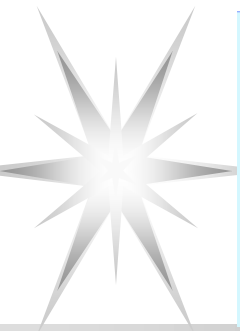




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ROYAL UNIVERSITY OF PHNOM PENH



Electronic and Mobile Commerce

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Why Learn About Electronic Commerce?

- ❑ Electronic commerce have transformed many areas of our lives and careers.
- ❑ Most organizations today have set up business on the Internet or are considering doing so.
- ❑ Many customers, potential employees, and shareholders will be accessing your firm's Web site via smartphones, tablets, laptops, etc.



Why Learn About Electronic Commerce?

- As an employee in today's organization, you must understand what the potential role of e-commerce is, how to capitalize on its many opportunities, and how to avoid its pitfalls.



Electronic Commerce

- **E-commerce** involves the exchange of money for goods and services electronically over the internet.
- Business activities that are strong candidates for conversion to e-commerce are ones that are:
 - Paper-based
 - Time-consuming
 - Inconvenient for customers



Electronic Commerce

Forms of e-commerce:

- business-to-business (B2B)
- business-to-consumer (B2C)
- consumer-to-consumer (C2C)
- ...



Business-to-Business (B2B) E-Commerce

- Business-to-business (B2B) e-commerce is a subset of e-commerce in which all the participants are organizations.





Business-to-Business (B2B) E-Commerce

- B2B market is considerably larger and is growing more rapidly than B2C.
- B2B sales within the United States were estimated to be over \$780 billion in 2015, twice the size of B2C commerce.



Business-to-Business (B2B) E-Commerce

- Many organizations use both:
 - buy-side e-commerce to purchase goods and services from their suppliers and
 - sell-side e-commerce to sell products to their customers.



Business-to-Consumer (B2C) E-Commerce

- Business-to-consumer (B2C) e-commerce is a form of e-commerce in which customers deal directly with an organization and avoid intermediaries.





Business-to-Business (B2C) E-Commerce

TABLE 7.1 Forecasted global B2C e-commerce sales (USD billions)

Region	Sales (billions)					
	2012	2013	2014	2015	2016	2017
Asia-Pacific	\$301.2	\$383.9	\$525.2	\$681.2	\$855.7	\$1,052.9
North America	\$379.8	\$431.0	\$482.6	\$538.3	\$597.9	\$660.4
Western Europe	\$277.5	\$312.0	\$347.4	\$382.7	\$414.2	\$445.0
Central and Eastern Europe	\$41.5	\$49.5	\$58.0	\$64.4	\$68.9	\$73.1
Latin America	\$37.6	\$48.1	\$57.7	\$64.9	\$70.6	\$74.6
Middle East and Africa	\$20.6	\$27.0	\$33.8	\$39.6	\$45.5	\$51.4
Worldwide	\$1,058.2	\$1,251.4	\$1,504.6	\$1,771.0	\$2,052.7	\$2,357.4



Business-to-Consumer (B2C) E-Commerce

- By using B2C e-commerce to sell directly to consumers, producers or providers can eliminate the middlemen or intermediaries, between them and the consumer.
- In many cases, this reduces costs and can lead to higher profits for businesses and lower prices for consumers.
- The elimination of intermediate organizations between the producer and the consumer is called **disintermediation**.



Business-to-Consumer (B2C) E-Commerce

- ❑ More than just a tool for placing orders, the Internet enables shoppers to compare prices, features, and value, and to check other customers' opinions.
- ❑ Consumers can, for example, easily and quickly compare information about automobiles, cruises, loans, and home prices to find better values.



Price Comparison

- ❑ An increasing number of companies provide mobile apps that enable shoppers to compare prices and products online.
- ❑ RedLaser enables shoppers to do a quick price comparison by simply scanning the product's bar code.
- ❑ Amazon's Price Check app also lets you search for pricing by taking a picture of a book, DVD, CD, or video game cover.
- ❑ ...



Business-to-Consumer (B2C) E-Commerce

- ❑ One reason for the steady growth in B2C e-commerce is shoppers find that many goods and services are cheaper when purchased online, including stocks, books, airline tickets, and hotel rooms.
- ❑ Another reason for the growth in B2C e-commerce is that online B2C shoppers have the ability to design a personalized product.



Business-to-Consumer (B2C) E-Commerce

- ❑ The company's online NIKEiD service enables purchasers to customize a pair of shoes by selecting from different material, features, and fit options—including the the fabric color and design of everything from the lining of the shoe to the laces.
- ❑ Nike also recently added a Personalized ID (PiD) service, which allows customers to further individualize their shoes by adding a personal message to their shoes.



Business-to-Consumer (B2C) E-Commerce

- Yet a third reason for the continued growth of B2C e-commerce is the effective use of social media networks by many companies looking to reach consumers, promote their products, and generate online sales.



