

Digital companions, a growing market.

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Over the last decade we have seen a stunning increase in computer systems that aid users in their everyday lives. After the successful launch of 'shopping assistant' for the PDA in 2007, the domains for which our little friends emerged rapidly expanded. Nowadays it would be unimaginable not to have your buddy assist you during an important business meeting or not to have him suggesting, or at least optimizing, the schedule for your next day off. It turns out that digital companions are now able to assist us with around 40% of all our activities. If we are either too lazy or too busy with other things we can explicitly ask for assistance. When we are in a situation where our buddies find us not acting according to the appropriate procedure or being too slow they may even pro-actively report their qualities.

Once Human Computer Interaction broke with the old-fashioned evaluation techniques that were pushed by the cognitive scientists until the mid eighties of the previous century, we saw a boom of so-called radical innovation in the field. People were free to design and develop whatever application they thought would benefit humankind without the actual presence of explicit definition of human needs and other constraints. This *research in the wild* led to the rapid expansion of the HCI framework. Single-user applications changed via multi-user to distributed multi-user applications and traditional interfaces such as mouse and keyboard were extended to natural interfaces with optimal use of different modalities.

According to some early adapters of the companion technology the rapport factor, or possessing the notion of the buddies' capabilities has proven of utmost importance. "If you cannot align with your companion, the two of you are communicating on a different level and you won't be able to exploit its benefits" Companies like Zu-Zu-La, who claim to have sold over a million copies of 'Cooks-for-your-kitchen' for their buddy within the first weeks, let us know that intuitive interaction in combination with implicit affordances that inform the user of how to *become friends easily* were embedded into the design.

One of the key factors that led to the success was the idea that interaction with the companion was brought to the level of representation. Companions are no longer solely assisting you, but also representing you. Starting with Find-a-match® that arranged and scheduled your dates at the cybertheatre, we are now all fully accustomed to having our companion handle the weekly phone call from the mother-in-law. With more and more niche activities becoming downloadable and more and more features being added we foresee that, when looking at the latest trends of brain computer interfaces becoming more and more prevalent, it won't take long until the first brain interface for your digital companion will be realized.