

# E-Commerce - 5

# Merchant System

## 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
- Stripe, Square, PayPal, Sage
- Amazon payment, Amazon fulfillment

# 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			✓

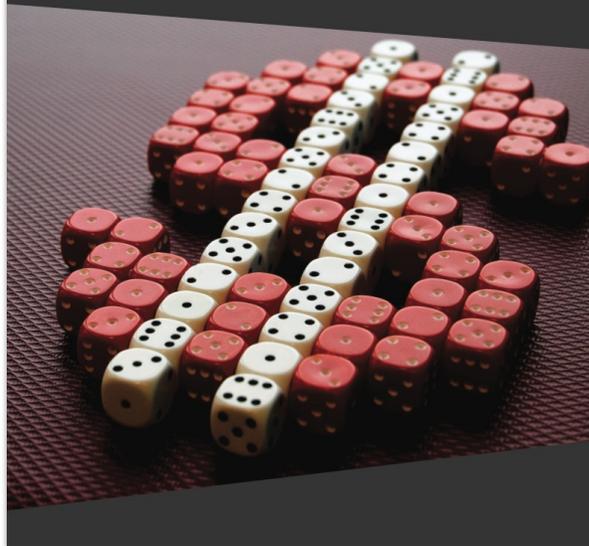
The Business of Software



# Don't Just Roll the Dice

A usefully short guide to software pricing

Neil Davidson



[http://download.red-gate.com/ebooks/DJRTD\\_eBook.pdf](http://download.red-gate.com/ebooks/DJRTD_eBook.pdf)

# Legacy Integration

## Nightmare

stock, picking, billing, customer care, marcom...

## 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, downloads

Tax horror stories

# Customer Relationship Management

CRM must be good

Empowering the Customer Service Representative

“I’m sorry our 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

Sly TV suggests 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 Information Commissioner's Office**

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 +LBGT

5-8 Social-economic class

income / postcode

[www.neighbourhood.statistics.gov.uk/dissemination/](http://www.neighbourhood.statistics.gov.uk/dissemination/)

[www.acorn.caci.co.uk](http://www.acorn.caci.co.uk)

## 7 ages

kids

teens

dinky

married with kids

empty nesters

retired

seniors

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

## 8 classes

1. High managerial and professional occupations
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

e.g. German nouns, Yen

Fulfilment

Taxes

Legalisty e.g. Gambling, porn, alcohol, guns

Payment mechanisms

Credit cards unusual in Italy, for example

Differity liability rules re bad debt

# 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 the premium service (downloads)

Funded by selling information about users

Funded by sellers (eBay)

Part of the 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, eBay

## Value your business

Cost per Acquisition (CPA) - how much to get a user

Customer Lifetime Value (LTV) - how much they spent

Average Revenue Per Customer (ARPU)

# Freemium Model

## 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

[patreon.com](https://patreon.com)

# 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 Spence

Perceived value

Cheap reliable airline => cheap reliable mobile

Peer pressure

Nike, Rolex, Dolce and Gabanna, Ferrari

Brand can exapand

Virgin

Active, Atlantic, Books, Bridges, Broadband, Cosmetics, Credit cards

Drinks, Galactic, Games, Holidays, Megastore, Mobile, Trains, Wine, and more

Apple

computers, iPods, iPhones

# Advertising

## Google AdWords

Ads are matched to keywords purchased

## Buy your brand name

Coke

Careers

Corporate Responsibility

The Coca-Cola company

## Buy your supplier's brand name

Nike

JDSports

## Buy your competitor's brand name

Ford

Advert for Toyota 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)

## Actions 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

Snapchat, slack, instagram

## Produce content targeted at your users

You produce it (Newspapers, slate)

Let them produce it (Facebook, YouTube)

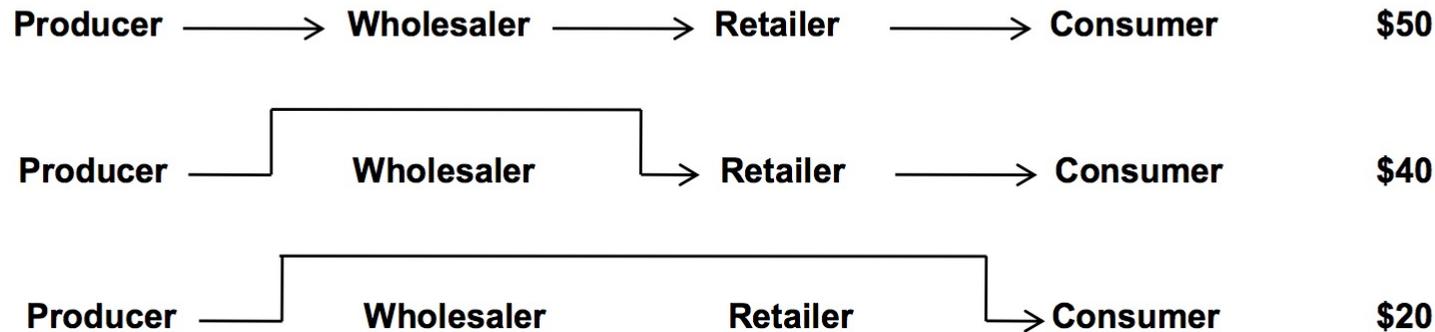
## Chicken and egg problem

How to get the site started?

Twitter used two large monitors at SXSW

Provide superset of competitor

# Disintermediation



## Supermarkets - 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 time and prices.

Personal advice because they have been there - trip advisor, Lonely Planet far better

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

Relationship with the customer is now sometimes with the producer

# Analytics

Where do visitors from from and why

From another web site, via a search engine or direct

Google Analytics

Profile typical users when they visit a website

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 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

- For a long time run by a single guy from his apartment paid over \$5m per year by google from AdSense adverts
- Free dating site
- In the global top 40 websites
  
- Bought by Match.com for \$575m in 2015