# Unit 4 Strategies for Pricing Information Goods

## **Cost of Producing Information**

- Information is costly to produce but cheap to reproduce
- Very costly to produce the first copy and very cheap to produce subsequent copies

- first-copy costs to compromise an even greater fraction of total costs
- additional copies cost essentially nothing
- Eg. Music, movies, books, etc
- Fixed costs of production are large, but the variable costs of reproduction are small.
- This cost structure leads
  - Economics of scale:
- The more it is produced; the lower will be the average cost of production

- Fixed costs of producing information goods are sunk costs
- If Movie flops, there isn't much of a resale market for its script
- Low variable cost of information goods
  - Great marketing opportunities

- Telecommunication Example
  - High cost to setup equipments for Optical Fibre
  - Costs next to nothing to send additional signals over the fiber

## **Cost and Competition**

- To compete, price of information can be lowered by each competitor
  - It is done because products offered are quite homogeneous
- There is flexibility to lower the price because marginal cost is very low
- So, to compete, prices are generally lowered down
- Competition among sellers of commodity information pushes prices down in the market

## Market Structures for Information Goods

- The dominant firm model
  - Product may not be best but due to power and brand name, it rules the market and earns through economies of scale.
  - E.g. Microsoft Windows and Android
- The differentiated product market
  - Same product but with different varieties
  - The product offers something of a value that others do not offer

 For example, first ever science fiction movie in a country, value of cartoon channels to a kid

## **Product Personalization**

- Personalizing
- Generating and presenting information to the specific customer according to the general likeness and observed features about the customer – Example:
- A news website personalizing ads displayed according to the type of news searched
  - Stock market and banks ads displayed for customers who looks for economic news
  - New sports events and fixtures ad for those who view for sports news

#### Know your Customer for Personalizing

- Information providers on the Web have the ability to know what Web surfers are actively looking for, where they spend their time, etc.
- Profile each customer uniquely

- Two main ways to get user information are
  - A. Registration and billing
  - B. Observation

## Registration and billing

 Not necessarily charge for money to the users, but at least let them create a user account to access information

- This allows the collect information on the demographics of the user
- Demographics, in turn be passed on to advertisers.

### **Observation**

Monitoring searches

Monitoring users click stream

Keeping record of search history of the customers online

## **Product Pricing**

- If the information product meets the interest of customer, the seller can have price flexibility
  - It means price can be charged according to customers
- The purest example of tailored goods are research reports, such as those produced by Gartner Group, Forrester Research, the Research Board, and other similar organizations. The Research Board, for example, sells research reports to CIOs that are highly targeted to

their interests and needs. In exchange, member companies pay subscription fees of \$50,000 to \$70,000 per year for this information, simply because it is hard to find such detailed and personalized information elsewhere

## **Price discrimination**

 Charging each customer just what he or she is willing to pay  Arises when consumers' willingness's to pay are heterogeneous

## Types / Degrees of Differential pricing

#### Personalized pricing:

Sell to each user at a different price.

#### Versioning:

 Offer a product line and let users choose the version of the product most appropriate for them.

#### Group pricing:

 Set different prices for different groups of consumers, as in student discounts

## 1. Personalized Pricing

- Mail order catalogs, for instance, often arrive with a stapled insert announcing "special offers" of one form or another.
- "Special offer" might just be a premium price charged

- The provider can design a package that is optimized for your interests and charge you accordingly
- Things that can be done in personalized pricing

- Personalize your product and personalize your pricing
- Know thy customer.
  - Customer demographics

- Tracking their click stream and search behavior
- Differentiate your prices when possible

#### 3. GROUP PRICING

- Base prices directly on group identity
  - Student discounts
  - Senior citizen discounts are some examples

- Textbook that sells for \$70 in the United
   States sells for \$5 in India
  - Paper quality low

- Low quality graphics and pictures
- Poor economic status of Indian buyers

## **Reasons for Group Pricing**

#### Price sensitivity

 Rather than charging normally higher prices, targeting a group of price sensitive customers at lower price can capture significant portion of market

#### Network effects

 Prices can be charged lower or higher according to group to comply to network effect. Prices make it easy to subscribe

#### Lock-in

 Keep value in product and price so that customers become addicted to the product

#### Sharing

 Academic journals that sell at a high price to libraries and a low price to individuals are another example. Libraries are willing to pay the higher price since the material is shared among many users

## **Versioning** Versioning

 Situations in which the producer provides different qualities/forms of a good which sell at different prices

- Get the consumers to sort themselves into different groups according to their willingness to pay
- The product line is designed so as to appeal to different market segments, thereby
  - selling at
- a high price to those who have a high value for the product,
- a low price to those who value it less
- Producer chooses the versions so as to induce the consumers to "self select" into appropriate categories.

