Crafting a Deployment Strategy

The question posed

A large part of the value of a technological innovation is determined by the degree to which people understand and use it.

Deployment is a **key component of the innovation process** because a new product has little value in and of itself.

It is only when people understand the innovation, can access it and utilize it regularly that the product is of value.

The question posed

The best deployment strategies **accelerate adoption by reducing uncertainty** about the product and **lowering resistance to switching from competing goods**.

Some of the key elements of an effective deployment strategy include **timing**, **licensing and compatibility**, **pricing**, **distribution**, and **marketing**.

Timing

Beyond the issues of timing discussed in Chapter 5, timing a product launch to take advantage of **seasonal effects**, or **to prevent or allow cannibalization** of existing products, can be an important part of a deployment strategy.

Cannibalization: when a firm's sales of one product (or at one location) diminish its sales of another product (or another location).

Timing

Strategic Launch Timing is a function of many factors including **seasonal or business cycles** and the **availability of complementary goods**.

Video game producers typically introduce new game consoles to coincide with the Christmas shopping season, but it is essential that complementary goods (to help create demand) and sufficient production (to meet demand) are readily available when the product is introduced.

Timing

For products characterized by **rapid technological change**, new product introductions should not follow so closely after the **previous generation** that consumers are reluctant to replace it, nor should the **next generation** be so long in coming that a competitor gets to the market first and establishes itself as the market leader.

Timing

- Firms can use timing of entry to take advantage of business cycle or seasonal effects.
  - For example, video game consoles are always launched just before Christmas.
- Timing also signals customers about the generation of technology the product represents.
  - For example, if too early, may not be seen as “next generation”.
- Timing must be coordinated with production capacity and complements availability, or launch could be weak.

Timing

- **Optimizing Cash Flow versus Embracing Cannibalization** is a very difficult choice for firms to make.
- There are instances when it is in the firm's best interest to **introduce new generations of technology while the current generation is still viable.** Though this strategy will result in the new generation **cannibalizing** sales of the previous generation, it is more likely to **keep consumers loyal** to the product and prevent them from switching to another manufacturer.
- **Cannibalization**: when a firm's sales of one product (or at one location) diminish its sales of another (or another location).

Optimizing Cash Flow versus Embracing Cannibalization

Traditionally firms managed product lifecycles to optimize cash flow and return on investment → **would not introduce new generation while old generation selling well.**

Often better for firm to invest in continuous innovation and willing *cannibalize* its own products **to make it difficult for competitors to gain a technological lead.**

Licensing and Compatibility

Firms should consider the new product's **compatibility** with competitors' or its own products when developing a deployment strategy.

By making the new product compatible with existing products, the firm can take advantage of a **large installed base**.

<u>A firm with a large installed base for its own goods may choose to make its products incompatible with other technologies</u> in order to prevent competitors from leveraging the installed base to create demand for competing products.

Licensing and Compatibility

The decision to make new products **backward compatible** with previous generations can be especially effective when combined with continuous innovation.

It takes advantage of the existing installed base and prevents competitors from creating a technological gap.

Pricing strategies

- Pricing strategies influence a **product's position in the market**, the **rate of adoption** and the **firm's cash flow**.
- A range of goals and corresponding pricing strategies are listed below:

Pricing strategies

- **Survival pricing** covers variable costs and some fixed costs and may be used in short run when there is **overcapacity** or **intense price competition**.
- **Maximize current profit pricing** establishes the price to maximize cash flow or rate of return on investment in the short run and is based on cost and demand estimates.
- **Maximum market skimming pricing** usually begins with a **high introductory price** to **signal high value** and recover initial development costs. This approach assumes that demand is unrelated to price and may attract competitors to market.

Pricing strategies

Maximum market share or **penetration pricing** sets the price as low as possible to attract customers in order to increase volume and decrease production costs. When an industry is characterized by **increasing returns** this can be a successful strategy because it can provide the firm with a powerful foothold as **low cost provider**.

Some firms use a "**freemium**" strategy whereby the core product is free or at a very low cost, but customers end up paying for add on features or services.

Pricing below cost can be an effective strategy when a firm expects to generate profits from the sale of **complementary goods**.

Pricing strategies

Timing strategies enable a firm to **manipulate customer perceptions of price** by changing how or when the purchase price is paid.

Options include **payment after a free trial period**, **leasing programs**, or a **give-away of the initial product** with profits earned from follow-on services. In addition, **introductory pricing** allows company to test price points in the market.

Pricing

Price influences product positioning, rate of adoption, and cash flow.

- What are firm's objectives?
  - Survival.
  - Maximize current profits.
  - Maximize market share

Pricing

- Typical pricing strategies for new innovations:
  - **Market skimming strategy** (high initial prices).
    - Signals market that innovation is significant.
    - Recoup development expenses (assuming there's demand).
    - Attracts competitors, may slow adoption.

