

AMdEX

tapp.



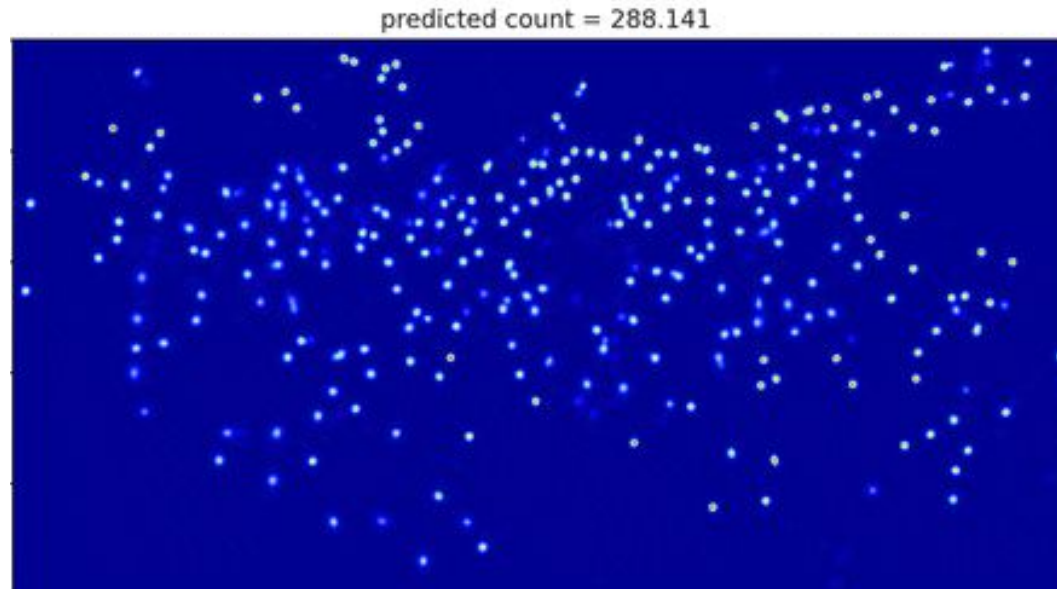
# Smart City User Case

AMdEX: Sensordata delen uit smart buildings | 14.09.2023



# Amsterdam is Getting Busy

Together with the City of Amsterdam, we developed privacy-by design algorithm that helps municipal innovators gain actionable insights about busy inner-city hot spots.

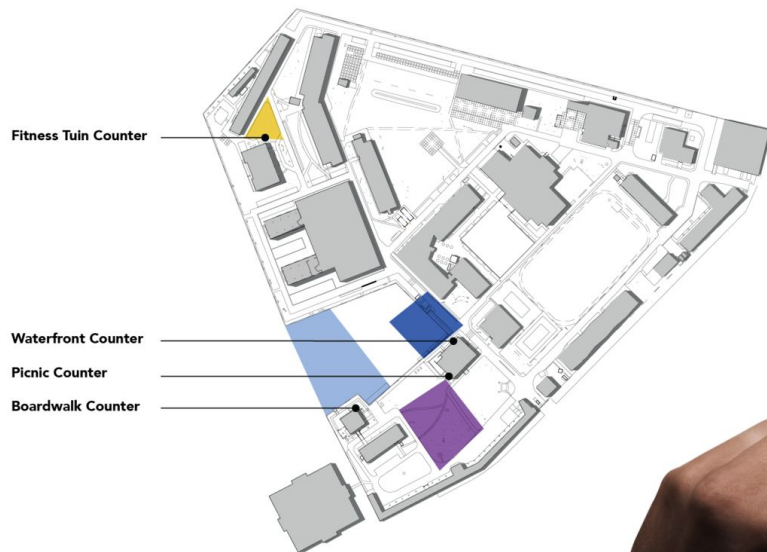


*Marineterrein - City Swim 2022*



# REALTIME & PUBLIC INSIGHTS

Data that is collected from 4 location on the Marineterrein Amsterdam to help improve the services & experiences of it guests and community



## DATA OWNER

Intermediary

Data Collector

Tapp & Life Electronic



*we don't have any restrictions on who can access crowd data*

Digital Notary

AMdEX

## DATA USER

AMS-Institute & Wageningen University and Research & CODAM (Students)

Aurore Paligot (Journalist)

NewBase Virtual Marineterrein (Entrepreneur)

Ruimtelijke Ordening Planning (Municipality)

Rijksvastgoed Bedrijf (Ministry)

ArtLab (Architects and Multimedia Artists)

“ I received an email from AMdEX with a data download link



# Result

Binnenhaven  
Kade  
Fitnessstun  
Park / Vooverf



temperature  
8.8°C

date  
26 · 11 · 2020

visitors  
167



Play animation



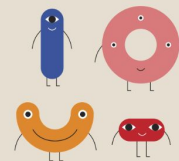
# Tada principles

The strength of Tada is that it starts from ethical values. That means people can agree with it and will be facilitated by the eFLINT policy framework.

