Strategic and Policy Initiative
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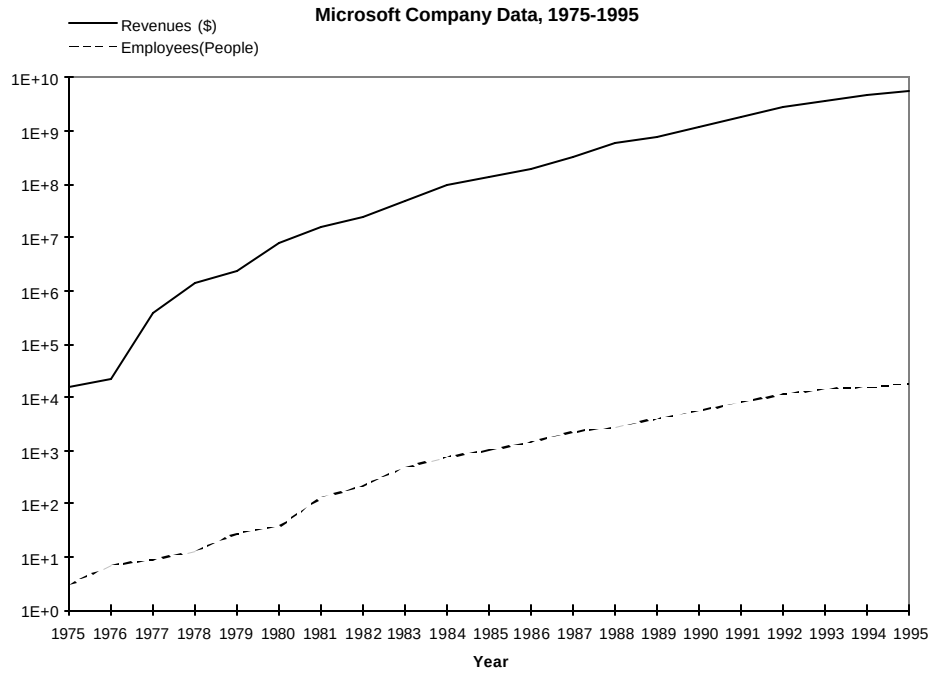
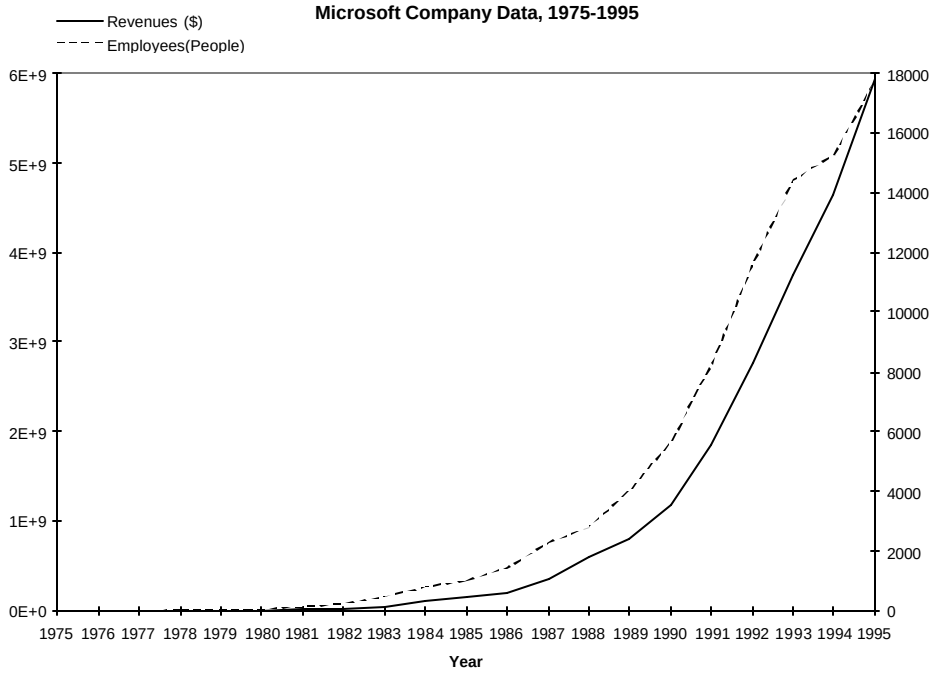
Professor Dundar F. Kocaoglu

