

Transforming Lives

ELECTRONIC COMMERCE

Chapter 2 : E-Commerce Business Models and Concepts

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Objectives

At the end of the Chapter, the student should be able to:

- Differentiate between Business Model and Business Plan.
- Identify the key components of E-Commerce Business Models.
- Describe the major B2C Business Models.
- Describe the major B2B Business Models.
- Understand key business concepts and strategies applicable to E-Commerce.

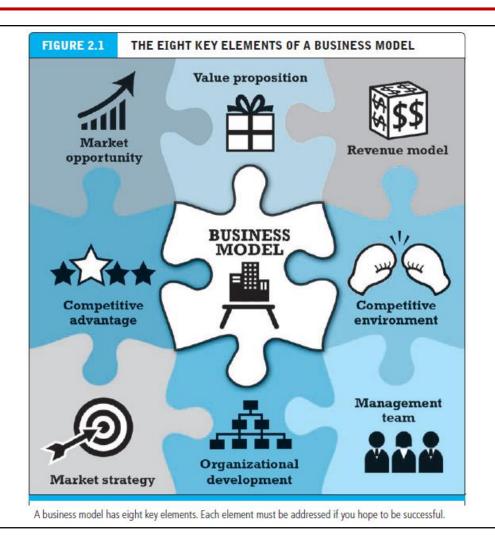
E-Commerce Business Model

- 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.

Key Components of E-Commerce Business Model

• A successful Business Model effectively addresses eight (8) key elements:



- **⇒ Value proposition:** How a company's product or service fulfills the needs of the customers.
- Typical E-Commerce value propositions include personalization, customization, convenience, and reduction of product search and price delivery costs.

- **Revenue model:** How the company plans to make money from its operations.
- Major E-Commerce revenue models include the advertising model, subscription model, transaction fee model, sales model, and affiliate model.
- **→ Market opportunity:** The revenue potential within a company's intended marketplace.

- ➡ Competitive environment: The direct and indirect competitors doing business in the same marketspace, including how many there are and how profitable they are.
- **Competitive advantage:** The factors that differentiate the business from its competition, enabling it to provide a superior product at a lower cost.

- → Market strategy: The plan a company develops that outlines how it will enter a market and attract customers.
- → **Organizational development:** The process of defining all the functions within a business and the skills necessary to perform each job, as well as the process of recruiting and hiring strong employees.
- **→ Management team:** The group of individuals retained to guide the company's growth and expansion.

TABLE 2.2 K	KEY ELEMENTS OF A BUSINESS MODEL			
COMPONENTS	KEY QUESTIONS			
Value proposition	Why should the customer buy from you?			
Revenue model	How will you earn money?			
Market opportunity	What marketspace do you intend to serve, and what is its size?			
Competitive environment	Who else occupies your intended marketspace?			
Competitive advantage	What special advantages does your firm bring to the marketspace?			
Market strategy	How do you plan to promote your products or services to attract your target audience?			
Organizational developm	What types of organizational structures within the firm are necessary to carry out the business plan?			
Management team	What kinds of experiences and background are important for the company's leaders to have?			

Major Business-to-Consumer (B2C) Models

- There are a number of different Business Models being used in the B2C E-Commerce arena.
- The major models include the following:
- → Portal: Offers powerful search tools plus integrated package of content and services; typically utilizes a combined subscription/advertising revenue / transaction fee model; may be general or specialized (vortal).

- ★ E-tailer: Online version of traditional retailer; includes virtual merchants (online retail store only), brick-and-click e-tailers (online distribution channel for company that also has physical stores), and manufacturers selling directly to the consumer.
- ◆ Content Provider: Information and entertainment companies that provide digital content; typically utilized and advertising, subscription, or affiliate referral fee revenue model.

- → Transaction Broker: Processes online sales transactions; typically utilizes a transaction fee revenue model.
- ★ Market Creator: Uses Internet Technology to create markets that bring buyers and sellers together; typically utilizes a transaction fee revenue model.
- **Service Provider:** Offers services online.
- ◆ Community Provider: Provides an online community of like-minded individuals for networking and information sharing; revenue is generated by advertising, referral fees, and subscriptions.

