To:	FY98 WWSMM Attendees
From:	Brad Chase
Date:	April 4, 1997
Re:	FY98 Planning Memo "Preserving the desktop paradise"

- The first section of this document is a high-level summary of our key goals and strategies. Appendices include detailed information to help you prepare marketing plans (product information, recommended marketing plan...).

1. EXECUTIVE SUMMARY

The Internet did change the world radically, and certainly ours, beyond our expectations. This year, we are on the map with an approximate 30% browser share with IE, 11% share with IIS and an **% adoption rate of ActiveX technology.
It is nice to see everyone's hard work rewarded by results, but 30% should not get to our heads, we are NOT number 1. We are a distant second. Let's be clear : we have gained ground, but we are still loosing.
Netscape's primary strategy has not changed : they still want to obsolete Windows. Netscape and Sun endeavor to commoditize the OS and drive developers to adopt their technologies and APIs. This is more true today than ever and these technologies are the precisely those that may make the NC viable.
Despite of all of our hard work, our momentum and all the press reviews we won, we are weak, with less than half of Netscape's installed base. We are even weaker in corporations, with 22% browser share vs 67% to Navigator. In the US alone, Netscape sold 5M copies to corporations. This is 5 times more than deployments of IE (approx. 1M).
As Netscape and we approach our respective 4.0 launches we both have a great opportunity to create a significant shift in the installed base. We will not have this opportunity again, this is our only silver bullet in FY 98.

But Windows is not the only Microsoft franchise at risk. Our Office business is now in danger too. Netscape is using their position with the browser as a foothold onto the desktop to push email and collaboration as the new killer applications. Any Office suite in the near future will have mail as its core component. As email use becomes more pervasive in organizations, it will replace Word (and by extension Office) as the most critical end user app in organizations. That is already true at many places (like Microsoft). Netscape is working hard to offer a compelling application development platform, which if successful, will greatly diminish corporation's interests in our Office products.
Email is the fastest growing app category in both the business and consumer segments. In the LAN email segment (all LORG and MORG, and ½ of SORG) we forecast the number of active email clients to double by the end of FY2000, from approximately 76MM to 155M. Our installed base mail client share is approximately 15% today. Today Internet mail makes up 32% of the total email client market. This market is predominantly consumers and SORGs. In this segment, the number of email clients will more than triple, from approximately 50MM to 150MM in the same timeframe. Our share is approximately 9% today.
The threat of continued low mail client share in organizations and with consumers is that our competitors gain control of the desktop, where they can switch existing Office users to their solutions, stall upgrades, and drive server share with a cohesive client-server solution.

Our product strategy on the desktop is fairly simple. IE is the vehicle to acquire new users (or not loose them to Netscape), it includes Outlook Express (OE) our free email client offering. Outlook and Office are respectively our entry and full-fledge user productivity products. We need millions of users on IE and upgrade them over time to Outlook and Office.

In summary, we must keep our focus on browser share. This is central to the success of Windows and central to the success of Office. By focusing on IE today, we not only secure the desktop and secure future Windows sales, but also gain a user base that we can upgrade to Outlook then Office . We also need a new focus on the Mail client. We have a whole new strategy and very ambitious plans with Outlook. These 2 efforts are very much tied together.
You may think "but isn't this just about selling Memphis ?". Well no, selling Memphis certainly helps, but distribution is not sufficient, as we found out when we put MS Mail in Windows for Workgroups or MSN and the Exchange client in Windows 95 for instance. We should measure browser and email client share in terms of usage and not just distribution[1].

We need your help to drive IE and OE usage with focused budgets and efforts in all Customer Units. We recommend that FY 98 marketing budgets should be budgeted about equal to this year. The proposed marketing plan and budget in this document may help you do your own planning.

[1] The same is true of IIS.

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2. Goals and Strategy

Our overall strategy is unchanged since last year. we still need to regain our leadership with our platform. We have won platforms battles before, we know what we have to do. We know that we need a very large installed base for our platform (browser and email client share) and we need to drive the adoption of the platform by developers (content developers, corporate developers, solutions developers...) so they build content and applications on top of it.

What is new in FY 98 is IE 4.0 with channels and its integration with Windows and our cleaned-up email and collaboration strategy. Between Exchange and Office with Outlook, I believe we will already have an appropriate focus on enterprise email share. *However, we will need a new focus on consumer email share.* We must take advantage of a fragmented market before our competitors do.

We will be making changes to the way we articulate our Platform and these changes reflect market feedback (the Active platform will be renamed and we will continue to strengthen our Java offering while dispelling the myths of the Java that Sun wants to promote). Tools remain key to support our platforms strategy. These points are further developed in a separate memo by Tom Button and Tod Nielsen.

Other than that, we just need to continue execute the winning strategies that we adopted last year, until we have recovered the lead position.

2.1. FY 98 Goals

1. Browser share : 51% market share in the US. Other countries should have higher goals. Countries where Netscape is not present should aim for 80% share. Immediate focus should be upgrading ISPs' installed base.
2. Mail client share : 30% of consumer market by June 98. 30% of corporate market by June 98.
3. IE 4.0 channels
   - Top 5-10 local ICPs have default channel at launch
   - Top 5 OEMs shipping IE 4.0 with channels within 2 weeks after laucnh
   - All level 1-3 Site Builder members briefed on IE4 channels by launch
   - Next 10-50 content sites with channels in IE4 channel guide by December

2.2. Strategies

2.2.1. Aim for largest possible browser share

Basic strategy

Quite obviously, to continue gain browser share, we need to :

- bring new users to the Internet with Internet Explorer and keep them on it,
- switch existing users of competitive browsers to Internet Explorer,
- and upgrade existing IE users to IE 4.0 (not loose them to Netscape).

As Netscape ships Communicator (their 4.0 version), we will both be in a race to upgrade the installed base. Their survival depends on their ability to upgrade a significant chunk of their installed base to Communicator. They also count on it as a significant source of revenues. We can expect them to be very aggressive and approach our volume partners (OEMs, ISPs) and largest accounts.

We have done a good job in FY 97 getting the key volume partners (ISPs, OEMs) to ship and promote IE to new users. We must continue to make this happen and get them excited about IE 4.0. We must reach out to them and keep them busy before Netscape comes after them.
We know it is harder to make existing users switch their browser, but we clearly need this shift to happen. We believe we have a superior product and we will use the leverage of the ISPs and incent them to upgrade their user base, this is the most important thing we should do in all countries. We must also generate millions of downloads from users of competitive browsers. Finally, we must communicate to our existing IE users and make sure they do not go to Communicator.

