

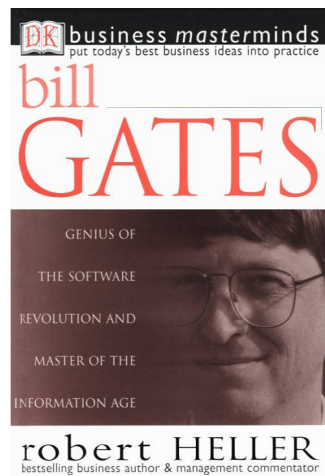
BusinessSummaries

WISDOM IN A NUTSHELL

PRESENTS
INSIDE THE GURU MIND SERIES

Bill Gates

Genius Of The Software Revolution And Master Of The Information Age



By
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Bill Gates

Forming Alliances: The Key to Success

In the early years, Microsoft needed IBM more than IBM needed Microsoft. As IBM sought ways to exclude “clones” from the PC market, Gates protected his partnership with IBM by co-developing OS/2 and offering IBM the successor to MS-DOS, an operating system called Windows.

“We’d lost the chance to make Windows and OS/2 compatible, and because we’d lost the struggle to make OS/2 run on modest machines, it only made sense to continue to develop Windows.”

- The Road Ahead

IT Changes Absolutely Everything

Entering the Web Race

Miscalculating the Popularity of the Internet

When the first website was launched in 1993 and Netscape Navigator was introduced to the world, Bill Gates did not foresee the impact that the Internet would have on consumer behavior. Gates had correctly predicted that the presence of the PC in every home and the routine use of e-mail, but he had not anticipated the pace at which the change would occur. By 1999, the quasi-monopoly of Microsoft was threatened with the emergence of new software, hardware and communication standards.

Gates comments on the value of the Internet, “the ability to find information and match people with common interests is completely new...The Internet creates a new universal space for information sharing, collaboration, and commerce.”

Changing Workstyle and Lifestyle

Predicting Technological Advances

Gates believes that there are technological breakthroughs or “inflection points” that dramatically change the way people work and live. He predicts that the next “inflection point” will be the portability of the Internet, when “everyday devices such as water and electrical meters, security systems, and automobiles will be connected...reporting on their usage and status.” In the realm of mass media, the integration of digital television with other digital data will usher in the use of smart agents (software that pre-selects television programs), targeted advertising and sales promotions, and direct Web access. Finally, limitations such as the lack of bandwidth and common standards will be overcome in the next decade.

Bringing People Together

Creating a Customer-centric World

Gates believes that the Internet's purpose is to provide universal communication. Rather than causing "society to fly apart," the Web brings people with common interests together, to form communities.

Gates' believes that people will follow the same interests but the Internet provides a better way of pursuing these interests. Online shopping, for instance, offers an infinite choice of products, services and modes of delivery. The end-result is time-savings for the customer. The Web has, therefore, led to the creation of "a true-customer-centric world."

Developing a DNS

Making Real-Time Decisions

Gates refers to DNS (digital nervous system) as the ideal business system. It consists of "digital processes that enable a company to perceive and react to its environment, to sense competitor challenges and customer needs, and to organize timely responses."

The Key Digital Business Applications

1. Replacing paperwork with digital text
2. Facilitating group work by enabling teams to use the same data simultaneously
3. Providing up-to-minute information about sales and customers to improve responsiveness
4. Facilitating relationships with business partners

Changing How Companies Work

Focusing on Core Competencies and Customer Needs

Companies are evolving to meet the needs of a market where "consumers are demanding faster service, stronger relationships and personalization." Many companies are already making the fundamental management changes that Gates predicts:

- Focusing on their "core competencies" and outsourcing everything else to outside suppliers
- Maintaining a small central core of people, and employing others as and when required
- Expanding rapidly and even globally from small or medium-sized bases
- Escaping from geographic constraints by transferring work to where it is best and/or most economically done

- Refocusing all processes on the customer, and constantly mutating to meet changing markets and competition
- Increasing the pressure to shorten cycle time and increase the speed of all other processes

Some consequences of these business changes are an increase in freelance employment, exportation of jobs, increasing specialization, and lower prices due to improved efficiencies.

Currently, more time is spent coordinating business processes than actual production. The Internet and an excellent internal information system will cut coordination time and will shift the battle from products to customer services.

Embracing Constant Change

Evolve or Die

Previous to the Internet Age, industry change was characterized by short periods of upheaval and long periods of stability. Today, our environment is in a state of constant change.

