



The Rise & Rise Of Bill Gates' Microsoft

[There's no stopping them now!]

N.L. GARFINKEL

Last month, we learned that Leonardo da Vinci's "Codex" notebook had joined Intuit and Stac Electronics as the latest jewel in the crown of Bill Gates. Gates, of course, is the richest man in the United States: the founder, Chairman, and CEO of Microsoft, the Seattle-based company that is running the world's personal computer industry.

Leonardo's seventy-two page Codex notebook predicted the invention of the submarine and the steam engine, contained advice on flood control, speculated that the moon is illuminated by reflected sunlight, and theorized why the sky is blue. In many ways, the manuscript, written between 1506 and 1510, anticipated the advances in science and technology that have been unfolding for the past five hundred years.

Microsoft, likewise, has spent much of the last year pursuing a series of strategic partnerships and acquisitions that may shape the world of computers, technology, and commerce well into the next century. At the focal point of Microsoft's dominance is the company's DOS and Windows, the "operating system" of more than 150 million desktop computers world wide; and Microsoft's willingness to use its operating systems to leverage its other products. In a world where the desktop computer is finding more and more uses every day, Microsoft's influence translates into a pervasive lever that is increasingly being felt throughout the world's economy.

On November 10th, Microsoft an-

nounced that it was embarking on a \$100 million marketing campaign to boost awareness of its name. "The Microsoft brand name represents 'access'—access to ideas, information, fun, tools and even other people," said Steve Ballmer, executive vice president of sales and support at Microsoft. "As personal computers appear in more and more places, we want people to recognize how software, and specifically Microsoft software, is making their computers come to life."

Microsoft predicts that its new motto—"Where do you want to go today?"—will be seen by more than 95 percent of the adults in the United States within the coming year.

If You Can't Beat 'em, Buy 'em.

Although Microsoft is clearly in the driver's seat today, things looked bad for the company earlier this year. In February, a jury found Microsoft guilty of violating a software patent on disk compression and awarded \$120 million in damages to Stac Electronics, a much smaller company located in Carlsbad, CA.

Disk compression is a technique that allows computers to store more information on their disks than would otherwise be possible, and compression in general is one of the key technologies allowing computers to manipulate images, sounds and video. Stac had been at the forefront of the industry, early on developing a program that allowed users to store more than 90 megabytes of data on a 40 megabyte hard disk. The lawsuit occurred when Microsoft put data compression into its

DOS 6.0 operating system, eliminating the need for customers to purchase Stac's product.

Many people believed that Stac's victory over Microsoft was proof that patents will protect smaller companies from larger ones, even ones as large as Microsoft. But, a few months later, the two companies settled their differences with an agreement that called for patent cross-licensing and for Microsoft to purchase 15% of Stac's stock for \$83 million. Stac's data compression patents, which worked so well against Microsoft, will now boost Microsoft's dominance in the field and prevent other companies from competing.

The same thinking was at work on October 13, when Microsoft announced that it was purchasing Intuit, maker of

Quicken, a wildly successful finance program used by millions of people to balance their checkbooks, follow their home finances, and run small businesses. Intuit was started in 1983 by Scott Cook and has since sold more than five million copies of its flagship product.

Back in 1983, Microsoft ignored the home finance market. Microsoft made a mistake. When Microsoft finally launched its own product, Microsoft Money, it discovered that it couldn't compete against Quicken. Last year, Money languished on retailers' shelves despite its \$15 price, while Quicken, at \$35, remained a hit.

One Microsoft senior executive privately

admitted that Money was an embarrassment to the whole company.

No longer. The deal announced between Microsoft and Intuit calls for Microsoft to spend \$1.5 billion to purchase Intuit's stock. As part of the deal, Microsoft will sell off its Money product to another firm. The official reason for jettisoning Money is to avoid the risk of being nabbed by the anti-trust division of the Justice Department for anti-competitive practices. The more likely reason is that Microsoft simply doesn't need Money any more.

Many users of Quicken were heartbro-

Microsoft's competitors must also be worried about what Microsoft will be doing in 1996 and 1997. Controlling the operating system, the network, and the network's infrastructure puts Microsoft in the driver's seat.

ken by the news: Intuit owed no small part of its success to fierce customer loyalty, earned with a friendly product and excellent technical support. One angry Quicken user is Cambridge resident Dan Geer, Director of Security Consulting for OpenVision, which sells computer administration tools. Coincidentally, Geer received a letter in the mail from Intuit, a few days after the announcement, inviting him to upgrade his copy of Quicken to the latest version. Geer mailed the form back with the words "Wrong Company" scrawled across the top. His plan now: For-sake Microsoft, and keep using his old version of Quicken.

