**From:** Steve Ballmer
Sent: Wednesday, January 26, 2000 1:53 PM
To: Quarterly Q & A
Subject: Updated Priorities Memo

Importance: High

Please replace the priorities memo I sent earlier today with this one. It is the exact same memo, but the earlier version did not have revisions accepted from earlier drafts. So please delete that one and keep this one.

Microsoft
Priorities.doc
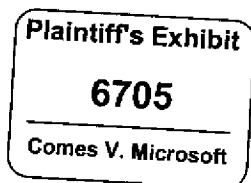
Company Priority: Next-Generation Windows Services (NGWS)

Today, Microsoft faces competitive challenges as great as at any time in our history. We all know who our competitors are: Sun, IBM, Oracle, AOL-Time Warner, and Linux.

At the same time, we have incredible opportunities ahead with the growth of the Internet, the development of new wireless and family room technologies, and the quest for simpler ways for users to do things with PCs and non-PC devices.

From a product standpoint, we are well on our way to completing the 2000-generation of products that our customers will rely on for the next several years. Windows 2000 and Office 2000 are released and Exchange 2000, SQL Server 2000, and other important tools are in the development homestretch.

In the years ahead, the nature of how software is delivered and used will change, but the importance of software as an underlying driver of the technology industry will only become more important. The next 10 years will be the Software Decade. Our heritage is as a software company, and as long as we stay committed to our roots, we will continue to be successful.

What we need, however, is a roadmap that will allow us to singularly focus on our corporate priorities for the future and to clearly communicate them to our employees. The purpose of this document is to lay out a high-level framework for Next-Generation Windows Services (NGWS)

Executing efficiently and effectively on NGWS will involve making some tough tradeoffs, including reducing the amount we invest in short-term opportunities and new things. We will need to allocate our top people to all-out success in this remake. There will be skepticism and cynicism. People will need to work together and depend on people in ways that are uncomfortable.

As a company, we have many strengths and some weaknesses, and we cannot be complacent, arrogant, or slow moving in addressing them. That is why we are dictating this imperative and a set of schedule targets, top down, in this memo. Detailed plans will be bottom-up and generated during the planning process by the business divisions. This process will need to bubble up the projects we must cancel or curtail to get the focus on the things in this memo. We cannot do everything. Our goal is to provide a lot more detailed information on NGWS for customers, analysts, partners and the media later this spring, at Forum 2000.

The Internet User Experience opportunity

Fifteen years ago, we totally committed ourselves to bringing the graphical user interface (GUI) to the PC through the Windows platform. Only through this single-minded commitment in both our Windows platform and applications were we able to successfully transform from a character-mode platform to the GUI, which laid the foundation for our success today and that of our partners.

We now have the opportunity to help create a totally new user experience – the Internet User Experience (IUE) – that is every bit as important as GUI. We've used a lot of buzzwords that partially describe this: Software as a Service, Web Workstyle, Web Lifestyle, Personal Web Services, The Business Internet, the Programmable Web, Megaservices, the Everyday Web.

But the IUE encompasses more than any one of these. As its name implies, the IUE is about creating compelling, intimate, seamless and automatic connections for and between consumers,

businesses and developers. It's no small task, but Microsoft is in a unique position to benefit from building these kinds of dynamic connections with and for our customers and partners.

For example, if we and our partners successfully execute on our goals, a great IUE will change the way everyone receives healthcare services. You'll be able to keep all of your information in a secure and private place out on the Web, give permissions to the appropriate doctors to view your medical history, easily pay your bills or address issues with your insurance company, receive notification when a medical appointment is needed, and incorporate those appointments into your calendar -- automatically, wherever you are and whatever device you are using.

A well-implemented IUE will change the way you think about traveling. You'll easily purchase a flight through Expedia or another partner and it will automatically be reflected on your schedule. Your friends, relatives or a business associate will be notified that you're coming to town, you'll be informed if there's a delay in your flight's departure, and the people picking you up at your destination will also be informed. Again, all of this will work seamlessly and automatically.

