The question of what is strategic when it comes to Information Technology (IT) is fundamental to the success of today’s enterprises. Last year, Nicholas Carr created quite a stir in the Information System (IS) community when he forwarded his thesis on “IT doesn’t matter.” This struck a nerve in practitioners, particularly IT leaders who saw this as sending a dangerous signal to non-thinking CEOs fostering budget cuts and downsizing of IT capabilities. Amidst the backdrop of a struggling economy and offshore outsourcing, such downsizing became easier to rationalize. Since then, many pundits have rebutted Carr’s arguments, and Carr himself has somewhat retracted his position. However, sustainable offshoots of this debate are the lingering doubts regarding the strategic role of IT in business. As we evolve into the next generation of e-business, this question is critical. Is the ubiquity and openness of IT bringing us to the point of utility computing, where the resource (like the telephone today) is fundamentally non-strategic since it cannot differentiate companies?

To deal with the issue of strategy and strategic, let’s first rebut the utilitarian argument. IT, if narrowly defined as hardware and software, is not strategic. Everyone has access to undifferentiated IT assets. However, I believe the differentiation occurs once it interacts with unique complementary resources of the firm, thereby creating unique competencies and capabilities. In the terminology of resource-based theory, these are inimitable and immobile and are thereby a more sustainable source of competitive advantage. Further, unlike the telephone or other physical technologies that enhance the physical ability of humans, IT is an intellectual technology. This means that it can form a platform for new knowledge creation and innovation. Every company’s ability to innovate (and implement) innovation is different. The ability to configure IT into solutions that address opportunity gaps in hypercompetitive markets is a critical differentiator of companies. Taken even further, it is not the IT, but the Information System that is the source of competitive advantage. It is how the hardware, software, people, and structures work together toward a common objective. If a part of that is becoming commoditized, that certainly doesn’t mean the whole system is. How people use the products from the system (i.e., information) could vary greatly across companies. Finally, if IT is becoming ubiquitous and inexpensive, that does not mean that it is non-strategic. Ubiquity does not translate to accessibility. IT accessibility can be made scarce through resource limitations, exclusivity contracts, and information gaming that allows manipulation of bits to create competitive advantage. Even if there is universal ease of access, isn’t this an opportunity for firms with strong processes and structures to unleash them? For instance, poorly managed
business processes will be far more visible and will extract a toll in the marketplace.

So, in summary, IT is merely the catalyst that facilitates leveraging of other resources with the objective of creating unique, inimitable capabilities. These capabilities are not easy to replicate, despite the fact that the core IT might be. Take, for instance, a travel agency that has a broad product line and unique relationships with its various suppliers of products and services. It can use IT to configure these services and match them with data mined from its customer base, creating more value for the customers. Competitors might replicate the underlying IT (i.e., data mining software, front-end services on a Web site, etc.), but that is entirely irrelevant to competitive advantage. It is the ability to leverage its uniqueness (i.e., relationship assets, customer data, other tacit knowledge in employees’ heads that spawns innovation) through IT that creates distinctive value. Further, much IT investment might remain dormant until the right conditions arise—when it can facilitate agile responses to opportunities. A company that has the resources, including IT, to take advantage of that opportunity (e.g., a product-market gap) will gain an advantage over another that does not.

So what is strategic when it comes to e-business enterprises that are so dependent on IT? The e in the term refers to IT or IT-enabled. Clearly it’s not the e by itself that is strategic (i.e., e-tailing, e-supply chain, etc.). This sounds obvious, but we obviously lost this point during the e-business gold rush a few years ago. Then, the mantra was, let’s e-everything, and everything virtual is gold — and this was reinforced by stock market reactions to new e-initiatives. We were willing to forgive profit, as long as revenue growth was there. But to grow eyeballs by giving incentives to customers requires loyalty to recoup investments, which just wasn’t there without good business models.

