Kenyatta University

SCO 311: ELECTRONIC COMMERCE

BSc Computer Science Year 3 Semester 2

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Prerequisites: SCO207 (Web Development Technologies), SCO 300(Computer Networks)

Lecture 1: Fundamentals of Electronic Commerce

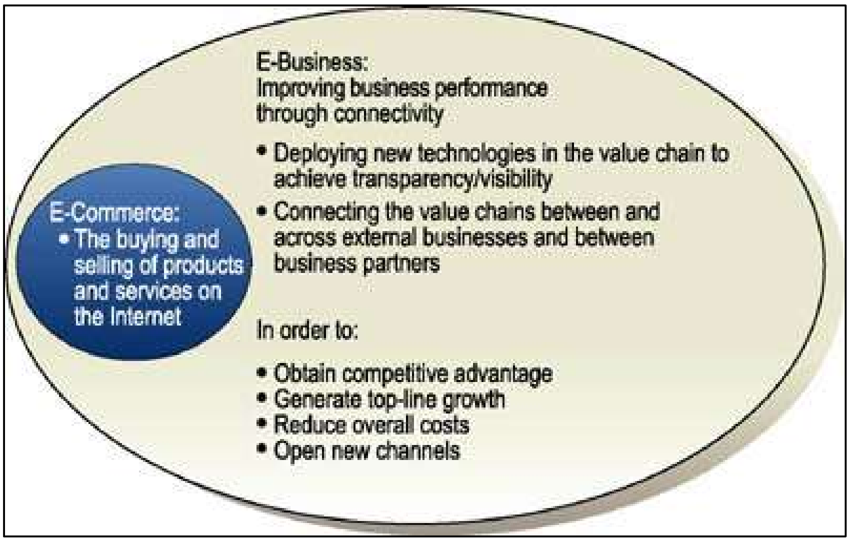
- Definition of e-commerce: digitally enabled transactions, including all transactions mediated by digital technology (Laudon, 2014); the use of the Internet, the World Wide Web (Web), and mobile apps to transact business. Although the terms Internet and Web are often used interchangeably, they are actually two very different things. The Internet is a worldwide network of computer networks, and the Web is one of the Internet's most popular services, providing access to billions of Web pages. An app (short-hand for application) is a software application (*ibid*, p.10).

- Electronic commerce (e-commerce, or EC) describes the buying, selling, and exchanging of products, services, and information via computer networks, primarily the Internet. (Turban, Volonino & Wood, 2013.

Other relevant definitions

- The *Internet* is a worldwide network of computer networks, and the *World Wide Web* is one of the Internet's most popular services, providing access to over 8 billion Web pages.
- The *World Wide Web* (the Web) is the most popular service that runs on the Internet infrastructure. The Web is the "killer application" that made the Internet commercially interesting and extraordinarily popular.
- A *transaction* is an exchange of value, such as a purchase, a sale, or the conversion of raw materials into a finished product. By recording transactions, accountants help business owners keep score and measure how well they are doing. All transactions involve at least one activity, and some transactions involve many activities.
- *Commercial transactions* involve the exchange of value (e.g., money) across organizational or individual boundaries in return for products and services. Exchange of value is important for understanding the limits of e-commerce. Without an exchange of value, no commerce occurs.
- *Transaction costs* are the total of all costs that a buyer and seller incur as they gather information and negotiate a purchase-and-sale transaction.
- The group of logical, related, and sequential activities and transactions in which businesses engage are often collectively referred to as *business processes*. Transferring funds, placing orders, sending invoices, and shipping goods to customers are all types of activities or transactions.
- *E-business* refers primarily to the digital enablement of transactions and processes ***within*** a firm. It does not include commercial transactions involving an exchange of value across organizational boundaries. For example, a company's online inventory control mechanisms are a component of e-business, but such internal processes do not directly generate revenue for the firm from outside businesses or consumers, as e-commerce, by definition, does. It is true, however, that a firm's e-business infrastructure provides support for online e-commerce exchanges; the same infrastructure and skill sets are involved in both e-business and e-commerce.

- *E-business applications* turn into *e-commerce* precisely when an **exchange of value** occurs



1.0. Why study e-commerce

- E-commerce technology is different and more powerful than any of the other technologies experienced in the past century.
- While these other technologies transformed economic life in the twentieth century, the evolving Internet and other information technologies will shape the twenty-first century.
- It is a rare event for an economy to move from one form to another. We are participating in the transition from the industrial to the information age. We all have an opportunity to participate in this historic event. The extent to which you partake in this revolution is determined, in part, by your desire to facilitate change and your understanding of how the new economy operates.