Team #3
Scott Runner
Raik Hammer
Long Nguyen
Tom Hoang
Suphakit Saengsin
Edouard Oyer

Introduction

Current chairman and CEO Bill Gates cofounded Microsoft in 1975 with his friend Paul Allen, who retired from Microsoft in 1983. This company started with one product (the BASIC) and only three people in Albuquerque, New Mexico. From this time Microsoft revenue's surged from $16,000 to nearly $6 billion in 1995, when the company had some two hundred products and approximately 17,800 employees across the United states and at 48 Worldwide subsidiaries.





As many as 90 percent of new firms fail within five years. Among those that survive, many do not adapt well to growth[2]. This is because companies often cannot put into place the specialized skills and managerial systems needed to control a larger organization or compete successfully over long period of time. Bill Gates and Microsoft have handled extremely rapid growth with great skill, and they are both worth careful scrutiny for this reason alone. At the same time, Microsoft retains much of the loosely structured, antibureaucratic, small-team culture that characterized the company in its early days. Over time, Microsoft has actually been getting closer rather than further from most of its customers. One example of this is how Microsoft now incorporates customer feedback into product development throughout the development cycle time

Practically every day, 140 million out of the 170 million people who use personal computer turn on their machine and see the words “Starting MS-DOS”. Seventy million people see “Microsoft Windows” as their computer screens fill up with graphical symbols calls icons. Microsoft is by far the world’s largest and richest company dedicated to PC software development, and thanks to an expanding stream of new products it continues to growth with astounding speed. Microsoft controls between 80 and 85 percent of the most important market segment for PC software-operating system, the programs that determine the basic function of the computer. It produced 25 percent or more of all PC applications products that enabled users to perform specific tasks on their computer, such as writing a letter or calculating numbers on a spreadsheet grid.

Since IBM, has adopted MS-DOS (probably the Microsoft's best-known product) as the operating system for their personal computer in 1981, Microsoft has sold one million of this software each year. The second best-known Microsoft's product is Windows, a graphical user interface that makes the computer easier to use. Microsoft is also the largest independent software producer for Apple's Machitosh and PowerMac computer.

Due to its market share and broad product offerings, Microsoft probably has more influence than any other single firm over the evolution of technical standards for computer software and information-based industries in general. No manager in any industry related to computers or information technology, and no current or future user of a computer can really avoid or afford to ignore what Microsoft does.

Microsoft has developed such power by moving from one software mass market and distribution channel to another. It started by selling programming language (BASIC, FORTRAN, COBOL) and then operating system (MS-DOS, Windows95) to computer equipment manufacturers, then moved to selling a variety of application products directly to retail stores. Microsoft has done it first in the United States and then abroad.

In 1975, when Microsoft started with its first product (BASIC), Gates' partner, Allen, wanted to produced both software and hardware products. Most companies in the computer industry, including IBM, DEC, and even such new entrants as Apple Computer (founded in 1976), had focused on hardware also. However Gates' opinion was different : "I thought we should do only software. When you have the microprocessor doubling in power every two years, in a sense you can think of computer power as almost free. So you ask, why be in the business of making something that's almost free? What is the scarce resource? What is it that limits being able to get value out of that infinite computing power? Software!"[1].

Other companies have since realized the value of software as well. As a result, Microsoft has had to be constantly concerned with competition as well as with introducing enough new features to get customers to buy updated versions of its products. It has also had to seek new market and applications for its technologies and programming skills. Microsoft was late in recognizing the potential of some product concepts, such as corporate networking, home finance, and groupware networking(pioneered by Novell, Intuit, and Lotus, respectively). It faces stiff competition as it enters such new arenas as information-highway products and services. Microsoft also has a long history of problem in quality control and on-time product delivery[3], Although it has responded with many improvements in how teams develop and test products as well as analyze information for users.