The 1998 Asian financial crisis is an example of how digital interconnection among the financial players can instantly affect different markets. Gates predicts “digital interconnections will soon exist for all markets” such that “any downturn or upturn in a major market creates overnight reverberations in other markets.”

Gates does not see any downside to the digital age. The key issues are “how we ensure access for everyone and how we protect our children.”

Putting Ideas Into Action

- Form teams able to use the same data simultaneously.
- Combine hardware and software for accuracy, immediacy, and richness of information.
- Meet customer demands for faster service, stronger relationships, and presentation.
- Focus on “core competencies” and outsource everything else to outsiders.
- Co-ordinate work to radically reduce time spent on production.
- Streamline and modernize to get the full benefit of technology.
- Choose right now to follow the emerging digital trends.

Building a Knowledge Company

How Learning Organizations Work

Mastering the Five Disciplines

Microsoft can best be described as a “learning organization.” According to Peter Senge, a professor at the Massachusetts Institute of Technology and author of the Fifth Discipline (1990), learning organizations are characterized by five disciplines:

- ❑ Personal Mastery. Expecting people to develop themselves to meet their own objectives, and those of the company, which is organized to encourage that personal effort.
- ❑ Mental Models. Developing the right mind-set to guide actions and decisions.
- ❑ Shared Vision. Commitment of all members of the organization to its aims and its ways of achieving those objectives.
- ❑ Team Learning. Exploiting the fact that group thinking is greater than the sum of its individual parts.
- ❑ Systems Thinking. Understanding that actions and decisions cannot be isolated, but have ramifications throughout the organization.

Increasing the Bandwidth

Bringing Great Minds Together

Using a metaphor taken from the data capacity of a communication system, Gates popularized the term “bandwidth” to describe human intelligence. He believes that the greater the human “bandwidth” he employs the stronger the company becomes. Also, Microsoft headquarters in Washington maintains the appearance and atmosphere of a university campus to bring out the best work in its employees.

Hiring the best and best-trained brains, maintaining an environment conducive to creativity and idea generation, and providing a system to share and transmit ideas are what make Microsoft a true “knowledge” company.

Hiring the Super Smart

Attracting Top Talent

Gates believes that the success of an employee at Microsoft depends more on hiring than on subsequent experience. He considers hiring those who possess all of the following attributes:

- Ability to grasp new knowledge very fast
- Ability to pose acute questions instantaneously
- Perception of connections between different areas of knowledge

- At-a-glance “linguistic” ability to interpret software code
- Obsessive concern with the problem on hand, even when away from work
- Great powers of concentration
- Photographic recall of their work

Writing software requires intelligence, but unless the software works in practice, it is useless. Gates hires people who possess both the intellect and pragmatism to write and foresee the practical uses of software.

Deploying the Best Brains

Allocating Sufficient Resources

Despite Microsoft's ability to attract top talent, the company experienced technical failures such as problems with early versions of Windows and the near fatal flop of Windows NT. Thus, hiring the best is not enough. Effective deployment throughout the organization ensures that talents are put to good use.

In spite of its campus-like setting, Microsoft is a commercial enterprise, and Gates is primarily interested in hard results. As a rule, Microsoft has deliberately sought to hire fewer people than it needs and follows the formula “n minus one” when deploying people, with its attendant risks. While deploying too much manpower is unwise, allocating too little can be counterproductive, leading to overwork and over-stretch.

Sharing Knowledge

Working Smarter

A company with a high corporate IQ shares information widely and enables its employees “to build on each other's ideas.” It has a store of information, which is easily mobilized by teams that work with a common purpose.

Gates believes that “the ultimate goal is to have a team develop the best ideas from throughout an organization and then act with the same unity of purpose and focus that a single, well-motivated person would bring to bear on a situation.”

With respect to the role of the leader: he must motivate knowledge sharing and teamwork via rewards and recognition.

Managing Knowledge Effectively

Managing Data and People

“Knowledge management is a fancy term for a simple idea. You're managing data, documents, and people's efforts.” Four areas where knowledge management can be applied are in planning, customer service, training and project collaboration.

One example in the area of customer service is InfoDesk, a Web site that answers 90% of customer inquiries in two days. Technical knowledge, which resides with the product groups, becomes easily accessible to customers. Another example is Microsoft's online training site, where employees search, receive a notice of availability and register in different courses.

