From: Bill Bliss

Sent: Tuesday, December 04, 2001 7:28 PM

To: Bill Bliss Cabinet

Subject: FW: Longhorn search

FYI. Not really actionable except perhaps for Adrian and Philip, I suppose.
----Original Message----From: Kai-Fu Lee
Sent: Tuesday, December 04, 2001 4:13 PM
To: Kai-Fu Lee; Kai-Fu Lee's Direct Reports
Cc: KD Hallman Direct Reports
Subject: RE: Longhorn search

A few points of clarification:

(1) I would like people to keep Karen in the loop when talking to Longhorn USER EXPERIENCE (Hillel's) team. This is what I mean by NISD point of contact.

(2) I would like Karen to send minutes/updates on her discussions with Longhorn user experience with at least NISD staff + NLG staff (and others who are interested).

(3) The above applies only to Longhorn User Experience, and for example does not apply to Avalon. We also need to have one story for Avalon (and Office, etc.). We won't have that one story until the NISD Roadmap is all done and we start to execute. Until that happens, you should continue your discussions with Avalon, Office, etc. You probably know who to keep in the loop from other groups (I know that Karen and Bev have both talked to Office; and XD and Bev have both talked to Avalon).

I should have made these points clear with people Please feel free to contact me if you don't have clarity on this or other issues.

Thanks, Kai-Fu

----Original Message----- **From:** Kai-Fu Lee **Sent:** Tuesday, December 04, 2001 11:45 AM **To:** Kai-Fu Lee's Direct Reports **Cc:** Beverly Sobelman **Subject:** FW: Longhorn search

FYI – I've asked Karen to be the NISD contact for Karen. Based on the successful SC collaboration with XP, with unified storage + unified search as the key opportunity for Longhorn (see message below), this was the natural extension of this relationship.

Their interest in "extending search" as the key opportunity for language input is also consistent with the NISD roadmap planning thus far.

Karen, please make sure that other teams (particularly NLG) are involved in this process.

Kai-Fu

-----Original Message-----From: Hillel Cooperman Sent: Wednesday, November 14, 2001 12:45 AM To: Karen Fries

> Plaintiff's Exhibit 8378 Comes V. Microsoft

9/23/2003

MS-CC-Sun 000001147908 HIGHLY CONFIDENTIAL **Cc:** John Tippett; Scott Seiber; Jerry Joyce; Matthew Goldberg; Kai-Fu Lee; Chris Guzak; Bob Day; Jason Moore; Tjeerd Hoek; Gayna Williams; Piero Sierra; Joe Peterson; Debra L. Weissman; Joyce Simons **Subject:** RE: Longhorn search

Sign me up too!!! ©

Quick feedback on the three opportunities you list.

- 1. I'm sold.
- 2. The core idea of having more contextual entry points to search... I love.

3 I agree there's a kernel of goodness here. We need to really zero in on it, and spend some time to decide what the bar is for LH.

Some other opportunities I'm hoping we can engage on together:

- Integrating web search into a unified results facility in the shell...
- Parallelizing the design of that search results place with the advancements that bill's team wants to
- make ... my gut tells me these things need to be in sync, or if not, we should have a good sense of why not
 - You mention it a little, but I'm hoping we can do some smart focused stuff wrt Assistance.
 - Want to make sure we leverage the SQM technologies heavily in this area so we can learn a ton.
 - Etc...

I'm sure there are more and this will come in time.

Some specifics on process . I would love to get an office for you guys in 9 (at least part time). I would like to get anyone who is dedicated to Longhorn on our team aliases, etc. etc.

I'm psyched. Can't wait to see the first set of scenarios. ©

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----Original Message---- **From:** Karen Fries **Sent:** Saturday, November 10, 2001 1:47 PM **To:** Hillel Cooperman **Cc:** John Tippett; Scott Seiber; Jerry Joyce; Matthew Goldberg; Kai-Fu Lee; Chris Guzak; Bob Day; Jason Moore **Subject:** Longhorn search

We met with Bob and Chns and others this week to go over Longhorn's current plans/thoughts around search, uses of Mighty Mouse, and discussed some of the areas of we thought our team could contribute.