Business-to-Consumer (B2C) E-Commerce

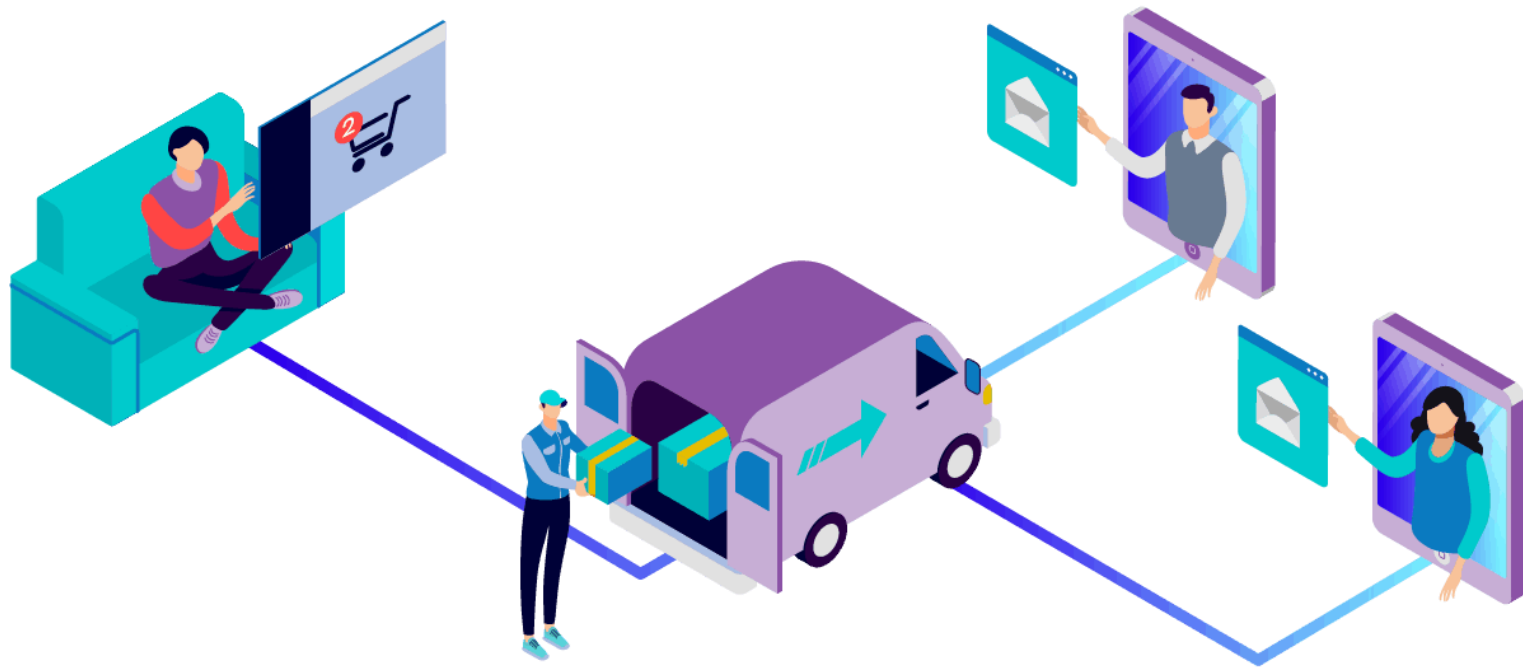
TABLE 7.2 Largest business-to-consumer retailers in the United States

Rank	Company	Total Web Sales (Billions of Dollars)
1	Amazon	\$71.8
2	Walmart	\$13.2
3	Apple	\$10.7
4	Macy's	\$4.7
5	Home Depot	\$4.3



Consumer-to-Consumer (C2C) E-Commerce

- Consumer-to-consumer (C2C) e-commerce is a subset of e-commerce that involves consumers selling directly to other consumers using a third party to facilitate the process.





Consumer-to-Consumer (C2C) E-Commerce

- ❑ eBay is an example of a C2C e-commerce site; customers buy and sell items to each other through the site. Founded in 1995, eBay has become one of the most popular Web sites in the world.
- ❑ C2C has created an opportunity for many people to make a living out of selling items on auction Web sites.



Electronic Payment Systems

- ❑ Electronic payment systems are a key component of the e-commerce infrastructure.
- ❑ Electronic cash:
 - ❑ An amount of money that is computerized, stored, and used as cash for e-commerce transactions
- ❑ Credit, debit, smart cards, and P-card:
 - ❑ Credit card-sized device with an embedded microchip to provide electronic memory and processing capability



Legal Jurisdiction

- ❑ Companies and individuals engaging in e-commerce must be careful that their sales do not violate the rules of various county or state.
- ❑ Examples:
 - ❑ Selling stun guns and similar devices
 - ❑ Selling cigarettes or alcohol to underage customers



Mobile Commerce

- E-commerce is a constantly growing, but **mobile commerce** is growing at an even faster rate.





Mobile Commerce

- ❑ To be clear, m-commerce is **not a separate entity from e-commerce**: instead, it is a more specific sub-group of e-commerce transactions that involves the use of smartphones and tablets, instead of desktop and laptop computers.
- ❑ M-commerce can be used to support all forms of e-commerce.



Mobile Commerce

- ❑ Failing to provide a mobile-friendly shopping experience might just be putting you at a disadvantage, given the growing number of smartphone and tablet users.
- ❑ The main goal in m-commerce is to ensure that your business' shopping experience is well-suited to the smaller screen sizes that we see on smartphones and tablets.



Mobile Commerce Hardware and Software

- For m-commerce to work effectively, the user interface user must be improved to the point that it is nearly as easy to purchase an item on a PC.



M-Commerce Web Sites

- A number of retailers have established special Web sites for mobile devices users.

TABLE 7.4 Highly rated m-commerce retail Web sites

Rank	Company
1	eBay
2	Amazon
3	Apple
4	Burberry
5	John Lewis
6	Lush



M-Commerce Web Sites

- ❑ Consumers often place high value on different criteria.
- ❑ In the OC&C survey, eBay and Amazon ranked highly due to their convenience, effective search tools, and transaction speed.
- ❑ The mobile site for natural cosmetics company Lush was rated highly because it created a strong emotional connection with consumers.



