Why Microsoft Is A Monopoly Essay, Research Paper

Through a combination of tactics that many people would consider monopolistic Microsoft is now involved in almost every aspect of the computer and computer-related telecommunications markets and is emerging as a major player in Internet commerce and on-line media ventures.

As of March 1997, 87% of all the software developers were actually developing the Windows bit 32 platform, which is the operating system for Microsoft. Fifty three percent of 2.4 million US Professional developers use Microsoft?s visual basic program as their primary development language(1) Microsoft is playing an increasing role in their technical education, forging commercial partnerships with both commercial and academic training institutions.

Microsoft?s Internet Explorer desktop browser has overtaken Netscape?s software for navigating the Internet. Microsoft also has made many alliances with banks and its financial software, Money and Personal Investor, along with its financial server software, Microsoft is emerging as a key player in shaping the on-line financial transaction system of the future. Its ownership of the Microsoft Network(MSN) and its partnership with NBC, which has created MSNBC venture has given Microsoft strong distribution outlets for its emerging range of media content. Its investment in Dreamworks gives it a position in Hollywood movie and music production that can be assembled into its on-line ventures involving interactive multimedia as computers and television combine in coming years.

Also Microsoft is working to control the way people connect to the Internet from work and home. Its $425 million purchase of WebTV gives it control of a major avenue for non-PC internet access. Its $1 billion investment in the cable company Comcast and proposed investments in US West cable now make it a major player in designing standards for accessing the Internet over cable. Microsoft?s Bill Gates is in partnership in a $9 billion venture to create a low-orbit satellite system called Teledesic that could give high-speed Internet access to anyone anywhere in the world, an investment supported by the US government through a massive free giveaway of radio spectrum to the company.

Microsoft has used that financial clout consistently over the last few years to acquire companies and their software and human assets, while sealing financial alliances with a range of partners. While many of the financial details have not been made public, Microsoft spent an estimated $1.5 billion between 1994 and 1996 on acquisitions.(3) Microsoft has purchased many companies buying or investing in over twenty companies in 1996 alone. Its investment have not only been with the $1.5 billion spent on WebTV and Comcast, the $150 million invested in Apple, and the hundreds of millions invested in additional Internet-related companies, including its key investments in audio and video streaming. It has been acquiring key strategic technologies at a rate of over one per month. Surprisingly Microsoft is not at the peak of an industry?s size but at an early stage in markets that are expected to explode in the next decade. If unchecked, there is a real possibility of Microsoft becoming a financial and technological mountain dominating more markets and industries than any monopoly has ever dominated.

The nature of high technology makes each individual market linked to other markets through a combination of software standards, training skills, development tools and physical architecture that must all be able to work in combination.

The key to the economics of networked technology is that products and markets do not stand alone in these high-technology markets but instead reinforce one path of innovation versus any alternative path. An operating system attracts software developed around that operating system, which discourages new competition since any alternative faces not only the challenge of creating a better operating system but competing against a while array of already existing software applications. Businesses train employees in one technology and are reluctant to abandon that investment in training, while the existence of a pool of people trained in that technology encourages other businesses to adopt that technology. And as desktop software has to be able to work with client-server networks and an array of other technologies, it becomes nearly impossible to abandon an established set of technology standards that tie those different parts together. These so-called ?network effects? give an incredible anti-competitive edge to companies like Microsoft that control so many different parts of the network and use that control to leverage position in connected markets.(5)

Any market leader that has many financial resources can easily drop its prices to prevent an upstart from destroying its initial investment. Since this is not a perfect world we have one company, Microsoft, that towers over its competitors in most market segments and who is doing everything possible to undermine open standards in favor of ones that its controls.

As well , Microsoft has not been adverse to engaging in outright anti-competive practices as needed to assure its dominance of markets, as a string of lawsuits and complaints trailing in its wake can attest to. From his first days in the computer industry back in the 1970s, Bill Gates said repeatedly ?We want to monopolize the software business.?(6) And while he has actually changed his words, his actions have shown no change in attitude other than the range of industries he wants to monopolize has expanded. When competitors have released new software, Microsoft has announced upcoming better features on its own software- improvements which often would not materialize for months, even years after their ?scheduled? release. Hidden features of its operating system have been used to give its own application developers an advantage over the competition. And the bundling of software has allowed Microsoft to use dominance in both markets together. It has used its advantage of its monopoly control of the desktop to obtain dominance of Internet standards and in turn use that control to achieve a dominant position in Internet commerce.

