

**PROFITABLE GROWTH IN INTERNET-RELATED BUSINESS:
STRATEGY TALES AND TRUTHS**

by

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Profitable Growth in Internet-Related Business: Strategy Tales and Truths

Subramanian Rangan and Ron Adner

In a rush to seek profitable growth in internet-related business, newcomers and veterans alike are exhibiting in their actions some serious misconceptions about strategy. Part of the explanation lies in a widespread acceptance of some dangerous half-truths and part lies in an inability to fathom serious tensions that lurk beneath seemingly sensible strategy choices. In this article, we flag seven of the more important tales and tensions and present a fuller picture for each one.

Our central message is this: The distance between aiming for and actually achieving profitable growth not only remains, but, in these early days of our so-called “new” economy, it has actually widened. While the powerful technology of the internet opens the way to new opportunities (new markets, new customers, new products, and new ways of doing business), it carries in its wake the threat that the pursuit of opportunity will be driven by what is now technologically feasible, rather than by what is strategically desirable. Accordingly, managers would do well to scrutinize internet-related business opportunities more carefully, and consult strategy principles more explicitly. To aid practice, we bring to light strategy principles that clarify the seven misconceptions, present decision frameworks that embody those principles, and conclude by outlining specific safeguards to guide managers’ judgement and formulation of internet-related strategy.

SEVEN STRATEGY MISCONCEPTIONS

The misconception of “first mover advantage.” There is a “land grab” mentality that has pervaded the internet and that appears to underlie the strategies of not only startups like Bluefly (apparel), Chateau Online (wine), and QXL (auctions), but also of established firms such as Microsoft, Telefonica, and Reuters. The putative logic is that one (if not *the*) key driver of success on the internet is being first. Clearly, there is some merit to this belief. Being first can bring a frontier-pushing aura and a pioneer reputation (think of Apple Computer). First movers can also pick up extraordinary free publicity and valuable brand recognition (think of Amazon and Yahoo!).¹ And, what is more, first movers tend to have a bigger opportunity to “lock-in” unattached customers and achieve “critical mass” (think of AOL).

Yet, in internet business, first-mover status is a precarious perch on which to rest strategy. The root of the misconception lies in a lack of understanding of the theory of first mover advantage, of which there are three significant strains. We will take up the *traditional* and *strategic* strains here, and, given its prominence, treat separately (in Exhibit 1) the *new economy* strain. In all cases, first mover advantage implies the following: the order of players’ entry into a target market is positively correlated with the odds of adoption by new users in that market and negatively correlated with the odds of switching by existing users. The greater the extent to which this relationship holds, the greater the extent of first mover advantage.

In the *traditional* strain there are three bases for first mover advantage, viz., *scarcity* of key inputs or distribution channels; *sustained cost differentials* between first and subsequent entrants; and user trial and *switching costs*.² Alas, in internet business, *none* of the three holds as much sway as in traditional business. Consider Yahoo!.

Common impressions to the contrary notwithstanding, its success is not due to a first mover advantage. In the portal business, neither scarcity of inputs (information on websites), nor cost differentials (to build and maintain search directories), nor user switching costs are significant issues. Yahoo!'s real advantage is related not to its being a first mover, but to its being a "best mover." Indeed, tomorrow, if Lycos or some other portal comes to be considered better, Yahoo! will replay Apple's decline. This logic applies equally to other B2C firms (such as Amazon, TheStreet.com, and Quicken), and, higher switching costs accepted, to B2B firms (such as FreeMarkets, Reuters, and SAP) as well.

Consider next the *strategic* strain where the basic idea is "the early bird gets the worm." This strain draws on the concept of preemption. Familiar examples include airlines' choices of routes to fly, oil refiners' capacity decisions, and the market entry decisions of corner stores. Widely applicable as this strain might seem, preemption works only when *both* of two conditions are satisfied.³ First, firms must be confronting an *efficiently-sized finite opportunity*. In essence, this means one firm is big enough for the opportunity and the opportunity is big enough for just one firm. Second, the product or service in question must be *simple*, i.e., it must be hard for firms to differentiate their offers (think of gasoline, airline seats, and TV cable service). Otherwise, later entrants can induce buyers to switch by offering better products and services (think of apparel retailing, restaurants, and software).

Does the strategic strain of first mover advantage hold in internet business? It would appear not. In most internet business, opportunities can hardly be characterized as finite (in the one firm is enough sense), and, importantly, even in businesses such as

exchanges and portals (where the one firm is enough criterion *might* tend to hold) products and services can hardly be characterized as *simple*. In fact, there is tremendous scope for differentiation in internet business and first movers can hardly rest victorious on this basis alone. Just ask QXL (the pan-European first mover in internet auctions that, even in its home market, is being surpassed by eBay), or Netscape (whose browsers were abruptly displaced, even on Macs, by Microsoft's Internet Explorer), or Pointcast (which, despite being "the first" internet company to deliver free news on line, is now a footnote in internet history).

What about the new economy strain, which draws on the concepts of network externalities, critical mass, and lock-in? As we explain in **Exhibit 1**, powerful as this strain is, it is an unpredictable, and ultimately unreliable, source of advantage to first movers.

To sum up, first mover advantages are neither necessary nor sufficient for success in internet business. They cannot and should not be the basis of a firms' internet strategy. Recall that neither eBay, nor Nokia, nor Schwab were first movers in their respective businesses. What is more, as one Silicon Valley insider recently warned: "Back then, you had miles of runway before you showed up on the radar screens of [competitors]... Now you have almost no time before you're under attack."⁴ It is time to stop grabbing the land and start cultivating it. We will elaborate below.

The misconception of "reach." There is an important idea that predates the internet and has been pursued by firms in industries as diverse as automobiles, hotels, and banks. It rests on the valid premise that a firm's *potential* customers are often distributed in

heterogeneous rather than homogeneous segments. Besides the familiar B2B-B2C (corporate-retail) segment divide, there is young and old, affluent and economy minded, professional and lay, business and holiday, and so forth. Given these various divides, the nub of the idea is the following: the more customer heterogeneity a firm can embrace, the more it can grow its revenues and earnings.