01

## Inclusive

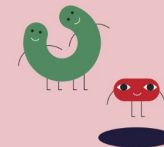
Our digital city is inclusive. We take into account the differences between individuals and groups, without losing sight of equality.



03

## Tailored to the people

Data and algorithms do not have the final say. Humanity always comes first. We leave room for unpredictability. People have the right to be digitally forgotten, so that there is always an opportunity for a fresh start.



02

## Control

Data and technology should contribute to the freedom of people. Data are meant to serve the people. To be used as seen fit by people to benefit their lives, to gather information, develop knowledge, find room to organise themselves. People stay in control over their data.



04

## Legitimate and monitored

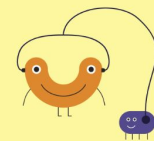
Citizens and users have control over the design of our digital city. The government, civil society organizations and companies facilitate this. They monitor the development process and the resulting social consequences.



05

## Open and transparent

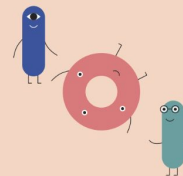
What types of data are collected? For what purpose? And what are the outcomes and results? We are always transparent about those aspects.



06

## From everyone - for everyone

Data that government authorities, companies and other organizations generate from the city and collect about the city are held in common. Everyone can use them. Everyone can benefit from them. We make mutual agreements about this.



# Tada Evaluation

“If more people have more access to high quality data, more people will work on solutions to the big problems”.



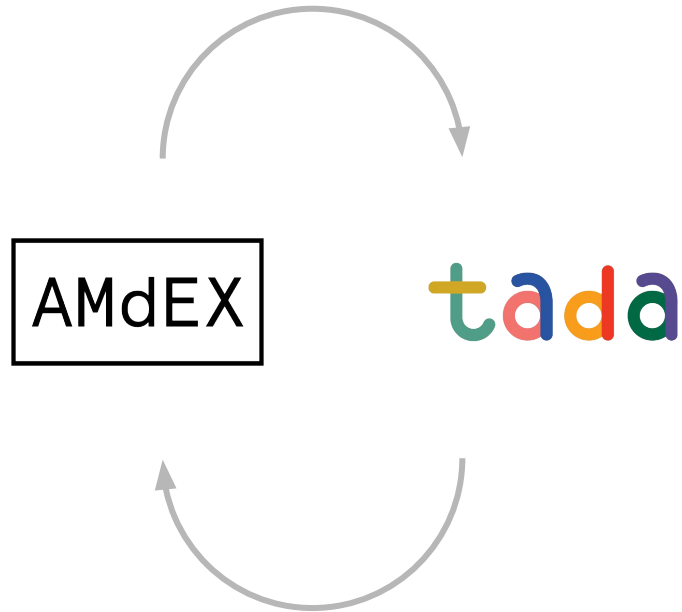
- 1 - Alternative to blackboxes.
- 2 - We want more transparency.
- 3 - We want to achieve trust.
4. So people are willing to share data.
5. So we can create new value.
6. To tackle bigger problems.
7. Because there are a lot of problems.

Workshop w/ Douwe Schmidt (co-found Tada) 12.04.2023



## Establishing trust with AMdEX

Data owners and users have to adhere to terms defined by the orchestrator & reasoner.





# Data Level Agreements



Agreement	Tada Principle	Data Owner	Data User
Must have an AMdEX Account			
Must provide a "Statement of Intent" describing the use / business case for data (100 words)			
Must provide a URL where the use / business case will be published			
Must provide a URL where the attribution can be found			
Must provide the start and end time when the use / business case will be published			
Must agree that Policy Agreement will be publically accessible			



# We want a digital city 'from and for everyone'.

But how do you shape that in practice?

Every data owner & data user that fulfills each level of the Data Agreement is rewarded with a Trust Badge.

