Focusing on Cost Management - the Window for Competitive Advantage is Open Only Briefly

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Contents

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1. Innovation and the cost of doing business

According to some experts, modeling humanity using math promises to be one of the great undertakings of the 21st century. Yahoo's chief researcher Prabhakar Raghavan who leads a team of 100 mathematicians believes there is a whole world of uninvented businesses and his team of subject matter experts will be amongst the first to develop better algorithms which are the critical survival to satisfy the curiosities and desires of many businesses. Mr. Raghavan understands the importance his powerful army of mathematicians represents in the future of many industries; however, he also knows that his army represents a business unit that needs to align its initiatives with business objectives and strategic goals. Mr. Raghavan's initiatives as well as many other business units providing technological services must focus on investments that provide a business value to help the business gain a competitive edge.

I believe there is a lot of potential for IT as a business differentiator. An army of 100 mathematicians who can provide a competitive edge through creativity is only a small example of what other companies have gained through the innovative deployment of IT. However, the study, design, development, implementation, support, and management of computer-based information systems represent the core functions of IT and the cost of doing business. In the article "IT Doesn't Matter" by Nicholas G. Carr published in the Harvard Business Review in May 2003, the author believes that IT management's key to success, for most companies, is to manage costs and risk meticulously.

2. IT Matters to Some

Nobody can argue with Nicholas Carr that information technology has become the backbone of commerce and that the core functions of IT have become available and affordable to all. Today, a small business has the ability to build an e-commerce website with value added products such as a virtual PBX, Toll Free Service, and even a Call Me Button which serves as a CRM solution. All these value added products and technologies are more affordable than ever before and a lot more businesses are pushing their boundaries to improve their market positioning and competitive edge. Nicholas Carr's article, "IT Doesn't Matter", can be misunderstood by many people as an opinion based on looking at IT with a very narrow scope. With that

said, please let me take my horse blinders off and provide an observation why IT matters to some.

In today's competitive marketplace there are many businesses offering the same product or service with the same baseline value. In order to achieve a competitive edge, businesses adopt value-added benefits. This additional value that the product or service has above the baseline is what differentiates a business from the rest. A business will always bring more to the table if they can add value, even if that means a higher price. As consumers, we do a cost/benefit analysis to ensure that the benefit outweighs the cost and some of this analysis is very subjective because everyone has a different definition of benefits. As a business owner, you want to make sure the value you are adding is considered beneficial by your customers.

As stated by Carr, the arrival of the internet has accelerated the commoditization for IT by providing a perfect delivery channel for generic applications. In recent years, the expansion of the mobile web, web analytics, virtualization, SaaS, and other infrastructural advancements in technology have provided value added benefits to some businesses. As I'm sitting here at Barnes & Noble, I'm able to use their free Wi-Fi to complete this assignment while drinking a Chai Tea Latte which by the way was rather pricey, but my cost/benefit analysis told me it is worth it.

Another example of value added benefits is the invention of the DVR. In 1999, Jim Barton and Mike Ramsay introduced TiVo to the world and what continues to be a digital video recorder for most consumers, it has transformed into a huge value added benefit for companies looking to advertise based on C+3 ratings (a mix of average live commercial ratings and three days of DVR playback). You can bet there is quite a bit of mathematics involved in analyzing DVR data from millions of customers and I believe an army of 100 mathematicians may not be enough to correlate all this information.

Web Analytics or the pure science of analysis is improving so rapidly because of infrastructural advancements in technology. Guardian Analytics is a privately held company that provides financial organizations with real-time risk management solutions.

Using proprietary models and strong analytics, their preventative anti-fraud solution performs ongoing monitoring and detection of risky online banking transactions. Google Analytics is another example of a value added benefit to a business that wants to deliver better-targeted ads, improve marketing initiatives, and create higher converting websites.

So, what was Nicholas Carr smoking when he titled the article, "IT Doesn't Matter"? Many of my colleagues found his article very disturbing back in 2003. Was he wearing horse blinders the whole time? I don't think Mr. Carr was wrong by making a comparison of IT as commoditized electricity and I'm sure he knew some of his readers didn't find any value added benefit in reading the article. Today, the intellectuals that believe IT matters and we should continue to invest heavily in "IT" are consulting firms, technology vendors, Infrastructure-as-a-Service (IaaS), Platform-as-a-Service (PaaS), and Software-as-a-Service (SaaS); or Cloud Computing solutions and their partners. As a security professional working for a forward-thinking organization, I hope one day they will see it for what it is.