HISTORICAL EVENTS

In 1978 Microsoft already domianted the software market of the microcompture. Their annual sales already reach $500,000 in the previous years. Many large corporation Microcomputer tried to enter the market, and all of them seem to offered Mircosoft BASIC as the standard language.

By the end of 1978, Gates and his company of only 13 employees based in Albuquerque, New Mexico brought in its first million. In april of 1978 Intel approached Gates with their latest 16 bit BASIC in a few months. Gates consulted his associates and replied that his company only needed 3 weeks to write BASIC code for the 8086. With such an aggressive attitude no wonder wight months later, the yearly sales for Microsoft reached a new high of 2.5 millions. One of Microsoft co-founder Paul Allen wanted to tap into the Apple software market, after all apple was the best selling personal computers at this time.

One way of captured the Apple software market was to design a new program that translate the Intel 8088 code into Apple 6502 code, but instead Paul Allen team developed a soft card installed into the Apple machine that enable it to run 8088 program. With only the help of a high school student, Mircosoft installed over 100,000 soft cards into the Apple II computer.

In July of 1980 IBM approached Microsoft and discussed about the project chess, after many days of meeting and agreement insisted Mircosoft to keep this project in top secret Gate and Allen signed the historical contract with IBM on Nov. 6 1980 with such demanded schedule that they already 3 months behind when the contract signed. Many hardware problem arose during the development period since the programmers only had access to prototype circuit board. In 1981 the MS-DOS was ready for IBM personal computer. IBM finally announced the new operating system, for its personal computer in Au. 12, 1981 its first micro compouter based on Intel 8080 architecture with price range from mid $1500.00 to $6000.00 for fully loaded version and color graphics.

For the first 2 years after the IBM announcement of MS-DOS as the operating system, it was difficult to judge whether Bill Gate and his crews would dominate the market since CP/M developed by Digital Equipment Company (DEC) was also popular. But as the years go by, the gap between MS-DOS and CP/M widen, simply because many manufacturers was rallying behind MS-DOS such as IBM, Intel, NEC, Panasonic, Hitachi, and many others.

In 1984 the domination of Microsoft in operating system for the PC market was clear when Lotus 1-2-3 became the best selling software package with operate solely under MS-DOS. Microsoft announced the revenue for the first six month eding in June of 1986 at almost 61 million dollar. Big name company such as Hewlett-Packard, Texas Instrument abandoned hop of competing with IBM and opted for compatibility. Now with a solid foundation and

positive cash flow. Gates and his associates focus on promoting Microsoft application software.

Microsoft delivered the first PC version of Multiplan in spring of 1982, the spreadsheet software required on 64K of memory to run, but IBM did not perceived this spreadsheet as a major product and continued market another spreadsheet called VisiCalc instead. Gates declared that anybody who know how to use a calculator could also use Multiplan and the press review were very positive for this first vesion of Multiplan. To compete with Lotus 1-2-3, Microsoft included "reday-to-use" models for finance and budgeting and making this product available in many platforms. In 1986 sales of
Lotus 1-2-3 were three times the sale of Multiplan, although Multiplan was behind Lotus in the US market but aboard Multiplan was very successful. Few new features were added to version 2.0 and 3.0 of Multiplan, mostly for mouse support and increase in speed of calculation, but Multiplan was not doing well in the US market. This lead to Bill Gates decision to counter attacked spreadsheet market in the US with Excel in 1985.

April of 1983 is another historical date for Microsoft and the software market, Gates and his company launched its second application to compete with WordStar the market leader in word processing at this time. Microsoft strategy were simple, make the product easier for the user with the mouse interface instead of combination of keys stroke and features such as "window" so that user could view more than one document at the time. MS-Word was the first word processing program to display boldface, underlining, and italic. Gates alos insisted the extremely difficult and technical complex task of incorporated the capability to handle proportional fonts that used on Laser printers, which had just appeared on the market.

