TISHK INTERNATIONAL UNIVERSITY
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Lecture 2

Introduction to E-commerce II

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Adapted from
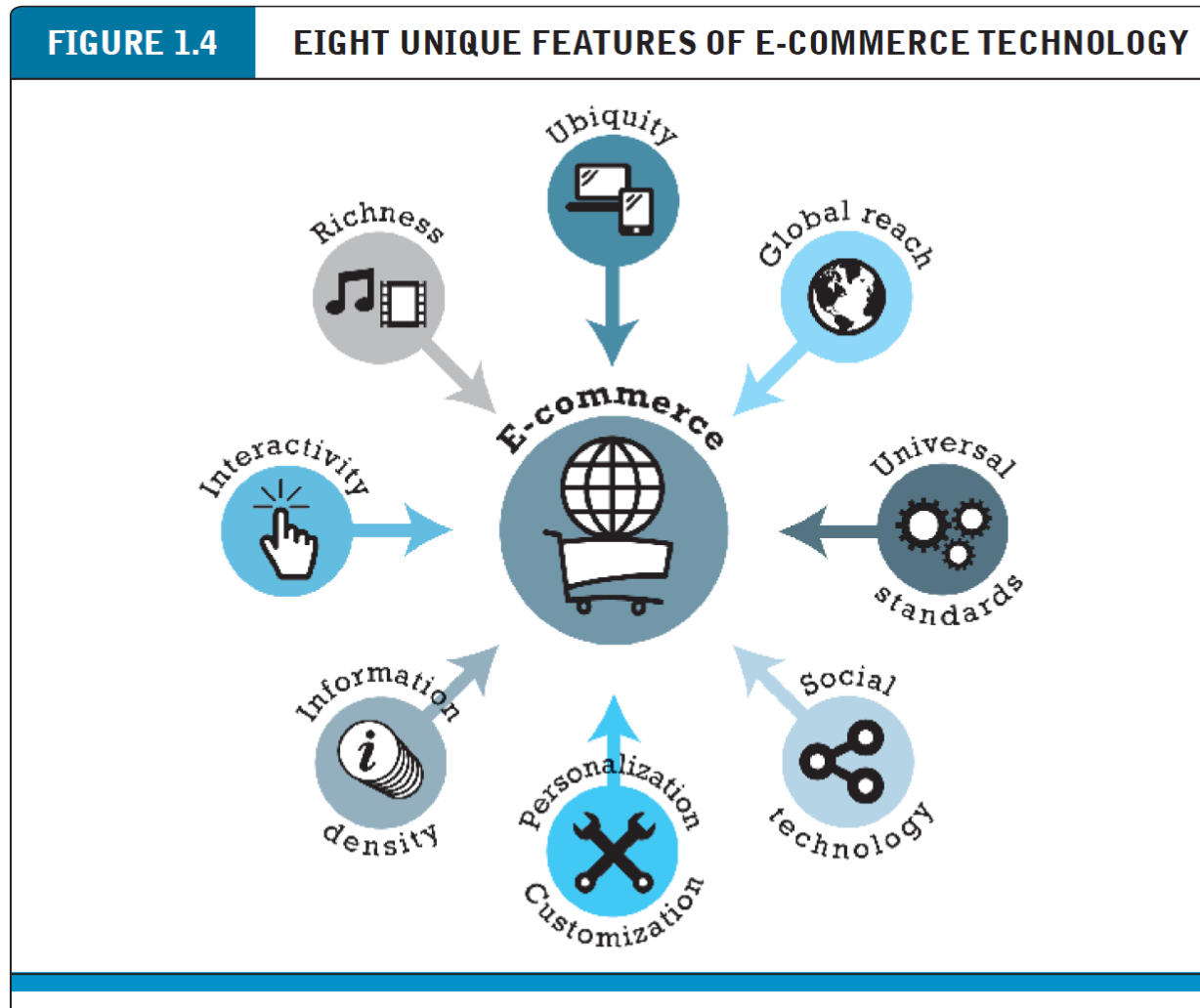**E-commerce 2021–2022: business. technology. society**

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Objectives

- Identify and describe the unique features of e-commerce technology and discuss their business significance.

- Describe the major types of e-commerce.

- Discuss the benefits of e-commerce to organizations and consumers.

- Describe the major themes underlying the study of e-commerce.

- Understand the evolution of e-commerce from its early years to today.

Eight Unique Features of E-commerce Technology

FIGURE 1.4   EIGHT UNIQUE FEATURES OF E-COMMERCE TECHNOLOGY

E-commerce technologies provide a number of unique features that have impacted the conduct of business.

Eight Unique Features of E-commerce Technology

1. Ubiquity

2. Global reach

3. Universal standards

4. Information richness

5. Interactivity

6. Information density

7. Personalization and customization

8. Social technology

Eight Unique Features of E-commerce Technology

1. Ubiquity

- In traditional commerce, a <u>marketplace</u> is a physical place you visit in order to transact. For example, television and radio typically motivate the consumer to go someplace to make a purchase.

