GE, Dell, Intel, and Others: The Competitive Advantage of Information Technology

There's nothing like a punchy headline to get an article some attention. A recent piece in the *Harvard Business Review* (May 2003), shockingly labeled "IT Doesn't Matter," has garnered the magazine more buzz than at any time since the Jack Welch affair. The article has been approvingly cited in *The New York Times*, analyzed in Wall Street reports, and e-mailed around the world. But without such a dramatic and reckless title, I doubt the article would have been much noticed. It's a sloppy mix of ersatz history, conventional wisdom, moderate insight, and unsupportable assertions. And it is dangerously wrong.

Author Nicholas Carr's main point is that information technology is nothing more than the infrastructure of modern business, similar to railroads, electricity, or the internal combustion engineering advances that have become too commonplace for any company to wangle a strategic advantage from them. Once-innovative applications of information technology have now become merely a necessary cost. Thus Carr thinks today's main risk is not underusing IT but overspending on it.

But before we get any further, let's have a reality check. First, let's ask Jeff Immelt, the CEO of General Electric Co., one of the premier business corporations in the world, this question: "How important is information technology to GE?" Here's his answer: "It's a business imperative. We're primarily a service-oriented company, and the lifeblood for productivity is more about tech than it is about investing in plants and equipment. We tend to get a 20 percent return on tech investments, and we tend to invest about $2.5 billion to $3 billion a year."

Then let's ask Dell Corporation CEO, Michael Dell: "What's your take on Nick Carr's thesis that technology no longer gives corporate buyers a competitive advantage?" Here's his answer: "Just about anything in business can be either a sinkhole or a competitive advantage if you do it really, really bad or you do it really, really well. And information technology is an often misunderstood field. You've got a lot of people who don't know what they're doing and don't do it very well. For us, IT is a huge advantage. For Wal-Mart, GE, and many other companies, technology is a huge advantage and will continue to be. Does that mean that you just pour money in and gold comes out? No, you can screw it up really bad."

Finally, let's ask Andy Grove, former CEO and now Chairman of Intel Corporation, a direct question about IT: "Nicholas Carr's recent *Harvard Business Review* article says: 'IT Doesn't Matter.' Is information technology so pervasive that it no longer offers companies a competitive advantage?" Andy says: "In any field, you can find segments that are close to maturation and draw a conclusion that the field is homogeneous. Carr is saying commercial-transaction processing in the United States and some parts of Europe has reached the top parts of an S-curve. But instead of talking about that segment, he put a provocative spin on it—that information technology doesn't matter—and suddenly the statement is grossly wrong. It couldn't be further from the truth. It's like saying: I have an old three-speed bike, and Lance Armstrong has a bike. So why should he have a competitive advantage?"

So, basically, Carr misunderstands what information technology is. He thinks it's merely a bunch of networks and computers. He notes, properly, that the price of those has plummeted and that companies bought way too much in recent years. He's also right that the hardware infrastructure of business is rapidly becoming commoditized and, even more important, standardized. Computers and networks per se are just infrastructure. However, one of the article's most glaring flaws is its complete disregard for the centrality of software and the fact that human knowledge or information can be mediated and managed by software.

Charles Fitzgerald, Microsoft's general manager for platform strategy, says that Carr doesn't put enough emphasis on the "I" in IT. "The source of competitive advantage in business is what you do with the information that technology gives you access to. How do you apply that to some particular business problem? To say IT doesn't matter is tantamount to saying that companies have enough information about their operations, customers, and employees. I have never heard a company make such a claim."

Paul Strassman who has spent 42 years as a CIO—at General Foods, Xerox, the Pentagon, and most recently NASA—was more emphatic. "The hardware—the stuff everybody's fascinated with—isn't worth a damn," he says. "It's just disposable. Information technology today is a knowledge-capital issue. It's basically a huge amount of labor and software." Says he: "Look at the business powers—most of all Wal-Mart, but also companies like Pfizer or FedEx. They're all waging information warfare."

Case Study Questions

1. Do you agree with the argument made by Nick Carr to support his position that IT no longer gives companies a competitive advantage? Why or why not?

2. Do you agree with the argument made by the business leaders in this case in support of the competitive advantage that IT can provide to a business? Why or why not?

3. What are several ways that IT could provide a competitive advantage to a business? Use some of the companies mentioned in this case as examples. Visit their websites to gather more information to help you answer.