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Get users to use Outlook Express at the same time as you get them on IE 4.0

Because Outlook Express (or OE, the new name for Internet Mail and News) is included in IE 4.0, a lot of our efforts to gain email client share on the consumer market will be tightly tied to our browser share efforts. Our market data shows that most users do not use the mail client included in their browser (for instance only 20% of Navigator users are using Netscape mail as their primary mail client and only 5% of IE users as using primarily our Internet mail client). This is a threat, and we want to make sure that the majority of the future IE 4.0 users also use OE. This means that we need to synch our upgrade activities and messages.
This is also an opportunity as we want to lure Netscape users away from their current email client with OE, and upgrade them to IE at the same time.

ISPs are still the most leveraged channels.

29% of all Internet users in the US got their browser from their ISP. We have done a great job all over the world licensing IE to all significant ISPs. We need to make sure that they do not go back to Netscape. Netscape will have a 3 months lead time. Between now and September, we recommend that you stay very focused on your top ISPs (depth) and make sure that they are very busy upgrading their user base to IE 3.0 or preparing for IE 4.0. We would like ISPs to start shipping IE 4.0 very soon after launch (as soon as the IEAK ships) and have their own channels.
We know that not all of them will do that, in particular because we will not have the Win 16 version of IE 4.0 until *** and some of them consider that having only one browser to support is a critical factor for keeping support costs down. We must try to turn this argument around and possibly find creative ways to help ISPs with their support issues (for instance setup a local 3rd party support center to assist users when they upgrade).
We may also try to use ISPs upgrade their 16 bits users to Win 32, either by promoting Memphis upgrades, or referring them to a mail order OEM. We should look into their support costs and understand what the main drivers are and whether the 16 bits users are more costly to support.
We will also continue to have more languages than Netscape and we should get the most of this advantage. If localized software and price are so important, there is no reason why Netscape would sell anything in places like Greece, Turkey or Russia.
We will need to make sure that our efforts with ISPs cover both IE 4.0 and Outlook Express at the same time.

To some extent we should consider the local Post Office as a major ISP, as these guys realize that a lot of the mail traffic is going digital, they are all figuring out their plans to contribute to their country's email infrastructure.

Own Corporate licensing.

This is one of the biggest revenue source for Netscape and we have not done a very good job. 25% of all Internet users in the US got their browser at work. Most of our customers (anyone who has a license for Win 95) have are automatically license for IE. We also have a better customization kit (IEAK) than Netscape's and there is no real reason why they should still have this lead on us.

You should not take IE for granted, as reality proves today and we recommend you plan specific actions and direct marketing campaigns to promote IE and the IEAK to your corporate accounts. OCU and ECU should continue to have specific goals on IE (and now OE) penetration. Not a single customer should leave any of our Internet/Intranet related seminars, TSBs... thinking that Communicator makes any sense to them.

Netscape positioning Communicator as an email and groupware solution is another reason why we want to gain our share back, we certainly don't want to end up having a harder time selling our messaging infrastructure.

Activate the OEMs.

14% of all Internet users in the US have got their browser with a new OEM machine. Virtually all OEMs now bundle Internet Explorer, yet we know some have also licensed Navigator. We need to make sure that they are excited about IE 4.0 and the possibilities it opens up for them (channels) and convinced about its superiority and appeal to end-users. We want to make sure that they actively contribute to the overall promotion for IE 4.0 and/or Memphis at launch.

Downloads

13% of all Internet browsers in use in the US were downloaded. We need to continue to have a focused effort to drive downloads and get our logistics right in all countries. We spend a lot of money in the US doing that. Outside of the US, there is a lot that can be done through bartering and smart deals. One thing to remember, we must have an overwhelming presence on the web at launch of our beta (June ? ***) and get a lot of partners and third parties (in particular our ISP partners, content partners and Site Builder partners) help us achieve this.

Own the Internet section in the retail channel

Only 6% of the Internet users in the US say they purchased their browser at retail (4% bought a browser only package and 2% got it with a software bundle). This clearly means that we do not want to spend a ton of money at retail, but we still need to achieve a better presence than Netscape's. We will have Memphis and an IE-only retail box to do that. We need this SKU to be in front of Netscape's retail browser boxes and as a distribution vehicle for the non Win 32 versions of IE (Win 16, Mac).

Maximize other physical distribution channels for Internet Explorer

We should continue to pursue all possibilities, such as bundles with magazines, modems, licensing to ISVs... These are cheap ways to achieve more mass distribution and if we did not do them, Netscape would make some licensing revenue there.

2.2.2. Great content, best viewed with Internet Explorer

Content drives systems. Windows won the desktop OS battle because it had more applications earlier than any other platforms. We must make sure that the best Web applications and content become available for IE users first.

Channels

This year, we are betting the farm on "channels". Channels are a new way to author web sites (not just another link to existing web sites. (*** add description of channel here and user benefits). There are in fact a few Internet standards that we need to see very widely adopted (Dynamic HTML, Desktop components, CDF Channel Definition Format, *** what else) and channels provide us with the golden opportunity to motivate web authors to do that.
Given the input we received from subsidiary, we will make a very special effort to have country-specific channels for most countries. We agree it is critical to the success of IE 4.0 inasmuch as it determines the appeal to local end-users, as well as motivating local ICPs, ISPs and OEMs to adopt channels (and the underlying technologies) and promote them actively.

We need to drive 2 efforts in parallel : the default Channels (1:few) and the Channel Guide (1:many). There will be a maximum of 10 default channels by locale (defined as a combination of country + language, e.g. French Canada). We must use these with the best content partners we have in each country and only consider the best, from an end-users appeal perspective (the local equivalent to Disney or The Wall Street Journal if you wish). Then all other content partners will be able to create their channels and register it in the Channel Guide (a worldwide database) which will also be accessible from IE 4.0.

We strongly feel that Channels is the single most compelling hook for users and this is the killer feature that we will promote the most. It is critical for you to have great Channels at launch, but also make sure that Channels are seen as the things all PC users want.

HTML Mail

OE and Outlook offer very interesting possibilities through a combination of HTML Mail, Dynamic HTML, data binding etc... Email will soon become the creation and viewing of web pages – ad hoc web page distribution. I author email and will create forms in html; I send web pages, etc. Consequently, with email, we not only influence the standards for mail protocols (SMTP, POP3, and IMAP) but also standards for content formats, content distribution and application development.
Netscape took the initiative with their In-Box Direct program (which has been rather successful outside of the US with major media groups such as ****). We will need to do a lot better than them in promoting the unique possibilities we will offer with OE in IE 4.0 (*** can we expand on that and what we want ICPs to do ?).