- E-commerce, in contrast, is characterized by its ubiquity: **<u>Ubiquity</u>—available just about everywhere, at all times, making it possible to shop from your desktop, at home, at work, or even from your car.** The result is called a <u>marketspace</u>—a marketplace extended beyond traditional boundaries and removed from a temporal and geographic location.

Eight Unique Features of E-commerce Technology

2. Global reach

- <u>Global reach</u>—permits commercial transactions to cross cultural and national boundaries far more conveniently and cost effectively than is true in traditional commerce. As a result, the potential market size for e-commerce merchants is roughly equal to the size of the world's online population.

- In contrast, most traditional commerce is local or regional—it involves local merchants or national merchants with local outlets.

Eight Unique Features of E-commerce Technology

3. Universal standards

- The technical standards of the Internet is same, and therefore the technical standards for conducting e-commerce are <u>universal standards</u>—they are shared by all nations around the world.

- In contrast, most traditional commerce technologies differ from one nation to the next.

Eight Unique Features of E-commerce Technology

4. Information Richness

- <u>Information richness</u> refers to the complexity and content of a message.
- Traditional markets and retail stores have great richness: they are able to provide personal, face-to-face service when making a sale.
- <u>Richness</u>—enables an online merchant to deliver marketing messages in a way not possible with traditional commerce technologies.

Eight Unique Features of E-commerce Technology

4. Information Richness (continued)

- E-commerce technologies have the potential for offering considerably more information richness than traditional media such as printing presses, radio, and television because they are interactive and can adjust the message to individual users. Chatting with an online salesperson, for instance, comes very close to the customer experience in a small retail shop.

- The richness enabled by e-commerce technologies allows retail and service merchants to market and sell "complex" goods and services.

Eight Unique Features of E-commerce Technology

5. Interactivity

■ Interactivity—technology that allows for two-way communication between merchant and consumer and enables the merchant to engage a consumer in ways similar to a face-to-face experience, but on a much more massive, global scale.

Eight Unique Features of E-commerce Technology

5. Interactivity (continued)

Examples of interactivity:

1) Comment features
2) Community forums
3) Social networks with social sharing functionality such as <u>like</u> and <u>share buttons</u> all enable consumers to actively interact with merchants and other users.
4) Forms that notify the user of a problem as they are being filled out.
5) Search boxes that autofill as the user types.

Eight Unique Features of E-commerce Technology

6. **Information density**

- E-commerce technologies vastly increase information density.
- <u>Information density</u>—is the total amount and quality of information available to all market participants.

Eight Unique Features of E-commerce Technology

6. Information density (continued)

A number of business consequences result from the growth in information density:

1. <u>Price transparency</u> refers to the ease with which consumers can find out the variety of prices in a market.

2. <u>Cost transparency</u> refers to the ability of consumers to discover the actual costs merchants pay for products.

3. <u>Price discrimination</u>—selling the same goods, or nearly the same goods, to different targeted groups at different prices in order to maximize sales and profits.

Price Discrimination

- Price discrimination is a selling strategy that charges customers different prices for the same product or service based on what the seller thinks they can get the customer to agree to.

- Many industries, such as the airline industry and the arts/entertainment industry use price discrimination strategies.

- Examples of price discrimination include issuing coupons, applying specific discounts (e.g., age discounts), and creating loyalty programs.

Price Discrimination (continued)

- One example of price discrimination can be seen in the airline industry:
  - ❖ Consumers buying airline tickets several months in advance typically pay less than consumers purchasing at the last minute.
  - ❖ When demand for a particular flight is high, airlines raise ticket prices in response. By contrast, when tickets for a flight are not selling well, the airline reduces the cost of available tickets to try to generate sales.
  - ❖ Because many passengers prefer flying home late on Sunday, those flights tend to be more expensive than flights leaving early Sunday morning.

Eight Unique Features of E-commerce Technology

7. Personalization and customization

- **<u>Personalization</u>** the targeting of marketing messages to specific individuals by adjusting the message to a person's name, interests, and past purchases.

- Example: Creating personalized product recommendations is an effective strategy for companies with an e-commerce site.

- This is a common tactic where you suggest products related to what someone just bought or is about to buy. Suggestions are based on other customers' past purchase histories when they bought a similar product.

Eight Unique Features of E-commerce Technology

7. Personalization and customization

- After a customer makes a purchase, redirect them either to a landing page that shows "customers also buy" recommendations or send a post-purchase email that includes these recommendations.

- Alternatively, be even more proactive with your recommendations by showing these products at checkout before the customer completes their purchase.

Eight Unique Features of E-commerce Technology

7. Personalization and customization

- **Customization** changing the delivered product or service based on a user's preferences or prior behavior.

  - ❖ Customers love creating customized t-shirts and bags with unique materials and colors.

  - ❖ The furniture industry can also benefit from product customization, such as carpets, tables, and kitchen accessories.

Eight Unique Features of E-commerce Technology

8. **Social technology**

■ **Social technology**—provides a many-to-many model of mass communications. Millions of users are able to generate content consumed by millions of other users.

BUSINESS SIGNIFICANCE OF THE EIGHT UNIQUE FEATURES OF E-COMMERCE TECHNOLOGY

Table 1.2 provides a summary of each of the unique features of e-commerce technology and their business significance.

