

The New Frontier in e-Business: Integrated Internet Strategy

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In the Internet context, it is common to pursue market strategies that create customer lock-ins by bundling integrative products and services (AT&T long distance, local service, wireless, and Internet). Another way to create lock-outs is to exploit opportunities to integrate market, technology and policy elements. An integrated Internet strategy (IIS) is created through a mixture of market, information technology, and policy strategies that allow a firm to close out competition, or force open monopolies, with its e-business competitors.

Integrated Internet Strategy (IIS): What is it?

David Baron argues that today's business strategy model should be integrated, consisting of a market and a policy ("nonmarket") component¹. We extend this notion to what we call the Integrated Internet Strategy (IIS). IIS consists of market, policy, and information technology components working in either complimentary, cumulative, or alternative fashion. Market strategy is a concerted pattern of actions taken in the market environment to create value for the firm by improving its economic performance, as is the case when the firm offers a new product or lowers prices in competition with its rivals. Market strategies are often focused on capturing market share or improving profitability through brand building, investment, and efficient contracts. Both academic and business practice literature is rich with theoretical and empirical studies suggesting optimal market strategies to close out competitors under a wide range of competitive conditions.

A policy strategy is a concerted pattern of actions taken in the policy environment -- that is, the political, social, and legal-regulatory environments -- to create value for the firm. Campaign contributions to key legislators who have committee jurisdiction over laws affecting one's industry, or lobbying industry regulators for rule changes, are typical

¹ D. Baron, "The Nonmarket Strategy System," Sloan Management Review (Fall 1995): 73-85.

policy strategies aimed at creating a more favorable environment for one's goods or services.²

The final dimension of the IIS framework – information technology strategy – has been considered much less as a strategy to control competition than as a strategy to implement business solutions. Information technology as it applies to the Internet is the hardware and software that make the Internet, and business operations over the Internet, work. We call an information technology strategy a concerted pattern of actions taken in building the firm's software, hardware, and data architecture that improve the firm's competitive position, including setting up electronic barriers to competition. Lawrence Lessig makes the case that information technology, or "code," is the most pervasive control agent on the Internet, more so than market or policy.³ Because of the open and anonymous nature of the Internet communications, technology structure much more effectively constrains behavior than any law or market mechanism could, he argues. In like manner, we adopt the notion that information technology has its own "governance features" that may be used by a firm in control of that technology to limit competition in the marketplace.

In short, IIS is simply about controlling competition, whether that competition comes from other business enterprises or customers. Market strategies enable control through price and organizational mechanisms (outsourcing, mergers, alliances, etc.). Policy strategies enable control through the creation of property rights (e.g. patents, copyrights and trademarks) and threats of punishments (regulatory sanctions). Information technology strategy (i.e., code) controls behavior through the way computer hardware and software handle competitor and customer access to digital products and services, and identification of parties on the Internet.⁴ The level of control that an IIS provides is the combined effect of these three strategies.⁵

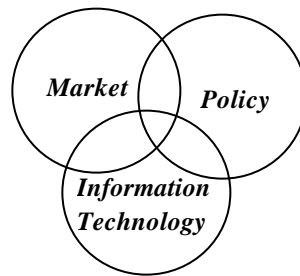
² Much of the literature on policy strategy finds its roots in public choice theory that identified the strategic, and industry-favoring, political behavior of firms and policymakers. See M. Olson, *The Logic of Collective Action: Public Goods and Theory of Groups* (Cambridge, Mass: Harvard University Press, 1965); S. Peltzman, "Toward a More General Theory of Regulation," *Journal of Law and Economics* 19 (1976), 211-240; R. Posner, "Theories of Economic Regulation," *Bell Journal of Economics and Management Science*, 5 (1974) 335-358. G. Stigler, "The Theory of Economic Regulation," *Bell Journal of Economics and Management Science* 2 (1971) 3-21; B. Weingast, "Regulation, Reregulation and Deregulation: The Foundation of Agency-Clientele Relationships," *Law and Contemporary Problems* 44 (1981) 147-177.

³ L. Lessig, *Code and Other Laws of Cyberspace* (New York; Basic Books, 1999). Lessig implies that the Internet is controlled by the developers of browser technology (Microsoft and Netscape) and the developers of network technology (CISCO, AT&T). L. Lessig, "The Law of the Horse: What Cyberlaw Might Teach," *Harvard Law Review* 113: 501-549.

