

OSIsoft Engineering Roadmap

Maximo Moglia Claps – Account Manager

July 6th, 2017



Our Vision

Assets



**Multiple
Sensors**

Plant



**Multiple
Assets**

Enterprise



**Multiple
Plants**

Community



**Multiple
Enterprises**

1

Accessing Operational Data



Expanding the OSIsoft portfolio of offerings

Connectivity

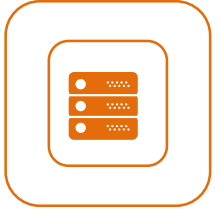
Connectors /
Interfaces



Embedded
Connectors



Edge
Historian

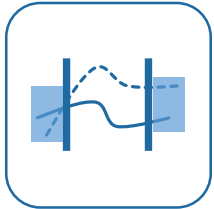


Enterprise

Notifications



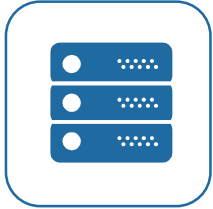
Event
Frames



Developer
Technologies



Server



Asset
Analytics



Health
Tooling



Visualization

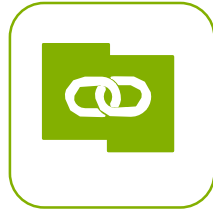
Vision



Manual
Logger

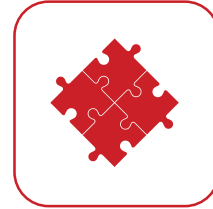


Datalink



Integration

BA



SAP



Esri



Microsoft



Enterprise wide
Streaming
Queries

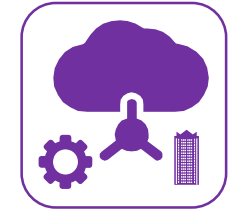


Cloud Services

Cloud Connect



Data Sharing



Display Sharing



Accessing Operational Data

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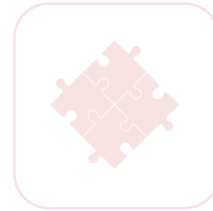


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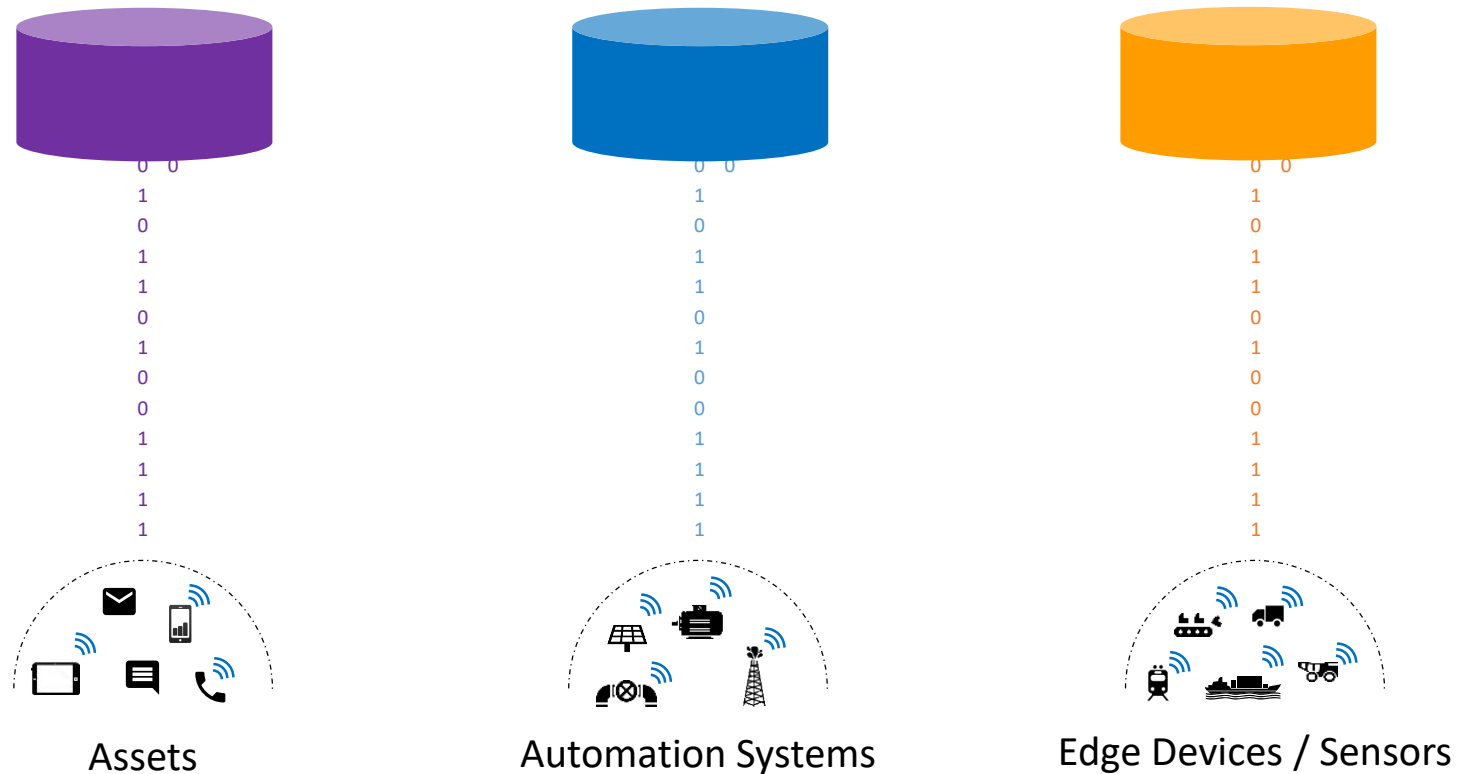
Display Sharing



The Industrial Internet of Things (IIoT) has inherent risks and challenges

Data Silos

One version of the truth?
Data is isolated from other use cases
Data management challenges

