MARKETING AND HIGH TECHNOLOGY

"Marketing and High Technology Products".

: Introduction To High-Technology

Topic Objective:

At the end of this topic student would be able to:

- Learn aspects of High-Technology
- Understand about High tech sectors

Definition/Overview:

High-Technology: High tech is technology that is at the cutting edgethe most advanced technology currently available. The adjective form is hyphenated: high-tech or high-technology. (There is also an architectural style known as high tech).

Key Points:

1. **High-Technology**

There is no specific class of technology that is high techthe definition shifts over timeso products hyped as high tech in the 1960s would now be considered, if not exactly low tech, then at least somewhat primitive. This fuzzy definition has led to marketing departments describing nearly all new products as high tech.

1.1.**High tech sectors**

- Aerospace technology
- Biotechnology
- Information technology
- Nanotechnology
- Robotics

2. Origin of the term

In a search of New York Times articles, the first occurrence of the phrase "high tech" occurs in a 1957 story advocating "atomic energy" for Europe: "...Western Europe, with its dense population and its high technology..." The twelfth occurrence, in 1968, is, significantly, in a story about Route 128, described as Boston's "Golden Semicircle":

It is not clear whether the term comes from the high technologies flourishing in the glass rectangles along the route or from the Midas touch their entrepreneurs have shown in starting new companies.

By April 1969, Robert Metz was using it in a financial columnArthur H. Collins of Collins Radio "controls a score of high technology patents in variety of fields." Metz used the term frequently thereafter; a few months later he was using it with a hyphen, saying that a fund "holds computer peripheral... business equipment, and high-technology stocks." Its first occurrence in the abbreviated form "high tech" occurred in a Metz in 1971.

Before 1970, the term "high technology" appeared a total of only 26 times; during the 1970s, 450 times; during the 1980s, over 4000 times. As of 2006, any technology from the year 2000 onward may be considered high tech.

2. Architecture

2.1 High-tech architecture

In architecture, high-tech design involves the use of the materials associated with high tech industries of the 1980s and 1990s, such as space frames, metal cladding and composite fabrics and materials. High tech buildings often have extensive glazing to show to the outside world the activity going on inside. Generally their overall appearance is light, typically with a combination of dramatic curves and straight lines. In many ways high tech architecture is a reaction against Brutalist architecture, without the features of post-modernism.

The high tech style emerged in the 1980s and remains popular. In the United Kingdom, two of its main proponents are Richard Rogers and Norman Foster

3. Economy

Because the high-tech sector of the economy develops or uses the most advanced technology known, it is often seen as having the most potential for future growth. This perception has led to high investment in high-tech sectors of the economy. High-tech startup enterprises receive a large portion of venture capital. However, if, as has happened in the past, investment exceeds actual potential, then investors can lose all or most of their investment. High tech is often viewed as high risk, but offering the opportunity for high profits.

Like Big Science, high technology is an international phenomenon, spanning continents, epitomized by the worldwide communication of the Internet. Thus a multinational corporation might work on a project 24 hours a day, with teams waking and working with the advance of the sun across the globe; such projects might be in software development or in the development of an integrated circuit. The help desks of a multinational corporation might thus employ, successively, teams in Kenya, Brazil, the Philippines, or India, with the only requirement fluency in the mother tongue, be it Spanish, Portuguese or English.

OECD has two different approaches: sector and product (industry) approaches.

4. OECD classification

OECD also classifies industries. OECD has two different approaches: sector and product approaches. The sector approach classifies industries according their technology intensity, product approach according to finished products. Further analysis from OECD has indicated that using research intensity as only industry classification indicator is also possible. The OECD does not only take the manufacturing but also the usage rate of technology into account.

Furthermore, OECDs product-based classification supports the technology intensity

approach. It can be concluded, that companies in a high-technology industry do not necessary produce high-technology products and vice versa. This creates a problem of aggregation.

: Strategy And Corporate Culture In High-Tech Firms

Topic Objective:

At the end of this topic student would be able to:

- Learn about strategy and corporate culture in High-Tech Firms
- Learn about marketing models
- Learn about strategy in practice

Definition/Overview:

Strategy and Corporate Culture: Zuboff, in her five year study of eight pioneering corporations made the important distinction between automating technologies and information technologies. She studied the effect that both had on individual workers, managers, and organizational structures.

Key Points:

1. **Marketing**

Although a sense of direction is important, it can also stifle creativity, especially if it is rigidly enforced. In an uncertain and ambiguous world, fluidity can be more important than a finely tuned strategic compass. When a strategy becomes internalized into a corporate culture, it can lead to group think. It can also cause an organization to define itself too narrowly. An example of this is marketing myopia.

2. **Define Mission and Goals**

- Mission
  - Why does the business exist?
  - Who are our customers?
  - What needs are we trying to solve?
  - How will we solve them?

- Goals
  - Profit
  - Growth

- New product acceptance
- Customer satisfaction

3. **Attractive Opportunities**

- Understand the market environment
- Carefully segment the market
- Evaluate fit of company capabilities and resources to market needs
- Identify current, potential, and indirect competitors
- Determine competitors strengths and likely strategies
- Assess profitability of serving each segment

4. **Strategic Choices**

- Decide whether opportunity should be pursued
- What will it be worth to win?
- Is the market opportunity attractive enough?
- Is the strategy powerful enough to generate a sufficient level of profitability?

5. **Winning Strategy**

- Positioning
- Product Development and Management
- Pricing
- Distribution
- Marketing Communications

6. **Key Strategy Decisions**

- Who are our target customers?
- What mix of products and services should we offer?
- When should we enter a market?
- How can we execute our strategy efficiently and effectively?

7. **Timing of Market Entry**

7.1. **Pros**

- Economies of scale
- Experience effects
- Reputational effects
- Technological leadership
- Buyer switching costs
- Higher profits and higher share
- Define product exemplar
- Higher consumer awareness

7.2. **Cons**

- Large development costs
- Market uncertainty

8. **Sources of Competitive Advantage**

- Tangible assets:
  - Products
  - Facilities
  - Financial Resources
- Intangible assets:
  - Brands/reputation
  - Know-how
  - Culture
- Competencies:
  - Routines
  - Processes

9. **Expeditionary Marketing**

- More accurate learning of customer needs
- Time between market learning and product launch is shortened
- Maximizes odds that product delivered matches customers needs as needs are less likely to change in the short-term
- Implication: Issue is less being right the first time, but being able to accumulate market experience, and quickly adapt market offerings

10. Strategic models

Marketing participants often employ strategic models and tools to analyze marketing decisions. When beginning a strategic analysis, the 3Cs can be employed to get a broad understanding of the strategic environment. An Ansoff Matrix is also often used to convey an organization's strategic positioning of their marketing mix. The 4Ps can then be utilized to form a marketing plan to pursue a defined strategy.

11. Marketing in Practice

11.1 The Consumer-Centric Business

There are a many companies especially those in the Consumer Package Goods (CPG) market that adopt the theory of running their business centred around Consumer, Shopper & Retailer needs. Their Marketing departments spend quality time looking for "Growth Opportunities" in their categories by identifying relevant insights (both mindsets and behaviours) on their target Consumers, Shoppers and retail partners. These Growth Opportunites emerge from changes in market trends, segment dynamics changing and also internal brand or operational business challenges. The Marketing team can then prioritise these Growth Opportunites and begin to develop strategies to exploit the opportunities that could include new or adapted products, services as well as changes to the 4Ps.

Real-life marketing primarily revolves around the application of a great deal of common-sense; dealing with a limited number of factors, in an environment of imperfect information and limited resources complicated by uncertainty and tight timescales. Use of classical marketing techniques, in these circumstances, is inevitably partial and uneven.

Thus, for example, many new products will emerge from irrational processes and the rational development process may be used (if at all) to screen out the worst non-runners. The design of the advertising, and the packaging, will be the output of the creative minds employed; which management will then screen, often by 'gut-reaction', to ensure that it is reasonable.

For most of their time, marketing managers use intuition and experience to analyze and handle the complex, and unique, situations being faced; without easy reference to theory. This will often be 'flying by the seat of the pants', or 'gut-reaction'; where the overall strategy, coupled with the knowledge of the customer which has been absorbed almost by a process of osmosis, will determine the quality of the marketing employed. This, almost instinctive management, is what is sometimes called 'coarse marketing'; to distinguish it from the refined, aesthetically pleasing, form favored by the theorists.

