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Establishing a Digitally Integrated Modern Energy System

ENA Data Working Group, 26th June 2020

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YODA

Programme Approach

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Workstream 1: Sector Engagement

User Persona Mapping
Prioritised User Functionality
Operational Aspirations & Challenges

Workstream 2: Solution Blueprint

Data Architecture
Platform Roadmap
Alpha Test Plan

Workstream 3: Data Quality

Common Data Licenses
Data Transparency Profiling
Data Obfuscation & Protection Techniques

Workstream 4: Business Impact

Exploitation Plan
Indicative Draft Business Model
Alpha/ Beta Partner Ecosystem

Commercial Framework Considerations

Open front-end, direct access, subscription, transactional cost

Service Delivery Considerations

Cloud deployment, managed service, SLA's, access governance

Success Requirements

1) Access to data
2) Reach & contribution
3) Cyber security and integration challenges

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Our Journey: to develop a user centered online digital architecture platform started with a simple idea

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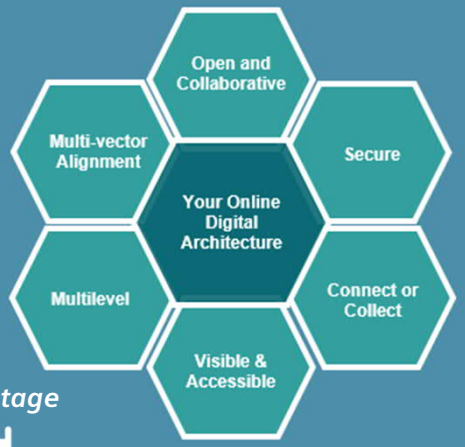
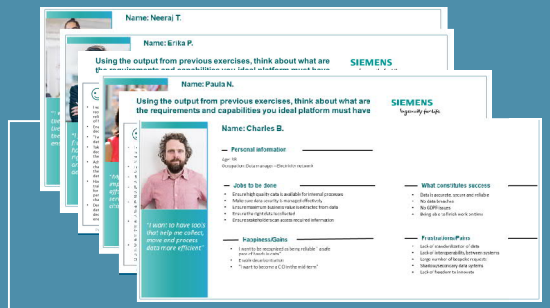
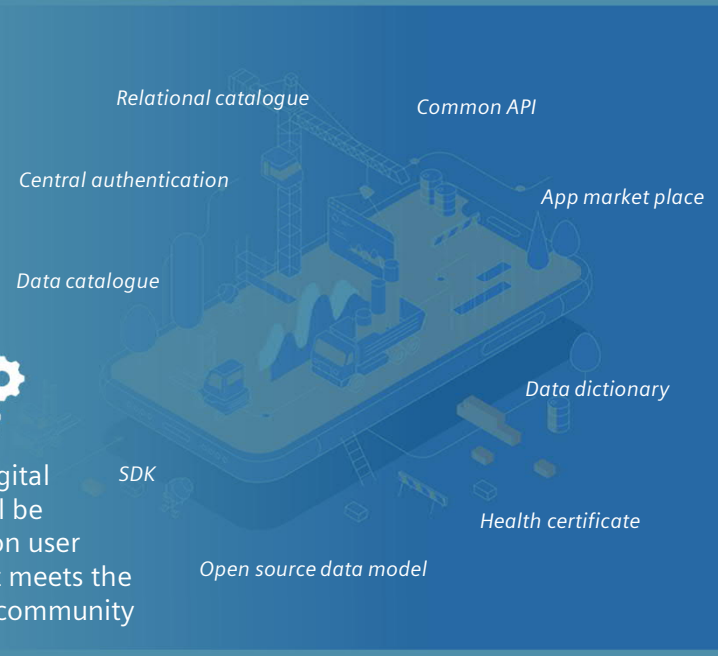


Bid stage





Our aim

To have an open and accessible data for all to drive insights, innovation and impact in support of the Net Zero challenge

Our approach

A design thinking approach was used to fully understand user's needs and requirements which then could be translated into the platform

Our next steps

Tomorrow, the Online Digital Architecture platform will be developed purely based on user requirements to ensure it meets the needs and wishes of the community

YESTERDAY | ***TODAY*** | ***TOMORROW***

Source: animation by Dribbble.com

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Diversity was essential for identifying such relevant insights for the Online Digital Architecture Platform

