



ASSESSMENT OF COMMUNICATION AND INNER STATES OF PEOPLE WITH PROFOUND INTELLECTUAL AND MULTIPLE DISABILITIES (PIMD)

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Overview

Financing:	EU-Project supported by the Horizon 2020 program
Period:	01/2018 – 12/2020
Consortium:	International & interdisciplinary
Trial:	6 test persons with PIMD
Objectives:	Design and develop an ICT platform that enables persons with PIMD to use digital applications and services that: <ul style="list-style-type: none">➡ can enhance the quality of their life➡ increase their ability to self-determination➡ enrich their life



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Target Group

People with profound intellectual and multiple disabilities (PIMD):

- Profound intellectual disability
- Adaptive behaviour clearly below average

In addition:

- Motor impairment
- Sensory impairment
- Medical problems (e.g. epilepsy)

Communication:

- Usually no verbal language
- Often on a pre-symbolic level
- Use of individual and unconventional behaviour signals

Extensive support needs & dependency

Concept of INSENSION Platform

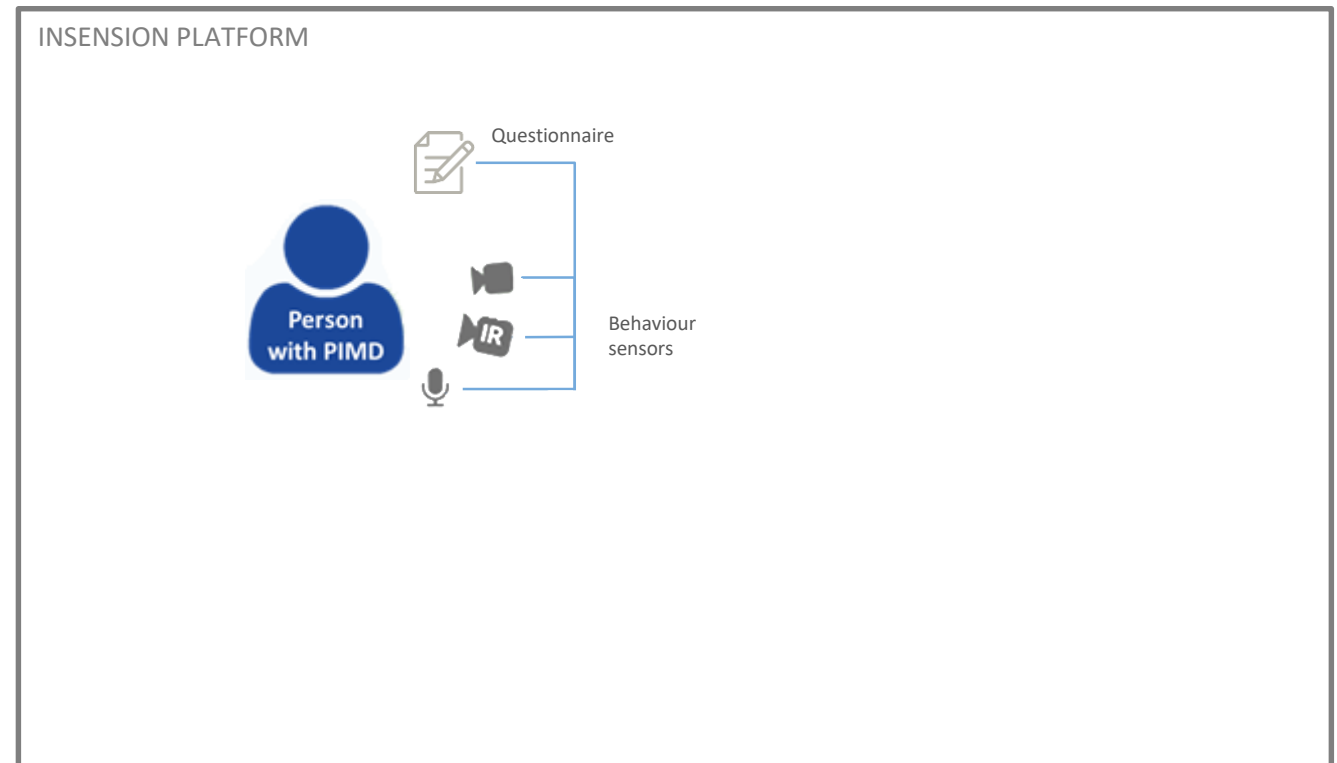
Approach: Technology-supported responsive environment

- Assessment: Recognition of non-symbolic behaviour
 - a) Questionnaire for proxies
 - General data
 - Communication development
 - Inner States (Mood, Pain, Pleasure & Displeasure/ Distress)