: Relationship Marketing: Partnerships And Alliances

Topic Objective:

At the end of this topic student would be able to:

- Learn aspects of Relationship Marketing
- Understand about Partnerships and Alliances

Definition/Overview:

Relationship Marketing: A marketing co-operation or marketing cooperation is a partnership of at least two companies on the value chain level of marketing with the objective to tap the full potential of a market by bundling specific competences or resources. Other terms for marketing co-operation are marketing alliance, marketing partnership, co-marketing, and cross-marketing.

Key Points:

1. **Marketing co-operations**

Marketing co-operations are sensible when the marketing goals of two companies can be combined with a concrete performance measure for the end consumer. Successful marketing co-operations generate win-win-win situations that offer value not only to both partnering companies but also to their customers.

Marketing co-operations extend the perspective of marketing. While marketing measures deal with the optimal organization of the relationship between a company and its existing and potential customers, marketing co-operations audit to what extent the integration of a partner can contribute to improving the relationship between companies and customers.

2. **Importance of Marketing Co-Operations**

The importance of marketing co-operations has significantly increased over the last few years: Companies recognize partnerships as an effective means for untapping growth potentials they cannot realize on their own. In the big merger and acquisition wave at the end of the nineties it became apparent, that co-operations (especially on the value chain level of marketing) often present a much more flexible approach with a more immediate growth impact than merging or acquiring entire business entities.

Studies show, that companies recognise the increasing relevance and potential of co-operations.

3. **Marketing Co-Operations Objectives**

There are four main objectives of marketing co-operations:

- Build-up and/or strengthening of brand/image/traffic by implementing joint or exchange communication measures
- Access to new markets/customers by directly addressing the co-operation partners customers or by using its distribution points
- Increase of customer loyalty by addressing own customers with value added offerings from the partner - often useful for community building
- Reduction of marketing costs by bundling or exchanging marketing measures
- In some cases, co-operations are set up to address one of these objectives. In most cases, it is a combination of these.

4. **Marketing Co-Operations Examples**

- Apple Inc. and Nike Inc. have formed a long term partnership to jointly develop and sell Nike+iPod products. The "Nike + iPod Sport Kit" links Nike+ products with Apples MP3-Player iPod nano, so that performance data such as distance, pace or burned calories can be displayed on the MP3-Players interface.
- The South Korean manufacturer of electronics products LG Electronics has teamed up with the luxury brand Prada in order to better tap the potential of the growing mobile phone high-end market by creating a Prada branded phone, the Prada phone by LG.
- Opel and Mango have established a pan-European marketing co-operation around the Tigra TwinTop campagne "Every street is a catwalk" with a focus on communication. This co-operation includes joint marketing communication, events/PR and promotional activities.
- YouTube and NBA have joined forces up to develop a special NBA Channel on the video platform, which basically is an individualised micro site providing primarily NBA material and offering user recordings of NBA games/players.
- Banner and link exchanges

5. **Types of Partnerships**

- Vertical partnerships: with members at other levels of the supply chain
  - Suppliers
  - Distribution channel members
  - Customers
- Horizontal partnerships: with members at the same level of the supply chain
  - Complementors makers of jointly-used products
  - Competitors

6. **Customer Acquisition Rules**

- Acquire any customer as long as the discounted future value of the customer exceeds the acquisition costs for that customer.
- When you broaden the acquisition effort, be prepared for lower response rates.
- The greater its profits from retention, the greater a firm's customer acquisition investment should be.
- The higher the percentage of the initial acquisition investment that a firm recovers in the first period, the greater its acquisition investment should be.

7. Development

According to Liam Alvey , relationship marketing can be applied: when there are competitive product alternatives for customers to choose from; and when there is an ongoing and periodic desire for the product or service.

Fornell and Wernerfelt used the term "defensive marketing" to describe attempts to reduce customer turnover and increase customer loyalty. This customer-retention approach was contrasted with "offensive marketing" which involved obtaining new customers and increasing customers' purchase frequency. Defensive marketing focused on reducing or managing the dissatisfaction of your customers, while offensive marketing focused on "liberating" dissatisfied customers from your competition and generating new customers. There are two components to defensive marketing: increasing customer satisfaction and increasing switching barriers.

Modern consumer marketing originated in the 1950s and 1960s as companies found it more profitable to sell relatively low-value products to masses of customers. Over the decades, attempts have been made to broaden the scope of marketing, relationship marketing being one of these attempts. Arguably, customer value has been greatly enriched by these contributions.

The practice of relationship marketing has been facilitated by several generations of customer relationship management software that allow tracking and analyzing of each customer's preferences, activities, tastes, likes, dislikes, and complaints. For example, <3 an automobile manufacturer maintaining a database of when and how repeat customers buy their products, the options they choose, the way they finance the purchase etc., is in a powerful position to develop one-to-one marketing offers and product benefits.

In web applications, the consumer shopping profile is built as the person shops on the website. This information is then used to compute what can be his or her likely preferences in other categories. These predicted offerings can then be shown to the customer through cross-sell, email recommendation and other channels. This is very incorrect facts.

Relationship marketing has also migrated back into direct mail, allowing marketers to take advantage of the technological capabilities of digital, toner-based printing presses to produce unique, personalized pieces for each recipient. Marketers can personalize documents by any information contained in their databases, including name, address, demographics, purchase history, and dozens (or even hundreds) of other variables. The result is a printed piece that (ideally) reflects the individual needs and preferences of each recipient, increasing the relevance of the piece and increasing the response rate.

8. Scope

Relationship marketing has been strongly influenced by reengineering. According to (process) reengineering theory, organizations should be structured according to complete tasks and processes rather than functions. That is, cross-functional teams should be responsible for a whole process, from beginning to end, rather than having the work go from one functional department to another. Traditional marketing is said to use the functional (or 'silo') department approach. The legacy of this can still be seen in the traditional four P's of the marketing mix. Pricing, product management, promotion, and placement. According to Gordon (1999), the marketing mix approach is too limited to provide a usable framework for assessing and developing customer relationships in many industries and should be replaced by the relationship marketing alternative model where the focus is on customers, relationships and interaction over time, rather than markets and products.

In contrast, relationship marketing is cross-functional marketing. It is organized around processes that involve all aspects of the organization. In fact, some commentators prefer to call relationship marketing "relationship management" in recognition of the fact that it involves much more than that which is normally included in marketing.

Martin Christopher, Adrian Payne, and David Ballantyne |at the Cranfield School of Management claim that relationship marketing has the potential to forge a new synthesis between quality management, customer service management, and marketing. They see marketing and customer service as inseparable.

9. Approaches

9.1 Satisfaction

Relationship marketing relies upon the communication and acquisition of consumer requirements solely from existing customers in a mutually beneficial exchange usually involving permission for contact by the customer through an "opt-in" system. With particular relevance to customer satisfaction the relative price and quality of goods and services produced or sold through a company alongside customer service generally determine the amount of sales relative to that of competing companies. Although groups targeted through relationship marketing may be large, accuracy of communication and overall relevancy to the customer remains higher than that of direct marketing, but has less potential for generating new leads than direct marketing and is limited to Viral marketing for the acquisition of further customers.

9.2 Retention

A key principle of relationship marketing is the retention of customers through varying means and practices to ensure repeated trade from preexisting customers by satisfying requirements above those of competing companies through a mutually beneficial relationship. This technique is now used as a means of counterbalancing new customers and opportunities with current and existing customers as a means of maximizing profit and counteracting the "leaky bucket theory of business" in which new customers gained in older direct marketing oriented businesses were at the expense of or coincided with the loss of older customers. This process of "churning" is less economically viable than retaining all or the majority of customers using both direct and relationship management as lead generation via new customers requires more investment.

Many companies in competing markets will redirect or allocate large amounts of resources or attention towards customer retention as in markets with increasing competition it may cost 5 times more to attract new customers than it would to retain current customers, as direct or "offensive" marketing requires much more extensive resources to cause defection from competitors. However, it is suggested that because of the extensive classic marketing theories center on means of attracting customers and creating transactions rather than maintaining them, the majority usage of direct marketing used in the past is now gradually being used more alongside relationship marketing as it's importance becomes more recognizable.

