Chapter 8 Product I: Innovation and New Product Development

I. CHAPTER OVERVIEW

Is the best product a well-made product, one that works better than all others do and the one that will succeed? The answer "yes" seems obvious, but in reality, the correct answer is often "no." To succeed, products must provide benefits that people seek. Products must satisfy consumer needs and wants better than competitors' products.

In this chapter, students learn how products are classified, the layers of a product, the importance of new products, and how firms develop new products. In addition, students learn how products are adopted and how innovations are diffused throughout society. After thorough study, students will be much more inclined to answer "no" to the opening question.

II. CHAPTER OBJECTIVES

- 1. Explain how value is derived through different product layers.
- 2. Describe how marketers classify products.
- 3. Understand the importance and types of product innovations.
- 4. Show how firms develop new products.
- 5. Explain the process of product adoption and the diffusion of innovations.

III. CHAPTER OUTLINE

► MARKETING MOMENT INTRODUCTION			
11 2	Suppose you're the marketing manager in charge of increasing the sales of iPads to people aged		
65 or olde	r. What are some of the challenges you would face when trying get e	lderly people to	
buy iPads	? This could lead to a discussion on adoption, diffusion, and types of	new products.	
p. 221	REAL PEOPLE, REAL CHOICES—HERE'S MY	Exhibit 8. 1 Neal	
	PROBLEM AT UNDER ARMOUR	Goldman Photo	
	In 1996, Kevin Plank, a football player at the University of		
	Maryland, had the thought that there must be a better solution to		
	the 100 percent cotton T-shirt he and his fellow teammates were		
	wearing under their pads. Their shirts were quickly soaked with		
	sweat within minutes of practice. In the spring of 2011, Under		
	Armour started to see a gradual decline in sales and for the first		
	time, the brand faced severe competition from other brands. One		
	major threat was Nike, which had just launched a new product		
	campaign called Pro Combat. If Under Armour had created the		
	story of compression apparel, Nike's Pro Combat was aiming to		

write the next chapter. The challenge we faced was twofold: product and marketing. When business began to dip, the reality of the situation was that any product line overhaul might be too little too soon. Any product adjustment can send ripple effects through the supply chain, which in turn can affect delivery times, sales, and profit. On the other hand, the longer Under Armour waited to enact a new plan, the more we would see a dip in sales.

Kevin considered his options:

- 1. Approach the decision as a product problem. Build new product offerings to get into retail ASAP.
- 2. Approach the decision as a marketing problem. Stay the course with the current product line and invest time, money, and resources immediately.
- 3. Start over with a new business plan. Rebuild the Base layer product from the ground up..

The vignette ends by asking the student which option he/she would choose.

p. 222 Kevin chose option #3.

VALUE

Use Website Here: Under Armous: www.underarmour.com

p. 222 1. BUILD A BETTER MOUSETRAP—AND ADD

The truth is that just because a product is better is no guarantee it will succeed. The marketer's task is twofold: first, to create a better value than what's out there already and second to convince customers that this is true.

A *product* is a tangible good, service, idea, or some combination of these that satisfies consumer or business customer needs through the exchange process; it is a bundle of attributes including features, functions, benefits, and uses. Products can be physical goods, services, ideas, people, or places. A **good** is a *tangible* product, something that we can see, touch, smell, hear, taste, or possess. In contrast, intangible products—services, ideas, people, places—are products that we cannot always see, touch, taste, smell, or possess.

Marketers think of the products as more than the thing that comes in a package. They view a product as a bundle of **attributes** that includes the packaging, brand name, benefits, and supporting features in addition to a physical good.

