LECTURE NOTES

CHAPTER OPENING EXAMPLE

CREATIVE PORTABLE SPEAKERS FOR YOUR MP3 PLAYERS: NOW YOU DO NOT HAVE TO LISTEN ALONE

Creative Technology, a Singapore-based company and worldwide leader in digital entertainment products, has introduced portable speakers for MP3 players in the TravelSound and TravelDock series as well as Cretaive PoPz.

A. Marketing issues faced by Creative Technology when introducing the portable speakers

- The Product: Extremely portable speakers able to produce powerful an superior sound to accompany third-generation nano MP3 players.
- The Target Market: Sociable nano MP3 users who love their portability of their MP3 players but who also want to share their music with their friends.
- The Special Marketing Task: To leverage on Creative's strong reputation in sound technology and move along with the current trend of music lovers' desires for sleek design, ultra portability, high quality sound and shared listening.

Besides frontal attacks on Apple's iPod with its Zen and MuVo, Creative is using the TravelSound, TravelDock and PoPz as flanking weapons to indirectly compete with Apple, the market leader in portable media players, by drawing away some portion of consumers spending on other portable digital entertainment products.

- A **product** is a good, service, or idea consisting of a bundle of tangible and intangible attributes that satisfies consumers and is received in exchange for money or some other unit of value.
- Tangible attributes include physical characteristics such as color or sweetness, and intangible attributes include becoming healthier or wealthier.
- The life of a firm depends on how it conceives, produces, and markets new products.

I. THE VARIATIONS OF PRODUCTS [LO1]

A product varies in terms of whether it is a consumer or business good.

A. Product Line and Product Mix

- A **product line** is a group of products that are closely related because they satisfy a class of needs, are used together, are sold to the same customer group, are distributed through the same type of outlets, or fall within a given price range.
 - **a.** Within each product line is the *product item*, a specific product as noted by a unique brand, size, or price.
 - **b.** A *stock keeping unit* (SKU) is a unique identification number that defines an item for ordering or inventory purposes.
- The **product mix** is the number of product lines offered by a company.

B. Classifying Products

- The government classifies products to collect information on industrial activity.
- Companies classify products to help develop similar marketing strategies for the wide range of products offered.

1. Type of User. Consists of two categories:

- **a.** Consumer goods are products purchased by the ultimate consumer.
- **b.** Business goods (B2B goods, industrial goods or organizational goods) are products that assist directly or indirectly in providing products for resale.
- **c.** Some products can be considered both consumer and business items, such as a personal computer.

2. Degree of Tangibility. Consists of three categories:

- **a.** A *nondurable good* is consumed in one or a few uses.
 - It ends to be inexpensive and purchased frequently.
 - Consumer advertising and wide distribution in retail outlets is essential.
- **b.** A *durable good* lasts over an extended number of uses.
 - Costs more and lasts longer than nondurable goods.
 - Personal selling is an important marketing activity in answering consumer questions.

c. Services are:

- Defined as activities, benefits, or satisfactions that an organization provides to consumers in exchange for money or something else of value
- Intangible, which means that special marketing effort is usually needed to communicate their benefits to potential buyers.

3. Services and New-Product Development.

Observing the step-by-step new-product development of a service is difficult due to its intangibility

II. CLASSIFYING CONSUMER AND BUSINESS GOODS [LO2]

Consumer and business products and services can be classified further.

A. Classification of Consumer Goods

There are four types of consumer goods, which differ in terms of (1) effort the consumer spends on the decision, (2) attributes used in purchase, and (3) frequency of purchase:

• **Convenience goods** are items that the consumer purchases frequently, conveniently, and with a minimum of shopping effort.

- **Shopping goods** are items for which the consumer compares several alternatives on criteria, such as price, quality, or style.
- **Specialty goods** are items that a consumer makes a special effort to search out and buy.
- Unsought goods are items that the consumer either does not know about or knows about but does not initially want.

The manner in which a consumer good is classified depends on the individual. One person may view a product (camera) as a shopping good whereas another may view it as a specialty good.

