

Technology Paradise Lost

By Erik Keller

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New information technologies developed over the last twenty years have significantly advanced the way corporations do business. During this period, corporations have relied on these new technologies to reduce cost and/or enhance revenues. While these new technologies have helped businesses become more efficient, the quest to obtain these new technologies created an “irrational exuberance” for Information Technology (IT)-based spending during the last decade. In Erik Keller’s book, *Technology Paradise Lost*, Keller explains the wild IT spending during the 1990’s is coming to a halt and future IT spending will be more efficient. Keller believes the companies who can efficiently cut IT spending will gain a competitive advantage over companies who continue to spend money on unnecessary technology. Keller gives ideas to companies on how they can efficiently cut IT expenses and use their existing technologies more productively. Conversely, Keller also gives ideas to IT sellers on what they can expect as a result of this new corporate mindset and how they can better serve their corporate customers. This book is about increasing the effectiveness of IT while at the same time decreasing IT spending. The goal of this book, as Keller states, is to help anyone whose livelihood depends on the IT industry to navigate the difficult times ahead.

Erik Keller has been in the IT industry for over twenty years. He began his career as a technical journalist reporting on many different technologies ranging from robotics to car

manufacturing. In the last decade, Keller has worked as a consultant with Gartner Inc. Keller, known as a highly renowned consultant and speaker, has worked with over 1000 companies including many on the Fortune 500. As Keller spent time with buyers and sellers of technologies during the booming economic times of the 90's, Keller saw many wasteful technologies implemented and many technologies that ended up failing.

Since the 1970's corporate IT spending has accelerated as new technological milestones are developed. IT spending has always depended on what the new "in thing" currently is being introduced in the market. For example, in the 1970's it was microcomputers, in the 80's it was the PC, in the early 90's it was new client server systems, and from the mid to late 90's Internet applications and Y2K updates. Companies have always wanted to be the 'first on the block' to have these new technologies no matter what the cost, for fear of not being technologically current up to date. Most executives usually listened to their IT departments and went along with whatever technology was recommended to them because are not technology savvy. As Keller explains in his book, this way of thinking is about to change. Instead of corporate executives being passive and listening to what IT can do for their companies, executives are being more pro active and telling IT what technology is going to do for their companies. Keller predicts that the next new thing will not be a new thing at all, but a new way of thinking. As revolutionary as this may sound, Keller is not the only one thinking this way. An article written by Nicholas Carr entitled "IT Doesn't Matter" in the Harvard Business Review goes a bit further than Keller, by arguing the importance of technology is diminishing because corporations are looking to spend IT dollars more efficiently instead of purchasing the newest IT products.¹

Keller compares the decline of IT spending with the collapse of the Antarctic Larsen B Ice Shelf. A single event did not cause the collapse; instead it was caused by many tiny changes

¹ Nicholas Carr, *IT Doesn't Matter*, Harvard Bus. Rev., May 1, 2003, at 27.

over time. Keller believes that IT, even during its heyday, was experiencing tiny changes such as missed revenue targets, corporate IT layoffs, and overall malaise in the IT industry. In predicting IT spending will continue to decline, Keller points to certain factors such as, the cost of IT personnel in other countries is considerably less than in the United States, technology budgets are being increasingly scrutinized, expensive software investments are being abandoned for approaches costing less than one tenth as much, and the fact that technology and software companies are giving away free products that deliver the same quality as more expensive systems.

The substantive portions of the book begin by showing the reader why IT projects in the past have not lived up to executive expectations and have cost companies more than originally planned. A large part of this problem was that company executives never fully understood the details of installing and managing a new system before deciding to buy a new technology. Supporting and customizing a new system is usually much more expensive than the cost of the actual software. Additionally, companies felt pressure to implement a new system before competitors, causing companies to make hasty decisions without exploring all options. Keller believes companies took these passive approaches because it is as easier to accommodate software for business processes, than it is to change business processes to accommodate software. Keller gives several suggestions to buyers of IT in order to get the most out of their IT. Keller also gives advice to sellers on how they can better serve customers with this “new way of thinking.” Most of Keller's suggestions seem obvious, but as Keller contends, they are not being performed; costing companies millions of dollars in wasted technology systems.