Now, with the arrival of the internet, the allure of heterogeneity has grown even greater. Popularized under the label of *reach*, it is tempting old and new firms alike to use their resources (from brand to bandwidth, and capabilities to content) to go after unprecedented numbers and types of customers.⁵ Thus, Reuters (a traditional B2B player) has contemplated a bold gambit to offer to retail customers (via a financial portal) the content and trading services it provides commercial institutions. WebMD wants to serve you and me, *and* doctors, *and* nurses, *and* pharmacies, *and* hospitals. And Enron (another traditional B2B player) wants, via a venture with Blockbuster, to use the cable bandwidth that it sells to businesses to bring movies-on-demand to retail consumers.

Some of these heterogeneity-embracing ventures might indeed lead to new profitable growth. Yet, reach is far from an unmixed blessing and managers should be aware that a serious tension lurks in the background. The tension relates to an issue that is fundamental to firms' strategy and their ability to make profits, viz., the issue of *fit*.⁶ Firms create customer value by undertaking and executing a particular set of *activities*. If the outcome is to be effective and efficient, individual activities cannot stand alone; they need to be integrated within a *coherent activity system*. But, the more customer heterogeneity a single firm embraces, the less coherent its activity system becomes. Ultimately, disregard for and loss of *fit* leads firms into trouble⁷ (just think of how Digital

Equipment Corporation ended up after attempting to make PCs, workstations, minicomputers, and mainframes, all under one roof). Thus, while expanding reach to embrace increasingly diverse customer pools might lead to rising revenues, if not approached judiciously, such actions might cause return on invested capital to decline and the firm's performance to deteriorate even in its core markets.

Before heeding to the siren call of reach, firms must work out its potential impact on fit. As we depict in the decision framework in **Exhibit 2**, an important dimension along which to assess the hidden danger of reach is the "core-context" continuum.⁸ "Core" activities are key to customer value, and, importantly, they *drive* other elements of the activity system (e.g., natural language recognition and search algorithms at an "expert" site such as Ask Jeeves). If the modifications required to accommodate reach will affect only activities that are considered "context" to the firm then fine. (Amazon's Z-shops, Merck-Medco, and ST Microelectronics provide positive examples.) If, however, core activities that presently cohere well will have to be reconfigured, or if changes in the context will have serious if delayed repercussions on the core, then firms should resist the temptation of reach and search perhaps for other ways to serve, or, if need be, forego, the opportunity under consideration.^{9, 10}

In sum, even as technological constraints on the embrace of heterogeneity decline, firms must monitor the often delayed impact on fit. As eBay considers entering the B2B space or as Intel considers entering the B2C space they should work out the implications of the reach-fit tension. Greater reach may lead to growth, but only when it is undertaken in a manner that preserves or reinforces fit will it lead to *profitable* growth.

The misconception of the “solutions” provider. A related but different temptation is to become a customer “solutions” provider. The logic is as follows: From a customer’s point of view many products and services can, or might need to, be *complemented* by other products and services.¹¹ Software complements hardware; trade execution capability complements investment advice; content complements an internet connection service, and so on.

Accordingly, when a firm has acquired a customer for one of its products or services, it could enhance its business by also offering complementary products and services to the *same* customer. This could be a win-win situation: the customer gets greater “convenience” and the firm achieves greater “wallet share” (e.g., Hewlett Packard which offers both printers and print cartridges). Related, but different, when necessary complements are too expensive or simply unavailable in sufficient quantities in the market, then a significant segment of customers might be precluded from buying the firm’s core offer. In such situations, firms might tend toward “solutions” in order to access a latent growth opportunity (e.g., Accenture, previously Andersen Consulting, complements its IT consulting services with top management strategy consulting).

Yet, as developed in **Exhibit 3**, outside of the above, firms would do well to contain their eagerness to chase demand-side complementarities. This is because there is a serious tension that lurks in the background and goes to the heart of a firm’s strategy. That tension revolves around the issue of *focus*. As Adam Smith taught us two hundred years ago, specialization can drive both effectiveness and efficiency. In particular, when markets are *large* and *competitive*, focus becomes a prerequisite for survival and success. After all, if the market is large enough, then it pays to specialize, and, if it is competitive,

it will hurt not to do so. Thus, while Intel has until now focused on hardware, Microsoft on software, and Dell on integration, Apple attempted to do it all with the noble aim of providing customers a convenient “solution.” Apple failed to see the penalty it would pay in terms of both price and performance.

The lesson should be clear for firms, like AOL/Time-Warner, Reuters, and Sony, that are implicitly or explicitly choosing “convenience” and “solutions” as their internet business strategies. Firms that neglect the complementarity-focus tension will pay a price. The *diseconomies of scope* might be hidden but they are there waiting to draw down even well-intentioned, unsuspecting firms. This point is as important today as it was before the advent of the internet.

One disciplined way to safeguard against the “solutions” trap is to ask and furnish an uncompromising answer to this question: “What business should we be in?” Then, in the particular business chosen, firms should work to become among the “best in class.” This strategy is what lies behind the enviable success of EMC², Intuit, and Schwab. Indeed, in a growing internet-driven economy, specialization *will* become widespread and generalist firms that fail to confront the What business? question will find success all the more elusive.

Perhaps one reason why this classic strategy question is being raised so infrequently today is because the internet has tended to be viewed as an undifferentiated sector. That too is a misconception and we take it up next.

The misconception of “the internet sector.” As if hypnotized by the dotcom suffix, many managers still appear to be viewing internet business as a relatively

undifferentiated landscape. While the B2B-B2C labels are useful as shorthands, they do not help managers identify with the value propositions that ought to underlie their business. Knowing that a firm operates in, say, the B2B space gives its managers almost no clue as to its *raison d'être*; its key drivers of customer value; its key requirements in terms of internal competencies; or its competitive landscape.

