



# Track 3

## Data Provider: SIEMENS

25.05.2021





# Smart manufacturing advances but workers are left out.

"The problem usually isn't a lack of investment in technology, but a lack of accompanying investment in companies' most important asset: their people."

**McKinsey, The future of manufacturing: Your people**





**"On average each worker spends  
2 to 3 hours searching per day!"**



Daniel Betz  
Delivery Team - Customer Oriented Solutions





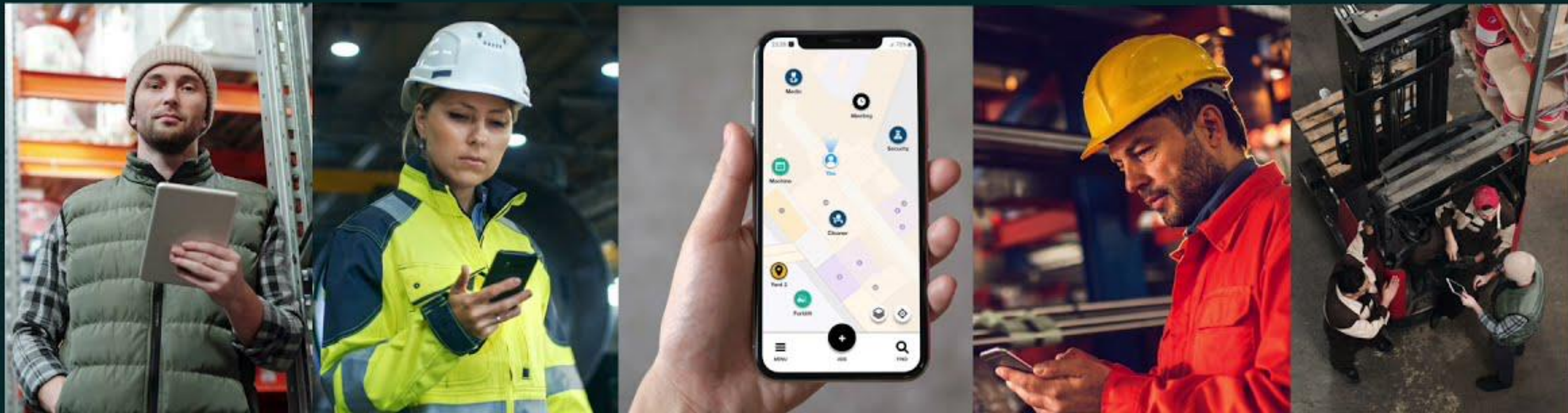


# Solution Mockup - Click on the image to play the video



Direct data and therefore information access will change  
how frontline workers do their job for the better.

Let's make it a reality today!





