

ICT 700

Business Information Systems



Lecture 4

E-business: Electronic Business Value and E-commerce

**Unit Coordinator:
Sajad Ghatrehsamani**

Reading Chapters:

Chapter 3 - Baltzan (2019)

Chapter 9 – Stair & Reynolds (2020)



Learning Objectives

1. Compare disruptive and sustaining technologies.
2. Explain how the Internet and WWW caused business disruption.
3. Describe e-business and its associated advantages.
4. Compare the four e-business models.
5. Overview of E-Business Forms and Revenue-Generating Strategies.
6. Describe the five e-business tools for connecting and communicating.



What is a Disruptive Technology?

- Known as disruptive innovation.
- A new way of doing things that initially does not meet the needs of existing customers.
- Open new markets and destroy old ones.



What is a Sustaining Technology?

- To mitigate an existing environmental issue.
- To create with sustainability principles in mind.
- To produce an improved product for customers to buy.



Compare Disruptive And Sustaining Technology

| Factors | Disruptive Technology | Sustainable Technology |
|---------------------------------|---|--|
| Product Quality and Performance | To create “good enough” products. | To create products that perform better and are of higher quality than those that already exist |
| Target Audience | Customers found in low-end and new market segments, are in search of a “good enough” product at a reasonable price. | Customers willing to pay relatively high prices for high-quality products |
| Business Model | A low-profit business model. | A high-profit business model. |

Source <https://online.hbs.edu/blog/post/sustaining-vs-disruptive-innovation>

Explain How The Internet Works

How the Internet Works

1. Just as your home has a unique address, so does your computer. Instead of street names and zip codes, your computer has an Internet Protocol (IP) address.
2. Your computer connects to the Internet through your modem and an Internet service provider (ISP). When you turn on your browser, your computer sends a request to your ISP to open an Internet connection through your modem. The modem connects your computer to the Internet. Computers talk to each other through electronic signals that follow the same rules and language, called protocols.
3. When you visit a website, you are really connecting to another computer's IP address. The Domain Name Service (DNS) is a series of databases that keeps track of every computer name and IP address on the Internet. If the website you want is not located on the first DNS database that your computer visits, that database sends your request to the next database, until your website is found. When your computer finds the web page you want in the DNS database, the database retrieves the page's IP address and sends it back to your computer.
4. Your browser requests access to the web page, or IP address. This is accomplished through HTTP (hypertext transport protocol). The website's server, which is the computer that hosts the web page, checks to make sure the page you requested exists. If it does, the website's server allows your computer access and you will see the page you want on your screen. If it doesn't, you will get an "HTTP 404" message, which typically states "Page not found."

