

HDMT-1308

Technology, Business and  
Society

Unit 02

Current Issues in E commerce: E-Government, E-Learning,  
Sharing Economy and P2P Commerce, IoT

E-Commerce: Basic Concepts

# Section A

E-Commerce:  
Basic Concepts

# E-Commerce: Definition

## ■ E-Commerce (EC):

- The use of internet, web and digitally enabled means of business activities.
- Examples:
  - Buying on Amazon, Zalora, Rakuten or other online platforms
  - Subscribing Netflix, HBO or other online movies channels
  - Booking tickets on Klook
  - Using mobile payments in convenient-stores
  - Any kinds of commercial online games
  - **Using online banking apps to manage bank accounts**
  - **Using Zoom to deliver lectures to the students (customers)**
  - **Promotion on internet, IG, FB, YouTube**
  - (... many others)

# E-Commerce

- E-commerce **brings forth changes** in
  - **B**usiness: the way firms doing businesses in the new era
  - **T**echnology: the use of new technologies to facilitate business performance
  - **S**ociety: how people, the whole community and the economy change caused by the popularity of EC

B T S

# Changes with EC: **B**usiness

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- **724** operations + global presence
- Using ***social media and new media*** heavily
  - e.g. IG, FB, twitter, vlog, YouTube
- Create own **special days** and events
  - e.g. Single's day (11/11), Amazon Prime day, Queen's day
- Online retails (e-tailing) grow significantly
- Who can enter the **mobiles** of the customers become the winners
- New business models emerges to compete/complement with traditional businesses
  - e.g. Uber, Deliveroo, Klook, Expedia, AirBnB, ...
- (What else?)

# Changes with EC: **T**echnology

- **Mobile** technology – more powerful hardware which can support more sophisticated applications
  - e.g. GPS, cam, sensors
- Faster telecommunications – connect everything instantly and able to communicate instantly, e.g. IoT
- **Cloud** computing – customer data and software are available anytime anywhere on the net
- **Big Data** and Data Analytics – firms now can collect large amount of data to make better decisions
- Virtual Reality (**VR**) and Augmented Reality (**AR**) to improve user experience
  - E.g. real-estate agencies use VR/AR to demonstrate properties; VR/AR games; VR/AR movies
- Cyber-currencies and block-chain technology to improve transaction security and anonymity
- What else???

# Changes with EC: Society

- **Users generate contents** on social media
  - A new challenge for public relation management
  - The emergence of KOLs: A new way to promote and to sell products
- Create many **new jobs**, e.g. SOHO sellers, courier, social media copywriters
  - \*SOHO = Small Office and Home Office
- More spams and frauds (cyber crimes)
- More complicated laws and legal issues, e.g. copyrights, contracts
- Taxation problems
- **Privacy** issues: customers' behaviors and acts are monitored closely by websites and apps
- What else???



