IT Doesn’t Matter, Does It?

Harvard Business Review published an article – “IT Doesn't Matter” by Nicholas G. Carr in May 2003. The article sparked a widespread debate on the strategic value of information technology. At a seminar held on January 22, 2004, the current doctoral students in Information Systems at UCLA Anderson School stated their positions in this debate as follows.

Ping Wang: In a recent conversation, the CIO of an automobile company told me that his company is cutting IT spending “across the board.” However, the marketing department really needs to buy a CRM package to obtain the online customer interfacing capability. When his IT department proposed this purchase to the board, it was rejected because the purchase was considered unnecessary IT spending. A few weeks later, when the marketing department proposed the very same software purchase, emphasizing this was not IT spending but marketing spending, it was approved. In much frustration, the CIO asked “IT, not IT, what’s in a name?”

In my opinion, the partial cause of the above frustration is the confusion around the acronym IT. Is IT singular or plural? In the HBR article “IT Doesn’t Matter”, although the author Nicholas Carr defined IT as “the technologies used for processing, storing, and transporting information in digital form” in footnote 1, he treated IT as if one single technology throughout the article. One can say that a particular information technology does not matter when it is commoditized. But one cannot say that all information technologies do not matter – many new information technologies have not yet been invented, not to mention commoditized. IT stands for information technologies. The acronym IT is plural. With the emergence of many new IT come the numerous opportunities to apply these technologies to business and gain competitive advantage. However, I agree with Carr that the competitive advantage afforded by each technology may not last long or sustainable. As shown by much previous research, one source of sustainable competitive advantage is the organizational know-how to manage and use IT. For example, it requires managerial skills to identify and timely invest in new IT of strategic value. In contrast, it only requires stupidity to lump all kinds of information technologies into one category and cut its spending altogether.

Yutaka Yamauchi: While the author provides insightful discussions as to how the strategic roles of IT have changed, there are several points that he seems to overlook. First, the article confuses two aspects of IT. On one hand, IT is simply a tool that workers use (e.g., electronic mail, web sites and data bases), which the author is mostly concerned about. To be sure, there is no longer much advantage of having an electronic mail system and a beautiful web page because everyone does. On the other hand, IT can be seen as a unique enabler by which firms can achieve what they could not without IT. This is what IT innovations should refer to. For example, when firms try to implement knowledge management systems, they seek not to simply have systems in place but to actually realize the effective integration of knowledge held by workers (and their work practices). Innovative design, implementation and use of IT enable such practices. This kind of IT is likely to be specific to the actual situation of the firm or subgroups in the firm.

Second, the author underestimates the difficulty of actually using IT. Why do so many CRM projects fail despite the fact that vendors provide a number of customized modules? Why do so many knowledge management systems end up not being used? Workers may reject the new IT
because it has some unexpected consequences to their work practices and political standing. What managers think are rational ways of doing work may actually hinder seen but unnoticed subtle practices that are crucial to get the job done. Even if IT is purchased as commodity, actual use is a complicated social and political matter. The capability of effectively using IT is a very important strategic variable, which I do not believe many firms have mastered.

These discussions, in hindsight, resonate with the author’s implicit claim. That is, IT itself does not provides any strategic value. The use of IT is what matters. The author accordingly concludes that we should be more defensive in spending on IT. This conclusion is valid only in so far as it advises managers not to spend in IT blindly but to spend wisely and carefully in order to realize the effective use of IT. Similarly, the author has a point in saying that once innovative IT has now become a commodity. Electronic mail, automated teller machines, statistical analysis package, and video conferencing are all familiar and taken for granted. Yet, IT will continue to change. It will change not only technologically but also in terms of how it is used. And if IT is commoditized, there will be more opportunities. As many people have broadband connection, there will be new opportunities for marketing and distribution of goods and services. If small sensors and IFID tags are cheap, firms can now deploy a large number of them. As opposed to the defensive strategy, firms can more actively innovate with IT.

Arnaud Gorgeon. In his article “IT doesn’t matter”, Nicholas Carr argues that IT, as an infrastructural technology, is not a strategic resource anymore. IT management, he suggests, should focus on cost, should minimize investment risks by taking a follower approach, and should pay attention to the vulnerabilities of IT systems rather than the opportunities they offer.

In his article Carr defines IT as “denoting the technologies used for processing, storing and transporting information in digital form”, what he calls infrastructural technologies or in strategic terms tangible resources. We know from strategy research that tangible resources are easily copied or simply bought, hence providing little strategic advantage. But, we also know that there are other sources of competitive advantage that are much harder to copy and rarely available in the marketplace. These are intangible resources, such as tacit knowledge, synergies or management know-how to cite but a few. Firms that invest in IT do invest in tangible resources, but when firms put their IT to work they build intangible resources that can be turned into powerful sources of competitive advantage.

In his article, Carr only discusses IT as a tangible resource, and on this basis his argument, that IT is not a strategic resource, is valid. Carr, however, forgets to tell executives that using IT is still not as straightforward as using electricity or the train. The struggle of many firms with SAP is a good example of this. It is in the use of IT, therefore, in learning how to use it effectively and creatively that firms build these intangible resources, real sources of competitive advantage. Carr’s new rules of IT management are thus incomplete. Firms shouldn’t just spend less, but should also better match their IT spending to their strategic needs. In their use of IT, firms should not follow but lead, looking for new opportunities to differentiate their work practices from those of their competitors. Of course, firms should not ignore the potential risks of IT, but they should also contemplate IT as a source of change, a means of improving what they already do better than their competitors.