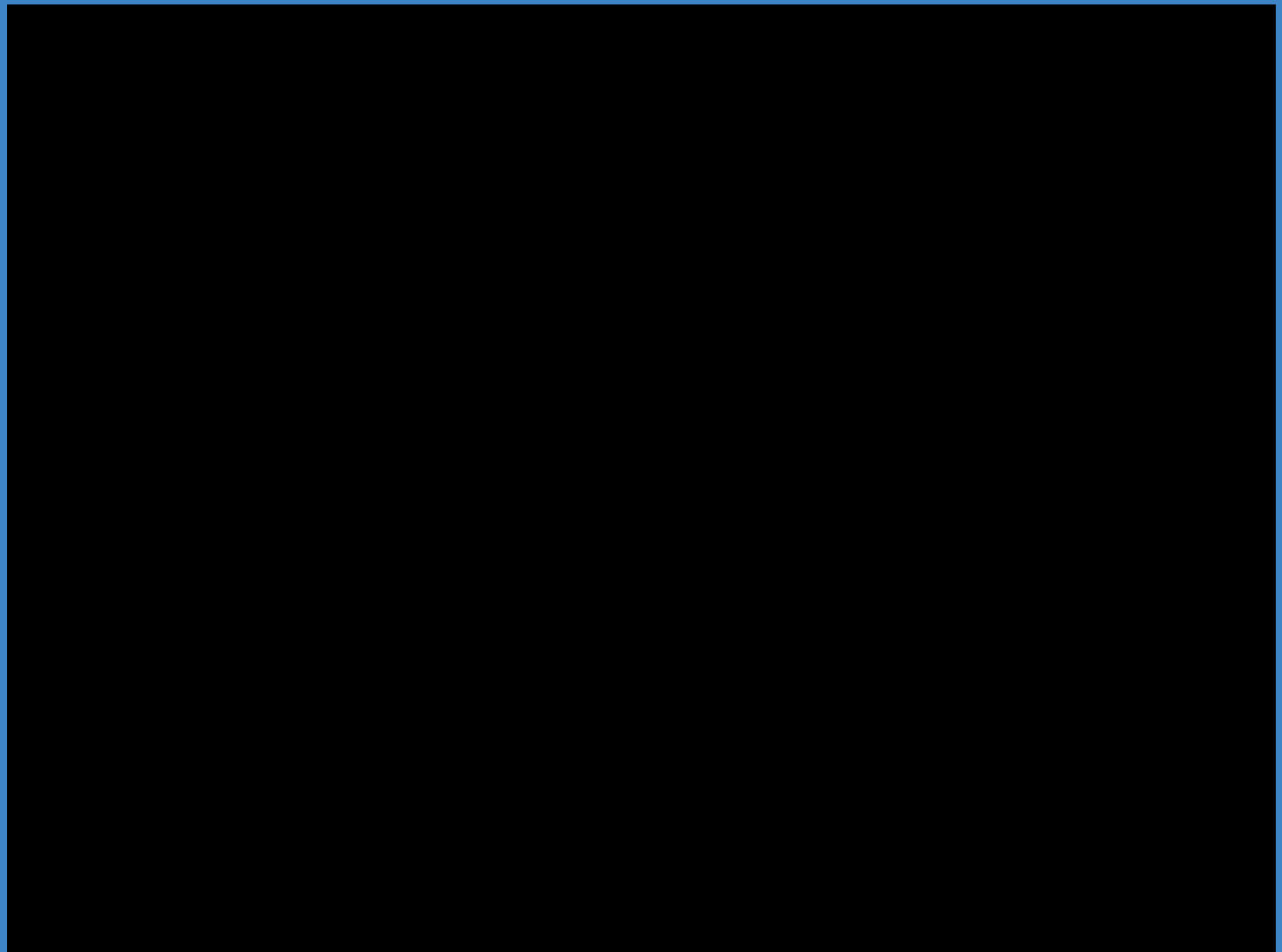


InSite

Insights you need on the devices you have

Executive Presentation

08. July 2021

D3I: PC1-MoL: “Data-driven Facility Management”

Table of Content

General Information

About the Project

Cooperation Project:

16 weeks

19. March 2021
-
9. July 2021

Customer-centric project management

Using agile methods like AWS Working Backwords & SCRUM

Goal

Development of a prototype for data-driven facility management

Development of InSite

PROBLEM - Problem Statement

Today has to the Facility Manager of the Museum of London contact a third party service provider find out about the building's health, identify issues & locate them, what consumes a tremendous amount of time!

