FOOD
AAL Project

VISION SYSTEMS SRL, Brasov, Romania

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FOOD Project

- **Framework for Optimizing the prOcess of feeDing**

- Duration: 36 months

- Project started on 1st of September 2011

- Coordinated by: INDESIT Company, Italy

FOOD Consortium

Partner		Country
INDESIT Company – coordinator		Italy
National Association for Labour Invalids and Maimed		Italy
Brainport Development N.V.		Netherlands
Copenhagen Institute of Interaction Design		Denmark
Department Of Social Services Brasov		Romania
International Business School, Jönköping University		Sweden
National Council of Research		Italy
Parma University, Collaboration Centre on Assistive Technologies		Italy
Vision Systems		Romania

FOOD – General overview

- The project addresses elderly people with a sufficient level of autonomy for independent life

- It aims at:
  - preserving and enhancing independence of elderly people
  - to guarantee them the possibility of taking active part in the "self-serve" society (ability to access information and negotiate and/or be supported for getting necessary items if mobility is a problem)
  - to secure social contacts and/or support, when necessary

FOOD – General overview

- The devised solution consists of a home-based system that enables elderly people to deal with feeding and food-related tasks in a safe, effective and rewarding way

- It is based on the seamless integration of sensors, intelligent appliances and Internet based services and applications, able to give access, through a natural interface, to information and communication in different social environments

- Its innovation lies in the integration and cooperation of Internet of things, Semantic Web and Web 2.0

FOOD – General overview

- The availability of relevant data from sensors on people and their environment and the cooperation of artificial and human intelligence through the network will contribute to support independence of people

- The quality of the end-users' everyday life will improve not only due to the support in food related activities, but also for the possibility of interaction with the outside world, both for practical purposes (e.g. e-commerce) and for socializing

FOOD – General overview

▸ The proposed system will help elderly people accessing the following services categories:

- Safety services (environmental control sensors – fire, gas, flood – and wearable sensors for vital sign and fall detections, able to generate local warnings or to deliver alarms to remote assistance center)

- Food related services (services related to specific nutritional needs: menu definition, shopping list support, step by step guidance for complex cooking activities, download and upload access to recipes databases, automated cooking programs in an oven-readable format)

- Communication, socializing, learning services

- Services related to ongoing medical therapies (agenda of prescriptions, therapy reminders, drugs re-stocking suggestions)

- Energy-related services (appliances consumption monitoring, power load scheduling for black-out prevention)

FOOD – General overview

▸ The main challenge for bringing the idea to the market is related to the change of paradigm: from manufacturing and selling products to *creating access to systems and services*

▸ The idea will be tested with pilots in three countries (Italy, Romania and Netherlands), in order to compare its impact in different social environments

FOOD – Pilots

- The project is supposed to implement a working prototype of the "smart kitchen" (integration of sensors, smart appliances and services based on the local infrastructure and on Internet) and test it in three field trials (*pilots*), in order to assess its impact on people and refine the business model for sustainable market development. Each pilot is supposed to include:

  - Some houses (8-10), each equipped with the basic infrastructure, i.e. a PC, a tablet PC, LAN, internet gateway, smart appliances (refrigerator, oven, gas hob);

  - A remote service centre

  - A technical-support staff, taking care of the management of the infrastructure

- An evaluation board will monitor the pilot outcomes in terms of measurable and perceived benefits and costs.

FOOD – Pilot: ROMANIA

- The Romanian pilot will be implemented with the help of the Department Of Social Services Brasov, Services for the elderly division

- DSS provides social services for the elderly through qualified personnel (care givers, doctors etc)

- Main objectives of DSS, Services for the elderly:
  - prevent social isolation
  - promote healthy living

- DSS will select the pilot sites in the region of Brasov
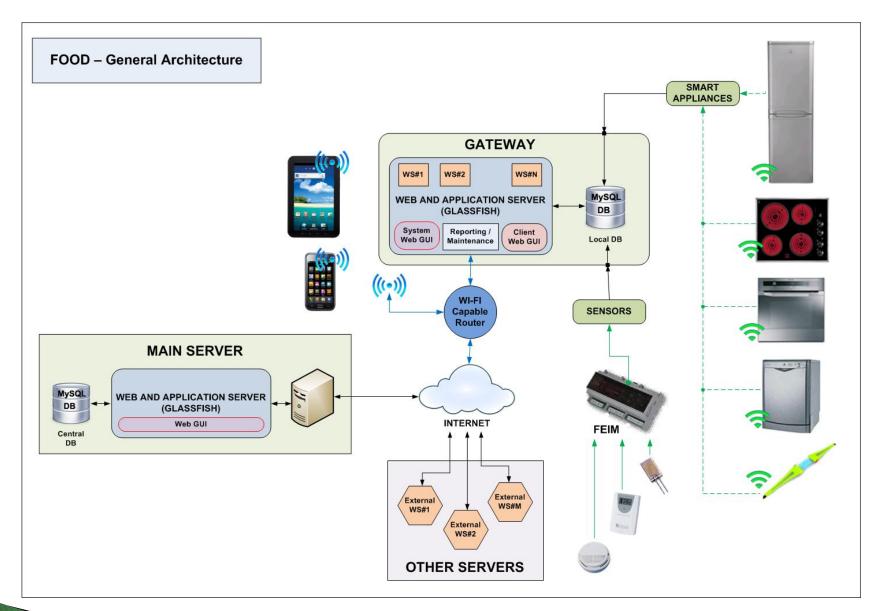
Vision Systems, Brasov, ROMANIA

- Software company based in Brasov, Romania
- Specialized in architecture, planning and implementation of large-scale internet/intranet applications with a focus on cutting-edge technologies
- One of our goals is to offer fully-scalable data collecting, processing and communication solutions, embedded into distributed environments
- Our firm has a close collaboration with the "Transilvania" University of Brasov, having in it's team professors, PhDs and MScs

Vision Systems' tasks

- Investigate which are the proper technologies to achieve the project's goals

- Study database optimizations models for large sets of data in order to use them in organizing data collected from sensors and smart appliances

- Developing the FOOD software framework for the home system and remote centre (to support web services and private and public interfaces)

- Development of web services

FOOD – General Architecture

AAL FOOD – Romania website

http://food.vision-systems.ro

Thank you for your attention!

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