Creating a Collaborative Culture

Nurturing Team Spirit

Technology plays a crucial role in energizing the workplace by making it possible for Microsoft employees all over the world to be in touch with one another. When a "critical mass of high IQ people" share experiences and work together "the energy level shoots way up." Such an atmosphere nurtures new ideas, encourages the less experienced employees to contribute, and gets the whole company working "smarter."

One characteristic of the Knowledge Company is easy data storage and access. At Microsoft, information is stored and shared by requiring consultants to post their technology solutions on InSite, a central Web location.

In addition, an incentive system must be in place. Gates regularly reviews the customer database provided by the sales teams, which is "the biggest incentive...to keep our customer database up-to-date."

Investing in Intellectual Capital

Managing Change

Gates defines intellectual capital as "the intrinsic value of the intellectual property of your company and the knowledge your people have," and it is the core of the IT industry.

Microsoft is an example of how management must change to support the three types of intellectual capital:

- Human – individual powers and resources
- Structural – accumulated knowledge and know-how of the organization
- Customer Knowledge

Because computers excel at repetitive tasks they have replaced people in the workplace. Thus, employees must evolve from "a cog in the machine" to true knowledge workers by managing processes and making optimal use of the digital information at their disposal.

Raising the Corporate IQ

Building Digital Solutions

There are four ways to raise the corporate IQ:

1. Establishing an atmosphere that promotes knowledge sharing and collaboration
2. Prioritizing the areas in which knowledge sharing is most valuable.
3. Providing the digital tools that make knowledge sharing possible.
4. Rewarding people for contributing to a full flow of knowledge.

As a consequence, the company will enjoy savings due to lower R&D costs. A high corporate IQ also shortens the time needed to launch a product, improves the quality of new product development and reduces the incidence of failure.

Maintaining Market Control

Defending Your Position in the Market of Ideas

Microsoft stores its own mistakes as part of its intellectual capital with the end in mind of learning from past failures. Gates used to publish and update an annual memo called "The 10 Great Mistakes of Microsoft." The source of many of these mistakes, Gates believes, was entering a market late or not at all.

Microsoft's primary challenge is to maintain its commercial monopoly in the face of increasing competition and an endlessly morphing technological landscape. But much of the company's efforts are geared towards maintaining the position of Windows, and this makes it vulnerable to external technological advances.

To outmaneuver competitors, it has been Gates' practice to buy new technology: either by acquiring the business involved or by forming a partnership agreement.

Developing Software That Sells

Investing In Research

Setting Project Priorities

Gates believes in spreading his bets to increase his chances of hitting the next technological jackpot. Guided by a clear set of objectives, resources are allocated in order of priority. One example is Microsoft's speech recognition project, which was driven by the goal to remove the keyboard from the PC. Research was committed to natural language processing, speech technology, user interface and language-enabled applications. But Microsoft's record as a technology pioneer has never been strong and it was not the first-to-market. Rather, its success is based on its ability to improve on existing technology and its marketing prowess.

Bringing together research and marketing teams is crucial, according to Gates. He cites Xerox's failure to market the discovery of graphical user interface (GUI) by PARC, a research center founded and financed by Xerox, as an example. In

sharp contrast, Microsoft Research has regular discussions with the product managers to ensure that technological advances have commercial applications.

People are deployed according to set priorities: 75% on projects already generating revenue, 24% on research on items expected to pay off in the near future, and 1% on long-term research.

“...the tendency for successful companies to fail to innovate is just that: a tendency.

If you're too focused on your current business, it's hard to look ahead...”

- The Road Ahead

Recognizing an Opportunity

Finding the Technology to Suit Customer Needs

Gates' pattern of technology management is pragmatic, acquiring technologies with potential commercial purpose. Case in point was when Ricoh approached Microsoft to license all its software for \$180,000. When Ricoh came back for more, there was no more. Gates then asked, “What can we develop for you?” Ricoh gave Microsoft a list of software needs and because the latter could not deliver, Gates “had to go buy some of them from somebody else.”

When IBM needed software for their PC development project, they talked to Gates about buying Microsoft BASIC. Gates and his partner, Paul Allen, committed an operating system to IBM even before buying DOS from another Seattle-based company.

“Getting in on the first stages of the PC revolution looked like the opportunity of a lifetime, and we seized it.”