The Internet, while a potential threat to Microsoft?s dominance, is also an opportunity for the company to seize control of those Internet standards and thereby gain new network footholds on every computer connected to the Internet. Through the combination of controlling standards in the Web browser market, Web servers, development tools for Internet software developers and development of standards for financial transactions on the Net, Microsoft is not only quickly dominating markets for software sales related to the Internet, it is using dominance of software technology to obtain a commanding position in consumer-oriented Internet commerce, from auto sales to classified advertising over the Internet. It is seeking to further reinforce its dominance by controlling standards and connections to the Internet right from home.

While the ?network effects? of technology have played a large role in Microsoft?s monopolistic success, much of the blame belongs to the federal government for its failure to curb abuses by Microsoft, block its acquisition of key technology, or step in to support open standards not controlled by Microsoft. The government must examine not only individual markets but how Microsoft?s expansion from desktop software to investments in enterprise computing, media content, on-line commerce and Internet access to the home all work in combination in anti-competitive ways.

The operating system, MS-DOS and Windows, are the software core of almost all computers-linking keyboards, the central processing unit, memory chips and all other software together in a functioning whole. While Microsoft has expanded its operations in the last few years, it was through control and sale of desktop operating systems in the consumer market that Microsoft made the fortune from which all other ventures have sprung and it is the operating system that has been the key strategic point of control that has given Microsoft a monopolistic advantage in other ventures. Microsoft is now using many of the same tactics that it used to monopolize the consumer market for the desktop computers to win domination of the business-level and Internet markets.

Microsoft?s MS-DOS operating system, begun in controversy and accusations of deceptive business practices, has been the subject of a Justice Department defense decree, and to this day is still the object of residual lawsuits from ertstwhile competitors. When IBM licensed the operating system from Microsoft in 1980, the fortune of the company was made as it went on to resell the operating system to almost every company seeking to build computers that were compatible with the new IBM standard.

While Microsoft has traditionally pushed forward its dominance through control of software, it is increasingly investing financial resources in professional training, and tilting the workforce towards Microsoft expertise. As Microsoft makes sure there are professionals available trained in its technology where its rivals often cannot, business will feel pressured to adopt Microsoft technology just to be assured of a trained workforce.

Microsoft’s existing worldwide training and certification programs trained more than 1.2 million technology professionals in fiscal year 1997 as part of a program Microsoft calls Skills 2000. It reaches these professionals through an intensive combination of partnerships with computer vendors, work with commercial training centers, a free television-based training program, training sessions linked to conferences around the country and a growing network of academic alliances.(29)

Microsoft is the only software vendor (outside fading Novell) which has its own professional certification credential. The company has worked with a variety of vendor partners and commercial training centers to establish its certification program; with 120,000 Microsoft Certified Professionals by 1997, the number had grown 250% in one year. Concentrated in the consultant services and system integrators hired by other firms to set-up their computer systems, such strategic training is magnified as those Microsoft-trained professionals tilt the buying decisions of a whole range of companies(30 Microsoft is spending hundreds of millions of dollars on training–thousands of dollars per person trained–on other peoples’ employees in order to tilt the supply of software professionals towards Microsoft technology.

Microsoft is also tying over 300 academic institutions and 40,000 students a year into its training program through its Authorized Academic Training Program It provides free technical training to teachers and educators and has shaped those academic programs to create Microsoft Certified Professionals, adding the academic stamp of approval to its own programs. Essentially, Microsoft is taking advantage of the weakness of standards in both the private and public technical education fields to mold them into subsidized Microsoft recruitment tools.

Looked at comprehensively, Microsoft is using its training programs to further reinforce the network effects already tilting control of corporate computing under its dominance. Its competitors like Novell, Sun and Oracle are scrambling to create a multi-company training network to contend with this Microsoft-controlled training system, but it is an unfortunate fact that our country’s whole system of technical education is being distorted as it becomes one more tool for Microsoft’s monopolistic goals.

