

# Merchant Systems

- Requirements
  - User logon required?
  - Remember credit card details?
  - Same price for everyone?
  - Special offers (free delivery if over \$100 spent)
  - Backend integration?
  - Help desk support?
  - Online credit checking?
  - Order picking?
  - Online stock shown?
- Examples
  - Microsoft Biztalk, OpenMarket, InterShop

# Pricing

- More complex than it seems
  - Confusion pricing
- Service levels
  - Matrix
- Special cases
  - Government, students...
- Special offers
  - Time limited

Service	Blue	Silver	Gold
Basic	✓		
Advanced		✓	✓
Fancy case			✓

# Legacy Integration

- Nightmare
  - Stock, picking, billing, customer care, marcoms....
- Legacy-based to realtime
  - Sainsbury's mainframe is busy 6-10pm every day
  - Attempt to run shopping system off this
- Incompatible nomenclature
- COBOL connecting to Java
- Batch
- Online credit card systems
- Customer care issues
- XML helps

# Payment

- Credit card horror stories
  - Has your card been compromised?
- Not everyone has one
  - Italians prefer post offices
- Services such as WorldPay, PayPal
- Fraud 40%
  - But the merchant pays (at least in the UK)
- Only deliver to card address
  - Irrelevant: eTickets, Telegraph Crossword, software
- Tax horror stories

# Customer Relationship Management

- CRM must be good
- Empowering the Customer Service Representative
  - I'm sorry out terminals are down this morning
- Call centre hell
  - Sainsbury's have 80 call centres
  - Good Morning Dr King
    - Please tell me your dog's name
  - If you know my mother's maiden name then so does the whole world
  - Continuity of customer experience
  - Sky TV suggest turning box on and off to cure database fault

# Personalisation

- Make site more interesting, and hence sticky
- User database
  - Address/postcode -> socio economic indicator
  - Gender
  - Age
  - -> Register with Data Protection Registrar
- Profile typical users
  - Disposable income
  - Disposable leisure time

# Customer and User profiles

- Pen portraits of typical user.
  - Hot buttons
  - Influencers (media)
  - Disposable budget/time
- 70 Profile “Bins”
  - 2 Gender (+LGBT?)
  - 5-8 Socio-economic class
    - Income/post code
      - (<http://www.neighbourhood.statistics.gov.uk/dissemination/>)
  - 7 ages
    - (kids, teens, **dinky**, married with kids, empty nesters, **retired** , seniors )

# The National Statistics Socio-economic Classification (NS-SEC)

8 classes

1. Higher managerial and professional occupations

1.1 Large employers and higher managerial occupations

1.2 Higher professional occupation

2. Lower managerial and professional occupations

3. Intermediate occupations

4. Small employers and own account workers

5. Lower supervisory and technical occupations

6. Semi-routine occupations

7. Routine occupations

8. Never worked and long-term unemployed

5 classes

1. Managerial and professional occupations

2. Intermediate occupations

3. Small employers and own account workers

4. Lower supervisory and technical occupations

5. Semi-routine and routine occupations

Never worked and long-term unemployed

\*3 classes

1. Managerial and professional occupations

2. Intermediate occupations

3. Routine and manual occupations

Never worked and long-term unemployed



# Internationalisation

- Not as simple as you may think
  - Eg German nouns, Yen
- Fulfilment
- Taxes
- Legality eg Gambling, porn, alcohol, guns
- Payment mechanisms
  - Credit cards unusual in Italy, for example
  - Different liability rules re bad debts

# Free Business Models

- For the fun of it
- Donation funded (wikipedia)
- Land grab to gain early users
- Funded by adverts
  - That you can pay to turn off (Spotify)
  - That you can pay for a premium service (downloads)
- Funded by selling information about users
- Funded by sellers (eBay)
- Part of a wider service (BBC, cars)
- Free software, pay if you like it (guiltware)
- Free software, pay for maintenance (Linux, AVG)

# Paid-for Business Models

- Try before you buy
  - Poor quality short clips
  - Free trial – but licence key cracks are common
- Pay per use
  - Software as a service
  - Genealogy sites
  - Betting
- Licence / subscription
  - Digital Rights Management (everlasting vs annual)
- Per item
  - Amazon, eBuyer
- Value your business
  - Cost per Acquisition (CPA) – how much to get a user
  - Customer Lifetime Value – how much they spend
  - Average Revenue Per Customer (ARPU)

# Freemium Model

- Free + premium content
  - Free taster
    - Subset, or time limited or adverts
    - “try before you buy”
      - Cf “ACCTO”
  - Premium content
    - Payment or subscription
      - Register of users
    - Unlock key
      - May be hacked
- Street performer protocol