The Internet is a great connector. But today, very few devices other than the PC work well together. The contacts that you keep in your PC aren't automatically available on your home and mobile phone and it is very difficult to coordinate having an e-mail delivered automatically to whatever device you're using at a certain time. You can't submit a purchase order to a customer's Web application when you're offline on a plane. And you can't even store your documents in one place and easily give permissions to control access to them. We must create an Internet User Experience that will solve these and other problems and create new opportunities for our users, partners, and Microsoft by tying together many devices and interfaces.

Users want services that present information to them with the simplicity of Web pages, the functionality of traditional applications, and the flexibility to combine and integrate information and services in new ways -- cross-device and cross-service. To create these next-generation services, developers want to be able to create services in their favorite language and have it run on many devices while leveraging each device's strengths and using services from the device and the Internet. This is a tall order, but one that we are uniquely positioned to deliver.

The key to delivering on these user and developer possibilities starts with the vision of the IUE, which in turn requires the development of new software and services. This is nothing less than a complete transformation of our business.

We succeeded with Windows and Office because we saw the value of a core platform for GUI applications and developed it, developed applications built on the platform, and evangelized this platform to partners and developers. Similarly, our commitment to making the IUE a reality will consist of creating a revolutionary platform -- the NGWS -- developing a set of key services for our customers that build on that platform, and evangelizing the platform's value. The platform will combine Internet-hosted platform services with the power of Windows PCs, servers and non-PC devices.

The application services we provide will be a small subset of those that people desire, so our evangelism, partnerships, and developer support must reach a new level to fill out the platform solution. We must show the world the opportunity we can offer. Only by doing this, and delivering the necessary new software and services, will we create the virtuous cycle necessary for both our partners and us to succeed.

Competitors all want to provide the core platform and services for users to take advantage of these changes. In some sense, it is now or never for us to deliver on this opportunity. We are the leader in the software business and we have the most capable people. As you read through this memo, you will see that it has much more detail on the future of our platform than anything else. That is because we all depend on the platform and it is the one thing that unites us.

The Next-Generation Windows Services Platform

We call our platform the next-Generation Windows Services platform to reflect a fundamental change – Windows will be delivered not as just a platform for a PC, server, or device but as part of a complete service. It renews and builds on Windows on the client and server and adds next-generation services delivered over the Web through NGWS Online. Bill will spend 100% of his time helping the business divisions create the NGWS platform and core services.

The core platform and user experiences for NGWS will have consistent client, server, and Internet implementations. In order to tie these all together, though, we must have a set of services and technologies that are universal to these NGWS implementations. This consistency will allow developers to write one NGWS application service to the platform that can be used on and optimized for any combination of devices and services, as the diagram to the right shows. It will allow users to have a uniform experience whether they're using the NGWS platform on the PC, a non-PC device, or on the Web. The functionality of the platform and core user experiences will be dynamic and rapidly updated. This is all part of the evolution of software to be a service.
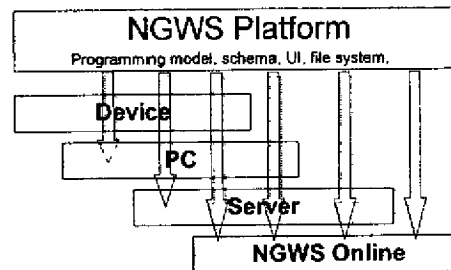
This platform is about more than just the clients or server or Internet service: it is about the power of combining the three. Some applications will just use one of these. But most applications will also take advantage of the relative strengths of the PC, non-PC devices, server, and services. This will be a core strength of the NGWS platform.

One example of a service that will take advantage of all components of the NGWS platform is entertainment. Internet services will make it simple to buy and store music online. This music will be available on all of a user's devices, including the home stereo, mobile music players, and their Auto PC. They will be able to cache the songs they most often listen to on their PC or home server. And the PC will allow them to edit, create, and control the music.

Since the Internet is the new focal point for our platform, some might think this initiative is only about the Internet. We may model our efforts from the Internet service, *but the client implementation and its popularity is 100% essential to the success of the company.*

One of the primary effects of the NGWS platform will be to create a much better Windows PC experience. Users will still have the total control and power that they have now and will still be able to run the same types of PC applications. They will also have more applications than ever – every NGWS application service will run on your Windows PC and, in most cases, this will provide the best experience. At the same time, you won't have to maintain or upgrade your PC – this will happen as a service. And your information and many application services will be available on any other PC, on non-PC devices, and through NGWS online. Windows PCs will be a great way to use next-generation Windows services, though not the only way.

