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Raising Personal Inclination and Usability of ICT supported Health

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Context and Scope

We are addressing primarily the **“Health” priority of the Slovenian Smart Specialization** (end of August 2014). In this context we build a prototype of **mHealth pilot application**.

Computing, storage and data analytic tasks, implemented as **cloud computing services**, can speed-up the implementation.

The **cloud technologies** provide reliable and secure capacities for **connecting the mHealth users** and the medical personnel using existing infrastructure.

ICT supported Health covers in our context the organizational and management issues (eHealth) and the technological aspects of data manipulation, diagnostic and treatments.



Motivation

The motivation for the pilot proposal comes from:

- the **lack of widely accepted mHealth solutions** that can provide improved medical care with reduced costs, and
- **high added value** and great market potential
- A weakness of current approaches is in the fact that the **majority of attention is focused on the technology**, while the importance of its **acceptance by users and health caregivers** is largely neglected



These issues are addressed in part in:

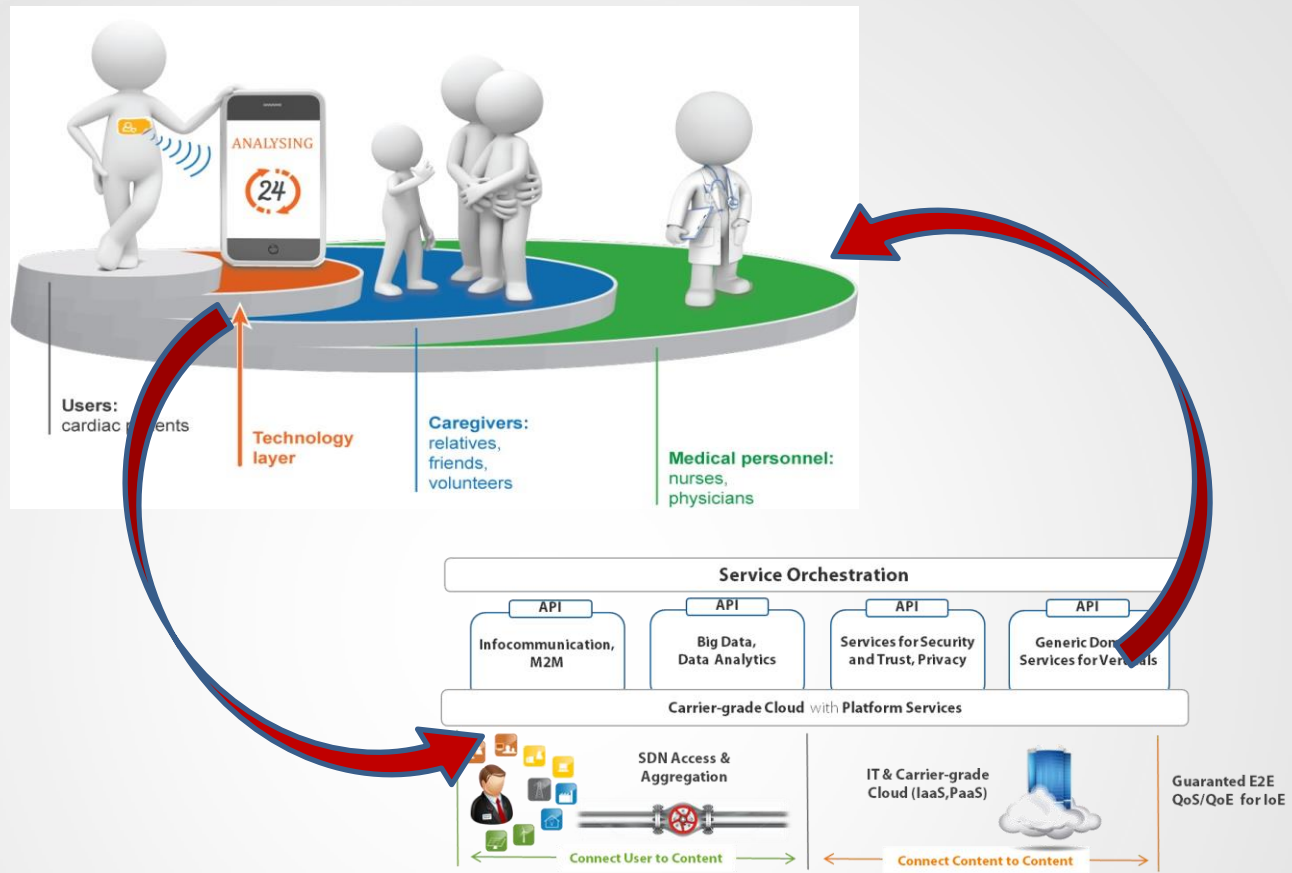
ADVICE FOR 2016/2017 OF THE HORIZON 2020 ADVISORY GROUP FOR SOCIETAL CHALLENGE 1, “HEALTH, DEMOGRAPHIC CHANGE AND WELLBEING”, July 2014

2. The biggest research challenges requiring action under the work programme 2016/2017

- 1) Ageing at large
- 2) Personalized medicine
- 3) ICT for health
- 4) Population health and health promotion
- 5) Infectious diseases
- 6) Early development
- 7) Sustainable health and care systems
- 8) Environment and health challenge