The rise of the Internet has been both a threat to Microsoft’s empire and an opportunity to expand it to a degree impossible before. With various forecasters expecting between $80 and $160 billion in electronic commerce by the year 2000, the Internet had become the decisive realm of computer competition for the future(35) And Microsoft is working hard to ensure that consumers will become captive customers of its monopoly.

The threat of the Internet was obvious: with a twenty-year tradition of open computing standards connecting computers of all kinds, the Internet looked ready to make proprietary operating systems for individual machines an anachronism. As the Internet broke into national consciousness in 1994 and 1995, it appeared that millions of computers were connecting to one another with Microsoft having nothing to say in the matter. The rise of Netscape and a host of other new Internet companies seemed to promise a new era of competition including a whole new cast of companies. The final nail in Microsoft’s coffin seemed to be when it introduced a new proprietary Microsoft Network on-line service as an alternative to the Internet; within months, Microsoft shut down the proprietary version in late 1995 and converted it fully into an Internet service provider.

But in many ways, Microsoft’s quick success since that point in seeking control of the Internet marketplace just shows the inherent monopolistic power of the company’s place in the computing world. Having dismissed the Internet until relatively late, Microsoft has in under two years been able to assume not only a competitive position but is now threatening to control the standards of the Internet. Microsoft’s slogan has been to “embrace and extend” (and thereby control) the Internet from its position of control over the desktop.

Nothing highlights Microsoft’s monopolistic strategies more than its attempts to destroy the open computing standards of the Internet-oriented Java language–an open standard for running software over the Internet created by Sun Microsystems and supported by hundreds of other companies. The most basic use of Java is for enhancements of Web pages–animated pictures, interactive queries from browsers – to go beyond viewing static information. But Java is ultimately a way for the Internet to act as one giant computer where programs can be located anywhere and be accessed instantly over the Internet from any desktop. The key innovation of Java is to be platform-independent, meaning that a Windows user can run software from a UNIX server or even run sophisticated software from simple “network computers” that need only a stripped-down operating system for Internet access; most software functions will be run somewhere else on the network and only small “applets” need be sent back-and-forth between desktop and central computer. Obviously, Java is a direct threat to Microsoft’s Windows franchise and the power Microsoft derives from it, so Microsoft has done everything possible to undermine Java’s “write once, run everywhere” programming standards.

Microsoft’s first strategy was to create a competing software system called ActiveX for allowing Web designers to create mini programs on their Web sites to lessen the immediate demand for Java “applets.” Microsoft quickly used its control of major development tools like Visual Studio and its web server support software to make writing ActiveX commands as easy as possible to lure developers and companies to adopt ActiveX. And this strategy partly worked with an estimated $400 million market in ActiveX components created by 1997.(49)

But Microsoft also recognized the lure of Java and it initially licensed Java from Sun for its own Web software and development tools for fear that developers might abandon them if Microsoft did not provide Java capability. Microsoft’s Visual J++ Web development software (incorporated in Visual Studio) quickly became the most popular Java development tool and is used by 50 percent of Java developers.(50) Microsoft accomplished this dominance through large-scale distribution of free and reduced copies of J++ to key developers around the country. It also bought out Colusa, an early developer of Java tools, and in 1997 purchased Dimension X, whose Liquid Motion graphics and multimedia authoring tools for Java were already considered top in the industry.(51) All of this gave Microsoft an emerging dominance in the Java field that was surpassing Sun itself. However, Microsoft’s J++ tools are optimized for Windows machines and many developers expressed skepticism of Microsoft’s commitment to open Java strategies.