# Bridging 2 data silos

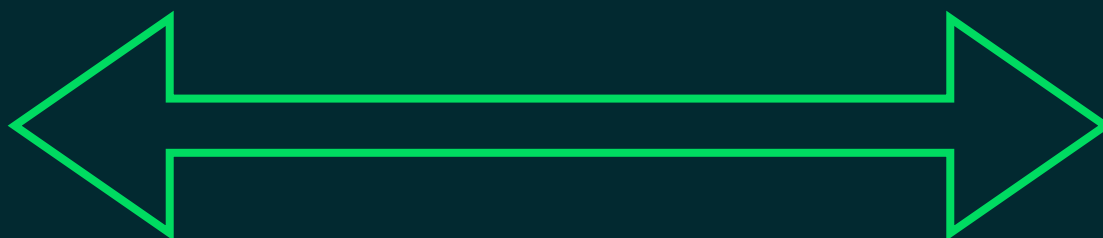
**SIEMENS**

*Ingenuity for life*



The workplace silo

Trackers  
Sensors  
Analytics  
Geofences  
Events  
Enriched data



FORMATION



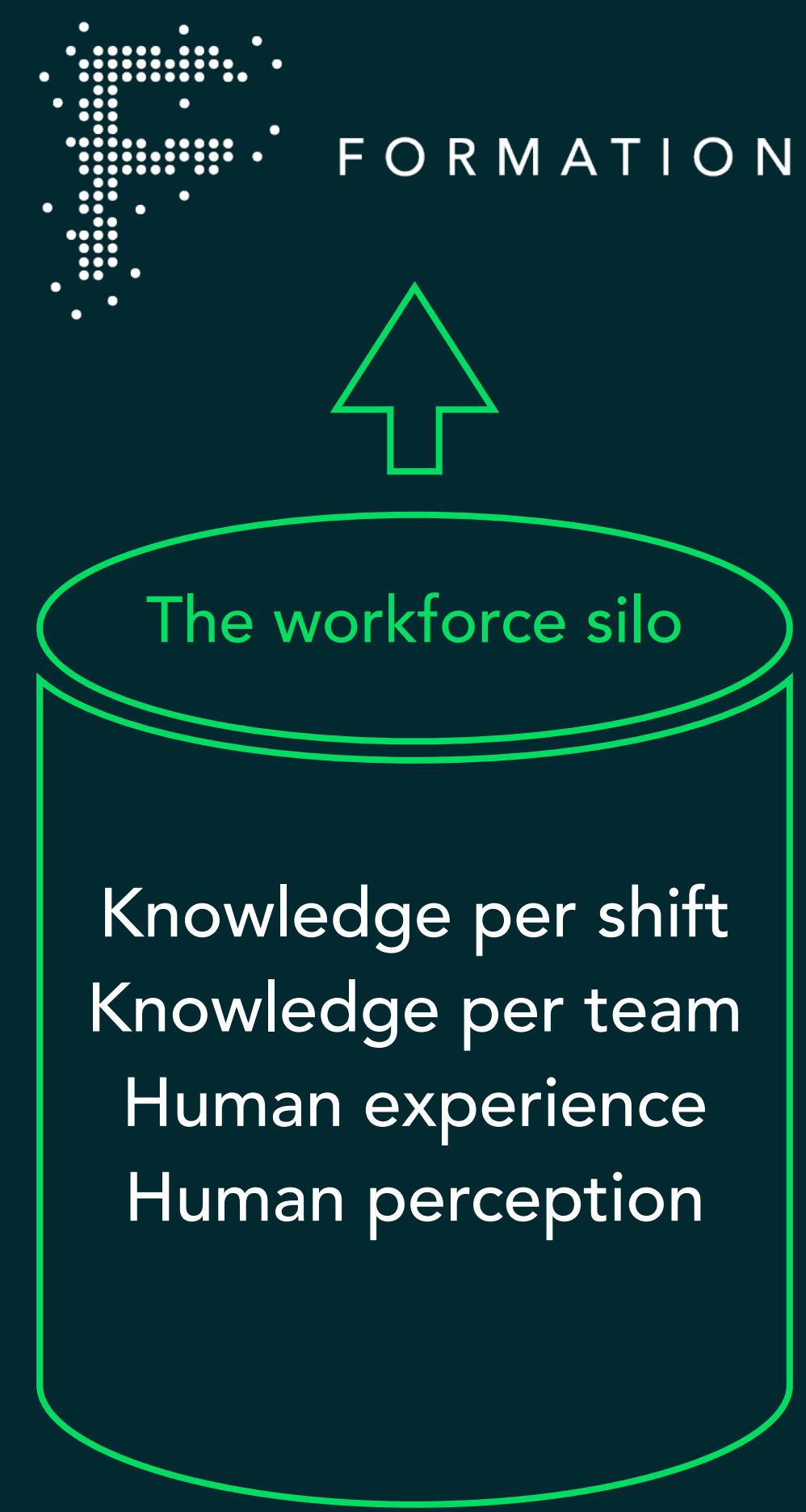
The workforce silo

Knowledge per shift  
Knowledge per team  
Human experience  
Human perception





# Bridging 2 data silos





# Data Value Chain

Creating better situational awareness for workers today and enabling further (future) use cases:

- Identify areas of interest through clustering
- Provide auditing information
- Anomaly detection
- Predictive maintenance & scheduling
- Event sourcing & real time KPIs