To be able to formulate and evaluate internet-related strategy, a firm must identify the specific internet sector(s) in which it is operating (see **Exhibit 4** wherein we delineate six broad internet sectors). This knowledge is critical because the *ends*, *means*, and *metrics* of competitive advantage will most likely be different from sector to sector. Thus, in the internet services sector, speed, convenience, and price might top the list of the drivers of customer value (i.e., the *ends* of competitive advantage); whereas, 24 x 7 availability, scalability, and compatibility might top that list in the infrastructure sector. Similarly, insourcing logistics, and keeping the proportion of costs that are fixed low might be key drivers of performance (i.e., key *means* to competitive advantage) in the internet services sector, while in the infrastructure sector, key means might be sufficient investment in product design, rigorous testing, and a modular approach to systems and operations.

Last, but not least, the key measures of performance and productivity (i.e., the *metrics* of competitive advantage) will also differ by sector. Thus, in the internet services sector metrics might include maintenance cost and transaction value per “registered customer,” and brand recall. By contrast, in the infrastructure sector, key metrics might include a customer satisfaction and retention index, annual billings per customer, and profits per employee. A failure to develop and track sector-specific

metrics of performance will hamper good management and lead to inferior resource allocation decisions. This is why from consulting to retailing to publishing, industries develop unique yardsticks that are suited to the specific nature of their markets and operations. In internet-related business as well, developing sophisticated and sector-specific metrics (i.e., moving beyond counts of “unique page hits” and “registered users”) is an essential step in being able to better formulate and assess strategy.

True, one can come up with more refined and different sector categories than the ones we have proposed, but our point here is that firms should grasp that focal offers vary in internet space and will be subjected by customers to different selection criteria. Settling upon the firm’s focal industry will help decide the depth and breadth of each product or service that the firm wants to offer. It will also help in evaluating alternatives and changes to this scope. Failure to decide the firm’s core sector will inhibit the possibility of being “best in track” and, worse, invite potentially dangerous experimentation along the dimensions of heterogeneity and complementarity that we discussed above.

To be sure, many managers recognize the heterogeneity-fit and complementarity-focus tensions. Indeed, it is to work around these tensions that managers are turning increasingly to a strategy known as “partner leverage.” But, sensible as it might appear, the strategy of partner leverage, as we explain below, is itself accompanied by a serious tension.

The misconception of “partner leverage.”¹² The strategy of partner leverage is about capitalizing on or creating a market opportunity by combining own-firm resources and

capabilities with those of *other* firms. Thus, from Covisint.com (where GM, Ford, and DaimlerChrysler plan to buy together), to the Enron-Blockbuster venture that aims to deliver movies on-demand to consumers' homes, to the KPN-NTTDoCoMo-Hutchison tie up that aims to bring wireless i-mode to Europe, partner leverage is all the rage. Indeed, over the past couple of decades, under various logics and monikers—the virtual enterprise, the ecosystem, the modern *keiretsu*—joint ventures, alliances, and other forms of partnerships have become a part of the business landscape.

Yet, elevating the notion of partner leverage, as is being done in internet business, to the status of an unambiguous virtue is dangerous. True, the technology of the internet makes it easier and cheaper to align *activities* across firm boundaries, but it does *not* do much to align *interests* across those same firm boundaries. As wise business leaders know, absent a real alignment of interests among firms, joint value creation, let alone joint value appropriation, tends to remain a strategic hope rather than a business reality.¹³

So, while elegant in theory, the concept of *partner leverage* will, in practice, have to be balanced against the more traditional, and doubtless less fashionable, concept of *control*.¹⁴ True, control is not very important when things are going well, and, true too, control is not, in and of itself, a guarantee of success. But control is what gives top management the right to exercise discretion over how resources will be allocated and which courses of action will be pursued. And, as experience teaches us, when things don't go well, discretion over strategy is what is most desired by all sides. This is one of the primary reasons why the survival and success rate of alliances is so slim (witness the alliance debris in the airline and computer industries).

Given that there is no good reason to believe that in internet-related business things will always go well, managers should pay more heed to this leverage-control tension. The right response is not, of course, to never use partner leverage. So when to use partner leverage? In answering this question, there is no substitute for good judgement.¹⁵ Judgement, however, ought to be informed by the partner leverage principles of *prudence* and *process*. We develop the principle of prudence in **Exhibit 5**. As we elaborate there, if a firm needs access to an activity or business that would disrupt its fit or dilute its focus, *and* if relations with prospective partners are not going to be cumbersome, then the firm would do well to explore the option of partner leverage. Thus, Cisco partners with Cap Gemini (the European IT consultancy) to deliver a “hardware *cum* software solution” to its customers.

The principle of process states that in making decisions that will impact partners, firms must adhere to the elements of *fair process* (they must engage, exchange, and explain).¹⁶ As every wise CEO knows, human intentions, actions, and volition play a (and perhaps *the*) key role in any endeavor, especially one which calls for the cooperation of other entities. Happily, the track records of firms like eBay, Intel, and Nokia attest to the fact that leverage can be balanced with control and play a positive role in achieving profitable growth.¹⁷

The misconception of the “born global” internet firm. Hailing the “death of distance” and the “end of the tyranny of national borders” many commentators and managers believe that internet businesses are virtually, so to put it, born global.¹⁸ True, bits and bytes can travel at the speed of light and at super low cost. True too, websites are

accessible from anywhere on the globe where laws allow and the appropriate equipment exists.

Alas, appealing as the born global view is, it is a dangerous half-truth. The root of the problem lies in a poor understanding of what it takes to succeed in global markets. There are at least three hurdles that firms must overcome. First, people must know that the firm exists. Despite the emergence of search “bots,” this typically calls for considerable local marketing efforts. Just consider, at last count, there were tens of millions of registered domain names. (This is partly why marketing has tended to be the single most prolific consumer of cash within startups.)