⁴ Lessig (1999).

⁵ In economics, the notion of complementarity means that the value of having more of one factor increases by having more of another complementary factor. P. Samuelson, "Complementarity," *Journal of Economic Literature*, 12 (1974): 1255-1289. A firm can maximize its benefits by exploiting complementary relationships among factors. An integrated Internet strategy is based on the idea that on the Internet private ordering (market), government ordering (policy), and ordering through hardware or software code (technology) can work in concert in controlling the business competitors. Although not applied to digital business strategies before to our knowledge, this type of complementary logic has been applied to integrated manufacturing strategy as well as business process redesign efforts. A. Barua, C. Lee, and A. Whinston, "The Calculus of Reengineering," *Information Systems Research* 7 (December 1996): 409-428. Milgrom and Robert found that the impact on a firm's profitability was maximized when a certain

Integrated Internet Strategy



Drivers of IIS

There are various factors that push firms to engage in IIS to control the competitive landscape. First is the highly competitive market environment the Internet has created. Information technology incorporated through the Internet is reducing much of the transaction and coordination costs associated with old economy business operations, and restructuring value chains allowing firms to forward integrate and bypass intermediaries.⁶ Brand new start-up firms can also easily enter markets and build a competitive enterprise in months, if not weeks. The global nature of the Internet makes competition even fiercer as competitors come across national boundaries. Hence, Internet companies operate in an ever more crowded market space and look for ways to reduce this crowdedness by closing out competition.

Second, traditional antitrust logic and enforcement is challenged in e-commerce. Digital commerce introduces new ways to close out competition that have not been addressed by the usual rules against anti-competitive behavior. The use of encrypted software code, proprietary standards, patented Internet business methods, and domain name ownership to control Internet space, for example, is poorly understood by antitrust regulators and courts.⁷ Moreover, firm organization is more dynamic in the Internet environment (meaning that horizontal and vertical arrangements are often difficult for antitrust regulators to identify and target) and many companies are less about being in a line of business (against which antitrust regulators can measure market share and dominance) than having a business model that spans a range of products and services. This

integrative activity pattern was observed. P. Milgrom, and J. Roberts, J. "The Economics of Modern Manufacturing: Technology, Strategy, and Organization," *American Economic Review* (June 1990): 511-528.

⁶ Malone and Laubacher, "The Dawn of the E-Lance Economy," *Harvard Business Review* (September-October, 1998).

⁷ For an example of a federal court's struggle with antitrust law and domain names, see *Weber v. National Football Leagues*, 112 F. Supp. 2d 667 (July 31, 2000). In that case the court had to consider whether the NFL's attempt to recover domain names such as jets.com and dolphins.com from an alleged cybersquatter had an anticompetitive effect on the market for domain names thus violating of the Sherman (Antitrust) Act.

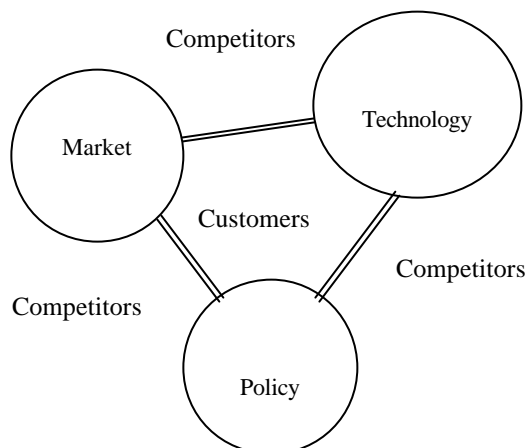
characteristic of the Internet makes it hard for regulators to punish firms for leveraging their power to close out competitors.

Third, because of the ease with which competition rises in e-commerce, innovative strategies to shut out competitive threats are appealing to venture capitalists who search for sustainable business models. Many attribute Priceline.com's venture capital and high initial valuations, for example, to the fact that it had received a patent (i.e., monopoly right) on its "name your own price" business model. The more a strategy can use market, technology and policy strategies to control a market, the more likely it will be that an e-business idea will be funded and pursued by initial investors.

Fourth, technological control is a means to build broad-based confidence in Internet commerce. Parties must be able to identify each other, their privileges authorized, transactions be secure and private, and a means of nonrepudiation and dispute resolution established. Customers by their own choice are moving to Internet platforms where wide open spaces are replaced by fenced sites requiring identification through a password, digital ID, disclosure of personal information, or willingness to be tracked via cookies.⁸ Competitors are shut out of the system for security and privacy reasons.