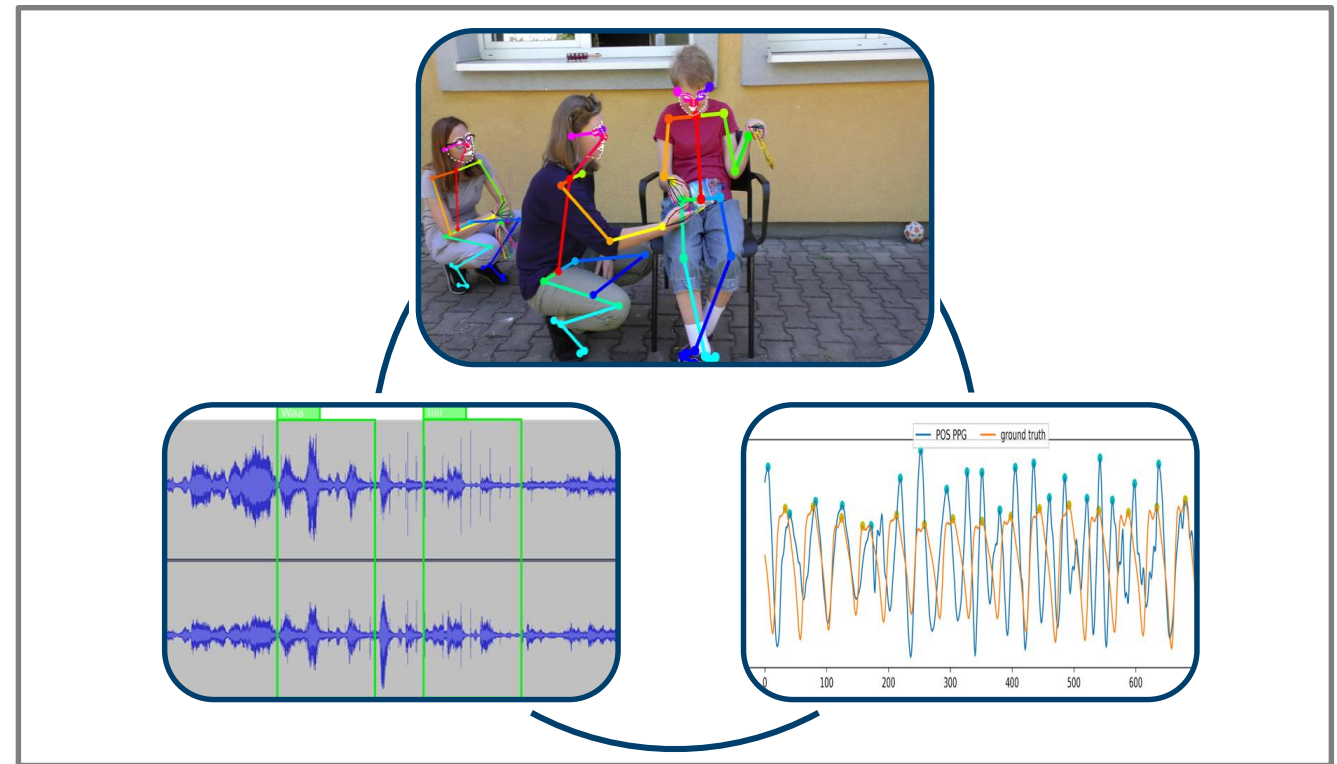


Concept of INSENSION Platform

- Assessment: Recognition of non-symbolic behaviour
 - b) Recognition Technologies
 - Facial expressions
 - Gestures
 - Vocalizations
 - Physiological parameters