The key word here is *create*. A large part of the marketer's role in

	creating the value proposition is to develop and market products appropriately.	
p. 223	1.1 Layers of the Product Concept A product is everything that a customer receives in an exchange. A product is made up of the core product, the actual product, and the augmented product. Marketers need to consider how to satisfy customers' wants and needs at each of these three levels – that is, how they can create value.	Figure 8.1 Layers of the Product
p. 224	1.1.1 The Core Product The core product consists of all the benefits the product will provide for consumers or business customers. A <i>benefit</i> is an outcome that the customer receives from owning or using a product. <i>Marketing is about supplying benefits</i> , <i>not attributes</i> . Many products actually provide multiple benefits.	Exhibit 8. 2 Skinny Cow
p. 224	1.1.2 The Actual Product The actual product is the physical good or the delivered service that supplies the desired benefit. The actual product also includes the unique features of the product, such as its appearance or styling, the package, and the brand name.	
p. 225	1.1.3 The Augmented Product The augmented product is the actual product plus other supporting features such as warranty, credit, delivery, installation, and repair service after the sale. Adding these supporting features to a product is an effective way for a company to stand out from the crowd.	
p. 225	2. HOW MARKETERS CLASSIFY PRODUCTS Marketers classify products into categories because the categories represent differences in how consumers and business customers feel about products and how they purchase different products. Such an understanding helps marketers develop new products and a marketing mix that satisfies customer needs.	
	Generally, products are either consumer products or business-to- business products. However, sometimes consumers and businesses buy the same products. Some examples include toilet paper, vacuum cleaners, and light bulbs.	
p. 225	2.1 How Long Do Products Last? Marketers classify consumer goods as durable or nondurable depending on how long the product lasts. Durable goods are consumer products that provide benefits over a period of months, years, or even decades, such as cars, furniture, and appliances. Nondurable goods, such as newspapers and food, are consumed	

	in the short term.	
	We are more likely to purchase durable goods under conditions of <i>high involvement</i> (as we saw in Chapter 5), while nondurable goods are more likely to be <i>low involvement</i> decisions.	
p. 226	2.2 How Do Consumers Buy Products? Marketers also classify products based on where and how consumers buy the product. We think of both goods and services as convenience products, shopping products, specialty products, or unsought products. Consumer decisions differ in terms of effort they put into habitual decision making to limited problem solving to extended problem solving. We can use this idea when we want to understand why it is important to classify products.	Figure 8.2. Classification of Products
p. 226	A convenience product typically is a nondurable good or service that consumers purchase frequently with a minimum of comparison and effort. Consumers expect these products to be handy and will buy whatever brands are easy to obtain. In general, convenience products are low priced and widely available. Consumers generally already know all they need or want to know about a convenience product, devote little effort to purchases, and willingly accept alternative brands if their preferred brand is not available in a convenient location. Most convenience product purchases are the results of habitual consumer decision-making. What is the most important thing for marketers of convenience products? You guessed it—make sure the product is easily obtainable in all the places where consumers are likely to look for it.	
p. 227	Staples such as milk, bread, and gasoline are basic or necessary items that are available almost everywhere. Most consumers do not perceive big differences among brands. Marketers must offer staples that consistently meet consumer's expectations for quality and make sure it is available at a price comparable to the competition's price.	
p. 227	An impulse product is something people buy on the spur of the moment.	
p. 227	Emergency products are those products we purchase when we are in dire need. Bandages, umbrellas, and something to unclog the bathroom sink are examples of emergency products. Because we need the product badly and immediately, price and sometimes product quality may be irrelevant to our decision to purchase.	
p.227	Shopping products are goods or services for which consumers	

will spend time and effort to gather information on price, product attributes, and product quality. For these products, consumers are likely to compare alternatives before they buy.

Specialty products have unique characteristics that are important to buyers at almost any price. Consumers usually know a good deal about specialty products, and they tend to be loyal to specific brands. Generally, a specialty product is an extended problem-solving purchase that requires a lot of effort to choose. That means firms that sell these kinds of products need to create marketing strategies that make their product stand apart from the rest.

p. 228

Unsought products are goods or services (other than convenience products) for which a consumer has little awareness or interest until a need arises. It requires a good deal of advertising or personal selling to interest people in these kinds of products—just ask any life insurance salesperson. It is a challenge to find convincing ways to interest consumers in unsought products.

