

PROTOTYPE: DIGITAL DATA MARKETPLACE

Enabling Data Sharing for AI Development

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More details: www.delaat.net/dl4ld

Research Projects

amsterdam economic board

AMdEX THE DATA HYPERMARKET

DL4LD Data Logistics

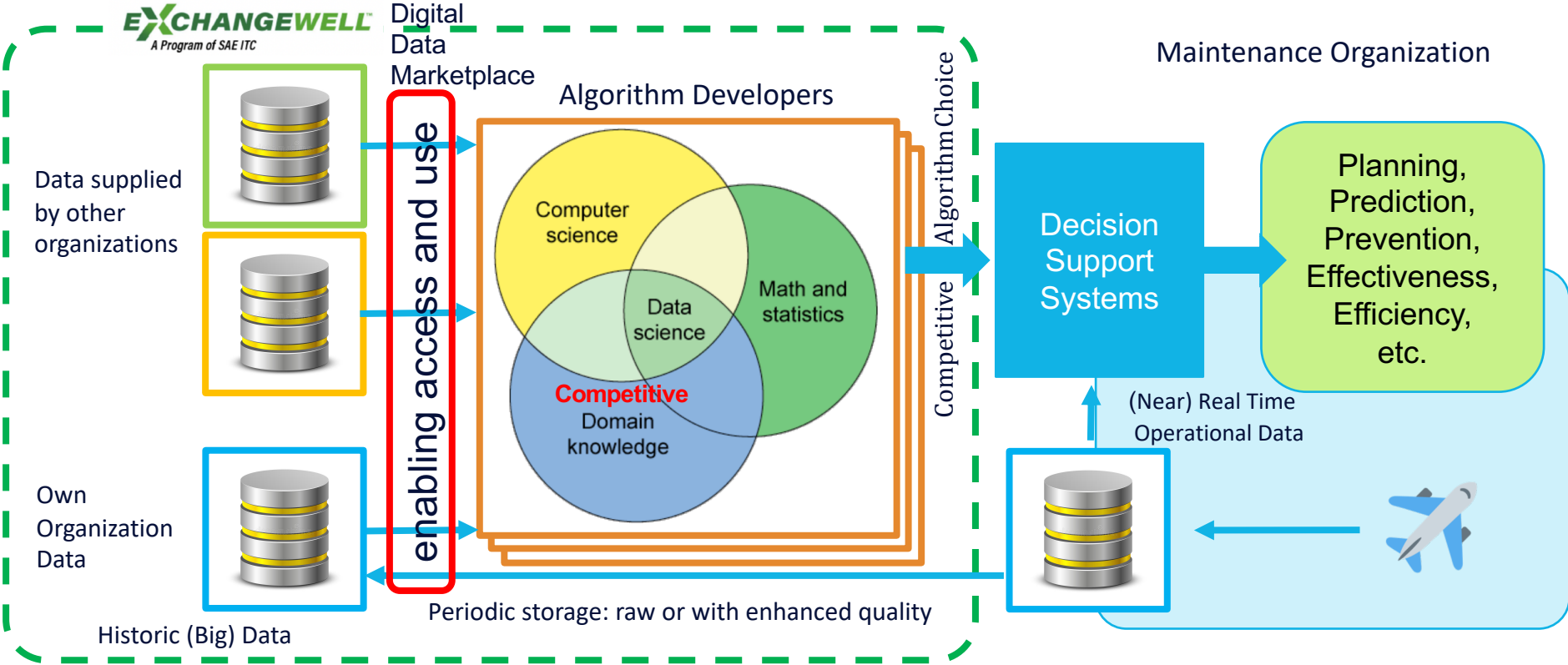
CIMPL

ReMAP

This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 769288

CHALLENGE: SHARING DATA FOR AI DEVELOPMENT

SOLUTION: DIGITAL DATA MARKETPLACE GOVERNED BY A MEMBERSHIP CONSORTIUM



DIGITAL DATA MARKETPLACE GOVERNANCE

A FOUR STEP APPROACH:

SAE ITC ExchangeWell

Testbed Equinix/Dell/
Nokia/Ciena



COMMON BENEFIT

Define and agree common benefit no single organization can achieve on its own.



