

Personal Information Management

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ABSTRACT

Personal Information Management (PIM) is the management of information (e.g. files, emails, and bookmarks) by an individual in support of his/her roles and tasks. Although PIM is practiced daily by millions of people, a research community has never been established. This SIG aims to provide an opportunity for researchers, students and designers who share an interest in the field to meet and discuss key issues. We hope the SIG will lay the foundation for an ongoing PIM research community.

Categories & Subject Descriptors: H.3 [Information Storage and Retrieval]: Information Storage – File organization; Information Search and Retrieval

General Terms: Design, Human Factors

Keywords: Personal information management, files, email, bookmarks, contacts, appointments, task management

INTRODUCTION

Personal Information Management (PIM) is the storage, organization, and retrieval of information by an individual for his/her own use. PIM is a fundamental aspect of computer-based activity - millions of computer users manage personal information (e.g. files, email, contacts, bookmarks, reminders) every day to support their work and leisure needs.

Studies have shown that PIM can be burdensome and error-prone [1,2]. Therefore the payoffs for advances in PIM are large and varied. As individuals, improved PIM means better use of our precious resources (time, money, energy, attention). At the organizational level, better PIM means improved employee productivity, which may in turn lead to better teamwork. Ideally people need access to the right information at the right time, in the right place, in the right form, and of sufficient completeness and quality to perform the task at hand. Further, they need to be able to manipulate that information with ease, to organize, excerpt, annotate, group and link it to accomplish their goals.

However the amount of research on the topic to date has been limited. For example, previous work has tended to focus on PIM in the context of specific tools such as email

or calendars, and there has been little consideration of how multiple PIM tools are used together. The information required to complete a task – planning a trip, for example – is often scattered across locations (home, work), devices (desktop, laptop, PDA, phone) and applications (files, email, bookmarks, calendar). Not only must users manage each store of information separately (encountering problems in classifying and retrieving items as they do so), but gathering the information needed to complete a task can be a major chore in its own right. Further research is required to investigate user requirements and direct design regarding both this and other aspects of PIM.

Moreover there is no PIM research community where researchers and designers working in the area can meet, share ideas and coordinate their efforts. This in turn contributes to the current lack of consensus on appropriate methods and directions for future research [5].

SIG GOALS

The SIG aims to bring together researchers, students and designers who share an interest in PIM to meet and discuss problems, designs, findings and methods. We anticipate that the SIG will help to guide future work by identifying key areas in need of attention, as well as fostering ongoing relationships between participants.

In the longer term, we hope the SIG will lay the foundation for a new research community focused on PIM. After the conference a discussion group will be set up to facilitate ongoing dialogue between participants. This will build on the recent success of an international PIM discussion group created by Ph.D. students who were carrying out research in the area but working in isolation.

RELEVANCE TO THE CONFERENCE THEMES

PIM as an activity reaches far beyond the desktop. Thus the SIG has close links with two of the conference themes, both of which we plan to encourage discussion in:

- Ambient Intelligence – People manage information in both the digital and physical domains, and previous research, e.g. [4], has explored how they can be integrated. Recent advances in ubiquitous computing offer exciting opportunities in this area, however there is a need for in-depth research into user requirements.

- Mobile Communications – Issues relevant to the SIG include the following: how should personal information be synchronized between devices? What is the potential for maintaining a centralized store of personal information that can be accessed from any device? What are the privacy implications of having personal information stored on the network?

AREAS FOR DISCUSSION

We present an initial discussion framework below. In addition, we encourage attendees to propose their own ideas for discussion.

Research into user practices and requirements

- What problems do users encounter as they manage personal information?
- Where is current knowledge on the management of personal information lacking?
- How can we generalize research findings across different PIM tools, e.g. from files to email?
- Do we need more research focused on certain user contexts, e.g. home vs. work, desktop vs. mobile situations?
- What methods are appropriate when researching complex, situated activities such as PIM?

Design of PIM tools

- What are the main strengths and weaknesses of today's PIM tools?
- Why have PIM tools changed so little in the past few decades?
- What is the future of PIM technology? Does the advent of database-storage, such as that planned for Microsoft Longhorn [3], mean that the idea of filing items within the traditional folder hierarchy will go away?

Evaluation of PIM tools

- Why are so few PIM tools systematically evaluated?
- How should PIM tools be evaluated (role of field vs. controlled studies)?
- How can the usability and utility of different PIM tools be compared? What are the reference tasks and metrics for PIM evaluation [5]?

Theoretical Issues

- How should PIM be concisely defined? What tasks and tools are involved in PIM?
- What can PIM research learn from established fields such as information retrieval and knowledge management?

- What theories exist to guide PIM design?
- What has more impact on the design of PIM tools: empirical research or issues of technology and economics? How can PIM research make more impact on design?

Building a PIM Research Community

- What further steps should be taken to build a community of people interested in PIM?

SIG ORGANIZATION

Due to the wide range of relevant topics, we aim to save time on the day by agreeing a focused set of issues in advance via public discussion on chiplace.

The SIG will start with a short session where participants with experience in the field will be able to briefly introduce their work. This will be followed by an open discussion in which all participants will be able to participate. If necessary, we will split into sub-groups, each focused on a key area. In a closing discussion, the sub-groups will sum up their findings to all attendees.

A key aim of the SIG is to lay the foundation for ongoing communication and sharing of ideas after the conference. Therefore participants will be encouraged to join a PIM discussion group. The authors will also produce a report of the discussion for publication.

TARGET AUDIENCE

The target audience for the SIG is researchers, students, and designers with an interest in any aspect of PIM - in terms of type of personal information (e.g. multimedia files, email), technology (e.g. desktop, mobile device), user context (home, work) and methodological perspective.

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