Concept



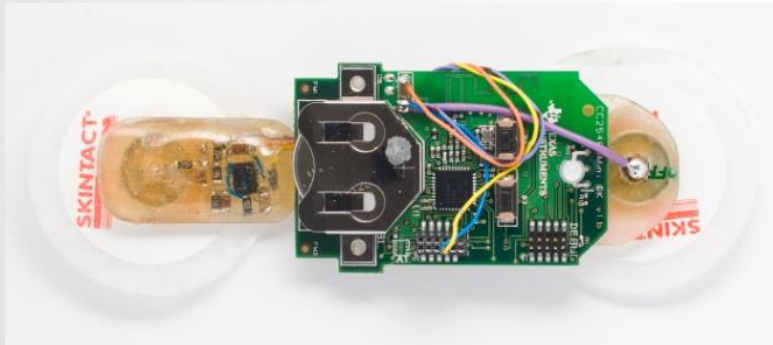
A single wireless, small **multifunctional body sensor** +
Personal data terminal (smart phone) + Comm. & service platform (**Cloud**)
== **Technology layer** for personal health monitoring



Motivation

The wearable **wireless sensors** are advanced enough to provide reliable **physiological readings** for health management and can be made **small and unobtrusive**.

Prototypes of a multifunctional wireless biosensor with dimensions: 7x2 cm and weight: 3g fixed on two standard ECG electrodes.

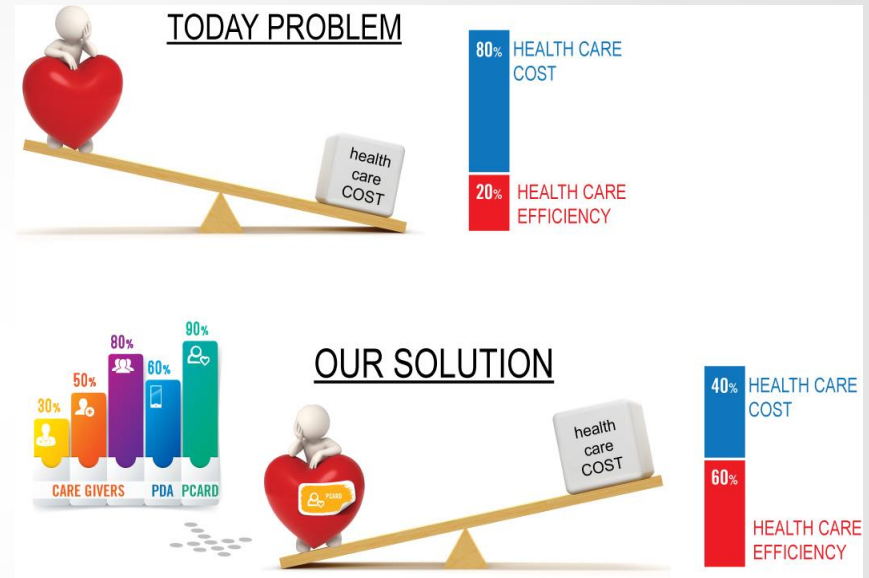


Expected Impacts

- increase health care efficiency and
- reduce health care costs.

New innovative products will:

- save energy, user's time,
- open new jobs for supporting users and medical personnel,
- increase the opportunities for Slovenian industry in development, testing and marketing of new ICT supported health products.



The project outcomes will stimulate the horizontal cooperation in:

- communication Platforms,
- cloud computing and data analytics,
- drug production,
- smart Home priorities.



Potential stockholders and market

Health organizations:

Slovenian Healthcare centers, hospitals, clinical centers, ...

Research institutions:

University of Ljubljana, Institute “Jožef Stefan”, ...

Industry:

IskraTel, LEK, SmartCom, Marand, Mesi, ICT related SMEs, innovative star-ups, ...

Public entities:

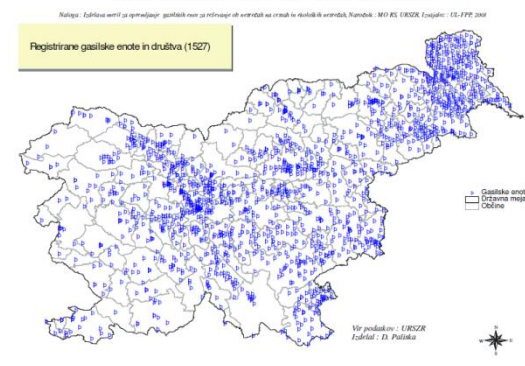
Volunteering firemen organizations, individuals, sports and health life associations

Potential market:

Pilot system in Slovenia and central EU region, Large sparsely populated areas in Northern EU countries, Russia, Australia, ...



GASILSKA ZVEZA SLOVENIJE



Thank You

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Implementation

- System architecture design and implementation,
- Organization of Co-design and engagement of its actors,
- Holistic management of health that increases usability of collected data,
- Redesign with technological and conceptual improvements with highest attention to the personal inclination and acceptance,
- Testing and validation
- Development of commercial products

