—Original Message—
From: Nathan Myhrvold
Sent: Sunday, February 15, 1998 12:37 PM
To: Bill Gates; Tod Nielsen, Brad Chase; David Cole; Joe Belfiore
Cc: 'Mich Mathews (Cor (michmath)'; 'Greg Shaw (Corp. (gregsnaw)'; Tom Pilla; Alison Obrien, Bill Neukom (LCA); David Heiner (LCA); Steve Ballmer; Mich Mathews; Eric Rudder; Yusuf Mehdi; Steve Ballmer; Paul Mantz; Jim Allchin (Exchange)
Subject: RE: Browser in the OS

It is a GREAT idea to get as much quotable data as possible - both for Bill's testimony and for other press work. By "quotable data" I mean:

- Specific people we can quote. Professor Detrouzos of MIT is a GREAT quotable source - he is very hard core on this. Bob Metcalfe, Stewart Alsop, Esther Dyson, Walt Mossberg and others have written in their various magazine columns that they agree the browser should be in the OS - we should look up the references and check them.

- Surveys we can use. This could be an internally done survey, or one done by a polling company.

- Signed statement. I think that we could make a statement and get specific people to sign up to it - including computer science professors, industry figures etc. This includes both people who are already on the record as saying that this is a good idea, as well as other folks. Ideally it includes both supporters (Michael Dell etc.) and impartial observers (Metcalfe, Dyson etc.) and also some competitors (Schmidt would be great, but at least Scott Cook, Gordon Eubanks).

We should get as much as we can get, as soon as we can get it.

As an example, we could get a statement about the technical direction of integration, get some survey results, and then get a statement signed by 100 industry and computer science figures.

If we had that, then I think we should consider running it in full page ads in the WSJ, NYT, Washington Post timed to appear the day AFTER Bill does the testimony.

We should keep this VERY quiet before the testimony because we do not want Barksdale or others preparing a counterattack. Bill should lead with this in his testimony, then we run the big full page ads the next day, and repeat for a couple days.

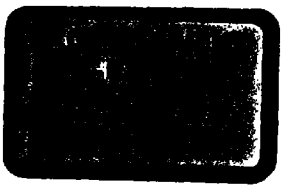
That is about the method. As to the SUBSTANCE, I think that it is CRUCIAL to make the statement we ask people about in the survey, or the statement we ask them to sign etc. is worded properly.

Saying "put the browser in the OS" is already a statement that is prejudical to us. The name "Browser" suggests a separate thing. I would NOT phrase the survey, or other things only in terms of "put the browser in the OS".

Instead you need to ask a more neutral question about how Internet technology needs to merge with local computing. I have been pretty successful in trying this on various journalists and industry people.

Here is an example:

Basic message



In the eany days of personal computing, the data that a person created or interacted with was all local to the machine - it sat there on the hard disk. You would explore or navigate that data by putting "files" into "folders", which were themselves organized hierarchically in "directories". The operating system included programs to deal with these structures for organizing local data.

In order to look at the files you had to use a variety of different programs. Many incompatible and proprietary file formats evolved, and each required different programs to open at look at them, and had different ways of being organized.

Along came the Internet. When a user connects to the Internet they are suddenly in contact with millions of sites all over the world. Those sites are organized using a different metaphor than local files. Instead of being in folders and directones and so forth, you get to them by clicking on links. The links are embedded in a universal data format called HTML.

Why have two different ways to look at and organize data? The simplest thing for users is to have one metaphor - which means that the system of folders, directories and files has to be updated. The programs that let you deal with folders, directories and files in the old PC way has to be updated to use links the way the Internet does, and be able to display HTML.

Local data and remote data should be treated on an equal basis. Users should not have to learn one metaphor for the Internet and a different one for their own files. The whole point of the Internet is abstracting away geography. You can bounce from one link to another, unaware of the continents you are crossing. Why should your own hard disk be the one exception?

Once you take this point of view, there are many opportunities to make Internet computing and local computing converge. Many of the data files on the local hard disk can migrate to HTML so that they can be viewed with the same universal data format. Local folders and directories can become pages. Even the background picture for the system can become an active web page, a stock market ticker or a series of news flashes.

Responses given if pressed

Microsoft has a vision to integrate local computing with Internet computing. This means building the fundamental Internet protocols into the operating system.

Netscape is on a different strategy. They are NOT attempting to make local data, or local PC computing mesh smoothly with the Internet. Instead, their strategy is to replace local computing by integrating more and more funcitonality into their software. They are creating new APIs to turn their browser into a high level operating system, which will obviate use of a local operating system, like Windows. They feel that the Browser is the platform.

This boils down to a fundamentally different view of the technology. The competition between Microsoft and Netscape isn't just about one company versus another - we have each made very different technical bets.

Microsoft is telling its millions of existing users that there is a path for them to use the Internet metaphor both locally and remotely. Netscape is telling people to put with the difference between their local PC and the INternet, and that over time you will

throw out your old software in favor of new software and services which operate on top of the Netscape platform.