Macintosh Quicken users, like Geer, are in a double bind. What incentive will Microsoft have to bring out the timely versions of Quicken for the Macintosh? After all, Apple's MacOS is a competitor to Microsoft's Windows. If you were Bill Gates would you be giving Macintosh users good reasons to stay with the Mac?

Eventually, though, Geer and thousands like him will probably break down and purchase the new version of Quicken from Microsoft. It's hard to maintain a boycott born of righteous indignation in the face of new features, improved user interface, and bug-fixes. A few years from now, most of us will probably look back at Microsoft's purchase of Quicken as part of the computer industry's "natural" growth cycle.

Products to Services

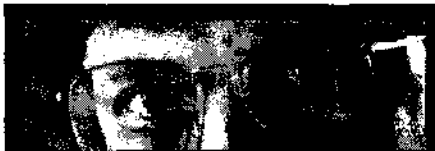
Intuit also fits neatly in with the direction that Microsoft is moving. Nearly 40 percent of Intuit's revenue comes from selling supplies and services, everything from checks to win-

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now envelopes. Intuit is also making a growing amount of money from a surcharge it collects on transactions made with its Quicken VISA card. Last year, Intuit announced a deal with VISA International, which will eventually allow any user of Quicken to download their VISA statement electronically, pay their bills, and make purchases from their keyboard. All for a nominal fee, of course.

Likewise, Microsoft realizes that much of its future earnings will come not from the sale of software, but from a commission or surcharge on purchases made with its software and information provided over its network. That's one of the ideas behind another Microsoft deal announced this month: a letter of intent, signed November 8 between Microsoft and VISA International, "to jointly provide a standard, convenient, and secure method for executing electronic bank card transactions across global public and private networks." The system, based on public-key cryptography, could put Microsoft in a position to extract a nominal toll for every credit card transaction on the Information Highway.



Microsoft predicts that its new motto - "Where do you want to go today?" - will be seen by more than 95% of the adults in the United States within the coming year.

If Microsoft has its way, the most important highway of them all may soon be its own, The Microsoft Network, originally code-named "Marvel."

The Marvel of Synergy

As we all learned this year from countless newspaper articles on the Internet and the "Information Superhighway," networks and online services are the next big thing for the computer revolution. The reason is simple economics: Networks

let companies sell the same thing, pure information, again and again, without the expense of delivering printed magazines, books, or record albums. Even better, most of the information—electronic mail, bulletin boards, and "chat" rooms—is created by the subscribers themselves and costs the online service provider nothing to produce.

The U.S. already has three big online companies—Prodigy, CompuServe, and America Online—with possibly more than five million subscribers between them. These companies make their money not only from connect fees, but from a surcharge on the goods

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Timeline

Microsoft's
move
to Power

1975 BILL GATES FORM MICROSOFT TO CREATE A BASIC INTERPRETER FOR THE MITS ALTAIR 8080 COMPUTER.

1977 GATES AND ALLEN DEVELOP VERSIONS OF BASIC WHICH THEY LICENSE TO MANY EARLY COMPUTER MAKERS, INCLUDING RADIO SHACK AND APPLE. GATES AND ALLEN ALSO DEVELOP A COBOL, FORTRAN, AND PASCAL LANGUAGES, WHICH THEY SELL THROUGH LIFEBOAT ASSOCIATES (NEW YORK, NY), THE COUNTRY'S FIRST MAIL-ORDER SOFTWARE DISTRIBUTOR.

1979 MICROSOFT MOVES TO BELLEVUE, WA. HIRES TIM PETERSON FROM SEATTLE COMPUTER PRODUCTS. THE FOLLOWING YEAR, PETERSON STARTS WORKING ON DISK OPERATING SYSTEM THAT WOULD BECOME MS-DOS.

1980 IBM'S BOCA RATON STUDY GROUP VISITS MICROSOFT. SIGNS CONSULTING AGREEMENTS.

1981 IBM ANNOUNCES ITS IBMPC, BUILT TO RUN MICROSOFT'S BASIC AND DOS OPERATING SYSTEMS. IBM ANNOUNCES THE IBM PC-XT, THE FIRST WITH A BUILT-IN HARD DISK. THE COMPANY RELEASES WINDOWS VERSION 2.0.