- In Section 2 of this course you will cover these topics:
  - Market Orientation And Rdmarketing Interaction In High-Technology Firms
  - Marketing Research Tools In High-Tech Markets
  - Understanding High-Tech Customers

- You may take as much time as you want to complete the topic coverd in section 2. There is no time limit to finish any Section, However you must finish All Sections before semester end date.

- If you want to continue remaining courses later, you may save the course and leave. You can continue later as per your convenience and this course will be avalible in your area to save and continue later.

: Market Orientation And Rdmarketing Interaction In High-Technology Firms

Topic Objective:

At the end of this topic student would be able to:

- Learn aspects of Market Orientation and R&D
- Understand about Marketing Interaction in High-Technology Firms

Definition/Overview:

Market Orientation: Marketing management may spend a fair amount of time building or maintaining a marketing orientation for the business. Achieving a market orientation, also known as "customer focus" or the "marketing concept", requires building consensus at the senior management level and then driving customer focus down into the organization. Cultural barriers may exist in a given business unit or functional area that the marketing manager must address in order to achieve this goal. Additionally, marketing executives often act as a "brand champion" and work to enforce corporate identity standards across the enterprise.

Key Points:

1. **Marketing management**

Marketing management is a business discipline focused on the practical application of marketing techniques and the management of a firm's marketing resources and activities. Marketing managers are often responsible for influencing the level, timing, and composition of customer demand in a manner that will achieve the company's objectives.

In part, this is due to the fact that the role of a marketing manager can vary significantly based on a business' size, corporate culture, and industry context. For example, in a large consumer products company, the marketing manager may act as the overall general manager of his or her assigned product category or brand with full profit & loss responsibility. In contrast, a small law firm may have no marketing personnel at all, requiring the firm's partners to make marketing management decisions on a largely ad-hoc basis.

2. **Market Orientation**

- Philosophy of doing business that emphasizes shared gathering, dissemination, and utilization of market information in decision making.
- Impact of market orientation on performance:
  - Firms that are strong technologically see a greater impact of market orientation on performance (than firms which are not strong technologically)

3. **Knowledge Management**

- Proactive management of firms bases of knowledge to better share and use information
- Requires conscious oversight to overcome natural boundaries (between functions/divisions)

4. **Barriers to Being Market-Oriented**

- People hoard information
- Core rigidities can cause people to disparage information about/from users
- Tyranny of the served market:
  - Listening only to current customers
- Users inability to envision new solutions
  - Solving problems only with current technologies

5. **Marketing/R&D Interaction**

- Break-through innovations
  - Success based on technological (R&D) prowess
  - Role of marketing: To provide market-related feedback on
  - market opportunity areas,
  - market development,
  - feedback on product features/engineering feasibility

6. **Strategies to Enhance R&D**

- Co-optation
- Coordination
- Communication
- Constructive Conflict

: Marketing Research Tools In High-Tech Markets

Topic Objective:

At the end of this topic student would be able to:

- Learn aspects of Marketing Research Tools
- Understand about Marketing research and analysis in High-Tech Markets

Definition/Overview:

Marketing: Marketing is an ongoing process of planning and executing the marketing mix (Product, Price, Place, and Promotion) for products, services or ideas to create exchange between individuals and organizations.

Key Points:

1. **Marketing research and analysis**

In order to make fact-based decisions regarding marketing strategy and design effective, cost-efficient implementation programs, and firms must possess a detailed, objective understanding of their own business and the market in which they operate. In analyzing these issues, the discipline of marketing management often overlaps with the related discipline of strategic planning.

1.1. **Marketing analysis structure**

Traditionally, marketing analysis was structured into three areas: Customer analysis, Company analysis, and Competitor analysis (so-called "3Cs" analysis). More recently, it has become fashionable in some marketing circles to divide these further into certain five "Cs": Customer analysis, Company analysis, Collaborator analysis, Competitor analysis, and analysis of the industry Context.

1.1.1.**Customer analysis**

The focus of customer analysis is to develop a scheme for market segmentation, breaking down the market into various constituent groups of customers, which are called customer segments or market segments. Marketing managers work to develop detailed profiles of each segment, focusing on any number of variables that may differ among the segments: demographic, psychographic, geographic, behavioral, needs-benefit, and other factors may all be examined. Marketers also attempt to track these segments' perceptions of the various products in the market using tools such as perceptual mapping.

1.1.2.**Company analysis**

In company analysis, marketers focus on understanding the company's cost structure and cost position relative to competitors, as well as working to identify a firm's core competencies and other competitively distinct company resources. Marketing managers may also work with the accounting department to analyze the profits the firm is generating from various product lines and customer accounts. The company may also conduct periodic brand audits to assess the strength of its brands and sources of brand equity.

1.1.3.**Collaborators analysis**

The firm's collaborators may also be profiled, which may include various suppliers, distributors and other channel partners, joint venture partners, and others. An analysis of complementary products may also be performed if such products exist.

Marketing management employs various tools from economics and competitive strategy to analyze the industry context in which the firm operates. These include Porter's five forces, analysis of strategic groups of competitors, value chain analysis and others. Depending on the industry, the regulatory context may also be important to examine in detail.

1.1.4. **Competitor analysis**

In Competitor analysis, marketers build detailed profiles of each competitor in the market, focusing especially on their relative competitive strengths and weaknesses using SWOT analysis. Marketing managers will examine each competitor's cost structure, sources of profits, resources and competencies, competitive positioning and product differentiation, degree of vertical integration, historical responses to industry developments, and other factors.

2. **Marketing management**

Marketing management often finds it necessary to invest in research to collect the data required to perform accurate marketing analysis. As such, they often conduct market research (alternately marketing research) to obtain this information. Marketers employ a variety of techniques to conduct market research, but some of the more common include:

- Qualitative marketing research, such as focus groups
- Quantitative marketing research, such as statistical surveys
- Experimental techniques such as test markets
- Observational techniques such as ethnographic (on-site) observation

Marketing managers may also design and oversee various environmental scanning and competitive intelligence processes to help identify trends and inform the company's marketing analysis.

3. **Concept Testing**

- Generate multiple product concepts
  - Observation
  - Focus groups
  - Brainstorming

- Judgmentally reduce number of concepts
    - o Describe their key attributes and benefits in paragraph form
    - o Potential customers rate each concept on dimensions such as trial interest and perceived value
- Further reduce number of concepts based on results from previous stage
    - o Representative sample of potential customers complete a battery of questions and diagnostic ratings on each finalist

4. **Conjoint Analysis**

- To determine how respondents value various attributes, and levels of attributes, in the product
- If we learn how buyers value the components of a product, we are in a better position to design those that improve profitability

5. **Empathic Design**

- Because users may be unable to articulate their needs, this technique focuses on observations of customer behavior to develop a deep understanding the users environment.
- Types of insights
    - o Triggers of Use
    - o Unarticulated user needs/coping strategies
    - o New usage situations
    - o Customization
    - o Intangible Attributes

6. **Quality Function Deployment**

- What: A tool that provides a bridge between the voice of the customer and product design
- Purpose: Ensure tight correlation between customer needs and product specifications.
- Requirement: Close collaboration between marketing, engineers, and customers

7. **Qualitative Forecasting Tools**

- Delphi method

- o Rely on a panel of experts
- Analogous data
- o Rely on similar products
- Information Acceleration
- o Use virtual prototypes to obtain customer feedback

: Understanding High-Tech Customers

Topic Objective:

At the end of this topic student would be able to:

- Learn aspects of High-Tech Customers
- Understand about Marketing research and analysis in High-Tech Markets

Definition/Overview:

High-Tech Customers: The concept of high-tech customers is closely related to the Technology adoption lifecycle where five main segments are recognized; innovators, early adopters, early majority, late majority and laggards. This content tells that the diffusion of innovations theory from Everett Rogers, and argues there is a chasm between the early adopters of the product (the technology enthusiasts and visionaries) and the early majority (the pragmatists). Moore believes visionaries and pragmatists have very different expectations, and he attempts to explore those differences and suggest techniques to successfully cross the "chasm," including choosing a target market, understanding the whole product concept, positioning the product, building a marketing strategy, choosing the most appropriate distribution channel and pricing.