Microsoft wants to optimize the Windows platform for the Internet. Netscape wants people to forget about local platforms altogether and only consider Netscape itself as the platform.

This is a case of different technical visions competing in the marketplace. We think our vision is clearly better for users than the Netscape approach. Reviewers and industry experts who have taken a look at IE 4.0 have agreed with us, but ultimately it is the customer who will decide.

Nathan

---Original Message---
From: Bill Gates
Sent: Saturday, February 14, 1998 10:42 AM
To: Tod Nielsen; Brad Chase; David Cole
Cc: Bill Neukom (LCA); David Heiner (LCA); Steve Ballmer; Mich Mathews; Eric Rudder; Yusuf Mehdi; Steve Ballmer; Nathan Myhrvold; Paul Mantz; Jim Allchin (Exchange)
Subject: Browser in the OS

Some part of this debate relates to the issue of whether the browser is a logical extension of the operating system.

When I explain to people what we are doing with help - moving away from a proprietary format with special tools to HTML and how that hleps users people start to understand. When I explain about bowsing information locally and remotely people understand. When I talk about letting ISVs call our html for LOCAL and remote display as well as link resolution etc... people start to understand. I also think we need to talk about our use of HTML for forms. Only by doing a document that EXPLAINS why we are putting the browser into the operating system will people start to have more sympathy for why this makes sense and understand that the government shouldn't be blocking this.

Right now people think the ONLY reason we are putting the browser into the OS is to gain share which just is not true - we didn't get share from IE 1 in the OS or IE 2. IE 3 got us share before it was in the OS because it was a strong product.

I think we need to do a piece on WHY we are putting the browser into the operating system and our future plans. I think we need to make that document widely known.

I want to get Eric Schmidt in particular to comment on whether he thinks it makes sense or not. I wonder who really thinks browsers don't belong in the OS. Detrouzos of MIT told me how he had been saying this before Netscape was founded and even said so in some speeches.

More important I want to get a survey done where ISVs declare whether they think having the browser in the operating system the way we are planning to do it makes sense and is good. We might want to do some users as well.

We have never put crazy stuff into the OS and its time for people to know we are doing this for developers and customers.

It would HELP ME IMMENSLY to have a survey showing that 90% of developers believe that putting the browser into the OS makes sense. I am sure we will get like 60% before we explain our plans. Once we explain our plans properly I think we will get more like 90%.

Even that insane SPA document didn't try to suggest that browsers don't belong in the OS.

Ideally we would have a survey like this done before I appear at the Senate on March 3rd.

I think David should have someone take a shot at writing up our plans for the browser in the OS and Brad/Tod should figure out how to get that distributed and do some kind of survey.

IMPACT OF BROWSER INTEGRATION ON THE SOFTWARE INDUSTRY

[IF NO CONTACT NAME: ASK TO SPEAK WITH OWNER OR HEAD OF MARKETING]

Hello, I'm _____of TRG, a nationwide market research company. We're conducting a survey of software manufacturers, and would like to speak with you briefly about your current offerings, and where you see the industry going over the next several years.

(if asked) The survey will take approximately 5 minutes.

(if needs reassurance) The purpose of the survey is to look at trends in operating systems, including such issues as integrating the browser with the OS.

SCREENING / QUOTA QUESTIONS

1A. Is your firm in the business of developing computer software or customized software applications?
1. Yes
2. No [TERMINATE]

1B. Are your software products
1. custom applications for specific companies or clients (Type A -Custom)
2. designed for the general computer marketplace (shrink wrapped software) (Type B- General)

1C. Does your firm develop software for.

MAINFRAME COMPUTERS	YES	NO	DK	
MINI-COMPUTERS OR SERVERS	YES	NO	DK	
PERSONAL COMPUTERS	YES	NO	DK	[TERM. IF NO/DK]
APPLICATIONS THAT INVOLVE THE INTERNET OR INTRANET	YES	NO	DK	

1D How long has your company been involved in the software industry? ____ Years

2A. Which operating system did this company's first program run under: (Check one)
1. DOS
2. MACINTOSH
3. OS/2
4. WINDOWS 3.X
5. WINDOWS 95
6. WINDOWS NT
7. UNIX
8. OTHER (SPECIFY) _____

2B. Which operating systems do your programs currently run under: (Check all applicable)

DOS	YES	NO	DK
MACINTOSH	YES	NO	DK
OS/2	YES	NO	DK
WINDOWS 3.X	YES	NO	DK
WINDOWS 95	YES	NO	DK
WINDOWS NT	YES	NO	DK
UNIX	YES	NO	DK

2C. Are you currently developing or planning to develop software for any of the following operating systems (only asked for those not mentioned in 2B)

