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Personal services

A neighborhood assistance app for city dwellers

People in rural regions generally have strong community ties. Neighbors know and support one another, for example, keeping an eye on the kids or helping with the shopping. Social bonds as close as these are rare in the big city. But many city dwellers' living situation is such that they depend on outside help. The Fraunhofer Institute for Integrated Circuits IIS and its partners are working on a new service concept to address these needs. They aim to promote solidarity in urban communities with a neighborhood assistance app developed specifically to this end.

The importance of neighbors helping neighbors is a lesson for the ages, as the coronavirus crisis has yet again confirmed. So many people are confronted with situations where they depend on others for help. Some have a medical condition, others could do with a handyperson to fix this or that, and still others need help caring for children or pets. Out in the country, people do not to think twice about ringing a neighbor's doorbell if they need a hand, but city life is more anonymous. Reservations about asking strangers for support are strong. Such personal services are available for a fee, but it is usually steep. This is why free mutual neighborhood assistance holds such great promise. A consortium has joined forces in the joint INSELpro project to tap that potential. The Fraunhofer Working Group for Supply Chain Services SCS at Fraunhofer IIS in Erlangen is working with the Erlangen-based software company develop group, the Evangelischer Gemeindeverein Nürnberg-Mögeldorf e.V. and the Chairs of Information Systems (Services, Processes, and Intelligence) and of Work and Organizational Psychology at Friedrich-Alexander-University Erlangen-Nürnberg to develop a novel digital service to provide neighborhood assistance. The German Federal Ministry of Education and Research (BMBF) is funding the project.

The urban village

"With this app, we want to bring the village to the city and connect people in the neighborhood," says Matthias Goldhan, a researcher at Fraunhofer IIS. The app's users are actually prosumers – that is, service beneficiaries and providers in one. These services could range from shopping, repairs and errands to official business, home care and joint recreational activities. Professional service providers such as local tradespeople may also be added to the list of users. "Citizens can connect with volunteer nonprofit organizations via the new digital platform," says Goldhan, adding that the non-monetary aspect is important. He says that the balance between services offered and used is based on the principle of "give and take."

Editorial Notes



Not a bulletin board

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Other neighborhood assistance apps work like a bulletin board where people post messages about what they are seeking. The partners in the INSELpro project are aiming for something different – an app that aligns the requests and offers of prosumers. Fraunhofer IIS researchers are developing the mediation back end. Explaining the underlying concept, Goldhan says, "The app serves to maintain users' profiles. We assign requests to the residents – that is, to the services they offer. A user who submits a service request gets a list of suitable prosumers from which to choose."

Prosumers describe themselves and their situation, indicating things like their physical fitness level, pet allergies, hobbies and the tools they have on hand. They can even let users know which tasks they do not wish to take on. Safeguards are in place to protect this data. Access is granted only to prosumers who have been deemed trustworthy. The database is secure. It also holds a semantic model of users, services and criteria for optimizing the way supply and demand are coordinated. Another distinguishing feature of the system is that it mediates service requests in real time.

A trial with these new personal services will take place in Nürnberg-Mögeldorf. This district's residents will be joined by 120 people slated to move into the buildings of the Langseestraße construction project in testing the app. The future residents of the Langseestraße ensemble had evaluated the GUI's user-friendliness in the first quarter of this year, with further tests to follow.

This project aims to strengthen neighborhood solidarity and promote cohesion and social interaction among locals. The structures put into place will benefit charitable organizations and municipal agencies and facilitate efforts to provide assistance to their constituencies. The service concept and software can be ported to other cities, and the app may be licensed.





Picture 1: The residents of Langseestraße in Nürnberg-Mögeldorf put the neighborhood assistance app's user-friendliness to the test.

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