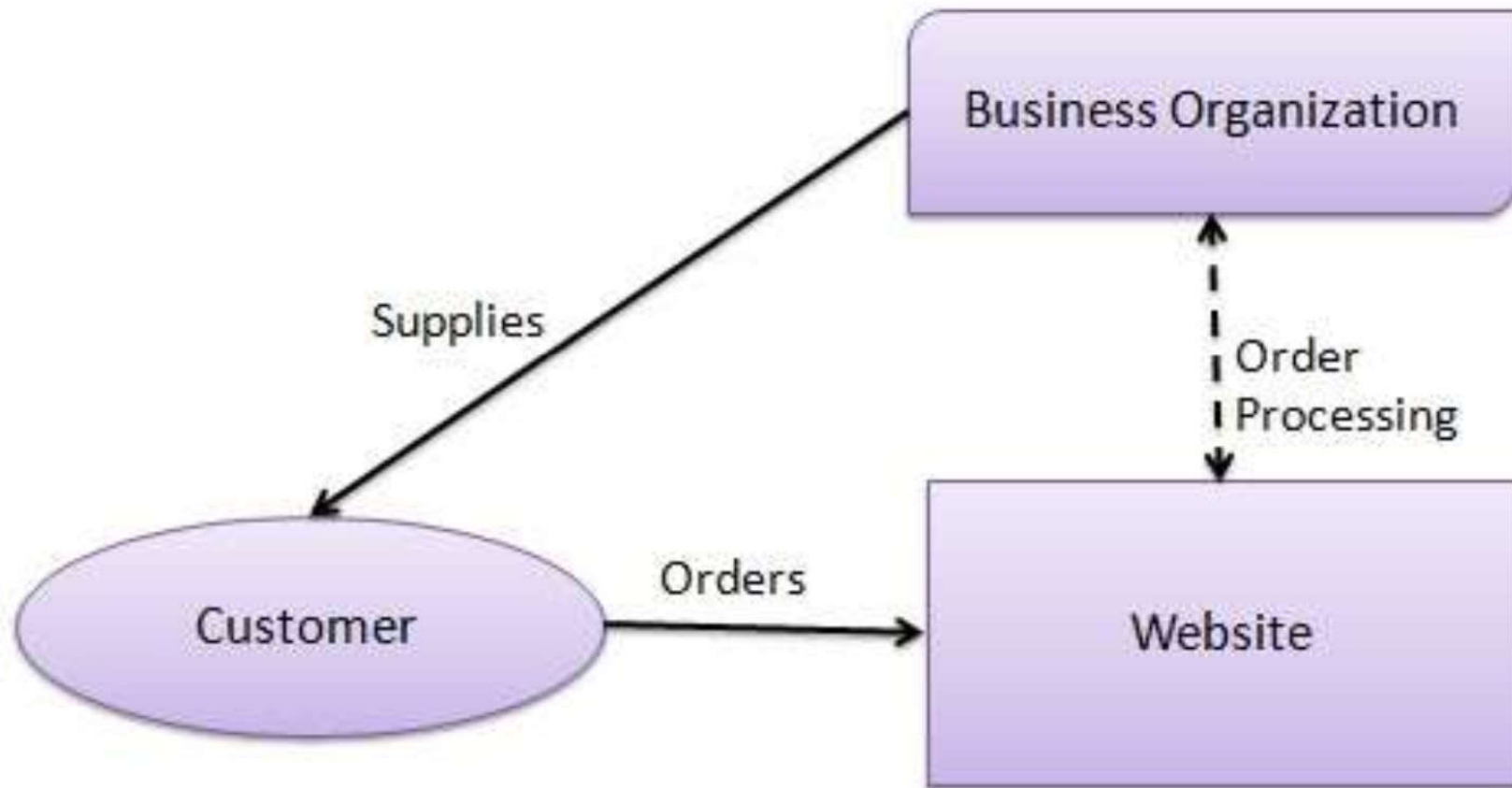
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Types of E-commerce

