Information Rules:

A Strategic Guide to the Network Economy

Recognizing Lock-In

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Recognizing Lock-In

- Cost of switching
- Compare
  - Ford v. GM
  - Mac v. PC

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What's the Difference?

- Durable investments in complementary assets
  - Hardware
  - Software
  - Wetware
- Supplier wants to lock-in customer
- Customer wants to avoid lock-in
- Basic principle: *Look ahead and reason back*

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Examples

- Bell Atlantic and AT&T
  - 5ESS digital switch used proprietary operating system
  - Large switching costs to change switches
- Computer Associates
- Aircraft repair and cargo conversion

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Small Switching Costs Matter

- Phone number portability
- Email addresses
- Hotmail (advertising, portability)
- ACM, CalTech
- Look at lockin costs on a per customer basis

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Valuing an Installed Base

- Customer C switches from A to "same position" w/ B
  - Total switching costs = customer costs + B's costs
- Example
  - Switching ISPs costs customer $50 new ISP $25
  - New ISP make $100 on customer, switch
  - New ISP makes $70 on customer, no switch
- Disruption costs
  - Example: ILECs v CLECs
  - Competitive market
  - Profit=switching costs
  - e.g. ILEC profits=customer + CLEC switching costs

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Profits & Switching Costs In General:

- Profits from a customer = total switching costs + quality/cost advantages
- In commodity market like telephony, profit per customer = total switching costs per customer
- Use of this rule of thumb
  - How much to invest to get locked-in base
  - Evaluate a target acquisition (e.g., Hotmail)
  - Product and design decisions that affect switching costs

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Classification of Lock-In

- Durable purchases and replacement: declines with time
- Brand-specific training: rises with time
- Information and data: rises with time
- Specialized suppliers: may rise
- Search costs: learn about alternatives
- Loyalty programs: rebuild cumulative usage
- Contractual commitments: damages

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Durable Purchases

- Aftermarket sales (supplies, maintenance)
- Depends on (true) depreciation
- Usually fall with time
- Watch out for multiple pieces of hardware
  - Supplier will want to stagger vintages
  - Contract renewal
- Technology lock-in v. vendor lock-in

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Brand-specific Training

- How much is transferable?
- Software
- Competitors want to lower switching costs
  - Borland and Quattro Pro help
  - Word and WordPerfect help

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Information & Databases

- Datafiles
  - Insist on standard formats

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Specialized Suppliers

- Advertising, legal, accounting firms
- Pentagon
  - Dual sourcing
  - Intel and AMD
  - Adobe PostScript
  - Java

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Search Costs

- Transactions cost in finding new supplier
- Also costs borne by new supplier
- Promotion, clsoing deal, setting up account, credit risks
- Example: Credit Cards
  - $100 million in receivables sells or about $120 million
  - Market valuation of "loyalty"

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Loyalty Programs

- Constructed by firm
  - Frequent flyer programs
  - Frequent coffee programs
- Personalized Pricing
  - Gold status
  - Example: Amazon and Barnes and Noble
  - Amazon Assocates Program v. B&N's Affiliates program
- Add nonlinearity?

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Contractual Commitments

- "Requirements contract":
  Purchase supplies from one supplier
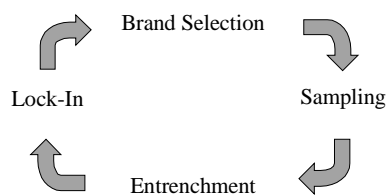- Beware of "evergreen contracts"

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Suppliers and partners

- Railroad spur lines
- Customized software

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Follow the Lock-in cycle

Brand Selection

Lock-In   Sampling

Entrenchment

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Lessons

- Switching costs are ubiquitous
- Customers may be vulnerable
- Value your installed base
- Watch for durable purchases
- Be able to identify 7-types of lock-in

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