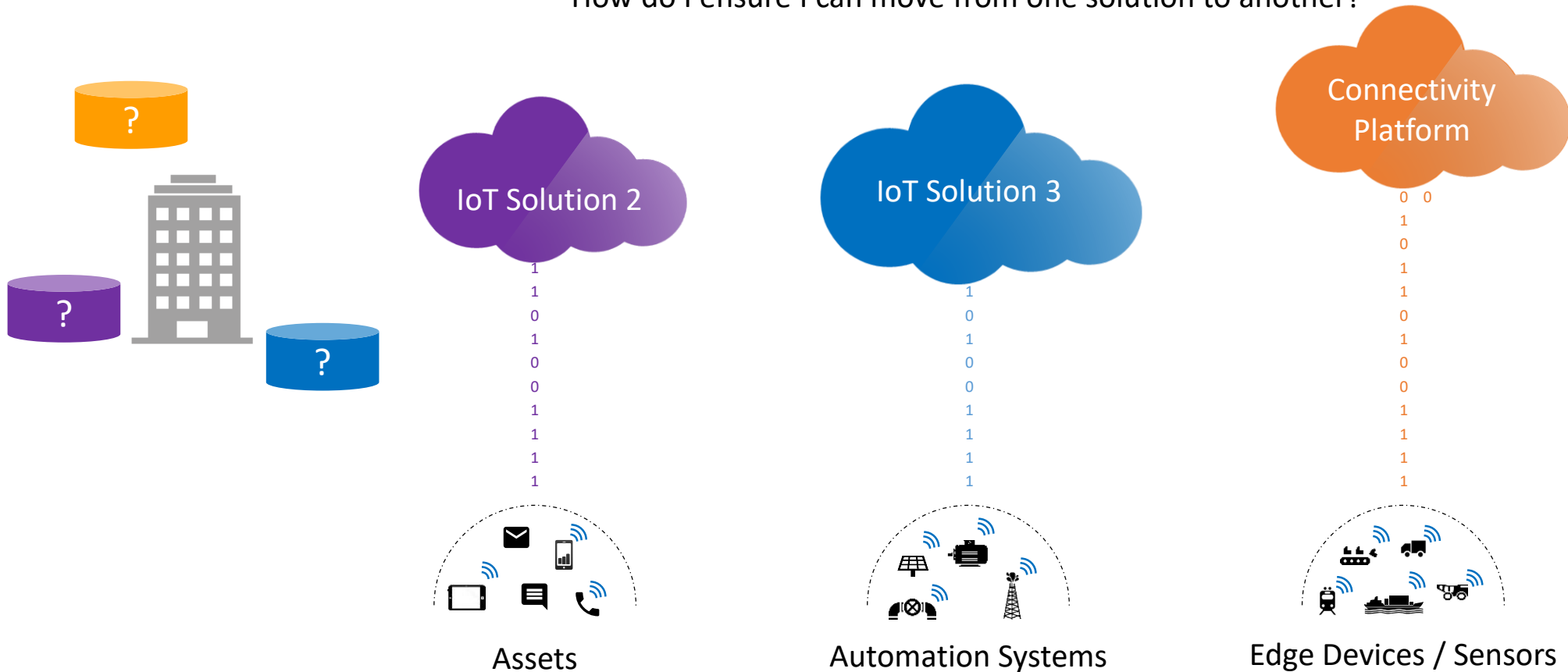


IIoT risks and challenges: Data Ownership

Data Ownership

Do I have access to my own data?

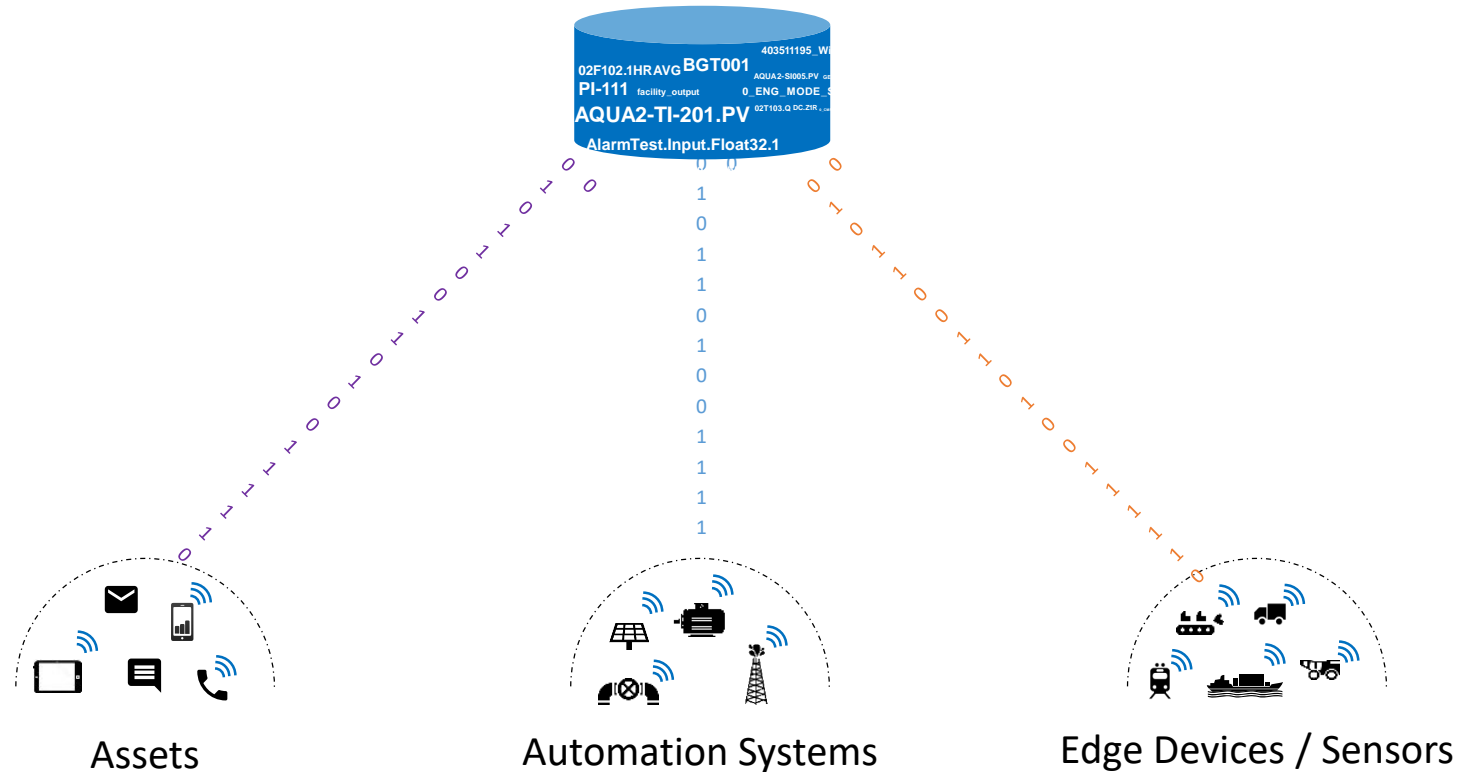
How do I ensure I can move from one solution to another?