Setting the Industry Standard

Providing the Biggest Bang per Buck

There were two other companies that created operating systems for the IBM PC: Digital Research and UCSD Pascal P-System. Gates decided to undercut the competition by offering IBM a perpetual, royalty-free right to use MS-DOS for \$80,000. This meant that IBM could charge customers only \$60 for MS-DOS versus \$450 for the UCSD Pascal P-System and \$175 for the Digital Research product.

As more applications using MS-DOS were created and the number of PC's increased, MS-DOS became the industry standard. In the software industry, market leadership is synonymous with being the industry standard. Later on, Gates repeated the exercise when he gave away the Explorer, an Internet browser, to compete with Netscape.

Gates' blueprint for success is based on a three-point plan:

- Make your product the best.
- Make your product the most useful.
- Make your product the cheapest.

Safeguarding A Position

Creating and Maintaining a Quasi-Monopoly

To maintain its position, Gates ensures that what the company sells, it continues to own. One example is Microsoft Word and Excel, products that were originally developed for the Mac. The knowledge acquired from the partnership with Apple paved the way for the development of Word and Excel on the PC.

The popularity of Microsoft's programs was a strong incentive for PC makers to include the applications in its package. In addition, Microsoft bundled its applications with its operating system, and effectively pushed out competition.

Finally, Microsoft enjoyed immense growth from the continuous replacement of the PC with better and more efficient versions.

Master Class

Mastering the Business

No matter what industry you are in, the principles behind market leadership are the same.

The Six-Part Competitive Strategy

1. Concentrate your effort on a market with large potential but few competitors.
2. Get in early and big.
3. Establish a proprietary position.
4. Protect that position in every way possible.
5. Aim for high gross margins.
6. Make the customers offers they cannot refuse.

How to Achieve Brand Excellence

Branding is the sum total of the perceptions of your customers. You can work towards brand excellence for your company, business unit or your own "personal" brand.

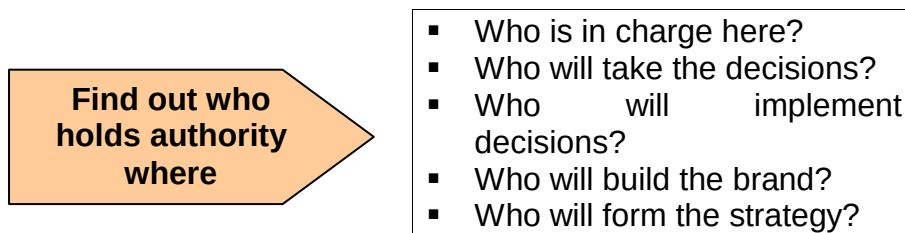
- ❖ Be open to ideas from any source – look outwards not inwards.
- ❖ Have the determination to persevere – take failure as a spur on the road to success.

- ❖ Go above and beyond the innovators – take their success as encouragement.
- ❖ Make the ideas your own – and make them part of your brand identity.

Leading Decisively

As the organization grows, it is impossible to master all the technical knowledge or do all the work yourself. In the IT industry, employee involvement is particularly important. Practicing both “soft” and “hard” management is the key to effective leadership.

The Hard Management Approach



The Soft Management Approach

- Encourage a free-and-easy atmosphere.
- Create a flat structure with few levels of hierarchy.
- Split the company into small groups.
- Give groups well-defined tasks for which they are completely responsible.
- Encourage discussion and debate (especially by using e-mail).
- Recognize and reward individual and team successes.

Applying the Five E's

When Microsoft restructured, eight autonomous divisions were created to hasten the decision-making process and to prevent Gates from taking on too much. Practicing the Five E's that govern Microsoft will create an environment where everyone can contribute to the organization:

1. EMPOWER people to undertake tasks for which they are competent and to see those tasks through from start to finish.
2. Adopt an EGALITARIAN attitude towards everybody, and insist that they do likewise.

3. Place an extraordinary EMPHASIS on performance, first making clear precisely what is expected.
4. Use E-MAIL to send and receive messages to and from anybody, and maintain continuous, open, constructive debate on issues of interest or importance.
5. ENRICH people with rewards for success, using not only financial rewards but also praise and recognition.

If you are not working in a 5E company, consider whether your company's culture motivates you to produce your best and whether your efforts are recognized. Otherwise, think seriously about moving to a company that will.