Advantages of E-commerce

- Reach new customers
 - E-commerce Web sites enable firms to reach new customers in new markets. Indeed, this is one of the primary reasons organizations give for establishing Web sites.
- Reduce costs
 - by eliminating or reducing time-consuming and labor-intensive steps throughout the order process, more sales can be completed in the same period.



Advantages of E-commerce

- ❑ Speed the Flow of Goods and Information
 - ❑ because electronic connections and communications are already established, the information can flow from buyer to seller easily, directly, and rapidly.
- ❑ Increase Accuracy
 - ❑ by enabling buyers to enter their own product specifications and order information directly, human data-entry error on the part of the supplier is eliminated.



Advantages of E-commerce

- Improve Customer Service
 - Easy collect customer feedbacks.
 - Always on and always connected with customers.



E-commerce Statistics in 2023

- ❑ Online retail sales amounted to 4.9 Trillion U.S dollars worldwide. And it's forecast to grow over 50% within the next four years.
- ❑ 58.4% of internet users buy something online every week. The current categories with more spending are consumer electronics and fashion.
- ❑ According to companies, retail sales revenue from physical stores and their digital sales are almost equal.



E-commerce Statistics in 2023

- ❑ China remains as the biggest marketplace for E-commerce, followed by the U.S.
- ❑ Mobile shopping is responsible for 63% of all e-commerce sales.
- ❑ 87% of shoppers research online before making a purchase.
- ❑ 95% of all shopping will be done online by 2040.

Retail e-commerce sales worldwide from 2014 to 2025

(in billion U.S. dollars)

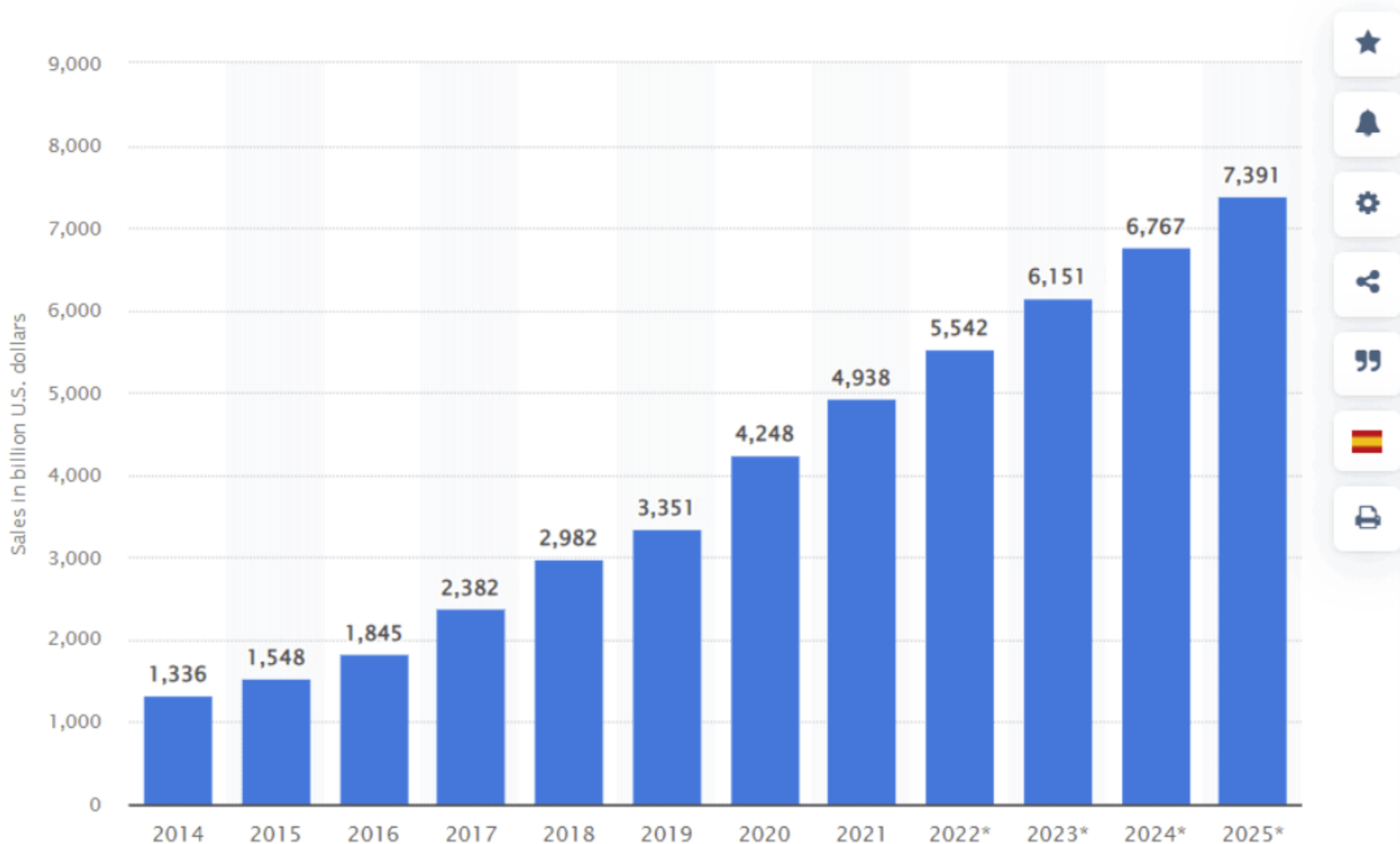




TABLE 9.1 Countries ranked by retail e-commerce sales

Top 10 Countries, Ranked by Retail Ecommerce Sales, 2018 & 2019 Billions and % change			
	2018	2019	% change
1. China*	\$1,520.10	\$1,934.78	27.3%
2. US	\$514.84	\$586.92	14.0%
3. UK	\$127.98	\$141.93	10.9%
4. Japan	\$110.96	\$115.40	4.0%
5. South Korea	\$87.60	\$103.48	18.1%
6. Germany	\$75.93	\$81.85	7.8%
7. France	\$62.27	\$69.43	11.5%
8. Canada	\$41.12	\$49.80	21.1%
9. India	\$34.91	\$46.05	31.9%
10. Russia	\$22.68	\$26.92	18.7%