We believe that these services we deliver as part of NGWS must evolve from existing Internet standards, and be robust in an inherently distributed world. We will thus embrace XML as a core tenet. XML is both technically appropriate and gives us a strategy to innovate in unique ways while still bridging to non-Microsoft systems. We will need the modern tools, frameworks, and runtime services that make it easy to develop these applications for Web services, either at the Internet message level or as objects.

There is a set of core NGWS services and technologies that must be consistent across the implementations online, on the PC, and on non-PC devices. These are not isolated from each other. They rely on each other and must be thought about together to enable the IUE. We have

many assets to draw upon to deliver these including: a) for schema, the work we have done with Exchange and Outlook; b) for UI, IE, ePad, Neptune design work, Netdocs and Outlook; c) for storage, Platinum and its Web Store and SQL Server and its rich XML support, and d) for programming model, Windows DNA and our VS 7 work. These services are:

NGWS Programming Model: The NGWS programming model must help developers with a number of issues, including: 1) Building apps/Web sites that easily export themselves and call loosely-coupled XML services; 2) Facilitating building Web sites by providing services that most apps will use like messaging, transactions, notifications, etc.; 3) Making it easy to build apps that scale out. Making the standard PC-based platform scale by enabling load balancing, fail-over, clustering and other software services is critical to meeting the threat of the server consolidation strategy from Oracle and Sun; 4) Making it easy to store and retrieve XML schema objects from our new file system and other information stores; 5) Providing higher-level services that make it easy to use our new standard Windows schema; and 6) Making it easy to write apps that target browser-only and new device environments as well as rich Windows clients without having to rewrite the applications.

NGWS Schema: Standard XML definitions of objects that NGWS will support in its UI. NGWS schema let both customers and developers have a single way to think about important items in their world, like people, devices, networks, services and places. Information shouldn't be lost when people synchronize devices like PCs and PDAs. NGWS schema enables Web Services to work together in an integrated, consistent fashion. It will build on the foundation of things like cut-and-paste and OLE that preceded them.

NGWS UI: Our NGWS UI must be three things. First, it must embody a new style guide that unifies services, Web pages, and NGWS applications and makes it clear how to take actions on XML objects. Second, it must be a new shell that makes it easy to organize, navigate, and integrate XML-based objects. And third, it must include a set of basic user functions for important XML schema objects (mail, files, calendars, merchandise, notices, versions, photos, etc.) The NGWS UI should have rich enough capabilities that it literally adds value to all Web sites that support NGWS schema, and other value to arbitrary Web sites that a user may explore.

NGWS Natural Language: NGWS must include offering customers a new way to access information; a more natural way of interacting with their own machines and with the Web as a whole. Our Natural Language assets must come together to deliver both an incredibly compelling consumer benefit, and a set of technologies that are hard for commodity browsers to match.

NGWS File System: The NGWS file system must be a place where XML objects can trigger events, in addition to being stored, content indexed, and versioned. Search and query functionality must be world class. Our file system must have the notion of hierarchy (client/server/service) built-in, and must provide a compelling offline experience. We will use advanced file system features in the new UI and evangelize these services to Web site builders. NGWS will instantiate advanced storage and standard schema so there is a well-known place that a user can expect to consolidate information from a variety of third party Web sites in the rich form that each Web site intends.

Today the Windows platform is delivered in two ways: on the PC client and server as well as on some non-PC devices. The NGWS platform will be delivered in three ways:

1) Windows NGWS. We must incorporate core NGWS services and technologies into a breakthrough Windows release for the PC client and server. We must also commit to Windows Excellence and deliver superior manageability, reliability, and security – from the client to the server to service.

2) NGWS Online will deliver world-class capabilities to both developers and end users from the Internet that enhance the Windows NGWS experience. This is a critical addition to our platform in much the way Windows NT added a server to our platform base.

3) Non-PC devices with NGWS technology.