Key Points:

1. **Rate of Adoption**

- Perceived Attributes
  - Relative advantage
  - Compatibility
  - Complexity
  - Trialability
  - Ability to communicate product benefits
  - Observability

1.1.**Factors Affecting Rate of Adoption**

- Relative Advantage
  - Benefits of adopting the new technology compared to the costs
  - Implication: Marketers must understand customer perceptions of benefits vs. costs

- Compatibility
  - Similarity to existing ways of doing things
  - Compatability with cultural norms
  - Implication: Marketers must educate customers if compatibility is low

- Complexity
  - Difficulty of use of new product
  - Implication: Try to simplify use; offer training and education

- Trialability
  - The extent to which a new product can be tried on a limited basis.
  - Reduces perceived risk.
  - Implication: Design products as independent modules or offer on trial basis.

- Ability to communicate product benefits
  - Ease and clarity of communicating benefits to prospective customers
  - Implication: Talk in terms customers understand and that meaningfully convey the compelling reason to own the new technology

- Observability
  - Customers ability to assess benefits
  - Ability of others to observe customers benefits obtained from using new product
  - Implication: If benefits are elusive to both the users and their friends, adoption will be slow.

2. **Marketing Hi-Tech Products**

- Demonstrable advantage
- Reduce risk
- Secure testimonials from early adopters
- Price to create value
- Patience!

3. **Categories of Adopters**

3.1.**Innovators**

- Appreciate technology for its own sake
- Motivated by idea of being a change agent
- Will tolerate initial glitches
- Will develop make-shift solutions
- Willing to alpha/beta test and work with technical personnel

- Provide early revenue for marketersbut not a large group
- Importance: They are the gatekeeper to the next group of adopters.

3.2.**Early Adopters**

- Want to revolutionize competitive rules in their industry
- Attracted by high-risk/high-reward projects
- Not necessarily very price sensitive
- Demand customized solutions and intensive tech support
- Product Form Competition: Between categories of solutions
- Early adopters communicate horizontally (across industry boundaries)

3.3.**Early Majority**

- Comfortable with only evolutionary changes in business practices, in order to gain productivity enhancements
- Averse to disruptions in their operations
- Want proven applications, reliable service
- Buy only with a reference from trusted colleague in same industry

3.4.**Pragmatists**

- This group is the bulwark of the mainstream market:
- Requires industry standards

3.5.**Late Majority**

- Risk averse, technology shy
- Very price sensitive
- Require completely pre-assembled, bullet-proof solutions

- Motivated only by need to keep up with competitors in their industry
- Rely on single, trusted advisor

3.6.**Laggards**

- Want to maintain status quo
- Technology is a hindrance to operations
- Buy only if all other alternatives worse

4. Origin of the term

In a search of New York Times articles, the first occurrence of the phrase "high tech" occurs in a 1957 story advocating "atomic energy" for Europe: "...Western Europe, with its dense population and its high technology..." The twelfth occurrence, in 1968, is, significantly, in a story about Route 128, described as Boston's "Golden Semicircle":

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Because the high-tech sector of the economy develops or uses the most advanced technology known, it is often seen as having the most potential for future growth. This perception has led to high investment in high-tech sectors of the economy. High-tech startup enterprises receive a large portion of venture capital. However, if, as has happened in the past, investment exceeds actual potential, then investors can lose all or most of their investment. High tech is often viewed as high risk, but offering the opportunity for high profits.

Like Big Science, high technology is an international phenomenon, spanning continents, epitomized by the worldwide communication of the Internet. Thus a multinational corporation might work on a project 24 hours a day, with teams waking and working with the advance of the sun across the globe; such projects might be in software development or in the development of an integrated circuit. The help desks of a multinational corporation might thus employ, successively, teams in Kenya, Brazil, the Philippines, or India, with the only requirement fluency in the mother tongue, be it Spanish, Portuguese or English.

OECD has two different approaches: sector and product (industry) approaches.

7. OECD classification

OECD also classifies industries. OECD has two different approaches: sector and product approaches. The sector approach classifies industries according their technology intensity, product approach according to finished products. Further analysis from OECD has indicated that using research intensity as only industry classification indicator is also possible. The OECD does not only take the manufacturing but also the usage rate of technology into account.

Furthermore, OECDs product-based classification supports the technology intensity

approach. It can be concluded, that companies in a high-technology industry do not necessary produce high-technology products and vice versa. This creates a problem of aggregation.

In Section 3 of this course you will cover these topics: - Product Development And Management Issues In High-Tech Markets - Distribution Channels And Supply Chain Management In High-Tech Markets
You may take as much time as you want to complete the topic coverd in section 3. There is no time limit to finish any Section, However you must finish All Sections before semester end date.
If you want to continue remaining courses later, you may save the course and leave. You can continue later as per your convenience and this course will be avalible in your area to save and continue later.

: Product Development And Management Issues In High-Tech Markets

Topic Objective:

At the end of this topic student would be able to:

- Learn aspects of Product Development and Management Issues in High-Tech Markets
- Understand about Technology development

Definition/Overview:

Technology development: Product marketing, as opposed to product management, deals with more outbound marketing tasks. For example, product management deals with the nuts and bolts of product development within a firm, whereas product marketing deals with marketing the product to prospects, customers, and others. Product marketing, as a job function within a firm, also differs from other marketing jobs such as Marcom or marketing communications, online marketing, advertising, marketing strategy, etc.

Key Points:

1. **Technology Identification**

- Inventory of firms valuable know-how that may be sources of revenue generation
  - Products
  - Processes
- Management practices
  - Such as knowledge management

2. **Focus on Development Risk**

2.1.**Internal Development**

- New development close to existing skills
- Confidentiality reasons
- NIH (not invented here): Good technology can be developed only internally.

2.2.**External Acquisition**

- Someone else has already developed
- Save time and effort
- Let others take risks first
- Keep up with competitors
- Use existing brand name/marketing resources

3. **Conditions for technology licensing**

- Network externalities: more value as more customers use a product
- Standardization of technology discourages substitute technologies
- Firm lacks marketing skills for end-product
- Major customers want a second source

4. **Internal technology solutions**

- Are employees willing to embrace technology?
- Have they been adequately trained?
- Have business processes been redesigned to realize the potential of technology?

5. **Intellectual Property**

- Original works that are creations of the mind which the originator has the right to earn an economic return from
- How to protect it?

- Patents
- Copyrights
- Trademarks
- Trade Secrets

5.1.**Patents**

- Confer owner the right to exclude others from making, using, or selling product or process for specific time period
- Three criteria invention must meet to be patentable**:**
- Useful: perform some function that benefits humanity
- Novel: no prior evidence of invention exists
- Non-obvious: No suggestion of invention exists, even when multiple writings are combined

5.2.**Copyrights**

Copyright (or) is a form of intellectual property which gives the creator of an original work exclusive rights for a certain time period in relation to that work, including its publication, distribution and adaptation; after which time the work is said to enter the public domain. Copyright applies to any expressible form of an idea or information that is substantive and discrete. Some jurisdictions also recognize "moral rights" of the creator of a work, such as the right to be credited for the work.

An example of the intent of copyright, based in the United States Constitution, is simply to promote the progress of science and arts by securing for limited times the exclusive right of the creator.

Copyright has been internationally standardized, lasting between fifty to a hundred years from the author's death, or a finite period for anonymous or corporate authorship; some jurisdictions have required formalities to establishing copyright, most recognize copyright in any completed work, without formal registration. Generally, copyright is enforced as a civil matter, though some jurisdictions do apply criminal sanctions.

Most jurisdictions recognize copyright limitations, allowing "fair" exceptions to the author's exclusivity of copyright, and giving users certain rights. The development of the Internet, digital media, computer network technologies, such as peer-to-peer filesharing, have prompted reinterpretation of these exceptions, introduced new difficulties in enforcing copyright, and inspired additional challenges to copyright law's philosophic basis. Simultaneously, businesses with great economic dependence upon copyright have advocated the extension and expansion of their copy rights, and sought additional legal and technological enforcement.

- Protect tangible form or manner in which idea is expressed, not the idea itself.
  - Example: software code
- Grants inventor right to reproduce and distribute copyrighted works
- Term is:
  - Life of author + 50 years -or-
  - Shorter of 75 years from publication or 100 years from creation of work

5.3.**Trademarks**

A trademark or trade mark, identified by the symbols and , or mark is a distinctive sign or indicator used by an individual, business organization or other legal entity to identify that the products and/or services to consumers with which the trademark appears originate from a unique source of origin, and to distinguish its products or services from those of other entities. A trademark is a type of intellectual property, and typically a name, word, phrase, logo, symbol, design, image, or a combination of these elements. There is also a range of non-conventional trademarks comprising marks which do not fall into these standard categories.