Multi-stage Model for E-Commerce

- A successful e-commerce system must address or support the many stages that consumers experience in the sales life cycle:
 1. users search for and identify items for sale;
 2. select those items and negotiate prices, terms of payment, and delivery date;
 3. send an order to purchase the items;
 4. pay for the product or service;
 5. obtain product delivery;
 6. and receive after-sales support.



E-Commerce Challenges

- A company must overcome many challenges to convert its business processes from the traditional form to e-commerce processes.
- As a result, not all e-commerce ventures are successful.



E-Commerce Challenges

Case Study: Borders

- ❑ Borders, book and music retailer, began an online Web site in the late 1990s.
- ❑ As a result of the substandard (below standard) results, many top executives were replaced, including the CIO and senior vice president of sales.
- ❑ Finally in early 2011, Borders applied for bankruptcy protection and began closing its stores.



E-Commerce Challenges

- ❑ Dealing with Consumer Privacy Concerns
- ❑ Overcoming Consumers' Lack of Trust
- ❑ Overcoming Global Issues
- ❑ Digital Divide



Dealing with Consumer Privacy Concerns

- While two-thirds of U.S. Internet users have purchased an item online and most Internet users say online shopping saves them time, about one-third of all adult Internet users will not buy anything online primarily because they have privacy concerns or lack trust in online merchants (people or companies involved in wholesale trade).



Dealing with Consumer Privacy Concerns

- Identity theft is the act of using your personally identifying information without your permission to commit fraud.
- In order to address customers' privacy concerns, companies looking to do business online must invest in the latest security technology and employ highly trained security experts to protect their consumers' data.



Dealing with Consumer Privacy Concerns

- For large companies, that can mean a sizable in-house staff that monitors security issues 24/7.
- Smaller companies often rely on security services provided by companies such as Symantec, whose security service is intended to provide customers with the confidence they need to transact e-commerce business.



Overcoming Consumers' Lack of Trust

Lack of trust in online sellers is one of the most frequently cited reasons that some consumers give to explain why they are unwilling to purchase online.

- ❑ Can they be sure that the company or person with which they are dealing is legitimate and will send the item(s) they purchase?
- ❑ What if the product or service does not match the description on the Web site, wrong size, wrong color, damaged during the delivery process, or does not work as advertised?



Overcoming Consumers' Lack of Trust

- ❑ Online marketers must create trust-building strategies for their Web sites.
- ❑ A perception of trustworthiness can be created by implementing one or more of the following strategies:
 - ❑ Demonstrate a strong desire to build an ongoing relationship with customers by giving first-time price incentives.
 - ❑ Demonstrate that the company has been in business for a long time.



Overcoming Consumers' Lack of Trust

- Make it clear that considerable investment has been made in the Web site.
- Provide brand endorsements from well-known experts or well-respected individuals.
- Display Web site accreditation by the Better Business Bureau Online or TRUSTe programs.
- ...



Overcoming Consumers' Lack of Trust

Here are some tips to help online shoppers avoid problems:

- ❑ Only buy from a well-known Web site you trust—one that advertises on national media, is recommended by a friend, or receives strong ratings in the media.
- ❑ Review the Web site's privacy policy before you provide personal information.
- ❑ Look for a seal of approval from organizations such as the Better Business Bureau Online or TRUSTe.



Seals of Approval

FIGURE 7.4

Seals of approval

To avoid problems when shopping online, look on the Web site for a seal of approval from organizations such as the Better Business Bureau Online or TRUSTe.





Overcoming Consumers' Lack of Trust

- ❑ Be wary if you must enter any personal information other than what is required to complete the purchase (name, credit card number, address, and telephone number).
- ❑ When you open the Web page where you enter credit card information or other personal data, make sure that the Web address begins with “https,” and check to see if a locked padlock icon appears in the address bar.
- ❑ Consider using virtual credit cards, which expire after one use.



Overcoming Global Issues

- ❑ People and companies can sell products and services to all over the world.
- ❑ These global business opportunity, however, come with numerous obstacles and issues:
 - ❑ **Cultural challenges.** Must ensure that a Web site is appealing, easy to use, and inoffensive to potential customers around the world.
 - ❑ **Language challenges.** Language differences can make it difficult to understand the information and directions posted on a Web site.



Overcoming Global Issues

- **Time and distance challenges.** This makes it difficult for some people to be able to speak to customer services representatives or to get technical supports.
- **Infrastructure challenges.** The Web site must support access by customers using a wide variety of hardware and software devices.



Overcoming Global Issues

- ❑ **Currency challenges.** The Web site must be able to state prices and accept payment in a variety of currencies.
- ❑ **State, regional, and national law challenges.** The Web site must operate in conformance to a wide variety of laws.