1.1. E-commerce Trends

- In 1994, e-commerce as we now know it did not exist.
- Prior to the development of e-commerce, the process of marketing and selling goods was a mass-marketing and sales force-driven process. Consumers were viewed as passive targets of advertising "campaigns" and branding blitzes intended to influence their long-term product perceptions and immediate purchasing behaviour. Selling was conducted in well-insulated "channels."
- Consumers were considered to be trapped by geographical and social boundaries, unable to search widely for the best price and quality. Information about prices, costs, and fees could be hidden from the consumer, creating profitable "information asymmetries" for the selling firm. **Information asymmetry** refers to any disparity in relevant market information among parties in a transaction. It was so expensive to change national or regional prices in traditional retailing (what are called *menu costs*) that "one national price" was the norm, and dynamic pricing to the marketplace— changing prices in real time—was unheard of.

  Other trends that are impacting electronic commerce include:
  i) Expansion of social, local, and mobile e-commerce
  ii) Mobile platform begins to rival PC platform
  iii) Continued growth of cloud computing
  iv) Explosive growth in "Big Data"

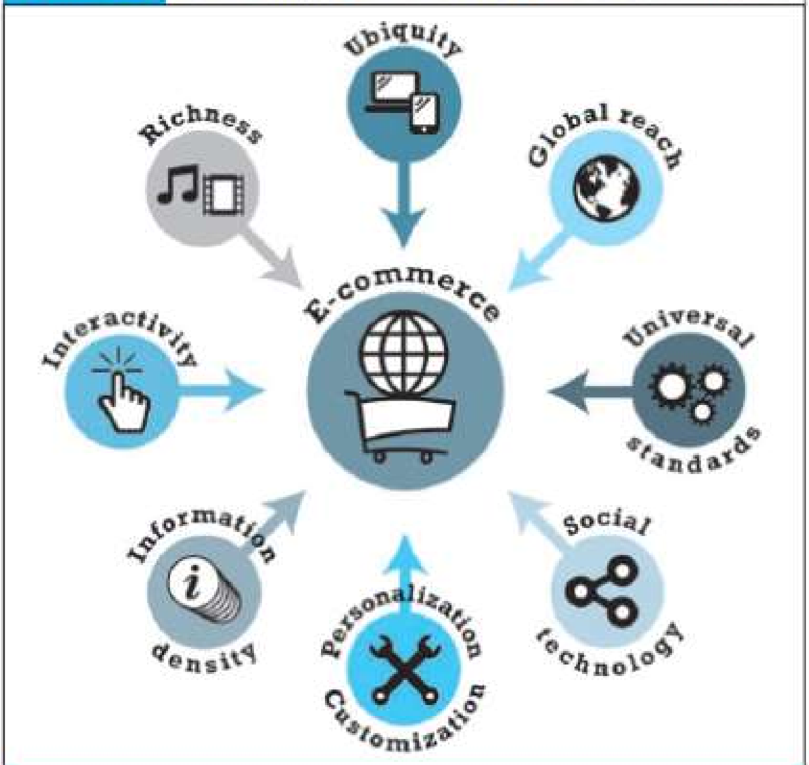
v) E-books gain wide acceptance
vi) Continued growth of user-generated content

1.2. Seven Unique Features of E-Commerce Technology

There are some unique features of e-commerce technology that both challenge traditional business thinking and explain why there is so much interest in e-commerce. These unique dimensions of e-commerce technologies suggest many new possibilities for marketing and selling—a powerful set of interactive, personalized, and rich messages are available for delivery to segmented, targeted audiences.

1. **Ubiquity** - The Internet is available everywhere, anytime
2. **Global reach** - reaches around the earth. The Internet and the Web can deliver, to an audience of millions, “rich” marketing messages with text, video, and audio, in a way not possible with traditional commerce technologies such as radio, television, or magazines.
3. **Universal standards** - one set of Internet standards
4. **Richness** - video, audio, text messages available
5. **Interactivity** - the technology interacts with the user
6. **Information Density** - reduced information costs with higher quality
7. **Personalization/customization** - enable personalized messages to be delivered to individuals as well as groups

FIGURE 1.2 EIGHT UNIQUE FEATURES OF E-COMMERCE TECHNOLOGY



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

1.3. Origins and Growth of E-Commerce

It is difficult to pinpoint just when e-commerce began. There were several precursors to e-commerce. In the late 1970s, (in the US) a pharmaceutical firm named Baxter Healthcare initiated a primitive form of B2B e-commerce by using a telephone-based modem that permitted hospitals to reorder supplies from Baxter. This system was later expanded during the 1980s into a PC-based remote order entry system and was widely copied throughout the United States long before the Internet became a commercial environment. The 1980s saw the development of Electronic Data Interchange (EDI) standards that permitted firms to exchange commercial documents and conduct digital commercial transactions across private networks.

In the B2C arena, the first truly large-scale digitally enabled transaction system was deployed in France in 1981. The French Minitel was a videotext system that combined a telephone with an 8-inch screen. By the mid-1980s, more than 3 million Minitels were deployed, and there were about 6 million in use throughout France, until 2012 when the

service was discontinued. Over 13,000 different services could be found on Minitel, including ticket agencies, travel services, retail products, and online banking. No credit cards were needed because purchases are charged to the monthly telephone bill, and there were no hackers, viruses, or worms because it was a private network owned by France Telecom (Arnold, 2003).