TABLE 1.2	BUSINESS SIGNIFICANCE OF THE EIGHT UNIQUE FEATURES OF E-COMMERCE TECHNOLOGY
E-COMMERCE TECHNOLOGY DIMENSION	**BUSINESS SIGNIFICANCE**
Ubiquity—E-commerce technology is available everywhere: at work, at home, and elsewhere via mobile devices, anytime.	The marketplace is extended beyond traditional boundaries and is removed from a temporal and geographic location. "Marketspace" is created; shopping can take place anywhere. Customer convenience is enhanced, and shopping costs are reduced.
Global reach—The technology reaches across national boundaries, around the earth.	Commerce is enabled across cultural and national boundaries seamlessly and without modification. "Marketspace" includes potentially billions of consumers and millions of businesses worldwide.
Universal standards—There is one set of technology standards.	There is a common, inexpensive, global technology foundation for businesses to use.
Richness—Video, audio, and text messages are possible.	Video, audio, and text marketing messages are integrated into a single marketing message and consuming experience.
Interactivity—The technology works through interaction with the user.	Consumers are engaged in a dialog that dynamically adjusts the experience to the individual and makes the consumer a co-participant in the process of delivering goods to the market.
Information density—The technology reduces information costs and raises quality.	Information processing, storage, and communication costs drop dramatically, while currency, accuracy, and timeliness improve greatly. Information becomes plentiful, cheap, and accurate.
Personalization/Customization—The technology allows personalized messages to be delivered to individuals as well as groups.	Enables personalization of marketing messages and customization of products and services based on individual characteristics.
Social technology—User-generated content and social networks.	Enables user content creation and distribution and supports development of social networks.

Types of E-commerce

- *we distinguish different types of e-commerce by the nature of the market relationship—who is selling to whom. Mobile and social e-commerce can be looked at as subsets of these types of e-commerce.*

1) **Business-to-Consumer (B2C)**

2) **Business-to-Business (B2B)**

3) **Consumer-to-Consumer (C2C)**

4) **Social e-commerce**

5) **Mobile e-commerce (M-commerce)**

Types of E-commerce (continued)

1) **Business-to-Consumer (B2C)**

B2C e-commerce involves businesses selling to consumers and is the type of e-commerce that most consumers are likely to encounter.

Types of E-commerce (continued)

Business-to-Consumer (B2C)

Example:

- **Amazon** is a general company that sells products to customers.

Types of E-commerce (continued)

Business-to-Consumer (B2C)

Example:

- ## Walmart

Walmart is an American multinational retail corporation that operates a chain of hypermarkets.

Types of E-commerce (continued)

Business-to-Consumer (B2C)

Example:

- ## H&M

is a multinational clothing company based in Sweden. Its focus is fast-fashion clothing for men, women, teenagers, and children.

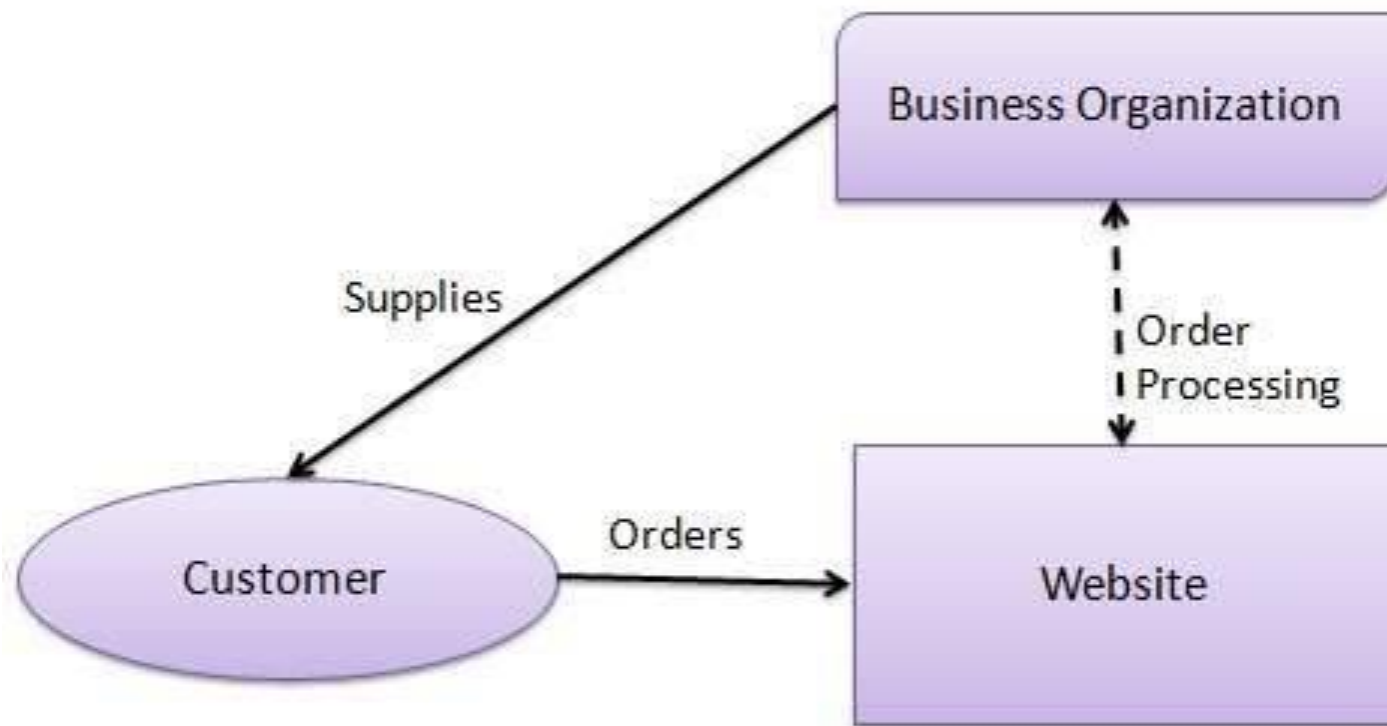# Types of E-commerce (continued)