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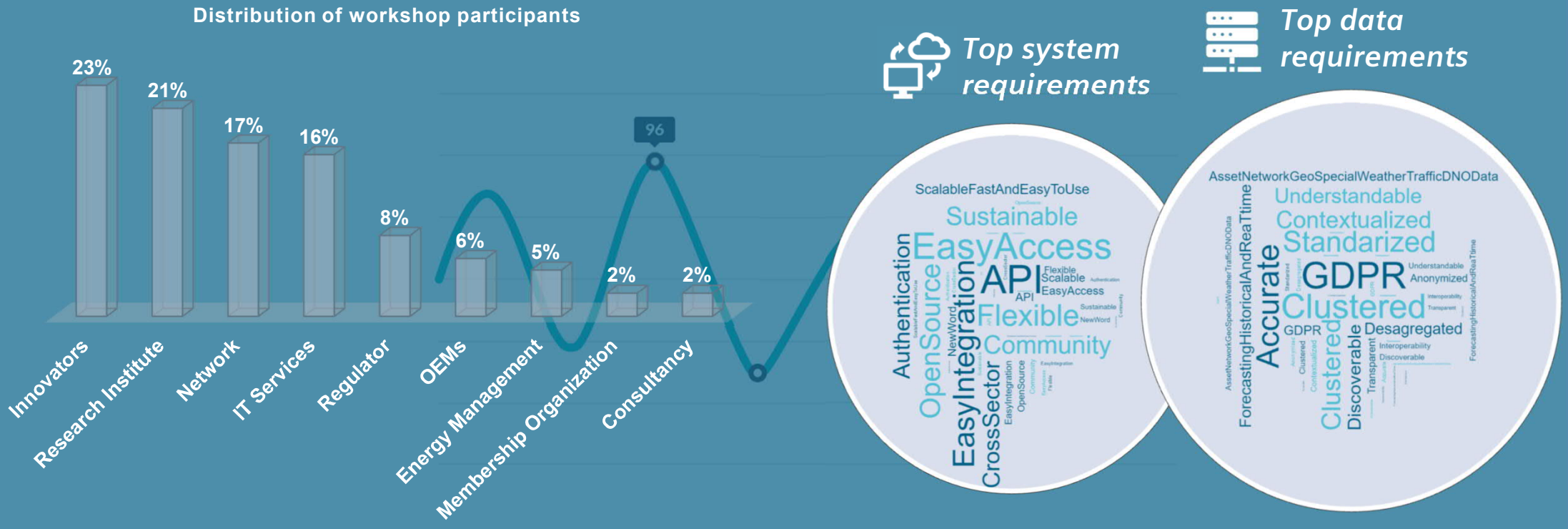

Network: Electricity 67%, Gas Distribution 27%, Transmission 7%

Source: animation by Dribbble.com

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META-Model – common data, multiple perspectives

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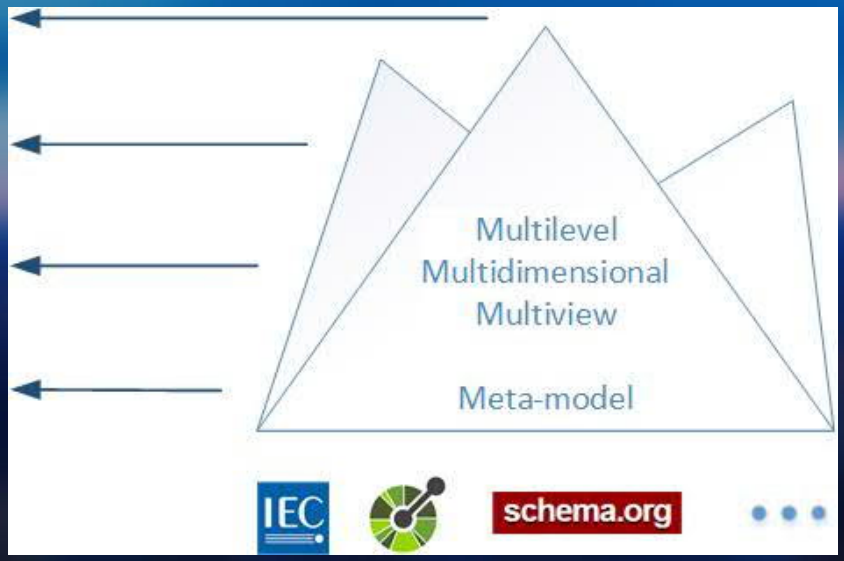

The Challenge

Using common data to enable a plethora of user-orientated views

The Approach

Utilising meta-models to create flexible and extensible user-defined interpretations

The Next Steps

Testing the principles with utility data to align with workshopped user-personas

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Your Online Digital Architecture

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Innovation via Applications

e.g., EV integration

YODA Insight-Arena

Engage, Share, Roadmap & Incubate

YODA MARKETPLACE

YODA CENTRAL DATA EXCHANGE ARCHITECTURE

YODA BROKER

YODA DATA CONSUMER

YODA API Tooling

Platform A

Platform B

Platform C

Platform D

Platform N+

Energy Map

Data Catalogue

Asset Register

Future Proofing Principles

- Flexible API tooling to enable wide integration with the meta-model
- Flexible & Extensible Data Structure
- Brokerage services to interconnect data requestors and providers
- User Centric-Roadmapping

How networks can continue to play a part

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Advance Requirements

As data providers and data users, what do networks **require** from this platform and what **challenges** would need to be overcome to deliver value for the sector

DFES, Data & Looking Forward

How could the common data platform support the management of underlying scenario data used in DFES?

Supporting YODA

We would welcome the support and collaboration of network(s) as we map and model existing data and progress into the Alpha stages

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Thank You, Any Questions?

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