

BUILDING DT TRUSTWORTHINESS

"Privacy Metrics Tool for Building Digital Twins Trustworthiness"

SEP. 8TH, 2022 @10.45 AM CEST | NICE, FRANCE



BUILDING DIGITAL TWIN
ASSOCIATION 



SPHERE
BIM DIGITAL TWIN PLATFORM



Session Chair: Eduard Loscos, BDTA (Building Digital Twin Association) – president@buildingdigitaltwin.org

Pablo Vicente Legazpi / BDTA – p.Legazpi@buildingdigitaltwin.org – PRESENTER

Andre van Delft / DEMO CONSULTANTS - Andre@demobv.nl



SUSTAINABLE
PLACES

CONTENTS

- Workshop video BDTIC May2022: <https://youtu.be/phnj7QYpTUE>
- Presenters
- Introduction:
 - The non privacy
 - Digichecks EU project
 - Metrics for home monitoring and AI
 - Other EU projects with pilots: we can help you. We can collaborate
 - Legislation needs standards, objective tools
 - User confidence. Tools for improving health and performance, not just comfort
 - EXAMPLE tno demo pilot



SUSTAINABLE
PLACES

A.(Andre) van Delft, MSc / Director



Can we gain trust if DT is still a concept that's multi interpretable to users?

General notes / remarks / questions

What is a digital twin

Building and its users

Privacy to the building or to the user?

What are characteristics of Digital Twins:

geometrical 3D twin, added data?, live data?, one or bi-directional

Some relevant EU projects DEMO Consultants has participated in

It started with Mobistyle and more

Research projects

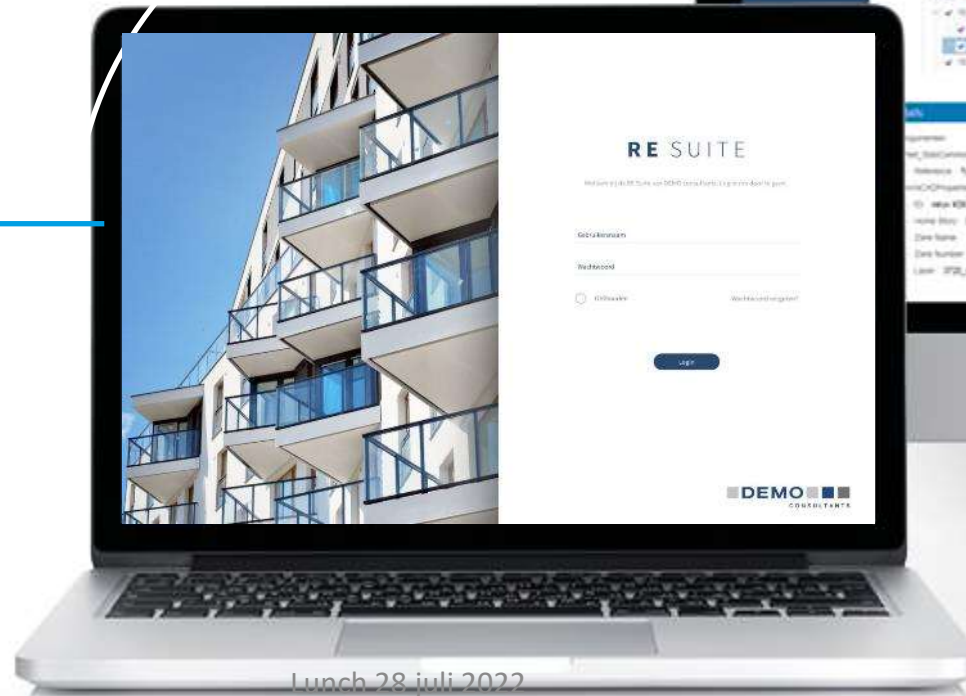
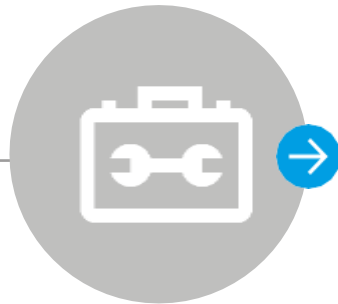
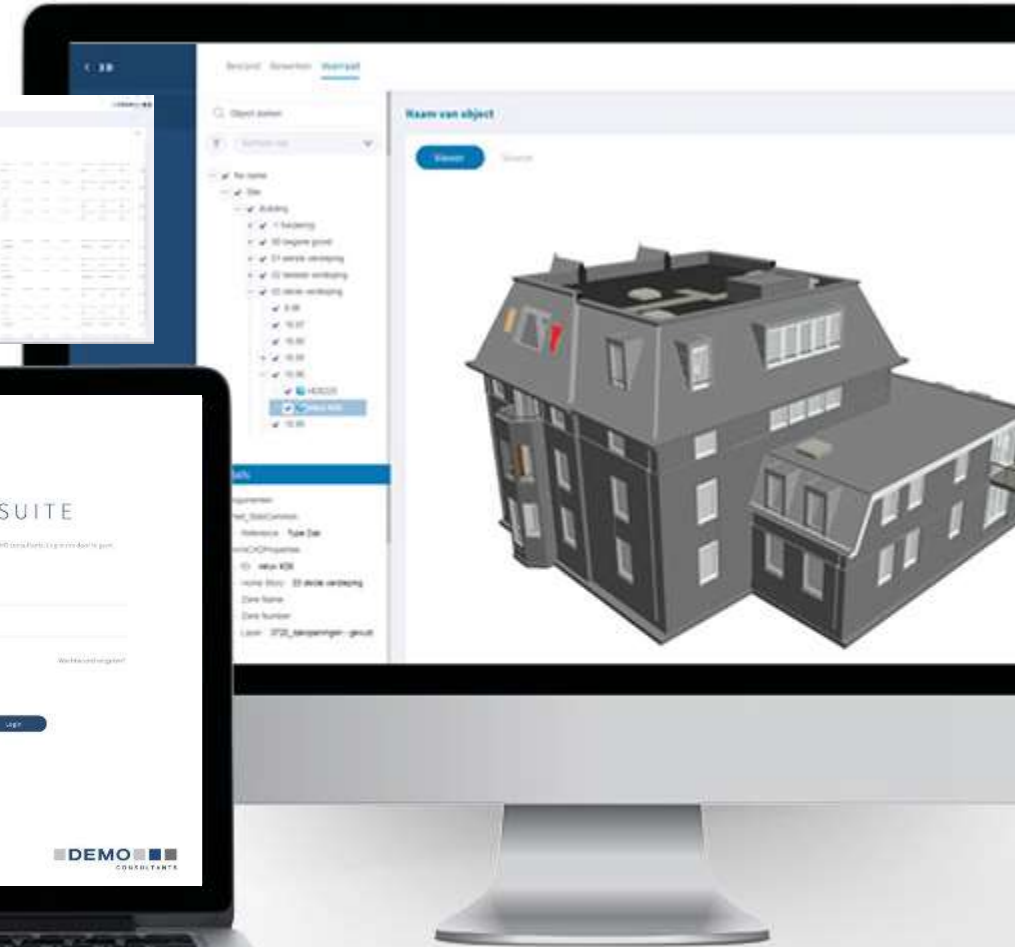