Laudon, p.24

However, none of these precursor systems had the functionality of the Internet. Generally, when we think of e-commerce today, it is inextricably linked to the Internet. For our purposes, we will say e-commerce begins in 1995, following the appearance of the first banner advertisements placed by ATT, Volvo, Sprint, and others on Hotwired.com in late October 1994, and the first sales of banner ad space by Netscape and Infoseek in early 1995.

Since then, e-commerce has been the fastest growing form of commerce in the United States.

Electronic Funds Transfers (EFTs)

Although the Web has made online shopping possible for many businesses and individuals, in a broader sense, electronic commerce has existed for many years. For more than 30 years, banks have been using electronic funds transfers (EFTs, also called wire transfers), which are electronic transmissions of account exchange information over private communications' networks.

Electronic Data Interchange (EDI)

Businesses have also been engaging in a type of electronic commerce, known as electronic data interchange, for many years. Electronic data interchange (EDI) occurs when one business transmits computer-readable data in a standard format to another business. In the 1960s, businesses realized that many of the documents they exchanged were related to the shipping of goods, for example, invoices, purchase orders, and bills of lading. These documents included the same set of information for almost every transaction.

By creating a set of standard formats for transmitting the information electronically, businesses were able to reduce errors, avoid printing and mailing costs, and eliminate the need to reenter the data. Businesses that engage in EDI with each other are called trading partners.

One problem that EDI pioneers faced was the high cost of implementation. Until the late 1990s, doing EDI meant buying expensive computer hardware and software and then either establishing direct network connections (using leased telephone lines) to all trading partners or subscribing to a value-added network. A value-added network (VAN) is an independent firm that offers connection and transaction-forwarding services to buyers and sellers engaged in EDI. Before the Internet came into existence as we know it today, VANs provided the connections between most trading partners and were responsible for ensuring the security of the data transmitted. VANs usually charged a fixed monthly fee plus a per-transaction charge, adding to the already significant expense of implementing EDI. Many smaller firms could not afford to participate in EDI and lost important customers to their larger competitors who could afford EDI.

1.4. E-Commerce: A Brief History

Although e-commerce is a very recent phenomenon of the late 1990s, it already has a brief, tumultuous history. The early years of e-commerce were a period of explosive growth and extraordinary innovation, beginning in 1995 with the first widespread use of the Web to advertise products. This period of explosive growth was capped in March 2000 when stock market valuations for dot.com companies reached their peak and thereafter began to collapse. A sobering period of reassessment occurred, followed by strong double-digit growth through the current period.

For computer scientists and information technologists, the early success of e-commerce was a powerful vindication of a set of information technologies that had developed over a period of forty years—extending from the development of the early Internet to the PC, to local area networks. The vision was of a universal communications and computing environment that everyone on earth could access with cheap, inexpensive computers—a worldwide universe of knowledge stored on HTML pages created by hundreds of millions of individuals and thousands of libraries, governments, and scientific institutes. Technologists celebrated the fact that the Internet was not controlled by anyone or any nation, but was free to all. They believed the Internet—and the e-commerce that rose on this infrastructure—should remain a self-governed, self-regulated environment.

1.4.1. E-Commerce 1995 - 2000: INVENTION

The business phenomenon that we now call electronic commerce has had an interesting history. From humble beginnings in the mid-1990s, electronic commerce grew rapidly until 2000, when a major downturn occurred.

Between 1997 and 2000, more than 12,000 Internet-related businesses were started with more than $100 billion of investors' money. In an extended burst of optimism, and what many later described as irrational exuberance, investors feared that they might miss the money-making opportunity of a lifetime. As more investors competed for a fixed number of good ideas, the price of those ideas increased. Many good ideas suffered from poor implementation.

Worse, a number of bad ideas were proposed and funded. More than 5,000 of these companies went out of business or were acquired in the downturn that began in 2000. The media coverage of the "dot-com bust" was extensive, with the popular media publishing endless news stories describing how the "dot-com boom" had turned into the "dot-com bust."

However, between 2000 and 2003, more than $200 billion was invested in purchasing electronic commerce businesses that were in trouble and starting new online ventures, according to the industry research firm WebMergers. This second wave of financial investment was not reported extensively in either the general or business media, but these investments quietly fueled a rebirth of growth in online business activity. This second wave has given many online business ideas that were poorly implemented in the early days of the Internet another chance at success.

Beginning in 2003, electronic commerce began to show signs of new life. Companies that had survived the downturn were not only seeing growth in sales again, but many of them were showing profits. As the economy grew, electronic commerce grew also, but at a more rapid pace. Thus, electronic commerce gradually became a larger part of the total economy.

1.4.2. E-COMMERCE 2001-2006: CONSOLIDATION

In the second period of e-commerce, from 2000 to 2006, a sobering period of reassessment of e-commerce occurred, with many critics doubting its long-term prospects. 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; financing shrunk as capital markets shunned start-up firms; and traditional bank financing based on profitability returned.