SOLUTION - Big Idea

Solution:

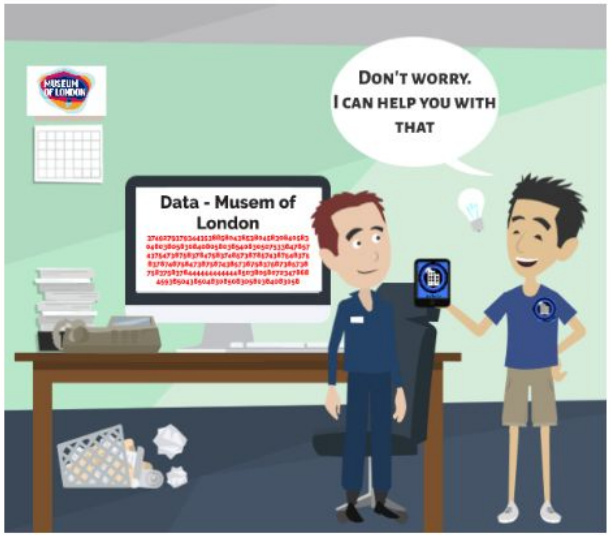
We will **develop a tool** that will make it possible to **process the data** collected from the building and **transform** them **into** valuable **information** in such a way that it can be easily interpreted.

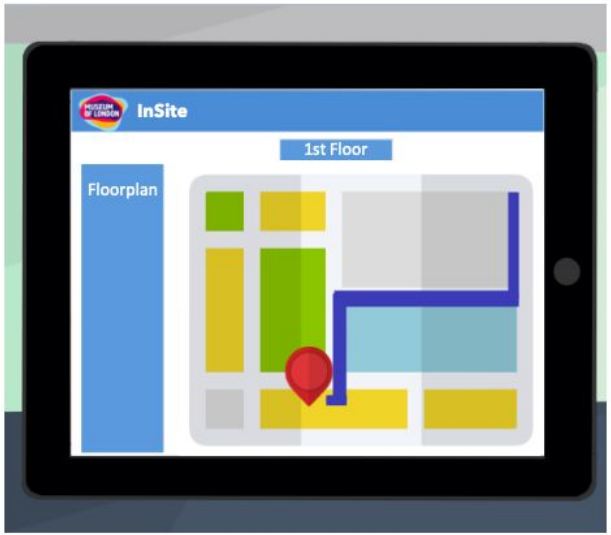
Benefit

Make available data centralized, transparent and clearly compatible for an intuitive and better understanding by visualising the building's data.

