The OPEN DEI ecosystem: 35+ Ecosystem Projects (incl. 2 LSPs)

Health & Care Cluster of Large-Scale Pilots

Agri-food (7)

Energy (9)

Manufacturing (7)

Health & Care (15)
Sharing responsibility and taking the lead where experience and skills pre-exist

**Health & Care Cluster of Large-Scale Pilots**

**WG1**
SMARTBEAR
DISSEMINATION
66 Members

**WG2**
SMART4HEALTH
USE CASES
71 Members

**WG3**
GATEKEEPER
KPIs
50 Members

**WG4**
PHARAON
REFERENCE ARCHITECTURE, STANDARDS
AND REUSABLE COMPONENTS
73 Members

**WG5**
ADLIFE
GDPR (+MDR)
57 Members

**Figures** = Number of meetings organized (not including preparation meetings)
Design principles for Data Spaces

• A first approach to define the design principles for data spaces, agreements on the building blocks for a soft infrastructure and governance for data spaces.
REFERENCE ARCHITECTURES AND INTEROPERABILITY IN DIGITAL PLATFORMS
Position Paper on Digital Platforms Uptake
Conclusions

• The “distance” with the other domains was actually bigger than expected; the healthcare domain has often been viewed as being the “other voice” with its focus on the demand - and demand enabler - side, the need to integrate societal value, and its already long tradition of cooperation between companies, organisations, and public authorities.

• The contacts with the other domains through OPEN DEI have also greatly contributed to put more emphasis on the supply side also in the healthcare domain: the Internet of Things being considered as a key cross-domains enabler and the perspective of quick progresses thanks to the use of meta-data.

• This project was a “première” by many aspects:
  • This was the very first time that a formal collaboration between funded projects was established at a very early stage of their initiation.
  • This was also the first time that four domains very different in nature were provided with a chance to interact and identify commonalities and specificities. A new space of discussion and interactions has thus been created.

• To progress further, the identification of realistic use cases which would directly connect the different domains will be important.
Synergies and consolidations achieved in the Healthcare Working groups

From information sharing to new knowledge: 54 resources shared - 33 collaborative ones
The Glue for bilateral/multilateral collaboration

### LSP Use Case Reference template

<table>
<thead>
<tr>
<th>Code / Abbreviation</th>
<th>&lt;The name of the Use Case&gt;</th>
</tr>
</thead>
<tbody>
<tr>
<td>Use Case storyline</td>
<td>&lt;A textual description of the Use Case, describing the situation AS-IS and the situation TO-BE with the usage of blueprint/assumption personas&gt;</td>
</tr>
<tr>
<td>Persona(s) / Target Group(s)</td>
<td>&lt;The main beneficiary of the Use Case (e.g. patients with a specific condition)&gt;</td>
</tr>
<tr>
<td>Stakeholders</td>
<td>&lt;Other Entities with interest in the Use case, that may affect it and/or interact with it (e.g. clinicians)&gt;</td>
</tr>
</tbody>
</table>

#### Use Case Objectives and how they contribute to the overall project objectives

<table>
<thead>
<tr>
<th>Use Case Objective (if metrics are defined, include them)</th>
<th>Overall Project Objective (if metrics are defined, include them) (optional)</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt;The objectives of the Use Case (e.g. collect data on a specific condition)&gt;</td>
<td>&lt;The overall project objectives linked to the use case objectives (e.g. improve overall health data collection)&gt;</td>
</tr>
</tbody>
</table>
From IoT to AI to EHDS

Title: Reference architectures and platforms for European Large-Scale Pilots on Smart and Healthy Living - analysis and comparison

Authors: [List of authors]

Abstract:

Much effort is being invested in implementing ICT enabled systems for promoting a higher quality of life and supporting the independent living of elderly people. There are often challenges in setting up and deploying these systems, that often have various needs, different architectures emerge. However, the conceptual work of setting up Reference Architectures (RA) is still in the initial stage. A standardised approach for designing architectures description allows for reducing time and costs. This work focuses on presenting, analysing and comparing the early work on architectures in several ongoing EU funded healthcare projects. After validating the theoretical foundation for making the definitions of core concepts explicit, we give surveys of architectures in eHealth and AI systems. After clearly presenting the RA, we elaborate on the analysis method and present a comparative analysis of architectures for large-scale European pilots on smart and healthy living.
Providing guidance to future projects:
CEN WA on PATIENT CONSENT (Published in June 2023)
Learning together by doing: Using OPEN CALLS