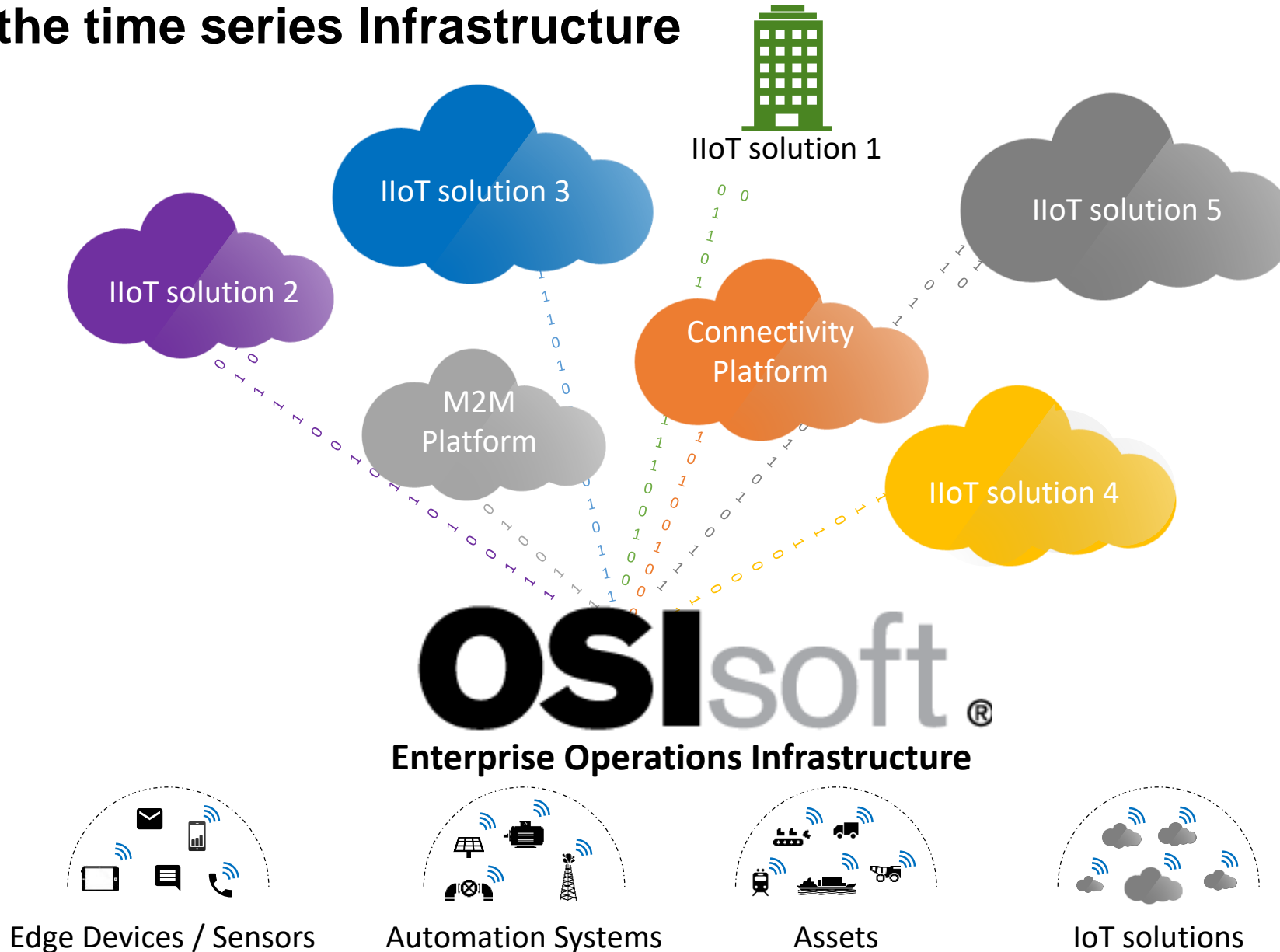
IIoT risks and challenges: Data Context

Data Context

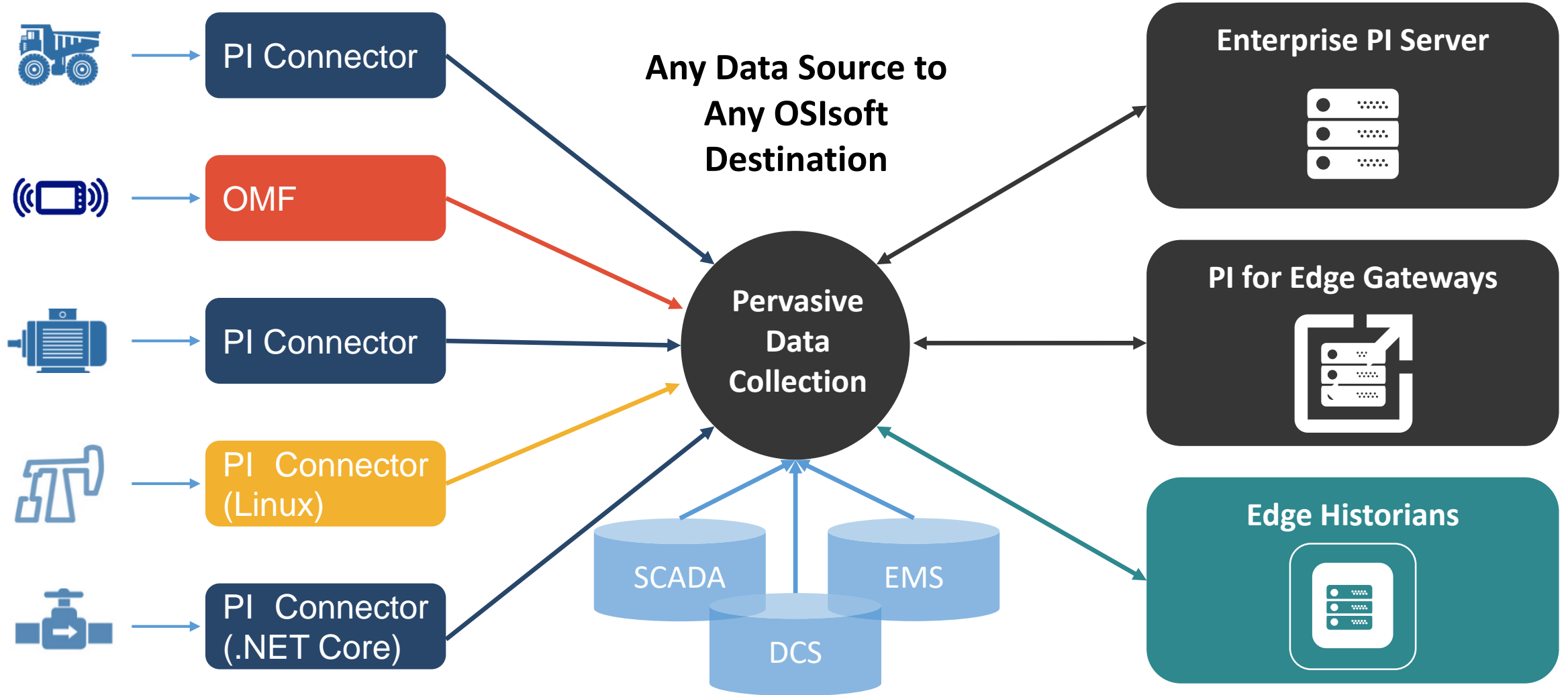
Understanding the criteria to analyze data is as important as the data itself
The further data moves from SME's the more important context is



