

Information Rules

A Strategic Guide to the Network Economy

Cooperation and Compatibility

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How Standards Change the Game

- Expanded network externalities
 - Make network larger, increase value
 - Share info with larger network
 - Attracts more users
- Reduced uncertainty
 - No need to wait
 - In war, neither side may win

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Change Game, cont'd.

- Reduced consumer lock-in
 - Netscape's "Open Standards Guarantee"
- Competition *for* the market v. competition *in* the market
 - Buy into an open standard, that becomes closed?
 - DJIA

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Change Game, cont'd.

- Competition on price v features
 - Commoditized products?
- Competition to offer proprietary extensions
 - Extending a standard
 - Ethernet 10 v 100
- Component v systems competition
 - With interconnection, can compete on components

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Who Wins and Who Loses?

- Consumers
 - Generally better off
 - But variety may decrease
- Complementors
 - Generally better off
 - May server brokering role (DVD)

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Who Wins, cont'd.

- Incumbents
 - May be a threat
 - Strategies
 - Deny backward compatibility
 - Introduce its own standard
 - Ally itself with new technology

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Who Wins, cont'd.

- Innovators
 - Technology innovators collectively welcome standards
 - If the group benefits, there should be some way to make members benefit
 - Negotiation costs, opportunistic behavior

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Formal Standard Setting

- *Essential* patents must be licensed on “fair, reasonable and non-discriminatory” terms
- ITU
 - 1865, now UN agency
 - Notoriously slow
- ANSI and ISO
 - 11,500 standards
 - NSSN

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Tactics in Formal Standard Setting

- What is your goal?
 - National or international?
 - Protecting your interests?
- What are others goals?
 - Do they really want a standard?

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List of Tactics

- Don't automatically participate
 - If you do you have to license
- Keep up momentum
 - Continue R&D while negotiating
- Look for logrolling
 - Trading technologies and votes

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List of Tactics, cont'd.

- Be creative about deals
 - Second sourcing, licensing, hybrids, etc.
- Beware of vague promises
 - Definition of reasonable
- Search carefully for blocking patents
 - Patents held by non-participants
- Preemptively build installed base

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Building Alliances

- Assembling allies
 - Pivotal customers should get special deals
 - But don't give your first customers too big an advantage
 - Offer temporary price break

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Building Alliances, cont'd.

- Who bears risk of failure?
 - Usually ends up with large firms
 - But bankruptcy favors small firms
 - Government is even better!
 - Smart cards in Europe

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Interconnection Among Allies

- History of interconnection
 - Post office, telephone
 - Internet?
- Negotiating a truce
 - Do the benefit cost calculation
 - How to divide a larger pie?

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The standards game

		Player B	
		Willing to fight	Wants standard
Player A	Willing to fight	War	Attempt to block
	Wants standard	Attempt to block	Voluntary standard

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Maximizing Return

- Your reward = Total value added x your share
- Cooperation between Netscape and Microsoft
 - Open Profiling Standard
 - VRML
 - SET

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Alliance Examples

- Xerox and Ethernet
- Adobe PostScript
- Active X

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Managing Open Standards

- Standard is in danger if it lacks a sponsor
- Unix
 - AT&T invention by accident
 - Gave away source code to EDU
 - 1993 Coalition: Novell purchased rights for \$320 million and gave name to X/Open
- SGML and XML

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Lessons

- Competition requires allies
- How does your standard affect competition?
- Standards benefit consumers and suppliers, at expense of incumbents and sellers
- Formal standard setting adds credibility
- Find natural allies

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Lessons, continued

- Before a battle, try to negotiate a truce
- Try to retain control over technology, even when establishing an open standard

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