

# OSIsoft Roadmap 2017

Claudio Muller

29 de Agosto de 2017



# Nossa Visão

**Assets**



**Multiple  
Sensors**

**Plant**



**Multiple  
Assets**

**Enterprise**



**Multiple  
Plants**

**Community**



**Multiple  
Enterprises**

# Expansão do portfólio OSIsoft

## Conectividade

## Enterprise

## Visualização

## Integração

## Cloud Services

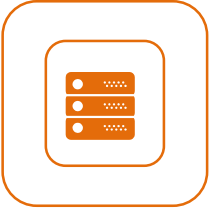
Connectors /  
Interfaces



Embedded  
Connectors



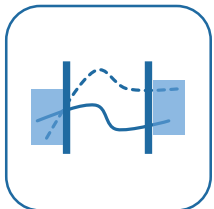
Edge  
Historian



Notifications



Event  
Frames



Developer  
Technologies



Server



Asset  
Analytics



Health  
Tooling



Vision



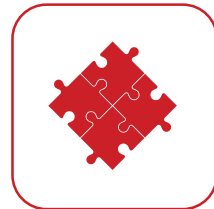
Manual  
Logger



Datalink



BA



SAP



Esri



Microsoft



Enterprise wide

Streaming



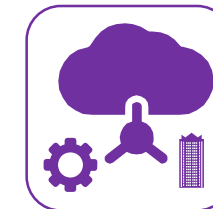
Queries



Cloud Connect



Data Sharing



Display Sharing



# 1

## Acesso aos dados operacionais



# OSIsoft é o caminho para o dado operacional: Conectividade

Conectividade

Enterprise

Visualização

Integração

Cloud Services

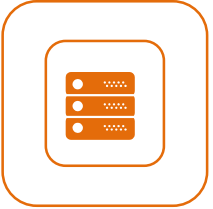
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Asset  
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Health Tool



Vision



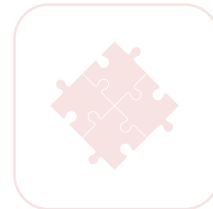
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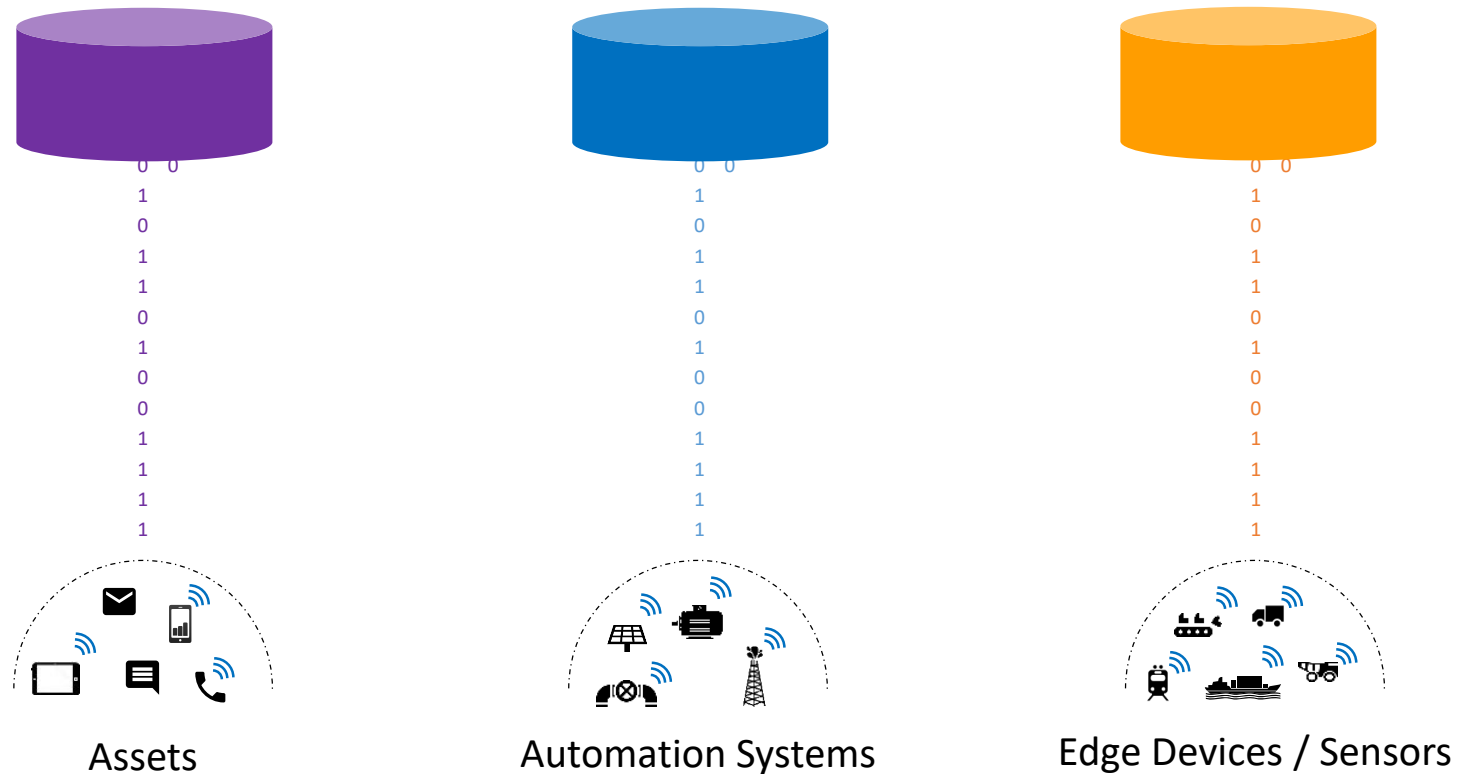
# Industrial Internet of Things (IIoT): Riscos e desafios