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, usually from work or home. Marketing on the Internet increasingly meant using search engine advertising targeted to user queries, rich media and video ads, and behavioral targeting of marketing messages based on ad networks and auction markets. The Web policy of both large and small firms expanded to include a broader "Web presence" that included not just Web sites, but also e-mail, display, and search engine campaigns; multiple Web sites for each product; and the building of some limited community feedback facilities. E-commerce in this period was growing again by more than 10% a year.

1.4.3. E-COMMERCE 2007 - PRESENT: REINVENTION

The first wave of electronic commerce was predominantly a U.S. phenomenon. Web pages were primarily in English, particularly on commerce sites. The second wave is characterized by its international scope, with sellers doing business in many countries and in many languages.

The Internet technologies used in the first wave, especially in B2C commerce, were slow and inexpensive. Most consumers connected to the Internet using dial-up modems. The increase in broadband connections in homes is a key element in the B2C component of the second wave.

The sale of digital products was fraught with difficulties during the first wave of electronic commerce. The music recording industry was unable (or, some would say, unwilling) to devise a way to distribute digital music on the Web. This created an environment in which digital piracy—the theft of musical artists' intellectual property—became rampant. The promise of electronic books was also unfulfilled. The second wave is fulfilling the promise of available technology by supporting the legal distribution of music, video, and other digital products on the Web. Apple Computer's iTunes Web site is an example of a secondwave digital product distribution business that is meeting the needs of consumers and its industry.

The availability of these smart phones and the low cost of Internet connectivity have made mobile commerce possible on a large scale for the first time.

1.4.4. ADVANTAGES AND DISADVANTAGES OF ELECTRONIC COMMERCE

Advantages

- it can help increase profits - can increase sales and decrease costs.
- Larger marketspace
- it increases purchasing opportunities for the buyer; provides buyers with a wider range of choices than traditional commerce
- increases the speed and accuracy with which businesses can exchange information, which reduces costs on both sides of transactions
- reduces the time buyers must wait to begin enjoying their purchases due to ability to deliver digital products
- electronic payments arrive securely and quickly when transmitted over the Internet
- enables people to telecommute

Disadvantages of ecommerce

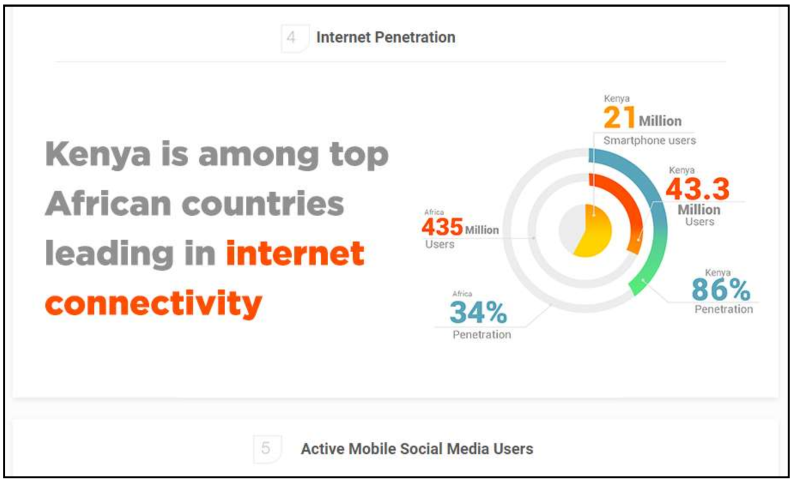
- technology and software issues
- cultural and legal obstacles

1.4.5. Class Discussion

Will Apps Make the Web Irrelevant?

Nowadays, it's hard to recall a time before the Web. How did we get along without the ability to pull up a Web browser and search for any item, learn about any topic, or play just about any type of game? Though the Web has come a remarkably long way from its humble beginnings, many experts claim that the Web's best days are behind it, and that there's a new sheriff in town: apps. Opinions vary widely over the future role of the Web in a world where apps have become an ever larger portion of the Internet marketspace. In 10 years, will Web browsers be forgotten relics, as we rely entirely on apps to do both our work and our play on the Internet? Will the Web and apps coexist peacefully as vital cogs in the Internet ecosystem? Or will the app craze eventually die down as tech users gravitate back towards the Web as the primary way to perform Internet-related tasks? Apps have grown into a disruptive force ever since Apple launched its App Store in 2008. The list of industries apps have disrupted is wide ranging: communications, media and entertainment, logistics, education, and healthcare. The average U.S. consumer spends over 2 and a half hours per day on smartphones and tablets, 80% of which is spent within apps. Despite not even existing prior to 2008, apps account for $25 billion in revenues, and the app economy is continuing to show robust growth, suggesting it is nowhere near saturated. Not only that, but the growth is not coming from more users trying the same small number of apps. Consumers are trying new apps all the time, leaving plenty of room for new app developers to innovate and create best-selling apps.

