

"Smart Working Environments for all Ages: Promotion of healthy habits in working environments and daily living activities to improve the well-being of older workers"

Smart Working Environments for all Ages: Promoting healthy work environments and activities of daily living to improve the well-being of older workers





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### Interactive Activity

"Lessons learnt in the development of innovative solutions to promote healthy habits in working environments and daily living activities & to improve the well-being of older workers"



Design of innovative solutions



Integration of different components of the final solution



Pilot stage



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#### **Interactive Activity**

Lessons learnt in the development of innovative solutions





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Interactive Activity

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#### Lessons learnt in the design of innovative solutions?

Involvement of multiple stakeholders is important to the needs of users and keep the solution simple and easy

Discussion
with all
stakeholders of
the company is
mandatory

Face-toface workshops support this process Presentation of prototypes and mockups are great vehicles to ensure correct understanding (vs. abstract description) Approach: do not lose sight of the combination of innovation and functionality

Overcoming difficulties:
combining innovation
with a pandemic
environment forces you
to be creative and
effective in solving
obstacles

No matter how well you design your solution, there will be lots of changes, plenty of them (HR, technology, human, policy, etc.) Agile design and development helped to align technology with innovation

Aligning business and research expectations about project outcome

Agile development of human-centred solutions is difficult, since R&D is not the priority of the factories

Workers very willing to participate

Many constraints exist for the early involvement of workers from the Companies engaged during the initial design phase

The choice of teleworking use cases proved to be very relevant, especially because of COVID-19

Modular design facilitated earlier deployment of a system with a subset of components

A smart combination of Edge
Computing hubs interconnected
through a Cloud infrastructure enabled
safer and faster data collection



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### Lessons learnt in the integration of different components of the final solution?

of single components and multi-components is useful

Make attractive and user-friendly integrated designs

Start integration early and test early prototypes on the site of the users

Test, test and test

The anticipation. The use of partial application COTS in a small device requires anticipation in selection and placement

Boldness in design,
betting on
unconventional
shapes that are
always functional and
visually attractive

Agile teams helped to adjust changes and quickly react on problems

helped to quickly integrate different components, even in cloud environments

Ethics and legal aspects

The actual paramount importance of Face-to-Face sessions, especially for integration

The complexity of GDPRcompliant data sharing among different organizations can impact research results



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Define well which aspects of the technology or use-cases should be evaluated and validated, and design questionnaires and feedback sessions accordingly



#### Lessons learnt in the pilot stage?

There can always be a virus which might make you change your pilot plans. Be proactive!

Long-term
engagement of
users with
systems might
some times be
very challenging

Virtual coaching as well as augmented reality/virtual reality solutions can help workers with their workability and make workplaces more flexible

Get the support of the end-user IT department and engage them in the process Pilots should be planned over a longer period and should be cascaded (so that bug fixes or any difficulties can be overcome)

Manage expectations (research prototypes vs. consumer "apple" like product)

The importance of generating supply channels that overcome unexpected conditions, such as the pandemic environment

The importance of maintaining the user centric design approach from the beginning to the end of the project

research projects
are often fragile
in productive
environments
and fast fixings
needed

Good Planning
of tests, teaching
of workers,
properly
planned
assessment is
key in pilot stage

Difficulty in moving away from controlled environment & implementing naturalistic technology assessment studies

Remote access to the system is indeed of paramount importance, yet on-site support and backup solutions for hardware issues are also necessary

Different processes to access, constraints to deploy... requires a very flexible management with the WorkingAge team and with each Pilot Company

Impossibility of mitigating certain impacts from the pandemic, e.g. face camera testing limitations in the Companies due to the use of facemasks Working with prototypes requires specific adaptation to different user scenarios





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## Thank you very much!!

We hope that this will allow us to strengthen the bonds of collaboration between all of us!!!

