Book Review

Gates, W., (2000). *Business @ the Speed of Thought.*

BILL GATES — THE DIGITAL AUTHOR

Bill Gates' latest book, *Business @ the Speed of Thought*, is a practical book for managers that will walk them through the opportunities based on information technology. This book will allow managers throughout the world to prepare for and get the upper hand in the knowledge age.

Being a visionary in an age of mainframes, where many could not grasp his vision of *"one computer at every desk and in every home"* seems only to have encouraged him more. Writing software for the first personal computer, the Altair 8800, was the first step in founding Microsoft. The breakthrough however, was the contract with IBM in which Microsoft would deliver the operating system for the first PC based on standard components; Microsoft would license to IBM under the same terms as an author would to a publisher.

The production of a PC based on standard industrial components would forever change the way computers would be used. The price of a PC dropped as an effect of this production strategy, but additionally so-called PC clones, which were PC's manufactured by IBM's competitors using the same standard industrial components, started to emerge. These PC-clones also needed the right to "publish" Gates' work. Today Microsoft is the leading provider of operating systems in the world…

Bill Gates is in essence a digital author; but one could wonder why he would be trading the time where he could be writing successful software for time writing books?

One answer for this could be that Bill Gates is an adventurer; for inspiration Bill Gates has been on educational vacations to Africa and South America. While in Brazil he studied biochemistry and in Africa he studied evolution. Another answer could be that Bill Gates sees himself as a visionary artist. This could be inspired by Leonardo da Vinci, whom he believes is one of the most interesting people who have ever lived, according to Jeanne M. Lesinski (Lesinski, 2000, p. 74). Or it could be from the perspective of a management guru, fuelled by the inspiration of the revolutionary industrialist Henry Ford; Bill Gates has a picture of Henry Ford in his office.

Regardless his motivation, Bill Gates has written yet another book surely to reach the boardrooms across the world.

Business @ the Speed of Thought

The book is about how information technology will shape the business environment as well as society as a whole. The impact of information technology is, according to Bill Gates, going to create winners and losers. The winners will be those who adopt information technology as a digital nervous system that allows information to flow through the organization to the right people. A digital nervous system will alert organizations to react to changes in the environment and allow them to take advantage of it.

Bill Gates attempts to improve organizations' responsiveness to changes by allowing information and knowledge to be used throughout the organization, in other words doing business at the speed of thought. The main thesis of the book is that information should flow through an organization, it should be readily available to those who need it, and it should ideally only be "touched" once. By allowing an organization to do this, it will be able to respond quickly to changes. Bill Gates states "If the 1980's were about qual

ity and the 1990's were about business process reengineering, then the 2000's will be about velocity." (Gates, 2000, introduction) In the world of velocity everyone within an organization should be allowed to work with information that flows through the organizations' digital nervous system. This nervous system is a number of computers through which the information will be able to be "touched" once, e.g., keyed in, then viewed and analyzed in the context in which it is relevant.

In order for the reader to take the words of Bill Gates seriously, it is important to adopt his vision of the future organization. Bill Gates refers to the current age as "the knowledge age", which is crucial for grasping the necessity of the digital nervous system. In the knowledge age, any organization is highly dependent on knowledge; this is basically the key competitive asset of any organization. The assumption is that competition is global, thus production facilities, cheap workforce, brand and other assets, are more or less given for all the companies competing. Information is the facilitator that allows companies to monitor, position and invent these assets (Gates, 2000, p. 2).

The fact that Bill Gates gives a lot of insight into the Microsoft organization is interesting in itself; he lets the reader in on details such as his management philosophy in terms of meeting practices and information sharing. If there are more than four people involved in a meeting chances are, that this is a consequence of poor utilization of the digital nervous system.

Another interesting story from the "gut of Microsoft" is the history about how the "Internet tidal wave" came, and how Microsoft managed not only to steer clear of it, but, to conquer it! "First of all, we were not as oblivious to the internet as it might have seemed to outside observers" (Gates, 2000, p. 163), regardless of this statement by Bill Gates, the story about how both development activities were reprioritized and the media was alerted, is a legend in the information technology industry. This is exciting reading for anybody that has been involved in a strategic planning process; and it demonstrates just how fast it *can* be done…

The major parts in which organizations can excel, using a digital nervous system, and the lessons learned in this book are:

E-Commerce
According to Bill Gates, the Internet will change everything (Gates, 2000, p. 61), it will facilitate companies in different distribution strategies, it will reduce prices by eliminating the middleman and it will give new possibilities for customer support. The key for companies is to acknowledge the internet as a factor that will change everything, companies should ignore the fact that many companies failed in the first e-commerce wave; this is simply a matter of people expecting the change slightly too early.