B. Classification of Business Goods

A major characteristic of business goods is that their sales are often the result of *derived demand*, which means that sales of industrial products frequently result, or are derived, from the sale of consumer goods. There are two types of business goods:

- 1. **Production goods**. These consist of items used in the manufacturing process that become part of the final product, such as raw materials or component parts.
- **2. Support goods**. These consist of items used to assist in producing other goods and services and include:
 - **a.** *Installations*. Consist of buildings and fixed equipment purchased by industrial buyers through sales reps often via competitive bidding.
 - **b.** *Accessory equipment*. Includes tools and office equipment and is usually purchased in small-order sizes by buyers. Sellers of industrial accessories use distributors to contact a large number of buyers.
 - **c.** *Supplies*. Are similar to consumer convenience goods and are purchased with little effort using straight rebuy decisions.
 - **d.** *Industrial services*. Are intangible activities to assist industrial buyers.

LEARNING REVIEW

1. Explain the difference between product width and product line.

Answer: The product width is the number of product lines offered by a company. A product line is a group of products that are closely related because they satisfy a class of needs, are used together, are sold to the same customer group, are distributed through the same type of outlets, or fall within a given price range.

2. What are the four main types of consumer goods?

Answer: convenience goods, shopping goods, specialty goods, and unsought goods

3. To which type of good (business or consumer) does the term *derived demand* generally apply?

Answer: business

III. NEW PRODUCTS AND WHY THEY SUCCEED OR FAIL [LO3]

New products are the lifeblood of a company and keep it growing, but the financial risks are large.

A. What Is a New Product?

The term *new* is difficult to define. The answer depends on one's perspective and has some marketing implications.

1. Newness Compared with Existing Products.

- **a.** New can refer to a product being functionally different than existing products.
- **b.** Sometimes this newness is revolutionary and creates a whole new industry, as in the case of the Apple II computer.
- **c.** At other times additional features are added to an existing product to try to make it appeal to more customers. However, firms run the risk of "feature bloat" that can overwhelm consumers.

MARKETING MATTERS

Blindsided in the Twenty-First Century – The Convergence of Digital Devices

In the late 1990s, companies selling digital products had it relatively easy: Just deliver the single core benefit that defined their respective product classes.

But in today's twenty-first century, whole industries—industries that used to be completely separate—are colliding and their products often overlap. The collision of these industries has birthed what some call the "convergent digital device".

Blindsided by the revolutionary changes in technology and consumer tastes, digital device marketers now face competition from unexpected places.

- 1. Newness in Legal Terms. Government authorities may advise or require that the term *new* be limited to use with a product for a certain period, for example, six months after it enters regular distribution. The difficulty with this suggestion is in the interpretation of the term *regular distribution*.
 - **2.** Newness from the Organization's Perspective. Companies view newness and innovation in their products at three levels:
 - **a.** The lowest level is a *product line extension*, which usually involves the least risk and is an incremental improvement of an existing product.
 - **b.** At the next level is a significant jump in the innovation or technology.
 - **c.** The third level is true innovation, a truly revolutionary new product.
 - **3.** Newness from the Consumer's Perspective. This approach classifies new products in terms of their effects on consumption according to the degree of learning required by the consumer to use the product properly:
 - **a.** Continuous innovation.
 - No new behaviors must be learned.
 - Effective marketing depends on generating awareness and having strong distribution, not reeducating users.
 - **b.** Dynamically continuous innovation.
 - Only minor changes in behavior are required.
 - The marketing strategy is to educate prospective buyers on their benefits, advantages, and proper use.

c. *Discontinuous innovation.*

- Consumers must learn entirely new consumption patterns.
- Marketing efforts involve not only gaining initial consumer awareness but also educating consumers on both the benefits and proper use of the innovative product, activities that can cost millions of dollars.

B. Why Products Succeed or Fail [LO4]

While there are many huge product successes, there are thousands of failures each year. Research indicates that it takes about 3,000 ideas to produce a single commercially successful new product.

1. Marketing Reasons for New-Product Failures.

Both marketing and nonmarketing factors contribute to new-product successes or failures.

MARKETING MATTERS

What Separates New-Product Winners and Losers?

- R.G. Cooper and E. J. Kleinschmidt studied 203 new industrial products to better understand what factors contributed to a product's success. The top five marketing factors in determining success are:
 - 1. Point of difference or uniquely superior product.
 - **2.** Well-defined product before actual development starts.
 - 3. Quality of execution of marketing mix activities.
 - **4.** Synergy or fit with marketing mix activities.
 - **5.** Market attractiveness, ones with large markets and high growth.