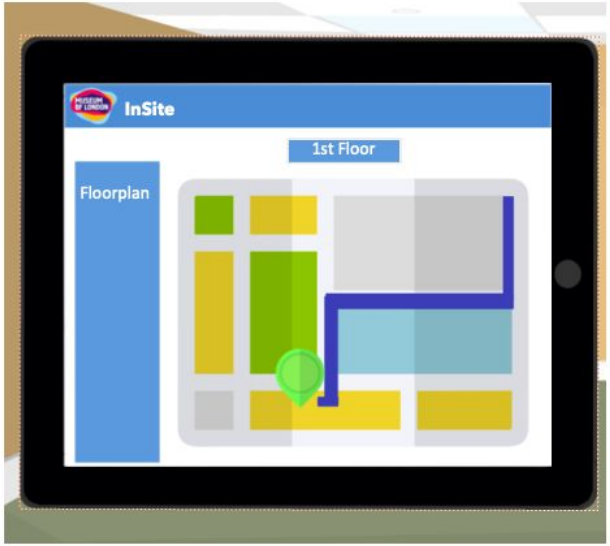
Storyboard


I DON'T UNDERSTAND THE DATA... WHAT CAN I DO?
Data - Musem of London


DON'T WORRY. I CAN HELP YOU WITH THAT
Data - Musem of London


InSite
1st Floor
Floorplan

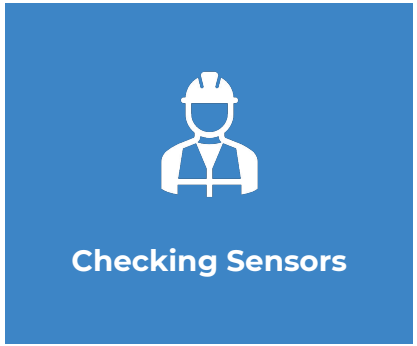
Storyboard

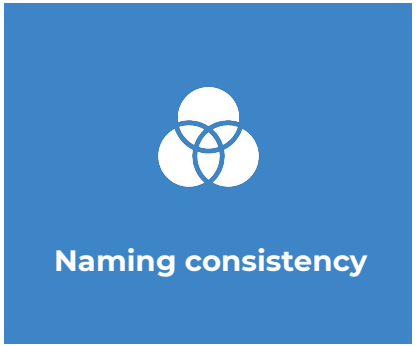


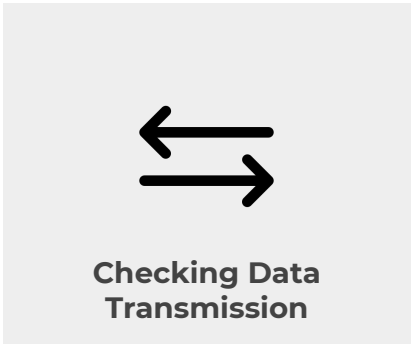
Prototype

Things to consider

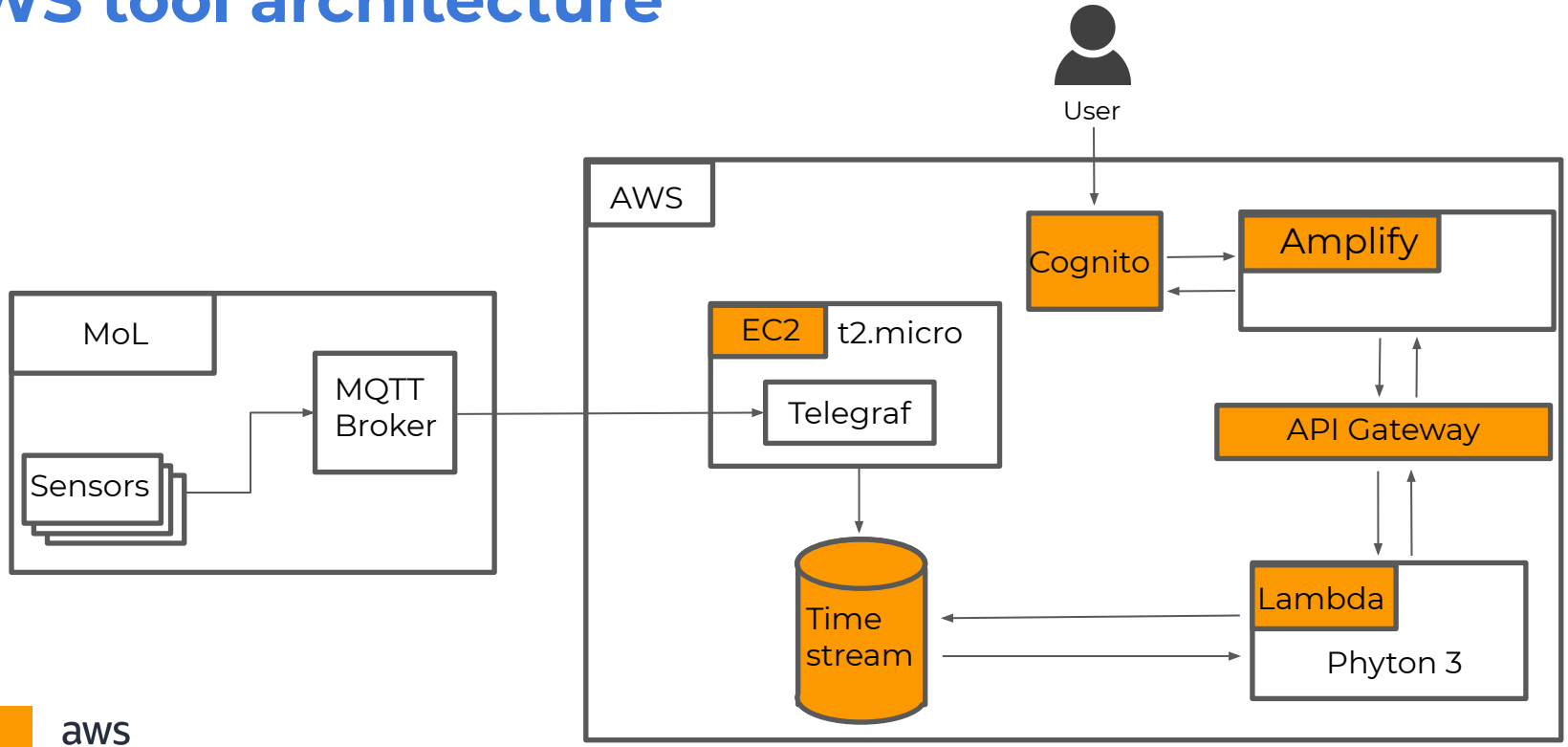
Laying the foundation







AWS tool architecture



Running Costs
using AWS tools

Estimated costs for current prototype	Estimated costs at current expansion level	Usage-based pricing
~ 19 £/mo.	~ 83 £/mo.	not predictable
current version with 6 data points visualized	current prototype with 600 data points visualized	costs can change in case of tools, # of data, upgrading, ...

Source: https://calculator.aws/#/estimate?id=d22b91ea8be5e25b40753eec55da064640627b16
Exchange rate 07.07.2021: 1$ = 0,72£

Business Case

Main Energy Savings

Use of model-based fault detection, fault diagnosis & optimization procedures **open up energy saving potentials of**