Second, users need to trust a firm enough to conduct business on its site. Trust increases with local presence. Why? Because a local management and employee pool brings local relationships and contacts; local presence allows local media access and scrutiny; and local presence enables local legal recourse. All these factors contribute to trust. So, far from the hyped model of servers in Boston, software in Bangalore, and customers in Berlin, this is a second reason dotcoms that want to succeed abroad will have to establish real local sites, country by country. Just ask eBay, Schwab, or Yahoo!.

Third, people must want to buy the dotcom’s offer. This (except if you are Intel) rules out simply rolling out home-grown products and services. That, in fact, is a likely path to rapid losses. Why? Because, from language to currencies, to income levels and consumer tastes, to differences in the regulatory and competitive landscape, national borders embody real *discontinuities*. And what is key is to realize that the internet does not eliminate those discontinuities. Adapting to the latter will, hence, be important if “going global” is to bring profitable growth. Even as successful a firm as AOL is an

“also ran” in nearly all the foreign markets it has entered. Similarly, Amazon, Priceline, and QXL too have discovered the myth of the born global internet firm.

The terms internet and global should not be thought of synonymously. In fact, all global firms will (as we are seeing) go successfully on the internet, but not all internet firms will be able to go global successfully. If they want to do so, they will have to learn what such firms as MTV, Wal-Mart, and Honda have learnt: to be successful abroad, you must first be successful at home, and then move outward in a manner that anticipates and genuinely accommodates local differences.

The misconception of “technology as strategy” The last misconception we want to address goes to the heart of many of the preceding issues. Its essence is captured in this statement made by one influential observer: “now technology is a driver of business strategy.”¹⁹ So much so, he adds, that within “old economy” firms a visionary CIO will be “the key to a company’s success.” Another Valley guru chimes in, “In this new age, IT is not *about* the business—it *is* the business.”²⁰

Of the seven, this is the most perilous half-truth. True “digiticity,” like electricity a 100 years ago, is likely to have a profound influence on what, how, and for whom firms produce. Yet, the fundamentals of economics and strategy have not changed and are not about to. Firms that understand their technology better than they do their customers are unlikely to succeed in any economy, old or new. Just think of automotive technology leader Mercedes in the car industry. Would Lexus have gotten in if Mercedes was more customer driven and less technology driven? Or consider AT&T’s failed entry into the credit card business (it wasn’t the backoffice that went wrong, it was poor customer

credit scoring). Or recall the dramatic billions that GM sunk in technology during its failed experiment of the 1980s. Or more recently, think of Globalstar and Iridium.

The sooner firms stop being distracted by the hype of new technology, the sooner they can focus on the key strategy lesson that business experience of the past couple of decades has taught us: Regardless of the industry that a firm operates in, it can achieve and sustain profitable growth only to the extent it grasps and delivers on two strategy fundamentals—product advantage and production advantage.²¹

A firm has *product advantage* when its offer creates genuine *and* unusual value for customers. By this definition, Amazon and Adobe, Nortel and Nokia, and Sony and Schwab have all demonstrated product advantages. Put more strongly, product advantage is about being best or among the best in class. Product advantage can and does emerge from many sources (including serendipity), but what is common about the result is that it represents a valuable advance on genuine customer problems, needs, and aspirations. Thus product advantages always correspond to *demand-side* insights, and should be gauged against demand-side parameters (such as efficacy, excellence, variety, convenience, speed, etc.).

While product advantage is necessary for achieving profitable growth, it is not sufficient. The reality, as most managers know, is that customers—corporate and retail—operate under a budget constraint. Accordingly, price enters their purchase and switching decisions. Indeed, from their point of view, value is relative not only to the performance of competing offers but also to price. This is why *unit costs* play such a critical role, and, in turn, where *production advantage* enters the picture.

A firm possesses production advantage when it can extend its offer to customers at prices that are both deemed affordable by the mainstream of the market and, at the same time, deemed adequately profitable (i.e., meets or beats ROI hurdles) from the firm's point of view. By this definition, firms such as Nokia, Microsoft, and Intel have exhibited production advantages, while most newly launched internet businesses (including Amazon, E*Trade, and Yahoo!), have yet to exhibit production advantage.

Like product advantage, production advantage can emerge from a number of sources. What is common across those sources, however, is that, without diluting the quality of the offer, they lead to lower total unit costs. Further, those lower costs, once achieved, must be sustainable. This is the essence of production advantage and it always corresponds to insights on the *supply side*. Yet production advantage must be gauged not only against supply-side parameters (such as quality-adjusted productivity, throughput, learning curve coefficients, and turnaround times) but, more importantly, against target price parameters. Of course, the target price ought to reflect both customers' willingness to pay and the prices of rival offers.

When observers point to Cisco, Schwab, and Exodus (see **Exhibit 6**) as technology leaders, they make an incorrect attribution for the success of these firms. It is first and foremost an insightful grasp of customers needs, aspirations, and constraints that explains the successes of these firms. Then and only then does technology enter the picture in creative ways to deliver value in an effective and efficient manner.

Conclusion

The dawn of a new technology brings great promise. There is already little doubt that the internet will have profound consequences for the conduct of business. Yet, while internet technology is going to be a powerful agent in propelling profitable growth, as we indicate in **Exhibit 7**, it also extends an unwitting invitation to managers to move technology to the foreground and displace strategy to the background. The more such displacement occurs, the more will *possibility* overshadow *profitability* in the selection of which growth opportunities to pursue. In fact, as we have already noted, there is even the risk of damage to existing businesses, brands, and bases of competitive advantage.