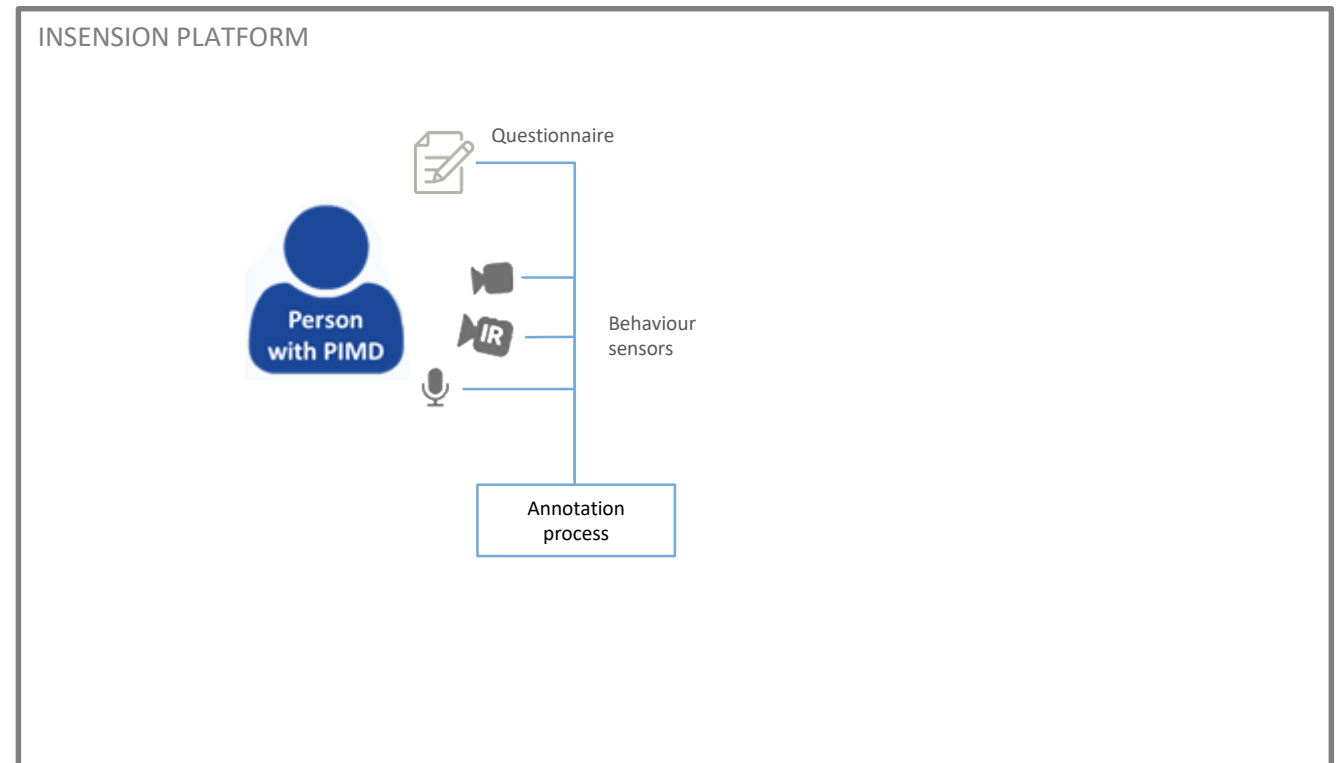


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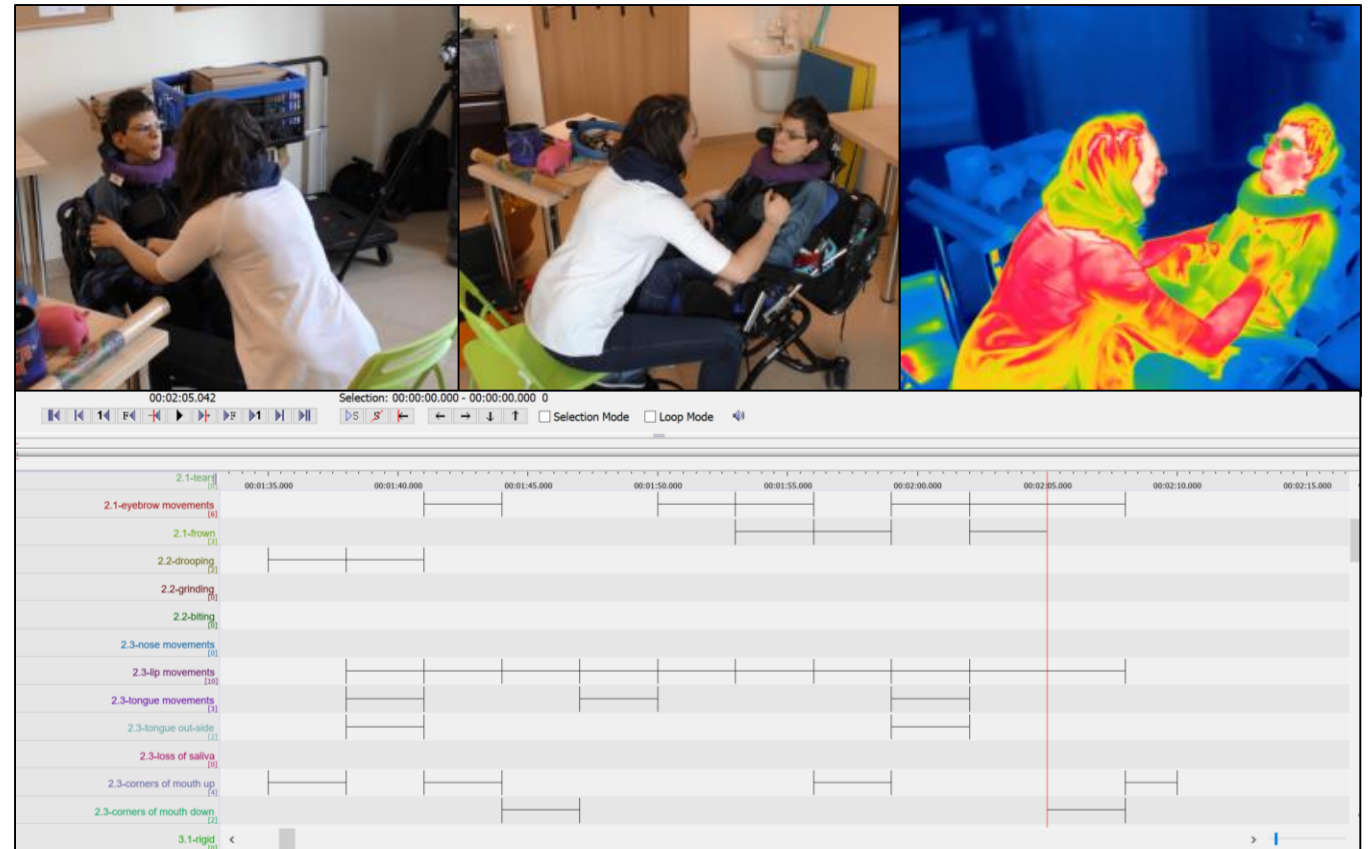
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 - Physiological parameters
 - c) Annotation process