Explain How The World Wide Web Works

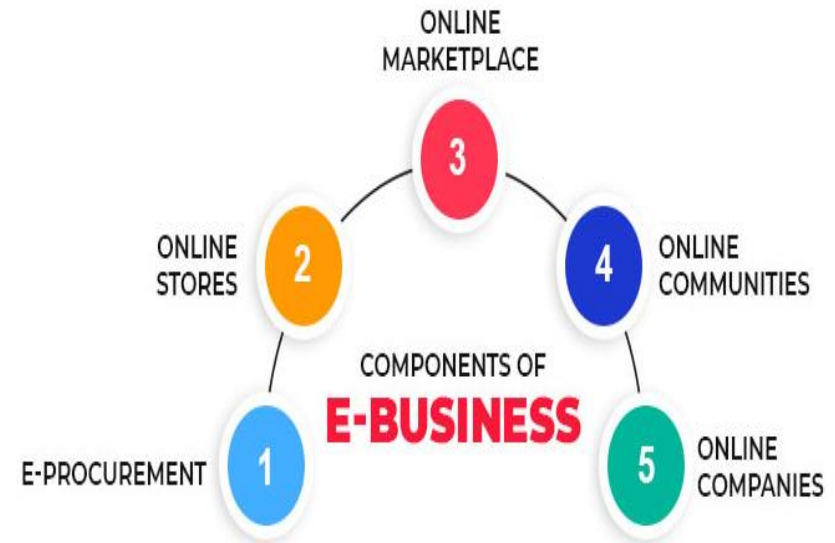
| Term | Definition | Example |
|-------------------------------------|--|---|
| Domain name hosting (web hosting) | A service that allows the owner of a domain name to maintain a simple website and provide email capacity | GoDaddy is a prime example of a domain name hosting company |
| Hypertext markup language (HTML) | Publishes hypertext on the WWW, which allows users to move from one document to another simply by clicking a hot spot or link | HTML uses tags such as <h1> and </h1> to structure text into headings, paragraphs, lists, hypertext links, and so on |
| Hypertext transport protocol (HTTP) | The Internet protocol that web browsers use to request and display web pages using universal resource locators (URLs) | To retrieve the file at the URL http://www.somehost.com/path/file.html |
| Web browser | Allows users to access the WWW | Internet Explorer, Mozilla's Firefox, Google Chrome |
| World Wide Web | Provides access to Internet information through documents, including text, graphics, and audio and video files that use a special formatting language called hypertext markup language | Tim Berners-Lee, a British computer scientist, is considered the inventor of the WWW on March 12, 1989 |

How The Internet And World Wide Web Can Cause Business Disruption

- The Internet is a massive network that connects computers all over the world .
- It allows everyone to communicate with one another including business owners.
- Computers connected via the Internet can send and receive information, including text, graphics, voice, video, and software.
- Tim Berners-Lee , the founder of World Wide Web
- The first website created is still online and can be found at <http://info.cern.ch/hypertext/WWW/TheProject.html>.
- Its purpose was to describe the WWW and tell people how to make their own web page.

E-Business

1. It refers to ecommerce.
2. All activities related to internal and external business operations such as servicing customer accounts, collaborating with partners, and exchanging real-time information.
3. E-business connects buyers, sellers, manufacturers, and suppliers, acting as a global marketplace.



<https://www.temok.com/blog/what-is-e-business/>

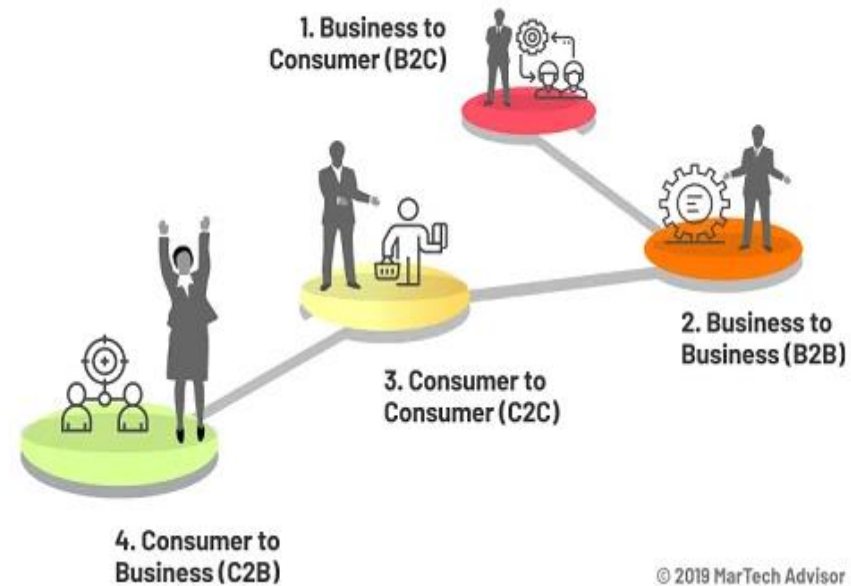
E-Business And Its Associated Advantages.