As we further indicate in Exhibit 7, the relative dangers are not the same for “old” and “new” economy firms. “New” economy firms are, of course, more susceptible to the misconceptions we have dealt with. They, in particular, should bear in mind that *new* rules are not the same as *exploitable* rules. “Old” economy firms will be wiser to misconceptions such as “born global,” but they too should be wary of overly discounting the benefits of fit and control. Regardless, both sets of firms must recognize that if they are to be members of the “profitable” economy, then they must attain both product and production advantage. It is in this sense that wise observers have averred that “the rules haven’t changed.”

The way forward will without doubt be paved with experimentation and trial and error. But its bounds and direction can be shaped by safeguards. It is in this spirit that we present the questions and guidelines that appear in the last column in Exhibit 7. We hope that as managers explore this vast and promising new territory of technology, those guidelines might serve them as a strategy compass indicating *profitable* north.

Additional Resources:

R. Amit and C. Zott “Value Creation in e-Business,” *Strategic Management Journal* (forthcoming).

J.M. de Figueiredo “Finding Sustainable Profitability in Electronic Commerce,” *Sloan Management Review*, Summer (2000): 41-52.

Exhibit 1. What about “network effects” and “critical mass”?

The *new economy* strain of first mover advantage, the one most discussed in the context of internet business, relates to the concepts of “critical mass” and “network externalities.”¹ The concept of critical mass is applicable in the context of products and services where the *behavior* of customers is susceptible to *tipping*. In those instances, once a threshold proportion (a critical mass) of actors adopts a particular product, technology, or market location, then remaining actors tip to that *same* choice.

The concept of network externalities also alludes to a feedback process. It is applicable in cases where the *benefits* that accrue to an actor from the adoption of a particular product, technology, or market location, increase with the number of others making that same choice. Benefits arise from an increase in the thickness of the network of adopters (think telephones), easier coordination with others (think word processing software), or a richer choice, including especially, of complementary products and services (think CDs and CD players).²

To be sure, the key reason why the preceding concepts attract so much attention is that they fuel *both* user adoption and user “lock-in,” a situation where switching becomes difficult. It is under these circumstances that the dynamic of “winner take all” can emerge. Here, users might be in a coordination trap: it makes sense to switch if everyone (or nearly everyone) else switches, but not otherwise. Or, they might be in a system compatibility trap: having made related investments in compatible complementary products and services, switching on the focal item might necessitate expensive switching on other items as well. In either case, the adopted standard prevails even in the face of objectively better offers from other firms.

Captivating as this theory is, notice that it does not stipulate that these positive feedback effects will automatically benefit the first mover. Think about these well known cases. Microsoft, the victor in the PC operating system business, was hardly the first one in that market. Nor for that matter was Matsushita with its VHS standard for video cassettes. Sony with its Betamax had entered over a year earlier.³ A similar outcome occurred in automated teller machines. Citibank was the pioneer, but it is the (multibank) Cirrus and NYCE systems that prevailed.

There are three explanations for the above outcomes. First, even when feedback processes are set in motion, their timing might be drawn out. In such cases, the first entrant is in fact often too early (because the market is insufficiently ordered). Second, when individual firms try to either monopolize or expressly manipulate the standard, potential users (and other producers) might be “spooked,” and they will resist getting “trapped.” Related to this, and third, a standard might emerge but not one that is proprietary to any single firm. Witness the ubiquity of “public” standards (from keyboard layouts, to cell phones, to wireless internet). It is due to these reasons that winner take all worlds tend to be accidental, not engineered. And the rules are no different on the internet.

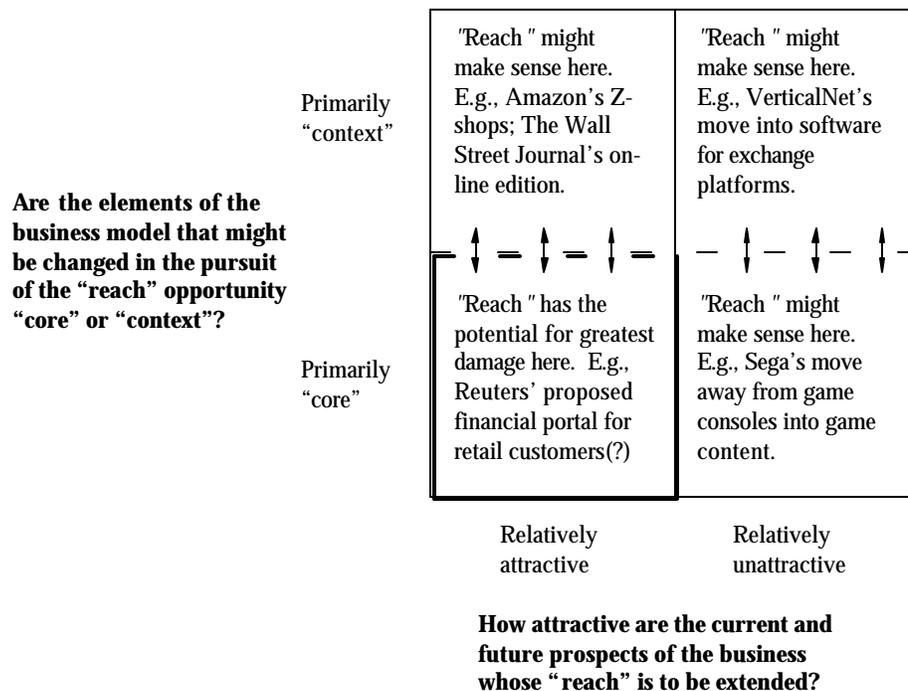
¹ See C. Shapiro and H.R. Varian, “Information Rules” (Boston: Harvard Business School Press, 1998)

² See G. Saloner, A. Shepard, and J. Podolny, “Strategic Management” (New York: John Wiley, 2001).

³ See M. Cusumano, Y. Mylonadis, and R. Rosenbloom, “Strategic Maneuvering and Mass-Market Dynamics: The Triumph of VHS over Beta,” *Business History Review*, 66 (Spring), 1992: 51-94.

Exhibit 2. When extending ‘reach’ make sense, and why established firms ought to think twice about it.