## Data generation

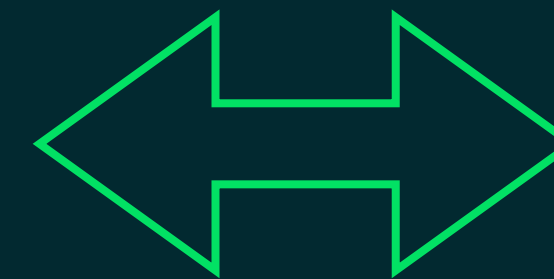
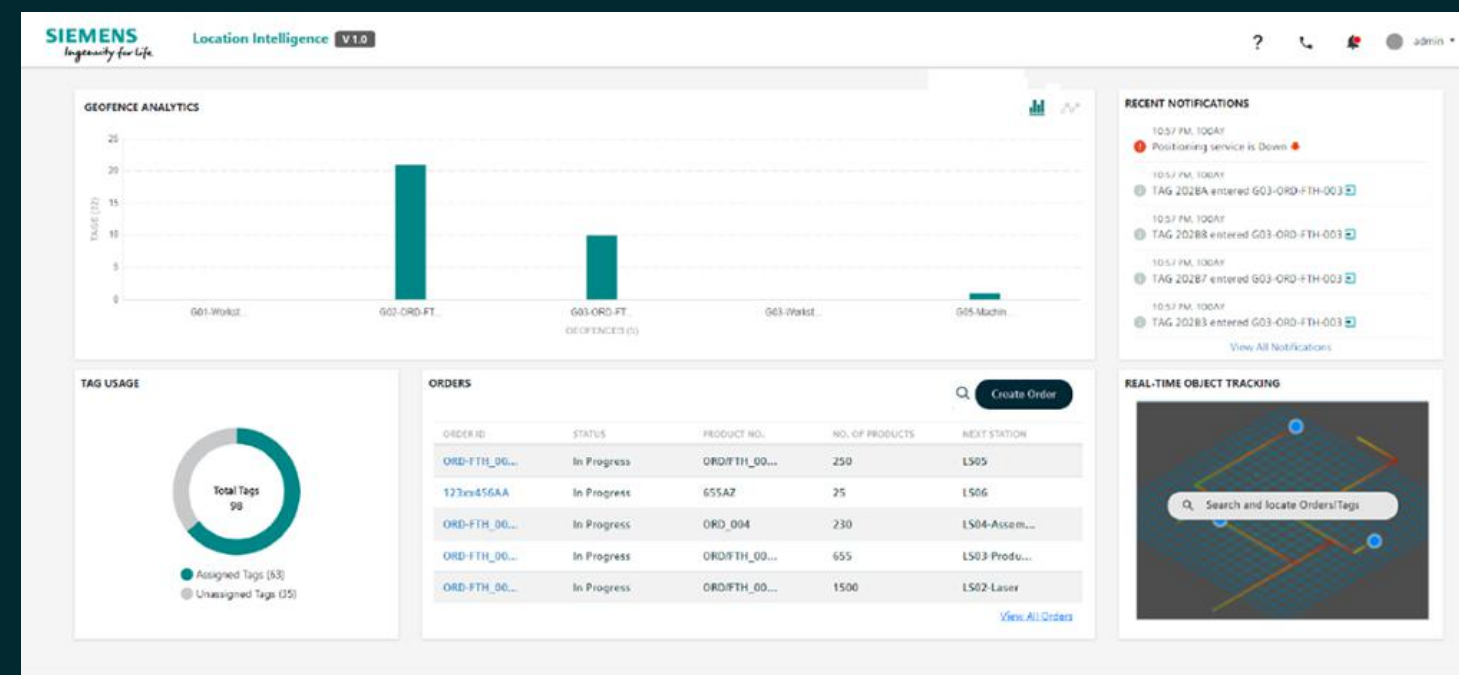


3<sup>rd</sup> party tracker,  
IIoT, MES etc.