Microsoft next task was to transforming the MS-DOS into a graphical interface, user friendly and in multicolor. In New York on Nov. 10, 1983 Microsoft officially announced a new operating software named Windows and Gates declared that 90 percent of all MS-DOS computers would be running on Windows. This mean users could place their software in any system and not have to worry about compatibility problem. The project encountered many delays, since Gates and the Windows project leader Scott MacGregor underestimated the complexity of the project and unprecedented technical problems. The company announced in May of 1984 the released of Windows was
reschelude for the end of August and again in July of the same year.

NOTHING BUT NET: MICROSOFT'S NEW STRATEGY

1995 marked a turning point in Microsoft's corporate strategy. They had mixed perspectives on the value of the World Wide Web, wrestling between whether to deploy a proprietary network, or leverage the public Internet. All the while, Microsoft kept their head down and focused on successful deployment of Windows95. And while Netscape was eating up the Internet browser market, Microsoft was making good on its years old promise of delivering a more user friendly, 32bit operating systems that would become the platform for a whole new generation of user-friendly, GUI (graphical user interface) based, tools which could interchange information, and be a platform for the home game and education market, as well as the business market. While many might criticize Microsoft for their lack-luster interest in the Internet, they continued to pump earnings-per-share and their stock price rewarded them for their performance.

However, perhaps more impressive than their relentless focus on executing on their Windows95 promise, Microsoft overnight reversed their Internet strategy and then committed themselves to this direction. Such a turn-about is unheard of for an $8B company such as Microsoft. However, as will be addressed in the next section, the processes used by Microsoft aid in its prevaling success.

So what is Microsoft's new strategy and how does it differ from the one they embraced a year ago? The Business Week article [ ] implies that this was a reverse in strategy - from a proprietary network to a public network. However, we think this is only part of the story. Publicly, Microsoft announced it's new Internet strategy in February, and highlighted the following points:

- The Internet is an amazing opportunity for great software.
- The communications revolution will change the way we do business, learn and entertain ourselves.
- Microsoft is hard core about the Internet (famous Bill Gate's quote).

However, privetely, and in more detail, the strategy appears multi-faceted and more complicated. There appears to be a short term strategy which is defensive, and a long term strategy which is at the heart of where Microsoft has wanted to next take its business. These will now be analyzed.

Microsoft's New Perspective

Bill Gate's and many other top managers at Microsoft believed that a private network could generate revenue, just as America On-line had, while they were unsure how a "communist" network such as Internet could benefit them. Clearly they were viewing the network as a vehicle for generating revenue, as opposed to a vehicle for selling supporting tools exclusively. This point is important, since how Microsoft will realize revenues and where they will make their investments say alot about their strategy. At first glance, one would think that their change in strategy is simply a reaction to protect their operating system francise. After all, the "net" serves to be a catalyst to change the PC into a tool for accessing, processing and distributing information [.net magazine]. With languages such as Java providing for distributed program execution, the embellished role of operating systems such as Windows95 could be on a crash diet to become just a basic set of capabilities, and a network access engine. This is very contrary to Microsoft's goal of continuing to inflate the operating system with more and more features, more and more frequently, to motivate you to upgrade, and for every new PC to have it. Therefore, there is definately a disadvantage if Microsoft get's left behind in the war for the client desktop.

However, this war is fought on several fronts. Figure X.X shows a flow of information content on the Internet, from author, through the channel, to the information consumer.
What is interesting is that today, while the Internet is such a hot business topic, very little commerce occurs over it [summarize electronic commerce figures]. So why is it so important, since end users are spending staggering amounts of money. While electronic commerce over the net is not so hot, total revenues related to the net are [figures]. And a fair proportion of the money, according to [.net mag.], ends up in the hands of the people making it happen - designers, programmers, an software houses. As the web matures and Web publishing gets easier, their share will diminish, and revenues from end users (clients) will wax. However, today, there is a shortage of content, and of business models for demonstrating how to achive electronic commerce. Microsoft, however, is fighting a war on all fronts to make it happen. The facets of their new Internet strategy can be partitioned, with respect to Figure x.x, into authoring, clients, distribution and content. Each of the is analyzed independently, with an integrating summary at the end of this section.