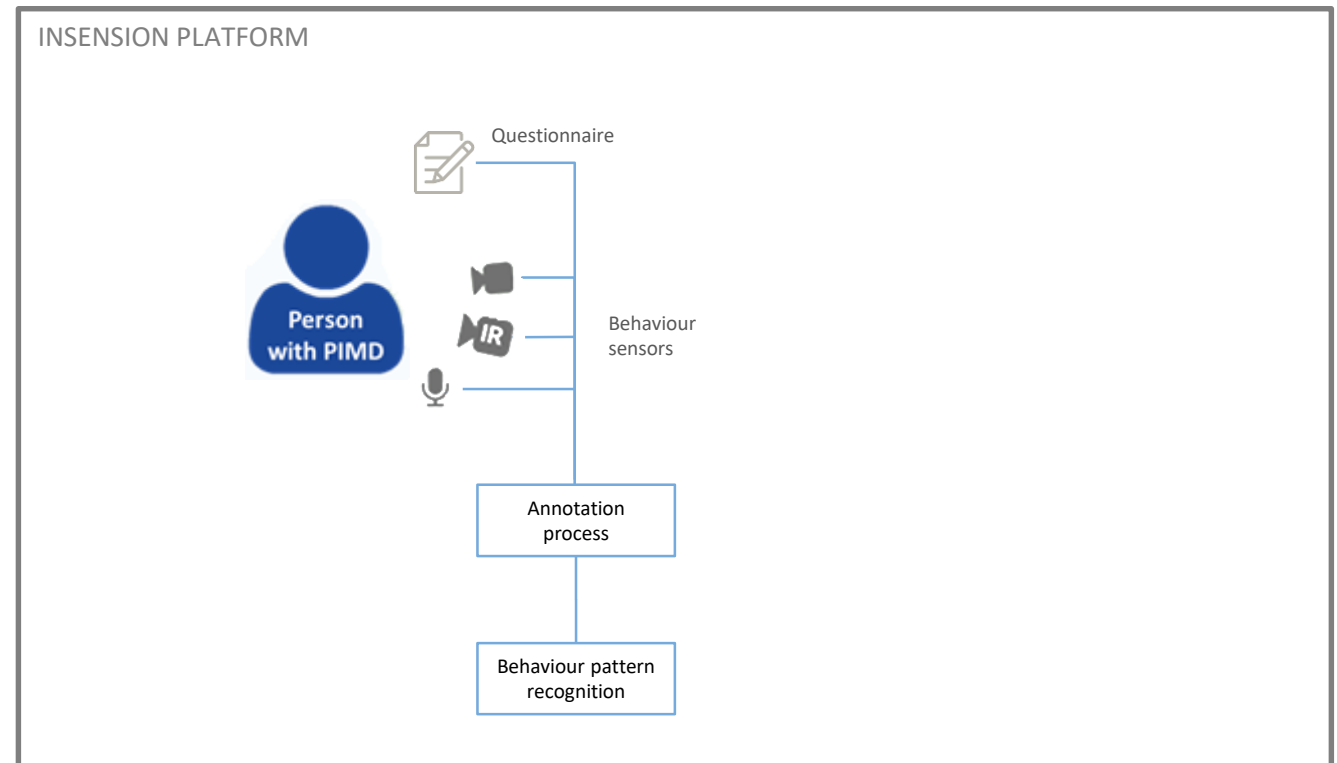
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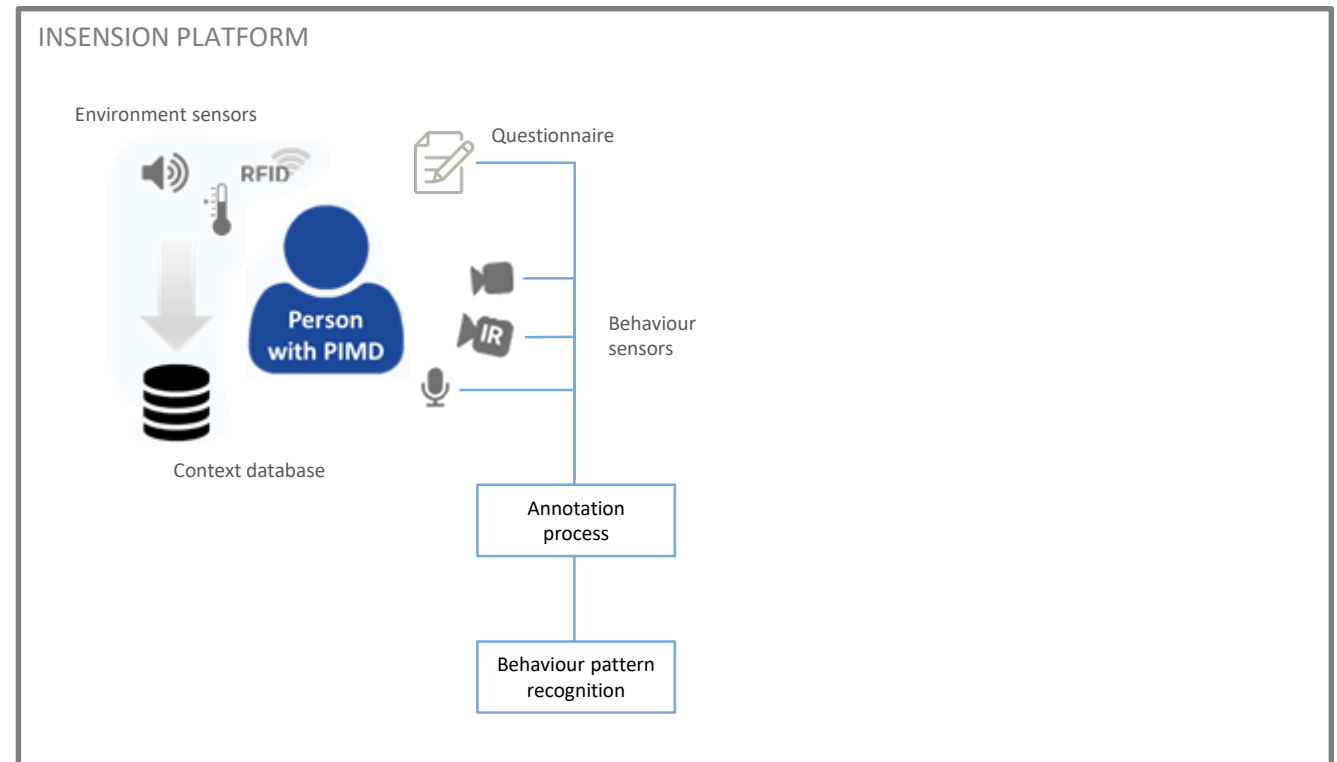
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Concept of INSENSION Platform