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1.2.2 Proposal evaluation
1.2.3 Conflict resolution
1.2.4 Project selection
1.3 PHASE 3 EXECUTION
1.3.1 Results’ announcement
1.3.2 Contracts negotiation
1.4 PHASE 4 SUPPORT
1.4.1 Training workshops

Call process overview

<table>
<thead>
<tr>
<th>Data sources</th>
<th>Open calls</th>
<th>Grant awarding</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tailored for project objectives and sustainability</td>
<td>Evaluated via a pre-defined set of criteria by the Data source prioritisation committee</td>
<td>Data sources can choose the SME from the pool of EHDEN certified SMEs</td>
</tr>
<tr>
<td>Supporting SMEs</td>
<td>Open calls</td>
<td>Training &amp; Certification</td>
</tr>
<tr>
<td>Focusing on SMEs able to support mapping and sustainability</td>
<td>SME certification committee prioritizes SMEs for training and certification</td>
<td>SMEs are paid via grants from the harmonisation fund</td>
</tr>
<tr>
<td>Mapped data sources are encouraged to be active members of the EHDEN community, participating in research studies.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Harmonisation fund

Workshop
Mapping Cycle
Audit
Mapping
Share of Mapping Success

EHTEL

05/07/2023
12
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Joint dissemination for higher impact
This is a cooperative model, in the sense that it is not possible for a single actor in the whole value chain to put a service into the market without the cooperation of the rest of the involved actors.

- Active cooperation mechanisms between companies and between companies and organisations not anymore based on a B2B or B2C but rather on a more inclusive B2B2C approach.

Robustness, Cooperation and circularity become more important than « performance » only.
Link with the health system remains essential: Healthcare is first of all a local/regional reality

Platforms created have been instrumental in demonstrating the conditions for the creation of a (semi) open ecosystem but given the fact that they are not rooted in the reality of healthcare organisations operating in a given health system, they have very few chances to survive their project.

In the future, it will thus be of key importance to work with existing already operational platforms (managed by organisations or companies) and reorient a substantial part of the resources to the evolution of this platforms and their capacity to integrate solutions operating on agreed standards with a work on exploitation and innovative business models initiated much earlier in the project cycle.
Upcoming priority topics

- **New CEN WA to be started:** Guidelines on Action Research for Large Scale Piloting
- **Responses to constraints related to MDR and ethics approval regulation for pilot implementation**
- **User acceptance:** Technology (pre)selection, user interface and patient stratification
- **Lessons learnt from project Procurement and OPEN Calls (selection of products). (aspects of COSTS of devices in relationship to prevention will also be reflected upon)**
- **Exploitation strategy:** linking innovation and implementation- in search of New business model strategies

"Architectural choices, and resulting architectures, are most often made considering functional and non-functional requirements, while technical and business constraints are in most cases only implicit."
Conclusions – Domain Collaboration

• Sharing resources between projects at an early stage has an important added value and is achievable but should be supported by an adapted infrastructure and easy to use processes.

• Consolidation work has also a lot of possible added value but is time consuming and requires a direct engagement from projects: it should be connected to concrete outcomes.

• Some scarce competences needed by all projects are not equally present in all projects (e.g., MDR impact) and should be identified as early as possible.

• Isolating and disseminating COMMON messages rather than project-based messages remains challenging.

• Exploitation of developed platforms remains an important open issue for many projects.

• There is a clear need to document better reusable building blocks and architecture and organise better evidence collected around common use cases.

• Projects should be able to rely on existing common resources repositories and avoid consuming resources to reinvent the wheel (e.g., GDPR and ethical impact) but rather contribute to their evolutive maintenance.

• The common documentation of use cases – and related personas – is an important entry point to organise focused and in-depth collaboration between projects.

• Use of data collected by projects become an important issue.
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https://www.ehtel.eu/health-care-cluster.html