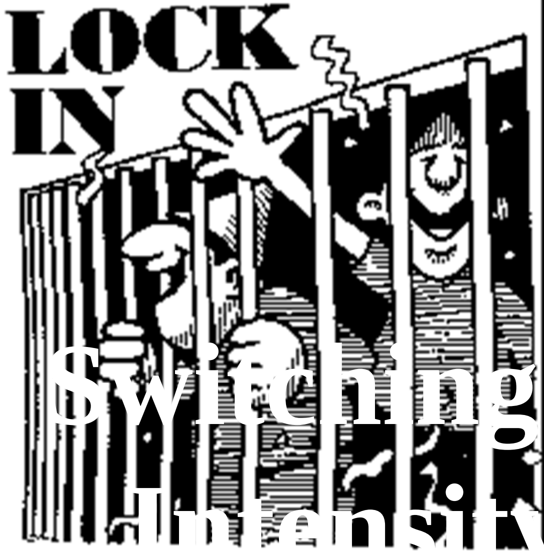

Switching cost, Lock-in and Intensity of Competition

1. Introduction

Switching costs, Lock-in, installed-base

Sources of switching costs

Total switching costs (TSCs)

Price competition

2. Switch costs, Lock-in, and Installed base of customers

- Switching costs
  - Systems of components
    - Building database, shopping, paying, delivery policy,…
  - Learning new functions incurs cost
- Lock-in and installed-base
  - Lock-in: when switching cost is too high, not worthwhile for the consumer to switch, generate future cash-flow
  - Customer's tipping market toward firm's products and service
  - Strategy for consumer lock-in is important for a firm

2. Switch costs, Lock-in, and Installed base of customers

Lock-in cycle

Brand Selection (consumer's decision)

(stage1)

Lock-in

(stage 4)

Sampling

(stage 2)

Entrenchment

(stage 3)

2. Switch costs, Lock-in, and Installed base of customers

- Examples
- Telecom Switching Equipment (mid 80's)
  - Bell Atlantic was locked-in by the AT&T OS
  - AT&T controlled OS
  - Upgrades provided by AT&T
  - Large switching costs
- Telephone numbers
  - Number portability reduces switching cost
  - Foster competition among providers
  - w/o number portability, business locked-in to incumbent

2. Switch costs, Lock-in, and Installed base of customers

- Domain names and email address
  - Entice users to web site
    - Short name, easy to remember
    - Related to established product
  - Expensive intellectual assets
  - Changing ISP
    - Switching costs high relative to subscription

3. Sources of switching costs

(i) Contractual commitments

(ii) Durable assets

(iii) Training costs

(iv) Information and databases

(v) Search costs and opportunity cost of time

(vi) Customer loyalty programs

3. Sources of switching costs

(i) Contractual commitments

Establish contracts: legal lock-in

Pay a penalty to switch

ISP, Cellular, etc

Induce a consumer to switch: need to reimburse

(ii) Durable assets

Complementary systems is the source of luck-in

Bell Atlantic’s OS

Economic life is important

3. Sources of switching costs

(iii) Training cost

Retraining is costly

Switching costs increase with time

(iv) Information and database

Specialized data formats

Switching cost increases with information size and quality

Standardized formats for consumers will reduce switching cost

MS statistics software

3. Sources of switching costs

(vi) Consumer loyalty programs

- Loyalty programs
  - ex) Air-liners: KAL, Asiana
  - Reward for use
  - Artificially increase switching costs
- Online loyalty program
- Online referrals
  - "associates program"
  - Amazon: make recommendation for related books

4. Total Switching Costs and Customer acquisition

(i) TSCs

TSC = Customer switching cost

+ Supplier switching cost

(ii) Customer Acquisition

Profit max. rule:

PV of future customer revenues > TSCs

4. Total Switching Costs & Customer acquisition

- Example: ISP1 (incumbent) vs. ISP2
- Customer Acquisition for ISP2
- TSCs and revenues
  - Setup costs: $25
  - Supplier switching cost (Two free month subscription): $50
  - PV of future revenue: $100
- Inducement successful?

5. Price Competition

Brand Loyalty and Competition

Two dominant firms in an industry

(i) Bertrand competition: Price cuts between two firms

(ii) Consumers move faster than firms

(iii) Firms move faster than consumers

(iv) Empirical evidence

(v) On-line differentiation and switching costs

5. Price Competition

Two dominant firms in an industry

(i) Bertrand competition: two firms alternately reduces the price

(ii) Consumers move faster than firms

- Price-cutting favors 1st mover
- Gain from the future value of consumers outweights reduction in price

5. Price Competition

(iii) Firms move faster than consumers

- A ↓ price, and B quickly matches
- Similar to Bertrand Competition
- No gain in consumers
- Less incentive to firms to ↓ price

(iv) Empirical evidence

- Dillard (1999) in UC at Berkely
- Track prices for Amazon and B&N
- Amazon is 'price Leader'
- Has some loyalty

5. Price Competition

(v) On-line differentiation and switching costs

- Switching costs due to
  - Familiarity with site and interface
  - Collaborative filtering tools
- Familiarity
  - Time cost of setting up new account
  - Risk of being pooled with low-value customers

5. Price Competition

Collaborative filtered information is available

- Personal recommendation
- More specific with more interaction
- Purchases concentrate around one retailer
- Evidence of low price sensitivity