1) NGWS Online

This is a critical addition to our platform. As Windows NT added a server to our platform base, NGWS Online adds an Internet Service to our platform. NGWS Online provides core NGWS services such as storage, personalization, and schema for other services and applications running on the Internet. It must also run certain central services that we will offer for corporate intranet servers, such as a directory and identity, software management and distribution services, and routing information for messages and notification. E-mail, instant messaging and other communications services are critical and will be implemented in the client and corporate server as well. Users will be able to store their information on NGWS Online, receive new information there, replicate information to their machine or server, and run scripts that tell the system what to do when their information changes. All of these facilities need be part of our corporate server and work seamlessly across the boundaries. (This implies work in Active Directory and Passport for example, as well as other areas.) We will rapidly improve and add new services to NGWS online.

NGWS Online services will support clients other than Windows NGWS clients -- down level Windows clients at some level. But users will have the best NGWS Online experience on Windows NGWS clients or with a Windows NGWS server. NGWS Online services will be visible to users of the Windows client or administrator of Windows servers. But many of the services will be delivered through customer services solutions. For instance NGWS Online will become the underlying platform on which MSN and bCentral will integrate additional services to deliver highly-scaleable, complete consumer and small business experiences. Our partners will also use these services, and in some cases so will our application services competitors.

We will instrument the site so we can, if we choose, bill users and developers for using these services in their apps. NGWS Online must be incredibly scalable. We will need to decide the terms on which we would allow third parties to host versions of NGWS Online.

2) Windows NGWS – Breakthrough and Excellence

The PC is truly one of the great developments of the last century. It is unsurpassed as a "creativity machine" and no other device has the flexibility that it has. But the PC can still be much better.

The first way we will make it much better is by embarking upon our next breakthrough product, continuing in the tradition of Windows 3.0, Windows 95, Windows NT and Windows 2000. This **Breakthrough in Windows NGWS**, though, must be even bigger in many ways. Like the most important breakthroughs of our past, this work must draw developers in very strongly. The keys to making that happen are a new user experience which promises to make the new release super popular, a great technical foundation that developers can tap into, and a clear sense that we will make the release an incredible success through our own services, evangelism and marketing.

The breakthrough Windows NGWS release will require changes to many key elements of the system through the implementation of the NGWS core technologies, including the programming model, the NGWS schema, the UI, natural language, and the NGWS file system. This is a crucial effort that will require great focus by the Windows team. This will also enable us to improve the Windows NGWS release by easily incorporating the valuable and dynamic NGWS online platform services. This breakthrough Windows NGWS will be simpler and easier to use for our customers while also adding important new functionality and services.

The second way that we will improve the PC is by delivering **Excellence in Windows**. This does not need to wait for NGWS. We use this term to refer to the improvements we must make in the basic ways our products work. Security and various "abilities" of the platform are core aspects of this. Windows 2000 is an incredible step forward, but we have more to do.

Manageability is key for our customers, so that they can scale their Web sites, manage large numbers of clients, keep systems up to date and monitor the performance of mission critical services. We will reconcile SMS, IntelliMirror and management infrastructure such as WMI and MMC. We must expand the role of Windows Update so it provides incredible management support for any Windows PC and application set connected to our NGWS online, a Windows server or a corporate Intranet.

Our reliability must continue to improve – from consumer client to server to NGWS Online. Getting Windows 2000 into consumer clients is as important as for business clients, and continuing to work on Windows 2000 systems and applications verification is key.

Security for information on Windows systems, and between Windows systems and non-Windows systems, is crucial. We must make sure we expand our security models to give more flexibility to users to delegate authority to trusted third parties to act on their behalf (e.g. "put my bills in my NGWS Online account") and we need to make working with security simpler across our products.

Delivering on NGWS Breakthrough and Excellence in Windows are crucial to the continued success of the PC and Microsoft.

3) Non-PC Devices

While the PC will continue to be an exciting, high-volume device for both consumers and business, the decreasing cost and increasing power of microelectronics mean that users will also use a multitude of non-PC devices. These new devices won't replace PC's, but will complement them. People will have multiple devices that use common services, and the customer will choose the appropriate device for each situation (e.g. computer when at desk, cell phone when on the move). Microsoft is in a superb position to solve the hard problem of understanding the end-to-end service needs – not just building cool independent devices. By thinking about the PC, these devices, and the underlying services as a whole, we can increase the value of both our service offerings and the PC. Our customers will love us if we are successful at this.

