

## Recognizing Lock-In

- Cost of switching
- Compare
  - Ford->GM
  - Mac->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" with 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

## Profits and 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)

## 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

## 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 and 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, closing 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 Associates Program v. B&N's Affiliates program
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## Contractual commitments

- "requirements contract": purchase supplies from one supplier
- beware of "evergreen contracts"

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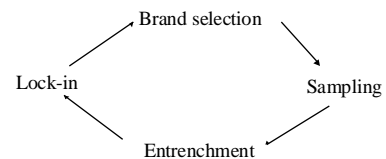
## Suppliers and partners

- railroad spur lines
- customized software

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## Lock-in cycle

- Follow the cycle:



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## Summary

- Switching costs are ubiquitous
- Customers may be vulnerable
- Watch for durable purchases
- Watch for 7 ways

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