Pricing

- **Penetration Pricing** (very low price or free).
  - Accelerates adoption, driving up volume.
  - Requires large production capacity be established early.
  - Risky; may lose money on each unit in short run.
  - Can **manipulate customer's perception of price.**
  - Free initial trial or introductory pricing.
  - Initial product free but pay for monthly service.
  - Razor and razorblade model: Platform is cheap but complements are expensive (as in video games).
  - For example, computer games and services often have a "**freemium**" model, where the base product is free, but additional features or capacity have a price.

Distribution

- **Selling Direct versus Using Intermediaries** is a function of the degree of **control the company wants to maintain over pricing**, **service and selling processes and opportunities to capture customer information and customize products**.
- Firms should consider the following questions when choosing a distribution channel for a product:

Distribution

- **How does the new product fit with distribution of existing product lines**? Does the firm have an **existing sales channel** that could be used for the new product or will the new product **warrant the cost and time required to build a direct sales force**?

- **How numerous and dispersed are customers, and how much product education or service will they require**? Is **pre-purchase trial** necessary or desirable? Is installation or **customization** required? If the answer to any of these is yes, intermediaries are likely to be the best option.

- **How are competing products or substitutes sold**? Apart from the need to change customer behavior if trying to change the traditional sales channel, the means by which a product is sold may affect **how it is perceived in the market** (unique, high end, mass market, etc.).

Selling Direct versus Using Intermediaries

Selling direct.

- Gives firm great control over selling process, price and service.
- Can be expensive and/or impractical.

Intermediaries

Intermediaries may include:

- **Manufacturers' representatives**: independent agents that may promote and sell the product lines of one or a few manufacturers.
- **Wholesalers**: firms that buy manufacturer's products in bulk then resell them (typically in smaller, more diverse bundles).
- **Retailers**: firms that sell goods to public.
- **Original equipment manufacturers (O E M s):**
    - A company that buys products (or components) from other manufacturers and assembles them or customizes them and sells under its own brand name. For example, Dell Computer..

Distribution

- In some industries, information technology has enabled **disintermediation** or reconfiguration of intermediaries.
    - For example, online investing enables customers to bypass brokers; online bookselling requires retailer to provide delivery services.

Distribution

Strategies for Accelerating Distribution should be considered when an industry is likely to select single technology as the dominant design.

Rapid distribution is central to establishing a **large installed base** and to encouraging developers of **complementary goods** to produce products that are compatible with a firm's new product.

These strategies include:

Strategies for Accelerating Distribution

Alliances with Distributors or the use of exclusive contracts can provide incentives to carry and promote certain goods.

Bundling Relationships increase the likelihood that customers will become familiar with the new product because the product is distributed with another product already enjoying a large installed base.

Contracts and Sponsorship encourage distributors, complementary goods providers or large end-users (e.g., universities, government agencies) to use the product increasing the likelihood they will buy it when faced with their own purchase decision.

Strategies for Accelerating Distribution

Guarantees and Consignment arrangements can reduce the impact of market uncertainty about a product.

For example, a manufacturer can encourage distributors to carry its product by selling it on consignment or agreeing to buy back unsold stock.

Similarly, complementary goods manufacturers can be motivated to support a new product with guarantees that a particular quantity of goods will be purchased.

Strategies for Accelerating Distribution

Alliances with distributors.

- Providing distributor with stake in product’s success or exclusivity contract can motivate them to promote more.

Bundling relationships.

- Sell in tandem with product already in wide use.

Contracts and sponsorship.

- Provide price discounts, special service contracts or advertising assistance to distributors, complementary goods providers or large and influential end users.

Guarantees and consignment.

- Reduces risk to intermediaries and complements providers.

Marketing

- **Marketing strategy** must take into account the **nature of target market and the innovation** in order to shape perceptions and expectations about the product's installed base and availability of complementary goods.
- Major marketing methods include **advertising, promotions, and publicity/public relations**.

Advertising

- Requires effective message.
- Requires media that conveys message to appropriate target market.
- Must strike appropriate balance between entertainment or aesthetics (to make memorable) versus information content (to make useful).

Advertising is used to build customer **awareness** of a technological innovation through an **effective advertising message** placed in the **advertising media** most likely to reach the target market.