To create this end-to-end service, our NGWS platform must put our key assets, including programming model and schema, on devices where Windows 2000 is too big. This will enable developers to simply write application services for non-PC devices and build on the NGWS online platform services. We have multiple code bases for non-PC devices today (Starlite, CE, Windows 2000 embedded). We need to consolidate efforts and have a clear code base per device.

We must focus on devices we stand behind, potentially brand, and integrate into our go-to market scenarios referenced below. The device types we target today are thin consumer terminal, mobile phone, Pocket PC, TV attached boxes (set top, gaming, video management), home server, small business server appliance, and a set of focused enterprise devices we will name. We will still allow our platforms to be embedded by others in arbitrary devices, but not as a primary effort.

Our preference in all device categories is to have OEM's build and sell the devices, with a unique partnership with us in the design of the device and service provisioning.

Owing to their low cost, it is unlikely that much money can be made selling software alone to these devices. There is, however, an opportunity to sell core services to people using these devices, and to profit accordingly.

NGWS Platform Roadmap

The Platform team will produce a concrete roadmap that others can build on by April 1. We hope, though, for the following:

Wave 1: (2000-2001) 64 bit and 32-way processor support for scalability, Platinum and Shiloh for next generation file system learning, VS 7 for customer experience with new programming model.

Wave 2: (2001-2002) New NGWS client, server, and NGWS Online, including the Platinum Web store as file system and Active Directory/Passport interop and new Visual Studio, API, and runtime. We may want to introduce middleware infrastructure at the server with new file system, message bus and programming infrastructure first and hold the client update until 2002. We should certainly add enough value to our file server to obsolete the need for other Office information servers. We should achieve Windows Excellence. MSN should be offering services based on NGWS Online in this wave.

Wave 3: (2002-2003) Full Windows Breakthrough including new UI, schema, natural language, and advanced storage technologies integrated in new file system. A new version of Office and MSN will be the showcase services for the NGWS platform.

Go-To Markets

The Go-To Markets discussed below are an evolution of our five current customer sets: developers, consumers, knowledge workers, IT, and small businesses, plus the addition of mobile users. These go-to markets are intended to address specific customer needs and enable total focus on these needs.

Today, we are in several businesses, or go-to-markets, but the fact is they all must benefit and build from our platform. We need to establish that platform in a number of user scenarios, with each scenario defining a set of R&D, business development, and selling we need to do. To be clear, these go-to markets will involve delivering services through packaged bits and Internet services.

Often, these go-to markets will benefit one another, as well as the platform.

The go-to markets will become the center of our marketing and business development activities, but continuing to win product reviews will also be key. Our product and service launches will be opportunities to articulate how our technologies help customers in a number of go-to markets.

Each go-to market must have a hard-core business development and marketing plan with appropriate resources and strategies to succeed. In the past, we have funded too many technology developments without the appropriate downstream resources required for success. Each go-to market may involve both extensive evangelism and partner support and our own development. Each go-to market must have a sales and marketing strategy; some may require new sales force coverage or resources.

PSS, operations, and finance infrastructure must all evolve to enable this service infrastructure.

Our sales forces will be organized by customer, with appropriately focused resources to support the go-to markets. We will manage partners that fall outside of sales force coverage with dedicated business development resources in the go-to market teams.

We cannot invest in all possible go-to markets. We should focus on the go-to markets below with a view of partnering out new opportunities wherever possible. This may require new partnering models to get partners dedicated to our platform. We may do equity investments and three-way deals with customers and key partners who use our platform.

We chose the go-to markets identified below because they represent large financial opportunities, build on current Microsoft strengths, are achievable and/or have strategic significance for advancing the NGWS platform.

General PC User

The most essential go-to market focuses on the PC as a device, and ensures that it stays exciting. This go-to market focuses on end users and OEM's and helping them do new things on the PC as a device. We must be able to articulate why the PC provides the richest and most complete user environment for services. This go-to-market must span consumer and business scenarios. Thin Web clients, new devices and slowing growth all present challenges in this go-to market. The health of the PC is essential for our corporate well-being and this go-to market has significant upside potential, even beyond our current OEM revenue, over the next several years.

