Consumer customers

S-38.041 Networking Business
Consumer’s problem
Conflicting interests

- Consumer tries to maximize consumer surplus, CS
- Consumer’s utility from a product is dynamic
- Producer tries to maximize producer surplus, profit, p-c
- Social planner tries to maximize social welfare, u-c
Consumer’s problem

Utility function

- $u(x)$ is typically increasing and concave
- Consumer chooses $x(p)$ because of maximal net benefit
- Communications expenditure is small wrt total income
  $\Rightarrow$ Level of income has little impact on $u(x)$
Consumer’s problem
Multiple consumers and services

• Consider a market with \( n \) customers selecting from \( k \) services

\[ CS_i = \max_x [u_i(x) - px] \]

Vector quantity of services, \( x = (x_1, \ldots, x_k) \)
Customer \( i \) belongs to \( N = \{1, \ldots, n\} \)
Assume \( p(x) = \sum_i p_i x_i \), for a vector of prices \( p = (p_1, \ldots, p_k) \)

• Demand function for customer \( i \) is \( x^i(p) \), given vector \( p \)
• Aggregate demand function is \( x(p) = \sum_i x^i(p) \), total demand
• Consumption may cause side-effects (externalities)
• Service demand may depend on other services (cross elasticity)
  • Substitutes
  • Complements
Consumer service portfolio

Home telephone
  • Number to family/location (analog, ISDN, VoIP)

Home Internet
  • PC broadband Internet access (copper, cable, fiber, WLAN)
  • Value-added services (email, home page, security, …)

Home TV/radio broadcast
  • Signal source (cable, terrestrial, satellite)
  • Signal type (analog, digital/MPEG, digital/IP streaming)

Personal cellular handsets
  • Personal life management
  • Services bundled on SIM card (GSM, WCDMA)
Service provider portfolio

Legend
- Core business
- Likely expansion
- Possible expansion

<table>
<thead>
<tr>
<th>Local teleoperator</th>
<th>CATV operator</th>
<th>Terrestrial operator</th>
<th>Satellite operator</th>
<th>ISP</th>
<th>Cellular operator</th>
<th>Content operator</th>
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Home telephone service
Broadband Internet access
Value-added Internet services
Terrestrial TV broadcast
Cable TV broadcast
Satellite TV broadcast
Cellular service
Multimedia content
Household spending
Communication as % of household consumption
(OECD average)

Source: OECD
Media consumption
Mobile is not yet recognized

Kids have adopted mobile culture
(% of age class)

Source: Lapset, nuoret ja matkaviestintä 2000-2002
Case Japan: daily usage time

Mobile Internet

<table>
<thead>
<tr>
<th>Minutes/day</th>
<th>Female (%)</th>
<th>Male (%)</th>
<th>Overall (%)</th>
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<tr>
<td>&lt;5</td>
<td>48.28</td>
<td>56.07</td>
<td>53.85</td>
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<td>5-10</td>
<td>22.06</td>
<td>19.86</td>
<td>20.49</td>
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<td>10-20</td>
<td>13.78</td>
<td>9.88</td>
<td>10.99</td>
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<tr>
<td>20-30</td>
<td>8.20</td>
<td>5.74</td>
<td>6.44</td>
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<tr>
<td>30-60</td>
<td>4.68</td>
<td>4.25</td>
<td>4.37</td>
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<tr>
<td>60-90</td>
<td>1.27</td>
<td>1.44</td>
<td>1.38</td>
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<tr>
<td>&gt;90</td>
<td>1.72</td>
<td>2.76</td>
<td>2.46</td>
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</table>

- More than 50% of users use less than 5 min per day
- No clear correlation
  - between time of day and content
  - between amount of usage and content

Source: MoCoBe.com survey, 2003
Case Japan: daily usage location

Mobile Internet (%)

- Usage follows the duration of presence (except commute)
- No clear correlation between location and content

Source: MoCoBe.com survey, 2003
Case Japan: usage summary

Mobile Internet

- Personality drives the usage patterns, not location or time
  - contextual marketing should focus on personality
- 73% of users consider email/chat as #1 app
  - ringtones/pictures is #2 with 6% of respondents
  - email is a killer app!
- Only 26% of users pay extra for mobile Internet content
  - 60% of those who pay extra, pay less than 4 USD/month

Source: MoCoBe.com survey, 2003
Framework of consumer orientation

Receptive Belonging

- Emphasis on interacting and sharing with others

US

Restrictive, rational, confined

- Emphasis on the safety of the group and using accepted and proven methods and solutions

INTROVERT

Relaxed and pleasure oriented

- Emphasis on putting oneself in the center and following own drives and urges in a spontaneous and open way

ME

Individualistic Self-esteem

- Emphasis on imposing oneself on the environment in a very controlled and rational way

EXTROVERT

Source: Nokia, 2002
The Six “MindStyle” Segments

- **EXTROVERT**
  - “Sharers”
    - Interaction, sharing
  - “Experiencers”
    - Fun, exploration
  - “Controllers”
    - Order, rationality
  - “Maintainers”
    - Family, stability
  - “Impressors”
    - Profile, image
  - “Balancers”
    - Duties, people

- **INTROVERT**
  - I listen, choose, then share
  - I want to keep what's important to me
  - I want to enjoy myself
  - I want to like & admire me
  - I need to control how you see me

Source: Nokia, 2002
What do the Mindstyles tell us?