TABLE 2.3	B2C BUSINESS	MODELS		
BUSINESS MODEL	VARIATIONS	EXAMPLES	DESCRIPTION	R E V E N U E M O D E L
E-tailer	Virtual Merchant	Amazon iTunes Bluefly	Online version of retail store, where customers can shop at any hour of the day or night without leaving their home or office	Sales of goods
	Bricks-and-Clicks	Walmart.com Sears.com	Online distribution channel for a company that also has physical stores	Sales of goods
	Catalog Merchant	LLBean.com LillianVernon.com	Online version of direct mail catalog	Sales of goods
	Manufacturer- Direct	Dell.com Mattel.com SonyStyle.com	Manufacturer uses online channel to sell direct to customer	Sales of goods
Community Provider		Facebook LinkedIn Twitter Pinterest	Sites where individuals with particular interests, hobbies, common experiences, or social networks can come together and "meet" online	Advertising, subscription, affiliate referral fees
Content Provider		WSJ.com CBSSports.com CNN.com ESPN.com Rhapsody.com	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	Advertising, subscription fees affiliate referral fees

Portal	Horizontal/ General	Yahoo AOL MSN Facebook	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	Advertising, subscription fees, transaction fees
	Vertical/ Specialized (Vortal)	Sailnet	Offers services and products to specialized marketplace	Advertising, subscription fees, transaction fees
	Search	Google Bing Ask.com	Focuses primarily on offering search services	Advertising, affiliate referral
Transaction Broker		E*Trade Expedia Monster Travelocity Hotels.com Orbitz	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	Transaction fees
Market Creator		eBay Etsy Amazon Priceline	Businesses that use Internet technology to create markets that bring buyers and sellers together	Transaction fees
Service Provider		VisaNow.com Carbonite RocketLawyer	Companies that make money by selling users a service, rather than a product	Sales of services

Major Business-to-Business (B2B) Models

- The major Business Models used to date in the B2B E-Commerce arena include:
- **E-distributor:** Supplies products directly to individual businesses.
- **E-procurement:** Single firms create digital markets for thousands of sellers and buyers.
- **Exchange:** Independently owned digital market place for direct inputs, usually for a vertical industry group.

- Industry Consortium: Industry-owned vertical digital market.
- Private Industrial Network: Industry-owned private industrial network that coordinates supply chain with a limited set of partners.

TABLE 2.4	B2B BUSINESS MODELS					
BUSINESS MODEL	EXAMPLES	DESCRIPTION	REVENUE MODEL			
(1) NET MARKETPLACE						
E-distributor	Grainger.com Partstore.com	Single-firm online version of retail and wholesale store; supply maintenance, repair, operation goods; indirect inputs	Sales of goods			
E-procurement	Ariba PerfectCommerce	Single firm creating digital markets where sellers and buyers transact for indirect inputs	Fees for market-making services, supply chain management, and fulfillment services			
Exchange	OceanConnect	Independently owned vertical digital marketplace for direct inputs	Fees and commissions on transactions			
Industry Consortium	Exostar Elemica	Industry-owned vertical digital market open to select suppliers	Fees and commissions on transactions			
(2) PRIVATE INDUSTRIAL NETWORK						
	Walmart Procter & Gamble	Company-owned network that coordinates supply chains with a limited set of partners	Cost absorbed by network owner and recovered through production and distribution efficiencies			

E-Commerce Enablers

- No discussion of E-Commerce Business Models would be complete without mention of a group of companies whose Business Model is focused on providing the infrastructure necessary for E-Commerce companies to exist, grow, and prosper.
- These are the E-Commerce enablers: The Internet infrastructure companies.

- They provide the:
 - Hardware
 - Operating System Software
 - Networks and Communications Technology
 - Applications Software
 - Web Design
 - Consulting Services
 - Other tools that make E-Commerce (see Table 2.5).