By mid-1997, it became clear that Microsoft’s goal was not just to “embrace and extend” Java but to destroy its multi-platform function, using Microsoft’s combination of browsers, operating systems and developers tools to divert Java into a new Microsoft-controlled proprietary system running best only on Windows-based machines. Microsoft introduced a new version of Java called J/Direct which went beyond being optimized on Windows machines to actually making direct “calls” on Windows operating system commands – violating the basic principles that all Java programs should be independent of a specific operating system. In July of 1997, Microsoft announced it would not include any of what Sun called Java Foundation Classes–bits of standardized Java code to assist cross-platform compatibility–in future Microsoft products. As one Microsoft executive stated flatly, “It [Java] is a competing operating system” and Microsoft’s goal was to undermine, not support its use as a cross-platform standard, no matter how many companies supported it.[(52) Microsoft is promoting a competing Windows-oriented Java Application Foundation Classes (AFCs) and has been working with its hardware ally Intel to optimize its new software standards with Intel's hardware--thereby reinforcing both their positions in control of computing standards.(53)

Having largely engineered its unfriendly takeover of Java standards, Microsoft put the final nail in the coffin with its $150 million investment in Apple Computer. In exchange for that investment, Apple not only agreed to bundle Explorer with every Apple computer, but agreed to support Microsoft's Java standards - essentially extending Microsoft's control of Internet standards across nearly 100% of desktop computers.(54)

On Oct. 7, Sun filed a breach-of-contract suit in federal court in San Jose, Calif., arguing that Microsoft was misusing its license to use Java in creating platform-dependent versions. Business Week commented on the importance of the lawsuit, stating, "[Java] is perhaps the only remaining technology that can challenge Microsoft’s dominance,” but they also noted that the delays involved in any lawsuit may well kill open Java standards since the legal uncertainty plays right into Microsoft’s hands since it can in the meantime confidently promise to, through its economic strength, deliver one standard or another on its Windows machines.(55) If there is no quick, decisive action by the courts or the Justice Department to support open standards, Microsoft will end up expanding its monopoly to control of software throughout the Internet and corporate networks, and consumers as well as business customers will be captives of its monopoly.

Having come to dominate software sales in the computing world, Microsoft is looking to use that control to move into other markets. With large areas of commercial activity moving onto the Internet, a prime Microsoft goal is to take substantial control of the standards governing financial transactions on the Internet and to use that position to leverage itself into an array of on-line commercial activities. While working to set the software standards for financial transactions on the Internet, Microsoft is rapidly moving from being a software supplier to being a major direct player in Internet commerce unto itself by using its dominance of software and its monopoly position in operating systems to reinforce its other businesses on-line.

Microsoft had originally hoped to take a very direct route to dominating on-line commerce by cornering the market on all financial software sold to consumers. In 1995, it was ready to pay $1.5 billion to acquire Intuit, maker of the dominant financial software program Quicken. Microsoft had tried to make inroads with its own Money software, but Quicken had proven a harder challenger than any other software competitor (even with Money bundled with other software for free), so buying the company had become the next best option. However, under pressure from competitors and banks, the Justice Department intervened to pressure Microsoft to abandon the deal.

The result shows some of the benefits of blocking Microsoft from dominating a market, but subsequent events demonstrate that when one avenue of control is blocked, Microsoft will simply take another route. Consumers who purchase Intuit’s Quicken 98 will have to install Microsoft’s Explorer browser in order to use the software for online banking. In some respects, however, having been blocked from merger, Microsoft has been forced to compete hard with Intuit in improving its software. Most importantly, Microsoft has been forced to work with Intuit on open transaction standards, called Open Financial Exchange (OFX), acceptable to both companies along with an array of banks, including Bank of America, Chase Manhattan, Citibank, Wells Fargo along with many others.(56)

However, having been blocked in directly controlling the software and standards for financial transactions, Microsoft has rushed to dominate the tools and server software necessary for banks and other financial institutions to implement the standards. It has established alliances with Hewlett-Packard and Verifone (maker of most credit card “swipe” machines in retail stores) to promote Microsoft financial server software.(57) It also has established an alliance with Tandem and Compaq computers, dominant suppliers of hardware to banks, to promote an upgraded version of its SQL Server to act as a database for financial transactions through ATMs and home computers. Microsoft has supplemented its developer tools with a specific set of tools aimed at financial institutions working to build transaction-oriented Web sites.(58)