Extending the time series Infrastructure



A true operational data infrastructure





Evolution of the Enterprise **2**

Strengthening the Enterprise

Connectivity

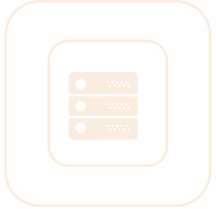
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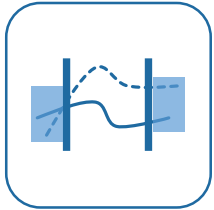


Enterprise

Notifications



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Technologies



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Tooling



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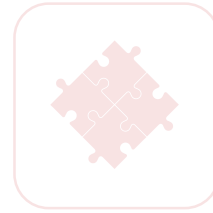


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Cloud Services

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Display Sharing



Initial Focus: Evolution of the PI System

Expand



Increase the **volume**
& **velocity** of
operations data

Extend



Associate **quality**
information with
measured values

Ease



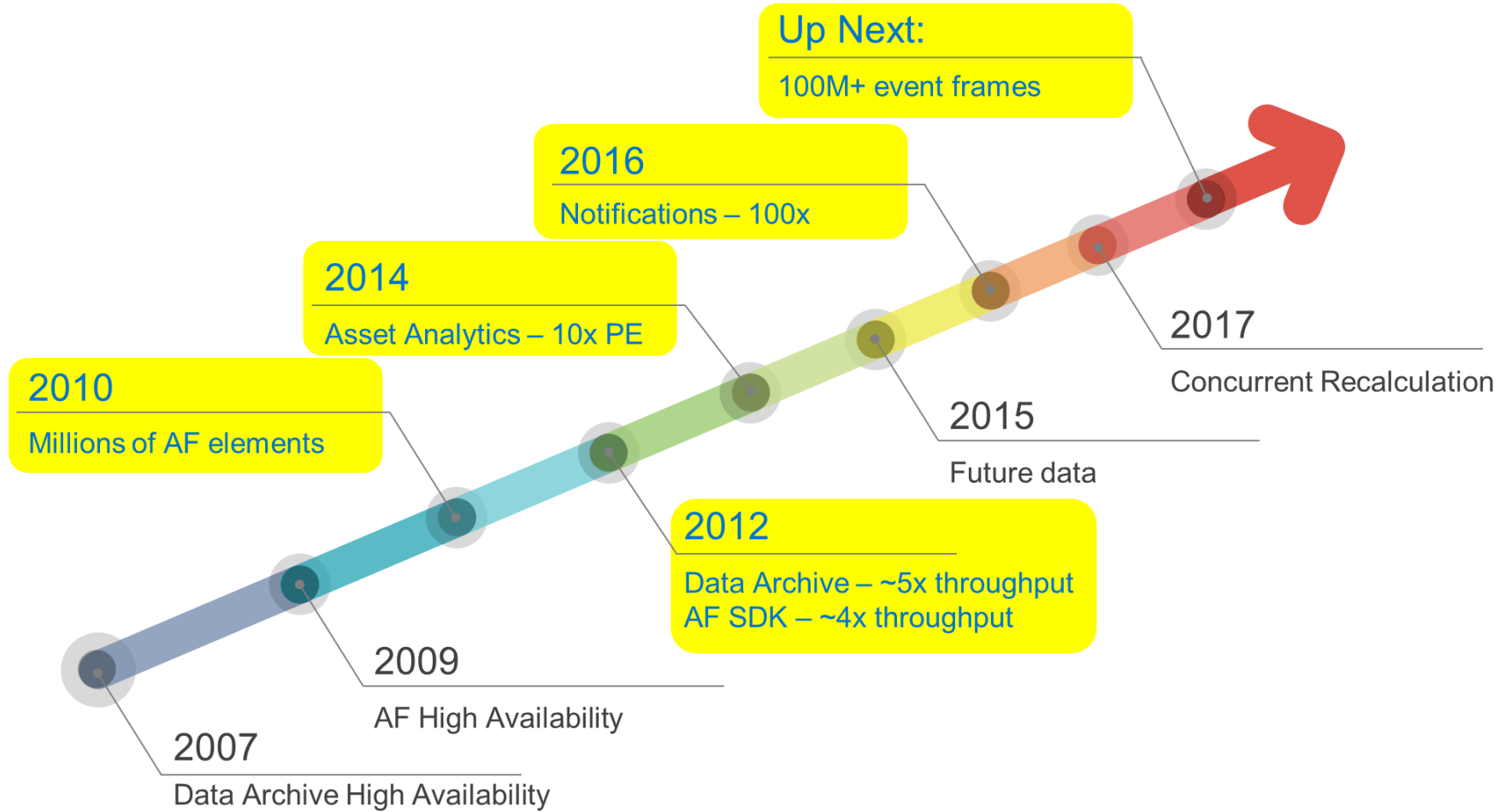
PI system tools
designed to work across
the enterprise

