

From: Steven Sinofsky
Sent: Sunday, August 01, 1999 3:41 PM
To: Bill Gates
Subject: RE: Reading and Office

How would we expose this to the user? How would they know about it? What would it do? What is different than what we already tried and were not successful with? Have you read the comments on your web page about this?

It is really worth thinking about this. I know you think these features are important, but I don't think it is enough to say that they won't be bloat because of that.

Ralf will answer your other mail on this topic.

-----Original Message-----

From: Bill Gates
Sent: Sunday, August 01, 1999 3:34 PM
To: Steven Sinofsky
Subject: RE: Reading and Office

I think having a great reading mode would be a very heavily used feature.

If people are moving to online documents including reading email and reading Intranet sites (and commenting on them) the ugliness of the "paper is king" model come through more and more.

We can make on screen reading better than on paper - annotations being one great example of this.

Collaboration loses a lot when it has to move to paper copies and paper storage.

Annotations/Collaboration/Reading are very very synergistic and therefore are features that will get massive attention and be the opposite of bloat.

This one I am absolutely sure about.

Some things like how much progress can we make on Digital Dashboard for our mass of users I have some real doubts myself.

Some of the scenarios with Audio and Video we need to get annotations right for them as they become popular.

The Annotations/Collaboration/Reading stuff I have no doubt is worth the size and effort. In fact to me these and competing with Notes can be the centerpieces of Office10.

-----Original Message-----

From: Steven Sinofsky
Sent: Saturday, July 31, 1999 9:42 PM
To: Bill Gates
Subject: RE: Reading and Office

You might want to turn off web discussions when cutting and pasting. I know it is silly, but DHTML doesn't work well on the clipboard and we chose to use it to do the ui for comments (mistake!). Just click the discussion toolbar in IE. Also, those grey blocks will become images once they are finished loading (an artifact of fetching the page out of the cache).

I'm not sure I would agree with the idea of an online reading view. We actually tried this in Word 97 and pulled it out in Word 2000. People find the different views in Word totally confusing. As you said, it might be that we would not permit editing in the online reading view because of all the layout it would do--that is exactly the thing that causes confusion. In Office 97 we added editing to Print Preview (and at the same time merged print preview with the "print layout view" -- they are the same though there are two menu commands for compatibility). Today we don't allow arbitrary formatting in Outline view and it is another reason people find outlines confusing.

Plaintiff's Exhibit

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In Word 97 the online view, turned on "wrap to window", displayed the document map, and turned off headers/footers, footnotes became popups, and tweaked a few other settings (i.e. two column documents become one column, we show the background color/bitmap if there is one). This was less than we originally envisioned not because of the schedule, but because all the differences started becoming very ambiguous choices that were going to make it hard for a person to know what was going to happen when they hit print.

It is just worth considering how we would make a feature like this discoverable... Would you always default to opening existing files in this new view mode? If so, then people would always have to discover how to get out of this mode and would have to execute a command to start editing. If we didn't go into the view mode, then how would people know it exists? We have tried offering tips for things like this but those are always ignored or forgotten.

It also adds a number of complexities--the document would look different when printed, how would the clipboard work, what would happen to page numbers/headers/footers, etc. All of those are things we tried to cope with using the Word 97 Online Reading View.

For Word 2000, we changed the online view to the web view, where we have specific things we do: text is wrapped to the screen, tables behave like web tables (stretchy), etc. It is the default when you edit an HTML page so there is a reasonable place to put this command and it doesn't need to be discovered. When a person does print preview from a page being edited in Web View things look exactly like they will when printed as well.

I certainly understand the value of having a great onscreen reader. It isn't clear to me how to make this a successful feature in Word though.

Collectively, we really need to internalize the issue of "bloat" and work to have a common framework for working under these assumptions. This is the number one challenge we face. What I am trying to do is whenever features are discussed, ask people:

- How will customers know the feature exists and know what it does?
- How will they access and why will this not be excessive bloat for people that don't use it?

-----Original Message-----

From: Bill Gates
Sent: Saturday, July 31, 1999 5:07 PM
To: Bill Hill; Bert Keely
Cc: Steven Sinofsky; Bob Muglia (Exchange); Dick Brass; Ralf Harteneck; Eric Rudder; Andrew Kwatinetz
Subject: Reading and Office

We had a brainstorming meeting about Office talking with Ralf about reading and collaboration.

Ralf had in his plans the idea of working with you to get Word to output your format.

I said I wanted to see a much closer relationship.

In particular I wanted Word to have an online viewing mode with all the Osprey richness. If this means new properties in the word document great.

If it means having to support ClearType widths somehow directly in Word great.

I said that your group would view getting this support in Word as big thing since this would let Word documents use the proprietary extensions part of our "ebook" format.

I said that your group would also come up with ideas about better visualization of documents and help the Word guys.

For example the idea about showing where you are in a document in a better way than just a scroll bar - using thickness for example.

NOW is the time to try and become part of the Office10 VISION and have OFFICE10 buy into your vision and help your efforts.

Ralf is the person to start with - he can tell you how best to engage his team.