But the key to Microsoft’s strategy is making its Merchant Server the dominant Internet server for on-line commerce. Lacking the technology inside Microsoft, the company in mid-1996 acquired eShop Inc., which had created key technology in running their own virtual shopping mall. Shutting down the mall, Microsoft made it clear that it was eShop technology they needed for incorporation into Merchant Server. Analysts described Microsoft’s purchase as a major blow to competitors, especially Netscape. Measuring the importance of eShop, Microsoft itself stated it saved 12 to 24 months of development time and outside analysts argued that cornering the eShop technology was going to give Microsoft a three-year jump on the competition – a lifetime in the fast-moving computer world.(59)

Sealing its advantage, Microsoft quickly nailed down contracts with major financial institutions to use Merchant Server, including BankAmerica Corp, Wells Fargo, NOVUS Services and hundreds of others (including many of those who had worked with Microsoft and Intuit in establishing the OFX on-line transaction standards.) As part of the deal, Microsoft and its on-line partner VeriFone added secure Internet retailing and payment systems, further strengthening the package that Microsoft has been able to offer in selling not only its Merchant Server but its underlying NT computers as well.(60)

While Microsoft had not been able to dominate on-line financial transactions from the consumer software side, it rapidly proved that its already expanding dominance of server software could be leveraged for many of the same goals. It has opened its own financial Web site, Microsoft Investor, which already has 120,000 people a day–a number that Microsoft has generated by providing, in the words of Forbes magazine “tour de force software and financial analysis at no cost.” Along with this has come lavish spending on free services to generate Web traffic, while generating commissions and fees for higher-level services.(61) Microsoft has already forged alliances with Charles Schwab and Fidelity Investments for their customers to trade stocks through the service, generating a share of the commissions for Microsoft. Since Schwab alone already has 908,000 active online customer accounts with holdings of more than $66 billion, even a piece of that and other financial allies’ business promises large growth areas for Microsoft.(62)

While Microsoft currently faces competition in each of these individual online markets, it is the only company in all of them, from personal finance to travel to real estate to car sales to local information services. Its technological expertise and deep pockets give it a built-in advantage to begin with, but Microsoft’s ability to bundle these on-line services together allows it to repeat its “suite” strategy of linking and cross-promoting its different ventures into one dominant “super-site.” Combining customized local versions of Expedia, Carpoint and Boardwalk will give each city’s Sidewalk a powerful competitive edge over any rivals. And analysts see Microsoft’s breadth itself as a selling point to advertisers. Jupiter Communications analyst Peter Storck argues, “They can package a network with a whole bunch of demographics in one media buy. That’s what advertisers are begging for.”(71)

The real kicker, however, goes right back to Microsoft’s dominance of the desktop. Microsoft’s new version of its Internet Explorer 4.0 contains a feature called “active channels” ? technology to send Web site information directly to the desktop. The software comes with twelve preset “channels” which Microsoft is busy licensing to media outfits and planning to use to promote its own Internet commerce sites. Not only is Microsoft pressuring media outfits for exclusive deals to help reinforce its browser, it is in turn requiring computer resellers to stick with its preset channels as part of its operating system and browser licensing deals(72). Combined with its massive spending and technological know-how, Microsoft is adding in its usual pattern of monopolistic tie-ins to dominate online commerce.

One other wrinkle is Microsoft’s recent investment stake in Comcast Cable, which in turns owns the QVC home-shopping cable channel. QVC’s new on-line site, iQVC, is only selling $1 million of goods per month, but it is backed by the QVC experience of over $2 billion in cable sales each year and, as importantly, has experience in fulfilling orders fast and accurately. With its investment in Comcast, Bill Gates announced, “We’ll be sitting down and talking out how we can help QVC move and drive forward their interactive activities.”(73)

Microsoft’s most notable failure has been leveraging its original content on the Microsoft Network (MSN) into a stronger position as a service provider, although its 2.3 million subscribers still makes it the second largest Internet service provider behind America Online. But it has continued to invest in original content, from “channels” to Slate magazine, and is launching new content this fall with a range of media partners, including the Disney corporation.(74)

On the other hand, the hundreds of millions invested by Microsoft in its MSNBC venture with NBC has resulted in programming, if not profits, that have won it respect. With an online editorial staff of over 100, its interactive coverage of the news has been hailed by critics as better and more original than CNN’s or ABC’s news web sites.(75) Microsoft has launched another joint service with Black Entertainment Television, MSBET, to target African Americans on-line.