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Informationmanagement

Tools

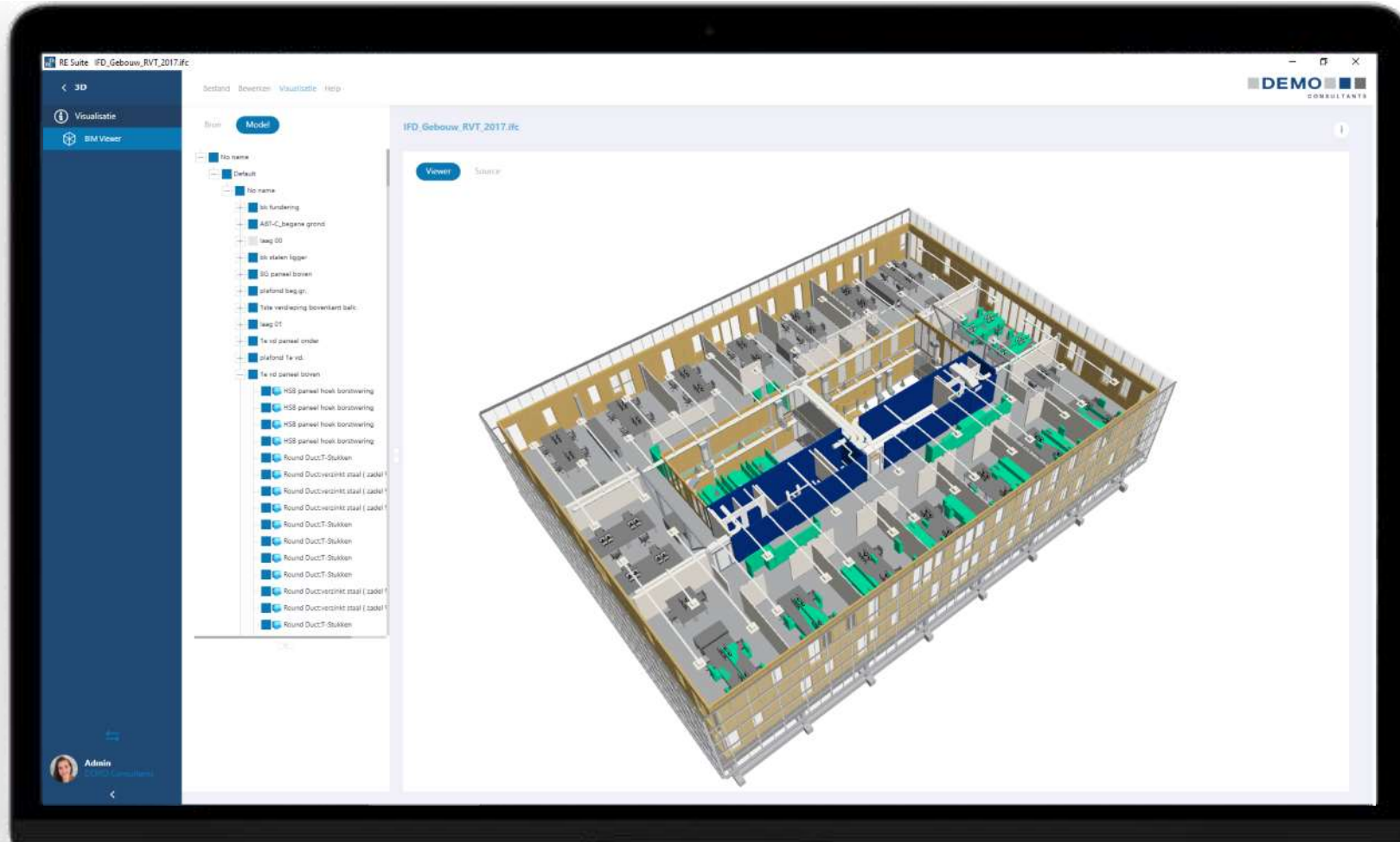
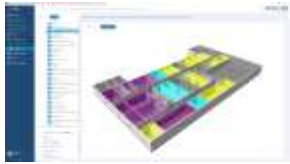
→ RE Suite