The owner of a registered trademark may commence legal proceedings for trademark infringement to prevent unauthorized use of that trademark. However, registration is not required. The owner of a common law trademark may also file suit, but an unregistered mark may be protectable only within the geographical area within which it has been used or in geographical areas into which it may be reasonably expected to expand.

The term trademark is also used informally to refer to any distinguishing attribute by which an individual is readily identified, such as the well known characteristics of celebrities. When a trademark is used in relation to services rather than products, it may sometimes be called a service mark, particularly in the United States.

5.4.**Trade Secrets**

A trade secret is a formula, practice, process, design, instrument, pattern, or compilation of information which is not generally known or reasonably ascertainable, by which a business can obtain an economic advantage over competitors or customers. In some jurisdictions, such secrets are referred to as "confidential information" or "classified information".

A company can protect its confidential information through non-compete and non-disclosure contracts with its employees (within the constraints of employment law, including only restraint that is reasonable in geographic and time scope). The law of protection of confidential information effectively allows a perpetual monopoly in secret information - it does not expire as would a patent. The lack of formal protection, however, means that a third party is not prevented from independently duplicating and using the secret information once it is discovered.

The sanctioned protection of such type of information from public disclosure is viewed as an important legal aspect by which a society protects its overall economic vitality. A company typically invests money, time and energy (work) into generating information regarding refinements of processes and operations. If competitors had access to the same knowledge, the first company's ability to survive or maintain its market dominance or market position and market share would be impaired. Where trade secrets are recognized, the creator of knowledge regarded as a "trade secret" is entitled to regard such "special knowledge" as intellectual property.

6. **Managing Intellectual Property**

Intellectual property (IP) are legal property rights over creations of the mind, both artistic and commercial, and the corresponding fields of law. Under intellectual property law, owners are granted certain exclusive rights to a variety of intangible assets, such as musical, literary, and artistic works; ideas, discoveries and inventions; and words, phrases, symbols, and designs. Common types of intellectual property include copyrights, trademarks, patents, and trade secrets.

The majority of intellectual property rights provide creators of original works economic incentive to develop and share ideas through a form of temporary monopoly. While credited with significant contributions to modern economic growth, some have criticised the expansion in nature and scope of IP laws.

: Distribution Channels And Supply Chain Management In High-Tech Markets

Topic Objective:

At the end of this topic student would be able to:

- Learn aspects of Distribution Channels and Supply Chain Management
- Understand about Distribution Channels and Supply Chain Management in High-Tech Markets

Definition/Overview:

Distribution: Distribution (or placement) is one of the four aspects of marketing. A distributor is the middleman between the manufacturer and retailer. After a product is manufactured, it may be warehoused or shipped to the next echelon in the supply chain, typically a distributor, retailer or consumer. The other three parts of the marketing mix are product management, pricing, and promotion.

Key Points:

1. **Distribution Channel**

Frequently there may be a chain of intermediaries; each passing the product down the chain to the next organization, before it finally reaches the consumer or end-user. This process is known as the 'distribution chain' or the 'channel.' Each of the elements in these chains will have their own specific needs, which the producer must take into account, along with those of the all-important end-user.

2. **Channels**

A number of alternate 'channels' of distribution may be available:

- Selling direct, such as via mail order, Internet and telephone sales
- Agent, who typically sells direct on behalf of the producer
- Distributor (also called wholesaler), who sells to retailers
- Retailer (also called dealer or reseller), who sells to end customers
- Advertisement typically used for consumption goods

Distribution channels may not be restricted to physical products alone. They may be just as important for moving a service from producer to consumer in certain sectors, since both direct and indirect channels may be used. Hotels, for example, may sell their services (typically rooms) directly or through travel agents, tour operators, airlines, tourist boards, centralized reservation systems, etc.

There have also been some innovations in the distribution of services. For example, there has been an increase in franchising and in rental services - the latter offering anything from televisions through tools. There has also been some evidence of service integration, with services linking together, particularly in the travel and tourism sectors. For example, links now exist between airlines, hotels and car rental services. In addition, there has been a significant increase in retail outlets for the service sector. Outlets such as estate agencies and building society offices are crowding out traditional grocers from major shopping areas.

3. Channel members

Distribution channels can thus have a number of levels. Kotler defined the simplest level, that of direct contact with no intermediaries involved, as the 'zero-level' channel.
The next level, the 'one-level' channel, features just one intermediary; in consumer goods a retailer, for industrial goods a distributor. In small markets (such as small countries) it is practical to reach the whole market using just one- and zero-level channels.
In large markets (such as larger countries) a second level, a wholesaler for example, is now mainly used to extend distribution to the large number of small, neighborhood retailers.

4. The internal market

Many of the marketing principles and techniques which are applied to the external customers of an organization can be just as effectively applied to each subsidiary's, or each department's, 'internal' customers.

In some parts of certain organizations this may in fact be formalized, as goods are transferred between separate parts of the organization at a `transfer price'. To all intents and purposes, with the possible exception of the pricing mechanism itself, this process can and should be viewed as a normal buyer-seller relationship. The fact that this is a captive market, resulting in a `monopoly price', should not discourage the participants from employing marketing techniques.

Less obvious, but just as practical, is the use of `marketing' by service and administrative departments; to optimize their contribution to their `customers' (the rest of the organization in general, and those parts of it which deal directly with them in particular). In all of this, the lessons of the non-profit organizations, in dealing with their clients, offer a very useful parallel.

5. Channel Decisions

The channel decision is very important. In theory at least, there is a form of trade-off: the cost of using intermediaries to achieve wider distribution is supposedly lower. Indeed, most consumer goods manufacturers could never justify the cost of selling direct to their consumers, except by mail order. In practice, if the producer is large enough, the use of intermediaries (particularly at the agent and wholesaler level) can sometimes cost more than going direct.

Many of the theoretical arguments about channels therefore revolve around cost. On the other hand, most of the practical decisions are concerned with control of the consumer. The small company has no alternative but to use intermediaries, often several layers of them, but large companies 'do' have the choice.

However, many suppliers seem to assume that once their product has been sold into the channel, into the beginning of the distribution chain, their job is finished. Yet that distribution chain is merely assuming a part of the supplier's responsibility; and, if he has any aspirations to be market-oriented, his job should really be extended to managing, albeit very indirectly, all the processes involved in that chain, until the product or service arrives with the end-user. This may involve a number of decisions on the part of the supplier:

- Channel membership
- Channel motivation
- Monitoring and managing channels

5.1.Channel membership

- Intensive distribution - Where the majority of resellers stock the 'product' (with convenience products, for example, and particularly the brand leaders in consumer goods markets) price competition may be evident.
- Selective distribution - This is the normal pattern (in both consumer and industrial markets) where 'suitable' resellers stock the product.

- Exclusive distribution - Only specially selected resellers or authorized dealers (typically only one per geographical area) are allowed to sell the 'product'. Often this form of distribution stipulates the contracted resellers cannot offer competing products.

5.2.Channel motivation

It is difficult enough to motivate direct employees to provide the necessary sales and service support. Motivating the owners and employees of the independent organizations in a distribution chain requires even greater effort. There are many devices for achieving such motivation. Perhaps the most usual is `incentive': the supplier offers a better margin, to tempt the owners in the channel to push the product rather than its competitors; or a competition is offered to the distributors' sales personnel, so that they are tempted to push the product. At the other end of the spectrum is the almost symbiotic relationship that the all too rare supplier in the computer field develops with its agents; where the agent's personnel, support as well as sales, are trained to almost the same standard as the supplier's own staff.

5.3.Monitoring and managing channels

In much the same way that the organization's own sales and distribution activities need to be monitored and managed, so will those of the distribution chain.

In practice, many organizations use a mix of different channels; in particular, they may complement a direct salesforce, calling on the larger accounts, with agents, covering the smaller customers and prospects.

6. Vertical marketing

This relatively recent development integrates the channel with the original supplier - producer, wholesalers and retailers working in one unified system. This may arise because one member of the chain owns the other elements (often called `corporate systems integration'); a supplier owning its own retail outlets, this being 'forward' integration. It is perhaps more likely that a retailer will own its own suppliers, this being 'backward' integration. (For example, MFI, the furniture retailer, owns Hygena which makes its kitchen and bedroom units.) The integration can also be by franchise (such as that offered by McDonald's hamburgers and Benetton clothes) or simple co-operation (in the way that Marks & Spencer co-operates with its suppliers).