Microsoft is already inking similar deals with news outlets around the world. In July, Microsoft agreed to develop an online news site with Australia’s Publishing and Broadcasting Ltd. (PBL), including Nine Network TV and a magazine publishing empire – all owned by Australia’s richest man, Kerry Packer (worth $3 billion). The online service will include news, sports, weather, entertainment and lifestyle shows along with access to financial and retail services, including Microsoft’s Sidewalk and Expedia services. One example cited in the advantages of the combination is leveraging Channel Nine’s travel shows with an instant link to Expedia’s Web sites to book tickets.(76)

When Microsoft announced in April of this year that it was paying $425 million for Web TV Networks, a company with 56,000 customers that had made a few small inroads selling a cheap machine to surf the Internet without owning a computer, many commentators saw it as one more shot in the personal computer war with Microsoft placing a side bet on WebTV. With rivals like Netscape, Sun and Oracle lining up behind “network computers,” Web TV looked to be a nice piece of hardware to outflank them on accessing the Net cheaply. At one level that was true, but the advantages for Microsoft go much deeper than that.

Microsoft’s main goal is to merge WebTV’s access standards and technology with its own stripped down version of Windows called Windows CE. Microsoft had previously targeted Windows CE for handheld computers but was now making a large push to make CE the operating system of the whole consumer electronics world, from cable set-top boxes to DVD music players to Internet telephones. With WebTV adopting Windows CE, the consumer electronics companies that build the hardware for WebTV, like Phillips and Sony, would be encouraged to adopt Windows CE as a general multi-purpose operating system for all their consumer goods – a potential market far larger than the personal computer market.

With Microsoft supplying the development tools, new “smart” consumer goods would become cheaper and easier to make while ensuring that machines could communicate with each other – more and more important over time – only on platforms controlled by Microsoft(87) Microsoft also recently invested in Navitel, the maker of an Internet telephone which has adopted CE as its standard and could be integrated into WebTV

Of course, the primary consumer item Microsoft wants to have Windows CE set the standard for is the cable set-top box that many people expect will control high-speed access to the Internet from homes across the country. Cable connections to the home are expected to be more than twenty times as fast as the fastest modems today – a speed that will suddenly make all the investments Microsoft has made in interactive 3D graphics incredibly valuable to the whole media industry.

But to accomplish that, Microsoft wants to control the software in the cable box – thus its $1 billion investment (an 11.5% stake) in Comcast Corp., the fourth largest cable company in the country, and its negotiations with US West, Time Warner, Telecommunications Inc. (TCI) and Cox Cable for possible investments of similar magnitudes. With these major cable investments, Microsoft is seeking a commitment by them to support the WebTV/Windows CE standards for connecting cable set-top boxes to the Internet. This commitment by Comcast and other cable companies is crucial since there are moves by a consortium of cable companies called Cable Labs to adopt open standards for all cable set-top boxes–a development anathema to Microsoft. With deals that are likely to include the Microsoft Network as well, Microsoft may be about to see all its investments come together in a highly profitable alignment.(88) Even if Microsoft is not able to control the exact standards adopted initially, it is leveraging itself into a position to control even “open standards” in much the way it has been able to “embrace and extend” other standards like Java.

The next step is Microsoft’s effort to have television broadcasters adopt digital TV standards promoted by Microsoft, Intel and Compaq that would allow the bundling of interactive content with any television show as long as the viewer has the proper operating software (meaning Microsoft’s). Microsoft is already demonstrating a version of “enhanced television” this fall that depends on its new Windows98 operating system and special digital circuitry. UPN’s “Moesha,” the WB’s “F/X,” and USA Network’s “Pacific Blue” have all agreed to broadcast with the new system that allows the specially equipped computers to view cast biographies, chat with other viewers and even buy knockoffs of stars’ clothes as they watch the show. Combined with WebTV/CE standards, Microsoft is building a recipe for the complete convergence of computers, TV and Internet commerce.(89)