- ❖ Which do you use more, apps or the WWW?
- ❖ What apps do you use most?
- ❖ Why?



Source: https://www.jumia.co.ke/mobile-report/ (May 2018)

1.5. E-Commerce Business Models and Concepts

1.5.1. Introduction

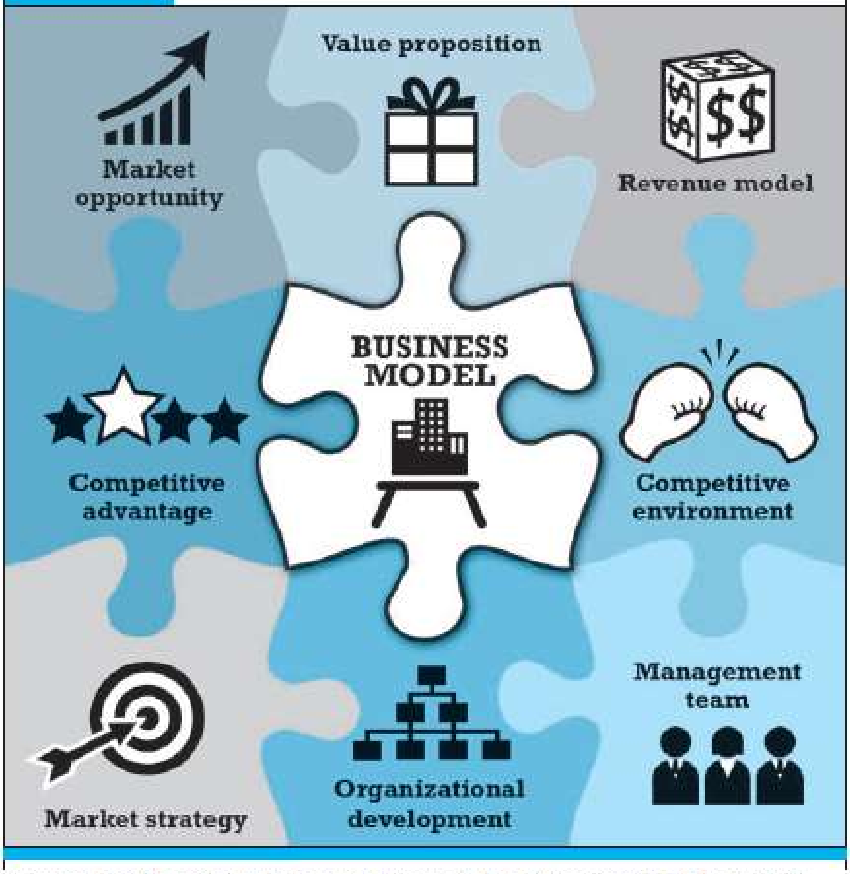
A *business model* is a set of planned activities (sometimes referred to as business processes) designed to result in a profit in a marketplace. A business model is not always the same as a business strategy, although in some cases they are very close insofar as the business model explicitly takes into account the competitive environment (Magretta, 2002). The business model is at the center of the business plan. A *business plan* is a document that describes a firm's business model. A business plan always takes into account the competitive environment. An *e-commerce business model* aims to use and leverage the unique qualities of the Internet, the Web, and the mobile platform.

1.5.2. Eight Key Elements of a Business Model

In any arena, not just e-commerce, a successful business model must effectively addresses the following eight elements:

1. Value proposition
2. Revenue model
3. Market opportunity
4. Competitive environment
5. Competitive advantage
6. Market strategy
7. Organizational development
8. and Management team.

FIGURE 2.1 THE EIGHT KEY ELEMENTS OF A BUSINESS MODEL



A business model has eight key elements. Each element must be addressed if you hope to be successful.

1. **Value proposition**
   Defines how a company's product or service fulfills the needs of customers (Kambil, Ginsberg, and Bloch, 1998). To develop and/or analyze a firm's value proposition, you need to understand why customers will choose to do business with the firm instead of another company and what the firm provides that other firms do not and cannot. From the consumer point of view, successful e-commerce value propositions include personalization and customization of product offerings, reduction of product search costs, reduction of price discovery costs, and facilitation of transactions by managing product delivery (Kambil, 1997; Bakos, 1998).

   Example: Amazon makes it possible for book lovers to shop for virtually any book in print from the comfort of their home or office, 24 hours a day, and to know immediately whether a book is in stock. Amazon's Kindle takes this one step further by making e-books instantly available with no shipping wait. Amazon's primary value propositions are unparalleled selection and convenience.

2. **Revenue Model**
   A firm's **revenue model** describes how the firm will earn revenue, generate profits, and produce a superior return on invested capital. We use the terms *revenue model* and *financial model* interchangeably. The function of business organizations is both to generate profits and to produce returns on invested capital that exceed alternative investments. Profits alone are not sufficient to

make a company "successful" (Porter, 1985). In order to be considered successful, a firm must produce returns greater than alternative investments. Firms that fail this test go out of existence.