E-sites and Developers

This is the go-to market where we must get early traction with the Internet User Experience and our new NGWS platform. All developers become service developers. This go-to-market focuses on all developers except developers doing utilities tied to another market, and entertainment developers who are tied to the home go-to market.

The NGWS Windows Breakthrough, NGWS Excellence, new non-PC devices, and NGWS Online are all key to developer success. They must believe we have a complete, reliable, and scalable platform.

We will have to loudly, clearly, convincingly and repetitively articulate this story. We must show developers that there is opportunity on our platform and that we are totally committed to helping them be successful technically and financially.

We must articulate how developers easily build code and Web content, deploy, manage, and cache the resulting pieces on client and server, build the applications and content that take advantage of our schema and notification infrastructure, and store data into NGWS Online on users' behalf. We need a fairly complete set of development tools and management tools for this go-to market, including streaming media tools. We should not do vertical services but should have a rich enough tool set and customer involvement to be at the table, defining schema in many verticals. We will need to do a lot of evangelism and extend MSDN to stay in line with the creative things others are doing with sample code and source code etc. We must decide how to support e-sites and apps built on UNIX: how do they support our UI, NGWS Online, etc. We are in a real battle with IBM, Sun and Oracle in this endeavor.

To be successful in this go-to market, we must highlight the opportunity on our new platform so that the business people in start-ups and established companies support the choices technologists may make for our platform. That also means this go-to market must think through how we help developers promote their services, not just build them. Special partnerships, MSN, and bCentral can all help in creating promotional opportunities.

We have a special challenge here in computer science students, professors and young developers who are partial to UNIX. We will make special efforts to reach out to these communities.

This go-to market can be a significant opportunity over the next three years, but is essential to the health of all other go-to markets and has top priority for that reason.

IT Infrastructure

We want our platform to be the backbone for how users, devices, software and data are set up, deployed, managed and stored in businesses that run their own internal services. The NGWS management capabilities, file system, and schema are all directly relevant to this go-to market. In addition, many companies will decide to outsource some services. NGWS Online will be relevant by providing services that help businesses connect their employees to their personal information and services, in addition to business information.

We will need partners who flesh out management tools, especially in heterogeneous environments. The competition from Linux, Novell and others will be intense.

This is currently a very large opportunity today when you include enterprise licensing for the platform etc.

Home and Consumer Use

The Home and Consumer markets represent an area of tremendous growth and opportunity for Microsoft. This opportunity consists of continued growth of PCs in the home, along with new devices, home automation and networking, entertainment software, TV products, and a wide array of underlying services. We will need to develop a consistent architectural view of how the home and consumer scenarios will evolve and how we will capitalize on these opportunities. In addition, we must understand that business customers are also consumer customers, and we must support key scenarios, such as keeping a single contact list or having a single calendar, which are important to them.

The consumer go-to market is a hugely important instantiation of our platform. We want consumers to take advantage of our Internet portal experience, MSN; to do that we need to make up ground with MSN versus AOL and Yahoo. Our opportunity lies in making the platform and the portal more interconnected. The portal will use our NGWS schema, provide an end-user experience to NGWS Online and give consumers a way to integrate their experiences across e-sites (identity, payment, calendar, notification, information storage, etc.) Communications, community, shopping, search, photos and published content (third party or our own) all play a key role in the consumer experience and the platform standardization. To maximize the user experience and extend our platform, we need to deliver Internet access and a thin terminal alternative as part of the go-to market. At the same time, our portal will highlight the benefits of the PC and have client side code for many important scenarios (photography, money management, reference, consumer productivity etc.) We will need extensive partnerships with third parties for apps and content to give a complete experience and to ensure their support for our platform from client to server to service.

We will need to really think it through, but quite naturally many of today's packaged consumer offerings -- such as Encarta, Money and others we are doing today -- should evolve to be part of our consumer service.

