



Evaluating a Personal Communication Tool: Sidebar

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Abstract:

By more closely integrating email with the web we aim to bring organization to email and more collaboration to the web. To this end we developed the Sidebar [1] a web-browser plug which displays email relevant to the currently displayed web page. Sidebar allows for serendipitous email discovery, provides organization for email discourse, and merges private information from a user's personal email archive with public information from mailing lists and web pages.

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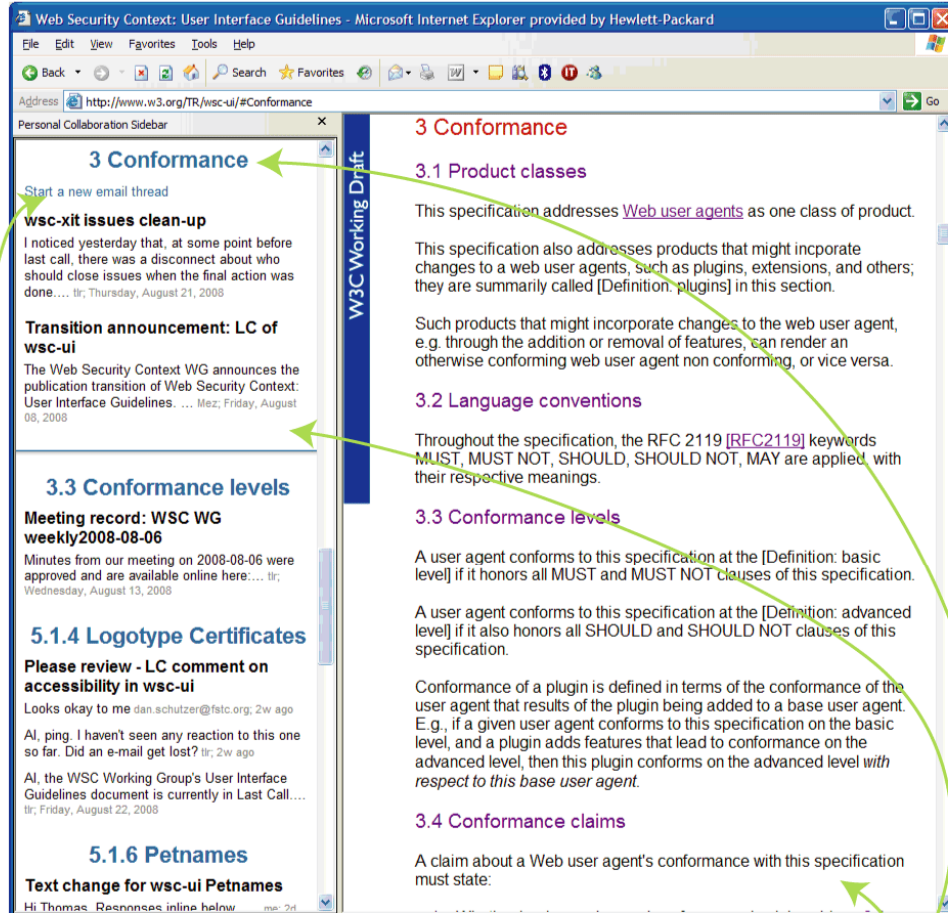
By more closely integrating email with the web we aim to bring organization to email and more collaboration to the web. To this end we developed the *Sidebar* [1] a web-browser plug which displays email relevant to the currently displayed web page. Sidebar allows for serendipitous email discovery, provides organization for email discourse, and merges private information from a user's personal email archive with public information from mailing lists and web pages.

Others have also recognized the need for improved email interfaces. Recent developments have included better email search [3, 7], tools for indexing email, files and other online documents based on web page content [2,5,6], and for attaching chat windows to parts of a document [4].

The Sidebar browser plugin is shown in Figure 1. Each of the displayed messages in the sidebar was found in the user's personal email store by searching for the visited page URL. In this paper we describe results from a three week longitudinal user study to observe the usage of Sidebar and determine if it improves communications productivity.

Study participants were selected from a *marketing communications* and *administrative assistants* staff. We used the diary study methodology to capture experiences and conducted weekly semi-structured interviews and surveys to study changes in behavior and perceptions over time. Highlights of the results reveal interesting usability insights about the changes in **communication productivity**, the need of an **integrated communication-web interface**, assumptions about **privacy concerns** and the **ideal target user**.

SideBar resulted in increased **communication productivity** when users viewed a web page that was involved in a collaborative engagement, especially when they did not remember the URL of the webpage. Sidebar also resulted in serendipitous awareness of emails related to a webpage while browsing pages not part of a users active collaborations, though this typically resulted in less interaction and served mostly as historical reminders. The summaries were then interesting and occasionally fun, but not essential.



- A web document (which happens to have multiple sections identified by anchor tags)
- Email summaries extracted from the users personal messaging store by searching for email containing a link to this page. Click on any summary to see the full message.
- Email is organized using section headings automatically extracted from the page.
- Clicking "start a new email thread" causes a new message to appear with address fields prepopulated with everyone involved in discussions about this page and with the URL and title in the message body.

Figure 1: The SideBar in use

The need for an integrated **communication-web interface** became apparent when users desired functionality that combined both: finding webpage related to a conversation, and the need to help locate emails for an unknown URL.

Earlier assumptions regarding users' email **privacy concerns** were dispelled when none of the participants displayed any discomfort with Sidebar creating a local email index in their machines, or with email messages being visible by having Sidebar open while browsing.

The **ideal target users** of Sidebar are those who changed their behaviour after using Sidebar. Two of our most enthusiastic users were an admin who made extensive use of the "Start a new email thread" link, and a communications employee who made a new Wiki page for each planned meeting and then used those pages as a navigational structure for subsequent email conversations.

The study also revealed findings about the purpose of using URLs during communications in email, the nature of the pervasive use of "cut and paste" to embed URLs, combining Wikis with Sidebar to organize email based on topics, the effects of combining email and browsing, insights into communication productivity raised by Sidebar, awareness of productivity trends through Sidebar reports, and the use of Sidebar as a personalized index into long web documents.

We conclude that the integration of communication and web browsing into a single platform is most productive for those users whose jobs require them to engage in web collaborative tasks. The ability to organize conversations using web pages is deceptively simple and yet surprisingly powerful. It should have wide applicability.

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