Although there are many different e-commerce revenue models that have been developed, most companies rely on one, or some combination, of the following major revenue models: the advertising model, the subscription model, the transaction fee model, the sales model, and the affiliate model.

2.1. In the **advertising revenue model**, a company that offers content, services, and/ or products also provides a forum for advertisements and receives fees from advertisers. Companies that are able to attract the greatest viewership or that have a highly specialized, differentiated viewership and are able to retain user attention ("stickiness") are able to charge higher advertising rates. Yahoo, for instance, derives a significant amount of revenue from display and video advertising.

2.2. In the **subscription revenue model**, a company that offers content or services charges a subscription fee for access to some or all of its offerings. For instance, the digital version of *Consumer Reports* provides online and mobile access to premium content, such as detailed ratings, reviews, and recommendations, only to subscribers, who have a choice of paying a $6.95 monthly subscription fee or a $30.00 annual fee. Experience with the subscription revenue model indicates that to successfully overcome the disinclination of users to pay for content, the content offered must be perceived as a high-value-added, premium offering that is not readily available elsewhere nor easily replicated. Companies successfully offering content or services online on a subscription basis include nytimes.com , youpreneur.com, and studygateway.com, amongst others.

2.3. In the **transaction fee revenue model**, a company receives a fee for enabling or executing a transaction. For example, eBay provides an auction marketplace and receives a small transaction fee from a seller if the seller is successful in selling the item. E*Trade, a financial services provider, receives transaction fees each time it executes a stock transaction on behalf of a customer.

2.4. In the **sales revenue model**, companies derive revenue by selling goods, content, or services to customers. Companies such as Amazon (which sells books, music, and other products), LLBean.com, and Gap.com all have sales revenue models.

2.5. In the **affiliate revenue model**, companies that steer business to an "affiliate" receive a referral fee or percentage of the revenue from any resulting sales. For example, MyPoints makes money by connecting companies with potential customers by offering special deals to its members. When they take advantage of an offer and make a purchase, members earn "points" they can redeem for freebies, and MyPoints receives a fee. Community feedback companies such as Epinions receive much of their revenue from steering potential customers to Web sites where they make a purchase.

3. Market Opportunity

The term **market opportunity** refers to the company's intended **marketspace** (i.e., an area of actual or potential commercial value) and the overall potential financial opportunities available to the firm in that marketspace. The market opportunity is usually divided into smaller market niches. The realistic market opportunity is defined by the revenue potential in each of the market niches where you hope to compete. For instance, let's assume you are analyzing a software training company that creates online software-learning systems for sale to businesses. The overall size of the software training market for all market segments is approximately $70 billion. The overall market can be broken down, however, into two major market segments: instructor-led training products, which comprise about 70% of the market ($49 billion in revenue), and computer-based training, which accounts for 30% ($21 billion). There are further market niches within each of those major market segments, such as the Fortune 500 computer-based training market and the small business computer-based training market. Because the firm is a start-up firm, it cannot compete effectively in the large business, computer-based training market (about $15 billion). Large brandname training firms dominate this niche. The start-up firm's real market opportunity is to sell to the thousands of small business firms that spend about $6 billion on computer-based software training. This is the size of the firm's realistic market opportunity.

4. **Competitive Environment**

   A firm's **competitive environment** refers to the other companies selling similar products and operating in the same marketspace. It also refers to the presence of substitute products and potential new entrants to the market, as well as the power of customers and suppliers over your business.

   The competitive environment for a company is influenced by several factors: how many competitors are active, how large their operations are, what the market share of each competitor is, how profitable these firms are, and how they price their products. Firms typically have both direct and indirect competitors. Direct competitors are companies that sell products and services that are very similar and into the same market segment.

   For example, Priceline and Travelocity, both of whom sell discount airline tickets online, are direct competitors because both companies sell identical products—cheap tickets. Indirect competitors are companies that may be in different industries but still compete indirectly because their products can substitute for one another. For instance, automobile manufacturers and airline companies operate in different industries, but they still compete indirectly because they offer consumers alternative means of transportation. CNN.com, a news outlet, is an indirect competitor of ESPN.com, not because they sell identical products, but because they both compete for consumers' time online.

   The existence of a large number of competitors in any one segment may be a sign that the market is saturated and that it may be difficult to become profitable. On the other hand, a lack of competitors could either signal an untapped market niche ripe for the picking, or a market that has already been tried without success because there is no money to be made. Analysis of the competitive environment can help you decide which it is.

5. **Competitive Advantage**

   Firms achieve a **competitive advantage** when they can produce a superior product and/or bring the product to market at a lower price than most, or all, of their competitors (Porter, 1985). Firms also compete on scope. Some firms can develop global markets, while other firms can develop only a national or regional market. Firms that can provide superior products at the lowest cost on a global basis are truly advantaged.