Major Advertising Media

Media	Advantages	Disadvantages
Online Advertising: Pay-per-click (search engines)	Can be highly targeted to a particular audience; pay only for results (clicks); fast to deploy, and can be adjusted or deleted just as quickly; enables rapid and efficient tracking of responses for analyzing effectiveness of the ad	Vulnerable to click-through fraud (for example, clicks by a competitor or an unhappy customer or employee), which could result in wasted advertising spend
Online Advertising: Social Media	Can connect with customers in a rich way; potential for broad reach and viral marketing; can be highly targeted to a particular audience; relatively inexpensive; can be quickly deployed and adjusted; can track visitors in real-time	Conversion of visitors to customers is often low; can be difficult to build awareness and traffic to social media site
Television	High sensory richness that combines sight, sound, and motion; high geographic and demographic reach; independent stations offer new opportunities to more directly target specific audiences	Increasingly fragmented audience due to proliferation of stations; increasing use of DVR's enables viewers to skip the advertising; high absolute cost; fleeting exposure
Radio	High geographic and demographic selectivity; medium reach; relatively low cost	Audio presentation only; advertisers may need to buy ads with multiple stations to achieve desired audience reach; fleeting exposure

Major Advertising Media

Media	Advantages	Disadvantages
Newspaper	Timeliness; good local market coverage; broad acceptance; high believability; audience can keep or revisit the advertisement; wide price ranges available	Newspaper audiences are decreasing; easy for audience to skip over ad; relatively poor production quality; high advertising clutter; may be difficult to selectively target a particular audience
Magazine	High geographic and demographic selectivity; high quality visual production; long life; can enable significant technical content; good pass-along readership	Slow deployment (long ad purchase lead times); some waste circulation; may require advertising in multiple magazines to achieve desired reach
Direct Mail	High audience selectivity; no ad competition within the same medium; personalization; enables communication of significant technical content; may be passed along to others; responses can usually be efficiently tracked	Relatively high cost; “junk mail” image; requires access to good mailing lists; requires relatively long lead times for printing and mailing
Outdoor (for example, billboards, banners)	High repeat exposure; low cost; low competition	Limited audience selectivity; very limited technical content
Telephone	High audience selectivity; can give personalized message	Relatively high cost; can be perceived as an annoyance

Promotions

Promotions are **temporary** selling tactics used at the customer or distributor level to **stimulate purchase** or trial.

<u>Examples include:</u>

Offering samples or free trial.

Offering cash rebates after purchase.

Including an additional product with purchase.

Offering sales bonuses to distributor or retailer sales representatives.

Publicity and Public Relations

Publicity and Public Relations can be used to generate **word-of-mouth** recommendations, **public awareness** and **goodwill**.

Viral marketing attempts to capitalize on the social networks of individuals to stimulate word-of-mouth advertising.

Information is sent directly to a set of targeted consumers (a process called "seeding") that are well-positioned in their social networks in some way (e.g., they may be "hubs" in that they have many more friends than others, or may have high potential for opinion leadership).

The objective is to spark rapid spreading of the information through social networks, akin to a viral epidemic.

Tailoring the Marketing Plan to Intended Adopters

Tailoring the Marketing Plan to Intended Adopters is crucial because each adopter group responds to different marketing content.

Tailoring the Marketing Plan to Intended Adopters

Innovators and Early Adopters respond to marketing that offers significant technical content and emphasizes leading-edge nature of product.

- Need media with high content and selective reach.

Early Majority responds to marketing emphasizing product's completeness, ease of use, consistency with customer's life, and legitimacy.

- Need media with high reach and high credibility.

Late Majority and Laggards respond to marketing emphasizing reliability, simplicity, and cost-effectiveness.

- Need media with high reach, high credibility, but low cost.

Using Marketing to Shape Perceptions and Expectations

Advertising, promotions and publicity will all play an important part in shaping the market's expectations about the product, the installed base and the availability of complementary goods.

- **Preannouncements and Press Releases** aggressively promoting existing and planned products can increase the actual and perceived installed base, both of which may drive future adoptions. "**Vaporware**" is the pre-advertising of products not yet on the market and are often used to encourage customers to wait for a firms product when a competitors product is already available.
- **Reputation** (for introducing successful, well-supported innovations) will influence customers', distributors' and complementary goods producers' expectations of the new

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Reputation (for introducing successful, well-supported innovations) will influence customers', distributors' and complementary goods producers' expectations of the new product.

Credible Commitments including financial commitments to a new technology, either in R&D costs or in new manufacturing capability, will signal the market about the firm's confidence in and commitment to the new product.

Creating an Information Epidemic

- Gladwell notes that some individuals have a disproportionate impact on marketplace behavior:

Connectors.

Have exceptionally large and diverse circle of acquaintances

Knack for remembering names and important dates.

Mavens.

Driven to obtain and disseminate knowledge about one or more of their interests; Will track prices, tend to be consumer activists; Take great pleasure in helping other consumers.

Salespersons.

Naturally talented persuaders

Acute ability to send and respond to nonverbal cues; can infect others with their mood!

Discussion Questions

1. Can you identify one or more circumstances when a company might wish to delay introducing its product?
2. What factors will (or should) influence a firm's pricing strategy?
3. Pick a product you feel you know well. What intermediaries do you think are used in bringing this product to market? What valuable services do you think these intermediaries provide?
4. What marketing strategies are used by the producers of the product you identified for question 3? What are the advantages and disadvantages of these marketing strategies?