Our NGWS platform must succeed in supporting entertainment scenarios, including gaming, edutainment and TV viewing/media watching. We will need client and service applications as well as a flexible low-end TV attached platform to realize this go-to-market. MSN must be fully

accessible from this device and the PC must give full access to these new services for us to succeed. The key here is, again, platform adoption, and we will be flexible in thinking through ways to involve partners to support our platform, including today's cable operators and media companies. We are developing two device platforms in this area -- Xbox and WebTV -- with different initial foci that will need to be synergistic over time. AOL and Sony are formidable competitors in this space.

This opportunity (without access, which the market will drive towards netting no gross margin revenue) can be several times what it is today in three years.

Knowledge Workers

This go-to market has been an incredible key to our success but we need to evolve our work in this area rapidly. Office will need to evolve to be an NGWS service, as well as to use our new platform fully. Office needs to use this change to do a better job of targeting certain small-group knowledge work and corporate knowledge management scenarios where we have been weak. We must build on Office strength in personal productivity. There will not be a firm line between consumer and knowledge worker productivity scenarios, and crossing these boundaries must be seamless for users. Netdocs must be part of this future of Office. We may use Netdocs initially in the small business go-to market, but only with a strategy that gets it to be in the future path of Office. Some partners may complement our work in this area, but we need to provide a fairly complete solution.

This go-to-market can grow nicely in three years if it becomes a real service.

Mobility

Mobility refers to five things: 1) PC laptop wireless support, of course; 2) Microbrowser-based cellular phone device support; 3) Pocket PC wireless device support; 4) Server and service infrastructure that makes it easy for developers and users to script wireless notification, information transmittal, offline replication and position information to all devices; and 5) New services running on the Internet and in the devices. Mobility is a complement to our other go-to market's and should work with all of them. We will have to think through how NGWS supports non-MS microbrowsers and Palm Pilots. Partnerships with carriers will be critical.

It is not clear whether we will monetize this opportunity directly to a significant degree, or just consider it from a revenue standpoint as part of and the core platform. We will guide investments by the strategic imperative.

Small Business

Small businesses have been most taxed to fully exploit both the computer and the Internet revolution. They have the most to gain but also the least time and resources to invest. The opportunity to help small businesses take advantage of these opportunities is immense. Although a diverse set of competitors has arisen in this segment, NGWS, with its ease of use, together with NGWS Online and managed device services could help customers a lot. The small business experience could also really help establish the platform. We must deliver our knowledge worker, consumer productivity, and mobility go-to markets to this market, but we must also work ourselves, and with partners, on providing services that let people do commerce (buying and selling) and manage their businesses in an integrated way. Many small businesses will want some local shared storage and Internet gateway support and we must have a simple plug and play server appliance, with PC client style admin for that environment.

On top of our knowledge worker revenue stream that will be carried inside bCentral, this opportunity could be another meaningful revenue stream. The biggest upside in small business for us short-term is in activating knowledge workers through our service.

Our success with these go-to markets is crucial to establishing the NGWS platform, realizing our revenue goals, and providing the best service to our customers.

Resources

Based upon views of what revenue might be next year and what we would like profit to be, we will limit new resources. We may add up to 700 full time and contingent heads company-wide over what is already approved today (except PSS and MCS and operations where they can self-fund.) In addition, we will accept a couple of pending proposals to invest incrementally in business development and support efforts in the developer, gaming, general PC use, and mobility spaces. We do need more resource to develop service opportunities outside the U.S. This implies we must allocate existing approved development, sales and marketing resources more tightly to our services jihad. As mentioned earlier, we will cancel or curtail current efforts to make room for these priorities.

Summary

The time is now to enable the Internet User Experience. We must create the NGWS platform that takes advantage of the PC, non-PC devices, servers, and Internet platform services to deliver on the IUE. We must also build the services for the go-to markets. Clear strategy, crisply communicated, with rapid internal buy-in and strong execution and great marketing/business development are the keys.

There is no higher priority for the company. Top leadership will need to spend a lot of waking hours over the next year evangelizing this strategy internally and externally -- to employees, to customers, to partners. We need to get all our senior people bought in to this, and their roles and economic returns defined ASAP. We will draw upon our incredible people, calling on them to step up to new and expanded challenges. We can and will prevail. No company – whether startups or established -- has the opportunity we do. None. We can change the way the information industry works again and provide enormous new benefits to consumers and businesses. Lets do it.