   Firms achieve competitive advantages because they have somehow been able to obtain differential access to the factors of production that are denied to their competitors—at least in the short term (Barney, 1991). Perhaps the firm has been able to obtain very favourable terms from suppliers, shippers, or sources of labour. Or perhaps the firm has more experienced, knowledgeable, and loyal employees than any competitors. Maybe the firm has a patent on a product that others cannot imitate, or access to investment capital through a network of former business colleagues or a brand name and popular image that other firms cannot duplicate. An **asymmetry** exists whenever one participant in a market has more resources—financial backing, knowledge, information, and/or power—than other participants. Asymmetries lead to some firms having an edge over others, permitting them to come to market with better products, faster than competitors, and sometimes at lower cost.

For instance, when Apple announced iTunes, a service offering legal, downloadable individual song tracks for 99 cents a track that would be playable on any digital device with iTunes software, the company had better-than-average odds of success simply because of Apple's prior success with innovative hardware designs, and the large stable of music firms that Apple had meticulously lined up to support its online music catalogue. Few competitors could match the combination of cheap, legal songs and powerful hardware to play them on.

One rather unique competitive advantage derives from being a first mover. A **first-mover advantage** is a competitive market advantage for a firm that results from being the first into a marketplace with a serviceable product or service. If first movers develop a loyal following or a unique interface that is difficult to imitate, they can sustain their first-mover advantage for long periods (Arthur, 1996). Amazon provides a good example. However, in the history of technology-driven business innovation, most first movers often lack the **complementary resources** needed to sustain their advantages, and often follower firms reap the largest rewards (Rigdon, 2000; Teece, 1986). Indeed, many of the success stories we discuss in this book are those of companies that were slow followers—businesses that gained knowledge from failure of pioneering firms and entered into the market late.

Some competitive advantages are called "unfair." An **unfair competitive advantage** occurs when one firm develops an advantage based on a factor that other firms cannot purchase (Barney, 1991). For instance, a brand name cannot be purchased and is in that sense an "unfair" advantage. Brands are built upon loyalty, trust, reliability, and quality. Once obtained, they are difficult to copy or imitate, and they permit firms to charge premium prices for their products.

In **perfect markets**, there are no competitive advantages or asymmetries because all firms have access to all the factors of production (including information and knowledge) equally. However, real markets are imperfect, and asymmetries leading to competitive advantages do exist, at least in the short term. Most competitive advantages are short term, although some can be sustained for very long periods. But not forever. In fact, many respected brands fail every year.

Companies are said to **leverage** their competitive assets when they use their competitive advantages to achieve more advantage in surrounding markets. For instance, Amazon's move into the online grocery business leverages the company's huge customer database and years of e-commerce experience.

6. **Market Strategy**

No matter how tremendous a firm's qualities, its marketing strategy and execution are often just as important. The best business concept, or idea, will fail if it is not properly marketed to potential customers.

Everything you do to promote your company's products and services to potential customers is known as marketing. **Market strategy** is the plan you put together that details exactly how you intend to enter a new market and attract new customers. For instance, Twitter, YouTube, and Pinterest have a social network marketing strategy that encourages users to post their content on the sites for free, build personal profile pages, contact their friends, and build a community. In these cases, the customer becomes part of the marketing staff!

7. **Organizational Development**
   Although many entrepreneurial ventures are started by one visionary individual, it is rare that one person alone can grow an idea into a multi-million dollar company. In most cases, fast-growth companies—especially e-commerce businesses—need employees and a set of business procedures. In short, all firms—new ones in particular— need an organization to efficiently implement their business plans and strategies.

   Many e-commerce firms and many traditional firms that attempt an e-commerce strategy have failed because they lacked the organizational structures and supportive cultural values required to support new forms of commerce (Kanter, 2001).

   Companies that hope to grow and thrive need to have a plan for **organizational development** that describes how the company will organize the work that needs to be accomplished. Typically, work is divided into functional departments, such as production, shipping, marketing, customer support, and finance. Jobs within these functional areas are defined, and then recruitment begins for specific job titles and responsibilities. Typically, in the beginning, generalists who can perform multiple tasks are hired. As the company grows, recruiting becomes more specialized. For instance, at the outset, a business may have one marketing manager. But after two or three years of steady growth, that one marketing position may be broken down into seven separate jobs done by seven individuals.

   For instance, eBay founder Pierre Omidyar started an online auction site, according to some sources, to help his girlfriend trade Pez dispensers with other collectors, but within a few months the volume of business had far exceeded what he alone could handle. So he began hiring people with more business experience to help out. Soon the company had many employees, departments, and managers who were responsible for overseeing the various aspects of the organization.

8. **Management Team**
   Arguably, the single most important element of a business model is the **management team** responsible for making the model work. A strong management team gives a model instant credibility to outside investors, immediate market-specific knowledge, and experience in implementing business plans. A strong management team may not be able to salvage a weak business model, but the team should be able to change the model and redefine the business as it becomes necessary.