But Microsoft’s control of the standards for Internet access over cable is apparently not enough; Bill Gates has personal plans to own a worldwide system of satellites beaming Internet access to homes anywhere in the world. Rather than Microsoft encircling the world, Bill Gates is investing out of his own pocket in a project called Teledesic, a plan to launch 288 low-orbit satellites that will relay Internet traffic to any point on the earth. Gates and fellow billionaire Bill McCaw (who made his fortune early in the cellular phone industry) are the primary partners in this $9 billion venture, with AT&T and Boeing each receiving a smaller stake for their contracting role in the operation.(90)

The revolutionary part of Teledesic’s approach is that traditional stationary satellites are so high up that delays in transmission make them less useful for high-bandwidth transmission like the Internet, so Teledesic will have to coordinate low-orbit satellites careening 435 miles above the earth at 16,740 miles per hour. Using government-financed technology left over from Star Wars experiments, Boeing is helping them solve the problem and get their satellites launched by 2002. That is when the partners want to start service to anyone with a satellite dish (that need be no larger than a dessert plate).(91)

The irony is that this plan to create a massive worldwide Internet access service controlled by two of the richest men in the world has been assisted by the U.S. government with a complex give-away of radio spectrum that amounts to twice the total spectrum controlled by all of the country’s radio and television stations put together–without the government being paid a cent for this favor.(92) In fact, the government lobbied hard at the World Radio Conference, the world governing board for operating such a satellite system, to help Gates and McCaw get approval for their venture.

So with government-financed research and free radio spectrum courtesy of U.S. taxpayers, Bill Gates will be adding the final touch to his computer network domination with the most comprehensive broadband Internet access system in the world–an access system that will no doubt enhance Microsoft’s monopoly in the computing world.

As noted at the beginning of this report, many of the monopolistic advantages enjoyed by Microsoft are due only partially to predatory abuses by the company; many of those advantages are results of the “network effects” to any dominant player in an area of technology where customers seek consistency and compatibility between converging technologies and connected markets.

Microsoft has used its dominance of the operating system standards–the “field of competition” in many ways–to gain an unfair monopolistic advantage against application competitors trying to compete on the standards controlled by Microsoft. It has used predatory pricing, including free giveaways of its software through bundling and Internet distribution, to overwhelm competitors who do not possess similarly deep pockets, and it has used exclusive licensing deals to completely cut off competitors from access to markets such as computer resellers tied to Microsoft through those exclusive deals.

For twenty years in the 1970s and 1980s, the federal government rigorously supported open technology standards and the end result was the innovative Internet. In recent years, the federal government has stepped back from that role as guardian of open standards and the result has been rapid monopolization by Microsoft. It is NetAction’s position that the federal government must step back in to vigorously defend open standards and open competition, while carefully guarding against even the smallest abuses by Microsoft since even minor abuse by such a dominant player magnifies its advantages due to the network effects of the new economy.

In conclusion, NetAction offers the following recommendations as appropriate means of restraining the negative aspects of Microsoft’s dominance:

1.Divestiture: At a minimum, Microsoft’s Windows operating system monopoly should be split off into a separate company from the application and Internet divisions. This would end the inherent opportunities for abuse of one company competing in application markets while controlling the “field” of competition as well. It may also prove necessary to separate Microsoft’s application and Internet divisions.

2.Restrain Predation: Stop Microsoft from giving away browser products. Since $0.00 is below any measure of cost, it meets the traditional test for predatory pricing (sustaining below cost pricing with monopoly profits in order to drive out competition and then raise price).

3.Licensing: Microsoft should be forced to discontinue any licensing practices (NT, database server, etc.) that restrict customer dealings with competitors or require customer use of MSFT products. Exclusive dealing and tying purchase of one product to purchase of another should be unlawful for this monopolist where linked to the operating system.

4.Open Standards: The government should more vigorously support open standards processes and endeavor to defend open standards developed through industry standards processes from anticompetitive abuse by Microsoft.

5.Consumer Involvement: The government must establish processes to ensure participation by Internet users in public policy decisions effecting consumer use of the Internet, including appropriate mechanisms for addressing complaints about product marketing and the quality and reliability of Internet services.

With these measures, we can begin restoring the promise of open standards and the dominance by the best available technology, not merely whatever technology furthers Microsoft’s profits and strategic dominance.