IE logo everywhere

We are still catching up with the huge presence of Netscape's logos all over the Web. We have come a very long way in closing the gap. We must re-launch our logo program everywhere in the world with the IE 4.0 launch and get most of our existing logo licensees to update their logos to IE 4.0. This will give us a great presence on the web as well as many hooks to get users to download. This is not difficult, but we must not forget to do it.

(*** Yus, are we planning to do that ?)

Site Builders

We have created a great asset with the Site Builder Network and have more than 500,000 members to date (*** check real number). We must continue to actively leverage this network as an evangelism pipe and motivate them to build channels and support the new Internet standards we want to promote. This means we expect every country to continue to nurture their local community and feed them with all of the above. This means that most subs need to earmark a marketing budget in FY 98 to continue do this.

2.2.3. The best PR

Netscape has proved they have one of the best PR machines in the world, but we have proved that we can do an even better job. This means focus again (and some funds).

Win all reviews

This is the starting point to capture momentum. We did great with IE 3.0 and must do it again with IE 4.0. This means all countries should have specific press activities targeted at the Internet influentials so we gain the best browser position. This clearly means a separate PR effort from Memphis and a different timing, i.e. with the final beta in June ***). This also means doing a good job with Mac pubs in countries where Mac is important.

Broad reach PR

We want people to think "Internet = Microsoft", everywhere we can. This is very different from the PR we traditionally do with trade press and analysts. We must also do very broad PR, be everywhere on TV in shows that demonstrate the benefits of the Net to various audiences : kids, parents, professionals...
We missed this opportunity with IE 3.0 (except a few countries). Netscape did much more than we did and managed to get air time in many countries. We should not miss this opportunity this time with IE 4.0, all the more so that we should benefit very broadly from the media power of our IE 4.0 channel partners (i.e. if one of them is a TV or radio station or newspaper, they must commit to promote IE 4.0 and their channel heavily at their own expense).

2.2.4. Engage the developers

There are 6 million developers worldwide who use Microsoft development tools and technology. This is one of our key assets against Netscape. We must continue to help them (ISVs and corporate developers) write to our platform. Tom Button and Tod Nielsen develop this point in a separate memo.

2.2.5. Activate our Solution Providers

Netscape does seem to have benefited from their impressive web of partnerships (Sun, SGI, Novell, IBM, AT&T, Sony, HP...), leveraging their partners corporate sales force and channels against us.

In most countries, it seems it has taken us almost one year to put our Solution Providers asset to work. We must not taken IE for granted with these guys either. Sure we know the server is a harder sale, but the browser and the mail client does not sell by themselves alone. We need to continue to feed and support these key partners and make sure none of them think it makes any sense for them to promote Communicator.

3. COMPETITION

3.1. Netscape

3.1.1. Current situation

We have been amazed how fast Netscape has extended their reach all over the world and done a decent job recruiting solid partners and VARs in many countries. They also have improved a lot their localization quality and deltas and offer now Navigator in 13 languages (up from 4 a year ago). They have a direct presence in ** countries with ** people and an indirect presence in ** more countries (such as Korea, India, Thailand, Mexico, Poland...) with strong local partners.
They have had a tough time trying to keep their revenue from ISPs, but had a little more luck with OEMs

(Siemens Nixdorf, ***). They did make inroads in corporate accounts all over the world. They also have good success at retail in many places (in particular countries where they had a big lead time over us, like US and Japan) where they outsell any other retail product.
They have experimented joined marketing with Sun, Silicon Graphics, IBM and Novell, but did not seem to have done a lot beyond corporate seminars. They did a better job at PR, in particular broad reach PR and getting air time on TV.

3.1.2. Next moves

This is what we expect them to do :

- We know that they will be very focused on the corporate market. They are (and so is Lotus) successfully driving a value shift in the minds of customers towards the notion of collaboration, and attacking the email space where we have had low share, low awareness and no clearly articulated product, marketing and selling strategy (untill today). Netscape will try to use email and the browser as a Trojan horse into the productivity apps and workgroup space.
- Netscape also has a big opportunity to turn their consumer browser share into a substantial revenue stream with Communicator. Convincing consumer users to pay $49 or so for a great internet mail application with the name Netscape on it will be a lot easier than convincing large enterprises to deploy the Netscape infrastructure widely. I expect Netscape to adapt their strategy to take advantage of this opportunity.
- Finally, they will obviously go back to volume partners (ISPs and OEMs in particular) and aggressively try to sign big deals at all cost.

Products

- They will have a 3 months lead over us. Their new product, Communicator, is better than IE 3. They will clearly push their cross-platformness forward as a key competitive advantage and try to reposition us as the Windows-only company. Another reason why we need to promote IE as the best browser on all key platforms (Win 32, Win 16, Mac and soon UNIX).
- Constellation, the next release, scheduled for *** will provide integration with the OS. If done right, it will be a further threat to our leadership of the desktop and extend Netscape's influence over UI and key APIs.
- (*** do we want to say anything on servers here ?)
- Acquisitions to complete their tools portfolio and maybe add productivity apps (Corel ?).

3.2. Lotus (*** what can we say here ?)

3.2.1. Current situation

Lotus is leveraging their workgroup and email strength to bridge workgroup and web publishing. Both are also attempting to commoditize the OS and productivity app market and change the playing field from browsing/productivity to email/collaboration. This threatens more than Windows as I have discussed.
Lotus has a confused email client strategy and we can try to position them as having no Internet client, inferior productivity apps, and a solution appropriate only for the high end of the workgroup spectrum, whereas Office + Exchange is a superior departmental collaboration solution.

3.2.2. Next moves

4. CONCLUSION

- This is another major "make or break" rendez-vous. We need your support to continue your focused effort on IE and now our email client share jihad. We believe that this effort will greatly pay-off mid term (within next 6-12 months) in terms of securing our strategy position on the desktop and future Windows, Office and server sales. A strong IE is also a good insurance policy against inroads from the NC and the Java OS threat.
- We have the opportunity to regain total leadership within a year and pass the 51% share mark with IE[2]. If we do that, we will enjoy the comfortable position of the leader that we have achieved in most of our businesses.

[2] A few countries have managed to reach 50% share this year. We would recommend that they do what it takes to prevent Netscape from making a come-back with Communicator.

- The opportunity is now, as Netscape is getting ready for their "make or break" push, and as you are doing your plans through FY98 and the remaining of FY97.
- We know what we have to do. Focus and speed of execution through the next 6 months is the key success factor. This is why we are including a recommended subsidiary marketing plan and suggest you maintain marketing investment at a similar level as last year.

5. APPENDICES

5.1. Recommended Tactical Marketing Plan

This is what we recommend all subs do, of course, you decide what makes sense to do in your market. We are signed up to support you and your people through the implementation of these activities.