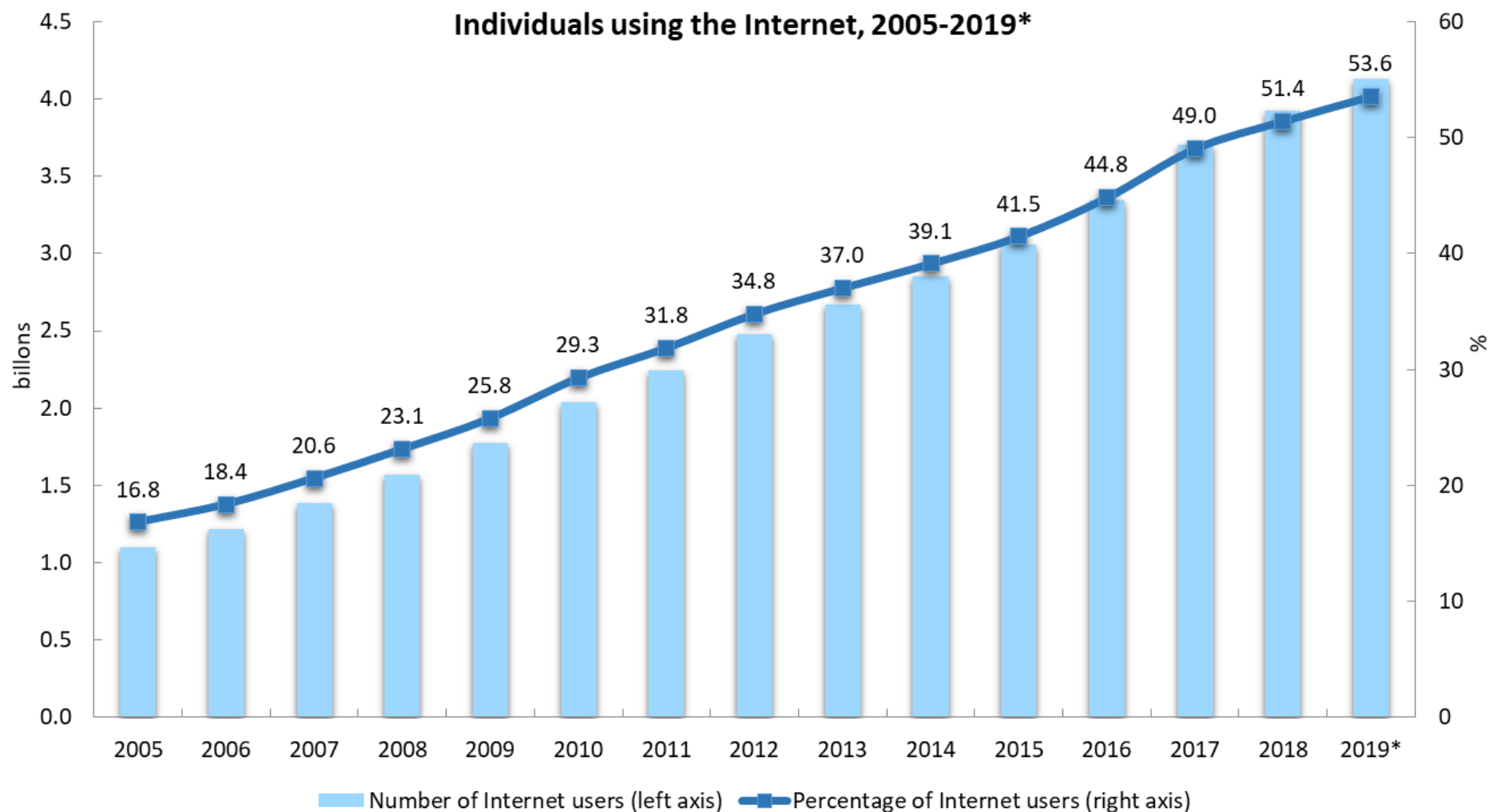
Digital Divide

- Many people cannot live anymore without modern technology such as computers, smartphones and the Internet to improve their standard of living, while some billions of people around the globe have not yet had a chance to use ICTs. This is what we call the **Digital Divide**.