- Assessment: Recognition of non-symbolic behaviour
- Detection of context



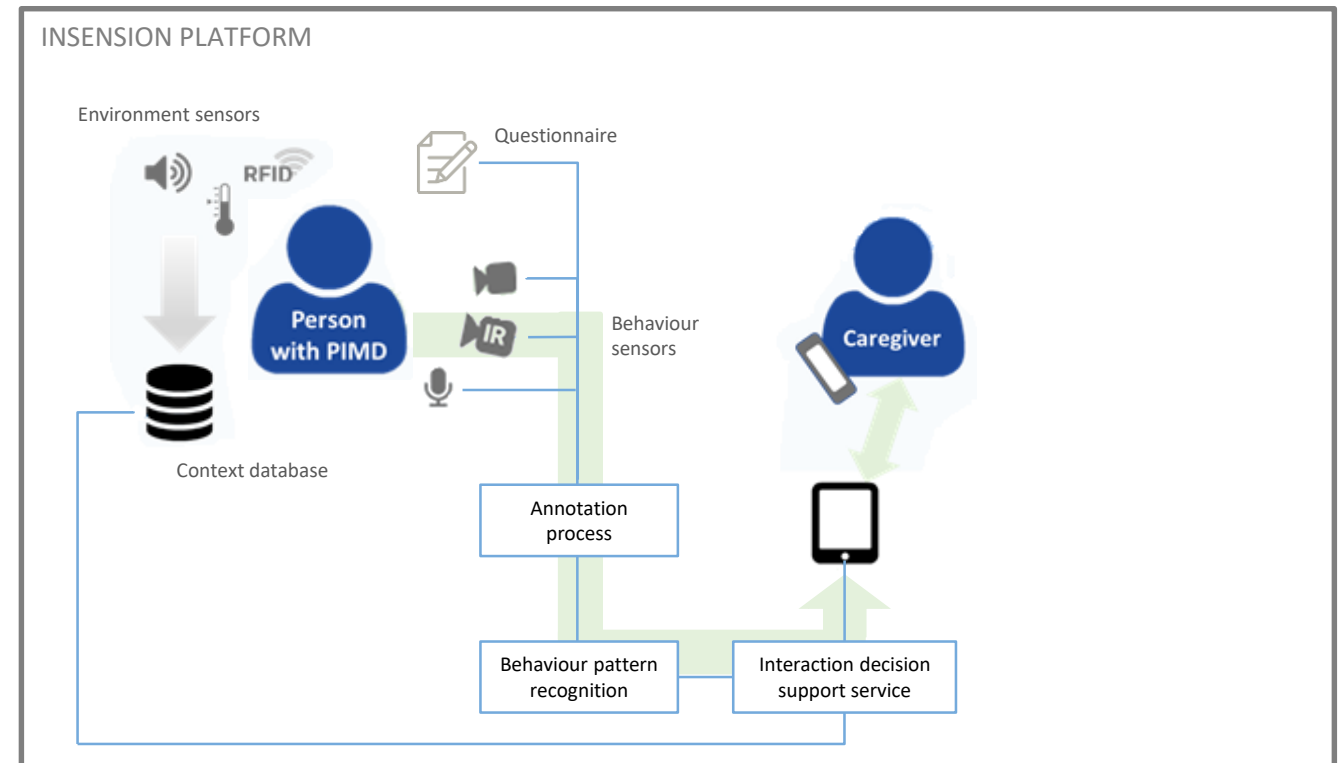
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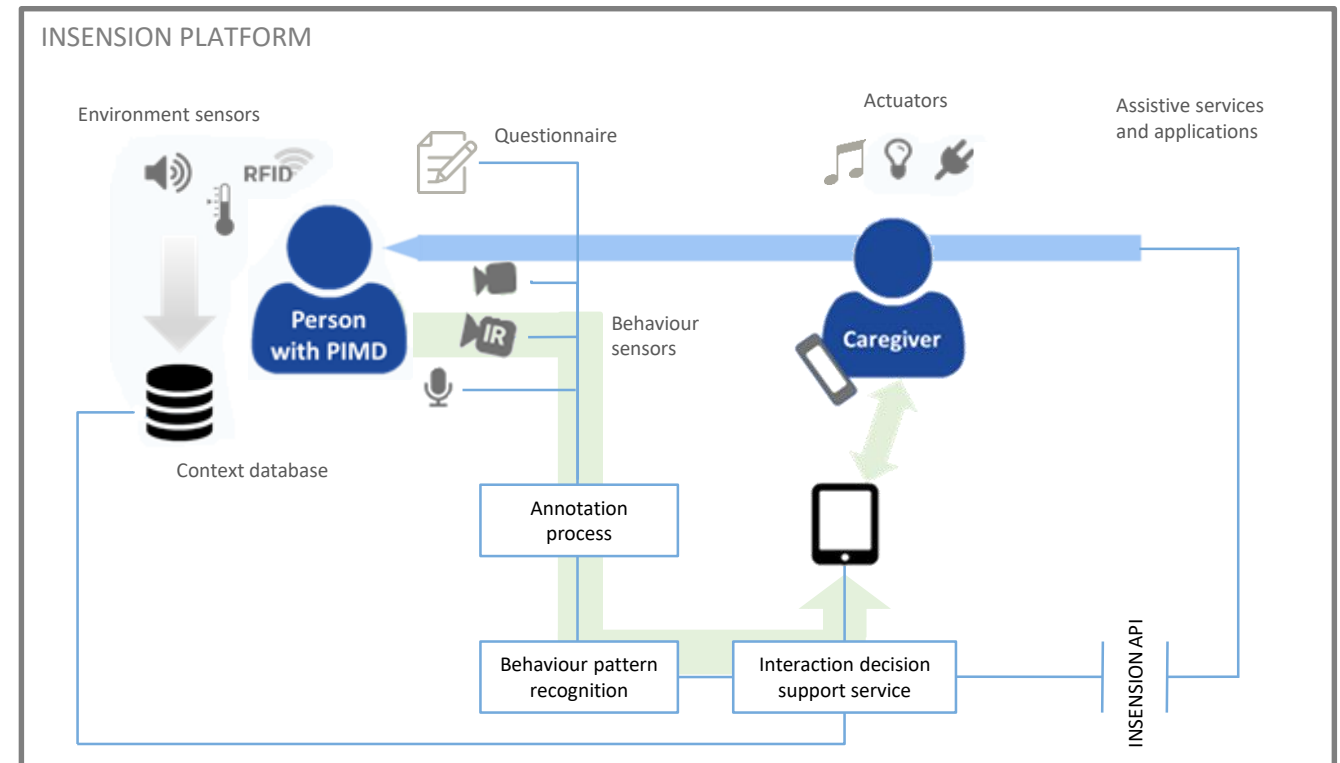
Concept of INSENSION Platform