■ **Business-to-Consumer (B2C)**

Figure: B2C business model

Types of E-commerce (continued)

2) **Business-to-Business (B2B)**

B2B e-commerce involves businesses selling to other businesses and is the largest form of e-commerce.

Types of E-commerce (continued)

Business-to-Business (B2B)

Example:

- ## Metalshub

Metalshub is an independent third-party marketplace that serves the metals industry.

metals**hub**

Types of E-commerce (continued)

Business-to-Business (B2B)

Example:

- ### Grammarly for Business

Grammarly for Business is built for teams to ensure their communication and writing is professional and clear.

Types of E-commerce (continued)

Business-to-Business (B2B)

- A **wateholesaler** goes to the **Business Organization's website** to order products in bulk.

- The Business Organization **processes** the order and **supplies** the products to the **wholesaler**.

- When the wholesaler receives the products, then the wholesaler can sell those same products at a high price to their customers.

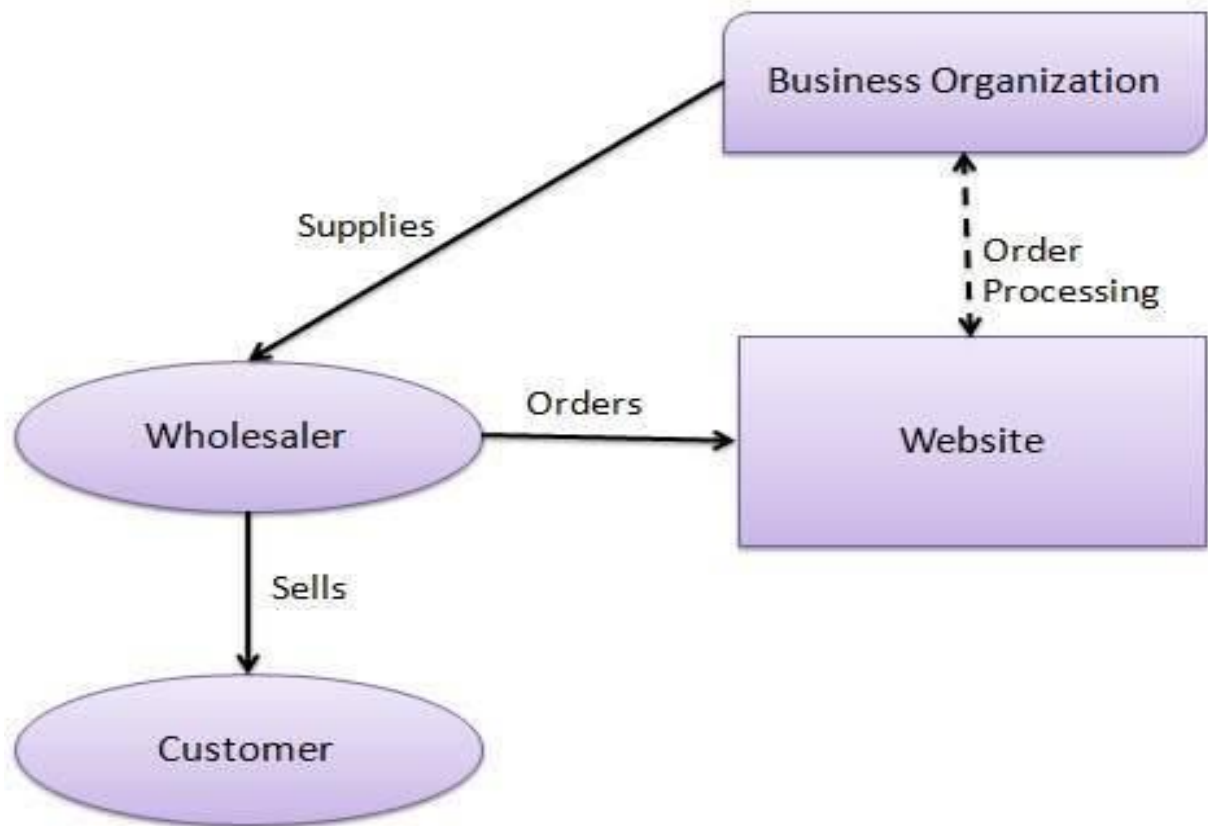# Types of E-commerce (continued)