The critical marketing factors, some of which overlap, that often separate new-product winners and losers are:

- **a.** Insignificant point of difference.
 - Must have superior characteristics that deliver unique benefits to the user
 - Must be important enough for consumers to switch from a competing product.
- **b.** *Incomplete market and product definition before product development starts.*
 - New products need a precise protocol, a statement that, before product development begins, identifies: (1) a well-defined target market;
 (2) specific customers' needs, wants, and preferences; and (3) what the product will be and do.
 - Without this precision, money disappears as R&D tries to design a vague product for a phantom market.
- **c.** Too little market attractiveness.
 - New-product managers look for large and growing markets with real buyer needs.
 - When looking for market niches, the target market may be too small and competitive to warrant the R&D, product, and marketing expenses necessary to reach it.
- **d.** *Poor execution of the marketing mix*. Name and package (product), price, promotion, and distribution (place) can cause products to fail if any element isn't executed properly.
- e. Poor sensitivity to consumer needs on critical factors.
 - Even if general quality is high, a problem with a critical factor can kill a product.
 - Sometimes large markets can be served by taking features *out* of a product to make it simpler to use.
- **f.** Serious problems inherent in the product. Serious problems can kill a new product. For example, Mattel had to recall 1.5 million Fisher-Price infant toys worldwide which were made in China because of possible lead-paint hazards for children.
- **g.** *Bad timing*. Occurs when the product is introduced too soon, too late, or when consumer tastes are shifting dramatically.
- **h.** *No economic access to buyers*. Over 33,000 new consumer packaged goods products (food, beverage, household, etc.) are introduced in the last few years. As a result, the fight for exposure is tremendous in terms of costs for advertising, distribution, and shelf space.

MARKETING MATTERS

When less is more – How reducing the number of features can open up huge markets

Huge new markets can open up if firms move the opposite direction by taking features away and simplifying the product.

- Muji's clothing depends on studied anonymity for its appeal, and brandlessness is its chief brand.
- Apple's Computer's Newton personal digital assistant (PDA) was a great idea but was too complicated for users. Inventors of PalmPilot deleted certain features and achieved a market breakthrough.

Innovation research shows that firms using disruptive innovation and creating newness by simplifying the product are often *not* the industry leaders selling the more sophisticated highend products with more features.

2. A Look at Some Failures.

- **a.** Kimberly Clark's Avert Virucidal tissues failed because consumers didn't believe the claims, they lacked a clear point of difference, and had a bad name ("-cidal").
- **b.** Out! International's Hey! There's a Monster in My Room spray failed because the name implies that kids thought monsters were still in their rooms (poor name execution) and it never really had a well-defined protocol.
- **c.** Simple marketing research on consumers should have revealed the problems.

C. How Marketing Dashboards Can Reduce New-Product Failure

Marketers can use marketing dashboards to measure actual-market performance versus the goals set in new-product planning, such as tracking the sales of a new product launch. As a result, they can see, in a graph or chart on the marketing dashboard, what's working and what's not in terms of the marketing mix actions for the new product (Stockouts? Priced right? Advertising effective?).

USING MARKETING DASHBOARDS

Monitoring Your New-Product Launch

Household (HH) Trial and Repeat Percent

Your Challenge.

The marketing dashboard tracks the results of new-product launches by showing actual monthly results (blue line) of the new-product launch to goals (red line). Let's say there are 100 million (MM) households in the U.S. New households buying the new Super Snack Bar totaled 5 million households (HH) in the first month, 4 million in the second month, and 3 million in the third month. What is the "trier" rate for the new product?

Triers =
$$\left[\frac{\text{HHs Who Bought for Months } (1+2+3)}{\text{Total U.S. HHs}}\right] \times 100$$

$$\text{Triers} = \left[\frac{(5 \text{ MM} + 4 \text{ MM} + 3 \text{ MM})}{100 \text{ MM}}\right] \times 100$$

Triers = 12% who have tried the product in the first 3 months.

In month 1, a total of 1 million (MM) bought the new Super Snack Bar again (repeaters) out of a total of 5 MM purchases. Thus, in first month, 20% of triers repeated (1 MM/5 MM). In the second month, another 1 MM consumers bought the product again, for a cumulative total of 2 MM for months 1 and 2. The total repeater rate for the first two months for the new product is the cumulative repeaters (1 MM + 1 MM) divided by the cumulative triers in the first two months (5MM + 4MM).