Alternative approaches are 'contractual systems', often led by a wholesale or retail co-operative, and `administered marketing systems' where one (dominant) member of the distribution chain uses its position to co-ordinate the other members' activities. This has traditionally been the form led by manufacturers.

The intention of vertical marketing is to give all those involved (and particularly the supplier at one end, and the retailer at the other) 'control' over the distribution chain. This removes one set of variables from the marketing equations. Other research indicates that vertical integration is a strategy which is best pursued at the mature stage of the market (or product). At earlier stages it can actually reduce profits. It is arguable that it also diverts attention from the real business of the organization. Suppliers rarely excel in retail operations and, in theory, retailers should focus on their sales outlets rather than on manufacturing facilities (Marks & Spencer, for example, very deliberately provides considerable amounts of technical assistance to its suppliers, but does not own them).

7. Horizontal marketing

A rather less frequent example of new approaches to channels is where two or more non-competing organizations agree on a joint venture - a joint marketing operation - because it is beyond the capacity of each individual organization alone. In general, this is less likely to revolve around marketing synergy.

8. Issues in Distribution

- Firms at different stages of the channel
  - May have conflicting goals and objectives
  - Often dont think in terms of joint problem solving
- Goal: Manage all functions to provide value to end customer
  - Meet customer needs in most effective/efficient mode possible

9. Effective Channels

- Identify redundancies that lead to inefficiency and conflict
- Develop relationships and alliances
- Work toward cost efficiency and customer satisfaction
- Rely on technology solutions
- Use channel members as partners

10. Channel Objectives, Constraints, External Environment

- Base channel design on consideration of
  - Customer behavior and needs
  - Competitors channels
  - Product characteristics

11. Types of Resellers

- VARs and VADs
  - Purchase components from different manufacturers, customize for various vertical markets
- Systems Integrators
  - Manage large or complex projects
- Inbound versus Outbound
  - Has a store-front for walk-in traffic or- dealer sales force calls on customers
- Traditional intermediaries
  - Mass merchandisers, Category killers, small mom-and-pop stores, franchises

12. Gray Markets

- Diversion of goods to unauthorized distributors, sold at discounted prices
- Manufacturer loses control over distribution
- Legitimate channels lose business
- Loss of incentive for legitimate channel members to push sales or provide service

- Intra-brand competition, channel conflict

12.1. Causes of Gray Markets

- Pricing policies with large volume discounts
- Differential in international exchange rates (parallel importing)
- Cost differences between different types of resellers
- Free-riding of discount outlets on full-service outlets
- Selective distribution
- Lack of intra-brand competition may invited gray marketers

12.2. Solutions to Gray Markets

- Track source of units and cut off supply to gray market
- One-price policy (no volume discounts)
- Increase penetration in the market
- Collect information on extent of the problem, consistently measure channel member performance

13. Managing Hybrid Channels

- Objectives:
  - Increase coverage while lowering costs
- Steps:
  - Identify customer target segments
  - Delineate tasks/functions needed by segments
  - Allocate most effective/efficiency channel to the tasks on a by-segment basis

14. Contingency Model

- Consistency model consist of three basic elements
  - Channel
  - Channel performance
  - Tasks targets

15. Supply Chain Management

- Match inflow of supplies with the demand at every stage of the value chain based on the actual demand from end-users
- Reduce inventory as work-in-progress
- Reduce cycle time
- Electronic links to customers

16. Implications of Contingency Model for Supply Chain Management

- For incremental innovations:
  - Customer needs are known
  - Focus on managing physical functions and close coordination to gain cost efficiencies
- For breakthrough innovations
  - Must read uncertain market signals, knowing what inventory is required where
  - Focus on responsiveness (speed and flexibility)
  - Consistent with trends to channel assembly

In Section 4 of this course you will cover these topics: Pricing Considerations In High-Tech Markets Advertising And Promotion In High-Tech Markets
You may take as much time as you want to complete the topic coverd in section 4. There is no time limit to finish any Section, However you must finish All Sections before semester end date.
If you want to continue remaining courses later, you may save the course and leave. You can continue later as per your convenience and this course will be avalible in your area to save and continue later.

: Pricing Considerations In High-Tech Markets

Topic Objective:

At the end of this topic student would be able to:

- Learn aspects of Pricing Considerations in High-Tech Markets

- Understand about Price Bundling, Technology Paradox, Three Cs of Pricing and Pricing

Definition/Overview:

Pricing: Pricing is one of the four p's of the marketing mix. The other three aspects are product, promotion, and place. It is also a key variable in microeconomic price allocation theory. Price is the only revenue generating element amongst the 4ps,the rest being cost centers. Automated systems require more setup and maintenance but may prevent pricing errors.

Key Points:

1. Effective price

The effective price is the price the company receives after accounting for discounts, promotions, and other incentives.

2. Price lining

Price lining is the use of a limited number of prices for all your product offerings. This is a tradition started in the old five and dime stores in which everything cost either 5 or 10 cents. Its underlying rationale is that these amounts are seen as suitable price points for a whole range of products by prospective customers. It has the advantage of ease of administering, but the disadvantage of inflexibility, particularly in times of inflation or unstable prices.

A loss leader is a product that has a price set below the operating margin. This results in a loss to the enterprise on that particular item, but this is done in the hope that it will draw customers into the store and that some of those customers will buy other, higher margin items.

3. Pricing

Pricing is the manual or automatic process of applying prices to purchase and sales orders, based on factors such as: a fixed amount, quantity break, promotion or sales campaign, specific vendor quote, price prevailing on entry, shipment or invoice date, combination of multiple orders or lines, and many others.

3.1.Promotional pricing

Promotional pricing refers to an instance where pricing is the key element of the marketing mix.

The price/quality relationship refers to the perception by most consumers that a relatively high price is a sign of good quality. The belief in this relationship is most important with complex products that are hard to test, and experiential products that cannot be tested until used (such as most services). The greater the uncertainty surrounding a product, the more consumers depend on the price/quality hypothesis and the more of a premium they are prepared to pay. The classic example of this is the pricing of the snack cake Twinkies, which were perceived as low quality when the price was lowered. Note, however, that excessive reliance on the price/quantity relationship by consumers may lead to the raising of prices on all products and services, even those of low quality, which in turn causes the price/quality relationship to no longer apply.

3.2.Premium pricing

Premium pricing **(**also called prestige pricing) is the strategy of consistently pricing at, or near, the high end of the possible price range to help attract status-conscious consumers. A few examples of companies which partake in premium pricing in the marketplace include Rolex and Bentley. People will buy a premium priced product because:

- They believe the high price is an indication of good quality;
- They believe it to be a sign of self worth - "They are worth it" - It authenticates their success and status - It is a signal to others that they are a member of an exclusive group;
- They require flawless performance in this application - The cost of product malfunction is too high to buy anything but the best - example : heart pacemaker.

3.3.Goldilocks pricing

The term Goldilocks pricing is commonly used to describe the practice of providing a "gold-plated" version of a product at a premium price in order to make the next-lower priced option look more reasonably priced; for example, encouraging customers to see business-class airline seats as good value for money by offering an even higher priced first-class option. Similarly, third-class railway carriages in Victorian England are said to have been built without windows, not so much to punish third-class customers (for which there was no economic incentive), as to motivate those who could afford second-class seats to pay for them instead of taking the cheaper option. This is also known as a potential result of price discrimination.

The name derives from the Goldilocks story, in which Goldilocks chose neither the hottest nor the coldest porridge, but instead the one that was "just right". More technically, this form of pricing exploits the general cognitive bias of aversion to extremes. This practice is known academically as "framing". By providing three options (i.e. small, medium, and large; first, business, and coach classes) you can manipulate the consumer into choosing the middle choice and thus, the middle choice should yield the most profit to the seller, since it is the most chosen option.

3.4.Demand-based pricing

Demand-based pricing is any pricing method that uses consumer demand - based on perceived value - as the central element. These include : price skimming, price discrimination and yield management, price points, psychological pricing, bundle pricing, penetration pricing, price lining, value-based pricing, geo and premium pricing. Pricing factors are manufacturing cost, market place, competition, market condition, Quality of product.