The concept of “reach” refers to the deployment by a focal firm of *existing* activities and resources in the pursuit of a new segment of customers. As explained in the main text and suggested in the framework below, while the ostensible aim is to achieve profitable growth, whether that result obtains depends on the extent to which *fit* in the existing business is disrupted. In essence, firms in profitable businesses should be wary of reach opportunities that threaten to disrupt “core” elements of their business model. Because interconnections within established activity systems tend to be extensive and not always apparent, insulating “core” activities from changes to the “context” is seldom easy. Further, in contrast with changes in “context,” changes in the “core” are not so easily reversed. It is for these reasons that despite the alluring opportunities offered by the internet, established firms (such as ABB, Citibank, and Sony) ought to think twice before deciding to pursue “reach.”



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Exhibit 3. When does a customer “solutions” approach make sense?

The term customer “solutions” refers to an approach wherein, in the pursuit of profitable growth, a focal firm goes beyond the provision of a simple product or service and offers its customers access to valuable *complements* (i.e., other products and services that customers require to make full or better use of the initial product provided). In deciding whether you should be taking a “solutions” approach, work through the framework below. As explained in the main text, the key consideration is whether the *loss of focus* (and the associated product and product disadvantages) that might accompany a “solutions” approach will be offset sufficiently by the extra profits generated via the approach. Also note: (i) the two dimensions of the framework actually represent continuums; and (ii) that your position along these dimensions can change over time. You might, therefore, need to monitor and periodically reassess the situation.

<p>Do customers experience “bottlenecks” (due to high price or insufficient availability) in accessing the complements under consideration?</p>	Yes	<p>A “solutions” approach makes sense here. E.g., AOL in 1993.</p>	<p>A “solutions” approach makes greatest sense here. E.g., Andersen’s offer in strategy consulting.</p>
	No	<p>A “solutions” approach makes least sense here. E.g., Apple Computer; AOL in 2001(?)</p>	<p>A “solutions” approach makes sense here. E.g., Cisco’s value-added reseller certification program.</p>
		Yes	No
		<p>Do customers perceive the complements under consideration to be generic <i>and</i> easy to self-assemble?</p>	

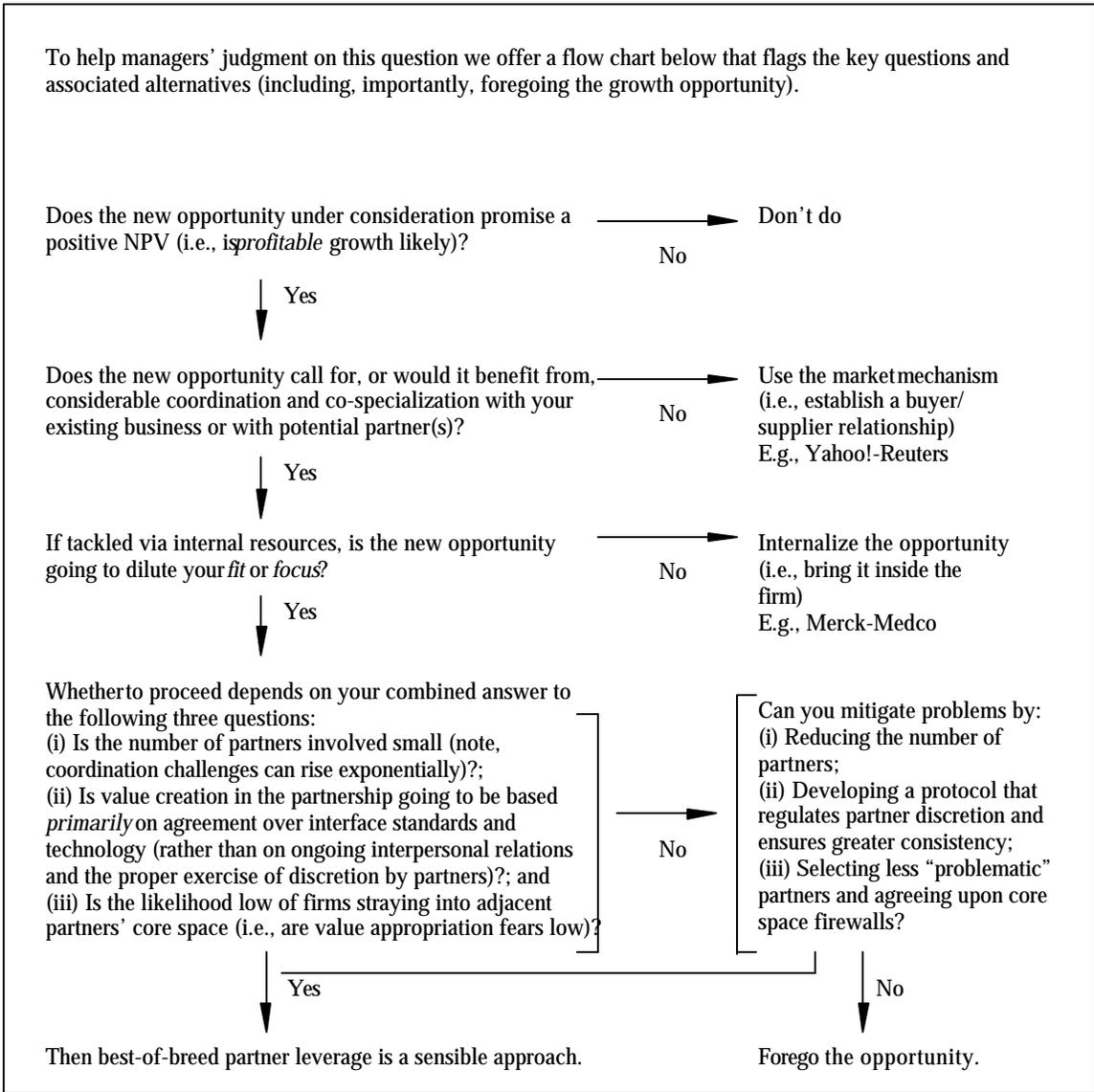
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Exhibit 4. Segmenting internet business space: Six high-level-sectors.