Repeaters =
$$\left[\frac{\text{HHs Who Bought Again for Months } (1+2)}{\text{Total HHs That Bought for Months } (1+2)}\right] \times 100$$

Repeaters = $\left[\frac{(1 \text{ MM} + 1 \text{ MM})}{5 \text{ MM} + 4 \text{ MM}}\right] \times 100$

Repeaters = 22% who have bought the product again for the first two months after the launch.

[See CH10HHTrierRepeater.xls]

Your Findings.

- The top figure shows the number of households trying the new flavor (blue line), which is far below the red goal line.
- Consumers are not repeating to the level of the goal set in the bottom figure.

Your Actions. There could be three different problems:

- Why are fewer people trying the flavor than expected? This will trace to marketing, sales, and communication issues.
- Why are those who bought it not buying it again? This could be a distribution problem (it's not in stock) or it could be a product or packaging problem.
- It is possible that the product is doing fine, and the goals are unrealistic.

You decide to tackle the third issue first.

LEARNING REVIEW

4. From a consumer's viewpoint, what kind of innovation would an improved electric toothbrush be?

Answer: continuous innovation

5. What does "insignificant point of difference" mean as a reason for new-product failure?

Answer: The product must have superior characteristics that deliver unique benefits to the user compared to those of competitors.

IV. THE NEW-PRODUCT PROCESS [LO5]

- Innovation and new products are the lifeblood of most business firms. This is why many firms set goals for sales revenues derived from new products.
- To develop new products efficiently, companies take a specific sequence of steps before their products are ready for market.
- The **new-product process** consists of seven stages a firm goes through to identify business opportunities and convert them to a salable good or service.

[SLN 10-2: The New-Product Process at 3M]

A. New-Product Strategy Development

New-product strategy development is the stage of the new-product process that defines the role for a new product in terms of the firm's overall corporate objectives. It provides a focus for ideas and concepts developed in later stages.

1. Objectives of the Stage: Identify Markets and Strategic Roles.

Firms use SWOT analysis and environmental scanning process described in Chapter 3 to identify factors to exploit and define the product's protocol.

2. Improving Innovation: Cross-Functional Teams.

Using cross-functional teams is vital because it allows members to talk with each other about the firm's new-product process for a given product under consideration or development.

B. Idea Generation

- **Idea generation** is the stage of the new-product process that involves developing a pool of concepts as candidates for new products and builds on the previous stage's results.
- The idea should be made as concrete as possible before moving to the next stage of the new-product process.
- New-product ideas are generated by customers, suppliers, employees, basic R&D, and competitors as well as "outsiders," such as universities, inventors, and technology firms.

1. Customer and Supplier Suggestions.

- **a.** Business researchers emphasize that firms must involve customers and suppliers in the product development process.
- **b.** This often means focusing on what the new product will actually *do* for them rather than simply *what they want*.
- **c.** Look outside the firm for solutions to problems rather than insisting "we know best."

2. Employee and Co-Worker Suggestions.

- **a.** Employees may be encouraged to suggest new-product ideas through suggestion boxes or contests.
- **b.** Volvo's YCC (Your Concept Car) all female design team first obtained ideas on new-car features from all-female focus groups drawn from its Swedish workforce.

3. Research and Development Breakthroughs.

- **a.** Another source of new products is a firm's basic research, but the costs can be huge.
- **b.** Professional R&D "innovation labs" also provide new-product ideas.

Web Link

IDEO—Where Design Is Not a Noun ... It's a Verb

The Apple mouse. The Crest Neat Squeeze toothpaste dispenser. The Steelecase Leap adjustable office chair. These are just some of the thousands of new products designed by a firm you've probably never heard of but benefit from everyday. To David Kelley, cofounder of IDEO, product design includes both artistic and functional elements. Visit IDEO's website (www.ideo.com) to view its recent inventions and innovations for its clients.

- **4. Competitive Products**. A firm can purchase and use competitors' products to assess their strengths and weaknesses relative to its own offerings and to generate new-product ideas.
- **5.** Universities, Inventors, and Small Technology Firms. Visionaries outside the firm can be a source of new-product ideas.
 - **a.** *Universities*. Their technology transfer centers often partner with other for profit business firms.
 - **b.** *Inventors*. Lone inventors and entrepreneurs often come up with brilliant ideas.
 - **c.** *Small technology firms*. Many large firms started out as tiny organizations until a venture capital firm or large corporation invested money and expertise to help them grow.

C. Screening and Evaluation

Screening and evaluation is the stage of the new-product process that involves internal and external evaluations of the new-product ideas to eliminate those that warrant no further effort.