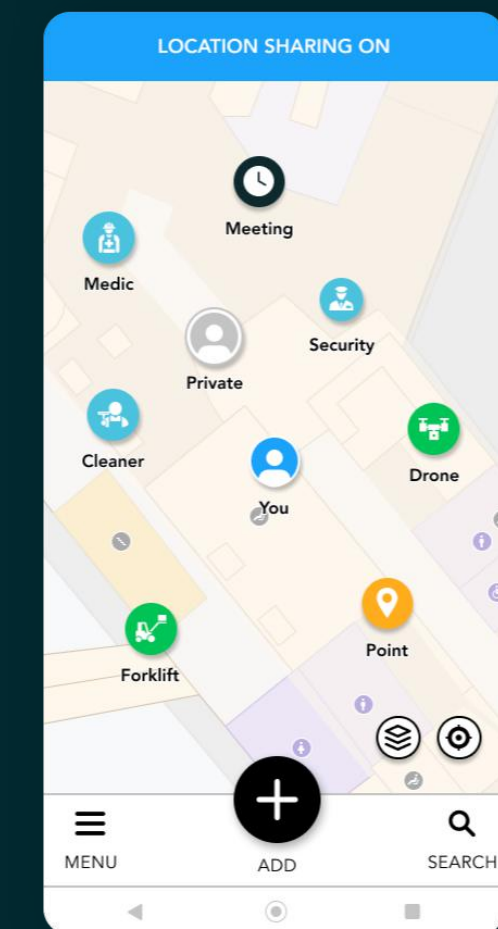


## Location Intelligence

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## Worker access







# Data generation



3<sup>rd</sup> party tracker,  
IIoT, MES etc.

New location tech  
(5G etc.)