■ **Business-to-Business (B2B)**

Figure: B2B business model

Types of E-commerce (continued)
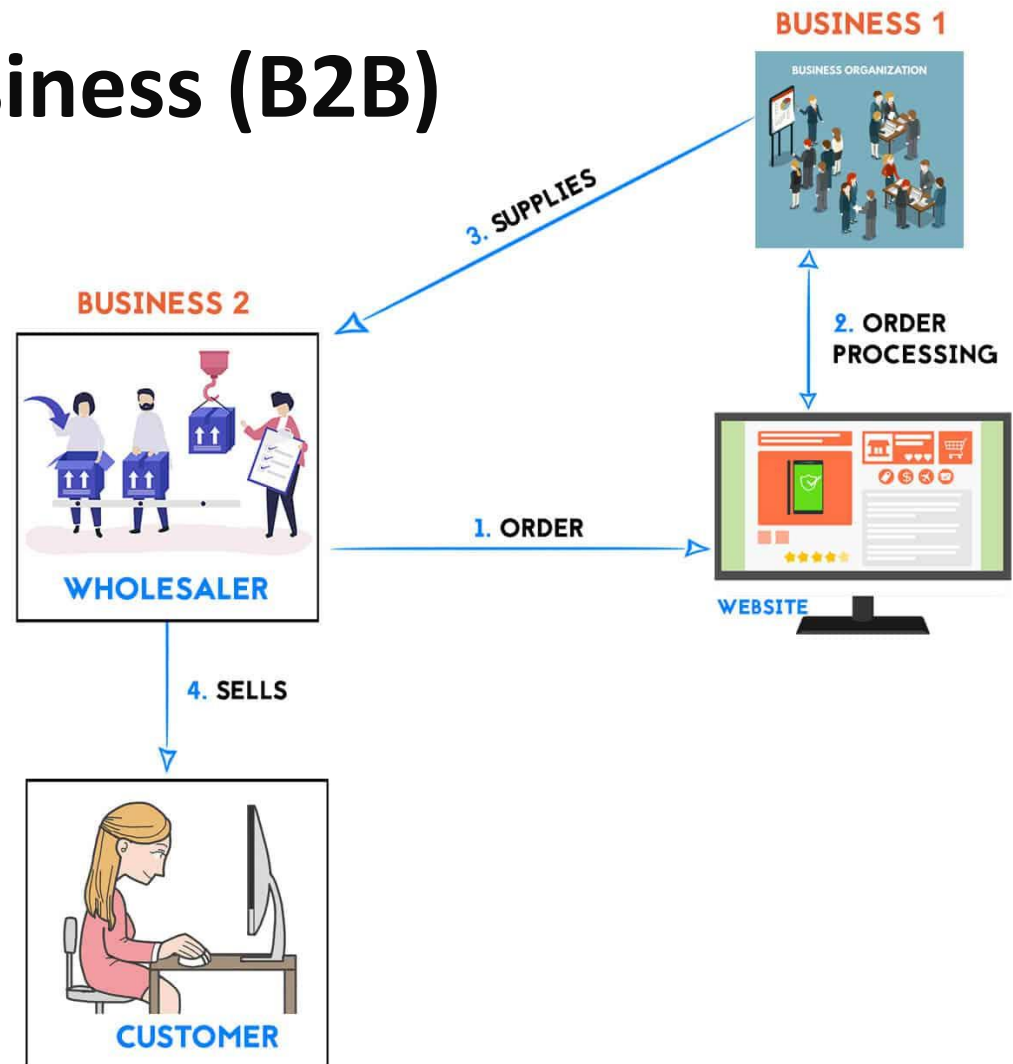
■ **Business-to-Business (B2B)**

Figure: B2B business model

Types of E-commerce (continued)

3)   Consumer-to-Consumer (C2C)

- **C2C e-commerce** is a means for consumers to sell to each other.

- In **C2C e-commerce**, the consumer prepares the product for market, places the product for auction or sale, and relies on the market maker to provide catalog, search engine, and transaction clearing capabilities so that products can be easily displayed, discovered, and paid for.

Types of E-commerce (continued)

Consumer-to-Consumer (C2C)

Example:

eBay

- eBay is an American multinational e-commerce company based in California, that facilitates consumer-to-consumer (C2C) sales through its website.