Expand the PI System: Performance and Scalability

Expand



Increase the **volume**
& **velocity** of
operations data



Extend the PI System: Data Quality

Extend



Associate **quality** information with measured values

Data Collection



Collect quality information from source systems

Storage



Natively associate quality information with data

Asset Analytics



Calculations take into account quality of inputs

Developer's Technology



Ingress and egress of data with quality via programmatic means

Visualization



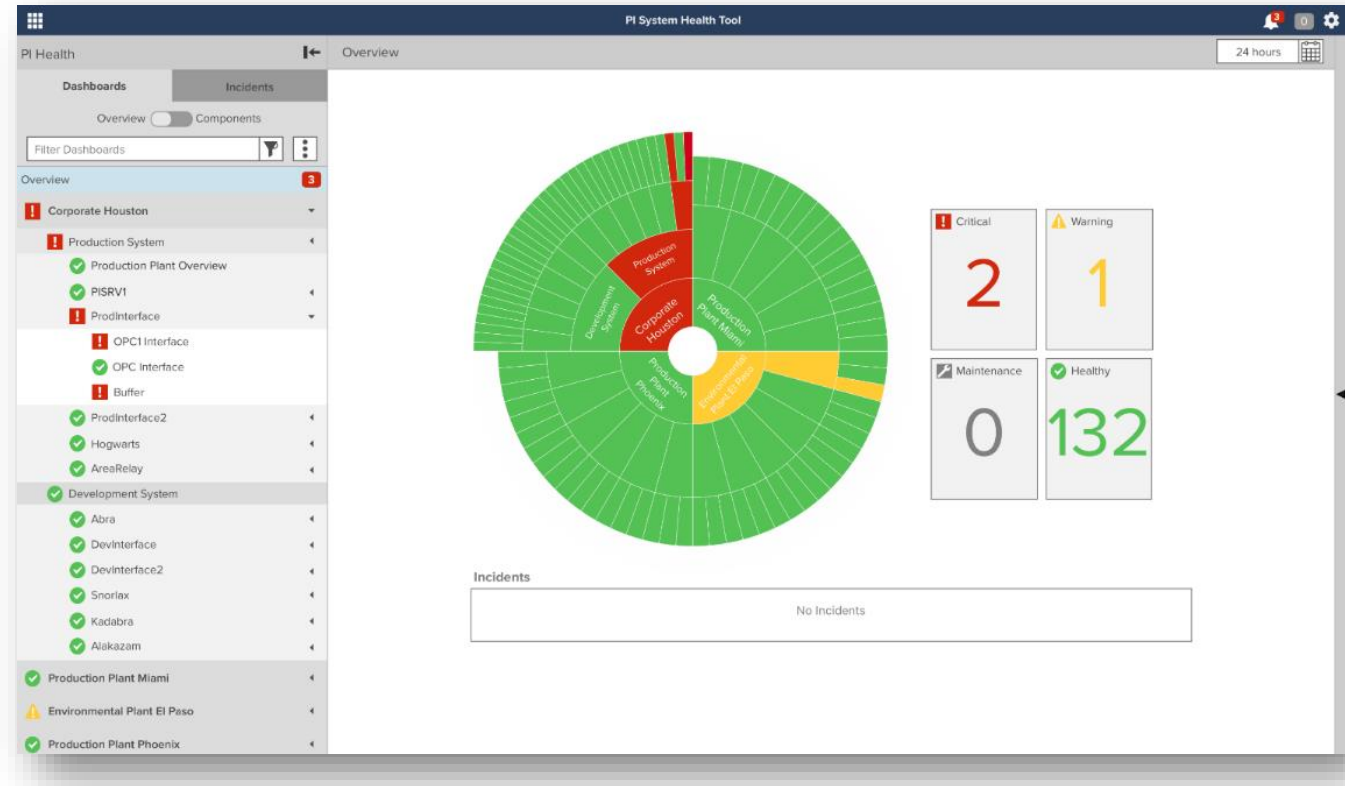
Display data with quality information

Ease of use with the PI System: Management and Administration

Ease



PI system tools
designed to work across
the enterprise





3

Visualizing Operations Data

Visualizing Operations Data

Connectivity

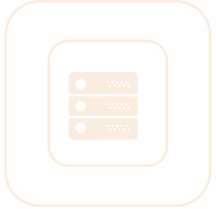
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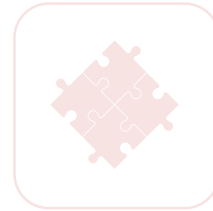


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Queries



Cloud Services

Cloud Connect



Data Sharing

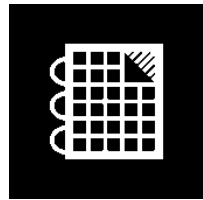


Display Sharing



An Integrated Visualization Platform

Today



PI ProcessBook
Display Editor
Process Monitoring



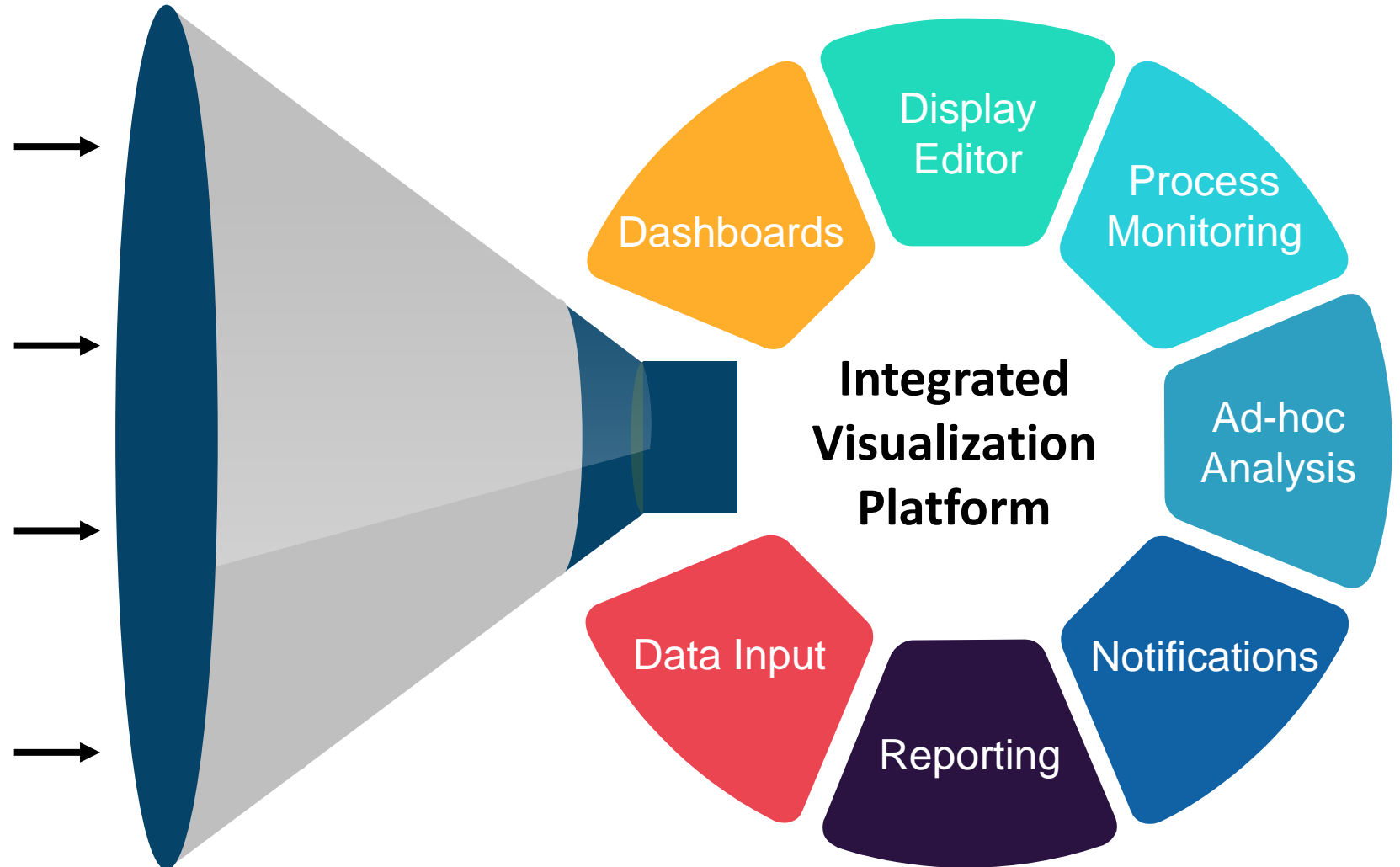
PI Coresight
Ad Hoc Analysis
PB Display Viewer