1. Faster buying process
2. Store and product listing creation
3. Cost reduction
4. Affordable advertising and marketing
5. Flexibility for customers
6. No reach limitations
7. Product and price comparison
8. Faster response to buyer/market demands
9. Several payment modes
10. Enables easy exports



Four E-Business Models

1. Business-to-business (B2B)
2. Business-to-consumer (B2C)
3. Consumer-to-business (C2B)
4. Consumer-to-consumer (C2C)



Compare The Four E-Business Models.

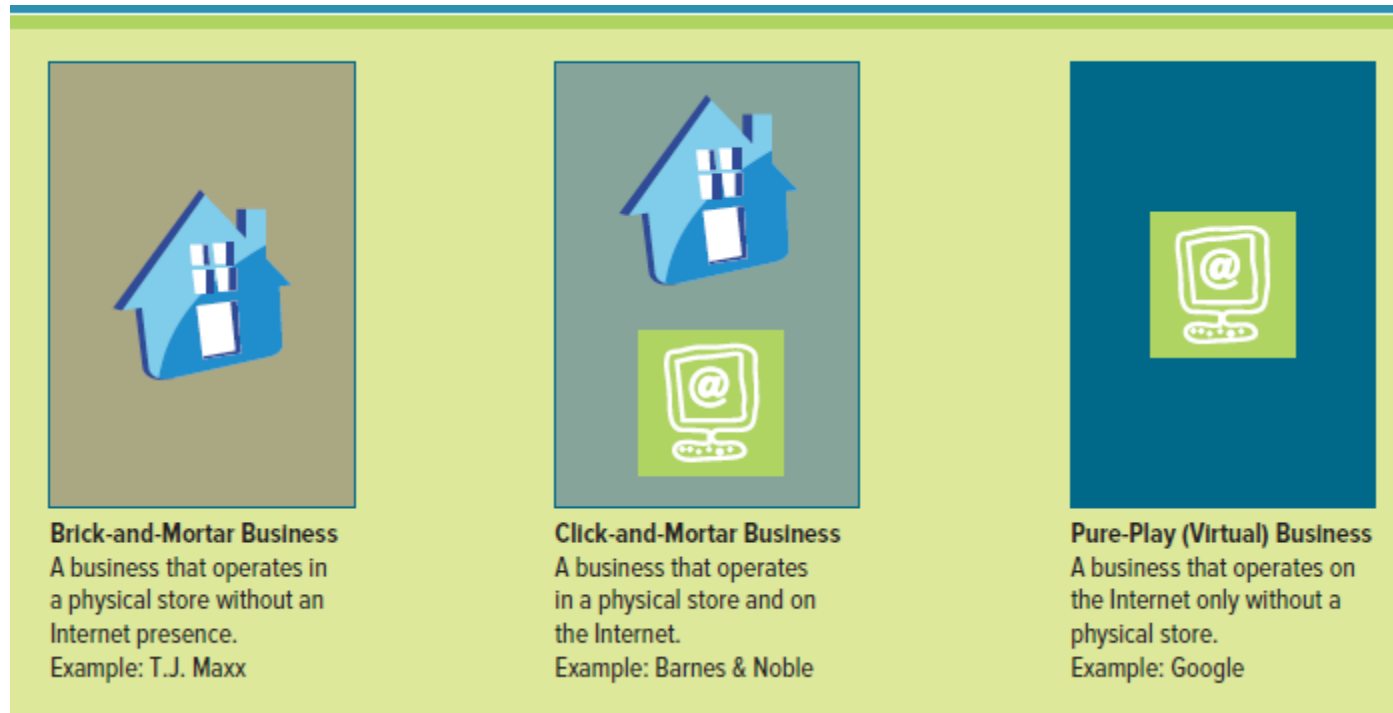
| Ebusiness Term | Definition |
|-----------------------------------|---|
| <i>Business-to-business (B2B)</i> | Applies to businesses buying from and selling to each other over the Internet. |
| <i>Business-to-consumer (B2C)</i> | Applies to any business that sells its products or services to consumers over the Internet. |
| <i>Consumer-to-business (C2B)</i> | Applies to any consumer that sells a product or service to a business over the Internet. |
| <i>Consumer-to-consumer (C2C)</i> | Applies to sites primarily offering goods and services to assist consumers interacting with each other over the Internet. |

| | Business | Consumer |
|----------|----------|----------|
| Business | B2B | B2C |
| Consumer | C2B | C2C |

Business To Consumer (B2C) Model

Business-to-consumer (B2C) applies to any business that sells its products or services directly to consumers online.