1. **Internal Approach**. Internally, the firm evaluates the technical difficulty of the proposal and whether the idea meets the objectives defined in the new-product strategy development step.

2. External Approach.

- **a.** Concept tests are external evaluations that consist of preliminary testing of the new-product idea, rather than the actual product, with consumers.
- **b.** These tests are more useful with minor modifications of existing products than with really new, innovative products.
- **c.** Concept tests usually rely on written descriptions of the product but may be augmented with sketches, mockups, or promotional literature.

d. Questions asked during concept testing are: (1) How does the customer perceive the product? (2) Who would use it? and (3) How would it be used?

LEARNING REVIEW

6. What step in the new-product process has been added in recent years?

Answer: New-product strategy development has been added recently by many companies to provide focus for ideas and concepts developed later.

7. What are the main sources of new-product ideas?

Answer: Customer and supplier suggestions, employee suggestions, R&D breakthroughs, and competitive products.

8. What is the difference between internal and external screening and evaluation approaches used by a firm in the new-product process?

Answer: In internal screening, company employees evaluate the technical feasibility of new product ideas. In external screening, evaluation consists of preliminary testing of the concept (not the actual product) with consumers.

D. Business Analysis

- **Business analysis** is the stage of the new-product process that involves specifying the product features and marketing strategy and making necessary financial projections needed to commercialize a product.
- This is the last checkpoint before significant capital is invested in creating a *prototype*, a full-scale operating model of the product under development.
- Economic analysis, marketing strategy review, and legal examination of the proposed product are conducted at this stage.
 - **a.** *Economic analysis*. Profit projections are developed based on estimates of the number of units and the costs of R&D, production, and marketing.
 - **b.** *Marketing strategy review*. The product is assessed whether it will help or hurt sales of existing products and if it can be sold through existing channels or if new outlets are needed.
 - **c.** Legal examination. The new product is studied to determine whether it can be protected with a patent or copyright so that the technology, product, or brand cannot easily be copied.

• This is the last checkpoint before significant capital is invested in creating a *prototype*, a full-scale operating model of the product under development.

E. Development

- Product ideas that survive the business analysis proceed to actual
 development, the stage of the new-product process that involves turning the
 idea on paper into a prototype. This results in a demonstrable, producible
 product.
- This stage involves both manufacturing the product and performing laboratory and consumer test to ensure that it meets the standards set. The new product must be able to be manufactured at reasonable cost with the required quality.
- Some new products can be so important and costly that the company is betting its very existence on success.
- Safety tests are critical when products are **not** used as planned.

MAKING RESPONSIBLE DECISIONS—SAFETY SUVs and Pickups versus Cars – Godzilla meets a Chimp?

High-bumper pickups and sport utility vehicles (SUV s)—termed "light trucks" in the industry—are now involved in about 20 percent of all highway deaths.

When one of these light trucks, which is often a ton heavier than a car, collides with a car, the car comes off second best.

The problem is also money. These light trucks now account for a fairly large percentage of automobile sales and most of its profits. Improving the cars—with side air bags and steel supports—is expensive, as is lowering the frame or adding a crumple zone for the bumper of the bigger vehicle.

15 automakers from four countries voluntarily agreed to redesign their light trucks to make their bumper height more compatible with cars. T hey are also likely to protect car passengers from side impacts from light trucks by making side air bags standard equipment in cars.

F. Market Testing

Market testing is the stage of the new-product process that involves exposing actual products to prospective consumers under realistic purchase conditions to see if they will buy.

1. Test Marketing.

- **a.** Test marketing involves offering a product for sale on a limited basis in a defined area to determine whether consumers will actually buy the product and to try different ways of marketing it.
- **b.** Only about a third of the products test marketed do well enough to go on to the next phase.
- **c.** Market tests are usually conducted in cities that are representative of average U.S. consumers. Criteria include:
 - Match the average demographics and brand purchase patterns of the U.S.
 - Are small towns far enough from big markets to test low-cost advertising and sales promotion alternatives.
 - Have cable systems to deliver different ads to different homes and tracking systems in retail locations like those of AC Nielsen to measure sales.

d. Market tests:

- Gives the company an indication of potential sales volume and market share in the test area.
- Can check other elements of the marketing mix.
- Are time consuming and expensive due to production and marketing costs incurred.
- Reveal plans to competitors, enabling them to get a product in national distribution first or trying to sabotage the test. As a result, some firms skip test markets.