GROUP RULES

Define consortium rules considering data use, access and benefit sharing



ORGANIZE TRUST

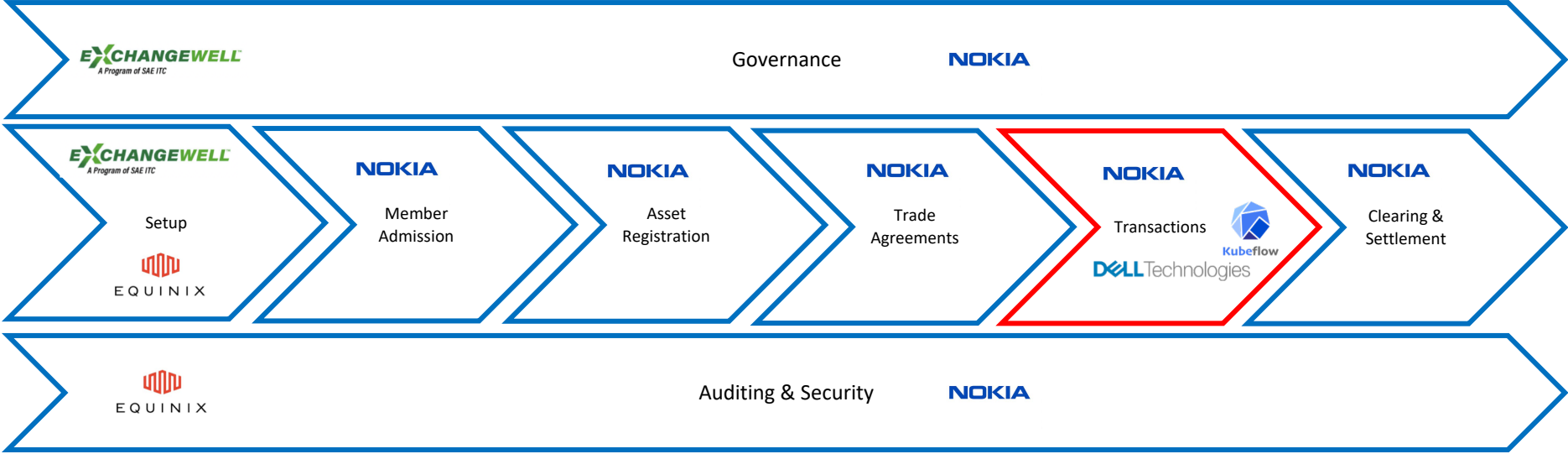
Organize power and trust as a **means to reduce risk** for participating members



IMPLEMENT INFRASTRUCTURE

Research operationalization of **Digital Data Marketplace** concepts

MARKETPLACE JOURNEY IMPLEMENTED IN PROTOTYPE



MEMBERS ALLOW EACH OTHER VISIBILITY

AI flow Data/Algorithm



Datapace

- Dashboard
- Sell stream
- Buy stream
- Smart contract
- Access control
- AI**
- My wallet

manu@gmail.com
0 DPC



AI

- + Add Algorithm
- + Add Dataset
- + Execute

Algorithms

	Name	Type	Price	
<input type="checkbox"/>	MyMetaAlgo >	Algorithm	0.45 DPC	

Choose Algorithm

< Previous 1 2 3 4 Next >

Datasets

	Name	Type	Price	
<input type="checkbox"/>	publicManu2Stream >	Dataset	0.67 DPC	
<input type="checkbox"/>	dsfsdfds >	Dataset	0.44 DPC	
<input type="checkbox"/>	MyMetaData >	Dataset	0.1 DPC	