If you need a ballpark figure for your marketing budget, we recommend that you budget your marketing funds at 5% of your total marketing budget (not including tools and platforms marketing), this is same as last year. We recommend you allocate a significant part to ICU for co-marketing with ISPs (2%). And again, you decide what makes sense in your country.

Please forgive us if a lot of the things below are obvious, last year we had good feedback on this format so we are doing it again here. We are not trying to tell you how to do your job. There is just so much to do in so little time that the best way for us to support you well is if everybody moves in synch. I have listed your contacts in our international marketing team for each of these campaigns, of course you will also have contacts with the Customer Units and the other product marketing folks in Redmond.

5.1.1. April - June 97

This is the pre-IE 4.0 beta launch period. This is also when Netscape will try to prepare the market and align partners and channels for their Communicator launch. Naturally, we want to pro-actively counter Netscape's moves and secure our volume partners. This is also the time when we recruit ICPs for IE 4.0 channels.

Therefore, we will get organized around these targeted campaigns (all the "former IDCU" people are fully aware of these and most are thinking along the same lines).

- Secure our ISP partnerships, further upgrade the installed base with IE 3.0
- Recruit IE 4.0 Channel partners (1:few and 1:many)
- Long lead briefings to OEMs and key channel partners
- Activate the developers
- Continued momentum PR
- Continued Intranet push

Secure our ISP partnerships, upgrade their installed base with IE 3.0 (contact :Chrisd)

- We want to keep ISPs busy upgrading their installed base to IE 3.0 (I believe every country is doing this right now) and preparing their IE 4.0 Channels.
- It is critical that you intensify regular contacts with your top ISPs so you can become aware of any Netscape move and counter it very rapidly. The national Post Office should be in this list.

Recruit IE 4.0 Channel partners (1:few and 1:many) (contact : Larsba)

- First, you need to select and support the top ICPs that will make the default Channels for IE 4.0 (therefore Memphis) in your country. Regional workshops have been organized to help you do this. This means briefing ISPs and OEMs at the same time.
- As you sign your IE Channels partners, you should make sure that they commit to help promote very broadly IE 4.0 and their Channel (i.e. if one of them is a TV or radio station or newspaper, we want them to leverage their media power at their own expense). Don't miss this opportunity, this is one of the best things you can do.
- Then you will need to evangelize broadly the concept of Channels (leveraging Site Builder Network), so users will find many great Channels in the Channel Guide, and so that our favorite Internet standards gain wide adoption. For this, we will provide content (in seminar in a box format).

Long lead briefings to OEMs and key channel partners (contact : Briansha)

- To pre-empt Netscape's moves, we want to make sure that all our key volume partners are excited about IE 4.0 and Memphis. We are supporting some regional OEM briefings (Berlin, Japan) and will also provide you with a complete package with demos, slides and a Q/A.

Activate the developers (contact : Alfredop)

- The developer release of IE 4.0 is now on the web (in 7 languages), you need to make sure that all developers (whether corporate developers, content developers or solutions developers) in your market are up to speed on the key new technologies it introduces. This means basic things like promoting it on your web site and more in-depth evangelism.
- There are several events that will help you do the latter in particular the "Creating Powerful Web Applications" seminar (May 20) and TechEd (see Tom Button/Tod Nielsen memo for more details). If you cannot leverage these events, you will still be able to use the content.

Continued momentum PR (contact : Briansha)

- All of you are having great successes, with ISPs, with corporate accounts, with traffic on key web sites... You need to continue to feed the local press and maintain perception of our momentum, and continue through Netscape's announces.
- There are also angles in IE 3.0 that have an interesting PR potential and have not be exploited everywhere yet (ratings, NetMeeting). Finally we need to make sure we get good coverage of the final IE 3.0 Mac version.

Continued Intranet push (contact : Briansha and Alfredop)

- This is an on-going, slow-burn effort. We need to increase our push to corporations, especially as they evaluate the upgrade to Communicator. We should continue to do this in an indirect way (make sure all our seminars and those that partners give feature IE in good place), but we should also be a lot more active directly. Some countries have done significant direct marketing to corporate decision makers to promote IE, inform customers that they have a license and offer the IEAK.
- There are a few other things that will help. Obviously, you want to have most of the corporate developers attend the "Creating Powerful Web Applications" seminar. There is also a new Intranet Resource Center: a web site with sample applications and code. functionally superior to Netscape AppFoundry; going live on May 5th. All countries should announce locally and market to drive traffic to it.

5.1.2. Mid May – June 97

This is when we actually do our first IE 4.0 launch and reach out to influentials and press. This is a very critical phase were we must win all the reviews. We will also try to drive massive downloads of the final beta. By then, all the IE 4.0 default channels should be ready and operational.

We will get organized around these targeted campaigns

- PR push
- Online launch
- Corporate Early Adopters Program

PR push (contact : Briansha)

- We want to win the reviews with IE 4.0 as best browser. The IE 4.0 reviewers' workshop is a must. You should send your most influential press people there – June 25-26 (*** is the date right ?)
- We also need to start articulating our email strategy.

Online launch (contact : Briansha)

- We want millions of downloads. In fact because IE 4.0 is going to be so big (*** MB), we will need to find practical ways to ship many CDs to users and let them order it online. Some countries, like France, have found great ways to leverage other partners (the Post Office in this case) to do this for them.
- We also want to "saturate the web" and have a bigger presence than Netscape. To do that, we need help from all our partners who have a web site (Site Builders, content partners, ISPs, OEMs). They should all have a vested interest in IE 4.0 and help us promote it.

Corporate Early Adopters Program (contact : Briansha)

- This is about getting great public reference accounts at launch, this is a similar program to what we did with Win 95 (ie "Goliath"). We are obviously synch'ing up our efforts with Memphis.

5.1.3. July-September 97

This is when we prepare and the second wave of our IE 4.0 launch with the final release.
Hopefully, we will have won all the reviews and will be running downhill (or we won't and have a real tough time). This is when we line up all the channels and partners to promote and distribute IE 4.0 massively.