- Eg.
  - Trail version vs Full version
  - General users vs VIP users in a singing application called "Smule"

## Types of Dimensions of Versioning

- 1. Delay:
- 2. User Interface
- 3. Convenience
- 4. Image Resolution
- 5. Speed of Operation
- 6. Flexibility of Use

- 7. Capability
- 8. Features and Functions
- 9. Comprehensiveness
- 10. Annoyance
- 11. Technical Support

## 1.Delay

- Information is like an oyster:
  - Has the greatest value when it is fresh.
- "strategic" information, such as information about stock market or interest-rate movement, where individuals

- possessing the information have a strategic advantage over those lacking it.
- Those customers who want the latest information will pay more for the fresh and timely delivery of information.
- FedEx offers two classes of service, a premium class that promises delivery before 10 A.M. and a "next day" service that only promises delivery some time the next day

 Providing premium service for "ordinary" packages would reduce the value of premium service.

### 2. User Interface

 Provide high-paying customers with more powerful search capabilities i.e. offering different search interfaces

 experienced users tend to be users with high willingness to pay; they first signed on to

- purchase the information and generally use it more intensively.
- Casual users typically welcome a strippeddown interface, while advanced users can handle additional capabilities

Experienced users are offered sophisticated UI with more functionalities that a general user may not understand

#### 3. Convenience

- Control of convenience by restricting the time or place at which an information service is used.
- Example of Time convenience:
  - Night surfing package of worldlink during 2006/07
- Companies can also restrict access by location
  - Example, some on-line database providers have offered libraries licenses that allow unlimited use by patrons within the library but restrict use by off-site patrons

## 4. Image Resolution

- Use visual resolution to discriminate between users
   Example: An online Photo Library
  - Professionals might demand for high size high quality and resolution images that can be used for large size printing purpose
  - Same Image, but of a lower size and resolution can be given to general users for viewing purpose
  - High resolution can be charged but lower can be set free
  - Photo conversion sites: free conversion for JPEg but price charged for Raw files

## 5. Speed of operation

- Strategy is to sell versions with different capabilities
- Releasing a new product with slower operations
  - Eg a printer with a slower printing speed than previous version
  - A version of mathematical calculating software with relatively lesser calculating capabilities
  - Minimal version is sold at a lower price and this increases the value of the higher product
  - Smartphones with slower processor sold at low price

## 6.Flexibility of Use

- Basis for versioning is the ability to store, duplicate, or print the information
- Some software companies(such as Borland) sold two versions of their software—a low-priced version that could not be copied and a high-priced version without the copy protection.
- Another example
  - Charging on offline versions

## 7. Capability

Product	Price	Description
VoicePad Pro	\$ 79	Vocabulary of 20,000 words
Personal	295	Vocabulary of 30,000 words
Professional	595	Vocabulary of 50,000 words
Office Talk	795	General office staff
LawTalk	1,195	Legal vocabulary
Voice Med	6,000	Medical offices
Voice Ortho	8,000	Special purpose medical vocabulary

## 8. Feature and Functions

Basic and Deluxe Version

- Example : Quickens Financial App
- The Quicken Deluxe version offers
  - a mutual fund finder,
  - a mortgage calculator,
  - an insurance needs estimator,
  - and other features valued by high-powered users
- Basic version of the software offers only the core checkbook software

## 9. Comprehensiveness

Premium version contains fully contained information

- E.g. a library might provide detailed historical information to its premium users online who pay and subscribe to the premium category
  - These users can dig deep for more relevant information

## 10. Annoyance

- Lower versions contain something that users do not really want
  - E.g. S/W that frequently displays ads or prompts us to keep updating

 Premium versions do not Pop Up such advertisements and messages that users do not welcome

## 11.Technical support

 Premium version includes free technical support

Free version includes only basic services

- E.g. Antivirus programs
  - Free version : simple scan and clean
  - Premium : added technical support

## Adjusting Price and Quality in versioning

- Goal of versioning: sell to <u>different market segments at different</u> <u>prices</u>.
- Creating low-end and high-end versions of product, companies can sell the <u>same thing</u> to customers with significantly <u>different</u> <u>levels</u> of willingness to pay.
   Considerations:
  - If premium-price, <u>high-end product attracts some low-end customers</u>, that's great: company will getting <u>more revenue</u> from them than if they had stuck to the low-end product. Hence, make high end product as <u>attractive</u> as possible.