So now, more sustainable models that focus on value, stickiness, lower costs, and so forth are being deployed, as we realize that maximization of virtual value is not the optimum strategy, but maximization of overall business value — virtual, physical, and virtual X physical (synergy) — is optimum. In other words, it’s back to business fundamentals again.

Strategy in e-business now must clearly articulate overall business value. IT, as discussed, is not the strategic component in and of itself, but the interaction of IT with unique firm characteristics can enhance value in a manner that is tough to imitate. I will describe three general strategies that could lead to sustainable advantage. Of course, the devil is in the details, but progressive firms that carefully think through these orientations (that are not mutually exclusive) could differentiate themselves in the marketplace.

CUSTOMER VALUE ORIENTATION

Progressive firms need to articulate their customer value proposition. Customer value is the net gain accrued by customers from buying and using a seller’s product. Services offered by sellers are a distinct component of the value determination. In an e-business context, services offered by a seller can assume even more importance, as price competition intensifies. IT is integral to the implementation of this value proposition. The customer life cycle is a useful framework within which to structure the customer value orientation. The premise involves providing customers with value during each stage of the buying and post-sale process (i.e., determination of requirements, product acquisition and payment, product stewardship, and product retirement). Introspective thinking of each phase and the unique resources the firm can bring to bear on customer value needs to be articulated. IT and other complementary resources that add real customer value are hard to imitate. Also, the broader the relationship
with customers across all phases, the stronger the umbilical cord that creates higher switching costs. Better use of customer information can further new initiatives in customization and market expansion.

**NETWORK VALUE ORIENTATION**

Firms also should articulate explicitly their network value orientation. This refers to the advantageous position they hold within their network of suppliers, customers, and partners. Often, relationships with key constituents within this network are a source of uniqueness. This could be in the form of proprietary partnerships that allow seamless integration of value chains or knowledge sharing and new product development that adds value to all entities involved. Here again, IT is the catalyst that creates inimitability when integrated with business processes that transcend organizational boundaries.

Another aspect of network value orientation is the supply chain. For instance, with respect to distribution, firms can use IT to follow the direct model (selling directly to customers), the infomediary model (sell through virtual stores), or the synergistic model (sell through physical and virtual stores with each complementing the other). The choice depends on the nature of the product, industry, technological and legal environment (e.g., e-music), and consumer preferences. Firms that do not consciously strategize their relationship and supply chain value orientation are deemed to fail.

**INNOVATION VALUE ORIENTATION**

Innovation value orientation stems from the need to constantly innovate in lieu of a changing environment. However, innovation requires very different structures (i.e., more organic) than sustenance. Some have used the term *ambidextrous* organizations to refer to firms that are forward looking (innovative) while still effectively managing their current product market strategy. Such firms overlay either innovative or entrepreneurial structures on existing organizational structures. E-business firms should carefully evaluate innovation orientation and the new engines of firm growth that this can bring. The resulting innovations often involve IT as a service delivery vehicle, as part of a product, or as a mechanism to implement new forms of customer or network value. Also, related to innovation value is the knowledge strategy of the firm. Harnessing, codifying, and transferring tacit knowledge provides more effective (and efficient) use of human resources and spawns innovation. Here again, IT could be a useful mechanism for organizing and presenting knowledge or identifying knowledge assets and experts through intranet portals.

Returning to the question of what is strategic when it comes to IT, the answer, of course, is that IT is, indeed, strategic when incorporated into a well articulated strategy that defines customer value orientation, network value orientation, and innovation value orientation for the firm. The actual implementation of IT initiatives that deliver this value takes place in the form of business processes. These processes allow even ubiquitous, inexpensive, and utility-like IT to be leveraged into differentiated assets. Managers with both insight and foresight not only can develop these value orientations as a part of e-business strategy, but can also sense product-market gaps and then mobilize and configure their resources to fill the gap. In this era of hypercompetition, competitive advantage may not stem from big strategic moves, but from many smaller ones. In other words, strategy and competitive advantage requires agility — a capability that is often dependent on IT investments.
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