

Handoffs & Handovers: Collaborating in Turns

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ABSTRACT

Handoffs and handovers are common in many domains. They are crucial to effective team performance, but are also considered ripe opportunities for the introduction of errors and inefficiencies. The workshop will examine the various types of handovers/handoffs, ways of better supporting handoffs/handovers with technology, and possible benefits of handovers/handoffs. It is expected that the workshop will help advance understanding of handoffs/handover as a form of collaboration and will bring relevant collaboration research to bear on the problem of errors in handoffs/handovers.

Author Keywords

Handoff, handover, collaboration, asynchronous, routines.

ACM Classification Keywords

H.4m Information Systems Applications-Miscellaneous.

General Terms

Human Factors, Performance, Reliability, Standardization.

INTRODUCTION

Handoffs/Handovers (HOs) are a form of collaboration that is not only asynchronous but also serial. HOs are often employed to preserve continuity of work. However, HOs involve transitions that can introduce errors and inefficiencies [9]. These errors have received ongoing attention from researchers and policy-makers. While errors in HOs have received attention, it is sometimes overlooked that HOs also offer an opportunity to introduce new perspectives and skills [6].

Since HOs are a form of collaboration, the understanding of HOs can benefit by drawing from existing collaboration research. For example, collaboration literature implies a whole ecology of elements key to successful HOs: intent to collaborate [3,4], common-ground [1], good awareness information of collaborators [2], a shared physical space [7], additional communication channels [5] and handoff artifacts.

These elements highlight possible issues of importance and interest when studying HOs. For example HO “artifacts” have come into recent focus with the push on moving to electronic medical records in hospitals but a whole ecology of elements must be understood for fruitful adoption of electronic records.

The elements mentioned above, as well as others, can also help us focus on various kinds of HOs. For example, within the broad definition, HOs can vary depending on different characteristics such as what is handed off (the task, task environment or just artifacts). For example in “shift-changes” the whole task responsibility; the task environment including all task material is typically directed towards a recipient group. In “referral” HOs the task responsibility and task material are directed towards a recipient but a task environment may not be shared. Both referral and shift-change situations are common in domains like health-care, emergency-response, software programming, manufacturing and various other services.

The limits and boundaries of what HOs can encompass can also be explored using the above elements. For example, if intent to collaborate is considered a variable rather than a required element, the definition of HOs can be expanded to include some cases of discovery and reuse. In such situations someone working on the same or similar task subsequently may pick up the work done by the earlier person.

The intent of this proposed workshop is to further our understanding of HOs in order to support them better. This will require looking at different types of HOs across various domains, understanding the importance of elements involved beyond just HO artifacts and exploring the boundaries of HOs

WORKSHOP OVERVIEW

The goal of the workshop is to expand our understanding of HOs by bringing together a core of researchers working in this interdisciplinary area from various domains. The following themes have been tentatively identified as important:

- **Mapping the landscape of HOs:** Identifying unique issues in HOs that cut through various domains like healthcare, software-development, air-traffic control, crisis-response etc. Also exploring various types of HOs like shift-changes and referrals.
- **Improving HOs:** *Discussing frameworks and theories applicable to and useful in understanding HOs. Identifying best practices, strategies and especially tool design recommendations that can be used to support HOs.*

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- **Beyond continuity:** Exploring “benefits” of handoffs like recruiting of new perspectives and skills. Identifying issues unique to non shift-change HOs. Also exploring boundaries of HOs and implications from other research areas like “information reuse”.

An earlier ECSCW workshop on “Handover: Collaboration for Continuity of Work” [8] began by exploring theoretical frameworks and support tools for HOs for continuity. This workshop will continue and extend the focus on theoretical frameworks and tools while further exploring new issues of importance. As mentioned above, the workshop will have a slightly broader definition of HOs than the 2007 ECSCW workshop by looking at issues beyond continuity. The discussion of various types of HOs will also be an addition to the themes of the 2007 ECSCW workshop.

The first part of the workshop will be spent on very brief presentations of position papers and the second part would be spent on breakout sessions followed by a group review of their results. The breakout sessions will focus on the themes mentioned above with possible addition of topics of interest from position papers and presentations.

We anticipate that a diverse group of participants will attend the workshop. This means people working in various roles (researchers, policy-makers, practitioners and tool designers), people involved with various domains where HOs occur (health-care, emergency-response, software-development, manufacturing, services, etc) and people with varying experience (senior researchers, graduate students). The workshop will be open to a maximum of 15 participants. Acceptance will be on the basis of short position papers (2 to 4 pages) summarizing participants’ work on HOs.

Some of the expected outcomes of the proposed workshop are: increased awareness of CSCW issues for people involved with HOs in various domains, organizing a CSCW portion of conferences of communities that are involved in HOs (e.g. healthcare), a white-paper or report of guidelines for successful HOs. We also hope the workshop will result in a publication on one or more of the explored themes.

ORGANIZERS

The workshop organizers have a keen interest in HOs:

Nikhil Sharma has been studying handoffs in sensemaking tasks for the last 5 years. He has studied handoffs in computer support helpdesks and has conducted laboratory-experiments to study the usage and usefulness of artifacts in handoffs during sensemaking.

Michael Cohen is W.D.Hamilton Professor the School of Information, University of Michigan. His research covers many aspects of routinized activities in organizations, such as handoffs. He has received an Investigator Award from the Robert Wood Johnson Foundation to facilitate a series of studies of handoffs in health care.

Brian Hilligoss is a doctoral candidate in the School of Information at the University of Michigan. His research explores the challenges of handing off across organizational boundaries and the need to adapt handoff practice to situational demands. His dissertation examines handoffs that occur between physicians when patients are admitted to a hospital from an emergency department.

Emily Patterson (PhD) is an assistant professor in the Health Information Management and Systems Division of the School of Allied Medical Professionals, The Ohio State University Medical Center.

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