Based on this meeting, we're really excited about working with you guys on Longhorn search. Sign us up...our devs are going to enlist and we've got some ideas we want to prototype (Jason, we should discuss this with you).

I'd like to know if you have any thoughts on the areas of collaboration we discussed with Chris and Bob.

Here's where I think we came out:

Opportunities for our team to contribute

1) Local doc and media search should be improved in light of Mighty Mouse...there are lots of interesting opportunities around the property store. The result of search might be some smart behind the scenes sql queries (this is analogous to what we did for media search where we compiled the right extensions, but we'd take it further) I think Chris is right in that the work he's doing around logical views and smart grouping will make the need for searching for files less common, in some cases.

2) More access to file search: Introducing the ability to search for files into the places where people need it. An obvious example of this is the File Open dialog. This is implemented today in longhorn but there's no UI. Our

team could help with the Ul/code needed to make this accessible, as well as work with Bob Day to introduce search access in other areas.

3) Using search as a means to unify many fragmented parts of the UI today. This area is the most interesting to our group and potentially the most challenging. The ultimate goal would be to provide end users of the shell (maybe one day all web services/apps but that's likely further out) with one place to go to complete their tasks. You guys are moving this way with Web View tasks, in a more hard wired way. Majel is coming at it from the opposite direction. This work needs to all be unified. Customers should see common tasks (maybe even smarter tasks then exist today, see details below) and then have a quick way to find anything not on the list. We need to prototype this to show you what we're talking about. Wouldn't it be nice if longhorn actually could remove UI junk, rather than invent and display even more.

Process.

We need to talk about what worked and what didn't in the Windows XP effort. To really make this work, we'll be working in the space defined by a lot of other people, PMs, Help folks, etc. so we need to figure out clear roles, responsibilities and get those communicated. I think this is ongoing but we should discuss a plan for this.

Other issues

From our division's standpoint, we have a goal to provide a platform upon which web services can expose their tasks, and end users can ask for those tasks naturally (spoken and typed). As much as possible, our work in Longhorn needs to tie into this platform plan. The obvious area will be in the internet space, but there may be other opportunities. I'd see our team as being the point of contact for this.

Details and background junk

Some specific things we discussed around unifying search:

- Chris indicated we could get at Web View tasks in Longhorn today, given some work you're doing for Avalon. It may not be hard to make all folder features/tasks accessible. We'd like that, we'll probably start on a prototype of making current web view tasks accessible via "search".

-We've also been talking to Jan about tying this into the inductive UI parts of the interface. We need to figure out where control panel, etc. fit in. we also need to work with Deb and the help team to ensure there's an architecture where we can make help tie into this.

-Having a robust tip architecture ties in too.... I forgot to ask if there are plans to create a smarter tip system where there is more user context considered (has the user seen the tip before, have they closed it, what kind of a user is accessing the system now, etc). which leads to...

- The sql store is a good place to think about adding critical user profile data so user context and past behavior can be considered in task prediction, tips, and even the kind of UI we show (simple tips, character/no character, classic menus, etc) Web view tasks could be smarter than just the common tasks for a folder across ALL users (MRU task at a minimum). Chris said there is no plan for a high level description of user profile, events, history, searches, for Longhorn today. More difficult, but still interesting to think about is if we can make the Longhorn experience more useful for people if we know more about their interests. Given we have a model around past searches and tasks chosen, we know something about what a given person likes to do. This is a big opportunity – and has even bigger issues around privacy, etc. We need to find out if there are people on the PM side working on this or thinking about this. My take on user context and this issue is there is some low hanging fruit Sometimes people think it's a panacea and it's not, but there are some easy high impact opportunities.

We'll flesh out some of these ideas over the next few weeks, talk to Jason/Chris/Bob to answer outstanding issues, and get started. Caveat: short term part of our team's time will be focused on Texas and plans for our broader architecture.