3. The Mobile Web Revolution & Web Analytics 2.0

Mobile technology is revolutionizing the way we access information. Mobile devices are everywhere today and not having a cell phone in Sweden is tantamount to kicking baby seals. You just don't do it. So, how can a business find a competitive edge while focusing on cost management knowing this window of opportunity may close very soon? Well, businesses have strategic goals and objectives, but somebody has to find the flexibility and malleability to make it happen. Hui-Liang Tsai states that Information Technology can be used in many different ways to accomplish different business objectives, but also it can bring about numerous changes to make the organization more efficient and competitive. He adds that in the past, information technology supported a narrow range of transaction-intensive activities. But today, it is no longer possible to separate information technology from business processes. Basically, IT matters so much that it has become a business process for most organizations. According to Adam Arakem, "it facilitates and streamlines business processes, in fact

business processes have evolved around an IT infrastructure.

Some forward-thinking organizations look to reengineer business processes like Information Technology to provide cost effective solutions in this mobile web revolution. Mobile home banking, Mobile phone applications, and infrastructural advancements in mobile technology are some examples of this rapid growth. Bank of America provides their customers with mobile phone apps and access to a mobile phone version of their website while providing a multifactor authentication solution using SMS. The organization I work for will be providing a mobile banking solution this month and more companies are rethinking their strategies to include value added benefits by utilizing mobile technology as a perfect delivery channel. This reengineering approach mimics what Nicholas Carr refers to as the commoditization of IT by utilizing the Internet as delivery channel. According to AdMob, which claims it is the world's largest mobile advertising platform, mobile web and application use has doubled over the past two years. It is clear that mobile technology as a business process had revolutionized the way we access and use information; however, the value added benefit is mobile web technology as the result of reengineering IT. Information Technology is only a process that through proper cost management creates innovative value added benefits while the window of opportunity for competitive edge remains open.

Web Analytics 2.0 as defined by Avinash Kaushik is the art of online accountability and the science of customer centricity. Just like an army of mathematicians will satisfy the curiosities and desires of many businesses, web analytics measures valuable reporting and provides insights into website traffic to improve the competitive edge for many companies. Mobile web analytics is the result of the mobile web revolution and just another example of an infrastructural advancement in technology. Some of these new analytics technologies have been developed to be offered as SaaS or a cloud computing solution. In the end, whether the mobile web revolution is accelerating the commoditization of IT or packaging computing solutions, such as Web Analytics, is similar to a traditional public utility, it becomes easier to understand why Nicholas Carr believes that computing is moving towards the same centralized, utility approach that power generation did just over a century ago.

4. Commodity and Value Add

Is Carr simply asserting that the way IT was practiced in the past is no longer a competitive factor? It is evident that Nicholas Carr had a vision and that's why he wrote "The Big Switch: Rewiring the World, from Edison to Google". Mr. Carr concludes that businesses and consumers will switch over from our existing computing infrastructure to utility-supplied computing that provides processing and storage in-the-cloud. Today, this cloud computing alternative is attractive to many businesses because of its convenience, cost, and value added benefits.

Cloud computing is the future of IT and the window of opportunity is just beginning. Amazon Elastic Compute Cloud is just one service offered by Amazon Web Services. In a not too distant future, the utility-supplied computing will be a reality and most businesses will have a presence in this cloud whether is renting storage, running instances, or hosting computer applications. Information Technology will be the business process needed to facilitate the study, design, development, implementation, support, and management of cloud computing systems to provide a competitive edge. The effective reengineering of this business process will result in a whole world of uninvented businesses.

5. Reengineering IT

According to Hui-Liang Tsai, the major role of information technology is to facilitate the design of new business processes that support critical decision-making tasks that enable managers to attain the value added benefits of business transformation. In order to achieve this goal, reengineering information technology is paramount. As more businesses increasingly make a decision based on costs, efficiency, and convenience, and choose the web-supplied, grid-like, cloud computing alternative, the real window for competitive advantage is to reengineer IT.

The "I" in IT is for infrastructural technology that revolutionizes the way we access information today. Reengineering IT to become this essential business process is an opportunity businesses need to focus on now. IT matters as an infrastructural technology for forward-looking Cloud computing providers and their partners, but

what matters in many organizations is that a business process is in place to address the strategic goals and business objectives. The new IT needs to be ready for future challenges and provide process efficiency, cost management, and value added benefits as its new core functions. As stated by Nicholas Carr, when a resource becomes essential to competition, but inconsequential to strategy, the risks it creates become more important than the advantages it provides; therefore, data storage, data processing, and data transport should be functions for Cloud computing.

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