 Reversely: There arise a problem if <u>low-end version is attractive</u> to some customers who would otherwise pay a <u>premium price</u> for the high-end version.

## 4.2b. Adjusting Price and Quality

- Solution:
  - I. <u>Reduce the price</u> of the high-end product to make it relatively more attractive.
  - II. <u>Reduce the quality</u> of the low-end product to make it relatively less attractive.
- Discounting High-End Product

## 4.2b. Adjusting Price and Quality

- Creating <u>low-end version</u> of information product requires <u>reducing price</u> of <u>high-end products</u> so that high-value customers are happy and satisfied.
- The question that matter is:
  - \* Do <u>high-end products</u> (still) really offer <u>sufficient value</u> to highvalue customers?
  - \* Whether discount in the high-end product price lead to <u>increased sale</u> to <u>compensate</u> for the price reduction?
- When low-end products are offered, high-end <u>sales may</u> <u>decrease</u> however, the <u>revenue</u> is still <u>contributed</u> by lowend product.

# 4.2b. Adjusting Price and Quality

 What's important is the <u>difference</u> in the revenue from the high and low ends of product line.

#### II. Value-Subtracted Versions

- For <u>physical goods</u>, it is usually more <u>expensive</u> to produce an <u>extra</u> unit of the <u>high-quality</u> versions.
- A <u>high end smartphone</u> is more costly to make than a low end smartphone.
- In case of information goods, <u>low-end products are toned down</u> <u>versions</u> of high-end products.
- Hence, producing <u>low-end products</u> may <u>cost nothing</u> much or <u>more</u> than high-end products.

# 4.2b. Adjusting Price and Quality

- Example: The versions related to <u>image quality</u>, the company has to <u>upload</u> every image with <u>high resolution</u> first and later <u>tone</u> <u>it down</u>, requiring <u>additional work</u> for low-end version.
- Consideration: If company add a <u>new feature</u> to its software or information product offered to <u>high-end customers</u>, make sure there is some way to *turn it off*.

### Value-subtraction Versions

- Ease in Information goods reproduction
  - Producing a fancy version is not so costly than basic version

 Firm develops the high-end version first and then degrades to obtain lower quality versions

- strategy to exploit the cost savings in content, design, and code reuse
- Once you've got your high-value, professional product, you often want to eliminate features to create a lower-value, mass-market product

### Pitfalls of Versioning and How to avoid

#### 1. Low willingness-to-pay

- Can't be solved unless producers can "degrade" the product in a way that discourages high-willingnessto-pay consumers from purchasing it.
- Without offering distinct versions, best strategy would be to offer the high-end product at a premium price

Emphasize more on the low end product for the customers

### Pitfalls of Versioning and How to avoid

#### 2. Quality adjustment breaching by customers

- Adjust the quality and make sure that the quality adjustment (low end)cannot be undone by clever consumers .
- Example: Microsoft Windows NT
  - Windows NT Workstation: \$260
  - Window NT Server: \$730-\$1,080, server version will accept any number of simultaneous sessions
  - Problem: Some sophisticated consumers were able to turn the low-cost version into the high-cost version

Failure of the versioning strategy indeed due to lack of quality adjustment

### 4.2d. On-line and Off-line Versions

- Offline versions are often <u>preferred</u> by customers than online versions.
- Examples: Offline version of Google Map, printed versions of book, downloaded music in mobile phones.
- Reasons: <u>Quality, accessibility, ease of use, availability</u>.
- Effects:
  - <u>Free online</u> versions and <u>cost</u> for printed/<u>offline</u> versions. (Harvard Business Review, online reports)
  - Online version require near <u>zero marginal cost</u> while offline version has some.

- Make online products more <u>attractive</u> (adding value) because it requires <u>no additional cost</u> for additional copy.
- Online products offer more <u>flexibility</u> in terms of search, sorting, filter electronically, cross referencing (hyperlinks).