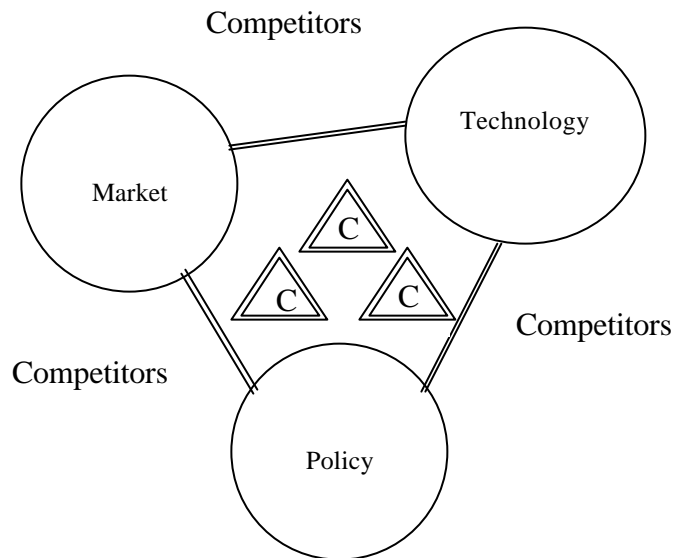
Enablers of IIS

An integrated Internet strategy can be focused directly on competitors, or on the customers if the conditions merit. With respect to traditional competitors (other firms offering similar goods or services), the question facing the firm is "to what extent do we limit competitor access to our current or potential customers." The answer depends on the available options offered through the market, technology and policy domains within which the firm operates.



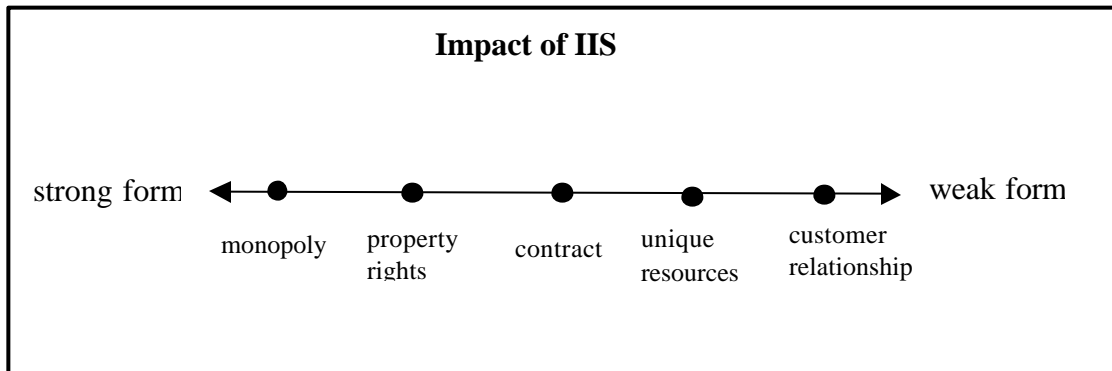
⁸ A good example of this is mobile computing technology that is rapidly becoming the dominant platform used to access the Internet around the world. S. Jarvenpaa, "Internet Goes Mobile: How Will Wireless Computing Affect Your Firm's Internet Strategy?" working paper, Center for Business, Technology and Law, University of Texas, Austin, Texas, July 2000.

In terms of customers, the strategic question is cast as “to what extent do we limit customer access to our product or service and how do we do it.” In some environments, the firm does not wish to limit access; in fact, the firm may even give the product away for free. The purpose may be to gain quick market share, to sell complementary features, or to profit from advertising. Free Yahoo! e-mail and free online newspapers are two examples. In other environments, the firm may want to limit customer access. For example, suppose the customer can easily become a competitor – a common risk in the Internet environment where start-up costs are low and the transmission of information quick. The recent debate over downloadable music through Napster (a software program that allows Internet users to search each other’s computers for digitized music) illustrates the dilemma. Record companies have become concerned that the trading of digitized music among customers has, or will, cost them sales. Customers become competitors as they freely distribute the music good.