Dividing, Delegating and Leading

Founding Management Style

Learning Through Experience

The systems in place at Microsoft evolved according to need rather than theory. In the early days, Gates and Allen would share decisions and alternate tasks. Although Gates was more focused on negotiations and contracts, and Allen was predominantly accountable for new technology, responsibilities were quite unclear. Today, Microsoft is run by technology experts, who have acquired managerial skills along the way. It does not hire managers per se, but people with professional skills such as programmers, content providers and marketers.

Two other lasting features of Microsoft's management style are "marathon" discussions, often lasting from 6 to 8 hours, and working hard and long hours. This is the expectation of Gates, who crams his own calendar with an extraordinary number of activities.

Sloan as Role Model

Reinventing Microsoft

Gates is not typically used as an example for management studies, perhaps because he does not subscribe to any management philosophy nor follow any corporate role model - with the exception of Alfred P. Sloan, the man credited with the success of General Motors.

Gates was struck by the attention Sloan paid to GM's dealers and the efficient monitoring systems that he installed. Sloan set up a standardized accounting system so that every dealer and employee "categorized numbers in precisely the same way." Sloan also believed in visiting his dealers frequently, and this was copied by Gates in his 1997 world tour.

In 1999, Microsoft was divided into several autonomous divisions, much along the lines of Sloan's principles. Prior to the reorganization, decisions were highly centralized, and consequently, the approval process was extremely slow. Whether Gates and Steve Ballmer, his newly installed president, can delegate enough of their powers is the central issue facing Microsoft today.

Small-Company Dynamic

Ensuring Efficiency and Empowerment

Gates has built a corporate culture where "you have all the resources of a large company yet you still have that dynamic small-group, small-company feeling where you can really make a difference."

At Microsoft, teams are normally divided when numbers become unwieldy. Tasks are then divided among the teams, and the team leaders, in turn, subdivide the tasks among subordinates and coordinate the progress of the group. Gates then encourages debate between the groups, and brings the different units together with a shared vision.

Managing Change

Seeing the Turn on the Road

Microsoft's failure to get in early during the Internet revolution is a lesson that has not been forgotten. Today, Gates prepares for "inflection points" by ensuring that technological developments are monitored and that Microsoft hires employees with the skills to apply these advances to commercial ends.

Kaizen or continuous improvement is also a part of Gates' philosophy, "I work in the software industry, where change is the norm. A popular software title...gets upgraded every year or two with major new features and continuous refinements. We listen to customer feedback and study new technology opportunities to determine the improvements to make."

Recognizing Discontinuous Change

"The most important part of my work as chairman is recognizing [sea-changes] and articulating the opportunities they present to each person in the company. We then empower employees with as much information and as many productivity tools as possible, so they can achieve results within the framework of that vision."

- Interview with Bill Gates
Geoffrey James, *Giant Killers* (1997)

Decisive Leadership

Choosing Between Windows and Java

Making all the major strategic decisions at Microsoft is still very much a part of Gates' role as CEO. The question of whether to develop an Internet browser using Windows or Java was debated on e-mail for months before Gates made his decision, which was to "protect Windows at all costs." The strategy resulted in an anti-trust suit against the company in 1998.

The incident highlights the principles behind Gates' leadership style.

- The boss is the boss.
- As boss, he listens to all opposing arguments, and then makes a clear, unequivocal decision.
- He makes sure that the decision is followed through.
- The boss concentrates on solutions that will best protect and profit the company's proprietary position.
- He takes the decision that embodies the best trade-off between risk and return.

The balance to the decision power of Gates comes from his partners, Steve Ballmer and Paul Allen, whom Gates totally trusts and who share the same vision, but have different skills.

Turning Vision in Value

Taking Big Risks

Embracing Change

"To be a market leader, you have to have what business writer and consultant Jim Collins calls 'big, hairy audacious goals'," states Gates. He believes that the willingness to take risk, not vision, was the reason behind Microsoft's success.

Many companies are paralyzed by the fear of cannibalizing their own technology that they fail to take advantage of the "inflection point" brought about by a new, disruptive technology. This was the case with IBM, which was so focused on defending its own technology that it did not foresee the potential of the PC market, and allowed Microsoft to own the core of the PC – the operating system.

Recognizing Big, Hairy Audacious Goals

- They make a very large difference to future success.
- They stretch you well beyond the present levels of achievement.
- They involve a considerable degree of risk.
- They include major tasks that you have never previously accomplished.
- They appear "impossible" in the eyes of others, including competitors.