From:	Steven Sinofsky
Sent:	Sunday, August 01, 1999 4:30 PM
To:	Bill Gates
Cc:	Eric Rudder; Bob Muglia (Exchange); Darryl Rubin; Andrew Kwatinetz
Subject:	RE: Bloat

We talked about this a great deal at the start of Office 2000. I recall a fun meeting we had with you, Nathan, paulma, davidv, and others where everyone said they knew exactly what bloat was and we then had a discussion where everyone arrived at a different conclusion. This anecdote is actually part of my standard presentation on the design of Office.

There are a hundred+ hours of focus group/usability tapes we can show you where customers go around in circles explaining what bloat means to them, much like that same meeting we had. Disk space, size of files (for people squeezing them on floppies), too many menu commands, too many toolbars, help is too hard to use, boot time, ram, too many features, too much on the screen, etc. It goes on and on. I also use these in our standard talk and everyone empathizes with all of these and people come up afterwards and always say "where did you find all those comments because we know bloat is really only X <insert pet issue>"

We worked extraordinarily hard on this issue for Office 2000 and I believe we actually made some significant progress.

The intelligent menus and rafting/intelligent toolbars go in the right direction of the key theme that I think we heard:
    "Office does a lot of things. Much of what it does I don't use so it gets in the way."

The next step is to do something about:
    "I know it does things I would like to use, but I don't have time to learn or figure out where they are."

The AnswerWizard and Assistant were supposed to help with that, but I don't think we have been successful there. We have also done:
- tooltips
- tips while you are working
- wizards (we have enough wizards that we now need a wizard to find the right wizard)
- shift-F1 help (click shift-F1 and then click on something)
- automatic features (which are now driving people crazy)

For Office10, one thing we are going to resurrect is an idea that Chris Graham really pushed years ago for Office 95/97 which is "on the object UI". We will likely use this to better implement some super important features that people do not use enough such as Paste Special. We are working through the places where this will make sense. We also have a UI element called Work Pane that will allow some more descriptive HTML based UI like in the Outlook Organize ui.

It is easy to say that more elements could confuse, but I think that we are ok on that if we can make the right ones appear at the right time. Most sophisticated devices employ a ton of different user-interface elements (knobs, dials, sliders, gauges, digital readouts, etc.) - using the right one at the right time is what a good design is about, not just forcing one design element everywhere.

You might say at an abstract sense that it is the UI. I think that it is more the level of abstraction we work with. Office is a tool and there is always going to be a mapping from a general purpose tool to specific goal a customer has-with so many customers and so many goals, that mapping is very hard for us and for customers. Everyone has a clue how to use a hammer, but building that project Norm just showed on *This Old House* is very difficult-for software people blame the "hammer" (Office) but on TV everyone knows that Norm is just smart and the tools are fine.

Templates have always been something that we think could help, but we have not been successful at making this work. There are two issues:
- Having a lot of templates just introduces another place of bloat. People think the Help Index is indicative of bloatware because it is too long and unwieldy. Any massive collection of templates will be the same. If you have to go to the web or go through an elaborate search service the feature will just go unused. The irony is that if there was a web site called www.1000letters.com <http://www.1000letters.com> I bet people would use it to find standard letters-something to think about.
- Templates are never quite right. The feedback on templates has always been that they do not come close enough to solving the problem and trying to make them solve the problem is not worth the effort of starting from the template. It is much easier to find a document you or a friend worked on previously. Again, your coworkers are likely to know exactly what you want to do whereas a big source of templates is going to be a "nearest match" problem.

To get an idea of just how insane the world of templates can be, take a look at a catalog of office forms (invoice, etc.) from a company like New England Business Systems. There are a zillion forms for a very limited set of problems (invoice for example).

People are very picky.

I think all you're hearing about templates is many years of frustration from many program managers. We do feel like we have tried everything. A lot of cycles have been consumed by template thought. Perhaps some more specific brainstorming from you would be helpful to us.

Nearly all of the thought on how to reduce bloat in the marketplace has actually been an exercise in "how to design a product that just does less". It drives me crazy when I see people talk about the CE apps and how they are not bloated (a word processor without autocorrect!) or when people say HotMail or Jump are easier than Outlook - that's like saying a tricycle is easier to operate than a car (duh!). Anyone working on bloat should be sure to start with a working version of Office and not try to design an optimal user-interface for our top 20 commands. Alan Cooper's new book falls victim to this by showing the ultimate design for a non-bloated in-flight movie player (all it does is select from 10 movies and allow you to hit play!). Sorry, this just frustrates me.

-----Original Message-----
From: **Bill Gates**
Sent: Sunday, August 01, 1999 4:06 PM
To: Steven Sinofsky
Cc: Eric Rudder; Bob Muglia (Exchange); Darryl Rubin; Andrew Kwatinetz
Subject: Bloat

The actual memory size and disk size of Office are at all time lows as a percentage of resources.

Our bloat comes from:

   a) UI!!!!
   b) Start uptime.

Finding a place to let people see exciting templates and having Office teach the user what can be done is important.

I want to think hard about this. I wonder if our leading up thinkers like Capps and Trower have ideas. They are great thinkers.

Did Fallows have any ideas on this?

It is a key issue.

Who would have thought that UI would become the most ponderous thing.

I still think a template area done right can be part of the solution.

We cannot change our UI in any major way so this is tricky.

How can Office let people see its richness?

I will come up with some thoughts on this.