Choose DataSet

Execute Training,
Model
creation,
Prediction

Jobs Queue

ID	Mode	Algo	Data	State
5c780634afdade0001a0d3a5 >	federated	mySuperAlgo	pu-Dataset	executing
5c7a6f31afdade00013a4f31 >	centralized	locoo	proproprotetd	executing

Log tracking,
execution tracking

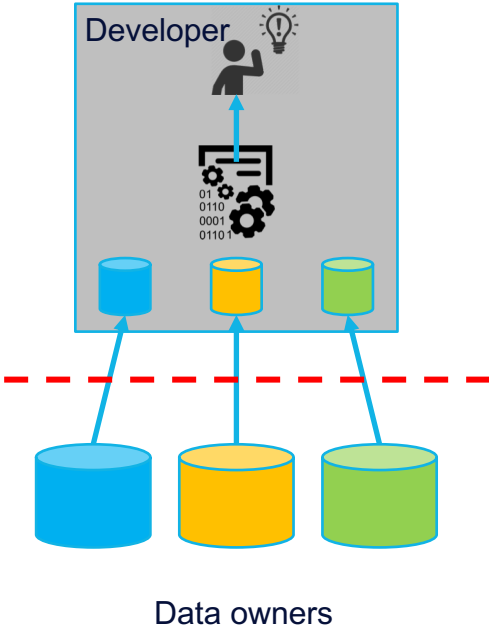
Dec 2018 Mar 2019 Mar 2020

ESSENTIAL INFRASTRUCTURE ARCHETYPES

MANY VARIANTS: FOCUS ON CONSORTIUM DRIVEN APPROACH TO ORGANIZE TRUST

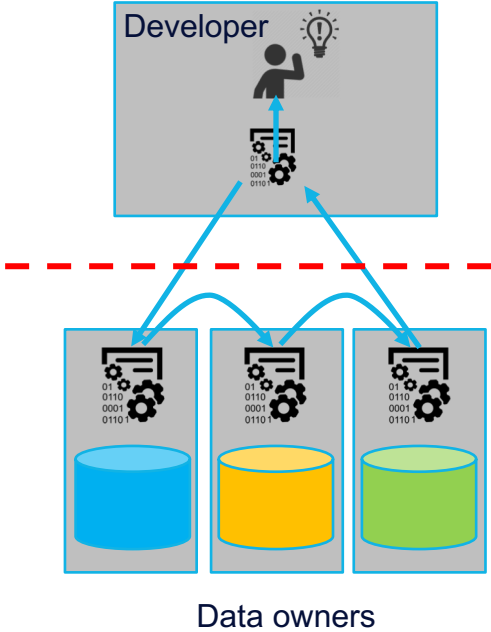
Centralized

Bring data to the algorithm



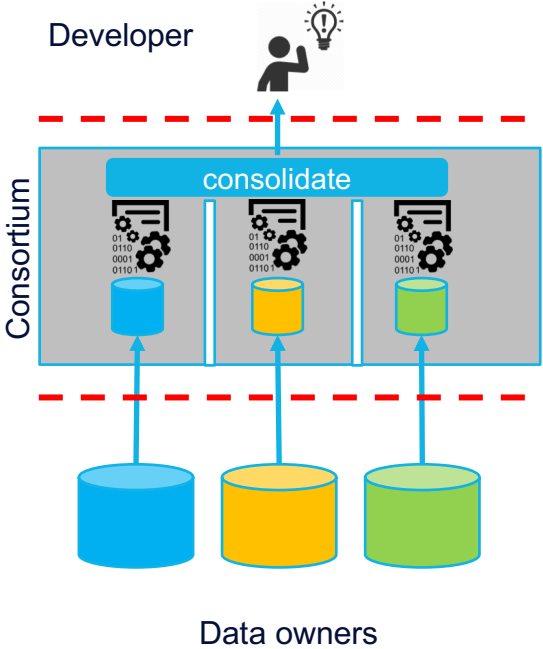