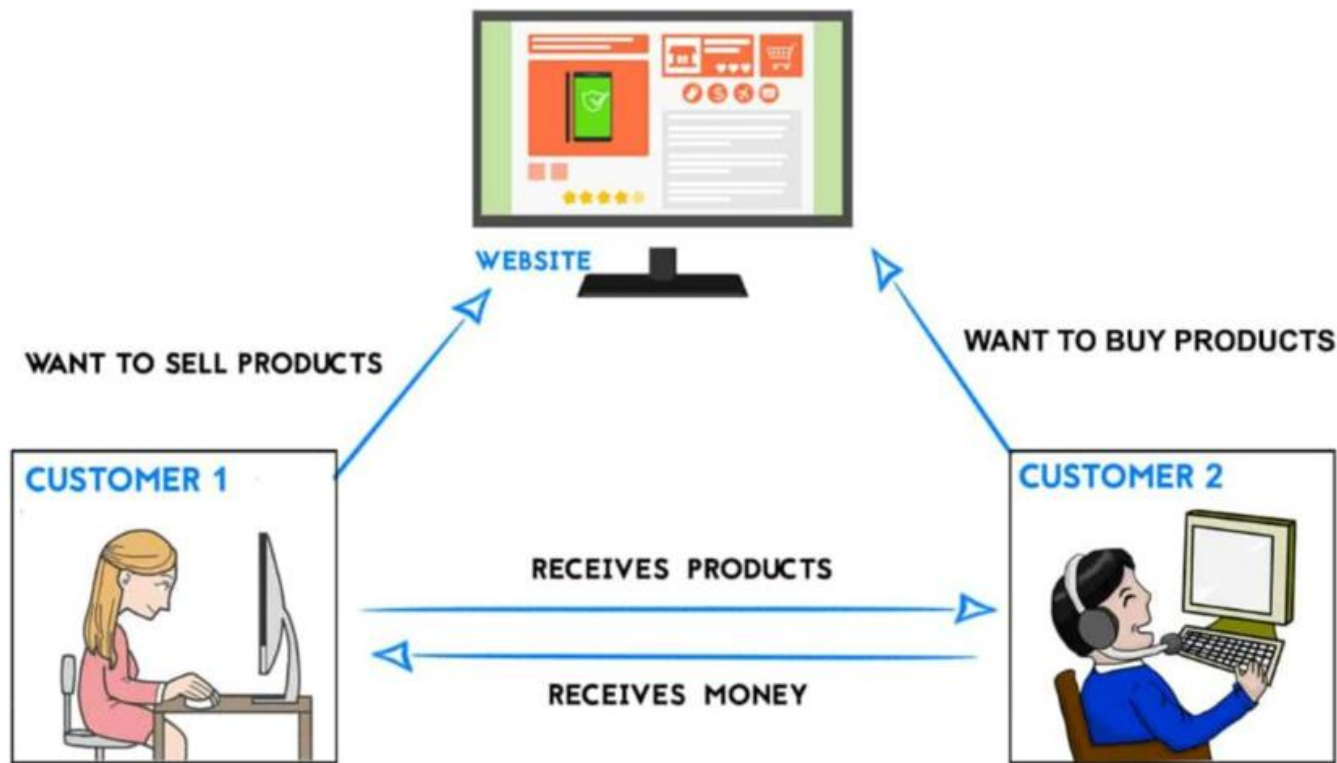# Types of E-commerce (continued)

Consumer-to-Consumer (C2C)

Example:

Etsy

- Etsy is a global online marketplace, where people come together to make, sell, buy, and collect handmade and unique items.

Etsy

Types of E-commerce (continued)

■ Consumer-to-Consumer (C2C)

Figure: C2C business model

Types of E-commerce (continued)

4) **Social e-commerce**

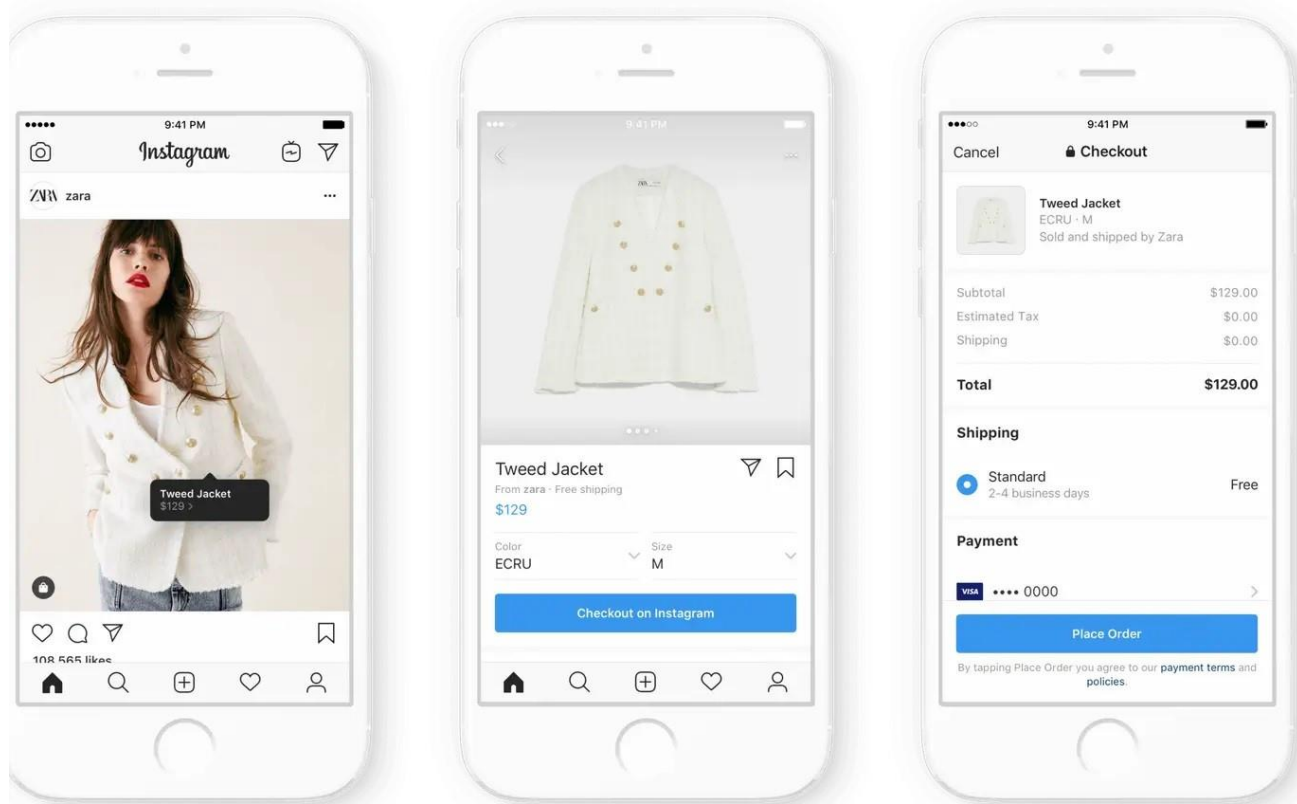**Social e-commerce** e-commerce enabled by social networks and online social relationships.