Data analysis
The ability to slice and dice through any key figures is an ability that has already given Microsoft competitive advantage; Bill Gates explains how he has been able to look as far down into details as restaurant bills, and how he and his managers are able to dazzle middle managers by knowing their key figures into detail. This is quite impressive to hear from an organization as big as Microsoft.

Electronic Workflow management
The idea is that information should be "touched" as few times as possible in order to create the highest efficiency. Bill Gates explains how the basic information from the pension plan in Microsoft is used in multiple issues during the enrollment of an employee, thus reducing the time spent filling out forms significantly and increasing the quality of data as less manual input is needed.

Knowledge management
Raising the corporate IQ can be done using information technology. Essentially the technology will allow experts to collaborate more frequently, since email and Internet access will reduce time cycles and

geographical obstacles. Bill Gates exemplifies how this has been done at Boeing; in this case he also stresses the point that a company shall never lose the ability to be visionary. He uses the example of how Boeing leapfrogged McDonnell Douglas by prioritizing the jetliner without even having one order. As another example of collaboration that would not have been as efficient — or even possible — without the Internet, Bill Gates gives the example of how the human genome was mapped.

E-mail

A remarkable note is that Bill Gates stresses the e-mail as one of the core components of sharing information throughout organizations. In other words, the basic tool for stepping into the information age is at the tip of the fingers for practically any organization in the western world today! When asked by customers what they can do to get more value out of their information systems and foster collaboration, he answers "E-mail" (Gates, 2000, p. 177).

Bill Gates believes that e-mailing is a tool to flatten the organization and shorten the cycle time from occurrence to action, but another interesting observation is that e-mailing turns middle managers from information filters into "doers" (Gates, 2000, p. 176).

Predicting in hindsight?

Having reviewed the book from an objective standpoint, one could now take a critical approach to the information brought forth.

In the information technology industry, Microsoft has been criticized for not foreseeing the Internet spreading, thus not making it a priority. Bill Gates can't help mentioning that they might not have been a forerunner, but that they did not ignore the Internet as much as it might have seemed from the public. At the end of the millennium, Microsoft and Bill Gates have, by both action and this book, certainly changed their priorities.

In the book Bill Gates recalls that the priority above all was to finalize the release of Windows 95; the Internet was a second priority. Looking back in hindsight the priority was not that bad from a Microsoft perspective; the release of Windows 95 and the follow-up with the updated Windows NT 4.0, that had the same user interface as Windows 95, effectively killed the idea that IBM's operation systems OS/2 would ever rebound. In conjunction with this move, Microsoft succeeded in gathering the internal knowledge already residing internally and launching it as the Internet Explorer web browser, again with significant short-term agony to competition.

One could argue that Microsoft was not the forerunner in terms of externally promoting the idea of the internet and the interconnected future back in 1995; however the rapid reaction and the fierce blow into the market in two segments within one year, also account for the reason to tell the story in this book. The historically flat organization of Microsoft is probably what led to the need for a digital nervous system internally. The lessons learned and the success of Microsoft in the scenario of 1995 could arguably be sufficient reason for Bill Gates to write the book.

A personal touch

Having read about Bill Gates, I feel that I should share one of my personal experiences. In the summer of 2002, we had just completed half a year of hard work to enter Microsoft's Data Warehouse Alliance. During this process we received significant help from Microsoft, and I decided to write an email to Bill Gates as an experiment; I wanted to see just how interconnected Microsoft was.

Within two days, one of the Microsoft employees asked me if I had sent an email to Bill Gates; he told me that the mail that had been forwarded from Bill Gates to the Danish Microsoft office, it had been circulated to the employees and this employee in particular had received an acknowledgement for his work.

I believe that this example shows just how fast an organization like Microsoft responds using its own

digital nervous system. Additionally, I think it tells something about the Microsoft management style, action is swiftly taken and there is not a long virtual distance from the top executive to the engineer in the field. Although this is just a single incident, it tells me that Bill Gates is certainly taking "his own medicine" — and I can't help thinking that according to Bill Gates, bad news would have traveled even faster!

Being global but still acting only locally?