1984 MICROSOFT BECOMES THE FIRST SOFTWARE COMPANY TO REACH \$100 MILLION IN ANNUAL SALES. MICROSOFT SHIPS WINDOWS 1.0.

1986 MICROSOFT STOCK GOES PUBLIC AT \$21 PER SHARE, RISING TO \$28 BY THE END OF THE FIRST DAY.

1987 MICROSOFT INTRODUCES THE FIRST 32-BIT MS-DOS EXTENDED DOS.

1988 MICROSOFT INTRODUCES EXCEL FOR WINDOWS.

1990 MICROSOFT RELEASES WINDOWS 3.0.

1992 MICROSOFT SHIPS WINDOWS 3.1, WITH MORE THAN ONE MILLION ADVANCED ORDERS PLACED WORLDWIDE.

1994 SHIPMENTS OF MICROSOFT WINDOWS PASSES 40 MILLION MARK IN JANUARY.

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service that would run at night and store the user's information securely in an off-site data vault.

Microsoft's competitors in the applications arena have long contended that the tight integration between Microsoft's operating system and its application development groups represents unfair competition for the rest of the computer industry. Indeed, until this summer, Microsoft was the target of one of the highest-profile anti-trust cases in more than a decade. But the settlement with the Clinton Administration confused many observers: Instead of making it easier for application developers to compete with Microsoft, the agreement only changes the way that Microsoft licenses its operating systems to the makers of PC hardware. Microsoft's unfair advantage in the applications arena will continue.

Microsoft's domination of the computer industry is not without precedent. By its very nature, information technology seems to encourage monopolistic practices. It was no accident that two of the largest anti-trust cases since the Second World War were those against IBM and AT&T. But the Justice Department didn't follow the model of those two cases when they negotiated the deal with Microsoft: Instead of breaking up Microsoft into two companies, one making operating systems, the other making applications, Microsoft was let stand.

It's doubtful that such a court-ordered split could have worked. Today's boundaries between "operating systems" and "applications" arise out of convention, not out of fundamental laws of computer science. Most PC users, for instance, once considered the network to be an application. Increasingly, though, networks are viewed as part of the operating system.

Indeed, Microsoft's partnerships and acquisitions this year may prove to be far more prophetic, and far more appropriate for the new owner of the Codex, a growing amount of money from a surcharge it collects on transactions made with its Quicken VISA card. Leonardo's notebook foretold development in science and understanding, which could not be imagined when he penned his drawings five hundred years ago. Likewise, in one hundred years, Microsoft may be the only supplier of commercial software on the planet. People will then look back and be amazed that Microsoft ever had any competition at all.

Simon L. Garfinkel is a contributing writer for WIRED Magazine and the author of four computing books, including The UNIX-HATERS Handbook (IDG, 1994), NeXTSTEP Programming (Springer-Verlag, 1993), Practical Unix Security (O'Reilly and Associates, 1991) and the forthcoming PGP: Pretty Good Privacy (O'Reilly and Associates, 1995). He wrote this article with Microsoft Word. This article originally ran in The Boston Globe.

Newton Notes CONTINUED

blank to-do items, all two lines high. Whenever you need to jot down a new item you won't have to fiddle with drawing a straight line, which can be challenging if attempted while playing drums, skiing, holding a child, or after consuming many adult beverages.

Ray-O-Vac Renewal Batteries

These rechargeable alkaline batteries are cool. Unlike nicads, they don't have problems with memory effect or charge dissipation in storage. They last a long time (two weeks in a MessagePad 110), are cheap, and the recharger is small and easy to use. The only thing wrong with Renewals is that they can be hard to find. Try K-Mart or Target.

Faster Names File Access

Always keep at least one name card in your Unfiled folder. After a restart, Newton resets your Names file to show only Unfiled names. If you have no unfiled names, it takes forever to come up with an empty list. I keep a copy of my own card for quick beaming.

MessagePad 100/110 Moon Phase Trick

The 100/110 ROMs have a little improvement to the original Dates application. Tap just above the date in the upper left to see a little moon phase icon. Cool.

Improved Handwriting Recognition

MessagePad 100s and 110s have the ability to use letter-by-letter recognition in the Names file or everywhere. The only reason it is turned off by default is that Apple feels it slows things down too much. However, this works so well you might as well try it for yourself. Go to your Prefs, choose Recognizers, and check the letter-by-letter recognition box and the Everywhere button. This engages both word and letter recognition, improving the recognition accuracy with only a very slight performance degradation. Works for me. ☺

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