- Business-to-Consumer (B2C)
- Business-to-Business (B2B)
- Consumer-to-Consumer (C2C)
- Business-to-government (B2G)
- Government to consumer (G2C)
- Government-to-business (G2B)

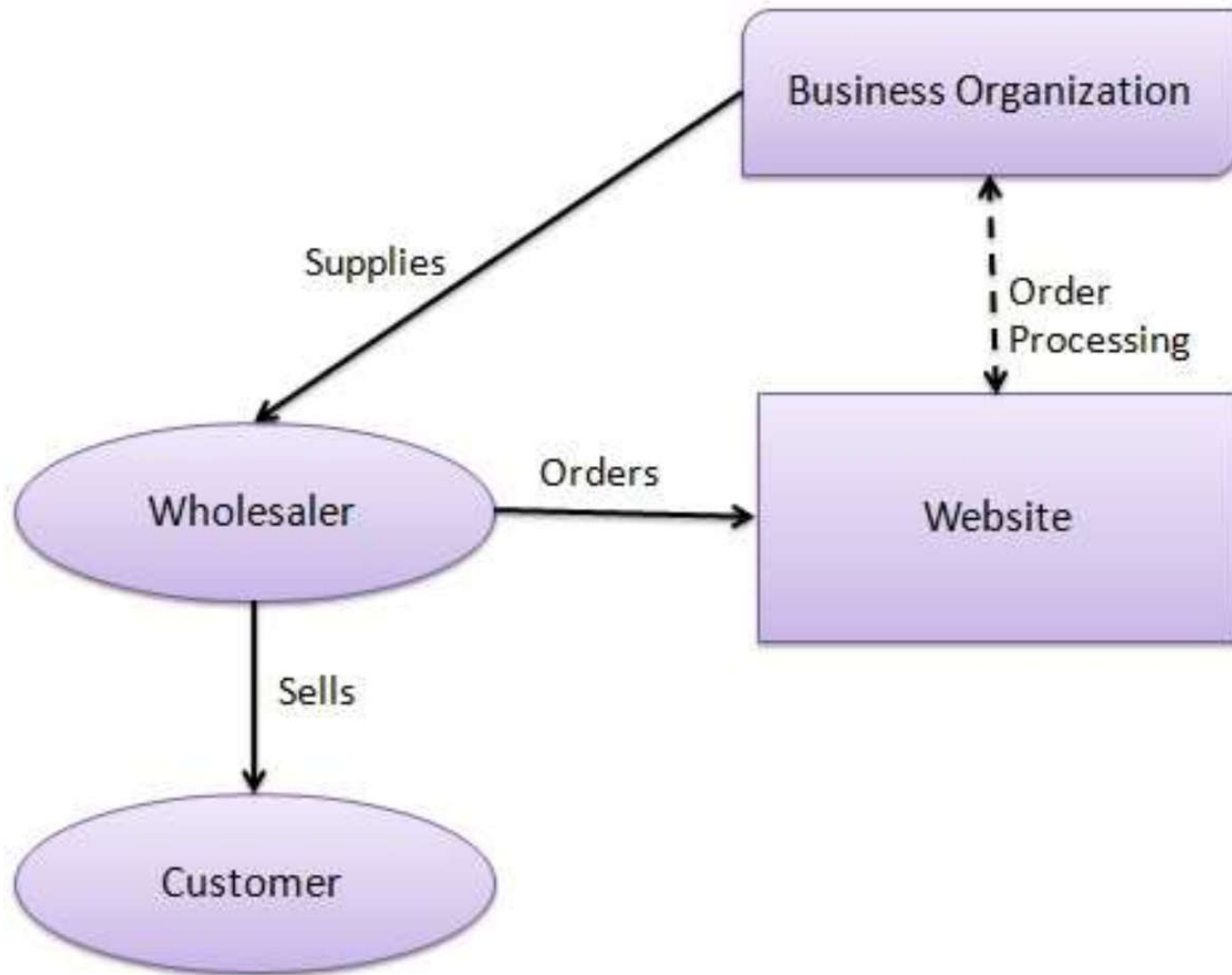
What is B2C ecommerce?