4. Three Cs of Pricing

- Competition
- Customer
- Cost

4.1. Customer Perceptions of Benefits/Costs

- Benefits:
  - Functional
  - Operational
  - Financial
  - Personal
- Costs:
  - Monetary
  - Nonmonetary

5. Technology Paradox

- Rapid pace of price declines
- At the extreme, technology is free and companies literally give product away
- How can businesses thrive when their prices are falling?
  - Requires exponential growth of market to be faster than the exponential decline of prices
  - Requires new skills

6. Price Bundling

- Pure price bundling
  - Components not available separately
  - Value from synergistic use of components
- Mixed price bundling
  - Bundle and separate components available
  - Value from discount over sum of component prices

7. Approaches

- Pricing as the most effective profit lever
- Pricing can be approached at three levels

- The industry, market, and transaction level
- Pricing at the industry level focuses on the overall economics of the industry, including supplier price changes and customer demand changes
- Pricing at the market level focuses on the competitive position of the price in comparison to the value differential of the product to that of comparative competing products
- Pricing at the transaction level focuses on managing the implementation of discounts away from the reference, or list price, which occur both on and off the invoice or receipt

: Advertising And Promotion In High-Tech Markets

Topic Objective:

At the end of this topic student would be able to:

- Learn aspects of Advertising and Promotion
- Understand about Advertising and Promotion in High-Tech Markets, Tools to Build and Maintain Customer Relationships

Definition/Overview:

Advertising: Advertising is a form of communication that typically attempts to persuade potential customers to purchase or to consume more of a particular brand of product or service.

Promotion: Promotion involves disseminating information about a product, product line, brand, or company. It is one of the four key aspects of the marketing mix. (The other three elements are product marketing, pricing, and distribution.)

Key Points:

1. **Advertisements**

Many advertisements are designed to generate increased consumption of those products and services through the creation and reinforcement of "brand image" and "brand loyalty". For these purposes, advertisements sometimes embed their persuasive message with factual information. Every major medium is used to deliver these messages, including television, radio, cinema, magazines, newspapers, video games, the Internet and billboards. Advertising is often placed by an advertising agency on behalf of a company or other organization.

Advertisements are seen on the seats of shopping carts, on the walls of an airport walkway, on the sides of buses, and are heard in telephone hold messages and in-store public address systems. Advertisements are often placed anywhere an audience can easily or frequently access visual, audio and printed information. Organizations that frequently spend large sums of money on advertising that sells what is not, strictly speaking, a product or service include political parties, interest groups, religious organizations, and military recruiters. Non-profit organizations are not typical advertising clients, and may rely on free modes of persuasion, such as public service announcements.

1.1.Covert advertising

Covert advertising is when a product or brand is embedded in entertainment and media. For example, in a film, the main character can use an item or other of a definite brand, as in the movie Minority Report, where Tom Cruise's character John Anderton owns a phone with the Nokia logo clearly written in the top corner, or his watch engraved with the Bulgari logo. Another example of advertising in film is in I, Robot, where main character played by Will Smith mentions his Converse shoes several times, calling them "classics," because the film is set far in the future. I, Robot and Spaceballs also showcase futuristic cars with the Audi and Mercedes-Benz logos clearly displayed on the front of the vehicles. Cadillac chose to advertise in the movie The Matrix Reloaded, which as a result contained many scenes in which Cadillac cars were used. Similarly, product placement for Omega Watches, Ford, Vaio, BMW and Aston-Martin cars are featured in recent James Bond films, most notably Casino Royale.

1.2.Television commercials

The TV commercial is generally considered the most effective mass-market advertising format, as is reflected by the high prices TV networks charge for commercial airtime during popular TV events. The annual Super Bowl football game in the United States is known as the most prominent advertising event on television. The average cost of a single thirty-second TV spot during this game has reached $2.7 million (as of 2007). The majority of television commercials feature a song or jingle that listeners soon relate to the product.

Virtual advertisements may be inserted into regular television programming through computer graphics. It is typically inserted into otherwise blank backdrops or used to replace local billboards that are not relevant to the remote broadcast audience. More controversially, virtual billboards may be inserted into the background where none existing in real-life. Virtual product placement is also possible.

1.3.Newer media and advertising approaches

Increasingly, other media are overtaking television because of a shift towards consumer's usage of the internet as well as devices such as TiVo. Advertising on the World Wide Web is a recent phenomenon. Prices of Web-based advertising space are dependent on the "relevance" of the surrounding web content and the traffic that the website receives. E-mail advertising is another recent phenomenon. Unsolicited bulk E-mail advertising is known as "spam".

Some companies have proposed to place messages or corporate logos on the side of booster rockets and the International Space Station. Controversy exists on the effectiveness of subliminal advertising, and the pervasiveness of mass messages.

Unpaid advertising (also called word of mouth advertising), can provide good exposure at minimal cost. Personal recommendations ("bring a friend", "sell it"), spreading buzz, or achieving the feat of equating a brand with a common noun (in the United States, "Xerox" = "photocopier", "Kleenex" = tissue, "Vaseline" = petroleum jelly, "Hoover" = vacuum cleaner, and "Band-Aid" = adhesive bandage) these are the pinnacles of any advertising campaign.

However, some companies oppose the use of their brand name to label an object. Equating a brand with a common noun also risks turning that brand into a genericized trademark - turning it into a generic term which means that its legal protection as a trademark is lost.

1.4.Measuring the impact of mass advertising

The most common method for measuring the impact of mass media advertising is the use of the rating point (rp) or the more accurate target rating point (trp). These two measures refer to the percentage of the universe of the existing base of audience members that can be reached by the use of each media outlet in a particular moment in time. The difference between the two is that the rating point refers to the percentage to the entire universe while the target rating point refers to the percentage of a particular segment or target. This becomes very useful when focusing advertising efforts on a particular group of people. One of the reasons advertising is successful is because it can target a particular audience to build awareness of what the advertiser has to offer.

2. **Integrated Marketing Communications**

- The use of different promotional tools such as advertising, public relations, events, and the Internet in a planned, coordinated campaign to deliver a clear and consistent message to a target audience

2.1. **Media Advertising**

- Select media vehicle
  - Mass media or trade journals
  - Audience overlap with firms target market
  - Cost efficiency (CPM)
  - Fit of editorial climate with brand message
  - Size/Frequency of ads
  - Ad agency or not?
  - SRDS, CMP Media, media kits
- Select message strategy
  - Break through clutter/gain attention

- o Reinforce brand message

2.2. **Public Relations**

- Event sponsorship
- Charitable events/cause marketing
- Corporate advertising
- Publicity
- Press conferences, press releases

2.3. **Direct Mail**

- Effectiveness is a function of
- o List quality
- o Appropriate mailing volume/frequency
- o Message

2.4. **Trade Shows**

- To launch new products, reach sales prospects, compare competitors products
- Investment versus return
- Attract traffic to booth
- Follow-up on leads

2.5. **Telemarketing**

- Outbound
- Inbound
- o Assign people to specific customer accounts
- Do Not Call list

2.6. **Personal Selling**

- Effectiveness of this most expensive tool is a function of the foundation established by lower-level tools in the pyramid.

2.7. **Internet Advertising**

- Can be used in a complementary fashion at all levels of the pyramid
- Banner ads
- Search engines

2.7.1.**Internet Promotional Tools**

- Affiliates
- Viral marketing
- Permission marketing (email, newsletters) versus spam
- Mobile advertising

3. **Customer Relationship Marketing**

- Use database marketing to categorize customers on volume and profitability and/or on share of customer purchases and consumption level
- Decide on level of marketing effort and expenditure for each category
- Tailor marketing communications appropriately

3.1. **Categories of Customers**

- Low share of purchases/Low consumption in category
  - Absent compelling reason, avoid the customers
  - Risk of alienating wrong customers
- High share of purchases/Low consumption in category
  - Reasonably profitable, but not compelling
  - Sustain with occasional offers

- Low share of purchases/High consumption in category
    - Major opportunity
    - Grow firms share of business
    - Aggressive marketing
- High share of purchases/High consumption in category
    - Bread and butter customers
    - Attractive to competitors!
    - Maintain loyalty; dont be complacent

4. **Strategies for CRM**

- Capture the customer
- Event oriented prospecting
- Extended organization
- Manage by wire
- Mass customization
- Yield management

5. **CRM Software**

- Automate the sales force
- o Track accounts and prospects
- Automate call centers
- o Create customer profiles
- o Provide scripts
- o Cross-sell
- o Coordinate communication
- Analyze customer purchase history
- o Design targeted campaigns
- o Measure results
- Develop Web interface

- Product catalog, shopping cart, credit-card purchases
- Web configurator, for custom products
- Web analysis of shopping activity

In Section 5 of this course you will cover these topics: E-Business, E-Commerce And The Internet. Realizing The Promise Of Technology
You may take as much time as you want to complete the topic coverd in section 5. There is no time limit to finish any Section, However you must finish All Sections before semester end date.
If you want to continue remaining courses later, you may save the course and leave. You can continue later as per your convenience and this course will be avalible in your area to save and continue later.

