

# The Associative PDA 2.0 (proposal)

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## INTRODUCTION

Since all activities of Personal Information Management often happen in transit, mobile support is indispensable. While there do exist many mobile systems to support PIM, there is no adequate solution yet. Some of the main problems are the retrieval of information (mainly because of hierarchical structures), usability, flexibility, and the hardware.

This work is a continuation and extension to the Associative PDA [1]. It is based on an associative network of information. Finding information is either done by traversing the network or searching in the shared neighborhoods of relevant items. This way of organizing information is more efficient in terms of information organization and retrieval. The problem with the APDA was the evaluation. In user tests the subjects had to work with an artificial data set, which was unfamiliar to them since it was not their own personal information. I want to use the subjects' real personal information to get more authentic evaluation results. I will concentrate on the note-taking aspect of PIM and develop a specialized tool, which will be evaluated with the user in a long-term study.

## RESEARCH QUESTION

I want to show that an information management system based on an associative network is beneficial for the user, especially when using meta-data for defining automatic associations.

## RELATED WORK

There are two systems for PIM that are based on associations: SEMEX by Cai et al. [2] and Personal Brain by TheBrain Technologies [3]. The Associative PDA 2.0 differs from them in two important aspects: neither do they consider a solution for mobile devices nor do they focus on the user interface, but on the underlying concept. However, Semex is very interesting for my work since it introduces several possible ways of realizing automatic associations.

Saha et al. [4] present ways of determining the location of a mobile device with the help of WLAN. Since the Associative PDA 2.0 uses location as an automatic association, I will adopt one of these methods.

The studies of Khan [5], Hayes et al. [6], Bernstein et al., and Dai et al. [7], give interesting information about the characteristics of notes and note-taking behavior. It is

important that I consider this background information when developing a detailed note-taking implementation.

## PROJECT SCHEDULE

### Phase 1: Literature Review (1 month)

Initially, I will familiarize myself with PIM, the APDA and note-taking.

### Phase 2: Interviews about note-taking (1/2 month)

In order to get more detailed information about notes and the note-taking process I will run a preliminary study. Thereby I will extend or confirm other related studies.

### Phase 3: Paper prototypes (1 month)

After I have gathered sufficient information I will construct one or two paper prototypes to get feedback from users.

### Phase 4: Implementation (1 1/2 months)

Considering the information I got from the prototypes I will then develop the system and a complete note-taking system.

### Phase 5: Evaluation & Analysis (2 months)

I will ask two to four people to use the system for a period of one month and capture their experience in a diary. Then I will analyze this diary and perform additional interviews to understand the strengths and weaknesses of the system.

## REFERENCES

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