- Total social commerce revenues worldwide in 2020 were estimated to be around $90 billion (Business Wire, 2020).

Example: Facebook is both the leading social network and social e-commerce site.

Types of E-commerce (continued)

4) **Social e-commerce**

Instagram

Types of E-commerce (continued)

5) **Mobile e-commerce (M-commerce)**

M-commerce involves the use of wireless digital devices to enable online transactions.

Example: Mobile devices such as tablet computers and smartphones can be used to conduct commercial transactions.

Benefits of E-commerce

E-commerce provides huge benefits to Organizations and Consumers

1) **Benefits of E-commerce to Organizations**

2) **Benefits of E-commerce to Consumers**

Benefits of E-commerce

Benefits of E-commerce to Organizations

1. **International marketplace**

What used to be a single physical marketplace located in a geographical area has now become a borderless marketplace including national and international markets. By becoming e-commerce enabled, businesses now have access to people all around the world.

2. **Operational cost saving**

The cost of creating, processing, distributing, storing and retrieving paper-based information has decreased.

3. **Mass customization**

E-commerce has revolutionized the way consumers buy products and services. Now customers can configure a product according to their specifications within minutes on-line via the website.

4. **No time constraints**

Businesses can be contacted by at any time.

Benefits of E-commerce

E-commerce provides huge benefits to Organizations and Consumers

1) **Benefits of E-commerce to Organizations**

2) **Benefits of E-commerce to Consumers**

Benefits of E-commerce

Benefits of E-commerce to Consumers

1. **24/7 access**

Enables customers to shop or conduct other transactions 24 hours a day, all year round from almost any location.

2. **More choices**

Customers not only have a whole range of products that they can choose from and customize, but also an international selection of suppliers.

3. **Price comparisons**

Customers can 'shop' around the world and conduct comparisons directly by visiting different sites.

4. **Improved delivery processes**

This can range from the immediate delivery of digitized or electronic goods such as software or audio-visual files by downloading via the Internet, to the on-line tracking of the progress of packages being delivered.

5. **An environment of competition**

Where substantial discounts can be found or value added, there are different retailers for customers.

Describe the major themes underlying the study of e-commerce.

E-commerce involves three broad interrelated themes:

1) **Technology**

2) **Business**

3) **Society**

Describe the major themes underlying the study of e-commerce.

E-commerce involves three broad interrelated themes: Technology, Business, and Society

1) Technology

To understand e-commerce, you need a basic understanding of the information technologies upon which it is built, including the Internet, the Web, and mobile platform, and a host of complementary technologies—cloud computing, desktop computers, smartphones, tablet computers, local area networks, client/server computing, protocols such as TCP/IP, web servers, HTML, and databases.

Describe the major themes underlying the study of e-commerce.

E-commerce involves three broad interrelated themes: <u>Technology, Business, and Society</u>

2. Business

While technology provides the infrastructure, it is the business applications—the potential for extraordinary returns on investment—that create the interest and excitement in e-commerce. Therefore, you also need to understand some key business concepts such as electronic markets, business models, industry structure, and consumer behaviour in digital markets.

Describe the major themes underlying the study of e-commerce.

E-commerce involves three broad interrelated themes: Technology, Business, and Society

3. **Society**

Understanding the pressures that global e-commerce places on society is critical to being successful in the e-commerce marketplace. The primary societal issues are intellectual property and individual privacy.

Understand the evolution of e-commerce from its early years to today.

E-commerce has gone through three stages: **Invention**, **consolidation**, and **reinvention**.

1) **E-commerce 1995–2000: Invention**

■ The early years of e-commerce were a technological success, with the digital infrastructure created during the period solid enough to sustain significant growth in e-commerce. During this Invention period, e-commerce meant selling retail goods, usually quite simple goods, on the Internet. This period of e-commerce came to a close in 2000 when stock market valuations plunged, with thousands of companies disappearing (the "dot-com crash").