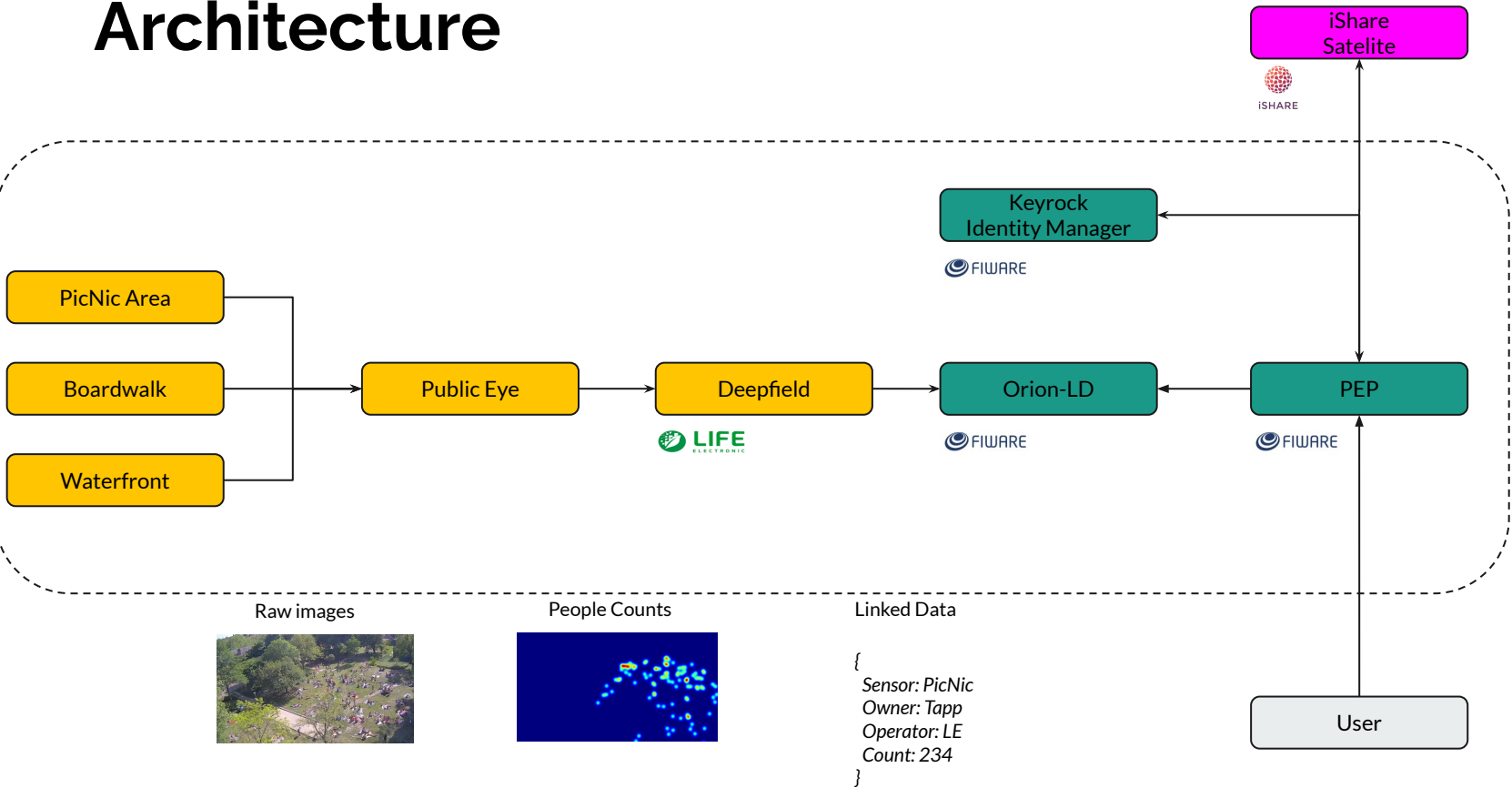
A badge is visible on every registered AMdEX member profile and visible at the DataDeal Checkout.



The Trust Badge tells others:

- I am a trusted member of the data exchange community
- I practice the values for a fair and just data exchange

# Architecture



# Data Request Flow

1. Data journalist Aurora requests data from PicNic camera through Amdex portal



2. We check if Amdex portal is part of the data space by connecting to iShare Satellite



3. We check if Amdex portal is allowed to GET the data within the requested time span using an iShare policy

```
{
  "delegationEvidence": {
    "notBefore": "2016-07-09T00:00:00Z",
    "notOnOrAfter": "2017-07-09T00:00:00Z",
    "policyIssuer": "EU.EORI.NL300000001",
    "target": {
      "accessSubject": "EU.EORI.NL300000001"
    },
    "policies": [
      {
        "authorizationDepth": 2,
        "target": {
          "environment": {
            "license": "iSHARE_00001"
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        },
        "policies": [
          {
            "target": {
              "resource": {
                "type": "entity",
                "identifiers": ["*"],
                "attributes": ["*"]
              },
              "actions": ["GET"],
              "environment": {
                "serviceProviders": ["EU.EORI.NL300000001"]
              }
            },
            "rules": [
              {
                "effect": "Permit"
              }
            ]
          }
        ]
      }
    ]
  }
}
```

4. If yes, we create a data package and make it securely available for download

