

## User Modeling in Human Computer Interaction

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### What did you find ...

#### Interesting?

It is interesting to note that User Modeling goes beyond User Interface design. The term "right thing at the right time in the right way" caught my eye since I have found myself wondering in the past how application usage could improve aside from interfaces. **It is true, to me, then that User Modeling is a discipline in HCI that spans multiple disciplines: the complexities of improving HCI design involve domain knowledge and process knowledge.** Other topics of interest involve usable, highly-functional applications, "experts" as context-sensitive, and adaptable approach to user modeling.

#### Not interesting?

**The paper seemed like of a summary paper, which covers a breadth of topics but does not go into depth on any one of them.** However, there were links to plenty of papers that went into more depth about particular topics. I would have liked to see more on the Microsoft Intellisense software, more on active help and critiquing, expand on user modeling versus task modeling, perhaps explaining more about how to capture the larger context of user interaction, and others.

#### What did you consider the main message of the article?

The article gets the reader thinking about User Modeling as an important design challenge in HCI. The article presents User Modeling as a natural evolution of the original HCI concerns limited to user interface. Modern day concerns include shared understanding, knowledge about communication processes and communication agents, domain knowledge, context-sensitive information delivery, and others. The paper takes a look at the current state of User Modeling and challenges going forth.

#### Which computer systems have you encountered which have a User Modeling Component?

Take, for example, Help systems. In Microsoft there is the paper-clip helper, which is almost completely useless. Most of the time, the user does not want to type a query into a black box, and most of the paper-clip responses have been off-base, **sometimes even insulting to the knowledge-level of the user.** Then there is the **tip-of-the-day**, another tool that is not exactly helpful, sometimes even intrusive. **Other systems have fared better:** for example, tutorials, help documentation, and the good old Google-query. Perhaps Google was not designed with User Modeling in mind, but there have been plenty of times that Google queries have delivered the "right thing at the right time in the right way" for me.

#### Was the User Modeling Component beneficial or detrimental?

Carrying on the conversation from the above question, I feel that the question of "push" or "pull" by itself isn't very interesting. **Both push and pull have their merits when complemented by the right situation.** For example, a tooltip is a push-like situation that is also non-intrusive: the user hovers over some button and the tip is displayed. The Google-query is a pull tool that has prove to be of excellent use. I do believe that leveraging the web-community is a wise starting point for information delivery: it goes back to the point on the "symmetry of ignorance". Then the issue becomes, how can systems better understand user questions (**Question-Answering**) and how can systems deliver the right information to the user (**Information Retrieval and Summarization**)?

#### How was the information in the user model accumulated?

Various ways. Some are just a "dump" of all the available information. Others are grouped by level-of-difficulty to the users. Still others are growing, organic knowledge-bases (for example, Wikipedia and Google).

**Would a User Modeling Component be feasible and useful for Swiki? which benefits could it provide?**

Perhaps. Like the article describes, *"to increase the payoff, ... increase the value by showing that future systems relying on user models are more usable or more useful, or decrease the effort associated with creating a user model."* From a user standpoint, this my challenge for the Swiki: show to the user that a Swiki with user models is more usable or useful than a Swiki without one. At the very least, the Help Page could perhaps be **reorganized by Use Cases**. It's quite long and very heavy on text. The ironic thing is, there actually isn't a plethora of content in the Help. This is possibly the least desired scenario: **user perceives there is too much information when there really isn't enough.**

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