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E-COMMERCE ENABLERS

INFRASTRUCTURE

PLAYERS

Infrastructure

re Players

Web Servers IBM, HP, Dell, Oracle

Hardware: Web Servers

Software: Server Software

Microsoft, Red Hat Linux, Apple

Cloud Providers

Amazon Web Services, Rackspace, Google, IBM,

Hosting Services

Rackspace, Webintellects, 1&1 Internet, HostGator, Hostway

Domain Name Registration

Go Daddy, Network Solutions, Dotster

Content Delivery Networks

Akamai, Limelight

Site Design

GSI Commerce, Fry, Oracle

E-commerce Platform Providers

GSI Commerce, Magento, IBM, ATG, Demandware

Mobile Commerce Hardware Platform

Apple, Samsung, Google

Mobile Commerce Software Platform

Apple, Google, Adobe, Usablenet, Unbound Commerce,

Branding Brand

Streaming, Rich Media, Online Video

Security and Encryption

Payment Systems

Web Performance Management

Comparison Engine Feeds/Marketplace

Management

Customer Relationship Management

Order Management

Fulfillment

Social Marketing

Search Engine Marketing

E-mail Marketing

Affiliate Marketing

Customer Reviews and Forums

Live Chat/Click-to-Call

Web Analytics

Adobe, Apple, Easy 2 Technologies, Channel Advisor

VeriSign, Checkpoint, GeoTrust, Entrust, EMC, Thawte, McAfee

PayPal, Authorize.net, Chase Paymentech, Cybersource

Compuware Gomez, Smartbear, Keynote Systems

Channel Advisor, Mercent, CPC Strategy

Oracle, SAP, GSI Commerce, Salesforce.com, NetSuite

JDA Software, GSI Commerce, Stone Edge

JDA Software, GSI Commerce, CommerceHub

Buffer, HootSuite, SocialFlow

iProspect, Channel Advisor, Rimm-Kaufman Group

Constant Contact, Experian CheetahMail, Bronto Software,

MailChimp

Commission Junction, Google Affiliate Network, LinkShare

Bazaarvoice, PowerReviews, BizRate

LivePerson, BoldChat, Oracle

Google Analytics, Adobe Omniture, IBM Coremetrics

How E-Commerce Changes Business: Strategy, Structure, and Process

- You need to understand how E-Commerce has changed the business environment in the last decade, including Industry Structures, Business Strategies, and Industry and Firm Operations (Business Processes and Value Chains).
- In general, the Internet is an open standards system available to all players, and this fact inherently makes it easy for new competitors to enter the marketplace and offer substitute products or channels of delivery.

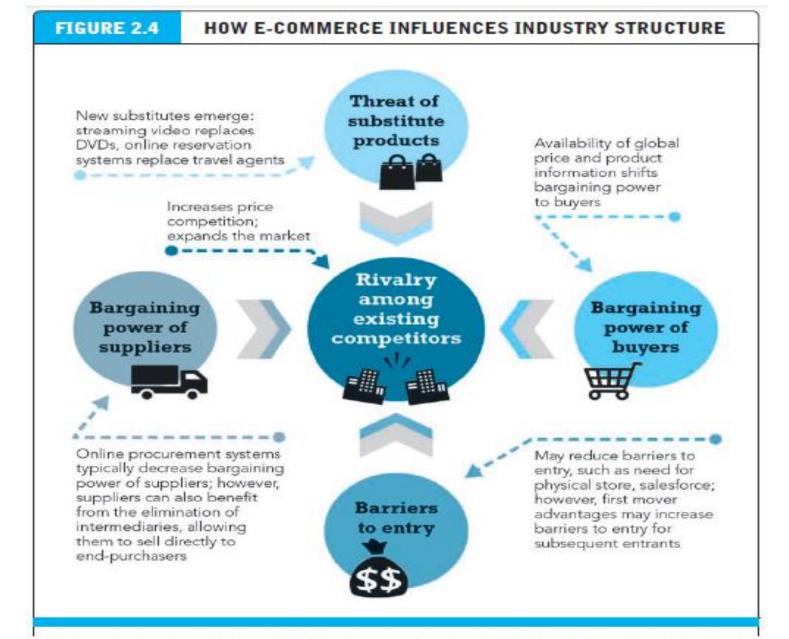
- Because information becomes available to everyone, the Internet inherently shifts power to buyers who can quickly discover the lowest-cost provider.
- On the other hand, the Internet presents many new opportunities for creating value, for branding products and charging premium prices, and for enlarging an already powerful offline physical business such as Walmart or Sears.

☐ Industry Structure

- E-Commerce changes Industry Structure, in some industries more than others.
- Industry Structure refers to the nature of the players in an industry and their relative bargaining power.
- According to Porter (1985), An Industry's Structure is characterized by five forces:

- Rivalry among existing competitors
- * The threat of substitute products
- **×** Barriers to entry into the industry
- * The bargaining power of suppliers
- * The bargaining power of buyers

- When you describe an Industry's Structure, you are describing the general business environment in an industry and the overall profitability of doing business in that environment.
- E-Commerce has the potential to change the relative strength of these competitive forces (see Figure 2.4).