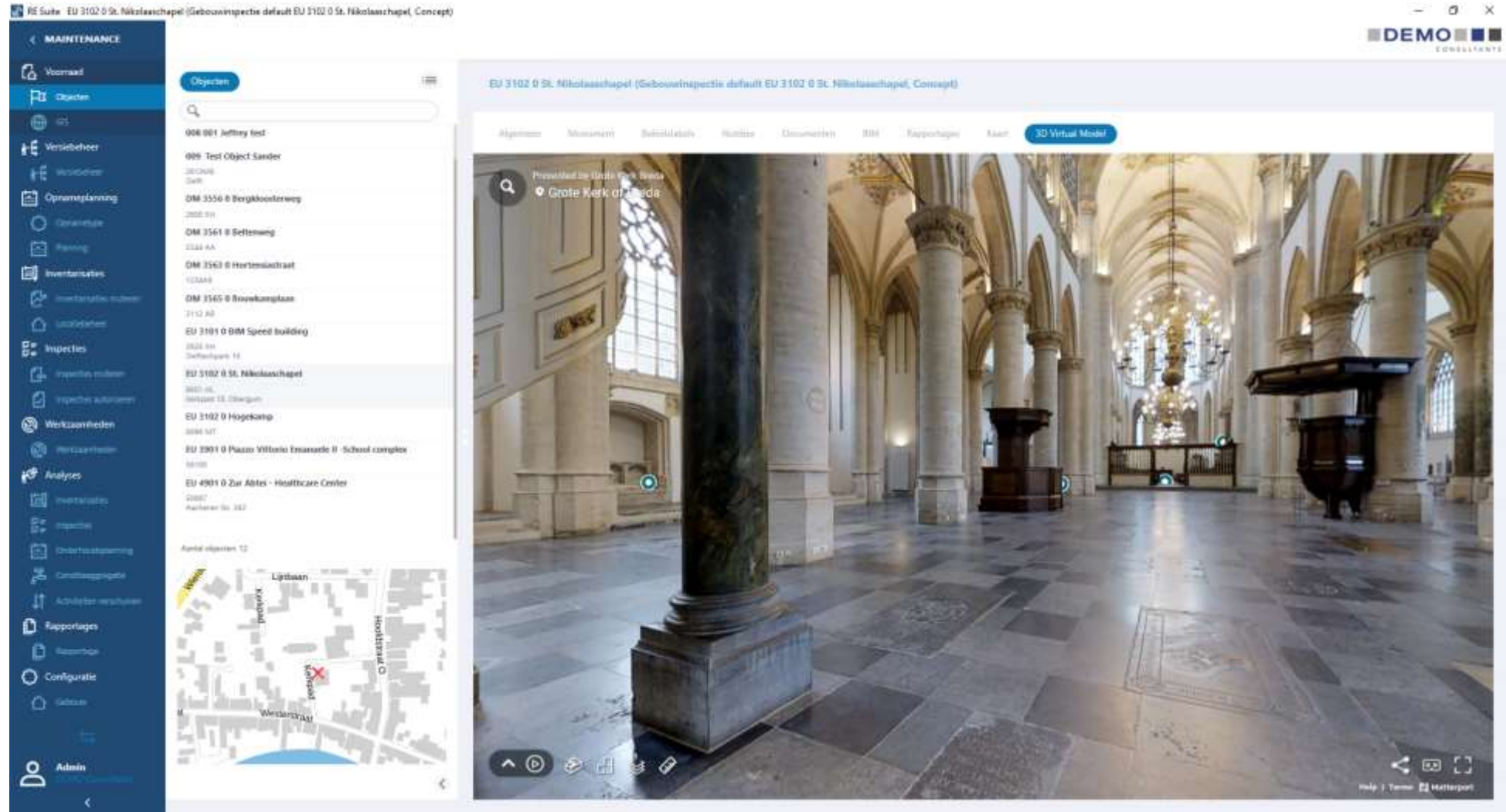
Lunch 28 juli 2022



BIM – Digital twin?



Digital twin?



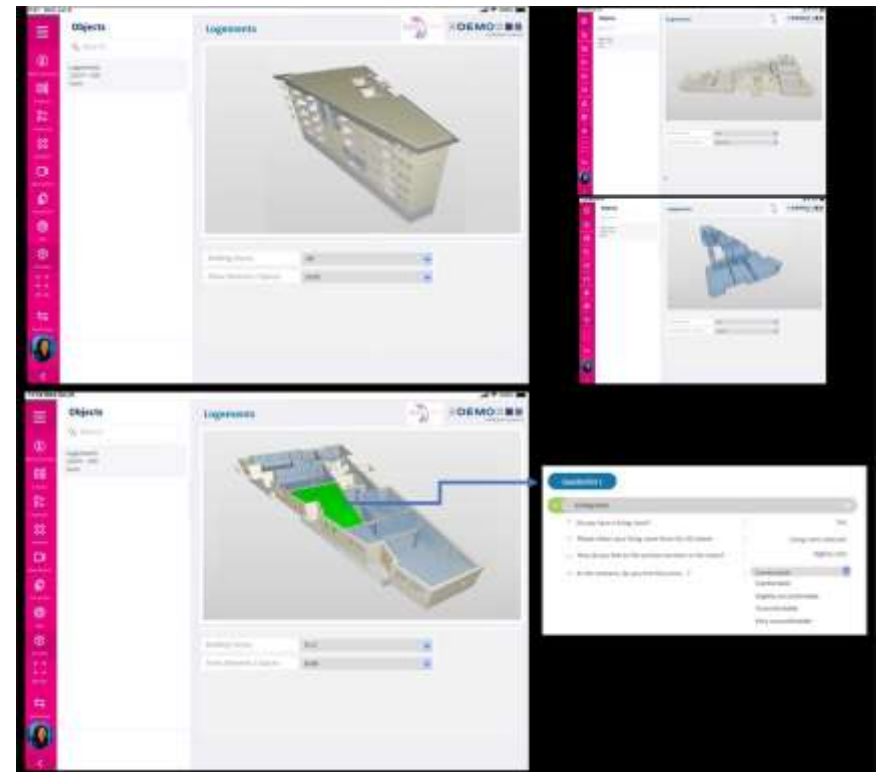
Mobistyle

- Energy savings, health and comfort
 - First project for collecting close to real time data
 - Performance, quality, reliability
 - Export tool, data quality, aggregation.
-
- And privacy

BIMSpeed



- Dealing with privacy issues, but is it Digital Twin
- We don't have much Digital Twins, do have IoT in BIM Model
- We do have inhabitants app
- GDPR..