Keller believes that a misconception of IT productivity has led companies to engage in overspending on IT projects. An important observation pointed out by Keller is that technology

also includes a convenience factor. This means that some systems that are implemented may make business processes easier and more convenient but not necessarily more productive. This is a problem because many companies gauge the success of an IT project based its productivity. When the project does not show an acceptable return, the project is abandoned and a new project is undertaken. This stems from the belief that an increase in technology will equate to higher profits. Keller warns companies with these misconstrued beliefs, that companies must not equate more technology with higher productivity. Keller cites to several other sources for concerning IT and its impact on productivity, most notably, the Federal Reserve Board² and the National Bureau of Economic Research.³

The continuous spending on new IT projects (with the belief that more IT will increase productivity) and the need to have the newest IT on the market have created “IT junk yards.” Keller suggests that companies should take a careful inventory of all software, hardware, servers, etc. and evaluate what these once believed to be dead systems might be able to do for the future. Keller believes a lot of companies purchased IT systems for specific functions and do not realize the full capability of the systems they previously or currently use. Careful asset management is a way companies can reduce future IT costs as well as recapture some of the once thought lost benefits of the past.

Keller strongly believes that off-shoring is a big way companies can lower IT costs. Many nations such as Russia, China, and India are promoting a low-cost, high labor pool that can be tapped into and save companies as much as 50% in IT labor costs. This is the result of

² Stephen Oliner and Daniel Sichel, *Information Technology and Productivity: Where Are We Now and Where Are We Going?* Federal Reserve Board, available at <http://www.federalreserve.gov/pubs/feds/2002/200229/200229pap.pdf> (May 2002); Dale Jorgensen and Kevin Stiroh, *Raising the Speed Limit: United States Economic Growth in the Informational Age*, Harvard University and the Federal Reserve, available at http://www.newyorkfed.org/research/economist/stiroh/ks_grw.pdf (May 2000).

³ Robert Gordon, *Does the New Economy Measure Up to the Great Inventions of the Past?* National Bureau of Economic Research Working Paper 7833, available at <http://papersdev.nbet.org/papers/w7833> (August 2000).

countries pushing for higher education with a focus on technology and the advancement of communications IT which has led to remote work sites. Once remote, it doesn't matter whether a programmer or support technician is in India or the United States. Most large companies have already found that high quality IT solutions exist in countries such as India, and have started to shift IT jobs and software developing projects to these countries. Keller warns that problems could arise by relying exclusively on offshore services but concludes that if the proper mix of offshore and in-house staff is balanced, along with strong management of the offshore services, companies will find large cost reduction in IT costs without sacrificing convenience or quality.

Keller concludes his book by describing effective ways to cut the IT budget, when taken in conjunction with the above material, will get the company to what Keller labels the "path of profit."⁴ In cutting IT budgets, Keller explains that the number one reason for the excess spending is a lack of financial analysis. This lack of analysis is caused by IT groups ill-prepared to justify their expenditures and company executives not requiring them to justify their IT spending. Keller predicts that many companies can reduce their budgets by simply evaluating IT spending and the benefits that will be realized by the new technology to be implemented. Keller sees tremendous savings in all phases of corporate IT including, hardware, software, labor/internal costs, and services. In summary, it just simply goes back to basic responsible spending.

Responsible spending, Keller argues, will put companies on the path of profits. The four paths described in Keller's book include the paths of profits, propaganda, problems, and pennies. While all of the paths except for the path of pennies, call for the spending of IT dollars, only the path of profits effectively balance price and productivity carefully. The path of problems and propaganda both increase IT spending, more so than the path of profits, but do not create as

⁴ Erik Keller, *Technology Paradise Lost*, 170-185 (Tiffany Taylor ed., Manning Publications 2004).

much business benefit as the profit path. The path of pennies is a stagnant path requiring little IT spending but not creating any business benefits. Keller admits that the path of profits is the toughest path, and he gives examples of two companies (Harrah's and JetBlue) he feels are on this sacred path. Keller believes these two companies are on the path of profits because they have mastered and properly meshed Keller's three C's of cost cutting; capacity, capital, and cleverness.

In conclusion, Keller predicts the companies who do not make a commitment to stop wasteful IT expenditures will not be able to compete with those companies that do. These new commitments will change the way companies buy future technologies and also change the way IT sellers develop, market, and sell their products. If all goes as planned in Keller's book, IT will continue to innovate, however, the innovations will promote efficiency and cost reductions instead of promoting wasteful and excessive spending.

Overall, the book was well written and gives fairly descriptive ideas on how the IT environment is changing. While the book has little legal value, anyone who has an interest in the technology field will appreciate this book. The book provides some nice illustrative graphs and charts, but most of the authority comes from the author's own experiences and can really only be critiqued by someone within the technology field with experiences far beyond my own. I would recommend this book to those who work or whose livelihood depends on the technology field. The book will also be of some value to business executives who have control over IT systems. Besides the technological savvy and certain business executives, the book has little to no entertainment value, and would probably be of no interest to the common reader.