

Some Thoughts on *IT Doesn't Matter*

By Nicholas Wybolt

Nicholas G. Carr's "IT Doesn't Matter" article that appeared in the May/03 issue of the *Harvard Business Review* has caused quite a fuss among the major IT constituencies – vendors, end-users, consultants, research and advisory services, and corporate IT functions. The reactions from corporate IT functions, vendors, consultants, and the research and advisory services have been predictably defensive. End users point their fingers knowingly – IT is too expensive, IT doesn't add value, so IT doesn't matter.

Everyone seems to be missing the point – Carr's article, while somewhat over the top in a number of areas, should serve as a wake-up call to the providers, influencers, and the users of IT. There's no value in being defensive or going on the offensive. Rather than focusing on the points of disagreement or on the contentious subject matter, we should agree with the *salient point* that *companies need to get better about managing IT* in order to minimize business disruption and reduce the total cost of ownership by improving the fidelity of IT purchasing¹ decisions. This is a shared, fiduciary responsibility of business and IT management.

If a CEO, CFO, or CxO somewhere threw Carr's article on my desk and screamed "IT doesn't matter," my response would be "Agreed! Here are some ideas about how we can do this and where we need your help to do it." There's nothing new here, but it is hard to do².

This paper presents some thoughts on Carr's paper³. First, some general observations and implications:

1. The "IT Doesn't Matter" model applies to all organizational commodities – Ubiquitous, standard, shared services such as Finance, Human Resources, and the like, are necessary to "keep the lights on" but otherwise provide no sustained competitive advantage to a company. Competitive advantage has to be sustainable. Building a competitive advantage based on a widely available, standardized resource is, at best, challenging. This is important because these are the organizations who perceive that they have a unique and valuable way to say, process invoices, requiring extensive and costly customizations to an ERP's financial modules. Cost savings and interoperability are thus compromised for the sake of what Carr refers to as "distinctiveness."
2. "Spending less" requires an acquisition / alternative analysis discipline that is lacking in many companies. For example, few businesses are able to make accurate (return on investment) ROI projections in a business case because they don't understand their extant business processes, can't measure the cost of doing business, and so on. This is because most firms do not have a clear understanding of how their business processes help them either make money or reduce costs. While many IT shops can compute the total cost of

¹ When referring to IT purchases or acquisitions, Carr uses the term *investment*, implying that the acquisition of a hardware or a software component is an asset that appreciates in value. This paper will use the term *purchase* when referring to the acquisition of hardware or software components or services.

² Managing IT to minimize business disruption or to reduce costs remains as evergreen a challenge as is delivering a bleeding edge web / AI / wireless / grid applications.

³ This paper was written assuming that the reader has actually read Carr's article, rather than a synopsis or discussed it with acquaintances over cocktails.

ownership (TCO) for an application or application alternatives, the initiative sponsor has to be able to place those TCO projections into the context of a business case, via an expected ROI delivered by the initiative.

3. Carr's directive to "Follow, don't lead" implies that the "sweet spot" is in the *Early Majority* or in the *Late Majority* of the *Technology Adoption Life Cycle*. One does not want to go first, but one needs a base level of IT competency to be competitive. A key point here is recognizing when an organization is below the base level and justifying the acquisitions to get to the base level (e.g., replacing a moribund Citrix terminal serving environment and outdated PCs with upgraded PCs, servers, and networks) – That is, meet minimal competitiveness criteria (or provide a minimal level of competency to stay in business). On the other hand, the *Law of Unintended Consequences* suggests that if everyone "followed," then only the vendors would "lead."
4. "Focus on risks, not opportunities" implies a renewed and emphasized importance of *service level management* and *enterprise management* skills, processes, and technologies in order to prepare for / avoid business disruptions. This, in turn, has implications on the openness and interoperability of business applications, the extent to which a company has a defined and managed and managed enterprise architecture, and some sort of governance model.