Internet Strategy: Clients

There are two fundamental groups of users on Web: authors or publishers and clients, or users [use standard reference here]. Of these, there are approximately [xxx] clients spending more than [xxx] hours a week on-line, and spending about $[xxx] per year in total. On the other hand, there are [xxx] authors on-line, who spend $[xxx] per year. While the Net started as a research and e-mail platform, more and people are using it to research products, buy products and receive support for products. But perhaps the biggest issue is that "surfing" the Net has become almost routine for the [xxx] millions of people who use a computer, either at home, or at work. Therefore, the software to access the Net, the "browser". in conjunction with the

heart of a computer, its Operating System, constitute an increasingly important part of the PC platform.

Microsoft knows 'platforms', for it is platforms such Windows, not applications such as Word which have given Microsoft its 'architectural local' on PC software. Platforms are pervasive and offer an architectural lock on users and the market. While Microsoft enjoys this how with Windows, it is postulated [.Net and Inc. Tech. mags] that the OS will be eclipsed by browsers that will become a core tool of the PC. For Microsoft to loose footing in this area is to compromise their existing (and growing) market, not simply forego the opportunity to tap into a new market.

Therefore, Microsoft's client strategy is a fairly defensive one: retain control of the PC desktop platform by leveraging its position with Windows, and expand its client offer to capture the new architectural lock. It is doing this through extremely rapid development of browser technology as the next platform, integration and synergy with Windows and all Microsoft products, and through wildfire market penetration.

To the point of rapid product development, Microsoft has released 3 Internet Explorer versions in 12 months!, and .net magazine gives Explorer a slight advantage over Netscape's product, which currently dominates the market. To address integration, Microsoft will release a new version of its NT operating system with many net developer and browser hooks built it, and soon, new versions of Windows95 will integrate Explorer as well as direct support for America On-line. As for product synergy, Microsoft has mandated that all new products be "Web-friendly" and have of course defined this as including such capabilities as direct browsing support from applications so that data can be accessed from within application data (such as Word and PowerPoint documents with active hyperlinks). This also includes the capability to migrate data from Microsoft applications onto the Web, but we'll discuss that issue more when we visit the issues of Web Authoring.

Internet Strategy: Authoring

There are two types of authors on the Net: those who wish to inform, and those who have something to see [.net]. While electronic commerce on the net has been hyped for several years, it has mostly taken the form of references (such as advertisements which include URL (Universal Resource Locator) pointers to their company web page which provides product details (but usually not sales) on-line. However, with support for network security and changes in how our culture views buying on the net, one can now purchase airline tickets, software, books, clothing and even automobiles on the net. Notwithstanding, the Net is still short of the electronic shopping malls that it has been portrayed to support.

In the era of mass production, when there is a shortage of supply, then if you want to generate revenues in a growing market in which there is an increasing number of competitors, then you

must increase production. In the case of the Internet, this means increase the rate of information or content production by 'authors'. An author is anyone who would publish information on the Internet. Those of greatest interest to Microsoft are those who have money to spend, either directly from revenues raised on the Internet, or through other sales channels for products which benefit from having complementary support via the Net. These are the authors, the software developers who have long been courted by Microsoft. According to Eric Schmidt in [U.S. News and World Report], Microsoft has absolute control over 50,000 software development companies that are deluged with Microsoft tools and techniques to build their software. These companies buy Microsoft products, follow Microsoft advise, and submit their products for Microsoft certification, all in order to allow access to the lucrative Windows market.

Thus, it appears that Microsoft is first targeting these "publishers", or authors on Internet content with products to leverage their influence to move Microsoft into a dominant position on the web. Through its authors, Microsoft can spur end-user demand for its browser and thus OS technology by insuring that these user tools leverage the "unfair advantage" that Microsoft is incorporating into their developer products.