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Here are some comments I made and some responses in an Office10 brainstorming document:

(What the heck are these grey rectangles in this pasted text? I have no idea - trying to use Office2000 to collaborate has been an eye opener to me - it just hasn't been used this way because it is way way too hard)

1. Reading documents on screen. I claim we should add at least one new viewing mode - even if we think it is funky. For example a viewing mode where the text you are looking at is blown up to a larger size and the text gets somewhat smaller as you move away from it. I think our Ebook group under Bill Hill is doing VERY interesting stuff in this area. However even they need to think about how screen views can go BEYOND what is possible I think we should have in some of the viewing modes a graphic display of the thickness of the document- how much you have read and how much you haven't read including the ability to page into the "book" to a particular place. We need to think about whether there is a way to deliver Osprey and Cleartype functionality in Word or whether all of this just is given away with the OS. Even if that stuff comes with the OS we need a connection to word. The demonstrations that the Ebook group does on LCD screens where they have tuned things get people VERY VERY excited. How can Office tie into this? Can we make it easy to be "inside" word and have these great reading views? This is another area where we should be able to leverage some great work from another part of the company. I can make this a very high priority for the Ebook people if we get the thinking about what we want to do here right. Office has to be the first tool that makes it easy to read and create ebook material that is great. Word did some nice readability stuff in the past, which I use. I wonder if there are drawbacks to it that we need to fix to make it more usable. Shipping Cleartype with Office is a great example of a case where I would be GLAD to violate the religion that Office10 never ships system components - I would want to make it optional to install and I would make sure the OS people packaged it as an OS update but I would include it in Office and not be shy about promoting scenarios that require its installation. I give lots of speeches about how one of the MOST exciting things happening to the PC is the readability of the screen with Cleartype and some layout software we are doing (Osprey). We need to connect this work to Office in an exciting way. I am willing to have people to have to either get the latest OS upgrade (Win2001) or an Office upgrade to get Cleartype and not give that to any other ISV. Cleartype will get fancier in the future in terms of the layout APIs - I think we will get this into Windows2001 and Office needs to take advantage of it. This is an example of something where the company is spending lots and lots of money and needs to tie it into one of its big businesses. We put Ebook stuff together with Office to try and see this happen. Some brainstorming with the Ebook group is required here because neither group is thinking about the opportunities right now. I feel very strongly about this if it isn't clear. One piece of work the company invested in that I have NO IDEA what we are getting from it is the Epaper work that was under Alex in Research. There must be some proprietary advantage for Office that can come out of this. They even budgeted for some OCR acquisition - unless it ties into Office and allowing people to easily search things with a nice Tahoe/PKM interface and to annotate even OCR things we won't get the return we should on this work. When will we get people to do electronic filing instead of paper filing? Can Tahoe come up with rich enough views and navigation and connection to the Windows storage advances that we can push this as the best way to do things? << OLE Object: Forms.HTML:Image.1 >>

Subject: **New reading views** From: **Andrew Kwatinetz** 7/21/99 12:21 AM Adding a new reading view to Word isn't the answer unless we can help you easily get in and out of that view. Today views in Word are complex and awkward--not a basic user feature. The default Word/Office views target editing (reading/navigation in the process of editing). The new WordMail (2000 vs 97) has moved away from viewing, leaving it more up to the common viewer (e.g. IE and, in the future, eBooks) which should be optimized for the reading experience. How often do you read in Word today vs. in email or IE (even though Word was used to create much of it)? Where we need to innovate more is the editor leaving better clues for the viewer so it can provide a better experience (e.g. structure, keywords, dates), and conversely, the viewer taking advantage of the editors (e.g. it's very likely you want to Collect information during reading that you will later paste into a message or document; however IE doesn't work well with the Office collect&paste feature--something we're trying to fix but not currently schedule work for the IE team). I don't think we've had anyone look into integrating ClearType. I get more excited about Outlook being better for viewing email on my laptop. << OLE Object:

Forms.HTML:Image.1 >> From: **Bob Muglia** 7/22/99 7:36 AM I agree that we are moving to a world with separate tools for viewing and editing. Office 2000 took this step in a major way and I think it is a good one. It allows for a specialization of functionality that makes a lot of sense - when you are reading a document, having all of the tools of word available to you isn't real helpful. I much prefer having the modality of an edit button. Wrt ebooks, I completely agree with Bill about the potential importance of this and the opportunity for thought leadership. The Osprey work that Bill Hill is doing will improve the readability of documents on screen by a significant margin. Unfortunately, we face the situation where these features won't be implemented in the browser for some time. So there will be a

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separate app for "immersive reading". Dick Brass's team is building this. Eventually, this will just be the browser but right now the area is too new to focus on unification - it needs to be perfected first. We should think about ways to distribute this app - the OS is one vehicle and Office 10 is another. The app will support cleartype for Windows 2000 even though it isn't shipped in the box (it is add-on DLLs, hopefully not system components!) The reading app supports an ebook format that is XML-based. That format is well defined at this time. A very interesting opportunity for Office is to be able to publish in that format, particularly from Word. That is a basic step and alone could go a long way. Eventually, it would be great to have pure wysiwyg editing in Word as well but this will require changes to line layout as one important part of Osprey is character spacing. Eliyezer is obviously the expert on this and I believe he is talking to the ebooks guys. << OLE Object: Forms.HTML:Image.1 >>

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