- Business-to-consumer e-commerce, or commerce between companies and consumers, involves customers gathering information; purchasing physical goods or receiving products over an electronic network.
- Offer directly to customer through an interface
 - Example:
 - Booking and purchase of airline tickets.
 - Online book store (Amazon.com)
 - Dell selling me a laptop



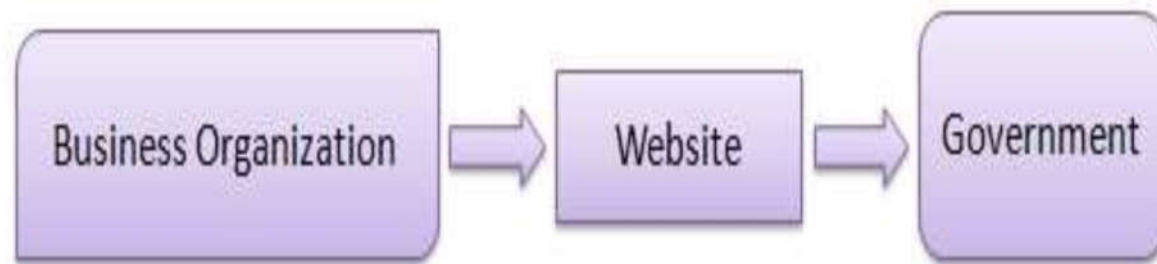
What is B2B e-commerce?

- Aims at integrating business processes between two or more enterprise.
- B2B e-commerce is simply defined as ecommerce between **companies**. About 80% of e-commerce is of this type.
- Example:
 - Linking requested orders (from company A, the seller) to company B (the shipping company)
 - Intel selling microprocessor to Dell
 - Heinz selling ketchup to Mc Donalds



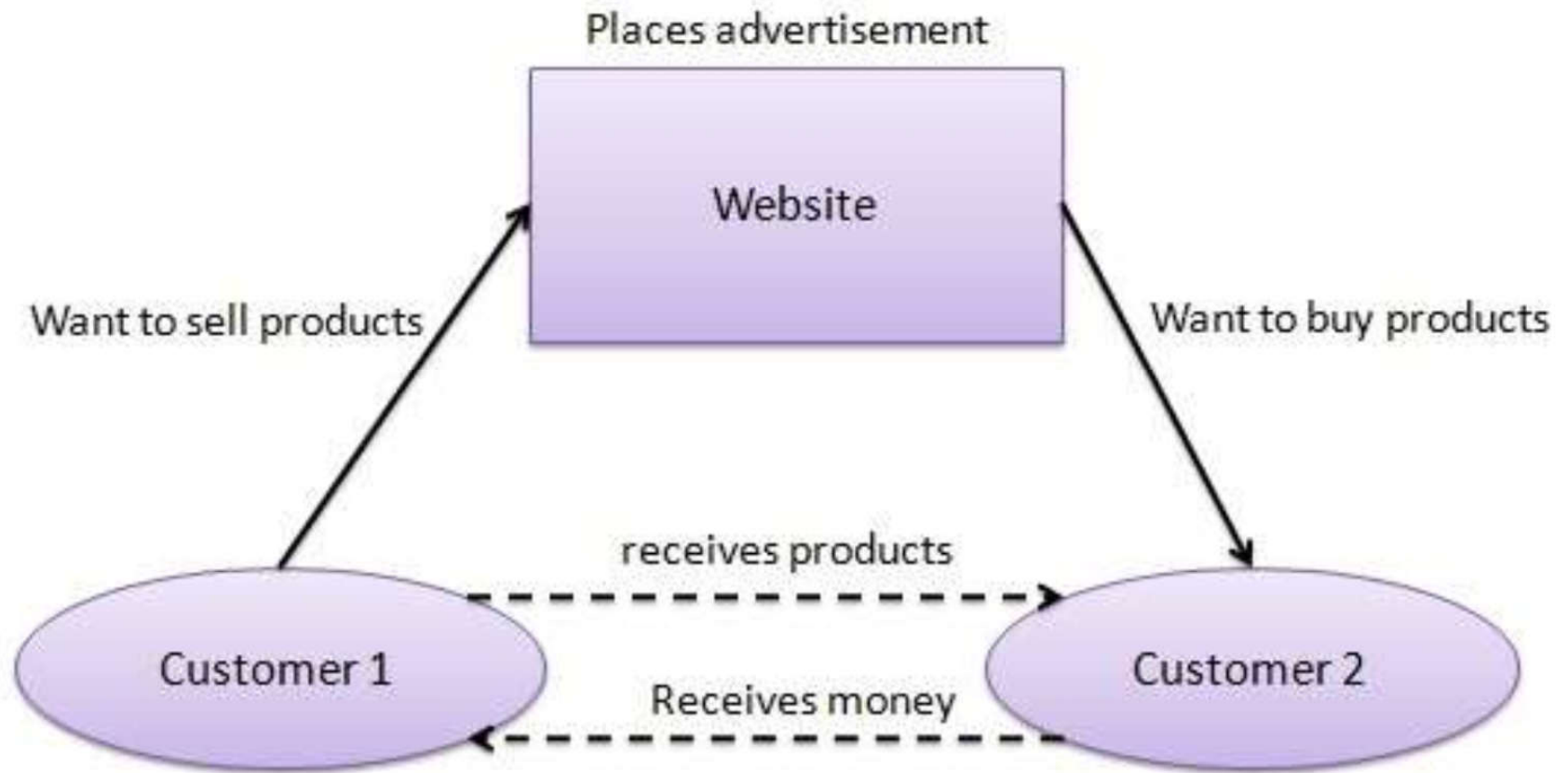
What is B2G ecommerce?