Digital Divide

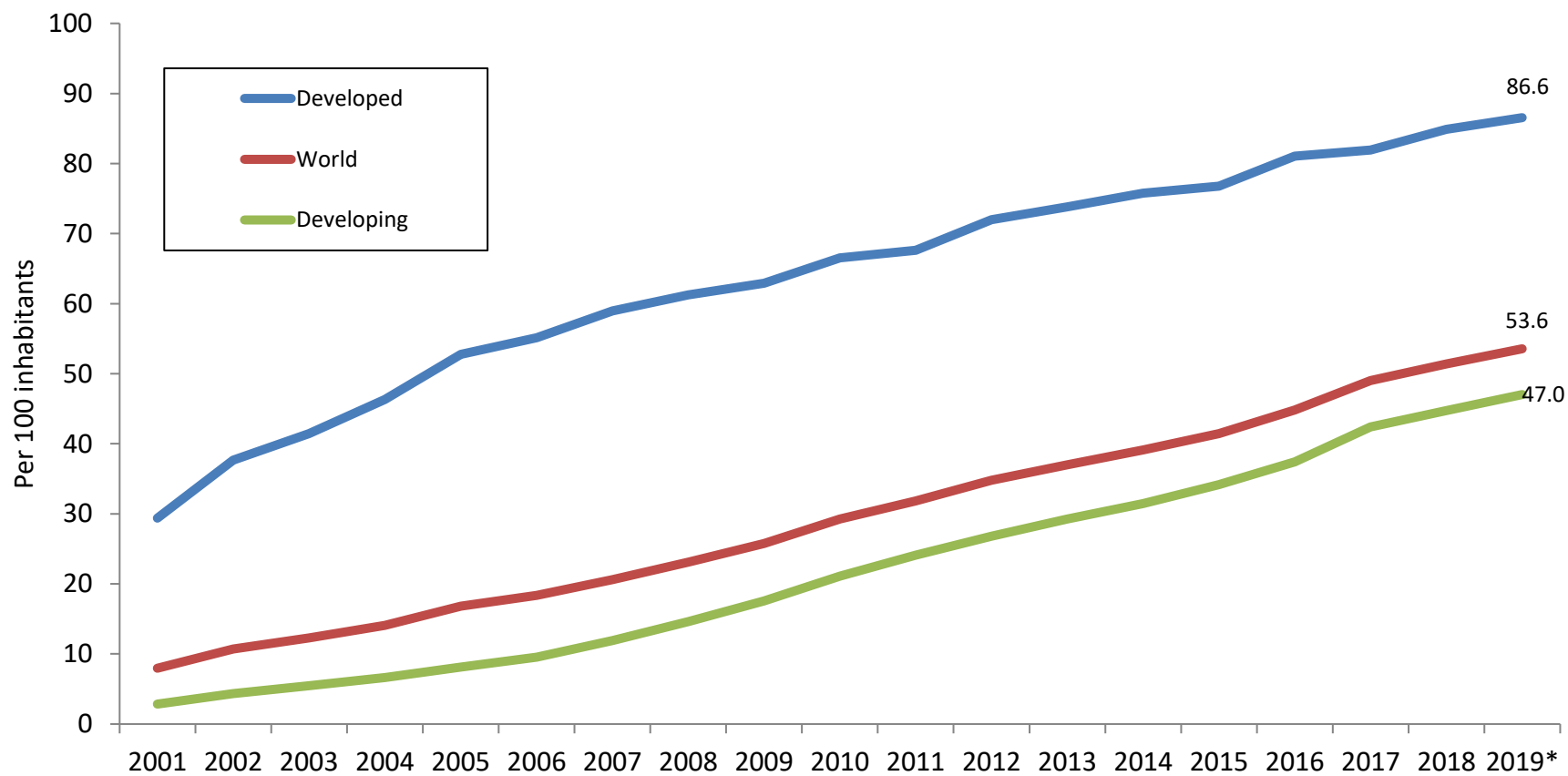
- ❑ **Digital divide** refers to the gap between people who have used modern technology known as ICT such as computers and the Internet to improve their standard of living and those who have not.
- ❑ Least developed countries are likely to lag behind and loose out on the benefits of ICT revolution and e-commerce opportunities.



Note: * ITU estimate
Source: ITU.

It is estimated that at the end of 2019, 53.6 per cent of the global population, or 4.1 billion people, are using the Internet.

Individuals using the Internet per 100 inhabitants, 2001-2019*





Digital Divide

Even among populations with some access to ICT, the Digital Divide can be evident in the form of:

- ❑ lower-performance computers,
- ❑ lower-speed wireless connections,
- ❑ limited access to some contents,
- ❑ restricted access to some contents, etc.



Digital Divide

The Digital Divide typically exists between:

- Those in urban areas and those in rural areas
- The educated and the uneducated individuals
- The more and less industrially developed nations.
- ...



How the Digital Divide Affects E-Commerce

- ❑ Reduced Customer Base: People without internet access or the necessary devices are excluded from participating in e-commerce.
- ❑ Uneven Market Growth: E-commerce growth is concentrated in areas with high digital penetration, leaving underserved regions behind.



How the Digital Divide Affects E-Commerce

- ❑ Lack of Infrastructure: Businesses in areas with poor digital infrastructure face difficulties in setting up and maintaining e-commerce operations.
- ❑ Payment Systems: Limited access to online payment methods in certain regions can deter transactions, forcing reliance on cash-on-delivery.



How the Digital Divide Affects E-Commerce

- ❑ Digital Literacy: Many potential customers lack the skills to navigate e-commerce platforms, which limits adoption.
- ❑ ...



E-commerce Applications

- ❑ E-commerce applications are being used in:
 - ❑ Retail and Wholesale
 - ❑ Online Marketplaces
 - ❑ Bartering
 - ❑ Financial Services
 - ❑ Education and E-Learning
 - ❑ Healthcare and Pharmacies
 - ❑ Entertainment and Media
 - ❑ ...



Electronic Retailing (E-tailing)

- ❑ Online Stores: Platforms like Amazon, eBay, and Walmart allow businesses to sell products directly to consumers.



Wholesale E-Commerce

- ❑ Wholesale ecommerce is a B2B e-commerce model where, instead of selling your products individually to consumers, you sell them in bulk and at a discount to other businesses.
- ❑ Purchases often approach 40 percent of a manufacturing company's total revenues.



Wholesale E-Commerce

- Platforms like Alibaba facilitate wholesale transactions between businesses.



Online Marketplaces

- ❑ One approach taken by many manufacturers to raise profitability and improve customer service is to form an electronic exchange.
- ❑ Electronic exchange is an electronic forum where manufacturers, suppliers and buyers meet to buy and sell products, and trade market information.



Types of Exchanges

- ❑ Private exchanges:
 - ❑ Owned and operated by a single company.
 - ❑ The owner uses the exchange to trade exclusively with established business partners.
- ❑ Public exchanges:
 - ❑ Owned and operated by industry groups.
 - ❑ Open to all interested parties (many sellers and many buyers)



Bartering

- **Bartering** means exchange goods or services for other goods or services without using money.





Bartering

- ❑ Some businesses are willing to barter to reduce excess inventory, gain new customers.
- ❑ A number of Web sites have been created to support this activity.