- Assessment: Recognition of non-symbolic behaviour
- Detection of context
- Forwarding potential need for action



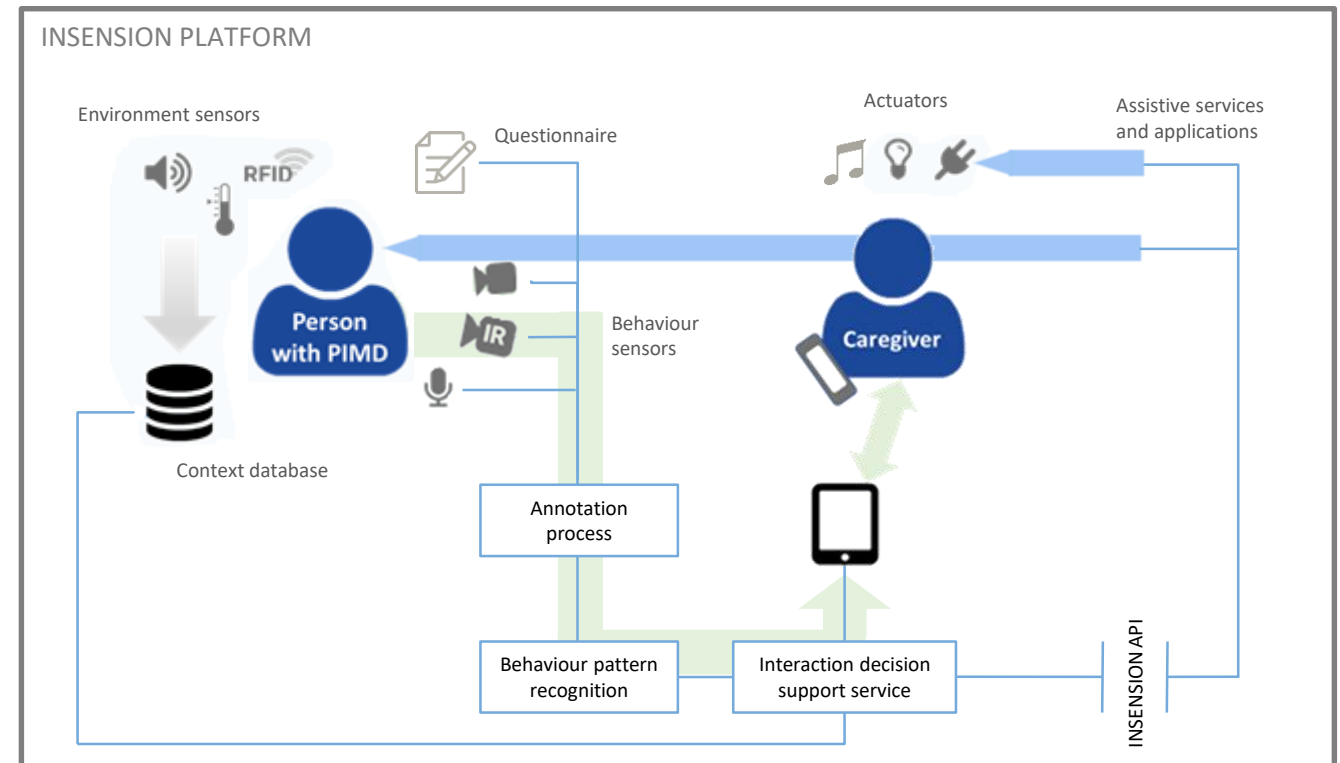
Concept of INSENSION Platform

- Assessment: Recognition of non-symbolic behaviour
- Detection of context
- Forwarding potential need for action
- Use of assistive applications



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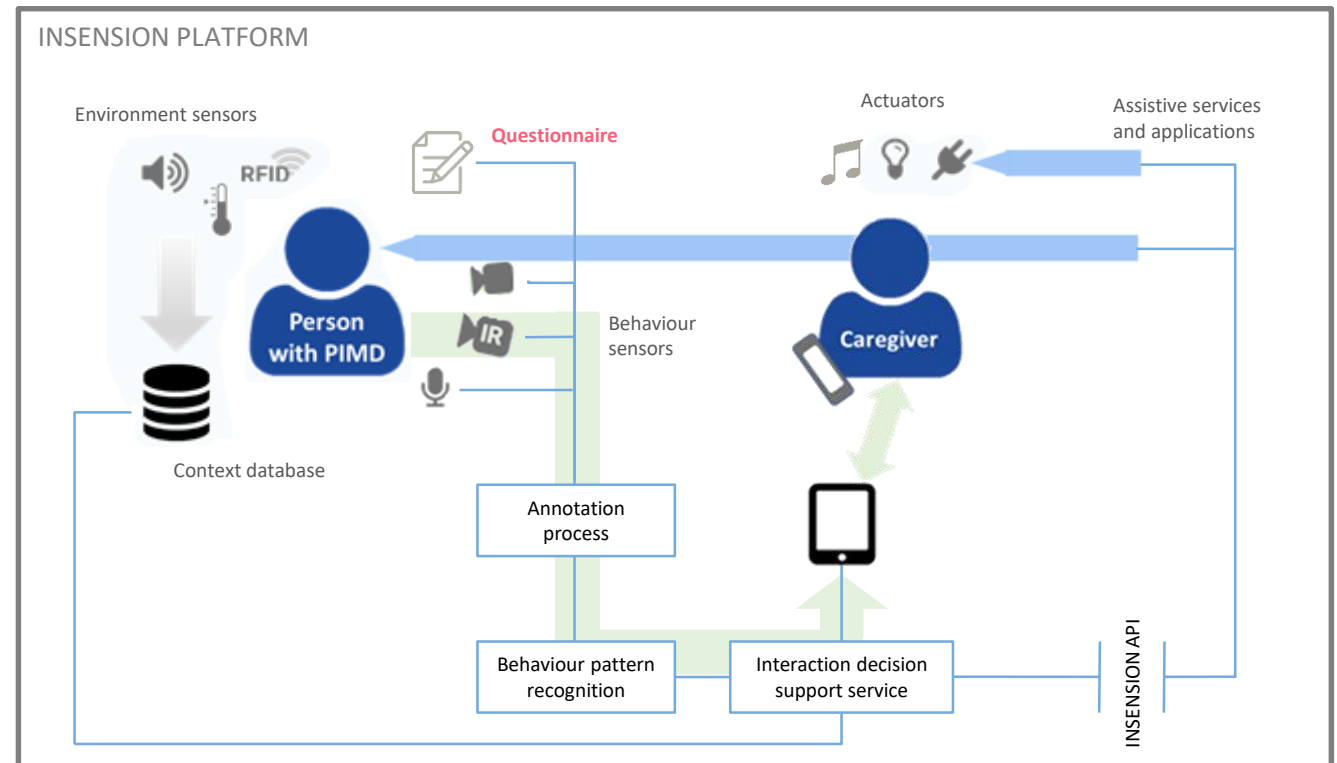


Concept of INSENSION Platform

Global PIMD Atlas



- Assessment: Recognition of non-symbolic behaviour
- Detection of context
- Forwarding potential need for action
- Use of assistive applications
- Creation of online knowledge repository on PIMD



Thanks for your attention!

Question, comments, remarks...?

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