Because IT components are becoming *commodity factors of production* ("costs of doing business that must be paid by all, but provide distinction to none"), the types of components are less interesting than the business requirements (drivers) that motivated purchases of them. In other words, there's nothing proprietary about the identity of a company's IT components because they are *standardized*⁴ (e.g., everyone uses electricity, everyone uses TCP/IP). Thus, a primary criterion when making IT purchases is the extent to which a component cost-effectively assures required service levels.

Consider McDonald's Corporation – If one accepts Carr's statement "...the technology's potential for differentiating one company from the pack – it's strategic potential – inexorably declines as it becomes accessible to all." Then McDonald's history and on-going spending on bespoke point-of-sale systems is wasteful by any professional measure. McDonald's would be advised to stop trying to differentiate themselves via PoS technology and acquire front- / back-office store systems from IBM or NCR.

If one accepts Carr's analogy and conclusion that:

IT ... is a transport mechanism ... And like any transport mechanism, it is far more valuable when shared than when used in isolation ... The history of IT has been a history of increased interconnectivity and interoperability ... Each stage in that progression has involved greater standardization of the technology and ... greater homogenization of its functionality. For most business applications today, the benefits of customization would be overwhelmed by the cost of isolation.

Then the benefits delivered by a managed enterprise architecture framework and architecture discipline with respect to supporting Carr's conclusion, as well as supporting risk reduction, are tangible and important. Furthermore, the implications on familiar IT mantras such as *Buy vs.*

⁴ *Commodity* has a very precise economic definition that is *too precise* for the world of IT. For example, one does not trade in PC futures as one does for say, grain, or pork bellies. In IT, one deals with standards or standardized products.

Build or Adopt instead of customize go beyond the IT organization to the business (refer to #1, above). For example, businesses that customize ERP functions / processes compromise interoperability and cost savings for “distinctiveness” increase their risk exposure to business disruption, as well (e.g., the ability to easily accept ERP upgrades or share information with trading partners). In other words, *distinctiveness* is not the same as *differentiated* and, therefore, simply being different is not a source of competitive advantage.

One also has to be cautious of fomenting “one size fits all” approaches to solutions. It’s true that transportation is a given; however, depending upon when I want to reach my destination, how much I’m willing to spend, how safe I want to be, or what kind of experience I prefer, I might choose a different mode of transportation to best meet my needs – Air travel for a business meeting in Seattle or an SUV for the family vacation.

Carr contends that “...as for IT-spurred industry transformations, most of the ones that are going to happen have already happened or are in the process of happening” smells of the statement made by the commissioner of the US Patent Office in 1899, “Everything that can be invented has been invented.” Carr's statement is sufficiently broad and ill-formed that accepting it would be akin to committing industrial suicide. Even if nothing new were to come along, the improvements made to an existing technology (e.g., wired → wireless, WAN → VPN, FC SAN → iSCSI storage) alone will drive value. However, there are two cautions here:

1. As noted in the previous paragraph, the appropriate solution must be fit to the parameters of the problem – Microsoft® Access is great for managing the department’s stationary supplies, but lacks the fortitude to be used as the basis for a corporate data warehouse.
2. Business and IT must jointly ensure that opportunities to reuse existing assets have been thoroughly explored when considering alternatives. This has implications on the design or acquisition of IT components in terms of openness⁵ and interoperability.

Carr's observation that

...an IT disruption can paralyze a company's ability to make its products, deliver its services, and connect with its customers, not to mention foul its reputation. Yet few companies have done a thorough job of identifying and tempering their vulnerabilities. Worrying about what might go wrong may not be as glamorous a job as speculating about the future, but it is a more essential job...

Further reinforces the importance of element / systems / enterprise management skills, processes, and tools in order to keep the business operating at required service levels, such as common operational processes across platforms, networks, and storage. Ubiquitous access requires ubiquitous management.