Bartering

TABLE 7.6 Popular bartering Web sites

Web site	Purpose
Craigslist.org	Includes a section where users can request an item in exchange for services or exchange services for services
Swapagift.com	Enables users to buy, sell, or swap merchant gift cards
Swapstyle.com	Allows users to swap, sell, or buy direct women's accessories, clothes, cosmetics, and shoes
Swaptrees.com	Users trade books, CDs, DVDs, and video games on a one-for-one basis
TradeAway.com	Enables users to exchange a wide variety of new or used items, services, or real estate



Financial Services

- ❑ Online Banking: Banks offer digital platforms for transactions, loan applications, and account management.
- ❑ Payment Gateways: Services like PayPal, Stripe, and Square enable secure online payments.
- ❑ Investment Services: Apps like Robinhood and Wealthsimple provide e-commerce solutions for stock trading and investment.



Education and E-Learning

- Online Courses: Platforms like Coursera, Udemy, and Khan Academy sell educational content and certifications.
- EdTech Subscriptions: Tools like Duolingo or Skillshare offer subscription-based learning services.



Healthcare and Pharmacies

- Telemedicine: Apps like Practo and Teladoc enable online consultations with doctors.
- E-Pharmacies: Websites like 1mg and Walgreens provide medicines and health products for home delivery.



Entertainment and Media

- Streaming Services: Platforms like Netflix, Spotify, and YouTube offer movies, music, and videos on demand.
- Event Ticketing: Services like Ticketmaster and Eventbrite allow users to buy tickets for concerts, plays, and events.



Strategies for Successful E-Commerce

- ❑ Defining an Effective E-Commerce Model and Strategy
- ❑ Defining the Functions of a Web Site
- ❑ Establishing a Web Site
- ❑ Building Traffic to Your Web Site
- ❑ Maintaining and Improving Your Web Site



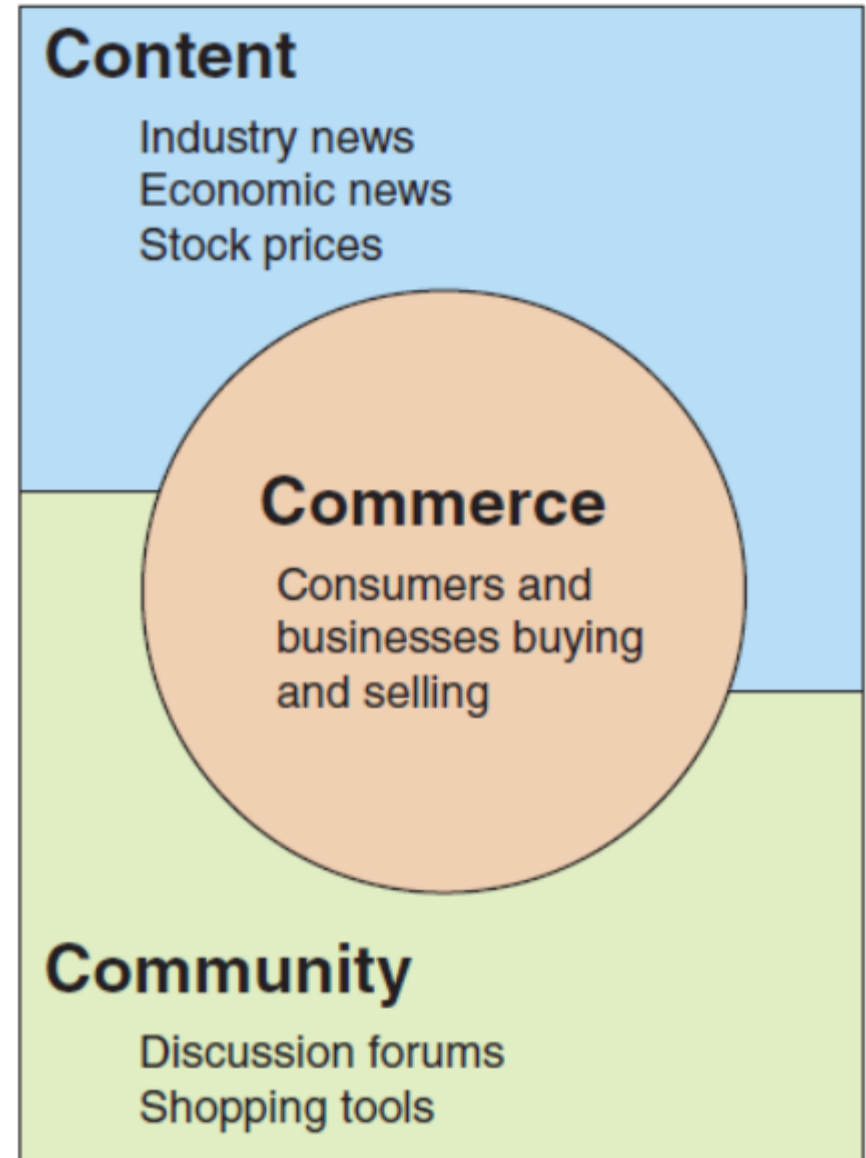
Defining an Effective E-Commerce Model and Strategy

- ❑ Before building a Web site, a company must first define an effective e-commerce model and strategy.
- ❑ Although companies can select from a number of approaches, the most successful e-commerce models include three basic components: community, content, and commerce.

FIGURE 9.11

Content, commerce, and community

A successful e-commerce model includes three basic components.





Defining an Effective E-Commerce Model and Strategy

□ Community

- Discussion forums can build a loyal community of people who are interested in the company and its products and services.

□ Content

- Providing useful, accurate, and timely content, such as industry news, economic news and stock price.

□ Commerce

- Commerce involves consumers and businesses paying to purchase goods, information, or services that are posted or advertised online.