# Section B

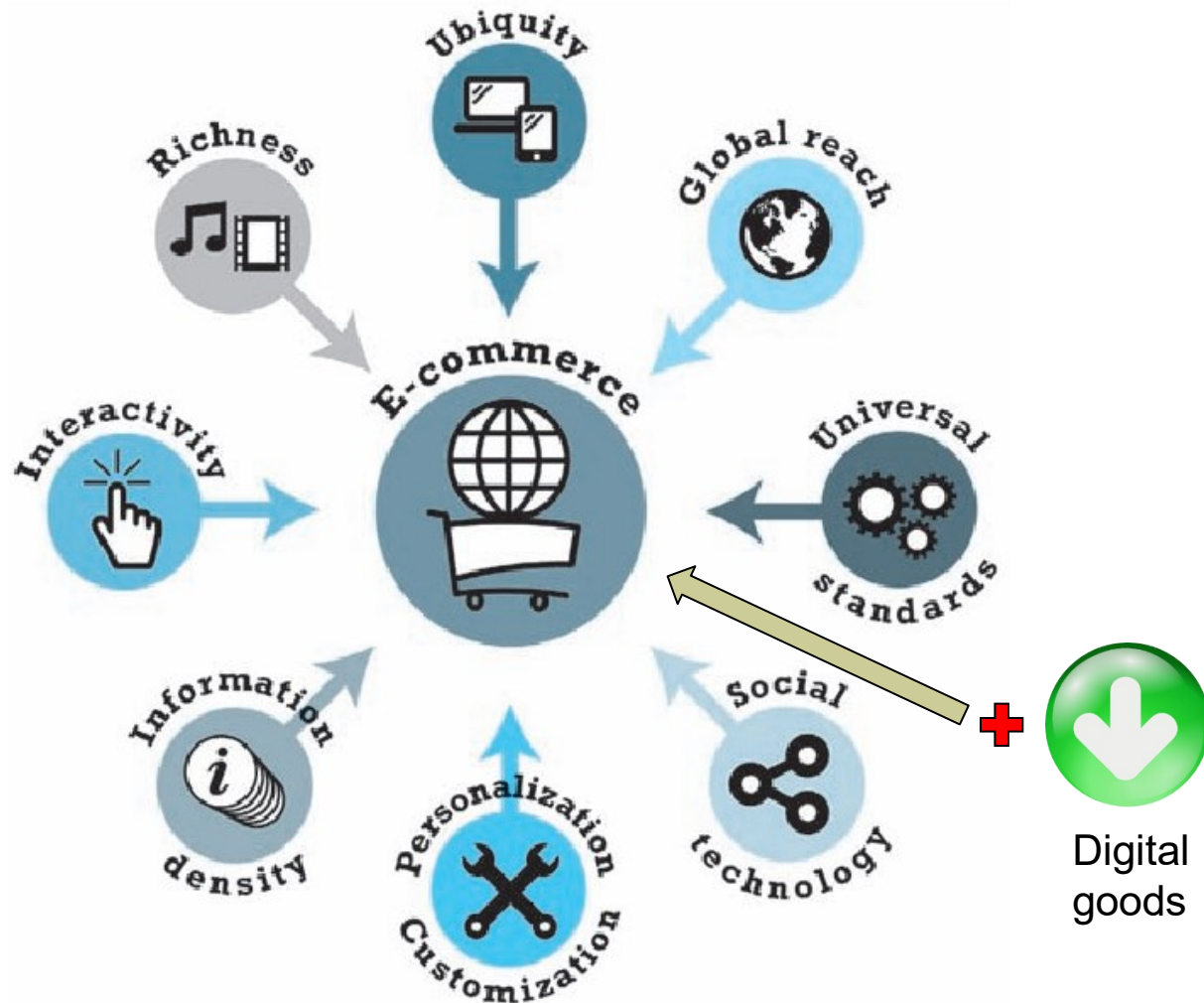
Uniqueness of EC:  
(The Unique Features of E-Commerce)



# Why EC is Different?

FIGURE 1.2

EIGHT UNIQUE FEATURES OF E-COMMERCE TECHNOLOGY



# Uniqueness of EC...

## ■ 1. Ubiquity:

- In traditional business, buyers and sellers need a physical marketplace to do transactions, e.g. buy in supermarket / convenient-store
- In EC mode, transactions are conducted in **marketspace**.
  - **Marketspace**—a marketplace extended beyond traditional boundaries and removed from a temporal and geographic location
- From a consumer point of view, ubiquity reduces **transaction costs**—the costs of participating in a market.
  - Don't need to waste time and money traveling to the marketplace
  - Less mental effort is required in making purchases
  - More (transparent) information is available
- Customer convenience is enhanced, and shopping costs are reduced

# Uniqueness of EC...

## ■ 2. Global Reach

- EC permits commercial transactions to **cross cultural** and national **boundaries** far more conveniently and cost effectively
- The marketspace includes, potentially, billions of consumers and millions of businesses worldwide.

## ■ 3. Universal Standard


- There is one set of technology standards, namely Internet standards.

With one set of technical standards across the globe, disparate computer systems can easily communicate with each other.

- E.g. build a EC website, which is accessible worldwide by PCs, Mac, Android devices, iOS devices, Linux, etc.



