

- >> BOOST PERFORMANCE
- >> REDUCE COST
- >> INCREASE AGILITY
- >> ENHANCE CRM
- >> SHORTEN TIME TO MARKET
- >> DRIVE INNOVATION
- >> IMPROVE EFFICIENCY
- >> INCREASE ADAPTIVITY
- >> ENABLE BUSINESS TRANSPARENCY
- >> ENSURE REGULATORY COMPLIANCE



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Health & Future Internet Session

Short Report

Josema Cavanillas – R&D&I Director

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Agenda

- » Scope & Objectives
- » Key Issues
- » Discussion
- » Conclusion / Next Steps



actors



- » Joel Backet - JB
- » Ann Ackaert - AA
- » Damien Hubaux – DH
- » Walter Mattauch – WM
- » Joe Gorban – JG
- » Klaus Fischer – KF
- » Colin (C)
- » Vassiliki Andronikou (VA)
- » Antonio Campos (AC)
- » Christian Mannweiler (CM)
- » Xavier Xirgu (XX)
- » Toon Poppe (TP)
- » Giuseppe Fico (GF)
- » Peter van der Doort (Oost Limburg Hospital, BE) (PvdD)
- » Lola Ruiz (LR)
- » Wolfgang Leister (WL)
- » Karmele Intxausti (KI)

Scope & Objectives



- » Digital Agenda Europe - is one of the flagships of EU2020 -> “sustainable economic and social benefits of future internet”
- » Implementation of DA via Key actions
- » KA13 – online access to their medical health data (patient empowerment)
- » Scope: Future Internet applied to health (patient and healthcare professional), but also:
 - » Ambient-assisted living part of the everyday life, not something apart.
 - » Integrated part of the home - JG
 - » Living labs
 - » Potential connection to a whole context (Connection to food info infrastructure, connection to sports context infrastructure, connection to worn devices, pharmacy, hospital, everything) (GF, KI)

Key Issues



- » Information Interoperability - connecting everything at regional national level, even EU level
- » Patient centric
 - » Patient empowerment
 - » Info transparent to user (JB, WM, CM).
 - » Involve doctor, nurses, specialists, ...and patient! (DH)
 - » Mobility is key (Loukianos Gatzoulis) – mHealth
 - » Social problems - Growing aging society (WM)
 - » Chronic Diseases (WL, XX)
- » Health professionals
 - » Creation of knowledge (AA)
 - » Reliability (AA)
 - » Digital signature and consistence of information should be ensured.
- » Measuring the quality – Care is not a pure consumption market. People should be convinced by quality of delivery (AA)
- » Clinical trial management is really underperforming (VA, PvdD)

Discussion – Use Cases & Scenarios



- » Univ Gent
- » Walloon Region - Belgium
- » Charité Klinik Berlin
- » HUCA Hospital of the Principality of Asturias
- » Technische Universität Kaiserslautern – apartments with sensors and actuators (AAL)
- » UPM SmartHouse (GF)

Discussion – Functionality & Technologies



- » Technologies for the user:
 - » Domain analysis, co-creation process, technological translation, include value network model from the start (AA). Language is an issue (AC)
 - » Security basic services like security, authentication, identification, timestamping (DH, VA), but not obsolete and not excessive, not too demanding (PvdD)
 - » Link to environmental data (C)
- » Specific technological issues:
 - » Overcome the contradicting demand on interoperability and privacy (WM)
 - » eHealth app stores (WM)
 - » Alerting & Identification services, trust (WM, JG)
 - » Sorting out the problems of clinical trials – design & planning, trial implementation, findings dissemination (VA)
 - » Telehealth becomes interactive
 - » Drug repositioning trends (VA)
- » Non-technological discussions:
 - » Long term – genetics + environmental conditions, to define your health status
 - » Impact and cost – the problem has been there for many years, but doing it in a cost-effective way is not easy

Discussion – Expected Core Platform Technologies



- » Usability (PvdD) – unification of interfaces (PvdD)
- » Information Management:
 - » Context awareness (DH) Context Acquisition and synthesis (JG)
 - » Information endorsement (CM, JMC)
 - » Semantic interoperability (JMC, VA, XX)
 - » High quality semantic annotation for health web services (DH)
 - » Storing and sharing contents (AC) Advanced Multimedia contents functionality (WL)
- » Service composition and mashups (DH, VA, KI) High computational capacity (VA)
- » Global communications (AC) Always connected (JG) Wider broadband (GF)
- » M2M comms (XX) Sw engineering platform with sensing and actuating capabilities (CM)

Discussion – Experimentation Environments



- » Diabetes (XX, JMC)
- » Co-creation process (AA)
- » Develop persona models (AA)
- » Mobile early warning systems (WM)
- » Disabled people – multi purpose smart home (CM)

Discussion – Sector’s role in the PPP



- » Sector’s role: human beings are the most important matter on earth (TP).
- » Two tracks: technology track and people track. If they don’t get together, there will be no real evidence for the user. That’s why CIP programme is so important. (AA)
- » There is a difference between FI Health and IT applied to Health (applications). Challenges for the core platform are not just “applications” but a whole new architecture/core platform. (C) C – No need of Future Internet for the specific health domain
- » LR: we are facing un solved challenges (security, interoperability, clinical data, EHR). Loukianos: but this is not internet-related, these are general topics. LR: the core platform has to ensure that the info stored there is protected.
- » “in health, either you buy the whole suite, or it does not work”. NO interoperability is ensured. There is a missing internet architecture that allows complete replaceability of items.
- » Internet Information layer may definitely help the advancement of pharmaceutical research. (NTUA) (interdisciplinary research). Health market does exist with or without technology. But maybe IT may help to better understand the need of the health sector. (AA)

Conclusion



- » CIP pilots exist, large involvement of MS, should not be redone. Continua, IHE, M403 also exist. Not to reinvent the wheel. (JB) Open URC alliance also exist (KF)
- » Existing projects like UNIVERSAAL(JG), i2HOME (KF), Smart Home Platform (CM), etc, in both Challenge 1 and Challenge 5 are to be taken into account
- » Large Quality of Service in health scenarios for the PPP (JB)
- » Heterogeneous scenarios with several connected hospitals and including all the complexity of the healthcare constellation actors and functions (AC)

Thank you



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Josema Cavanillas
ph : +34 – 91 214 86 09
jose-maria.cavanillas@atosorigin.com



ARI – Atos Research & Innovation
www.atosorigin.es / www.atosresearch.eu