   Eventually, most companies get to the point of having several senior executives or managers. How skilled managers are, however, can be a source of competitive advantage or disadvantage. The challenge is to find people who have both the experience and the ability to apply that experience to new situations.

   To be able to identify good managers for a business start-up, first consider the kinds of experiences that would be helpful to a manager joining your company. What kind of technical background is desirable? What kind of supervisory experience is necessary? How many years in a particular function should be required? What job functions should be fulfilled first: marketing, production, finance, or operations? Especially in situations where financing will be needed to get a company off the ground, do prospective senior managers have experience and contacts for raising financing from outside investors?

1.5.3. RAISING CAPITA L

Raising capital is one of the most important functions for a founder of a start-up business and its management team. Not having enough capital to operate effectively is a primary reason why so many start-up businesses fail. Many entrepreneurs initially “bootstrap” to get a business off the ground, using personal funds derived from savings, credit card advances, home equity loans, or from family and friends. Funds of this type are often referred to as **seed capital**. Once such funds are exhausted, if the company is not generating enough revenue to cover operating costs, additional capital will be needed. Traditional sources of capital include incubators, commercial banks, angel investors, venture capital firms, and strategic partners.

Incubators typically provide a small amount of funding and also an array of services to start-up companies

- **Angel investors** are typically wealthy individuals or a group of individuals who invest their own money in exchange for an equity share in the stock of a business; often are the first outside investors in a start-up

- **Venture capital investors** typically invest funds they manage for other investors; usually later-stage investors

- **Crowdfunding**, a new method for start-ups to raise capital, involves using the Internet to enable individuals to collectively contribute their money to support a project

There are many e-commerce business models, and more are being invented every day. The number of such models is limited only by the human imagination, and our list of different business models is certainly not exhaustive. However, despite the abundance of potential models, it is possible to identify the major generic types (and subtle variations) of business models that have been developed for the e-commerce arena and describe their key features. It is important to realize, however, that there is no one correct way to categorize these business models.

A business’s technology platform is sometimes confused with its business model. For instance, “mobile e-commerce” refers to the use of mobile devices and cellular and wide area networks to support a variety of business models. Commentators sometimes confuse matters by referring to mobile e-commerce as a distinct business model, which it is not. All of the basic business models we discuss below can be implemented on both the traditional Internet/Web and mobile platforms.

Finally, you will also note that some companies use multiple business models. For instance, Amazon has multiple business models: it is an e-retailer, content provider, market creator, e-commerce infrastructure provider, and more. eBay is a market creator in the B2C and C2C e-commerce sectors, using both the traditional Internet/ Web and mobile platforms, as well as an e-commerce infrastructure provider. Firms often seek out multiple business models as a way to leverage their brands, infrastructure investments, and assets developed with one business model into new business models.

1.5.4. Major Business-to-consumer (B2C) Business Models

	Business model	Revenue Model	Description	Variations	Examples
1.	E-tailer	Sales of goods	Online version of retail store, where customers can shop at any hour of the day or night without leaving their home or office	Virtual Merchant	Amazon iTunes
			Online distribution channel for a company that also has physical stores	Bricks-and-Clicks	Sears.com Walmart.com
			Online version of direct mail catalogue	Catalogue Merchant	LLBean.com
			Manufacturer uses online channel to sell direct to customer	Manufacturer-Direct	Dell.com Mattel.com
2.	Community Provider	Advertising, subscription, affiliate referral fees	Sites where individuals with particular interests, hobbies, common experiences, or social networks can come together and "meet" online		Facebook LinkedIn Twitter Pinterest
3.	Content Provider	Advertising, subscription fees, affiliate referral fees	Information and entertainment providers such as newspapers, sports sites, and other online sources that offer customers up-to-date news and special interest how-to guidance and tips and/or information sales		WSJ.com CBSSports.com CNN.com ESPN.com Rhapsody.com
4.	Portal	Advertising, subscription fees, transaction fees	Offers an integrated package of content, content-search, and social network services: news, e-mail, chat, music downloads, video streaming, calendars, etc. Seeks to be a user's home base	Horizontal/ General	Yahoo AOL MSN Facebook
			Offers services and products to specialized marketplace	Vertical/ Specialized (Vortal)	Sailnet
5.	Transaction Broker	Transaction fees	Processors of online sales transactions, such as stockbrokers and travel agents, that increase customers' productivity by helping them get things done faster and more cheaply		Expedia Monster Travelocity Hotels.com Orbitz
6.	Market Creator	Transaction fees	Businesses that use Internet technology to create markets that bring buyers and sellers together		eBay Amazon Priceline
7.	Service Provider	Sales of services	Companies that make money by selling users a service, rather than a product		VisaNow.com Carbonite RocketLawyer

1.5.5. Limitations on the Growth of B2C E-Commerce

- Expensive technology
- Sophisticated skill set
- Persistent cultural attraction of physical markets and traditional shopping experiences
- Persistent global inequality limiting access to telephones and personal computers

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