Use Website Here: www.geico.com Example of insurance company (Geico)
Use Website Here: www.redcross.org Example of an unsought product (Red Cross)

p. 228 | **2.3** | **How do Businesses Buy Products?**

Marketers classify business-to-business products based on how organizational customers use them.

Equipment refers to the products an organization uses in its daily operations. Heavy equipment, sometimes called *installations* or *capital equipment*, includes items such as buildings and robotics used to assemble automobiles. Installations are big-ticket items and last for a number of years. Computers and photocopy machines are examples of *light* or *accessory equipment*; they are portable, cost less, and have a shorter life span than capital equipment.

Maintenance, repair, and operating (MRO products) are goods that a business customer consumes in a relatively short time. *Maintenance products* include light bulbs, mops, and cleaning supplies. *Repair products* are such items as nuts and bolts. *Operating supplies* include computer paper and oil to keep machinery running.

Raw materials are products of the fishing, lumber, agricultural, and mining industries that organizational customers purchase to use in their finished products.

	Processed materials are produced when firms transform raw materials from their original state. Organizations purchase processed materials that become a part of the products they make. Some business customers purchase <i>specialized</i> services from outside suppliers. Specialized services may be equipment-based, such as repairing a copy machine or fixing an assembly line malfunction, or non-equipment-based, such as market research and legal services.	
p. 228	Component parts are manufactured goods or subassemblies of finished items that organizations need to complete their own products. As with processed materials, marketing strategies for component parts usually involve nurturing relationships with customer firms and on-time delivery of a product that meets the buyer's specifications.	
p. 229	3. "NEW AND IMPROVED!" THE PROCESS OF INNOVATION The Federal Trade Commission says that (1) a product must be entirely new or changed significantly to be called new and (2) a product may be called new for only six months.	Exhibit 8. 3 Badabulle
p. 229	From a marketing perspective, a new product or innovation is anything that customers <i>perceive</i> as new and different. An innovation may be a completely new product that provides benefits never available before, or it may simply be an existing product with a new style, in a different color, or with some new feature. Creativity describes a process that results in something new. Creative outcomes can take on many forms, but most often we experience them as something we can see, hear, smell, touch, or taste	
p. 229	3.1 Types of Innovations Marketers classify innovations into three categories based on their degree of newness: continuous innovations, dynamically continuous innovations, and discontinuous innovations. These categories are based on the amount of disruption or change they bring to people's lives.	The Cutting Edge Innovating for a Better Shave Figure 8.3 Types of
p. 230	3.2 Continuous Innovations A continuous innovation is a modification to an existing product. This type of modification can set one brand apart from its competitors. The consumer does not have to learn anything new to use a continuous innovation. From a marketing perspective, this means that it is far easier to convince consumers to adopt this kind of new product.	Innovations

p. 230	A knockoff is a new product that copies, with slight modification, the design of an original product.	
p. 230	3.3 Dynamically Continuous Innovations A dynamically continuous innovation is a pronounced modification to an existing product that requires a modest amount of learning or change in behavior to use it. From radio to smartphone an amazing journey in dynamically continuous innovation!	Exhibit 8.4 Record Player Photo
p. 231	3.4 Discontinuous Innovations To qualify as a discontinuous innovation , the product must create <i>major changes</i> in the way we live. Consumers must learn a great deal to use a discontinuous innovation because no similar product has ever been on the market. Major inventions such as the airplane, the car, and the television radically changed modern lifestyles.	Exhibit 8. 5 iPad Photo

Apple iPhone (product that changed the way we communicate): www.apple.com/iphone
Nintendo Wii (product that changed how we play): www.us.wii.com
Blackberry Phone (product that changed how we work): www.blackberry.com

► Marketing Moment Activity

Think of examples of each different type of product. Why did you classify the product this way?