E-commerce has many impacts on industry structure and competitive conditions. From the perspective of a single firm, these changes can have negative or positive implications depending on the situation. In some cases, an entire industry can be disrupted, while at the same time, a new industry is born. Individual firms can either prosper or be devastated.

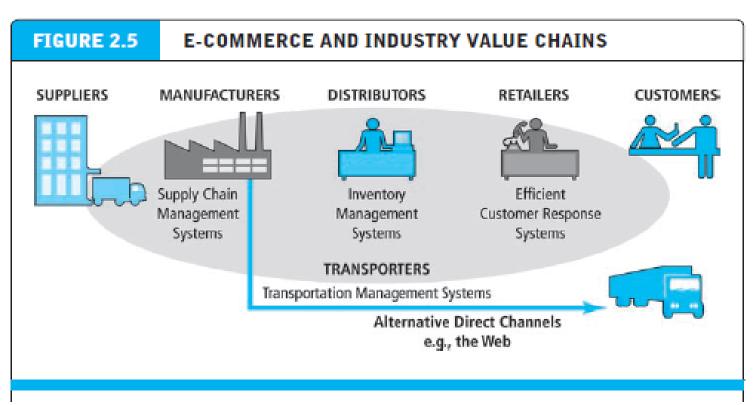
- When you consider a Business Model and its potential long-term profitability, you should always perform an Industry Structural Analysis.
- An Industry Structural Analysis is an effort to understand and describe the nature of competition in an industry, the nature of substitute products, the barriers to entry, and the relative strength of consumers and suppliers.

☐ Industry Value Chains

• While an Industry Structural Analysis helps you understand the impact of E-Commerce technology on the overall business environment in an industry, a more detailed industry Value Chain analysis can help identify more precisely just how E-Commerce may change business operations at the industry level.

- One of the basic tools for understanding the impact of IT on industry and firm operations is the Value Chain.
- A Value Chain is the set of activities performed in an industry or in a firm that transforms raw inputs into final products and services.
- Each of these activities adds economic value to the final product; hence, the term Value Chain as an interconnected set of value-adding activities.

- The six generic players in an Industry Value Chain are:
 - Suppliers
 - Manufacturers
 - Transporters
 - Distributors
 - Retailers
 - Customers



Every industry can be characterized by a set of value-adding activities performed by a variety of actors. E-commerce potentially affects the capabilities of each player as well as the overall operational efficiency of the industry.

- By reducing the cost of information, E-Commerce offers each of the key players in an Industry Value Chain new opportunities to maximize their positions by lowering costs and/or raising prices.
- For instance:
 - Manufacturers can reduce the costs they pay for goods by developing Internet-based B2B exchanges with their Suppliers.

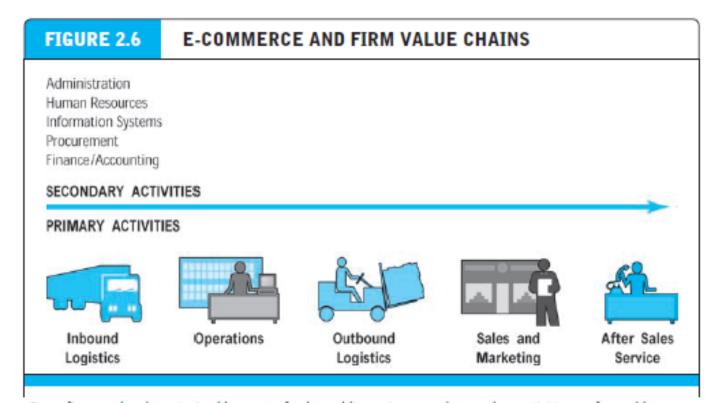
- Manufacturers can develop direct relationships with their Customers, bypassing the costs of Distributors and Retailers.
- Distributors can develop highly efficient Inventory
 Management Systems to reduce their costs
- Retailers can develop highly efficient Customer
 Relationship Management Systems to strengthen
 their service to Customers.

- Customers in turn can search for the best quality, fastest delivery, and lowest prices, thereby lowering their transaction costs and reducing prices they pay for final goods.
- Finally, the operational efficiency of the entire industry can increase, lowering prices and adding value for Consumers, and helping the industry to compete with alternative industries.

☐ Firm Value Chains

- The concept of Value Chain can be used to analyze a single firm's operational efficiency as well.
- The question here is: How does E-Commerce technology potentially affect the Value Chains of firms within an industry?
- A Firm Value Chain is the set of activities a firm engages in to create final products from raw inputs.