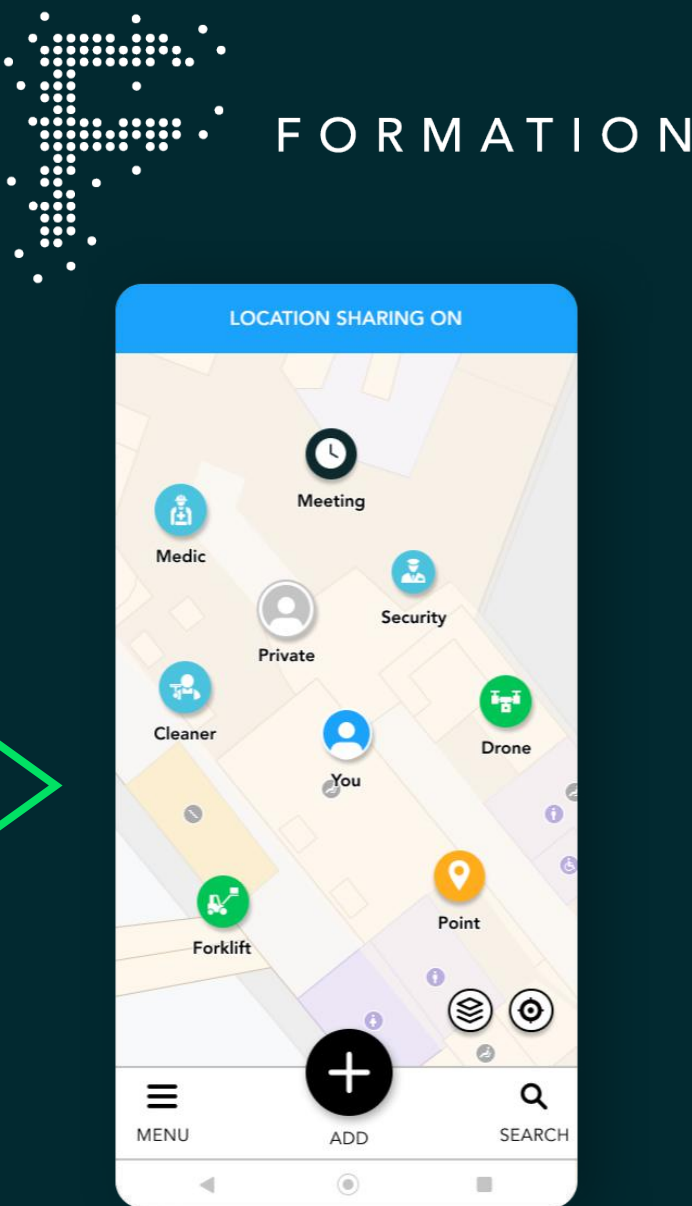
3<sup>rd</sup> party  
developers



# Customer Data



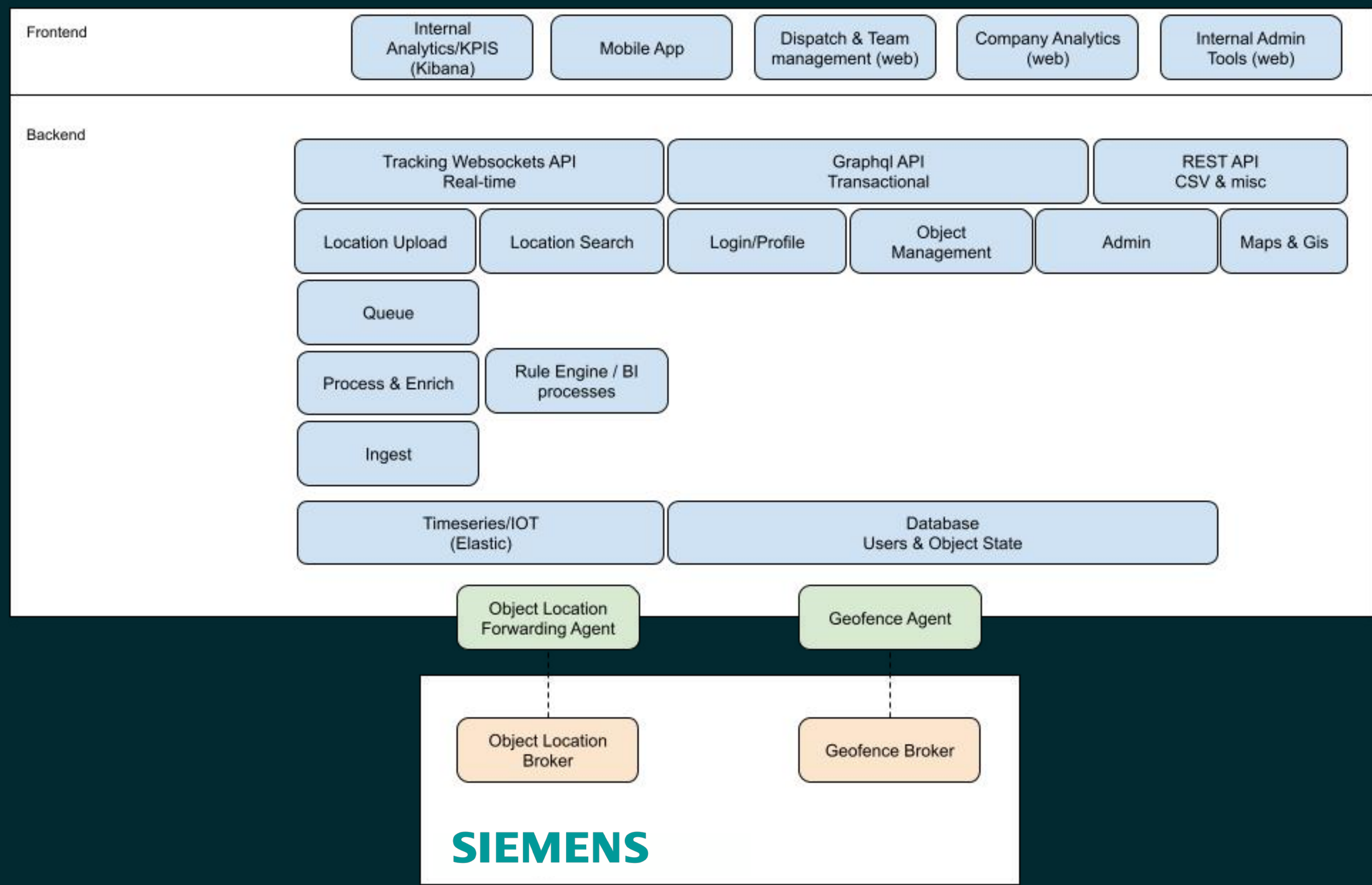
# Worker access







# Infrastructure overview







## Tools to ensure scalability







# Secure and scalable cloud solution

**TECHBOOST**  
STARTUP

Ein Programm der 

## Deutsche Telekom is a founding member of Gaia-X





# Data governance and compliance

We assure our users' data is safe & GDPR compliant:

- Client data isolation
- Role based security to protect company and group data
- Opt-in & time limitation for location sharing
- SSL encryption for all services
- Bcrypt is used to securely store user credentials
- JWT tokens for API authentications

We go beyond legal compliance:

- Active discussions with German workers unions





# QA & risk management

## Project risks:

- Operational issues (e.g. access to physical test environment)
- Access to SIEMENS data
- Data quality & suitability

## Risk mitigation:

- Continuous contact and exchange with SIEMENS
- Local software installation for early testing and assumption validation
- Initial release at SIEMENS demo environment for live testing
- SIEMENS is installing a public WIFI for the demo location





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Let's make it a reality today!



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