A minor criticism of the book would be that it tells little about the global impact of the knowledge age. Information technology will change the environment in which the companies will be doing business, in addition to the change within the companies themselves. Some have argued that information technology is a major facilitator in the internationalization of financial transactions, thus information technology could be the vehicle for bridging the global prosperity gaps over time.

Bill Gates does address this slightly in the knowledge economy in an example of the implementation of information technology to "Lift the skills of all citizens" (Gates, 2000, p. 393). Although Bill Gates states that "Schools need to level the playing field with access to the internet to help close the gap between the *haves* and *have-nots*" (Gates, 2000, p. 403); his examples, outside the economy of the United States and Europe, are limited to briefly mentioning India and Latin America.

The interconnected world will mean that governmental control will decrease since information technology interconnects the world; no single nation will be able to legislate on the huge amount of international transactions: financial, criminal, intellectual and others. This lack of governmental control effectively could leave no other option than a global market economy without any regulation, unless a regulatory body with global reach is formed. Some may argue that no regulation is necessary, but no-one can claim to have the full perspective of such a situation since it has never been seen…

What would happen if intellectual property rights ceased to exist — or what about no legislation and no monitoring of conglomerates conducting unfair competition in the market?

These questions are impossible to answer concretely, but sadly the world has at least experienced the impact of international terrorism. The attacks on the United States on September 11th 2001 will live in many people's mind for many years, as a point in time when we recognized just how much damage a few madmen can do in our modern society. This could be at least one example of why we need a regulatory tool in the interconnected world of the knowledge age.

Could it be that Bill Gates only acts locally i.e. United States and Europe and that in his excitement, he loses the larger perspective of technology?

In this book, he seems keener on writing about doing business in the knowledge age than about reducing the gap of technology among countries. Bill Gates does not leave the developing countries out; he mentions an opportunity to leapfrog the investments in education made by most western countries by adopting new methods of learning and education. However, this opportunity for sharing information globally in order to prevent the developing countries from falling too far behind is not described in detail. As such, he does little to draw a holistic picture of the future; he appears much more focused on showing how technology will impact business life today with little emphasis on the long-term consequences.

In his role as a management guru of the knowledge age, it is obvious that Bill Gates cannot cover all aspects in one book, and regardless of this priority, he makes it clear that information technology is a powerful sword for change today and in the future. Additionally, many of the examples and benefits achieved by enterprises can be used as learning tools for governments and global organizations as well.

Based on his actions, Bill Gates also indicates a holistic perspective when addressing the information technology gap as critical. He donates money for PC's to poor neighborhoods as well as encouraging teachers to adopt computers into the classroom and integrate them with the learning process.

Being a visionary and a respected person, it would be an interesting though, should Bill Gates decide to dedicate a book to the subject of the global perspectives of information technology in the knowledge age.

Conclusion

This book is important for two reasons: first of all since information technology will change the way organizations will work in the future, this will impact both businesses and governments. Ignorance of the effects could be a matter of life and death, or at the minimum a matter of use or abuse of opportunity.

Secondly, the fact that a man like Bill Gates, one of the most influential people in business, takes time to tell a story is most likely reason enough in itself for many people to read it. By predicting something, that many people will read and consider, could ultimately make this book fulfill its own prophecy.

This book or a book on the same subject is, in my opinion, a "must read" for any manager. Undoubtedly information technology will change the ways we do business. Reactions based on the review guidelines of this book could be the starting point for an organization in taking advantages of the potential of the future.

The positive approach to information technology and the importance of how it can and will shape the way to do business must not be ignored, in saying this I do agree with Bill Gates that the 2000's is and will be about velocity. This is based on the arguments of this book combined with my personal experience in the business intelligence field. The book appears right up this alley, and it highlights issues from the strategic level, yet gives a hands-on perspective so business managers can have the greatest benefit from it.

Having read about Bill Gates excitement for e-mail as well as having personally tried Microsoft's efficiency by the use of e-mail, it is not hard to guess why Bill Gates put an @ in the title.

In my opinion, this book achieves its goal of teaching managers the importance of a digital nervous system. My only concern is, that knowing about the causes that Bill Gates is involved in, along with much of the information of his biography; one can only assume that he is aware of and caring for the opportunities and threats of the global digitalization, thus I would hope that he will cover this in the short future. Recognizing that this has not been the primary focus of this book, I would like to see Bill Gates or a person just as known and recognized doing so. This would both be a natural progression to this subject, a book worth reading and needing to be written…

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