- Each step in the process of production adds value to the final product.
- In addition, firms develop support activities that coordinate the production process and contribute to overall operational efficiency.
- Figure 2.6 illustrates the key steps and support activities in a firm's Value Chain.



Every firm can be characterized by a set of value-adding primary and secondary activities performed by a variety of actors in the firm. A simple firm value chain performs five primary value-adding steps: inbound logistics, operations, outbound logistics, sales and marketing, and after sales service.

- E-Commerce offers firms many opportunities to increase their operational efficiency and differentiate their products.
- For instance:
 - o Firms can use the Internet's communications efficiency to outsource some primary and secondary activities to specialized, more efficient providers without such outsourcing being visible to the consumer.

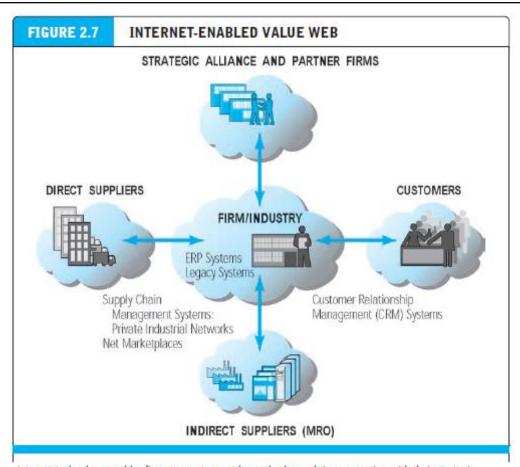
- In addition, firms can use E-Commerce to more precisely coordinate the steps in the Value Chains and reduce their costs.
- Finally, firms can use E-Commerce to provide users with more differentiated and high-value products.
- o For instance:

- ✓ Amazon provides consumers with a much larger inventory of books to choose from, at a lower cost, than traditional book stores.
- ✓ It also provides many services—such as instantly available professional and consumer reviews, and information on buying patterns of other consumers—that traditional bookstores cannot.

☐ Firm Value Webs

- While firms produce value through their Value Chains, they also rely on the Value Chains of their partners their Suppliers, Distributors, and Delivery Firms.
- E-Commerce creates new opportunities for firms to cooperate and create a value web.

- A Value Web is a networked business ecosystem that uses E-Commerce technology to coordinate the Value Chains of business partners within an industry, or at the first level, to coordinate the Value Chains of a group of firms.
- Figure 2.7 illustrates a Value Web.



Internet technology enables firms to create an enhanced value web in cooperation with their strategic alliance and partner firms, customers, and direct and indirect suppliers.

- A Value Web coordinates a firm's suppliers with its own production needs using an Internet-based Supply Chain Management System.
- Firms also use the Internet to develop close relationships with their logistics partners.

For instance:

- Amazon relies on United Parcel Service (UPS) Tracking Systems to provide its customers with online package tracking, and it relies on the U.S. Postal Service Systems to insert packages directly into the mail stream.
- Amazon has partnership relations with hundreds of firms to generate customers and to manage relationships with customers.

Business Strategy

- A Business Strategy is a set of plans for achieving superior long-term returns on the capital invested in a business firm.
- A Business Strategy is therefore a plan for making profits in a competitive environment over the long term.

- There are four generic strategies for achieving a profitable business: Differentiation, Cost, Scope, and Focus
- The specific strategies that a firm follow will depend on the product, the industry, and the marketplace where competition is encountered.
- Although the Internet is a unique marketplace, the same principles of strategy and business apply.

- Successful E-Commerce strategies involve using the Internet and Mobile Platform to leverage and strengthen existing business, and to provide products and services your competitors cannot copy.
- That means developing unique products, proprietary content, distinguishing processes (such as Amazon's one-click shopping), and personalized or customized services and products (Porter, 2001).
- There are five generic Business Strategies:

Product/Service Differentiation

- Differentiation refers to all the ways producers can make their products or services unique and distinguish them from those of competitors.
- There are many ways businesses differentiate their products or services.

- A business may start with a core generic product or service, but then create expectations among users about the "experience" of consuming the product or using the service—" Nothing refreshes like a Coke!" or "Nothing equals the experience of driving a BMW."
- Businesses may also augment products and services by adding features to make them different from those of competitors.