Defining the Functions of a Web Site

- ❑ Most people agree that an effective Web site is one that meets the needs of its visitors, which might include the following functionalities for users:
 - ❑ Obtaining general information about the company.
 - ❑ Obtaining financial information for making an investment decision.



Defining the Functions of a Web Site

- ❑ Learning about the products or services that the company sells.
- ❑ Buying the products or services that the company offers.
- ❑ Checking the status of an order.
- ❑ Getting advice or help on effective use of the products.
- ❑ Registering a complaint about the company's products.



Defining the Functions of a Web Site

- ❑ Providing ideas for product improvement.
- ❑ Obtaining information about warranties or service and repair policies for products.
- ❑ Obtaining contact information for a person or department in the company.



Defining the Functions of a Web Site

- ❑ Keep in mind that the priorities and objectives of customers may change over time.
- ❑ As the number of e-commerce shoppers increases and they become more selective, a company might need to redefine the functions of a Web Site to capture new business opportunities.



Establishing a Web Site

- ❑ Companies large and small can establish Web sites.
- ❑ Some companies develop their sites in-house, but this decision requires Web development staffs.
- ❑ Many companies, especially those with few or no experienced Web developers, have decided to outsource the building of their Web sites in order to get their sites up faster and cheaper than they could by doing the job themselves.



Establishing a Web Site

- ❑ Another model for setting up a Web site is the use of a **storefront broker**.
- ❑ Products are ordered by a customer at your site, orders are processed through a user interface provided by the storefront broker, and the product is shipped by the merchant.
- ❑ The storefront broker deals with the details of the transactions, including who gets paid for what, and is responsible for bringing together merchants and reseller sites.



Building Traffic to Your Web Site

- There are hundreds of thousands of e-commerce Web sites.
- With all those potential competitors, a company must take strong measures to ensure that the customers can find its Web site.



Building Traffic to Your Web Site

- The first step is to obtain and register a domain name, which should say something about your business.
 - For example, if you want to sell soccer uniforms and equipment, then you would try to get a domain name such as:
www.soccerstuff4u.com
www.soccerequipment.com



Building Traffic to Your Web Site

- The next step is to make your site search-engine friendly by improving its rankings.
- Include an HTML *meta tag* in your site's home page that contains keywords representing your site's content. Search engines use these keywords to build indexes pointing to your Web site.



Building Traffic to Your Web Site

- Use Web site traffic data analysis software to capture data and analyze data. This data can tell you which search engines and keywords that find your site, and other useful information.
- Provide quality, keyword-rich content. Be careful not to use too many keywords, as search engines often ban sites that do this.



Building Traffic to Your Web Site

- ❑ Consider paying the search engine companies to include you as a “sponsored” ad.
- ❑ Add new content to the Web site on a regular basis. This makes the site attractive to humans as well as search engines.
- ❑ Acquire links to your site from other reputable Web sites that are popular and related to your Web site.



Maintaining and Improving Your Web Site

- ❑ Web site operators must constantly monitor the traffic to their sites and the response times experienced by visitors.
- ❑ AMR Research, a Boston research analysis firm, reports that Internet shoppers expect service to be better than or equal to their in-store experience.
- ❑ To keep pace with technology and increasing traffic, it might be necessary to modify the software, databases, or hardware.



Maintaining and Improving Your Web Site

Case Study: Walmart

- ❑ Retailing giant Walmart recently invested over \$2 billion to improve its Web site and strengthen its e-commerce infrastructure.
- ❑ In addition to make its Web site easier for customers to shop, Walmart continues to add to the number of items available through its e-commerce site.



Maintaining and Improving Your Web Site

- Personalization:
 - The process of tailoring Web pages to specifically target individual consumers.
 - The goal is to meet the customer's needs more effectively.
 - Building a better understanding of customer preferences can also aid in cross-selling related products and more expensive products.



Maintaining and Improving Your Web Site

- Amazon uses a form of personalization in which the Web site recommends a list of new products based on the customer's previous purchases.



Maintaining and Improving Your Web Site

- Businesses use two types of personalization techniques to capture data and build customer profiles:
 - Implicit personalization:
 - Capture data from actual customer Web sessions—primarily based on which pages were viewed and which were not.
 - Explicit personalization:
 - Captures user-provided information



E-Government

- **E-government** is the use of information and communications technology to:
 - Simplify the sharing of information
 - Speed formerly paper-based processes
 - Improve the relationship between citizen and government.



E-Government

- Forms of e-Government:
 - Government-to-consumer (G2C)
 - Government-to-business (G2B)
 - Government-to-government (G2G)



Government-to-consumer (G2C)

- ❑ Citizens can use G2C applications to submit their state and federal tax returns online, renew auto licenses, and apply for student loans.
- ❑ Citizens can purchase items from the U.S. government through its GSA Auctions Web site, which offers the general public the opportunity to bid electronically on a wide range of government assets.



Government-to-consumer (G2C)

- Healthcare.gov is a healthcare exchange Web site created by and operated under the U.S. federal government as specified in the Patient Protection and Affordable Care Act.
- ...



Government-to-business (G2B)

- G2B applications support the purchase of materials and services from private industry by government procurement offices, enable firms to bid on government contracts.
- The Web site Business.USA.gov allows businesses to access information about laws and regulations and to download relevant forms needed to comply with federal requirements for their businesses.
- ...



Government-to-government (G2G)

- G2G applications support transactions between government entities, such as between the federal government and state or local governments.
- Government to Government Services Online (GSO) is a suite of Web applications that enables government organizations to report information—such as birth and death data, and information about the amount of state aid being received.

□ ...



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- ▣ **Reynolds, George Walter, Stair, Ralph M.**
“Principles of information systems”, 13e – 2018