### 4.2d. On-line and Off-line Versions

#### Consideration

- \* Whether the online version is a <u>complement</u> or a <u>substitute</u> for the offline version.
- \* If online version is <u>substitute</u> for the offline version, then <u>charge</u> for it recovering costs through <u>advertisements</u> or <u>version</u> it so that it doesn't <u>directly compete</u> with the offline version.

- \* If online version <u>complements</u> the offline version, promote offline version as aggressively as possible.
- \* This will <u>add to the sales volume</u> by encouraging the offline product.

### ON-LINE AND OFF-LINE VERSIONS

- Online and Offline are two channels of distributing same product
- It is much cheaper to sell information on-line since there are no production or distribution costs

 make it more attractive to the consumer than the off-line version treat your on-line content as if it were free

### ON-LINE AND OFF-LINE VERSIONS

 Online version should not cannibalize the revenue that can be possibly gained from the offline version

### Stimulates sales or Steals from Offline version?

## How many versions?

#### 1. Analyze Your Market

- Think about whether your market naturally subdivides into different categories of consumers and whether their behaviors are sufficiently different that they want (or are willing to tolerate) different quality of product.
- Are there professional and amateur users? If so, what distinguishes them?
- Your low-end information product should be lacking the key attributes that high-end customers crave for

 Come up with versions that both give value to your customers and raise revenues

## How many versions?

#### 2. Analyze Your Product

- Identify its key attributes, with an eye on segmenting the market
- offering a high-end and a low-end version with clear differences in customer value
- Enhance features for sophisticated customers who re willing to pay more
  - Degrade features for amateurs

- make the product relatively unattractive to the high willingness-to-pay users but still attractive to the next group down.
- Quite often, low end version can help to advertise the high end version too.

### Consumers Dillema

- Pricing is a <u>mind game</u>. Example: Rs. 99 rather than Rs. 100.
- Using the mind game to <u>trick</u> customers to purchase product.
- *First time user* of product are often *confused* as to which product to purchase.

- The selection becomes even <u>complex</u> if only <u>two versions</u> are available.
- The chances are there is higher possibility to purchase <u>low end</u> <u>version</u> for experiment or be in the safe side.
- Offering three versions may <u>psychologically trick</u> customers to purchase otherwise high-end version.

### **GOLDILOCKS PRICING**

- 1. Professional" and "standard" version
- 2. "standard," "professional," and "gold" version

- High end package targeted toward users with very high value for the product
  - Derives from psychological phenomenon known as "extremeness aversion".
- It's perceived as risky to go for the top or the bottom of the product line for most consumers, and much safer to choose something in the middle

# Goldilocks Pricing

Extremeness Aversion: Goldilocks Story

- When provided with <u>multiple choice</u>, people tend to <u>avoid the extreme</u> choices and stick to the <u>neutral one</u>.
- Psychological Reasons:
  - Most consumers perceived it as <u>risky</u> to go for the top or the bottom of the product line.
  - They perceive it is much <u>safer</u> to choose something in the middle.
  - Thereby, <u>avoid</u>ing the <u>extreme</u> choices.

## Goldilocks Pricing

#### Advantages:

- It <u>helps customers</u> to feel that they are in safe side; <u>avoiding extremes</u> and more <u>satisfied</u> with their purchase.
- It makes customers more <u>likely to purchase</u> the product; when choices are available, people feel <u>empowered</u> to make decision.
- Availability of <u>more choices</u> makes customers more <u>confused</u> and <u>dissatisfied</u>.
- Hence, <u>three choices</u> are ideal in most of the case.
- If companies can't decide how many versions to have, <u>choose three</u>.

#### Trick

- Keep the version you want to sell the most in the <u>middle price range</u>.
- The high-end product is there only to <u>push people</u> toward the compromise choice.

#### **GOLDILOCKS PRICING**

- Consumers don't want to choose between "too big" or "too small"
  - They want the product that is "just right."
- Influences low-end buyers to trade up to higherpriced models
- Trick: Extremeness Aversion
  - middle product : the main thing we want to sell

 high-end product is there only to push people toward the compromise choice

### **GOLDILOCKS PRICING**

 Add features that almost no one would use but that give the high-end product a distinct identity

Example:

 If you are selling images, offer a superhighresolution version that would exceed the needs of most users

### **Customizing the Browser and content**

 Controlling the browser allows the seller of content to increase the quality of what it is selling.