Internet Strategy: Distribution

It is in "information" distribution that Microsoft stubbed their toe. They perceived they needed a controlled network to leverage their information strategy. However, even Microsoft could not buck the trend. What is interesting is that the information distribution channel control is not as important as owning the source (authoring) and destination (client) ends of the channel. The fact that the Internet has exploded, and done so without tremendous investment from Microsoft, is a phenomenon that, as XXX and XXX and XXX of Microsoft have argued against the traditional Microsoft view, provides great leverage.

Thus, Microsoft has thrown in the towel and dived into the Internet as the distribution media. While the initial release of the Microsoft Network (MSN) was proprietary, akin to America On-line, Microsoft has now moved MSN to an Internet server. No more charges to get on-line with it, though much of the information may still be sold.

Internet Strategy: Content

This is the interesting part about Microsoft's strategy. While previously they had tied successful a information business to the method in which the information was distributed, they have in the short term focused on tools for authors and clients to leverage, even protect their current franchise. However, Microsoft has long eyed the information age as their next battleground, and as stated in [.net], both Microsoft and Netscape are more interested in the information than technology. What is interesting is that while Microsoft has been talking about their authoring and client focus, and making significant investments in these areas, they are at the same time

developing information content, much of which they sell on-line. Examples of current on-line services offered directly by Microsoft include:

- Complete Baseball: This program includes an on-line daily baseball newspaper, with one "photo", for $1.25 per day.
- Money 97 and Active Statement: Microsoft has established alliances with Wells Fargo and over 32 other banks to provide on-line banking through Money and partner banks. Monthly usage is charged which benefits both the banks and Microsoft.
- CarPoint: This on-line service provides a comprehensive set of reports on many types of automobiles, including dealer invoice and retail prices. Summary reports are free and detailed reports cost $4.99 each. CarPoint also offers on-line sales through member dealerships who pay a subscription fee to be listed and engaged. A customer submits a request via form indicating the car and what features they are interested in, and dealers in the area review the request and call back with a quote. Microsoft requires that the same car be bid on...no "bait and switch" appraoches allowed.
- Sidewalk: On-line guide to 15 cities by the end of 1997 are offered. Personalized ideas, articles, reviews and listings are provided based on personal portfolios to address all travel needs while in the destination city. Revenue to Microsoft is realized through advertisements.
- Automap on-line Route Planner: Provides trip planning to chart best paths from source to destination including desired types of driving.

It would appear that Microsoft is competiting with some of the very companies that it is trying to enable. This begs the question, is Microsoft in the business of tools, or in the business of selling information and related services?

MARKET DYNAMIC

Changes with Internet

Today Microsoft owns the operating systems and basic applications programs that run on 170 million PC's around the world. That is the leading market position in the segment of the operating systems and applications. No competitor as you look at IBM with OS/2, respectively OS/WARP could reach such amount of market share in the PC market. It seems to be tat OS/2 competes more with LINUX than Windows '95.

Microsoft understood to attack the future and to be the leader with its solutions. So, do you see any perils that my arise? No, so did Microsoft before INTERNET, INTRANET, and WorldWideWeb were a great "Buzzword", but today nobody can ignore the development and the impacts on companies strategies any longer.

What is this new challenge caused by the Internet, and why was the emerging Internet a danger to Microsoft in the existence as a leader in the PC market?
"*What's happened is that the computer industry started to move forward without Microsoft. That's a big deal*." [Marc Andreessen]
Two years ago, Internet was an emerging fad. Today it is an unstoppable market force bringing rapid change to the network computing market place.
First it is necessary to look at the market development before Microsoft built Internet features in all their products.

In brief are the following some important dates:

The beginning of the net from a "nerd"network to a network for everybody starts in January 1993 with the introducing of the first Web browser. After this the way to communicate in a user-friendly way rendered possible the access for users all over the world, which owns a PC, a modem, and the browser. The way to communicate with everybody via e-mail was opened. Nobody could see at this time, which enormous impact would have the emerging Internet. As a matter of fact there was already little activity by Microsoft to recognize the Internet and their standards, but in this stage it was no strategical change in the company.