PI WebParts
Dashboards



PI Manual Logger
Manual Data Entry



Collections

Drill-in Navigation

Mine Truck Landing Page

Mine_Truck_1 Mine_Truck_2 Mine_Truck_3 Mine_Truck_4
Mine_Truck_5 Mine_Truck_6

Mine_Truck_2 Overview

Brake Display Frame Display Frame Roll Analysis

Manufacturer	Type	Driver	Ground Speed
Volvo	V840	Tommy TooFast	0 m/h
Route	Status	Operation State	Load
Route B	Running	Loading	0 ton

Pinned Events

★ Pinned

- OSIsoft_201581181621 (CLEANING)
8/11/2015 4:16:21 AM - 8/11/2015 6:46:49 AM
- OSIsoft_2015810231135 (CLEANING)

Search Results

- OSIsoft_201581202655 (CLEANING)
- OSIsoft_2015810232451 (CLEANING)
- OSIsoft_20158519028 (CLEANING)
- OSIsoft_201585185135 (CLEANING)
- OSIsoft_2015853150 (CLEANING)
- OSIsoft_201584104839 (CLEANING)
- OSIsoft_201584103941 (CLEANING)

Model PizzaStar
Speed
2/8/2017 10:44:55 AM
54.817
247.19

Model PizzaStar
Speed
2/8/2017 10:44:55 AM
85.854
202.56

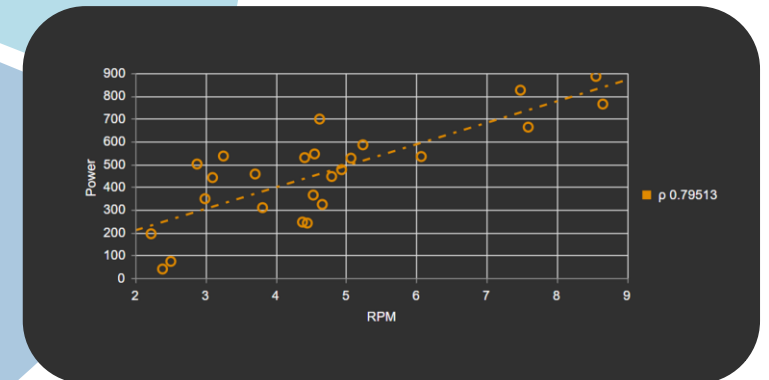
Model Jcar SuperVan
Speed
2/8/2017 10:44:55 AM
261.68
69.024

Model Jcar SuperVan
Speed
2/8/2017 10:44:55 AM
52.727
161.9

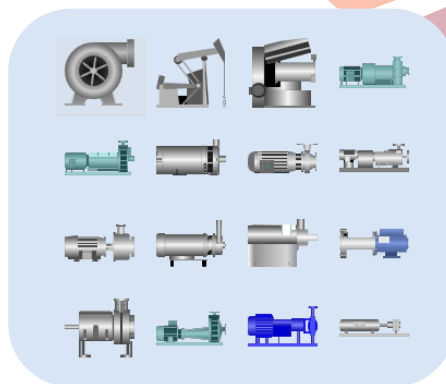
Model StoreRunner
Speed
2/8/2017 10:44:55 AM
No Data

Model StoreRunner
Speed
2/8/2017 10:44:55 AM
No Data

XY Plot



Graphic Library



Events Table

Event Name	Asset	Start Time	End Time	Acknowledgement
Engine Temperature High 2017-01-26 06:21:43.000	SP4	1/26/2017 6:21:43 AM	1/26/2017 7:57:43 AM	Acknowledge
Engine Temperature High 2017-01-26 07:14:43.000	SP6	1/26/2017 7:14:43 AM	1/26/2017 8:22:43 AM	Acknowledge
Gas Tank Level Low 2017-01-26 07:23:43.000	SP8	1/26/2017 7:23:43 AM	1/26/2017 7:32:13 AM	Acknowledged
Gas Tank Level Low 2017-01-26 07:34:13.000	SP8	1/26/2017 7:34:13 AM	1/26/2017 7:36:13 AM	Acknowledged
Engine Temperature High 2017-01-26 08:25:13.000	SP6	1/26/2017 8:25:13 AM	1/26/2017 8:25:43 AM	Acknowledged
Engine Temperature High 2017-01-26 08:29:13.000	SP6	1/26/2017 8:29:13 AM	1/26/2017 8:57:13 AM	Acknowledge

4

Answering Enterprise Questions



Answering Enterprise Questions

Connectivity

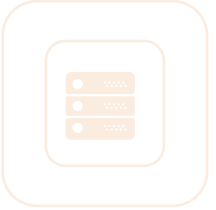
Connectors /
Interfaces



Embedded
Connectors



Edge
Historian



Enterprise

Notifications



Event
Frames



Developer
Technologies



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Asset
Analytics



Health
Tooling



Visualization

Vision



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Logger

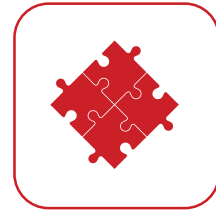


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Streaming



Enterprise wide
Queries



Cloud Services

Cloud Connect



Data Sharing



Display Sharing



Questions customers want to answer

What is my overall production in each region over the last year? How does this change over time?



