Plaintiff's Exhibit
6451
Comes V. Microsoft

From: Bill Gates
Sent: Wednesday, July 29, 1998 7:42 PM
To: Steven Sinofsky
Subject: FW: Office futures

My email error prevented darryl's comment from getting to you.

-----Original Message-----
From: Darryl Rubin
Sent: Tuesday, July 28, 1998 5:04 PM
To: Bill Gates; Jon DeVaan; Bob Muglia (Exchange); Steve Silverberg
Cc: Paul Maritz, Eric Rudder; Nathan Myhrvold
Subject RE: Office futures

Just a few thoughts on some of these questions:

When I think about Office I think about issues like:
a) How can we make it easy to find documents? It is still dramatically easier to do this on the Web than at Microsoft or any other Office user. Users want us to lead here and we need a short term and long term strategy that intersects with Neptune

One way to help is to do a better job of history. Given a complete history of every doc you've ever visited, the system can provide a rich set of views that make it easier to find something of interest that you've seen before. Eg, arranged by time, topic, frequency of visitation, etc. The way we present and use history info today is too primitive. We can take advantage of document keywords, properties, and metainformation like navigational relationships to provide much better ways of looking at, searching, and filtering history. It's also common to want to find documents via annotations or bookmarks you've made in them, so it's useful to provide cross-document lists (indices) of annotations and bookmarks that you can search, view and filter. The ePad prototype will show some of these ideas

b) How can we make a paperless environment pratical? Issues like our forms strategy and annotation come up here and we don't have an architectual approach other than the things Darryl has written which are not really read much. All our documents have to sit on some common forms/HTML technology for this to work

This ought to be NetDocs, if NetDocs is doing the right thing designwise.

c) When and how should we bring together Frontpage/Powerpoint/Word - the editors? How does Netdocs relate to this?

I believe NetDocs ought to be or become that unified editor. Maybe it's more precise to say it provides the container framework and some of the common editing components, and Frontpate/PP/Word provide the more specialized editing components.

d) What can we do to make the boundary between the editors and Excel/Access go away? No one knows where to make lists because we have functionality in so many places. No one knows how we deal with the different container issues

I am working on some ideas for how do things along these lines. It involves being able to decompose today's monolithic notion of spreadsheets and databases into expression, matrix, and chart entities that exist in a free-form document. The natural framework for this would be NetDocs.

e) How should Office relate to our lower end efforts - not only works but increasingly the version of Office we have asked the HPC group to build from scratch?
f) How can Office lead in our plan to make information available to the user on all devices at all times - Internet replication like we are doing with email on Hotmail?
g) What should the Office groups role in tablet PCs be? These are coming in a few years and they require a notetaking/handwriting UI thinking that some company will lead with?

The ePad proto aims to show a UI model for how you'd do these things. These ideas could be manifested in a version of Office (More precisely, a base set of the features get manifested in the shell, with the rest added by Office).

h) When and how should Office embrace speech input? Does this require us to recrafy the UI code in a modern way?

Rich audio note taking integrated with textual note taking is also very useful, and can be done independent of any technology or UI changes for speech recognition. Good recognition would of course open new dimensions in note taking functionality, as well as for the general UI of Office.

i) Can we get a version of Office out before Neptune that point in the direction of Neptune in the right way?
j) How can Office help define the requirements for Neptune and make sure we do the right thing? There is a huge vaccum where the Neptune people need to know the scenarios that a great UI and sotrage plus can enable
k) What innovations are available for the DNS worker dealing with numbers? How do we get schema knowledge into Access and Excel?
l) How do we reconcile all the mail clients we have (HPC, Hotmail, OE, Outlook) into something coherent?
m) We have a lot of things going on in research like the Tony Williams work, the Alex Loeb work?
n) How does Office help us with Collaboration? People like Hotoffice and visto and others are doing some interesting work.
o) How does Office deal with the users who are standardized on Notes? Don't we have to make our mail client accept their protocols in order to regain the central UI position for these customers and get them to want new versions of Office?
p) How do we clean up the Office programming story - the whole scripting versus Vb thing is confusing and dilutes our message. Can we do something leadership here?