We will get organized around these targeted campaigns

- ISP launch and upgrade campaigns
- Preparing the distribution channels
- Broad reach PR

ISP launch and upgrade campaigns (contact : MikeAld)

- This is where we should spend a very significant part of our budget (I would say as much as 40% of the total marketing budget over the 6 months following IE 4.0 launch).
- We can't say it enough, ISPs are our most important channel. We want to make sure that they love IE 4.0 and start shipping IE 4.0 as soon as possible (as soon as the IEAK is available). We know that some of them will want to wait for the Win 16 version, or even the Mac version, but we should try our best to convince it is their interest to ship IE 4.0 asap (because they get their own channel, because they offer the best to their users, *** what are other things we say here)
- You must have a very strong direct incentive program to all your top ISPs for them to upgrade their installed base. This approach has proved very effective in several countries (the UK in particular managed to upgrade 50% of Compuserve's installed base to IE in 4 months).
- To be clear, you should not spend any money or do anything with any ISP unless they are driving the upgrade of their installed base. This time, we will also need a specific focus on OE and drive users to upgrade their mail client at the same time as the browser.
- Everyone by now should be familiar with the things we want ISPs to do and the incentives we can offer (we went through this in October last year). The key thing is really to understand what each of the key ISPs really want most and do the best job providing them with a real incentive to do that.
- One area where we should do more is figure out how to minimize ISPs' support costs (for instance offering then an outsourced support center dedicated to user upgrades).

Preparing the distribution channels (contact : Briansha)

- We will need to prepare our channels : retail, outbound, SPs etc... we want to makre sure they love (and use) IE 4.0 and get the appropriate people reasonably trained.
- (*** need some details on what's the retail SKU, pricing and timing)
- It makes a lot of sense to synch these activities with Memphis and have the same person do that. We do not expect any country to invest a lot of time and money at retail, except Japan.
- Above all, we want to have better distribution than Netscape. If the solution for you is to not have a Microsoft retail IE box, but let ISPs do it and market it (like Portugal, Spain and Sweden did), that's great too.

Broad reach PR (contact : Briansha)

- We want people to think "Internet = Microsoft". To do this, you need to occupy the broad media, not just the PC trade press. We are thinking about producing a canned show (B-roll) you can use with your local TV channels. This can be much more effective than any ad.
- Assuming you have signed up you IE Channels partners to help promote very broadly IE 4.0, as soon as IE 4.0 final ships, you would want all of them to make big noise for you (and for free).

5.1.4. October –December 97

By then, IE 4.0 is launched, you want to keep the pressure on all distribution channels (with a focus on ISPs) and all content partners to do their part. Most activities are continuation and monitoring of those listed above.

Memphis launch

- Memphis will have longer localization deltas than IE 4.0 (see Appendix), this can impact the timing of your plans (in particular, retail and corporate migration). Eastern Europe, Greece and Turkey in particular may have to de-couple some of these activities and start with IE 4.0 sooner (depending on what we think Netscape will do there).

Outlook 8.5 launch

- We expect to launch Outlook 8.5 in December, this means another full-fledge typical product launch, with PR, channel and corporate accounts activities.
- *** What else do I say here ? Btw are we going to rev Office for it ?

5.1.5. 1998

- It is impossible for us to predict at this point what we will do after IE 4.0 and Outlook 8.5, because the success of these launches are so critical to our future steps and because we cannot fully anticipate our competitor's moves. We will provide continuous updates to these plans to all subs and a refreshed set of plans in December for your MYR planning.

5.2. Products

- Note : This does not include the developer products which are covered in separate memo.

5.2.1. Overview

	US RTM	Street Price	US FY 97 plan (units)
IE 4.0 for Win 32 - final beta	1-Jun	free	
IE 4.0 for Win 32 RTW	1-Sep	free	
IEAK 4.0	??	free	
IE 4.0 for Win 3.1	??	free	
IE 4.0 for the Mac	??	free	
IE 4.0 for UNIX	??	free	
IE retail box	??	??	10k units/month ?
Memphis	??	??	??
Outlook 8.5	1-Dec	??	??
Plus ??			

(*** needs update and explain what retail SKUs we will have)

5.2.2. Localization plans

	IE 4.0							Outlook 8.5				
Language	Win 95	Win NT	NT/Alpha	Win 16	Mac	Unix	IEAK	Office	SA	SBE	Exch	OE
Arabic	X							X				
Basque												
Catalan												
Chin-Simp	X	X	X	X			X	X			X	X
Chin-Trad	X	X	X	X			X	X			X	
Croatian	enabled											
Czech	X	X		X			X	X				
Danish	X	X		X			X	X				
Dutch	X	X	X	X	X		X	X	X	X	X	X
English	X	X	X	X	X		X	X	X	X	X	X
Estonian	enabled											
Finnish	X	X		X			X	X				
French	X	X	X	X	X		X	X	X	X	X	X
German	X	X	X	X	X		X	X	X	X	X	X
Greek	X	X						X				
Hebrew	X							X				
Hindi												
Hungarian	X	X		X			X	X				
Italian	X	X	X	X	X		X	X	X	X	X	X
Japanese	X	X	X	X	X		X	X	X		X	
Korean	X	X		X			X	X			X	X
Latvian	enabled											
Lithuanian	enabled											
Norwegian	X	X		X			X	X				
Pan Euro												
Polish	X	X		X			X	X				
Portuguese Brazilian	X	X	X	X	X		X	X	X	X	X	X
Portuguese Iberian	X	X		X			X	X				
Romanian	enabled											
Russian	X	X		X			X	X				
Serbian	enabled											
Slovak	X						X					
Slovenian	X							X				
Spanish	X	X	X	X	X		X	X	X	X	X	X
Swedish	X	X	X	X	X		X	X	X	X	X	X
Thai	enabled							X				
Turkish	X	X					X	X				
Vietnamese	enabled											

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(need to add deltas by language)

5.3. Market data

5.3.1. Internet users

Many surveys have been done on the Internet phenomenon. Surprisingly, it seems very difficult to get reliable figures. Estimates for Internet users worldwide range from 8 to 100+ million. We think there are currently 30 M active users in the US and 15-20M outside of the US (a large factor depends on whether we count academic users or not).

The table below shows dial-up users by country reported at MYR. When we compare these numbers accros countries and to host by domains, it seems obvious that several of our numbers don't make sense. However this is what we have today and are using to prioritize localization efforts.