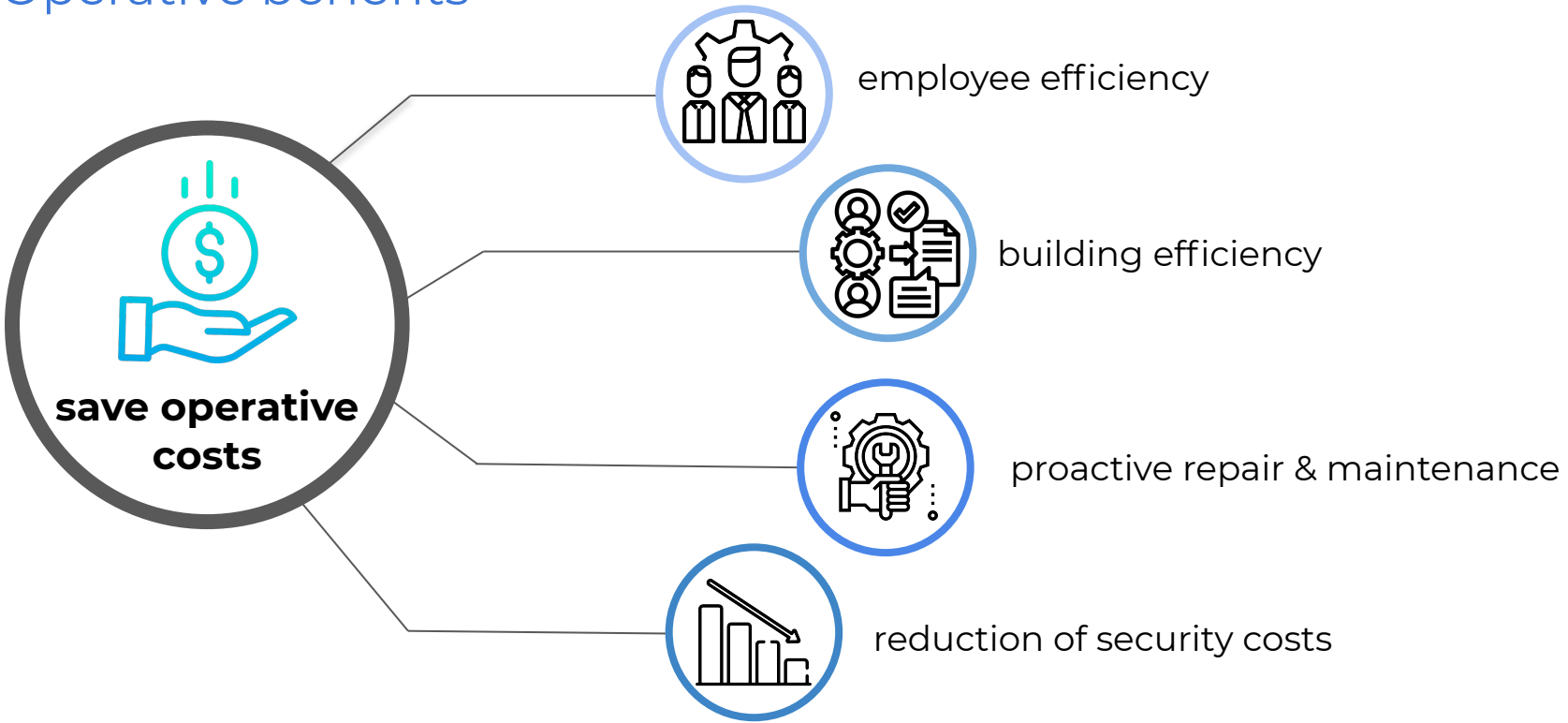
up to **30 %**

regarding a project study of the **Fraunhofer Institute**.

Source: https://www.ise.fraunhofer.de/de/forschungsprojekte/modqs.html *(24.06.2021)*

Business Case

Operative benefits



Frequently Asked Questions (FAQs)

Customer

Client

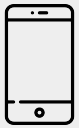
Partners

- Platform Architecture
- Data & Data Security
- Website Access
- Costs
- Value
- Functions

Future Outlook

A possible InSite Future

Implementation of **all data points** to InSite to transform the MVP into a valuable solution.



Improvement of InSite's **mobile version** for on-the-go information.

Showing **historical data diagrams** of every visualized sensor for further information.

Adding & refining maintenance calendar with a menu point for detailed information.

Development of an alternative **view by AHUs** beside the room view.

Implementing energy consumption visualization as a central element.

Individualization of the solution for every user. Selecting times, rooms, AHU, ... **responsibilities**.

Development & programming of a **predictive maintenance** approach to increase efficiency.

Implementing other project group solutions AND A LOT MORE!!!

Publications

Access www.co-inno-lab.org/en

Artefacts Co-Innovation Lab Press Release

Access sites.hm.edu/dt_lab/index.en.html

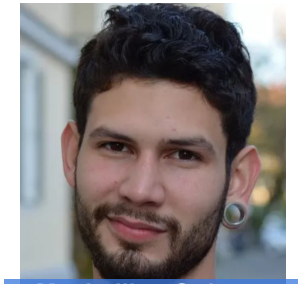
DT Lab

Artefacts Digital Transformation Lab Report
- Solution Press Release
- Prototype Code
- FAQs
- Storyboard

The Team

Meet the team

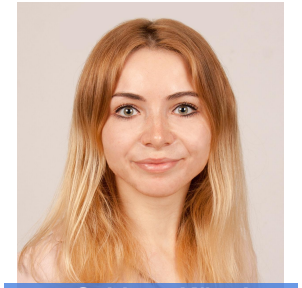
Felix Volz
Business Administration



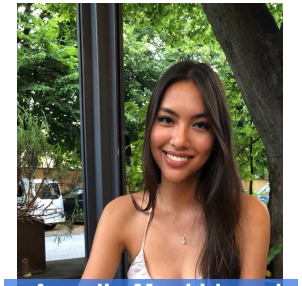
Maximilian Quintero
Business Administration

Johannes Schwarz
Business Administration

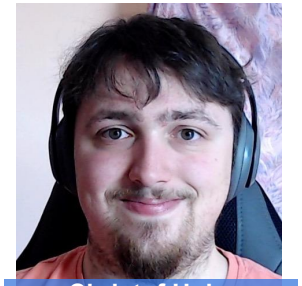
Niklas Biesold
Business Administration



Svitlana Kögel
Business Administration



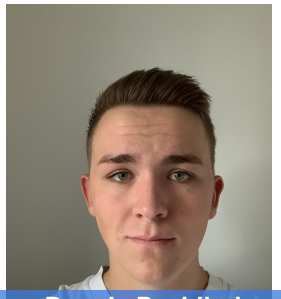
Anuujin Munkhjargal
Business Administration



Christof Huber
Computer Science

Philip Pastuschka
Computer Science

Teresa Auerbach
Computer Science



Dennis Pschibul
Computer Science

THANK YOU!

Any Questions?

Please contact us!

volz@hm.edu