# Uniqueness of EC...

## ■ 4. (Information) Richness

-  how an insurance agent sends and explains a proposal to her customer in traditional way? Have a 30-60 minutes face-to-face meeting with the customers?
- Information richness refers to the complexity and content of a message.
- In traditional market, salespersons can provide rich information by face-to-face contact. However, there is a trade-off between richness and reach. The larger the audience reached, the less rich the message.
- EC can allow both high-degree richness and reach at the same time. Products and sales information are provided in video, audio, graphs, social media and text. The information is accessible anytime anywhere.


# Uniqueness of EC...

## ■ 5. Interactivity

-  How do you ask for more details after seeing an interesting product in a magazine? (traditional scenario)
-  But there are usually online customer service officer in a corporate website. (online scenario)
- e-commerce technologies are interactive, meaning that they allow for two-way communication between merchant and consumer.
  - Radio and magazines, for instance, cannot ask the audience questions and enter into conversations with them.
- Interactivity allows an online merchant to engage a consumer in ways similar to a face-to-face experience but on a massive, global scale.


# Uniqueness of EC...

## ■ 6. Information Density

-  Are you smart enough to “shop” around on the net before making a purchase? Is it easy to get the shopping information you want?
- **Information Density** -- the total amount and quality of information available to all market participants, including both consumers, and sellers.
- Advantages:
  - Information density in e-commerce markets make prices and costs more transparent
  - It allows sellers to segment the market into groups that are willing to pay different prices.
  - It allows sellers to update information more frequently than traditional methods


# Uniqueness of EC...

## ■ 7. Personalization/Customization

-  Do you feel that the ads shown in your phone are targeted specifically for you? It's like someone know you and tailor-make the contents for you.
- Do you feel that the products shown on the online shopping platforms are well-planned to meet your preference?
- With **personalization**, sellers can target their marketing messages to specific individuals by adjusting the message to a person's clickstream behavior, name, interests, and past purchases.
- The technology also permits **customization**— changing the delivered product or service based on a user's preferences or prior behavior.
  - E.g. You can't choose the news in a traditional TV broadcast. But you are allowed to select the news stories with an online news app.

# Uniqueness of EC...

## ■ 8. Social Technology

-  Everyone can be a/an author/speaker/actor now. We write a post / or broadcast a video and then hundreds to millions audience read/watch it.
- The technology supports **content generation** and **social networking**.
- New Internet social and business models enable user content creation and distribution, and support social networks.
- The spread of product/service information is exponentially faster and wider than traditional means of promotions, which significantly enlarges the business opportunities.



# Uniqueness of EC...

## ■ 9. Digital Goods

- The Internet digital marketplace has greatly expanded sales of digital goods.
- **Digital goods** are goods that can be delivered over a digital network,
  - e.g. music, videos, magazines, books, software, and so on.
- the marginal cost of producing another unit is about zero (e.g. it costs nothing to make a copy of a music file).
- It is also more convenient for customers to buy, get and use digital goods instantly.

# Section C

Business Models and Revenue Models of  
E-Commerce

# EC Business Models

- There are many ways to classify e-commerce business models.
- We are going to discuss on two perspectives:
  - The relationship between the participants involved (buyers and sellers)
  - The business natures of or the roles played by the e-commerce owners



# EC Models – By Natures of Participants

- The two typical types of participants in an e-commerce models are:
  - Business (firms)
  - Consumers
- Based on these participants, several different models are evolved:
  - Business-to-Consumer (B2C)
  - Business-to-Business (B2B)
  - Consumer-to-Consumer (C2C)
  - Consumer-to-Business (C2B)

# EC Models – By Natures of Participants

## ■ Business-to-consumer (B2C)

- This model involves a firm (business) operates its own e-commerce facilities (website, apps, online shop) to sell products or services to individual shoppers (consumers).
  - E.g. cp1897.com, Pizzahut.com.hk, McDonald's app

## ■ Business-to-business (B2B)

- It involves sales of goods and services among businesses.
  - E.g. a chemical wholesaler runs a website for its business customers (factories) to buy chemicals online