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Internet dial up users estimates (MYR)

		Jan-97	
1	Unites States	15,944,131	56.6%
2	Japan	2,480,000	8.8%
3	Germany	2,283,000	8.1%
4	Canada	805,000	2.9%
5	United Kingdom	794,000	2.8%
6	Korea	650,000	2.3%
7	France	535,000	1.9%
8	Australia	430,000	1.5%
9	Brazil	400,000	1.4%
10	Taiwan	309,400	1.1%
11	Sweden	300,000	1.1%
12	Spain	300,000	1.1%
13	Netherlands	250,000	0.9%
14	Singapore	198,000	0.7%
15	Finland	186,000	0.7%
16	Denmark	180,000	0.6%
17	Norway	175,000	0.6%
18	Italy	168,500	0.6%
19	Hong Kong	168,000	0.6%
20	Mexico	120,660	0.4%
21	Thailand	111,900	0.4%
22	Austria	108,000	0.4%
23	New Zealand	100,000	0.4%
24	Switzerland	96,700	0.3%
25	Israel	93,000	0.3%
26	China	79,700	0.3%
27	Malaysia	69,000	0.2%
28	S. Africa	67,500	0.2%
29	Carribean	60,000	0.2%
30	Belgium	56,000	0.2%
31	Argentina	53,600	0.2%
32	Portugal	46,000	0.2%
33	Peru	44,970	0.2%
34	Gulf	34,414	0.1%
35	Turkey	31,550	0.1%
36	Indonesia	30,300	0.1%
37	Greece	29,800	0.1%
38	Egypt	28,800	0.1%
39	Colombia	26,100	0.1%
40	Venezuela	23,100	0.1%
41	Philippines	22,000	0.1%
42	Uruguay	17,900	0.1%
43	India	15,000	0.1%
44	Hungary	13,300	0.0%
45	Slovakia	13,300	0.0%
46	Chile	12,000	0.0%
47	Ecuador	11,200	0.0%
48	Morocco	1,600	0.0%
49	Russia	58,000	0.2%
50	Poland	54,000	0.2%
51	Czech Republic	47,800	0.2%
52	Ireland		0.0%
53	Slovenia	12,000	0.0%
54	Costa Rica		
	Total	28,145,225	

5.3.2. Hosts by domain

Another indicator of the Internet growth by country is count of domains and hosts. As of January 1997 there were over 240,000 domains, with 16M "advertised" connected computers worldwide. Because of the unknown and potentially unlimited numbers of multi-user computers, proxy servers and network or application gateways, it is not possible to correlate this any of this information with the number of end users. Considering the increasing tendency of hiding large numbers of hosts behind firewalls, the actual number of connected hosts is likely far higher.

Key data points :

- Total growth in past 12 months : 71%. But total growth in past 6 months : 26% (only 19% for .com).
- Higher growth is in intl domains : 31 %. Fastest growing countries : Hong Kong (104%), Spain (76%), Brazil (65%), Russia (52%), Belgium (49%), Japan (48%) and Mexico (47%).
- Japan is now #2, followed by Germany, Canada, UK, Autralia, an historically strong Finland, the Netherlands and France. These 8 countries together are as big as the total .com domain.

domain	domain	hosts - Dec 95	hosts - July 96	hosts - Jan 97	Growth	% of total
com	Commercial	2,430,954	3,323,647	3,965,417	19%	24.6%
edu	Educational	1,793,491	2,114,851	2,654,129	25%	16.4%
mil	U.S. Military	258,791	431,939	655,128	52%	4.1%
gov	Government	312,330	361,065	387,280	7%	2.4%
net	Networks	758,597	1,232,902	1,548,575	26%	9.6%
org	Organizations	265,327	327,148	313,204	-4%	1.9%
us	United States	233,912	432,727	587,175	36%	3.6%
	all intl domains	3,386,036	4,602,408	6,028,025	31%	37.4%
	Total	9,439,438	12,826,687	16,138,933	26%	100.0%

domain	Country	hosts - Dec 95	hosts - July 96	hosts - Jan 97	Growth	% of total intl
jp	Japan	269,327	496,427	734,406	48%	12.2%
de	Germany	452,997	548,168	721,847	32%	12.0%
ca	Canada	372,891	424,356	603,325	42%	10.0%
uk	United Kingdom	451,750	579,492	591,624	2%	9.8%
au	Australia	309,562	397,460	514,760	30%	8.5%
fi	Finland	208,502	277,207	283,526	2%	4.7%
nl	Netherlands	174,888	214,704	270,521	26%	4.5%
fr	France	137,217	189,786	245,501	29%	4.1%
se	Sweden	149,877	186,312	232,955	25%	3.9%
no	Norway	88,356	120,780	171,686	42%	2.8%
it	Italy	73,364	113,776	149,595	31%	2.5%
ch	Switzerland	85,844	102,691	129,114	26%	2.1%
es	Spain	53,707	62,447	110,041	76%	1.8%
dk	Denmark	51,827	76,955	106,476	38%	1.8%
za	S. Africa	48,277	83,349	99,284	19%	1.6%
at	Austria	52,728	71,090	91,938	29%	1.5%
nz	New Zealand	53,610	77,886	84,532	9%	1.4%
br	Brazil	20,113	46,854	77,148	65%	1.3%
ru/su	Russia	25,801	45,623	69,191	52%	1.1%
kr	Korea	29,306	47,973	66,262	38%	1.1%
be	Belgium	30,535	43,311	64,607	49%	1.1%
pl	Poland	24,945	38,432	54,455	42%	0.9%
hk	Hong Kong	17,693	24,133	49,162	104%	0.8%
cz	Czech Republic	16,786	32,219	41,164	28%	0.7%
il	Israel	29,503	39,611	38,494	-3%	0.6%
tw	Taiwan	25,273	30,645	34,650	13%	0.6%
hu	Hungary	11,486	25,109	29,919	19%	0.5%
mx	Mexico	13,787	20,253	29,840	47%	0.5%
sg	Singapore	22,769	38,376	28,892	-25%	0.5%
ie	Ireland	15,036	21,464	27,059	26%	0.4%
pt	Portugal	9,359	17,573	26,077	48%	0.4%
my	Malaysia	4,194	8,541	25,200	195%	0.4%
cn	China	2,146	11,282	19,739	75%	0.3%
gr	Greece	8,787	12,689	15,925	26%	0.3%
cl	Chile	9,027	13,239	15,885	20%	0.3%
si	Slovenia	5,870	9,949	14,051	41%	0.2%
tr	Turkey	5,345	7,743	13,194	70%	0.2%
ar	Argentina	5,312	9,415	12,688	35%	0.2%
id	Indonesia	2,351	5,262	9,591	82%	0.2%
th	Thailand	4,055	6,362	9,245	45%	0.2%
co	Colombia	2,262	5,265	9,054	72%	0.2%
sk	Slovakia	2,913	5,498	8,392	53%	0.1%
pe	Peru	813	2,269	5,192	129%	0.1%
ph	Philippines	1,771	3,117	3,628	16%	0.1%
cr	Costa Rica	1,495	2,582	3,491	35%	0.1%
in	India	788	2,176	3,138	44%	0.1%
ve	Venezuela	1,165	1,679	2,417	44%	0.0%
uy	Uruguay	626	878	1,823	108%	0.0%
	Other			77,321		1.3%
	Total	3,386,036	4,602,408	6,028,025	31%	100.0%

5.3.3. Servers : Internet vs Intranet

IDC projects that the market for Web servers, which stood at 120,000 shipments worldwide at the end of 1995, will grow to 5 million unit shipments by the year 2000. Most will go for Intranet sites. They estimate the split to grow from 57K Internet / 70K Intranet to 441,000 Internet and 4.6 million Intranet servers.