- If the consumer is viewing page 7 of the article, it is likely that page 8 will be the next piece of content he looks at
  - Browser could download page 8 in the background

# Customizing the Browsers

- A helpful technique in versioning where, information is customized to meet the individual user requirement.
- Customize the browsers to display the <u>particular type of goods</u> in an <u>optimal way</u>.

- It is changing the way the website <u>looks</u> in a way that <u>appeals</u> to customers' <u>unique interests</u>.
- Hence, the website looks more <u>valuable</u> to individual customer and company can <u>extract</u> more profit from it.
- Customization helps in <u>increasing sell</u> thereby <u>increased revenue</u> and <u>profit</u>.

## Customizing the Browsers

The browser can be customized the following ways:

- Display most tempting products:
  - Promoting the most <u>tempting products</u> to customers.

- Specific approach
- Aggressively promote the product to the <u>targeted</u>
   <u>segment</u>.
- Encourage Repeated Purchase
  - Showing these products at regular intervals to visitors who go to company's site, thus <u>driving repeat purchases</u>.
- Customize the content displayed on browser according to the user
- Languages like JAVA and Javascript(client side scripting) provide technical assistance for this purpose
- personalization can be done in user's side

### **Customizing the Browser and content**

- Turn off some features like speed of search for users that are not willing to pay and turn it on for users that are willing to pay
  - This creates a market segmentation
- Users with high willingness-to-pay pick the system that displays more quickly.
- Customize the content displayed on browser according to the user
- Languages like JAVA and Javascript(client side scripting) provide technical assistance for this purpose
- personalization can be done in user's side

 Optimize the browser to display that information in more useful and effective ways

### Bundling

- Special form of versioning in which two or more distinct products are offered as a package at a single price
  - example : Microsoft Office, consists of a spreadsheet, word processor,
     presentation tool and many more
  - Combo meal in QFX
  - TV and Internet package by an ISP
  - Whisky high volumes bottle
  - Coca cola high volume bottle
- Price of the bundle is usually less than the sum of the component prices

Tying:

- Individual products are offered only in the package.
- But bundling offers independently as well as in package
- Price of the bundle is usually less than the sum of the component prices
- In bundling, you need to determine whether you would like to offer a targeted discount on one product to customers who would purchase the other product anyway
  - Example: Wall street Journal gives discount to online subscribers on paper versions
  - But no discount is given to paper subscribers on the online version because they wont value online version once they have valued the paper version

## Bundling

#### Dispersion in Customer Value

- Willingness to pay for the bundle is less dispersed than the willingness to pay for the components.
- Consumers with a high willingness to pay for one component tend to have low willingness to pay for another component
- Therefore, bundling becomes an easy choice which can help to increase revenues

# Bundling

#### Option value

- A consumer may find Microsoft Office an attractive purchase even if she doesn't currently use a spreadsheet, since she might use a spreadsheet in the future.
- If the consumer does decide to use a spreadsheet in the future, he will naturally choose the one that is "free" in the Microsoft Office bundle.

 The spreadsheet really isn't free; The consumer paid for it while purchasing the bundle—but does have a zero incremental cost once the bundle has been purchased.

# Information Bundles

- Information Bundles
  - Magazines
- Bundles of articles,
  - subscriptions
    - Bundles of magazines
  - selling each article on a pay-per-read basis,

- It would likely get significantly less revenue
- Bundling reduces the dispersion in willingness to pay for the collection of articles it sells

# **Promotional Pricing**

- A sales promotion technique, wherein the firm <u>reduces</u> the <u>price</u> of a product <u>drastically</u>, for a <u>short period</u>.
  - To induce sales
- The promotional pricing may be in the form of
  - Special-Event Pricing (Discounts at festive seasons, new year, buy-two-get-one-free)
  - Sale (50% off)
  - Coupons (Discount coupons)

- Loyalty Schemes (Bhat Bhateni)
- Cash Rebates (Scratch and other coupons, "haat khali na hune upahar")
- Warranties and Service Contracts (Vehicles and electronics)
- Psychological Discounting (99 Shop)

### PROMOTIONAL PRICING

- Impose some inconvenience cost on the consumer
- Low price Sales
  - consumer has to watch for the sales to occur
- Coupons
- consumer has to clip the coupon and remember to take it to the store

- Promotions are often ways to segment the market into price-sensitive and non pricesensitive components
- Price sensitive: lower willingness to pay