BIMSpeed

- Inhabitant Informed Consent
- Privacy and purpose specification
- Data Security
- Overall ethical compliance

BIMSPEED Informed Consent Information for crowdsourcing



User consent

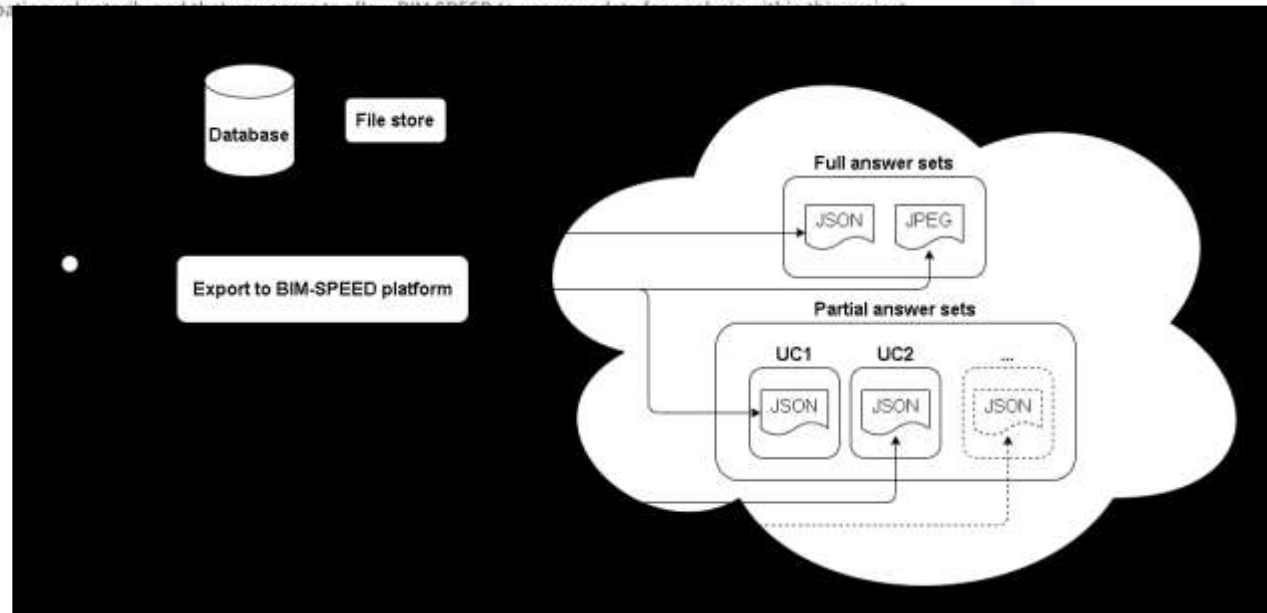
Thank you for agreeing to participate and contribute information to our renovation work. The BIM SPEED project will use the data that you provide to develop a more efficient and thorough understanding of structures undergoing renovation.

Before continuing, we need to ensure that you are 18 years old or older and that you are contributing voluntarily to this project. There are no obvious physical, legal or economic risks associated with participating in this study. You do not have to answer any questions you do not wish to answer. Your participation is voluntary and you are free to discontinue your participation at any time.

The information you provide will be stored securely by DEMO Consultants and this information will be anonymised before being fully integrated into BIM SPEED project developments. No personally identifiable information will be reported in any research product or renovation reports. More information on the project and its direct results are available on our project website.

The BIM SPEED Project believes privacy and data security and confidentiality to be very important. If you have any privacy and data security related concerns, please first contact our project data security manager, Jason Pridmore (pridmore@eshcc.eur.nl) at Erasmus University. Further support is available from the Erasmus University and project Data Protection Officer, Marlon Domingus (marlon.domingus@eur.nl).

By clicking "I agree" you are indicating that you are 18 years of age or older, that you are participating voluntarily, that you understand the risks and benefits of the project, and that you agree to the terms and conditions of the project.



Several other DEMO EU projects

- Precept
 - D2EPC
 - Smartliving EPC
 - EasySRI
 - REINCARNATE
-
- Greatest Common divisor: collecting real time data, aggregate, analyse, inform and steer / influence

Challenges

- Reliable platforms
- Reliable dataflows
- Secure dataflows
- Interoperability
- Purpose
- Business case
- Ownership
- Liability