<i>The six high-level i-sectors</i>	<i>Broad characterization of focal offer(s) in the sectors</i>	<i>Key value drivers in the sectors</i>	<i>Examples of firms in the sectors</i>
Infrastructure	Access, communication, interpretation, digitization, interconnectedness, display, storage, retrieval, and processing.	Availability, security, coverage, speed, scalability, mobility, price.	Akamai; AOL; BEA; Cisco; eInk; Ericsson; Exodus; Global Crossing; Intel; Lucent; Microsoft; Nortel; Sun; Telefonica; Tibco; Verisign.
Applications	Organization, simplification, presentation, manipulation, analysis, tracking, matching, and reception and transmission of information.	Functionality, reliability, efficiency, compatibility, upgradability, privacy, price.	Adobe; Ariba; Commerce One; DoubleClick; Inktomi; Intuit; Marimba; Microsoft; Oracle; SAP.
Portals	Internet gateway, search and navigation, links to services and content, and broadcast medium (for advertising).	Exhaustiveness, speed, convenience, privacy, community experience, customizability, size and attractiveness of user base, price.	AOL; CEOExpress; Excite; iVillage; Starmedia; TerraLycos; Yahoo!.
Content	Information (general and specific, current and archived), news, entertainment (including games), and databases.	Accuracy, timeliness, completeness, appeal, interactivity, price.	AOL/TimeWarner/CNN; Bloomberg; EMI; Multex; NewsCorp; Pearson; Reuters; WebMD.
Services	An act that satisfies a need or want.	Quality of experience, efficiency, reliability, convenience, customization, privacy, price.	Amazon; bFinance; Chateau Online; E*Trade; FreeMarkets; Grainger; iMotors; Media Metrix; Merck-Medco; MeritaNordbanken; Travelocity; WebMD.
Exchanges	A virtual trading place, and matching and creation of supply and demand.	Density, trust, transaction security, privacy, support services (such as insurance and delivery), price.	BandEx; ChemConnect; Covisint; eBay; Elemica; eSteel; QXL; Ventro.

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Exhibit 5. When is best-of-breed partner leverage a sensible approach to growth opportunities?



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Exhibit 6. Exodus Communications – Focused and now going global.

The concept of “web hosting” was pioneered by such firms as PSINet and UUNet. But it is Santa Clara, California based Exodus Communications that leads the pack in this now multibillion dollar business. Founded in 1995 and taken public in 1998, Exodus currently operates some three dozen “internet data centers” in the United States, Europe, and Japan.

True to its motto—“*infrastructure* for the digital economy”—Exodus has focused its business around a core offering of web hosting services. The guts of this business consist of (i) high-availability computer servers (more than 60,000 at last count) housed in secure vaults that Exodus designs, constructs, and manages; and (ii) consulting services dedicated to helping clients optimize their Exodus-hosted web operations. To complement this core offer, Exodus makes available expertise on data security and flow metrics. The former is a natural and increasingly must-have feature for firms that rely on the web, and the latter is key to ensuring availability and end-user satisfaction. Exodus has acquired firms in both areas to build and control this expertise in-house. At its core then, Exodus is about guaranteed availability, security, and scalability; and it delivers this set of value drivers internally.

In the case of other complements such as communications bandwidth and data storage, Exodus offers its clients those services as well, but it does so through partnerships with leading firms in those businesses. Thus, Exodus keeps its own resources focused on web hosting *services*, while bringing its customers web hosting *solutions*.

In terms of customers too, Exodus has focused on businesses. Relative to individuals, its business customers (which number over 3,000 and include both new and established firms such as eBay, The Gap, MSN Hotmail, Merrill Lynch, Yahoo!, and Ford) are much more likely to already have the “complex” web hosting needs (for 24 x 7 availability, high security, and on-demand scalability) that its activity systems are designed to serve.

By resisting the temptation to pursue all available growth opportunities, and, even more importantly, by not emphasizing technology over strategy, Exodus has thus far stayed on a disciplined path to creating both product and production advantage. The firm has broken the billion dollar revenue mark within three short years of going public and reports positive EBITDA (earnings before interest, tax, depreciation and amortization). This impressive record has got Exodus into the Nasdaq-100 Index and got analysts forecasting a successful global expansion and a future of profitable growth.

Exhibit 7. Strategy risks arising from internet-related misconceptions, the relative dangers they pose to “old” and “new” economy firms, and some key safeguard questions to aid management.