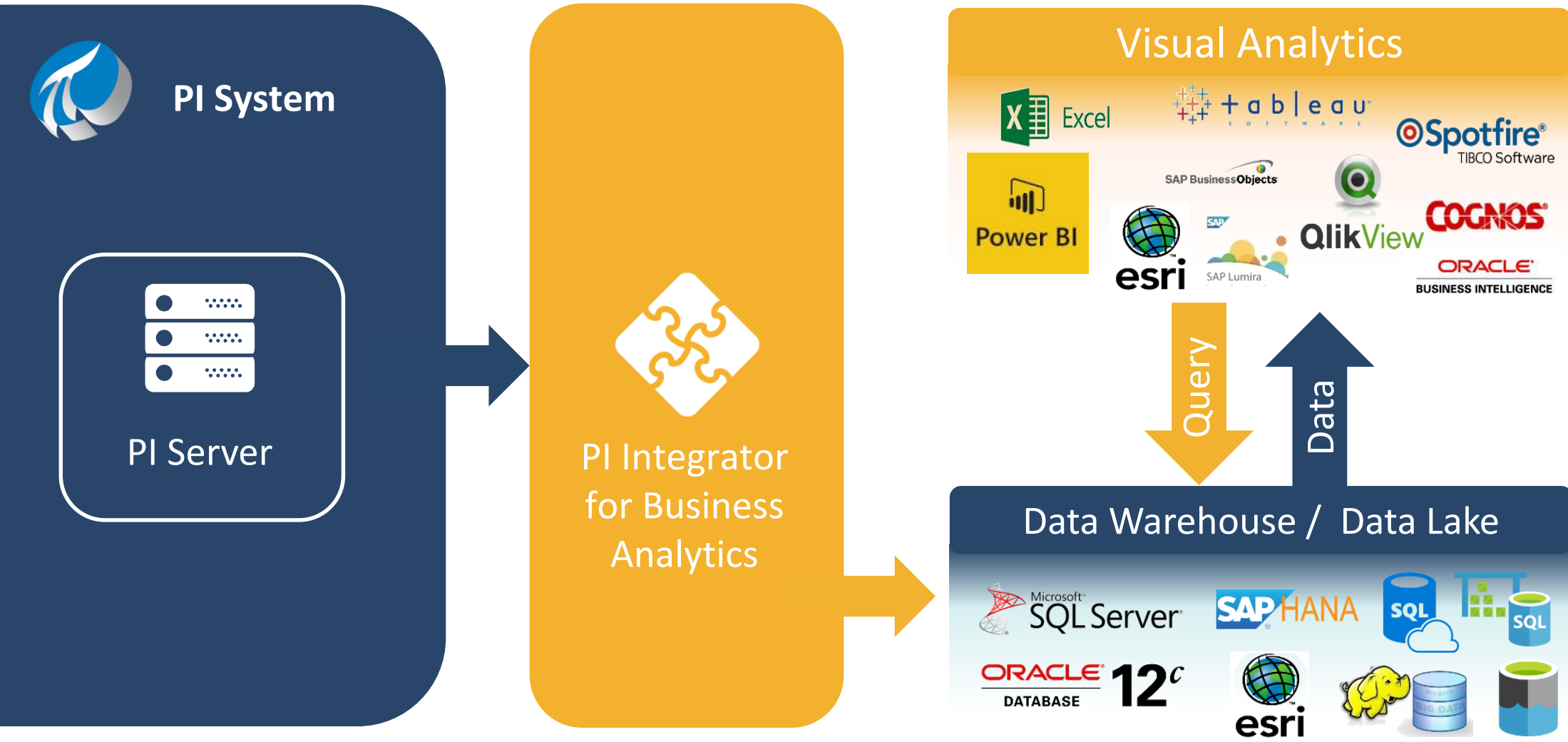
Did I produce within my compliance goals? When did I not comply? On which assets?



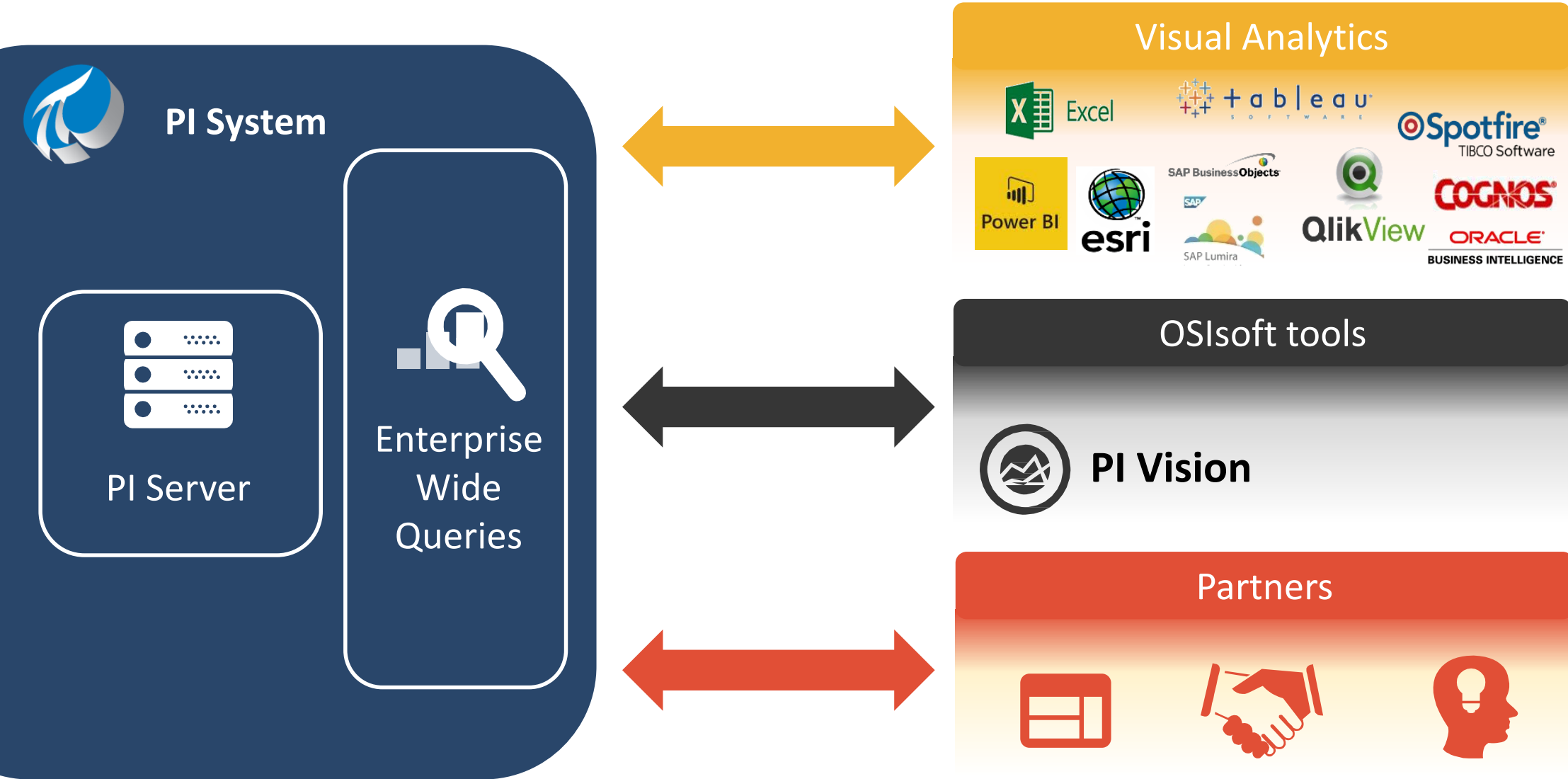
What assets are performing the best and worst? What factors are contributing to that performance? Which assets are most in need of maintenance?