The separation of essential purchases from discretionary purchases (or unnecessary or counterproductive purchases) requires more rigor which motivates and emphasizes the importance of acquisition / alternative evaluation in a defined, repeatable, equitable, and auditable manner (e.g., standard ROI models and thresholds) in order to reduce the risk of

⁵ In this context, *openness* refers to the use of, and adherence to, non-proprietary standards. More specifically, an open system is comprised of components with interface specifications that are fully defined, available to the public, and maintained by group consensus. The interface specifications cannot be available only to a select group of people / organizations who have some special interest. For a system to be truly open it is important for the component’s interface specifications to be of interest to a wide range of parties and not exclusively under the control of any single vendor.

business disruption – A governance model. The governance model should include a healthy dose of Occam's Razor and consideration of sourcing alternatives.

Carr's observation that "...companies continue to roll out across-the-board hardware and software upgrades ... Much of that spending, if truth be told, is driven by vendor's strategies" should be extended to include most any information technology acquisition and the research and advisory services (e.g., Gartner, META Group, et al). In addition to the vendors developing new features and capabilities in ways that force companies to spend money, the research and advisory services are constantly fomenting *the next big thing*, usually in such a way and in Moore's Law time frames, that companies never get a chance to analyze, implement, deploy, or operate – and derive value from – *the last big thing*.

Furthermore, because putting the next big thing into practice is hard work and because people are ambitiously lazy, companies never give the *current big thing* a chance to work before they are off chasing silver bullets or the next big thing. Thus, the voyage to the next big thing leaves a collection of stand-alone, un-integrated, and under-managed solutions in its wake.

This supports Carr's conclusion that "...companies have been sloppy in their use of IT." The rate of internally and externally motivated change means that companies do not, for example, integrate the last big thing into their enterprise management framework (risk exposure) or develop the skills or disciplines to cost-effectively manage the resource at required service levels.

Buyers are also unwilling to manage their vendors, regardless of products or services. Thus, they willingly accept irrelevant upgrades, new fee schedules, and the like, rather than seeking alternate suppliers. However, if companies fail to recognize the need to ensure interoperability, for example, and the architectural implications of interoperability, they will always be in a situation where the cost of the transaction to find an alternative vendor is outweighed by the cost to accept irrelevant upgrades and the like. As an IBM sales guy once said: "We won't lock you in to open systems."

"When a resource becomes essential to competition but inconsequential to strategy, the risks it creates become more important than the advantages it provides" suggests that IT components must be well-managed and IT purchases must be based on ROI (and sponsors held accountable to the ROI). This is a shared fiduciary responsibility between IT and business management. Thus, Carr's conclusions and recommendations:

1. The key to success, for the vast majority of companies, is no longer to seek advantage aggressively but to manage costs and risk meticulously,
2. Spending more frugally and thinking more pragmatically, and
3. Maintain that discipline.

Case Study – Adaptive Infrastructure?

Rather than develop storage management processes or perform capacity planning, one organization that took a *sledgehammer* approach (buy more capacity than you think you need) to storage management found that users viewed the available capacity as a *free resource* – "It's there, let's use it."

Storage management personnel became concerned as storage was consumed at a rate that exceeded the expected demand:

- They manually reviewed user storage profiles and visited with each user to ascertain needs or to reclaim storage
- They started creating large, "fake" files to create an illusion that there was less storage available to users

Storage management personnel were forced to create an ad hoc "free space" management process and assign dedicated staff to the process.

Require an over-arching framework for evaluating IT alternatives and purchases that considers ROI and service level management. Key IT assets to support this are a well-managed enterprise architecture, governance model, and the skills, processes, and technologies of enterprise management. Historically, however, many companies lack the staying power to maintain any sort of discipline – Discipline is boring. Discipline is hard. Discipline means accountability. Perhaps in the long run, IT really doesn't matter. But, while not a tangible competitive advantage, ensuring the operational excellence of shared services such as IT drives out costs and efficiencies which is an advantage.

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