Supporting Relationship Maintenance for Elders and Family Living Abroad

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Frequent communication and contact among family members are typical of many Latin American families. Relationships often suffer when family members migrate to other countries, especially the US, looking for jobs. Older adults miss having close family contact because they're usually left behind when younger family members migrate. For example, in 2005, 7.5 percent of Mexico's population was at least 60 years old; of that number, 10 percent lived alone with no family nearby, which is highly related to the migration phenomenon.

Although the Internet has helped families connect with members living abroad, the elderly often lack access to these communication methods. Considering the migration phenomenon, technology must consider elderly family members' needs and characteristics and properly integrate with the communication tools other family members use.

Following a user-centered design approach based on ethnographic interviews and prototype evaluations, our research group envisioned a home-based pervasive communication system. The Electronic Family Newspaper (EFN) facilitates communication between elders and their families living abroad. The system is a blogging tool that operates on a tablet PC. Family members can access the system through any Web browser. The EFN lets users share messages, attach pictures, and create news sections, and elders can play the included memory game (based on revealing pairs of pictures).
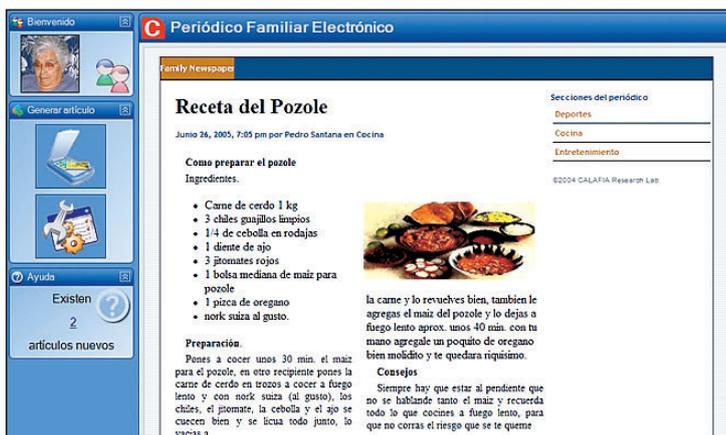
We designed the system to

- help elders feel close to their family by sharing information, such as memories, anecdotes, or traditions, through images and text;

- be easy for elders to use—it uses the tablet PC's pen-based system, with simple, easy-to-learn interface elements;
- be used by elders in different areas of the house, such as in bedrooms; and
- integrate with other devices so that elders can contribute using digital cameras and scanners.

We envision the EFN as a complete pervasive communication system that gives elders natural means of interaction across the entire domestic space. The system exploits cell phones and TV sets to receive notification of messages or read them. Because enabling a full smart-home environment for a Latin American context might still be difficult, we build upon the elements that will gradually be incorporated into the home environment. Elders and their families have evaluated preliminary versions of the system, and we will soon initiate a pilot two-month trial with target users.

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A sample screen of the Electronic Family Newspaper, showing a family recipe; a potential user evaluates the system.