Strategy risks arising from internet-related misconceptions	The relative relevance and severity of danger the risks mentioned pose to firms in:*		Some key management questions and guidelines to safeguard strategy from risks arising from internet-related misconceptions
	The “old” economy	The “new” economy	
Overestimating first mover advantage			Ask: <i>Would we enter the business and procure attractive returns even if our likely rivals are already in the market under consideration? A definitive Yes or No are both good signals. Yes suggests you have genuine product and production advantage; no suggests timing really is important. On the other hand, the more you hesitate here, the more you are likely to be at risk of overestimating “first mover advantages.”</i>
Unintentionally diluting <i>fit</i> in the pursuit of reach			Ask: <i>To what extent will the pursuit of the “reach” opportunity under consideration disrupt the <u>core</u> of our “activity system” (or business model) in an existing business that is <u>attractive</u> to us today and expected to remain so in the future? The smaller the anticipated disruption, or the less attractive the existing business, the safer it is to proceed.</i>
Unintentionally sacrificing <i>focus</i> in the desire to offer customer “solutions”			First ask: <i>Are we unable to tap into a potentially large and lucrative customer base <u>because</u> necessary complements to our product(s) are too costly, unavailable, or difficult for the customer to self-assemble? If any of these hold, then thinking about customer “solutions” will be helpful to profitable growth. Now ask: To what extent will developing the complements in-house (i) call for expertise we don’t possess, and (ii) dilute our focus in a sector that is attractive to us? The lesser the extent to which both hold, the safer it is to develop “solutions” in-house.</i>
Ignoring internet sector differences			Ask: <i>To what extent have we <u>tailored</u> the ends, means, and metrics of our product and production advantage to the <u>specific</u> sector(s) in which we operate? The more you’ve tailored, the more likely you are to succeed.</i>
Unguardedly relying on partner leverage			Ask: <i>To what extent will (i) our partners’ interests diverge from our own; (ii) the quality of our offer be subject to our partners’ discretion; and (iii) monitoring our partners entail prohibitive costs for us? The lesser the extent to which the preceding hold (or can be made to hold), the more sense it makes to rely on partner leverage.</i>
Going “global” (i.e., expanding abroad) prematurely			Ask: <i>To what extent do we (i) lead in our home market; (ii) understand the market discontinuities we will face abroad; and (iii) have competitive advantage over local rivals operating abroad? The greater the extent to which all three hold, the safer it is for you to expand into the foreign market under consideration. (Selectively violating the preceding might make sense if your intent is to “learn” abroad.)</i>
Treating technology as strategy			Ask: <i>To what extent are we separating the question of what, with the help of technology, we <u>can</u> do from what we <u>should</u> do? The greater the extent to which <u>should</u> dominates <u>can</u> in your thinking, the lower the risk that you are substituting technology for strategy. As a check, make a list of the <u>non-technology</u> related objections to the idea(s) under consideration. Then ask: <i>How grave are the listed objections? The graver and more numerous the objections, the more you should explore elsewhere.</i></i>

*In contrast to “old” economy firms, “new” economy firms operate in businesses where standards tend to matter; product life cycles are relatively short and network externalities tend to apply. Size of circle indicates relevance; shading indicates severity (i.e., permanence, depth, and breadth of potential damage).

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- ¹ F. M. Scherer and D. Ross, "Industrial Market Structure and Economic Performance," 3rd edition (Boston: Houghton Mifflin, 1990), p. 407 and 586-589, review several theoretical and empirical studies on this issue.
- ² See M.B. Lieberman and D.B. Montgomery "First-Mover Advantages," *Strategic Management Journal*, 9 (1988) 41-58; and I. Dierickx and K. Cool, "Asset Stock Accumulation and Sustainability of Competitive Advantage," *Management Science*, 1989: 1504-1511.
- ³ M. E. Porter, "Competitive Strategy" (New York: Free Press, 1980), p. 336-338, offers a more detailed discussion.
- ⁴ Vinod Khosla, partner at venture firm Kleiner Perkins Caulfield, quoted in "Starting up in high gear: An interview with venture capitalist Vinod Khosla," *Harvard Business Review*, July-August 2000, p. 94.
- ⁵ P. Evans and T. S. Wurster, "Blown to Bits: How the New Economics of Information Transforms Strategy" (Boston: HBS Press, 1999).
- ⁶ M. E. Porter, "What is strategy?," *Harvard Business Review*, 74(1996): 61-78.
- ⁷ Nicolaj Siggelkow, "Change in the Presence of Fit: The Rise, the Fall, and the Renaissance of Liz Claiborne," *Academy of Management Journal* (forthcoming).
- ⁸ G. A. Moore, "Living on the Fault Line" (New York: Harper, 2000).
- ⁹ See, for example, the analysis of Amazon in A. Afuah and C. Tucci, "Internet Business Models and Strategies: Text and Cases" (Boston: McGraw-Hill, 2001).
- ¹⁰ To be sure, as we depict in Exhibit 3, the importance of preserving fit is less of an issue if the health and attractiveness of the business whose reach is to be extended are in question.
- ¹¹ See A. Brandenburger and B. Nalebuff, "Co-opetition" (New York: Doubleday, 1996).
- ¹² Note, in this article, we are concerned with one variant of leverage, viz., partner leverage. For an insightful discussion of "competitive leverage" (i.e., using rivals' strengths to your advantage) see M. Cusumano and D. Yoffie, "Competing on Internet Time" (New York: Free Press, 1998); and for an insightful discussion of "internal leverage" (i.e., leveraging core competencies), see G. Hamel and C. K. Prahalad, "Competing for the Future" (Boston: HBS Press, 1994).
- ¹³ N. Venkatraman, "Five Steps to a Dot-Com Strategy: How To Find Your Footing on the Web," *Sloan Management Review*, Spring (2000): 15-28, offers a clear discussion on the importance of "governance" in internet-related business.
- ¹⁴ O. E. Williamson, "Markets and Hierarchies" (New York: Free Press, 1975).
- ¹⁵ H. W. Chesbrough and D. J. Teece, "When is Virtual Virtuous?," *Harvard Business Review*, January-February 1996: 65-73; and Y. Doz and G. Hamel, "Alliance Advantage" (Boston: HBS Press, 1998) discuss when and how alliance arrangements can play a role in organizing for innovation.
- ¹⁶ For a detailed discussion, see C. Kim and R. Mauborgne "Fair Process: Managing in the Knowledge Economy," *Harvard Business Review*, July-August, 1997: 65-75.
- ¹⁷ A. Gawer and M. Cusumano, "Platform Leadership: How Market Leaders Drive Industry Innovation" (Boston: HBS Press, forthcoming) discuss how technology firms might deal with this growing challenge.
- ¹⁸ See for example F. Cairncross "The Death of Distance: How the Communications Revolution Will Change Our Lives" (Boston: Harvard Business School Press, 1997).
- ¹⁹ Khosla, p. 99.
- ²⁰ Moore, p. 20.
- ²¹ C. Kim and R. Mauborgne, "Value Innovation," *Harvard Business Review*, January-February 1997: 103-112; and M. E. Porter, 1996, *ibid.*, provide insightful perspectives on *how* firms might create customer value and sustain competitive advantage.