Activity: List five innovations. Label each innovation as continuous, dynamically continuous, or discontinuous. Defend your selection of type of innovation.

► METRIC MOMENT

How do marketers measure innovation? A short list of measures provide an "Innovation Score Card": firm strategy, firm culture, and outcomes of innovation.

Apply the Metrics

- Select a firm that you are particularly interested in and that you believe is pretty innovative.
- Do a little research on its website and elsewhere to get a sense for the evidence about how it performs on the above criteria for innovativeness.
- Summarize your findings—how does the firm score on the Innovation Score Card?
- In general, do you find that the firm is more or less innovative than you expected?

p. 231-	4. NEW-PRODUCT DEVELOPMENT	Figure 8.4
233	Research and development (R&D) is a well-defined and	Phases in New
	systematic approach to how a firm innovates. There are seven	Product
	phases in the process of new product development (or NPD)	Development

p. 232- 233	4.1 Phase 1: Idea Generation In the initial idea generation phase of product development, marketers use a variety of sources to come up with great new product ideas that provide customer benefits and that are compatible with the company mission. Sometimes ideas come from customers. Ideas also come from salespeople, service providers, and others who have direct customer contact. Value co-creation refers to the process by which an organization	Exhibit 8. 6 Snack wrap photo
p. 232	creates worth through collaborative participation by customers and other stakeholders in the new product development process. Often firms use marketing research activities, such as the <i>focus groups</i> we discussed in Chapter 4.	
p. 233-4 p. 232	4.2. Phase 2: Product Concept Development and Screening The second phase in developing new products is product concept development and screening. Although ideas for products initially come from a variety of sources, it is up to marketers to expand these ideas into more-complete product concepts. Product concepts describe what features the product should have and the benefits those features will provide for consumers. When screening, marketers and researchers examine the chances that a new product concept might be successful, while they weed out concepts that have little chance to make it in the market. They estimate technical success when they decide whether the new product is technologically feasible—is it possible to actually build this product? Then they estimate commercial success when they decide whether anyone is likely to buy the product. 4.3 Phase 3: Marketing Strategy Development The third phase in new product development is to develop a marketing strategy to introduce the product to the marketplace, a process we began to talk about back in Chapter 2. This means that	Table 8.1 Products Yesterday, Today, and Tomorrow
p. 233	marketers must identify the target market, estimate its size, and determine how they can effectively position the product to address the target market's needs. In addition, of course, marketing strategy development includes planning for pricing, distribution, and promotion expenditures both for the introduction of the new product and for the long run. 4.4 Phase 4: Business Analysis Even though marketers have evidence that there is a market for the product, they still must find out if the product can make a profitable contribution to the organization's product mix. How much potential demand is there for the product? Does the firm have the resources it will need to successfully develop and introduce the product? The business analysis for a new product begins with assessing how the new product will fit into the firm's	

	total product mix.	
p. 234-	4.5 Phase 5: Technical Development	
236	In technical development , a firm's engineers work with marketers in refining the design and production processes. The	
	better a firm understands how customers will react to a new	
	product, the better its chances of commercial success. For this	
	reason typically, a company's research-and-development (R&D)	
	department usually develops one or more physical versions or	
	prototypes of the product. Prospective customers may evaluate	Exhibit 8. 7
	these mockups in focus groups or in field trials at home.	V8 Fusion
	Technical development sometimes requires the company to apply for a patent .	
p. 235	Ethics Check	Ripped from the
p. 233	Do you believe marketers are doing enough to develop	Headlines
	sustainable products?	Ethical/Sustainab
		le Decisions in
	4.6 Phase 6: Test Marketing	the Real World
	In test marketing , the firm tries out the complete marketing	
	plan—the distribution, advertising, and sales promotion—but in	
p. 235	small geographic areas that are similar to the larger market it	
	hopes to enter.	
	There are both pluses and minuses to test marketing. On the	
	negative side, test marketing is extremely expensive. A test	
	market also gives the competition a free look at the new product,	
	its introductory price, and the intended promotional strategy—and	
	an opportunity to get to the market first with a competing product.	
	On the positive side, when they offer a new product in a limited	
	area marketers can evaluate and improve the marketing program.	
	Because of the potential problems and expense of test marketing,	
	marketers instead may use special computer software to conduct simulated tests that imitate the introduction of a product into the	
	marketplace. These simulations allow the company to see the	
	likely impact of price cuts and new packaging—or even to	
	determine where in the store it should try to place the product.	
p. 236	4.7 Phase 7: Commercialization	
	Commercialization means the launching of a new product, and it	
	requires full-scale production, distribution, advertising, and sales	
	promotion. A launch requires planning and careful preparation.	
	There is an explosive growth of crowdfunding , where innovative	
	websites have raised more than \$5 billion for entrepreneurs and	
	small companies	
	Activity: Divide the class into groups of three to five students.	