DOS	YES	NO	DK
MACINTOSH	YES	NO	DK
OS/2	YES	NO	DK
WINDOWS 3.X	YES	NO	DK
WINDOWS 95	YES	NO	DK
WINDOWS NT	YES	NO	DK

MS98 0122150
CONFIDENTIAL

UNIX YES NO DK

MS98 0122151
CONFIDENTIAL

2D. What types of software products does your company develop (Do not read list. confirm choices)

ACCOUNTING
CAD
COMMUNICATIONS
DATA INPUT/ANALYSIS
DATABASE MANAGEMENT
DESKTOP PUBLISHING
EDUCATION
ELECTRONIC MAIL
GAMES/ENTERTAINMENT
GRAPHICS
LANGUAGES
MANUFACTURING/PROCESS CONTROL
PROGRAMMING TOOLS
PROJECT MANAGEMENT
SCIENTIFIC OR ENGINEERING APPLICATIONS
SPREADSHEETS
STATISTICAL ANALYSIS
TIME MANAGERS
UTILITIES
WORD PROCESSING
OTHER:(SPECIFY) _____

3. **How would you characterize your business' current sales? Are they**
   1. Declining
   2. Holding Steady
   3. Increasing moderately, or
   4. Increasing significantly

[ONLY ASK Q4-5B IF WINDOWS 3.X OR 95 OR NT MENTIONED IN 2B]

4A. **What percent of your sales <u>in 1997</u> came from Windows related products? ____ %**

4B. **What percent of sales <u>this year</u> do you expect to come from Windows related products? ____ %**

4C. **And how about next year? (What percent of sales <u>next year</u> do you expect to come from Windows related products?) ____ %**

5. **Overall, what impact has Windows had on your business? Has the impact been:**
   1. Very positive
   2. Somewhat positive
   3. Somewhat negative, or
   4. Very negative
   5. None (don't read, check if respondent volunteers)
   9. Refused/NA

6. **And what about the emergence of the Internet and Intranets? Overall, what impact has Internet and intranet technology had on your business? Has the impact been:**
   1. Very positive
   2. Somewhat positive
   3. Somewhat negative, or
   4. Very negative
   5. None (don't read, check if respondent volunteers)
   9. Refused/NA

MS98 0122152
CONFIDENTIAL

7. I'd like to get your reactions to one issue in the computer industry today, which is the integration of browser technologies into the Operating System. We'd like to review the rationale given by Microsoft for integrating browser technology into the Operating System, and get your reactions to it.

One of the reasons Microsoft cites for integrating browsing technology into the OS is the benefits to Independent software vendors from having a larger standard set of system services included in the OS, just as when other network protocols such as TCPIP (*read "T-C-P-I-P"*) were integrated into Windows.

In the case of integrated browser technologies, ISV's could develop applications knowing there was one standard set of user services that was on their machine. ISV's would not have to worry about whether a browser was present, or about inconsistency in user's installed software. For example, ISV's can ship help files as standard HTML (*read "H-T-M-L"*) files, knowing browser technology is there in the OS, thus eliminating the need for proprietary help formats and tools. This integration allows ISV's to use standard protocols in their applications including HTML, FTP (*"F-T-P"*) and Gopher to retrieve data from the Internet or other sources. Other new built in services would resolve URL addresses that are passed into an application or give you the ability to retrieve URL's and bring the data into your application. These are just some of the examples of the new standard services added with browser integration. (*PAUSE*)

Overall, how beneficial would having these capabilities be to your business as a software company? Would the impact be:

1. Very positive
2. Somewhat positive
3. Somewhat negative, or
4. Very negative

8. What impact do you feel these new capabilities will have on the independent software vendor community as a whole in their efforts to develop new applications? Do you feel the impact will be:

1. Very positive
2. Somewhat positive
3. Somewhat negative, or
4. Very negative

9 Do you feel that having these capabilities will make it any easier for you as a software company to develop new applications and bring new capabilities to your customers? Would you

1. Strongly Agree
2. Somewhat agree
3. Somewhat disagree, or
4. Strongly disagree that having these capabilities will make it easier for you as a software company

10 Do you feel that integrating browser technologies into Windows is a natural extension of the operating system, similar to previous additions such as adding TCPIP and other networking protocols?

1. Yes
2. No

11. Finally, how do you think this will impact end users. What impact, if any, would integrating browser and HTML technology into the operating system have on end users and the applications they can work with? Would the impact be

1. Very positive for end users
2. Somewhat positive
3. Somewhat negative, or
4. Very negative for end users

MS98 0122153
CONFIDENTIAL

Two demographic items for classification purposes

12. Approximately how many people are employed by your company at all company locations worldwide?

_____ Don't know/No answer

13 And approximately what is your total annual software sales volume? $ _____

14 Respondent Name: _____ Verify Direct Phone Number __-__-____

15 Record gender 1. Male . Female

Thank you very much for sharing your opinions with us. Have a nice morning/afternoon.

MS98 0122154
CONFIDENTIAL