2. Simulated Test Markets.

- **a.** Because of the time, cost, and confidentiality problems of test markets, consumer packaged goods companies often turn to *simulated* (or *laboratory*) *test markets* (*STM*), a technique that simulates a full-scale test market but in a limited fashion.
- **b.** STMs are often run in shopping malls, where consumers are:
 - Questioned to identify who uses the product class being tested as well as on usage, reasons for purchase, and important product attributes.
 - Shown TV commercials or print ads for the test product along with competitors' advertising and are given money to make a decision to buy or not buy the firm's product—or the competitors' product—from a real or simulated store environment.

• Used early in the development process to screen new-product ideas and later in the process to make sales projections.

3. When Test Markets Don't Work.

- **a.** Testing a service beyond the concept level is very difficult because the service is intangible.
- **b.** Test markets for expensive consumer products are impractical; only reactions to mockups or one-of-a-kind prototypes are possible.

G. Commercialization

- **Commercialization** is the stage of the new-product process that involves positioning and launching a new product in full-scale production and sale.
- Is the most expensive stage, especially for consumer products.
- If competitors introduce a product that leapfrogs the firm's own new product or if cannibalization of its own existing products look significant, the firm may halt the new-product launch.
- To minimize the risk of new-product failure, some companies use *regional rollouts*, introducing the product sequentially into geographical areas to allow production levels and marketing activities to build up gradually.

1. Sony Connect: The Complexities of Commercialization.

- **a.** Using outside technology to develop a new product was a departure from Sony's usual approach.
- **b.** As a result, the company faced a series of problems which eventually led to a failed product launch.

2. The Risks and Uncertainties of the Commercialization Stage. Grocery products pose special commercialization problems:

- **a.** Because shelf space is so limited, many supermarkets require a **slotting fee** for new products, a payment a manufacturer makes to place a new item on a retailer's shelf.
- **b.** If a new grocery product does not achieve a predetermined sales target, some retailers require a **failure fee**, a penalty payment a manufacturer makes to compensate a retailer for sales its valuable shelf space failed to make.

3. Speed as a Factor in New-Product Success.

- **a.** Companies have discovered that speed or *time to market* (TtM) is often vital in introducing a new product. Recent studies have shown that high-tech products coming to market on time are far more profitable than those arriving late.
- **b.** Parallel development involves cross-functional team members who carry out the simultaneous development of both the product and production process from concept to production, thereby reducing product development time.
- **c.** In software development, *fast prototyping* uses a "do it, try it, fix it" approach—encouraging continuing improvements even after the initial design.
- **d.** To speed up time to market many large companies are building "fences" around their new product teams to keep them from getting bogged down in red tape.

LEARNING REVIEW

9. How does the development stage of the new-product process involve testing the product inside and outside the firm?

Answer: Internally, laboratory tests are done to see if the product achieves the physical, quality, and safety standards; externally, consumer tests are done.

10. What is a test market?

Answer: A test market is a city that is viewed as being representative of U.S. consumers in terms of demographics and brand purchase behaviors, is far enough from big markets to allow low-cost advertising, and has tracking systems to measure sales.

11. What is commercialization of a new product?

Answer: Commercialization involves positioning and launching new product in full-scale production and sales and is the most expensive stage for most new products.

APPLYING MARKETING KNOWLEDGE

1. Products can be classified as either consumer or business goods. How would you classify the following products? (a) Johnson's baby shampoo, (b) a Black & Decker two-speed drill, and (c) an arc welder?

Answers:

a. Johnson's baby shampoo. A consumer good.

- b. **Black & Decker two-speed drill**. A consumer good, if used by a do-it-yourselfer for work around the house or in hobbies or a business good, if used by a construction worker building a new home.
- c. **Arc welder**. A business good.
- 2. Are products such as Kit Kat chocolate bars and Raymond Weil Watches convenience, shopping, specialty, or unsought goods?

Answers:

- a. Kit Kat chocolate bars. Convenience good.
- b. Raymond Weil Watches. Shopping good.
- 3. Based on your answer to question 2, how would the marketing actions differ for each product and the classification to which you assigned it?