# EC Models – By Natures of Participants

## ■ Consumer-to-consumer (C2C)

- This model involves the operation of an online platform so that consumers can sell directly to consumers.
  - E.g. ebay, taobao, Carousel, FB Marketplace

## ■ Consumer-to-business (C2B)

- Theoretically this model involves individual consumers sell something to business firms.
- Alternatively, C2B more often refers to the online platforms that consumers can request offers from different businesses.
  - E.g. hotels.com, agoda.com, ctrip.com,

# EC-Model

## ■ **Online-to-offline (O2O)**

- This model does not focus on participants involved.
- It is a model describing that a firm integrate and coordinate online business with traditional offline business,
  - e.g.
  - HKTVMall has physical shops for customers to pick up goods and view demo products;
  - online customer of JapanHomeCity can opt to pick the goods at any physical branch.

# EC Models – By Business Natures

- How do you describe the business natures of the following e-commerce firms:
  - Yahoo.com
  - Google.com
  - Amazon.com
  - Facebook / Instagram / Twitter
  - HBO / Netflix





# EC Models – By Business Natures

Category	Description
E-tailers	Sells <b>physical products</b> directly to consumers or to individual businesses; e.g. ???
Content providers	Creates revenue by providing digital content, such as news, music, photos, or video, over the web. The customer may pay to access the content, or revenue may be generated by selling advertising space. e.g. news apps, Netflix
Transaction brokers	Saves users money and time by processing online sales transactions and generating a fee each time a transaction occurs. e.g. house28.com, deliveroo, Uber, stock broker apps
Market creators	Provides a digital environment where buyers and sellers can meet, search for products, display products, and establish prices for those products. Can serve consumers or B2B e-commerce, generating revenue from transaction fees e.g. amazon, ebay, carousel

# EC Models – By Business Natures

Category	Description
Community providers	Provides an online meeting place where people with similar interests can communicate and find useful information. E.g. LinkedIn, Pinduoduo, Groupon
Portal	Provides initial point of entry to the Web along with specialized content and other services. E.g. Yahoo.com, Bing, MSN.com, QQ.com
Service providers	Provides Web 2.0 applications such as photo sharing, video sharing, and user-generated content as services. E.g. ??? Provides other services such as online data storage and backup. E.g. ???
Supporting service providers	Provides services for other e-commerce firms to facilitate their business. E.g. Paypal, Stripe, business analytic firms

- \*The business natures of e-commerce firms are highly related to how they make money (next topic).

# EC – How to Make Money?

- Now you know the common e-commerce models.  
Can you *summarize the different types of revenues* chargeable by the e-commerce firms?



# EC – Revenue Models

## ■ How E-Commerce firms make money?

Sales	Selling products and services on internet, e.g. Apple store
Transaction fees	Commissions are based on the volume of transaction made. E.g. HKTVmall, Expedia, Uber, stocks broker app
Subscription fees	Customers pay a fixed amount, usually monthly, to get some type of service. E.g. scmp.com, appledaily.com, Netflix
Advertising fees	Companies charge others for allowing them to place ads on their sites. E.g. google search engine, GDN, Facebook
Affiliate fees	Companies receive commissions for referring customers to certain websites. E.g. some coupon/promotion codes websites refers customers to Amazon, jetso websites
Licensing fees	Licensing fees can be assessed as an annual fee or a per usage fee. E.g. MS Office 365
Other revenue sources	Some companies find profitable model in e-Commerce. e.g. Some people mine bitcoins and some people help others mine bitcoins by providing facilities
Supporting services fees	Companies provides supporting services for EC, e.g. Paypal, Stripe, logistic firms

# EC- Revenue Models

- Do you have any new ideas to create a new e-commerce model or find a new way to make money online?



- If you do, you probably are the next billionaire!



# Section D

## Discussion:

Advantages and Issues of Conducting E-Commerce

# Do You Have Choice?

- Can you avoid entirely using any online services and digital consumptions in your daily life?
  - Not quite realistic!
- Can firms avoid deploying e-commerce of any kind to do business?
  - Also not realistic!
- 
- No matter like it or not, life and business nowadays can't separate with EC.



# Discussion Question

- Explain the advantages and issues for firms doing business online.



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