	Have each group develop (in theory) a new product. Create a plan for test marketing the product. Develop the marketing plan and	
	pick a geographic location.	
p. 237	5. ADOPTION AND DIFFUSION OF NEW PRODUCTS Product adoption is the process by which a consumer or business customer begins to buy and use a new good, service, or idea. Diffusion describes how the use of a product spreads throughout a population. At first, only a small number of people buy it, but change happens in a hurry when the process reaches the moment of critical mass. This decisive moment is called the tipping point. After months or years spent developing a new product, the challenge to firms is getting consumers to buy and use the product and to do so quickly to recover the costs of product development and launch.	
p. 237	5.1 Stages in Consumers' Adoption of a New Product Individuals and organizations pass through six stages in the adoption process. At every stage, people drop out of the process, so the proportion of consumers who wind up using the innovation on a consistent basis is a fraction of those who are exposed to it.	Figure 8.5 Adoption Pyramid
p. 238	5.1.1 Awareness To educate consumers about a new product, marketers may conduct a massive advertising campaign: a media blitz . This strategy works for new products when consumers see a new product as something they want, need and, cannot live without.	
p. 238	5.1.2 Interest Interest means that a prospective adopter begins to see how a new product might satisfy an existing or newly realized need. Interest also means that consumers look for and are open to information about the innovation. Marketers often design teaser advertisements that give prospective customers just enough information about the new product to make them curious and to stimulate their interest. Some consumers drop out of the process at this point.	
p. 238	5.1.3 Evaluation Sometimes little evaluation may occur before someone decides to buy a good or service. A person may do very little thinking before she makes an impulse purchase .	
	Again, some potential adopters will drop out at this stage.	
p. 239	5.1.4 Trial Trial is the stage in the adoption process when potential buyers will actually experience or use the product for the first time. Often	

	marketers stimulate trial when they provide opportunities for consumers to sample the product. Even if the trial is satisfactory, however, some prospective buyers still will not actually adopt the new product because it costs too much.	
p. 239	5.1.5 Adoption In the <i>adoption</i> stage, a prospect actually buys a product. This does not mean that all organizations or individuals who first choose an innovation are permanent customers. Marketers need to provide follow-up contacts and communications with adopters to ensure they are satisfied and remain loyal to the new product over time.	
p. 239	5.1.6 Confirmation Favorable experiences make it more likely that she will become a loyal adopter as her initially positive opinions result in <i>confirmation</i> . Some marketers feel that reselling the customer in the confirmation stage is important.	
p. 239	5.2 Adopter Categories Diffusion describes how the use of a product spreads throughout a population. Based on adopters' roles in the diffusion process, experts have classified them into five categories.	Figure 8.6 Categories of Adopters
p. 240	5.2.1 Innovators Innovators are roughly the first 2.5 percent of adopters. This segment is extremely adventurous and willing to take risks with new products. Innovators are typically well educated, younger, better off financially than others in the population, and worldly. Innovators pride themselves on trying new products.	
p. 240	5.2.2 Early Adopters Early adopters, approximately 13.5 percent of adopters, buy product innovations early in the diffusion process but not as early as innovators. Unlike innovators, early adopters are very concerned about social acceptance so they tend to gravitate toward products they believe will make others think they are cutting-edge or fashionable. Typically, they are heavy media users and often are heavy users of the product category. Others in the population often look to early adopters for their opinions on various topics, making early adopters key to a new product's success. For this reason, marketers often target them in their advertising and other communications efforts.	
p. 241	5.2.3 Early Majority The early majority, roughly 34 percent of adopters, avoids being	

