Future Internet
Business Collaboration

Networks in Agri-Food, Transport & Logistics

FI-PPP Information Days
3 October. 2013, Brussels

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Business partners

Technical partners

Research centers and universities
Motivation and Impact

Future Internet will facilitate:

- **... seamless cross-organizational collaboration** (information exchange, communication, coordination of activities)
- **... unprecedented transparency, visibility and control of processes** (using Internet-connected sensors and IoT devices)
- **... rapid, easy, low cost development and deployment of customized solutions** (apps and services)
- **... agile formation of business networks and ecosystems** (social networks and app/service markets)

Agri-Food, Transport and Logistics:
- EU turnover: 1,500 billion €
- Efficiency: 148-220 billion € savings
- Sustainability: 26.5% of CO₂ emissions
Imagine

- Large organisations mostly have gone digital, with ERP and other systems
- Between them (and especially with SME) data transfer is often on paper
- Where more data exchange to monitor processes would be welcome

So imagine:

- Firms could connect like in social media (LinkedIn, Twitter, Facebook)
- Also to specify their contracts in a ‘conversation’.
- Firms then could start to stream data between each other—like you upload a photo or video on Google+ to one of your ‘circles’
  - Data: invoices, Internet of Things’ sensor data, using standards like EDI, XBRL etc.
  - Although firms might like to have more control on access to their data (possible with web services and access rights), and do not need storage of their data
- Firms could buy apps to work with the data streams and enrich such “open” (and big) data.
FLspace platform High Level Architecture

- FLspace Store
- Real-time B2B Collaboration Core
- System & Data Integration
- Security, Privacy, and Trust Management
- Operating Environment

- Development Toolkit

- Trial 1
- Trial 2
- Trial 3
- Trial 4
- Trial 5
- Trial 6
- Trial 7
- Trial 8
Use Case Trial Experimentation Sites

1. Crop Protection Information Sharing
2. Greenhouse Management & Control
3. Fish Distribution and (Re-) Planning
4. Fresh Fruit and Vegetables Quality Assurance
5. Flowers and Plants Supply Chain Monitoring
6. Meat Information Provenance
7. Import and Export of Consumer Goods
8. Tailored Information for Consumers
Smart Farming

External Services

- Spraying, Greenhouse Services
- Meteorological Service
- State and Policy Information Service
- FMIS
- E-agriculturist Service for spraying potatoes, greenhouse
- Machine Breakdown Service

Centralized Cloud Service
NKUA’s Premises

Cloud FMS

Public Repository Registry

Internet

Local FMS

Machine Status Service
Task Controller Service

Machine
Machine

Farmer’s devices

Data sources
(OKEPEPE/MTT/ CropInfra & JD)

Greenhouse sensors, actuators
30% of our food is wasted!

Waste reduction: ~30-60%

Example App: Tailored Info for Consumers

Dynamic Best-before-Dates

Production Data

Transportation Data

Storage & handling data

BBD: 15.05.2013
Smart Food and Health Services
More effective utilization of transport means and roads
Increase in utilization: 50%-200% (estimated)
On the business model of Flspace

1. Flspace will most likely be exploited by a neutral organisation in a chain:
   1. ICT company
   2. Industry organisation (or semi-public organisation)
   3. Or a combination

- A situation with several instances of Flspace is possible
- Fees for use (firms, app developers) not yet clear.
What will FIspace offer Phase 3 consortia

1. The FIspace platform with release data
   1. including apps from a call to develop apps for the trials that is now open
   2. Including app development tool kit

2. Support for projects in Phase 3
   1. In the engagement phase to consortium partners
   2. In the development and experimentation phase (also to the ICT companies that win in the open calls of the consortia)

3. Ideas and support for bidders
   1. We’re here
   2. Documents on website, including suggestions for consortia topics.
   3. Webinars if desired
FIspace Release Milestones

• **Mo 6: Open technical specification**
  • Instrumental to engage with external developer community (*Open Call Members*)
  • Key information for **Phase 3 proposers**

• **Mo 12: Development & Validation Cycle 1**
  • First release of platform, experimental environment & Baseline Apps
  • Working platform for development community to use and build upon

• **Mo 18: Development & Validation Cycle 2**
  • Second release of platform ... + Domain Apps

• **Mo 24: Development & Validation Cycle 3**
  • Final release of platform ... + Domain Apps

30 Sep 2013
31 Mar 2014
Support for consortia – engagement stage

• Welcome package (and welcome sessions) to support real engagement
• Collaborative and online supporting tools:
  • guides on the FLspace for Users and for Developers, Technical Documentation for all FLspace components and Apps.
• Dedicated workshops and meetings
• Support for the Phase-3 open calls
• Preliminary training for trainers
Support for consortia – development stage

• Welcome package (and welcome sessions) to support real engagement

• Knowledge transfer activities (what):
  – FIspace capabilities for developers
  – Experimentation (design your experiment)
  – Building the innovation ecosystem around FIspace (best practices from the trials and other supporting tools, e.g. Living Labs)
  – Possibilities for exploitation

• Knowledge transfer tools (how):
  – Collaborative and online supporting tools: guides for the FIspace for Users and for Developers, Technical Documentation for all FIspace components and Apps.
  – Workshops, webinars and documentation
  – Community of developers
Some relevant public deliverables

• D200.2 Flspace Technical Architecture and Specification
• D400.2 Progress report on trial experimentation and App development and initial plan for Phase 3 rollout
• D500.7.1 Detailed plan to move into phase 3

Available at www.Flspace.eu

Also have a look at the previous project’s deliverables www.Flnest.eu and www.SmartAgriFood.eu

Proposers not entering phase 3 but interested in Flspace:
  – we would like keep working with you to explore possibilities of collaboration
Questions?

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