- Businesses can differentiate their products and services further by enhancing their abilities to solve related consumer problems.
- In their totality, the differentiation features of a product or service constitute the customer value proposition.
- E-Commerce offers some unique ways to differentiate products and services, such as the ability to personalize the shopping experience and to customize the product or service to the particular demands of each consumer.

• E-Commerce businesses can also differentiate products and services by making it possible to purchase the product from home, work, or on the road (ubiquity); by making it possible to purchase anywhere in the world (global reach); by creating unique interactive content, videos, stories about users, and reviews by users (richness and interactivity); and by storing and processing information for consumers of the product or service, such as warranty information on all products purchased through a site or income tax information online (information density).

Cost Competition

- Adopting a Strategy of Cost Competition means a business has discovered some unique set of business processes or resources that other firms cannot obtain in the marketplace.
- Business processes are the atomic units of the Value Chain.

- When a firm discovers a new, more efficient set of business processes, it can obtain a cost advantage over competitors.
- Then it can attract customers by charging a lower price, while still making a handsome profit.
- Eventually, its competitors go out of business as the market decisively tilts toward the lowest-cost provider.

- Or, when a business discovers a unique resource, or lower-cost supplier, it can also compete effectively on cost.
- Competing on cost can be a short-lived affair and very tricky.
- Competitors can also discover the same or different efficiencies in production.

- Competitors can also move production to low-cost areas of the world.
- Also, competitors may decide to lose money for a period as they compete on cost.
- E-Commerce offers some ways to compete on cost, at least in the short term.

 Firms can leverage ubiquity by lowering the costs of order entry; leverage global reach and universal standards by having a single order entry system worldwide; and leverage richness, interactivity, and personalization by creating customer profiles online and treating each individual consumer differently without the use of an expensive sales force that performed these functions in the past.

- While E-Commerce offers powerful capabilities for intensifying cost competition, which makes cost competition appear to be a viable strategy, the danger is that competitors have access to the same technology.
- However, self-knowledge, proprietary tacit knowledge (knowledge that is not published or codified), and a loyal, skilled workforce are in the short term difficult to purchase in factor markets.
- Therefore, cost competition remains a viable strategy.

Scope

- A Scope strategy is a strategy to compete in all markets around the globe, rather than merely in local, regional, or national markets.
- The Internet's global reach, universal standards, and ubiquity can certainly be leveraged to assist businesses in becoming global competitors.
- Yahoo, for instance, along with all of the other top 20
 E-Commerce companies, has readily attained a global presence.

Focus

- A focus/market niche strategy is a strategy to compete within a narrow market segment or product segment.
- This is a specialization strategy with the goal of becoming the premier provider in a narrow market.

- For instance, L.L. Bean uses E-Commerce to continue its historic focus on outdoor sports apparel; and W.W. Grainger—the Web's most frequently visited B2B site—focuses on the narrow Maintenance, Repair, and Operations (MRO) market segment.
- E-Commerce offers some obvious capabilities that enable a focus strategy.

• Firms can leverage richness and interactivity to create highly focused messages to different market segments; information intensity makes it possible to focus e-mail and other marketing campaigns on small segments; personalization—and related market customization—means the same product can be customized and personalized to fulfill the very focused needs of specific market segments and consumers.

Customer/Supplier Intimacy

- Another generic strategy is Customer Intimacy, which focuses on developing strong ties with customers.
- Strong linkages with customers' increase switching costs and thereby enhance a firm's competitive advantage.
- For example, Amazon's one-click shopping that retains customer details and recommendation services based on previous purchases makes it more likely that customers will return to make subsequent purchases.

• Table 2.7 Summarizes the five basic business strategies.

TABLE 2.7	BUSINESS STRATEGIES	
STRATEGY	DESCRIPTION	EXAMPLE
Differentiation	Making products and services unique and different in order to distinguish them from those of competitors	Warby Parker (Vintage- inspired prescription eyeglasses)
Cost competition	Offering products and services at a lower cost than competitors	Walmart.com
Scope	Competing in all markets around the globe, rather than merely in local, regional, or national markets	Apple iDevices
Focus/market niche	Competing within a narrow market or product segment	Bonobos.com (Men's clothing)
Customer intimacy	Developing strong ties with customers	Amazon; Netflix

Industry Structure, Industry and Firm Value Chains,
 Value Webs, and Business Strategy are central
 business concepts used to analyze the viability of and
 prospects for E-Commerce sites.



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