either first or last to try an innovation. They are typically middleclass consumers and are deliberate and cautious. Early majority consumers have slightly above-average education and income levels. When the early majority adopts a product, it is no longer considered new or different—it is, in essence already established.

p. 241 **5.2.4** Late Majority

Late majority adopters, about 34 percent of the population, are older, more conservative, and typically have lower-than-average levels of education and income. The late majority adopters avoid trying a new product until it is no longer risky. By that time, the product has become an economic necessity or there is pressure from peer groups to adopt.

p. 241 | **5.2.5** Laggards

Laggards, about 16 percent of adopters, are the last in a population to adopt a new product. Laggards are typically lower in social class than other adopter categories and are bound by tradition. By the time laggards adopt a product, it may already be superseded by other innovations.

By understanding these adopter categories, marketers are able to better develop strategies that will speed the diffusion or widespread use of their products.

► Marketing Moment In-Class Activity

Think about innovations such as MP3 players, digital cameras etc. Identify friends, family, and acquaintances that might fit the adopter categories for this product. What type of promotion would be needed to get these people to purchase a new product?

p. 241 **5.3 Product Factors That Affect the Rate of Adoption**

The reason for most product failures is simple—consumers did not perceive that the products satisfied a need better than competitive products already on the market.

Researchers have identified five characteristics of innovations that affect the rate of adoption. Following is a discussion.

p. 242 **Relative advantage** describes the degree to which a consumer perceives that a new product provides superior benefits.

Compatibility is the extent to which a new product is consistent with existing cultural values, customs, and practices.

Complexity is the degree to which consumers find a new product or its use difficult to understand.

Trialability is the ease of sampling a new product and its benefits.

Observability is how visible a new product and its benefits are to others who might adopt it.

► Marketing Moment In-Class Activity

Suppose you are in charge of marketing a new meat such as rabbit meat. Rabbit meat is lower in fat and cholesterol than beef, it is less expensive than chicken, and it tastes like veal. Ask students to design advertisements that demonstrate each of the five characteristics of innovation (Example: to demonstrate compatibility, the advertisement might show a mother cooking rabbit meat like hamburger).

p. 243	Real People, Real Choices: Here's My Choice at Under	Exhibit 8. 8
	Armour:	UnderArmour
		products in store
	Option #3.	

WEB RESOURCES

Pearson Education, Inc.: www.mymktlab.com

Example of insurance company (Geico): www.geico.com

Example of an unsought product (Red Cross): www.redcross.org

iRobot Corporation (Committed to building robots for the real world and the emerging commercial robotics market.): www.irobot.com

Honda FCX (hydrogen full cell car): www.honda.com

Skype VoIP telephony over the Internet: www.skype.com

Nintendo Wii (product that changed how we play): www.nintendo.com

Blackberry Phone (product that changed how we work): www.blackberry.com

Crest Whitestrips (product that changed our health and grooming): www.whitestrips.com/whitestrips-home.jsp

Microsoft Home Server—control all media outlets in a home, accessible anywhere on-line (product that changed our homes):

www.microsoft.com/windows/products/winfamily/windowshomeserver/default.mspx

Apple iPhone (product that changed the way we communicate): www.apple.com/iphone

Under Armour micro-fiber sportswear (product that changed our clothing): www.underarmour.com

Chobani: www.chobani.com