Consequences of IIS

The integration of market, technology and policy may help close out competition. The manner in which IIS can close competition depends on the particular policy, technology, and business tools deployed and the goals and the environment of the business. The ability to achieve a government granted monopoly is, of course, the ultimate closed competition for any business. By law and regulation, competitors are not allowed to co-exist with the monopolist. Economists have written extensively about the optimal economic conditions for monopoly. These conditions are not present in e-commerce and thus it is difficult to get policy makers to grant such a system.



Another strong means to close competition relies on property rights – patent rights being the most obvious example. With e-business, businesses have available to them today not only the ability to patent a technology, but rather a whole way of doing business (such as Priceline.com’s patent on the “name your own price” business model). Unique resources can also close competition. Competitive advantage is maximized when a firm can make investments that create new knowledge, generate information or utilize existing resources in new combinations that are not available for other firms. AOL’s merger with Time Warner gives the firm the unique resource combination of AOL’s Internet brand and ubiquitous technology (such as instant messaging technology and market share) with Time Warner’s broadband access and entertainment content. Finally, good customer relationships can help to close off competition. For example, privacy has become a critical element in online customer relationships. Some firms can be advantaged if privacy becomes a regulatory requirement because they (1) benefit from a more reputable industry image, (2) have resources to ensure privacy, and (3) are not dependent on the sale and questionable use of private customer information. The latter two conditions have a tendency to limit who can enter the space. An e-business may engage in personalization to customer visitors (such as Amazon.com’s use of stored customer information for 1-Click check out, or the personalization features of My Yahoo!). Or an e-business may invest in trust mechanisms (such as personalized communication). These tools increase customer switching costs to a new supplier.

Implementing an Integrated Internet Strategy

Given the complexities and intricacies involved in combining technology, policy, and market opportunities, planning and executing an IIS can be a key element of e-business success. Below we list some actions that a successful ebusiness manager would want to plan in pursuing an IIS:

1. Identify and define opportunities and/or respond to risks that transcend market environments.

2. Pull resources and relationships internally and externally to create an organization with market, policy, and technology expertise to execute the strategy.
3. Manage internal culture issues that arise from pursuing the strategy.
4. Manage public perception.

First, management must identify and define opportunities and risks. This requires environmental scanning that goes beyond the traditional competitor and market analyses to include policy analyses of emerging issues as well as changes in existing policy. Early beliefs by some firms that Washington was irrelevant for high technology and ebusiness enterprises have proved to be costly mistakes. Microsoft's ambivalence toward Washington policy makers, for example, was widely cited as an invitation for policy makers (antitrust regulators, in particular) to scrutinize the company unchecked. E-businesses are now forming or joining state and Washington-based trade associations (e.g., Information Technology Association of America, NetCoalition), or even setting up their own offices in Washington, to monitor the policy environment. Second, an IIS changes the way policy and technology issues are handled in organizations (in terms of who is involved, how teams are organized, incentives within the organization). For an IIS, firms need to draw on resources and relationships from both market and nonmarket environments to stitch a crossfunctional network that offers requisite expertise in markets, technology and policy as well as provide influence in areas that are still emerging and can be shaped. The patenting of Internet business methods, for example, invites the teamwork of not just lawyers and technologists, but also marketing people and virtually anyone within the firm that can think up new ways of conducting business operations on the Internet. Often, customers and suppliers need to be brought in. Such resources and relationships often require looking to outside firms in transcending industries. Third, like any cross-functional activity in a firm, integrated Internet strategy is likely to encounter internal conflicts in values and attitudes. Such conflicts will be most pronounced at the targets of control in the firm's IIS. Software developers, for example, often have an "open source" ethic. That conflicts with many efforts to close out competition through technological or legal means. But in many cases, mindsets are changed via incentives, education, and discussion. Fourth, firms need to manage public perception. Public missteps by DoubleClick with privacy, for example, severely damaged the firm's reputation. Amazon.com's Jeff Bezo's, by contrast, alleviated much public criticism of Amazon.com's patenting of the 1-Click checkout by writing an open letter to the Internet using public proposing a reduced period of legal protection (5 years) for Internet patents. Clearly, where possible, public perception should be managed proactively rather than reactively.

In sum, we argue that today's business strategy model should consist of market, technology and policy components. Reliance on a unique business idea, a great new technology, or even a change in public policy alone would be less attractive than a strategy that uses these forces in an integrated manner to sustain the firm's advantage over its competitors.