Understand the evolution of e-commerce from its early years to today.

E-commerce has gone through three stages: **Invention**, **consolidation**, and **reinvention**.

1) **E-commerce 1995–2000: Invention**

- Market middlemen—the distributors and wholesalers who are intermediaries between producers and consumers, each demanding a payment and raising costs while adding little value—would disappear (disintermediation).

- Disintermediation-displacement of Market middlemen who traditionally are intermediaries between producers and consumers by a new direct relationship between producers and consumers.

Understand the evolution of e-commerce from its early years to today.

E-commerce has gone through three stages: **Invention**, **consolidation**, and **reinvention**.

1) **E-commerce 1995–2000: Invention**

■ In this new marketspace, extraordinary profits would go to the first movers— those firms who were first to market in a particular area and who moved quickly to gather market share.

Understand the evolution of e-commerce from its early years to today.

E-commerce has gone through three stages: **Invention**, **consolidation**, and **reinvention**.

2) **E-COMMERCE 2001–2006: CONSOLIDATION**

■ E-commerce entered a period of consolidation beginning in 2001 and extending into 2006.

■ Emphasis shifted to a more "business-driven" approach rather than being "technology driven"; large traditional firms learned how to use the Web to strengthen their market positions; brand extension and strengthening became more important than creating new brands.

Understand the evolution of e-commerce from its early years to today.

E-commerce has gone through three stages: **Invention**, **consolidation**, and **reinvention**.

2) **E-COMMERCE 2001–2006: CONSOLIDATION**

- During this period of consolidation, e-commerce changed to include not just retail products but also more complex services such as travel and financial services. This period was enabled by widespread adoption of broadband networks in American homes and businesses, coupled with the growing power and lower prices of personal computers that were the primary means of accessing the Internet.

- E-commerce in this period was growing again by more than 10% a year.

Understand the evolution of e-commerce from its early years to today.

E-commerce has gone through three stages: **Invention**, **consolidation**, and **reinvention**.

3) **E-COMMERCE 2007–PRESENT: REINVENTION**

- E-commerce entered a period of reinvention in 2007 with the emergence of the mobile digital platform, social networks, and Web 2.0 applications that attracted huge audiences in a very short time span.

- More recently, the reinvention of e-commerce has resulted in a set of on-demand, personal service businesses such as Uber, Careem, and etc.

REFERENCES

- **Laudon, K. C., & Traver, C. G. (2021). *E-commerce 2021–2022: business. technology. society*. Pearson Education Limited.**

Review Questions (Lec1&Lec2)

- **Q1: List the unique features of e-commerce technology, then discuss two of these features in detail.**

- **Q2: List the five types of e-commerce, then explain two of these types in detail.**

- **Q3: Define Business-to-Consumer (B2C) E-Commerce with an example, then draw a figure illustrating the Business-to-Consumer (B2C) model.**

- **Q4: Define Business-to-Business (B2B) E-Commerce with an example, then draw a figure illustrating the Business-to-Business (B2B) model.**

- **Q5: Define Consumer-to-Consumer (C2C) E-Commerce with an example, then draw a figure illustrating the Consumer-to-Consumer (C2C) model.**

Review Questions (Lec1&Lec2)

- **Q6: Define the following:**
  - ➢ **Business-to-Consumer (B2C) E-Commerce**
  - ➢ **Business-to-Business (B2B) E-Commerce**
  - ➢ **Consumer-to-Consumer (C2C) E-Commerce**
  - ➢ **Social E-Commerce**
  - ➢ **Mobile E-Commerce (M-Commerce)**
- **Q7: List the benefits of e-commerce to organizations.**
- **Q8: Explain the benefits of e-commerce to organizations.**
- **Q9: List the benefits of e-commerce to consumers.**
- **Q10: Explain the benefits of e-commerce to consumers.**

Review Questions (Lec1&Lec2)

- **Q11: Describe the major themes underlying the study of e-commerce.**

- **Q12: Describe the three different stages in the evolution of e-commerce.**

- **Q13: How does the ubiquity of e-commerce impact consumers?**

- **Q14: _____ is the use of Internet, Web and mobile apps to digitally enabled commercial transactions between and among _____ and _____.**

- **Q15: E-business is _____.**

- **Q16: _____ primarily involves transactions that cross firm boundaries.**

- **Q17: _____ primarily involves the application of digital technologies to business processes within the firm.**

Review Questions (Lec1&Lec2)

- **Q18: _____ is the worldwide network of computer networks built on common standards.**

- **Q19: _____enables access to the Internet via wireless networks or cell-phone service.**

- **Q20: E-commerce involves three broad interrelated themes: _____ , _____ , and _____.**

- **Q21: E-commerce has gone through three stages: _____ , _____ , and _____ .**

- **Q22: E-commerce is the use of Internet, Web and mobile apps to digitally enabled _____between and among _____ and _____.**

- **Q23: The _____provides access to Web pages.**

- **Q24: E-commerce is _____.**