

H2020 PROGRAMME
H2020-EE-2014-2-RIA
Research & Innovation Action



OrbEET Project



Organizational Behaviour improvement
for Energy Efficient administrative public
offices

This project has received funding from the European Union's Horizon 2020
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A B O U T

ORBEET is the answer to the challenges and factors that hinder the capabilities of current energy performance and efficiency triggering frameworks. ORBEET energy efficiency will be achieved through progressive improvement of organizational efficiency, while energy performance will be optimally balanced with business performance and occupant preferences.

The Problem



- Huge gaps between **Asset Rating** and **Actual Operation in Building**

The Need



- Impact of **occupants' behaviour** on the energy performance of buildings is not addressed

The Solution



- Inability of current techniques to **trigger end users for energy efficient operation**
- **Holistic energy performance optimization** framework is required

The Services



- **Improved Operational Rating Models** to address the actual conditions in tertiary buildings

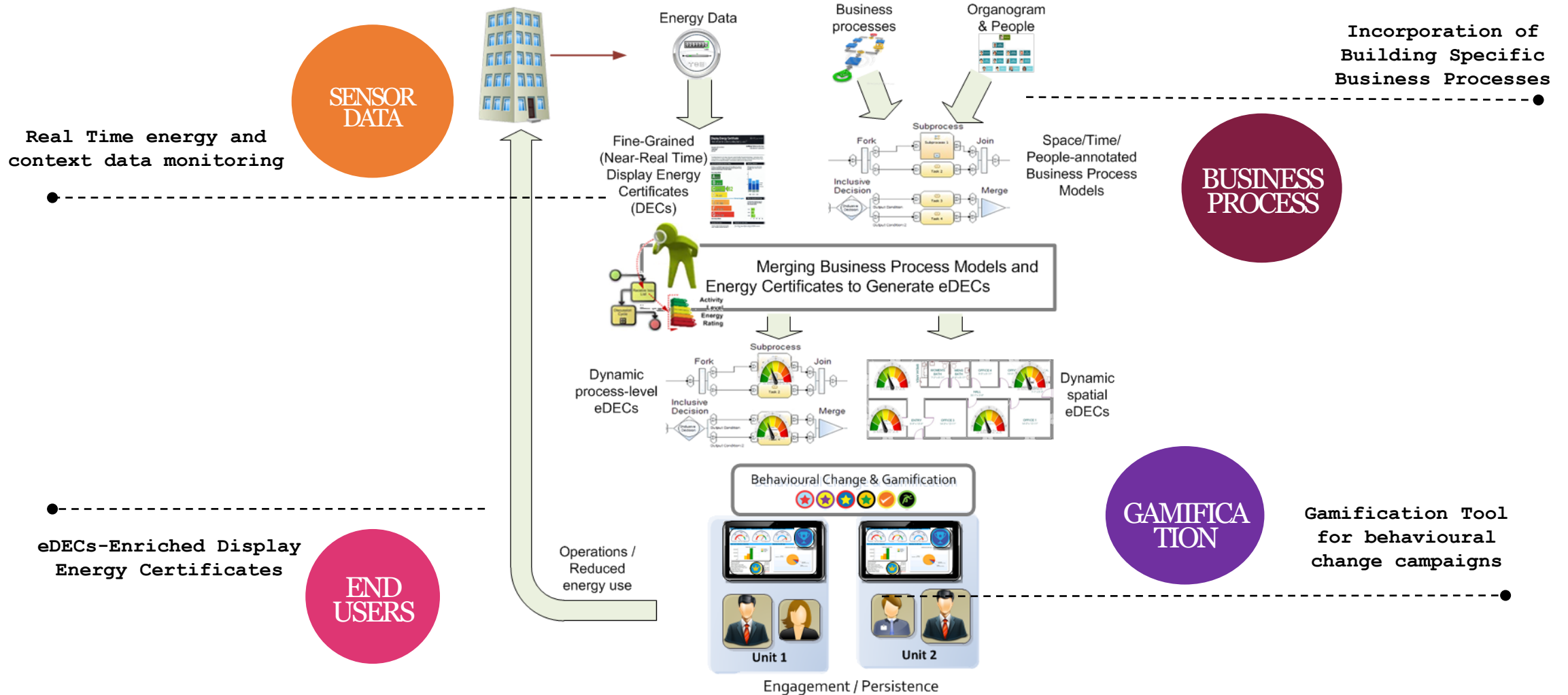
- Precise **allocation and real-time assessment** of detailed performance contributions of individual critical building components

- **Real-time building performance management** addressing also mainly business processes

- To establish a trusted **Systemic Enterprise Operational Rating** framework that will also present the ability for real time building monitoring, measurement of the impact of different activities on the overall building energy performance and most importantly, for **personalized feedback** that will aim at triggering sustainable behaviours. This will

THE CONCEPT

OrbEEt aims to leverage existing standards and methods of Building Operational Rating (OR) to deliver a mechanism for real-time extraction and calculation of detailed, fine-grained, dynamic parameters and subsequently provide continuous feedback on the present value estimation of the Building Operational Rating.



WORKPLAN

ORBEET activities are organized and structured in a way that promotes innovation and end-user involvement throughout the whole project duration. User acceptance and uptake is the ultimate goal of any innovation

01
analysis

The diagnostic and analysis phases aims at establishing very early in the project the main foundation on which the remainder of the project will be based.

02
design

The Design phase will provide the overall technological and functional specifications of the ORBEET framework, along with the architectural design and will evaluate the degree of availability of technological solutions

03
develop

Building upon the main outcomes and guidelines of the Design Phase, encompass the parallel development and integration activities of the ORBEET project

04
deploy

This phase will be run almost in parallel with all design and development activities, and will focus on training, fine-tuning and validation of the ORBEET integrated framework

05
business

Dissemination and Communication activities along with Business Innovation Planning for commercialization of ORBEET Solution

T I M E L I N E

Requirements Analysis

End-User & Business Requirements and Energy Performance Assessment Specifications. Definition of end users needs towards the extraction of high level system architecture

M 8

Design & Development of Tools

Design the conceptual architecture of the ORBEET framework, define the functional specifications of the individual components. Development of individual components that consist of ORBEET Framework

M 16

Apps Development & Integration

Development of end users applications and delivery of integrated ORBEET engine to provide support for energy behavioural change

M 24

Pilot Validation & Testing

The Innovative ORBEET solutions will be validated in real-life conditions over an extensive pilot roll-out period in a variety of buildings in four dispersed geographical areas (Spain, Bulgaria, Germany & Austria).

M 36

PILOTS

Evaluation holds a significant position in ORBEET, since it comprises the means towards validating cost-effectiveness, techno-economic feasibility and the impact generated by the project. ORBEET solutions will be validated in real-life in three dispersed geographical areas addressing the needs of different system stakeholders.

AUSTRIA



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THE CONSORTIUM



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QUESTIONS

Any Questions?