: E-Business, E-Commerce And The Internet.

Topic Objective:

At the end of this topic student would be able to:

- Learn aspects of E-Business, E-Commerce and the Internet
- Understand about E-Business Models, Classification by provider and consumer, Online Business Models Website Management, Consumer Behavior and the Internet

Definition/Overview:

Electronic Business: Electronic Business, commonly referred to as "eBusiness" or "e-Business", may be defined as the utilisation of information and communication technologies (ICT) in support of all the activities of business.

E-commerce: The subset of E-business activities that enables and supports customers to do online transactions

Key Points:

1. **E-Commerce**

Commerce constitutes the exchange of products and services between businesses, groups and individuals and hence can be seen as one of the essential activities of any business. Hence, electronic commerce or eCommerce focuses on the use of ICT to enable the external activities and relationships of the business with individuals, groups and other businesses. E-business involves business processes spanning the entire value chain: electronic purchasing and supply chain management, processing orders electronically, handling customer service, and cooperating with business partners. Special technical standards for e-business facilitate the exchange of data between companies. E-business software solutions allow the integration of intra and inter firm business processes. E-business can be conducted using the Web, the Internet, intranets, extranets, or some combination of these.

Electronic commerce that is conducted between businesses is referred to as business-to-business or B2B. B2B can be open to all interested parties (e.g. commodity exchange) or limited to specific, pre-qualified participants (private electronic market). Electronic commerce that is conducted between businesses and consumers, on the other hand, is referred to as business-to-consumer or B2C. This is the type of electronic commerce conducted by companies such as Amazon.com.

Electronic commerce is generally considered to be the sales aspect of e-business. It also consists of the exchange of data to facilitate the financing and payment aspects of the business transactions.

On the consumer level, electronic commerce is mostly conducted on the World Wide Web. An individual can go online to purchase anything from books or groceries, to expensive items like real estate. Another example would be online banking, i.e. online bill payments, buying stocks, transferring funds from one account to another, and initiating wire payment to another country. All of these activities can be done with a few strokes of the keyboard.

On the institutional level, big corporations and financial institutions use the internet to exchange financial data to facilitate domestic and international business. Data integrity and security are very hot and pressing issues for electronic commerce today.

2. **Subsets**

Applications can be divided into three categories:

- Internal business systems:
  - customer relationship management
  - enterprise resource planning
  - document management systems
  - human resources management
- Enterprise communication and collaboration:
  - VoIP
  - content management system
  - e-mail
  - voice mail
  - Web conferencing
  - Digital work flows (or business process management)
- electronic commerce - business-to-business electronic commerce (B2B) or business-to-consumer electronic commerce (B2C):
  - internet shop
  - supply chain management
  - online marketing

3. **Models**

When organizations go online, they have to decide which e-business models best suit their goals. A business model is defined as the organization of product, service and information flows, and the source of revenues and benefits for suppliers and customers. The concept of e-business model is the same but used in the online presence. The following is a list of the currently most adopted e-business models:

- E-shops
- E-procurement
- E-malls
- E-auctions
- Virtual Communities
- Collaboration Platforms
- Third-party Marketplaces
- Value-chain Integrators
- Value-chain Service Providers
- Information Brokerage

4. **Classification by provider and consumer**

Roughly dividing the world into providers/producers and consumers/clients one can classify e-businesses into the following categories:

- business-to-business (B2B)
- business-to-consumer (B2C)
- business-to-employee (B2E)
- business-to-government (B2G)
- government-to-business (G2B)
- government-to-government (G2G)
- government-to-citizen (G2C)
- consumer-to-consumer (C2C)
- consumer-to-business (C2B)

5. **Online Business Models**

- Portals
- Market makers
- Seller storefronts
- E-tailers
- E-procurement

6. **Website Management**

- Build Site Traffic
  - Network effects
  - Scale economies
  - Retention rates
- Manage Online Customer Relationships

7. **Consumer Behavior and the Internet**

- Inhibitors
  - Not compatible with consumer behavior
  - Access to technology
  - Spam
  - Viruses, hackers, and fraud
  - Concerns about privacy
- Facilitators
  - Empowerment (via access to information and transaction cost efficiencies)
  - Bricks-and-Clicks channel
  - Capability to join online communities
  - Peer-to-peer commuting
  - Broadband technologies
  - Wireless technologies

: Realizing The Promise Of Technology

Topic Objective:

At the end of this topic student would be able to:

- Learn aspects of Technology
- Understand about Advertising and Promotion in High-Tech Markets, Tools to Build and Maintain Customer Relationships

Definition/Overview:

Technology: Technology is a broad concept that deals with a species' usage and knowledge of tools and crafts, and how it affects a species' ability to control and adapt to its environment.

Key Points:

1. **Benefits of the Framework**

- Makes underlying issues explicit
- Highlights various stakeholders perspectives
- Leads to enhanced commitment to the decision
- Enhances ability to communicate decision to others

2. **Social Responsibility Considerations**

Making business decisions that are based on concerns not solely for profit but also for societal benefits/considerations. Examples:

- HP building technology infrastructure in developing countries
- Telecommunications companies building access to broadband technologies in rural areas.

3. **Social Responsibility and Business**

- Doing Good detracts from Doing Well
  - Loss of focus on core business issues
  - Spending and expenses that detract from bottom line
  - Decisions on social concerns better made by stockholders with their own money

- Doing Good facilitates Doing Well
  - Point of competitive advantage with customers
  - Way to gain employee loyalty and boost morale
  - Way to cultivate less hostile business environment
  - Way to find new revenue growth opportunities

4. **Social Responsibility Considerations**

Social responsibility is an ethical or ideological theory that an entity whether it is a government, corporation, organization or individual has a responsibility to society but this responsibility can be "negative." In that it is a responsibility to refrain from acting (resistance stance) or it can be "positive," meaning there is a responsibility to act (proactive stance).

There is a large inequality in the means and roles of different entities to fulfill their claimed responsibility. This would imply the different entities have different responsibilities, in so much as states should ensure the civil rights of their citizens, that corporations should respect and encourage the human rights of their employees and that citizens should abide with written laws. But social responsibility can mean more than these examples. Many Non-governmental organizations (NGOs) accept that their role and the responsibility of their members as citizens is to help improve society by taking a proactive stance in their societal roles. It can also imply that corporations have an implicit obligation to give back to society (such as is claimed as part of corporate social responsibility and/or stakeholder theory).

- Does the mission of the company match the mission of the cause?
  - Ex: Telecommunications companies building access to broadband technologies in rural areas
- Does the target market of the company have a vested interest in the cause?
  - Ex: If target market is women-owned small businesses, then supporting educational programs might make sense, even for a telecommunications company.
- Will the socially-responsible behavior: (a) generate goodwill and (b) positive exposure?
  - (a) Even if the behavior is not aligned with the corporate mission, and even if it reaches beyond the companys target market, creating goodwill may be sufficient justification.
  - (b) Likelihood of generating goodwill based on degree of Exposure Company will get for its socially-desirable activities

5. **Social Responsibility and Innovation**

- Extreme needs/conditions faced by the worlds impoverished people
- Problems that, when viewed through more traditional lens (i.e. what is used by customers in more moderate conditions) might be considered intractable
- Can stimulate radical thinking and breakthrough innovations

6. **Conclusion**

- Technology holds the hope and promise of solving many problems and woes
- It simultaneously causes problems and woes
- Effective marketing will be aware of the interface between promise/problem, and proactively manage customer concerns.
- Inventors who understand effective marketing more likely to see the promise of their technology realized