Carfax offers car buyers detailed histories of used vehicles for a fee. There are three ways to operate as a B2C: brick and mortar, click and mortar, and pure play. (See below figure)



Consumer To Business (C2B) Model

1. Consumer-to-business (C2B) applies to any consumer who sells a product or service to a business on the Internet.
2. One example is customers of Priceline.com, who set their own prices for items such as airline tickets or hotel rooms and wait for a seller to decide whether to supply them.
3. The demand for C2B e-business will increase over the next few years due to customers' desire for greater convenience and lower prices.

The Priceline logo is displayed in white text on a solid blue square background. The word "priceline" is in a lowercase, sans-serif font, with a registered trademark symbol (®) at the end.

Consumer To Consumer (C2C) Model

1. Consumer-to-consumer (C2C) applies to customers offering goods and services to each other on the Internet.
2. A good example of a C2C is an auction in which buyers and sellers solicit consecutive bids from each other and prices are determined dynamically.
3. Examples of C2C are Craigslist website and eBay website,
4. Linking like-minded buyers with sellers.
5. Other types of online auctions include forward auctions, in which sellers market to many buyers and the highest bid wins, and reverse auctions, in which buyers select goods and services from the sell



E-Business Forms and Revenue-Generating Strategies

| Form | Description | Examples |
|---------------------|--|----------------------|
| Content providers | Generate revenues by providing digital content such as news, music, photos, or videos | Netflix, iTunes, CNN |
| Infomediaries | Provide specialized information on behalf of producers of goods and services and their potential customers | Bloomberg, Zillow |
| Online marketplaces | Bring together buyers and sellers of products and services | Amazon, eBay |
| Portals | Operate a central website for users to access specialized content and other services | Google |
| Service providers | Provide services such as photo sharing, video sharing, online backup, and storage | YouTube |
| Transaction brokers | Process online sales transactions | Etrade |

E-Business Forms and Revenue-Generating Strategies

| Ebusiness Revenue Model | Benefits | Challenges |
|-------------------------|--|--|
| Advertising fees | <ul style="list-style-type: none">■ Well-targeted advertisements can be perceived as value-added content by trading participants.■ Easy to implement. | <ul style="list-style-type: none">■ Limited revenue potential.■ Overdone or poorly targeted advertisements can be disturbing elements on the website. |
| Subscription fees | <ul style="list-style-type: none">■ Create incentives to do transactions.■ Price can be differentiated.■ Possibility to build additional revenue from new user groups. | <ul style="list-style-type: none">■ Fixed fee is a barrier to entry for participants. |
| Transaction fees | <ul style="list-style-type: none">■ Can be directly tied to savings (both process and price savings).■ Important revenue source when high level of liquidity (transaction volume) is reached. | <ul style="list-style-type: none">■ If process savings are not completely visible, use of the system is discouraged (incentive to move transactions offline).■ Transaction fees likely to decrease with time. |

Five E-Business Tools For Connecting and Communicating



Case Study

The Amazon logo is centered on a dark navy blue rectangular background. The word "amazon" is written in a white, lowercase, sans-serif font. Below the text is a curved orange arrow that starts under the letter 'a' and points towards the letter 'n', resembling a smile.

Case Study Discussion

1. What is the founder of Amazon?
2. How did he earn his income?
3. What are Amazon's challenges?

Any Questions?

Thank You for listening . . =)