# Brand awareness

- Single most important piece of data
  - Hard to gain and easy to lose
- People buy from a known name
  - Sense of trust
    - Marks and Spencer
  - Perceived value
    - Cheap reliable airline => Cheap reliable mobile
  - Peer pressure
    - Nike, Rolex, Dolce and Gabanna, Ferrari
- Brands can expand
  - Virgin
    - Active, Atlantic, Books, Brides, Broadband, Cosmetics, Credit card, Drinks, Galactic(!), Games, Holidays, Limobike, Megastore, Mobile, Trains, Wines
  - Apple
    - From computers to iPods to iPhones

# Advertising

- Google Adwords
  - Ads are matched to keywords purchased
  - Buy your brand name
    - Coke
      - Careers
      - Corporate Responsibility
      - The Coca-Cola company
      - Press Centre
  - Buy your supplier's brand name
    - Nike
      - JDSports
  - Buy your competitors' brand name
    - Ford
      - Adverts for Seat dealer
  - Buy your target
    - Nike (Boycott Nike), Coke (KillerCoke)

# Google AdWords

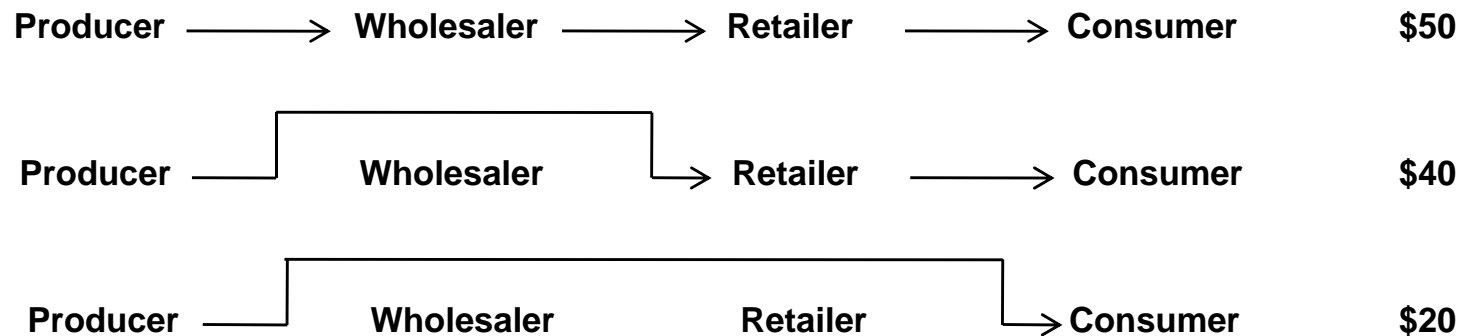
- Select keywords and Ad Content
  - Content Network and Search Network
  - Each has a maximum Cost Per Click (CPC)
- Auction when keyword(s) match search term
  - Maximum CPC determines position (if at all)
  - Actual CPC depends on auction results
  - Daily budget stops runaway
- Optimise via Click Through Rate (CTR)
  - Less than 1% CTR may mean your keyword is removed
- Make the ad match the keyword
  - e.g. Ad says “Cheap electronics” searching “Digital Camera”

# Users add value

- Network externality
  - The effect a user has on the value of a site to other users
  - A site/service is more attractive if your mates use it
  - MySpace / Facebook; Yahoo / Google / Bing
  - Google Talk / AOL / MSN
- Produce content targeted at your users
  - You produce it (Newspapers, slate)
  - Let them produce it (Facebook, YouTube)
- Chicken and egg problem
  - How to get the site started?
    - Twitter used two large monitors at a festival
    - Provide superset of competitor



# Disintermediation



## Supermarkets – a dominant species

Consumer buys through local supermarket, even if chosen online. Producer must negotiate with supermarket to stock items who will only accept products via distribution chain.

## Travel Agents – an endangered species

Airlines, holidays, hotels all sell direct. Customers can decide best times and prices.

Personal advice because they have been there – tripadvisor, Lonely Planet far better.

No commission paid to travel agent so cheaper for consumer and larger margin for suppliers

**Relationship with the customer is now sometimes with the producer**

# Analytics

- Where do visitors come from and why
  - From another web site, via a search engine or direct
  - Google Analytics
- Profile typical users when they visit a web site
  - Time and path to make purchase decision
    - Read ad, click ad, browse site, choose item, checkout, pay
  - Purchase history
  - Amount of research done
- Profile users through loyalty cards in the real world
  - Nectar
    - They know everything you have ever bought
- Different landing sites for different campaigns

# Successful business models

- Google
  - Acquiring DoubleClick gives it over 80% of web advertising
  - Acquiring YouTube gives it millions more viewers
  - Providing a simple way to advertise gets it plenty of customers
  - Has Microsoft Office firmly in its sights
  - Mobile and Android and voice and ...
- PlentyOfFish
  - Run by a single guy from his apartment
  - Free dating site
  - In the global top 40 web sites
  - Runs Google AdSense adverts
  - Gets paid over \$5m per year by Google