- The Mindstyles describe 6 different Life Strategies that people use to approach life's priorities and challenges.
- Understanding these different strategies provides strategists and designers with insights on what is relevant and important to different groups of consumers.
MindStyles: Experiencers

A 'typical' Experiencer:
Who: young, male or female
Life Stage: Pre-family
Mindset: Hedonistic/self-indulgent & spontaneous, seek excitement
Activities: with friends, active sports, clubs, internet
Attitude towards technology: High mobile phone usage. Technophiles. More edgy, will move on if too mainstream

To attract Experiencers:
- Bold and expressive marketing
- New and different products
- Rich communication capabilities
- Entertainment features (for sharing)
- Opportunities for self-expression

The experience they seek:
- I can have fun with my device
- I can always contact my friends
- I can get more out of life
MindStyles: Impressors

A 'typical' Impessor:

Who: in twenties/early thirties, managerial position

Life Stage: single, urban

Mindset: Want to be admired, and many aim to be rich

Activities: Cinema/holidays and all entertainment are selected on the basis of how they reflect on themselves

Attitude towards technology: Open to new technology nurturing continued friendships and making them look good!

To attract Impressors:

- Brand credibility
- Competent and successful imagery
- Smart, sophisticated products
- PIM functionality
- Personal services

The experience they seek:

- I know I look good
- People respect me
MindStyles: Controllers

A 'typical' Controller:
Who: probably male, 25-40
Life Stage: during children
Mindset: Want to be respected, hide inadequacies by challenging others/norms
Activities: Collect memorabilia, a lot of TV, e-mail and internet
Attitude towards technology: Interested in things rather than people, fearful of technology

To attract Controllers:
• Safe, respectable choice of brand and products
• Control over communication
• Entertainment features for own consumption

The experience they seek:
• I am in control of the way I present myself
• I feel protected from social pressures
• I can escape when I need to
MindStyles: Maintainers

A 'typical' Maintainer:
Who: Older, forties or older
Life Stage: during or post kids
Mindset: Home matters most. Cherish safety and stability of private world
Activities: with the family, traditional activities, magazines, newspaper, TV
Attitude towards technology: Technophobes. Practical mobile phone usage

To attract Maintainers:
• Technology made simple & friendly
• Benefits in terms of preserving lifestyle
  • Enhancing family communications
  • Saving time and money
• Services providing practical support

The experience they seek:
• Makes my life easier
MindStyles: Balancers

A 'typical' Balancer:
Who: Middle ages
Life Stage: During kids
Mindset: Driven to achieve in all aspects of life - work, family & personal development
Activities: Spend time with family, DIY
Attitude towards technology: High mobile phone usage

To attract Balancers:
• Brand as a reassurance of quality
• Reliability
• Facts regarding benefits of products
• PIM functionality
• Time and money saving services

The experience they seek:
• Makes my life easier
MindStyles: Sharers

A 'typical' Sharer:

Who: middle ages
Life Stage: with kids
Mindset: Pragmatic. Tend to emotional rather than physical need states.
Activities: spending time with family, nature, parks, walks. Busy lifestyle
Attitude towards technology: Positive but focussed on benefits, not the technology itself.

To attract Sharers:

- Brand as a corporate citizen
- Practical value to support busy lifestyle
- Creative/expressive capabilities

The experience they seek:

- Supports my lifestyle
- Enriches my life
Traditional vs new media

**PAST**

**Rational**
Limited Choice
TV, radio, movies
Newspapers & magazines

**Emotional**
More ‘face’/Word-of-mouth
Slower pace/simple
“Black & White”
More sharing of media
“People would gather together to look at photos”
Less “informed”
More planning
(less spontaneous)
Less taken for granted
‘Fireside’ values

**PRESENT**

**Rational**
Wide choice
Long-range/Global
Instant access
Internet, email
Cell phones

**Emotional**
More mobile/spontaneous
Faster, need to keep up
More ‘colour’
Greater choice
But
Complex – overload
Isolated
Less personal contact
Dependent
Rely on TV/mobile “too much”

**FUTURE**

**Rational**
More, Faster, Better
Merging of Mobiles & PC
Multi-media combinations
‘All in one’ devices

**Emotional**
‘The virtual world is the real world’
Technology takes over
Human hybrids
Humans become lazy
Loss of Privacy
‘Big Brother’

Source: Vanjoki, 2003
Two Types Of ‘Fun’

- Consumers make a distinction between two types of 'Fun' in relation to entertainment. **Fun I** is active, stimulating and exciting, to escape from boredom. **Fun II** is more passive, relaxing and calming to escape from stress. People use Media and Entertainment alternately to create these moods. **Younger** identify more with **Fun I** and **Older** with **Fun II**.

Source: ‘Reversal Theory’, Michael Apter
How do I manage my world?

- My bookmarks
- My phonebook
- My landmarks

- Browse
- Communicate
- Track

WWW