Template for short research summaries on practical results

Reference to the project: Smart Agrifood / Reference to the WP: WP400 Smart Food Awareness I

Smart Food Awareness
(please use 1 sheet per significant results)

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Aims and background

Consumers' trust in food, food production, the origin of food, and the actors involved is a core requirement for the functioning of European food markets and the competitiveness of industry involved.

With the experience of the BSE crises and subsequent food scandals in mind, consumers increasingly expect transparency on which trust can build.

Transparency is not meant to know everything but to create awareness on the issues consumers are interested in, involving information on the safety and quality of products and processes, and increasingly on issues around environmental, social, and ethical aspects.

Given that transparency depends on the information on the activities of all actors in the value chain, the design of appropriate transparency systems requires cooperation within the agrifood sector and a suitable IT infrastructure on which information can be collected, processed and moved towards retail and the consumer.

Results and applications

Some of the specific topics that should be facilitated in order to improve the Food Awareness and Transparency issues are as follows:

- Informed decisions of consumers based on tailor made information selected according to their criteria
- Improved diet and health through personalized nutrition
- Improved food safety and authenticity
- Meeting food safety, quality management and sustainability standards
- Improved education and training materials
- Improved knowledge for further research

Some of the technological concepts that could be applicable are as follows:

- Connected automatic systems, therefore communicating the equipment of the households, stores, shops, and personal health and nutrition care devices of the consumers.
- Monitoring of food quality, especially if applicable to small packaging units
- Improved traceability system: working with RFID or EPC (Electronic Product Code). Customers could obtain traceability information about products based on its identification
- Foreign material identification, based on cloud capabilities
- Profile specific newsletters and dissemination of information
- Virtual shops and virtual visits

Significance and benefits

In general, the expected results should provide benefit by addressing the following issues:
- *Product destination*: Being informed about a products origin and its path through the supply chain is basic for consumers. Similarly, farms are increasingly interested in knowing the destination of their products or their quality at destination. These are the same information items provided to consumers at destination and could be fed back to producers creating an information loop.
- *Food safety warning*: if a retailer receives information that products which have already been sold constitute a health risk, they could inform the affected consumer. Moreover, this could be also applied to quality issues.
- *Extended consumer search:* Consumers might be interested in knowing where (in which store) certain products of interest are being sold and at what price.
- *Consumer information control:* Consumers might want to receive feedback from NGOs or other groups if the information received for certain products is true.
- *Consumer evaluation feedback:* Consumers might be interested in communicating about their experience with (or expectations about) products or retail outlets.

There have been several initiatives addressing these issues. However, given that our case is based in some powerful new concepts and technologies provided by the Future Internet development, we can offer extra added value on:
- Cost savings
- Collecting and organizing fragmented information
- Screening of information by personalized selection criteria
- Interpretation of different objects in a system
- Improving the stock control in the household