The real attack to be the first in the Internet market with browser, client/server-software, and activeX begun after the announcement of Bill Gates in Dec.the 7th 1995 on Pearl Harbour Day. Microsoft retargeted much of its $1.4-billion-plus annual R&D-budget and adverted literally thousands of programmers to Internet projects and to retrofitting Microsoft's product line to mesh with the net.

The Market in the Information Technology changes very rapidly. The driver to this change is the knowledge. This knowledge results in better hard- and software and the way of implementation.

If you look at the Internet, the standard HTML and the upcoming browsers created an environment, which views a very new way of interactivity, that recognizes know Microsoft in its Business strategy. The Internet will have an impact on many of the technologies that businesses uses every day, from basic electronic mail to groupware and electronic commerce.

Why Microsoft ignored the Internet at First

Before Internet Microsoft concentrated completely on the development of operating systems, and software applications. Microsoft's leading position did not protect the company from a changing market environment. The ignorance of the changes in the market environment was a result of the concentration. Microsoft oversaw the development, because the management did not recognized the strategical impact of the capabilities of the Internet on the business. Furthermore Microsoft did not realized that the Internet is going to be a marketplace, where you can make money.

Perils of growing Internet for Microsoft: were Internet and Java and the usage as a platform, i.e. operating system. Makes Microsoft's standard programs could be obsoleted, and Internet PC forced by SUN Microsystems.[6]

Many companies were going to concentrate on Internet by developing software and hardware solutions, e.g., Netscape which its first Web browser.

Competitve Analysis

After Internet: strategic alliances were created. These alliances were using in the standards (technology transfer from outside), Other companies in the information technology recognized earlier the enormous capabilities of the Internet, but the question was always: Quo vadis Internet?

The ignorance of challenge of the Internet brought Microsoft in a situation, which is characterized by old way of thinking. The managers, who are in charge for a recognition failed. It was the fllexible structure of the company and the liquid financial base, which enabled Microsoft to react rapidly.

Microsoft's vision now: Internet as an enabler that cuts all of its product lines
Efforts are done to speed the idea in all divisions, respectively products:[4]

⇒ Platform product group, R&D budget: > $1 billion
⇒ Desktop application division, R&D budget: $400 million
⇒ Interactive media division, R&D budget: $500 million

⇒ Advanced technology media and research, R&D budget $25 million

Microsoft's annual R&D budget is more than six times as large as Netscapes annualized revenues. These enormous amounts are due to put the Internet competition prospective. Each above mentioned group has its own competitors. The platform product group, with its products like operating systems, network server, back office family of database products, and network server programs for managing websites, e-mail, and electronic commerce, tools and languages for programmers, competes with Apple, Netscape, Oracle, and Sun.

The desktop application group with the office suite of personal productivity software, which includes Microsoft Office. Their recent project Office 97, which handles Internet, e-mail, and word-processing documents into World Wide Web pages, races with Claris, Corel, and Lotus.

The interactive media devision with its products like CD-ROM games and reference works, and online content competes with AOL, Br∅derbund, CompuServe, CNN, and Disney. The recent project is developing MSNBC.

The advanced technology and research with its projects: developing 3D-graphics, speech, synthesis, and recognition, graphical user interface design, and data mining, a sophisticated database technology that will be especially useful on the Internet competes with Apple, Bell Labs, Silicon Graphics, Xerox (PARC) and universities.

Microsoft started from a small company and within a short period grew to a software developer giant. Today Microsoft dominated the software market with their operating system and their PC office software applications. Microsoft next mission is to invade the NET. Shortly after the release of their new product Windows 95, Microsoft decided to focus on application software with the NET. Microsoft believed more revenue will be generated by private network rather than selling supporting tools.

Microsoft sudden change in focus without any major destruction to the company was due to their finance power. The Net is the market that Microsoft ignored, now shifting the focus they risk the finance and pressure from existing competitions.

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