Answers:

- a. **Kit Kat chocolate bars**. Since this item is likely to be available to consumers wherever food and snack products are sold. Distribution of this product would include grocery, convenience, and mass merchandise stores and probably vending machines, since accessibility is important in the purchase of any convenience item.
- b. **Raymond Weil Watches**. Consumers who want this product will shop for watches, comparing the advantages and disadvantages of several brands. Since Raymond Weil will be compared against other brands, it is important to point out the differences that make the Raymond Weil watch a good value for the consumer.
- 4. In terms of the behavioral effect on consumers, how would a PC, such as an Apple PowerBook, be classified? In light of this classification, what actions would you suggest to the manufacturers of these products to increase their sales in the market?

Answers:

- a. **Classifying personal computers**. When first introduced, the personal computer was a discontinuous innovation. Using a computer for recreation, taxes, recipes, and education of children was not common. The consumer had to learn a totally new way to interact with a machine in order to get the desired results from the software.
- b. **Actions of manufacturers**. For the manufacturers of these products, education became a major obstacle, and product trial was particularly important to overcome consumer fears or hesitancies. Today, these desktop computers are a far more easier to do personal computing, but they can be considered continuous innovations. Now

Apple's and other PC marketers' task is to sell prospective buyers on the competitive points of difference of their respective laptops.

5. Several alternative definitions were presented for a new product. How would a company's marketing strategy be affected if it used (a) the legal definition or (b) a behavioral definition?

Answers:

- a. **Legal definition**. If a company uses the legal definition, a product would only be viewed as new for six months after it enters regular distribution. This view may not allow sufficient time for the new-product strategy to work.
- b. **Behavioral definition**. A behavioral definition is a useful way for a company to view a new product. The effect on marketing strategy would be dramatic. A company would recognize that discontinuous innovations require more personal selling and advertising for educational purposes. Classifying a product as a continuous innovation would prepare a company for the likelihood of rapid competitive entry, and it would strive to lock up distributors before competitors enter.
- 6. What methods would you suggest to assess the potential commercial success for the following new products? (a) a new, improved ketchup, (b) a three-dimensional television system that took the company 10 years to develop, and (c) a new children's toy on which the company holds a patent.

Answers:

- a. **New, improved ketchup**. In the test marketing of a new ketchup, use of a purchase laboratory might be the most advantageous method to assess the product's likely success. Competitive imitation of the product would be a real fear for the company, since imitation would be quick to follow in a test market situation.
- b. **Three-dimensional television system**. The three-dimensional television set might be a product that would require field-testing. Assuming that the technology was sufficient to produce a high-quality picture, actual consumer acceptance and purchase would be important. Moreover, since the development of the technology took the company such a long time, it would be unlikely that a competitor could quickly imitate the product.
- c. **New children's toy**. The company holds a patent for the children's toy. In this instance, field-testing is not a problem.

7. Concept testing is an important step in the new-product process. Outline the concept tests for (a) an electrically powered car and (b) a new loan payment system for automobiles that is based on a variable interest rate. What are the differences in developing concept tests for products as opposed to services?

Answers:

- a. **Electrically powered car**. The concept test for an electrically powered car would describe the product in terms of similar autos but would highlight the differences from existing gasoline-powered engines from the consumer's perspective.
- b. **New loan payment system for automobiles**. A concept test for a variable rate interest car loan would have to show how the monthly payment for the loan would change as the interest rate index factor changes.

The major difference in concept tests between products and services is that services are more difficult to concept test. It is harder to relate an intangible service to consumer experience in order to explain a purpose or new concept (also intangible).

BUILDING YOUR MARKETING PLAN

In fine-tuning the product strategy for your marketing plan, do these two things:

- 1. Develop a simple two-column table in which (a) market segments are in the first column and (b) the one or two key points of differences of the product to satisfy the segment's needs are in the second column.
- 2. In the third column of your table, write ideas for specific new products for your business in each of the rows in your table.

Answers:

(a) MARKET SEGMENTS	(b) POINTS OF DIFFERENCE	(c) NEW PRODUCT IDEAS

Question #1 revisits the first Building Your Marketing Plan activity for Chapter 9. However, after the discussion in Chapter 10 about points of difference being the single most important factor in new product success or failure, it should have more significance for students. Also, the students' development of a market-product grid (Chapter 9) for their plans should add to their understanding.

SLN 10-1: SUPPLEMENTAL LECTURE NOTE

Why New Product Development Can Be a Dice Roll: Some Forecasts

Although developing a new brand or product line extension can be risky, introducing a totally new technology can involve "betting the company." Here are some predictions for key technologies in today's multimedia telecommunications that look outrageous in hindsight.