(*** need to update)

5.4. Customer scenarios

(*** I had this last year because steve really wanted it, I am not sure I will update for this year – so we save 5 pages)

The essence of a platform is to serve the needs of a whole industry. The unique selling proposition of our platform is "one world". There will not be a PC world and an Internet world.

What does this mean for the customer ? It means you can keep your existing hardware and software - you can use your existing skills and knowledge.... And reap all the benefits of the Internet (or Intranet or Extranet) with only minor incremental efforts while protecting your existing investments. This is true whether you are an end-user, MIS manager, business decision maker or content developer, whether you want to create a commercial or non-commercial Web site, or an Intranet...

Netscape/Sun require a blank sheet, start it all over again approach.

In the section below, we discuss briefly the benefits of our platform and its components in regard of each of SteveB's customer scenarios. For more detailed drill down on customer profiles, needs and benefits, see Customer needs in Appendix.

5.4.1. Personal work productivity.

- Use your PC, use the Net, it is the same thing. One world. The integration of the browser into the Windows shell (Memphis) makes it very easy for users to use the Net. Users don't need to learn 2 different ways for navigating though and searching information. They don't need to think about whether the information they look for in is a file or HMTL page. All this is transparent. By bringing together hyperlink navigation, file tree structures, and universal search, the "Internet-enabled-Windows" offers the most efficient way to retrieve information from virtually unlimited resources worldwide. Starting this summer, the only thing any user has to do to get there, is to download IE 4.0 or buy Memphis.
- On top of that, IE allows applications to be containers (i.e., act like browsers) and access directly sources of information, so you don't need to switch back and forth between your browser and your application and copy and paste from one to the other. ActiveX also enables applications to create hot documents which behave like Web pages. They can contain ActiveX controls, be searched and surfed through. This opens up the market for a whole new breed of exciting applications. This is not easy to describe in writing, you've got to see the demos.
- Users will be able to subscribe to channels (consumer-type, business-type or even their own company's channels) and have critical information delivered to their PC without having to reach out and spend a lot of time searching for it.

5.4.2. Information sharing and communication at work (Intranet).

IE 4.0 offers many features enabling interesting scenarios, such as :

- Data conferencing and application sharing : 2 users work on the same Word document one after another and talk to each other simultaneously through the same connection, all they need for that are DSVD modems.
- White board : several users can work on the same application at the same time, any change appears instantaneously on all users' screen. Note that applications needs to be upgraded and written to these APIs to offer this functionality.
- Personal Web server : any Win 95 user can turn his own PC into a peer HTTP server and publish his own web pages without needing access to a server.

5.4.3. Small Business automation.

As the browser becomes the standard form viewer, many forms based applications can benefit from this simpler, unified container. In fact many forms will be HTML pages (in the US, for instance, the IRS made their forms available on the web).

ActiveX controls can be easily recycled from one application to another. There will be a wide market for sophisticated controls (this is pretty much the same thing as OLE Controls). As a consequence, Small developers and VARs will be able to can create customized solutions (such as a Web-based product catalog, order entry forms and mail) faster and for a cheaper cost.

5.4.4. Line of Business applications.

The benefits for the universal form viewer apply equally here.

Database publishing and interaction through the web will be big. The specific strength of ActiveX is DCOM, which makes easy to develop distributed client-server applications. Everything is here today to make it easy to distribute widely customized clients and query tools to existing databases. without marginal incremental investments.

5.4.5. Management and customizability.

This is where the "recycling" abilities of ActiveX really stand out. With the integration of VBS as scripting tool, the choice of languages (VB, VC, Java) and cheaper server programmability thanks to the ActiveX controls market, we should be able to convince customers that the development and maintenance of Intranet-based applications will be much cheaper than starting from scratch with Netscape and Sun's Java.

Same reasoning applies to cost of training of their helpdesk.

5.4.6. Internet Authoring.

As corporations open up a window on the Internet, they will want to show an attractive figure, while conducting business efficiently, maximizing their potential reach and keeping costs low. To them, we offer ActiveX (more bang for the buck), authoring tools, and (hopefully) soon the largest user base they can dream of.

To make the user experience richer and differentiate their sites vs the competition, webmasters (whether internal or external) will need to introduce sophisticated code into their pages, as opposed to just sophisticated graphics and visuals. This is the next wave, from today's almost static Web world to tomorrow's active web world, and of course, this is the promise of ActiveX.

ActiveX is not limited by the "sandbox" architecture in which Sun has locked Java. ActiveX controls offer much richer functionality than Netscape Java applets and Java script can offer. Netscape's plug-ins may offer similar levels in functionality, but they will not run in other applications than a browser. As a consequence, and because ActiveX controls are nothing else than OLE controls that have been enabled, many more ActiveX components will be available on the market at a cheap price. This takes care of the concern about costs.

We also have authoring tools. FrontPage will be the higher volume product, while Internet Studio (Q4 CY96) targets the professionals and will be positioned as a developer tool for handling the overall integration of ActiveX controls and professional graphics created in other tools.

Last but not the least, once the browser is in Windows and virtually any application acts like browser thanks to ActiveX, it is likely that the wider user[3] base will not use a separate browser. While the browser base has been a problem untill now (if you want reach, without the cost of maintaining several tree structures, you choose to optimize for Netscape).

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[3] This is true for the Win 32 user base. Win 3.x and Mac users will still use a separate browser.

From now on corporations who start developing web sites now should target the larger base (ActiveX), all the more so that ActiveX controls will be also run on Netscape 2.0, with the Ncompass plug-in.

5.4.7. Leisure Usage.

Nashville will ship with :

- An Internet game,
- Desktop themes (such as Kids, Personal Finance, Sports), with animations on the desktop and links to the Web.

5.5. Customer needs and benefits - drill down

5.5.1. Content providers

All organizations who have a Web presence have at least one need in common : lower their operations expenses. A Jan 96 IDC survey revealed that the cost of establishing an interactive commerce business channel on the web is typically four times greater than expected. It also proved that 80% of total cost is spent on custom software development and integration - only 20% on hardware and off-the-shelf software.

Whether these organizations handle their web presence themselves or through 3rd parties (webmasters and solution providers), the ActiveX platform offers these unique benefits :

- cheaper and faster development (because custom code is recyclable and cheap sophisticated ActiveX controls are available),
- better service (6 millions of experienced developers who have amortized their setup costs).