- Business-to-government e-commerce or B2G is generally defined as **commerce between companies and the public sector**. It refers to the use of the Internet for public procurement, licensing procedures, and other government-related operations
- **Example:**
 - Business pay taxes, file reports, or sell goods and services to Govt. agencies.



What is C2C ecommerce?

- Consumer-to-consumer e-commerce or C2C is simply commerce between private individuals or consumers
- Concern the consumers who run negotiations with other consumers sometimes utilizing as intermediary a company
 - Examples:
 - Ebay.
 - Selling a car to my neighbor



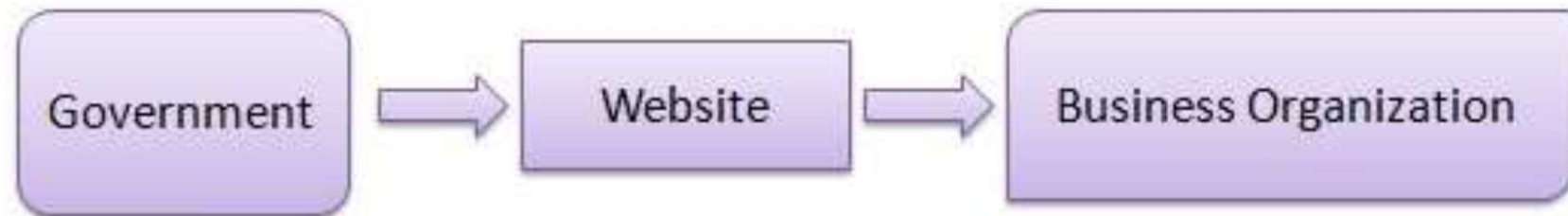
G2C E-commerce

- This Model is also a part of **e-governance**.
 - The objective of this model is to provide **good and effective services** to each citizen.
 - The Government provides the following facilities to the citizens through website.
 - Information of all government departments,
 - Different application forms to be used by the citizens.



G2B E-commerce

- Government-to-business (G2B) is a business model that refers to government providing services or information to business organization.
- Government uses B2G model website to approach business organizations.
- Such websites support **auctions, tenders and application submission functionalities.**



Advantages of e-commerce

- Faster buying/selling procedure, as well as easy to find products.
 - Buying/selling 24/7.
 - More reach to customers, there is no theoretical geographic limitations.
 - No need of physical company set-ups.
 - Customers can easily select products from different **providers without moving around physically.**

E-commerce Problems

- Privacy
- Authenticity
- Security