Distributed

Bring algorithm to the data



Federated

Using trusted infrastructure

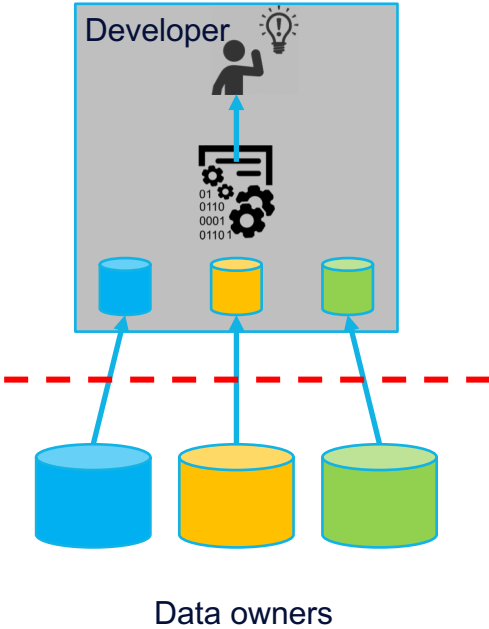


ESSENTIAL INFRASTRUCTURE ARCHETYPES

PROTOTYPE: CONSORTIUM DRIVING SECURITY & INFRASTRUCTURE ARCHITECTURE

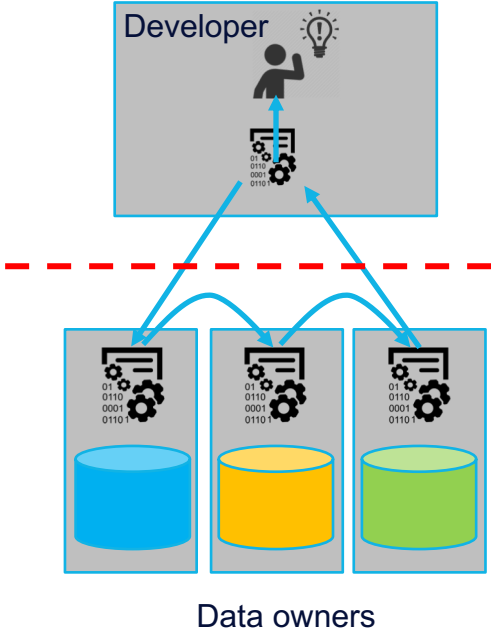
Centralized

Bring data to the algorithm



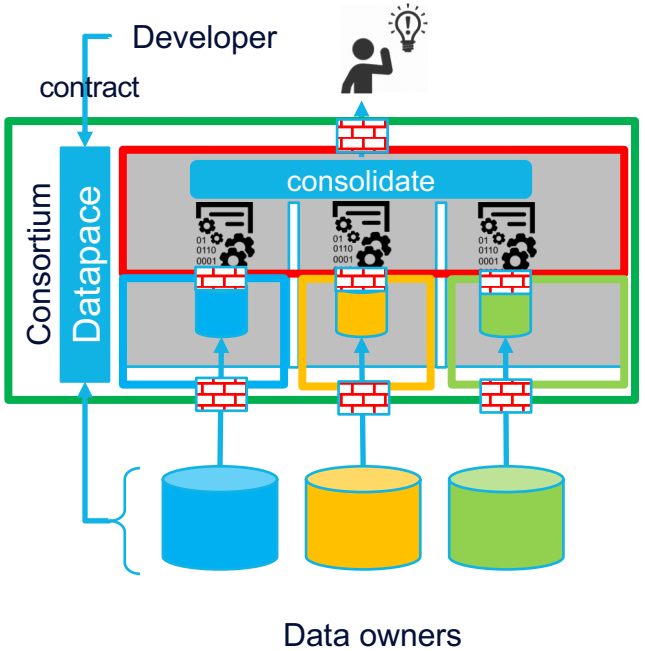
Distributed

Bring algorithm to the data



Federated

Using trusted infrastructure



DIGITAL DATA MARKETPLACE ARCHITECTURE

RESEARCHING IMPLEMENTATION OF ESSENTIAL ELEMENTS