Broadcast-publishing businesses

Their business model is subscription or advertising, this is the natural evolution of the media companies into this new media : the web. They seek to attract and retain an audience. First critical success factor is differentiation with competition through content, and now experience. The interactive nature of the Wed allows them to offer endless customization.

What our platforms enables for them :

- support of leading edge HTML (sounds, video, scrolling text) makes much better pages with simple HTML tag. Immediate enhancement without having to develop, incorporate a plug-in,
- unlimited possibilities to enrich the user experience (browser / document interaction not limited by Java sandbox, can do much more incredible new things),
- totally custom experience for the user at lower costs (fully programmable servers that generate custom HTML on the fly).

Corporations (Intranet)

Their needs for Intranet solutions include :

- automation, simplification of internal processes /administrative functions
- facilitating access to key internal business information (such as financial or operations data)
- facilitating group work, project-tracking across the organization

It just does not make any sense for them to choose Netscape and or Java based solutions, for many reasons (free IE client and IIS server, need to restart from scratch, scalability, robustness, breadth of our server products, proven interoperability, gateways to host systems available...).

From a platform standpoint, we can add that they benefit from :

- recyclable code (if they use Win 32 apps), means that they can achieve their business objectives at cheaper cost
- independence of language (not locked in Java limitations or evolution), means easier maintenance, wider choice of vendors and better perenniallity,
- use of standard APIs makes database publishing easy, means they can publish information in existing databases at low marginal cost, and same security,
- larger choice of vertical apps from ISVs (if we do our job well),

- seamless integration between shell and browser makes it is easier for users to navigate through various data and easier for corporation to develop elegant and simple integrated work environment.

Corporations (Internet)

Their needs for Internet solutions include :

- Information publishing (corporate information, events, products catalog),
- Structured interaction with customers or partners (order processing, EDI, Internet commerce),

The ActiveX platform benefits include :

- support of leading edge HTML (sounds, video, scrolling text) makes your products/company look better instantly with simple HTML tag, no development required,
- architecture plugs into existing file servers and back-ends. Proven operability,
- shared services in OS (encryption, signature) enable critical mass required for industry standards, you can bet on Microsoft for what we've always done best.

5.5.2. Developers

The ActiveX platform offers a very clear path for them to embrace the Web, with the languages they already know and the skills they already have. They can make their existing Win 32 applications Internet aware - either as a Web container (can browse HTML pages) or a hot document (can be seen and manipulated inside a web container, host ActiveX objects, be seen in tree view...) - with very little additional code. With minimal incremental efforts, they can get on top of the wave.

The more sophisticated ones can create ActiveX controls. Their creativity is not limited by the Java sandbox, so they will offer much richer functionality. Those who have specific projects and are constrained by time and costs can pick re-usable components from the wide libraries available.

Developers also know they can expect reasonably good support from Microsoft, through programs such as MSDN, TechEd.... It has taken us years to create and fine-tune them, the competition will not be able to match this soon.

Corporate developer

Technical developers have heavy input into technical decisions and toolsets chosen, especially programming languages, servers and databases.
This customer type is primarily interested in a publishing tool's programmatic extensibility. They also focus on the need to automate the production process, and to integrate/reuse programming across projects. Database connectivity, integration with legacy systems, and security are all very important to this customer type.

The ActiveX platform offers the same benefits as listed above :

- recyclable code (if they use Win 32 apps),
- independence of language,
- use of standard APIs makes database publishing easy,
- support of leading edge HTML (sounds, video, scrolling text),
- architecture plugs into existing file servers and back-ends. Proven operability,
- shared services in OS (encryption, signature) enable critical mass required for industry standards.

All this means they can deliver on the Business decision maker's expectations.

VAR/Solution provider

This is pretty much the same thing as the corporate developer. On top of the above listed benefits, re-usable code means that they can also recycle work they did for previous customers.

ISVs

All the benefits that apply to developers apply to ISVs of course. On top of that, they can web-enable their existing products and offer valuable upgraded functionality is short period of time, for instance :

- data conferencing, group collaboration,
- on-line updates or customer support,

5.5.3. Webmasters

We use the word Webmaster for organizations and individuals. It is useful to define a more precise taxonomy. As organizations, Webmasters are a new breed of solution providers. This wide definition includes all service providers who create and manage web sites. They can be an internal service group in an organization, or an external contractor. Many are currently small generalist shops who need to gather several key competencies. As an individual, the Webmaster is a role which can greatly vary from organization to organization. In many organizations, especially smaller ones or ones just starting to publish on the Web, the Web Administrator may be the "WebMaster" and "do it all"--from site design and setup to HTML editing to site maintenance. We expect increasing demand for professionalism and intensified competition to force them towards specialization into these 4 distinct roles.

On-line Producer

Has overall creative and operational responsibility for the site or subsite. Interfaces with the business decision maker, his customer. Producers have ultimate responsibility for creating and managing a site to accomplish the discrete business objectives. They must define and understand their target audience, and drive functional, creative and technical decisions for a site.

Producers are primarily concerned with the quality and features of their Web sites, as they relate to reaching their target audience and differentiating their site from competitors. Producers will generally carefully balance new technology adoption with customer reach considerations. They are also very concerned with the production process, and will influence tools decisions as they relate to reducing production costs and enabling better workgroup production. For intranet sites, the producer may be called a program manager, project manager or sometimes, editor in chief.

The Integration of the browser in Windows is our main asset for both Internet and Intranet scenarios, as we provide a significant installed base of users or potential users.

HTML authors/ Designers

Designers are responsible for the creative/artistic aspects of a site, including the overall graphical design for a site. They create individual graphics such as icons and logos, as well as typefaces used, etc.

The ActiveX platform offers them :

- support of leading edge HTML (sounds, video, scrolling text) so that they bring quick and easy, yet spectacular enhancement to their pages,
- support of key ISVs, such as Macromedia who will offer sophisticated authoring tools such as Shockwave (if we do a good job, ISVs will more likely write for the ActiveX platform because they will enable their existing apps and because the market will be bigger than for Java plug-ins)

Web administrators

Responsible for day to day site operations. Depending on the site, the Web Administrator may have strict operations responsibility only (availability, backup, publish operations, site integrity, security, traffic monitoring and reporting), or may have a wider range of responsibilities, including overall site and document design, HTML document publishing, hardware and server software setup, server-side programming, client-side programming, and even online customer service. However, as Web site teams become more mature, the administrative function will likely become a more specialized, operations role. They will benefit from FrontPage and Internet Studio site management capabilities for smaller sites, or prototyping new ones.

Developers

Today the developer is pretty much absent of the picture, they will soon become an important role and acquire similar or higher level of influence than the designer. The developer's needs and benefits have been largely discussed in other places in this memo.