On computers and chips:

- "I think there is a world market for maybe five computers."
 - —Thomas Watson, Chairman of IBM, 1943.
- "I have traveled the length and breadth of this country and talked with the best people, and I can assure you that data processing is a fad that won't last out the year."
 - —Editor in charge of business books for Prentice-Hall, 1957.
- "But what the hell is it good for?"
 - —Engineer at the Advanced Computing Systems Division of IBM, 1968, commenting on the microchip.
- "There is no reason anyone would want a computer in their home."
 - —Ken Olson, President, Chairman and Founder of Digital Equipment Corp., 1977.

On telephones, radios, and televisions:

- "Well-informed people know it is impossible to transmit the voice over wires, and even if it were possible the thing would have no practical value."
 - —Editorial in the Boston Post, 1865.
- "That's an amazing invention but who would ever want one?"
 - —President Rutherford B. Hayes, after participating in a test of the 1st intercity phone link between Washington and Philadelphia, 1876.
- "The radio craze will die out in time."
 - —Thomas Edison, 1922.
- "There's a lunatic in the lobby who says he's invented a device for transmitting pictures over the air. Be careful, he may have a razor on him."
 - —Editor of the London Daily Express, commenting on the man who had just invented television, 1925.

- "Video won't be around more than six months; people will soon get tired of staring at a plywood box."
 - —Daryl F. Zanuck, president of 20th Century Fox, 1946.

Daryl Zanuck's comment looks especially strange in light of recent mergers involving movie studios, TV networks, and communications firms.

Source: Bob Schwabach, "Many Predictions from the Past Missed Mark Badly," *Star Tribune* (Jan. 12, 1995), p. 2D

SLN 10-2: SUPPLEMENTAL LECTURE NOTE

The New-Product Process at 3M

Developing new products often requires a complicated and challenging sequence of activities. "Usually, it takes three years to get a product established in the marketplace," says George Dierberger, Marketing and International Manager of 3M's Sports and Leisure Products Project. During the past several years, this unit has developed several new products that have achieved significant market success. One of these products is Ultrathon, an insect repellent containing 3M Controlled Release Technology that slows the evaporation of DEET (the effective ingredient), thereby repelling bugs longer. Originally developed to protect U.S. troops, Ultrathon was recently ranked the number one insect repellent by a leading consumer magazine.

Since about half of 3M's products are less than five years old, the process used by 3M to develop new product innovations is critical to its success and continued growth. Every innovation must meet 3M's new product criteria: (1) is a patentable or trademarked technology; (2) offers a superior value proposition to consumers; and (3) changes the basis of competition

When developing a new product innovation, 3M uses a seven-step process, each with the following purposes:¹

- **Phase 1: Ideas**. Identify the market potential for new product or service ideas by assessing the "voice of the customer" through market research. Then, identify attractive market segments and evaluate potential market opportunities against the strategic direction and financial objectives of the business unit.
- **Phase 2: Concept**. Develop mock-ups or drawings of product or service concepts to identify those that are superior based on customer needs or requirements. Conduct a technical assessment to determine R&D and manufacturing readiness.

by achieving a significant point of difference.

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¹ Adapted from 3M's Corporate Planning System; used by permission.

- **Phase 3: Feasibility**. Select the best concept and create a prototype. Validate whether the solution meets customer requirements. Determine the value proposition: why the new product or service is better than the competition while meeting the needs of 3M. Develop a preliminary marketing plan.
- **Phase 4: Development**. Develop and refine the manufacturing process. Test the product or service for reliability under market conditions. Develop the strategies for each marketing mix element in the marketing plan. Revise the sales forecast as needed.
- **Phase 5: Scale-Up.** Optimize the manufacturing process and the marketing plan for the launch phase. Conduct a test market and analyze the results, if appropriate. Finalize the marketing plan. Complete intellectual property filings.
- **Phase 6: Launch**. Execute the launch plan, which includes training sales staff, building inventory, etc. Implement the control plans for marketing, sales, and manufacturing to identify deviations and product/service improvement opportunities. Develop a "project hand-ff" plan to transfer the new product or service to an ongoing business operation.
- **Phase 7: Post Launch**. Continue to review marketing mix strategies and identify manufacturing process improvements. Gather customer feedback to identify opportunities for product improvements, line extensions, and new products.

Source: George Dierberger. Marketing and International Manager of 3M's Sports and Leisure Products Project.