They do this today using PI + Integrators



Direct Access from PI Vision, Partner Apps, and BI Tools



An impressionist painting with vibrant, textured brushstrokes in shades of red, orange, yellow, and blue, creating a sense of light and movement. A horizontal yellow band is overlaid across the middle of the image.

5

Complementary Cloud Services

Complementary Cloud Services

Connectivity

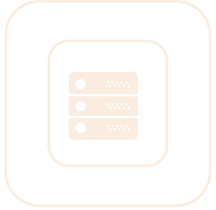
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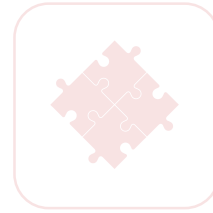


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Queries

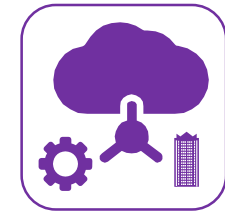


Cloud Services

Cloud Connect



Data Sharing



Display Sharing



Building an infrastructure approach

Cloud Services Platform



Sign-up
Services



Account
Management



Logging &
Telemetry

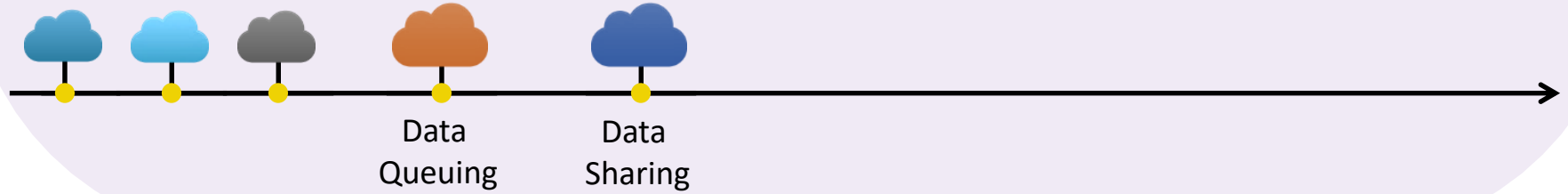
Building complimentary capabilities

Cloud Connect

**Commercial
Cloud Services
Offerings**



**Cloud Services
Platform**



Transforming platform services into commercial offerings

**Commercial
Cloud Services
Offerings**

Cloud Connect



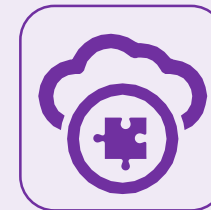
Data Sharing



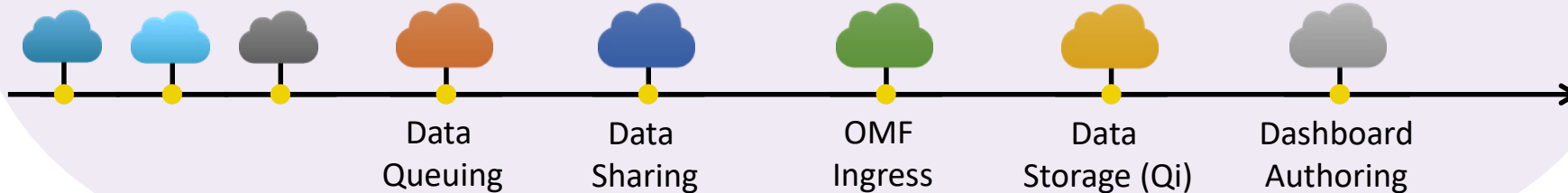
Display Sharing



Partners



**Cloud Services
Platform**



Building complementary capabilities

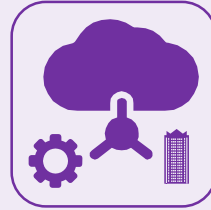
**Commercial
Cloud Services
Offerings**

Cloud Connect

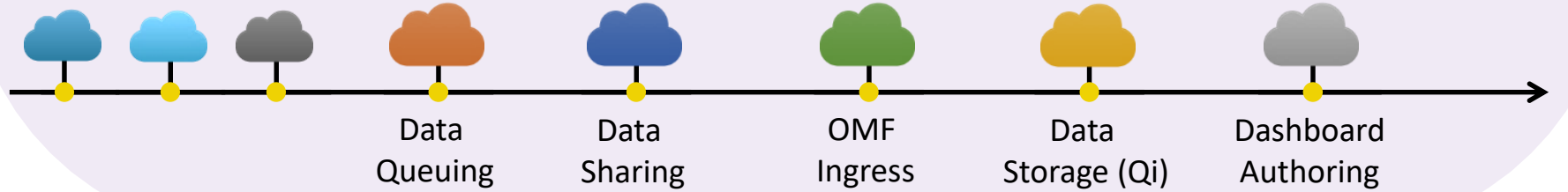
Data Sharing

Display Sharing

Partners



**Cloud Services
Platform**



**On-premises
capabilities**





Have an idea how to
improve our products?



**OSIssoft wants to hear
from you!**

<https://feedback.osisoft.com/>



Contact Information



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- mmoglia@osisoft.com
- Account Manager
- OSIssoft

감사합니다

谢谢

Danke

Merci

Gracias

Thank You

ありがとう

Спасибо

Obrigado