## Data Silos

Visão única?

Dado está isolado de outros

Desafios do gerenciamento de dados

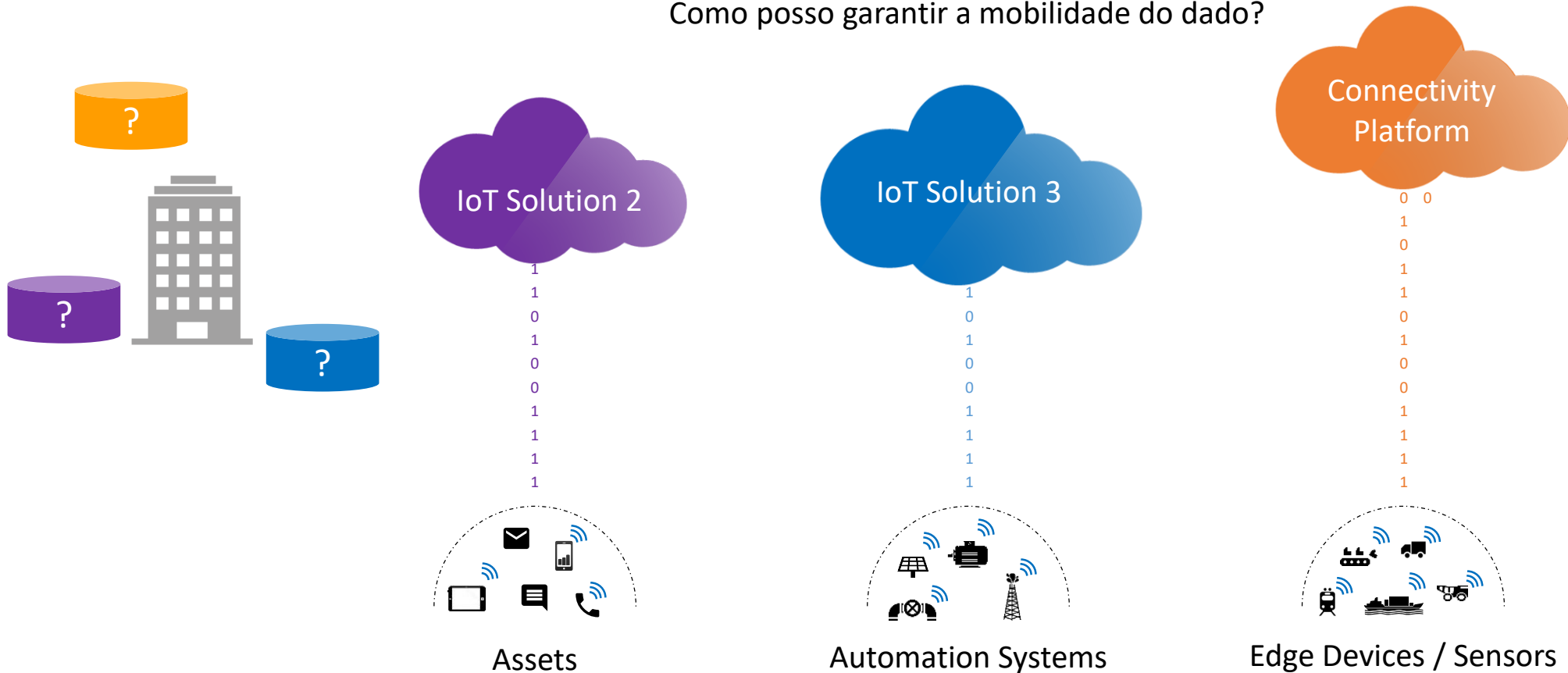


# IIoT Riscos e desafios: Propriedade do dado

## Propriedade do dado

Eu tenho acesso ao meu próprio dado?

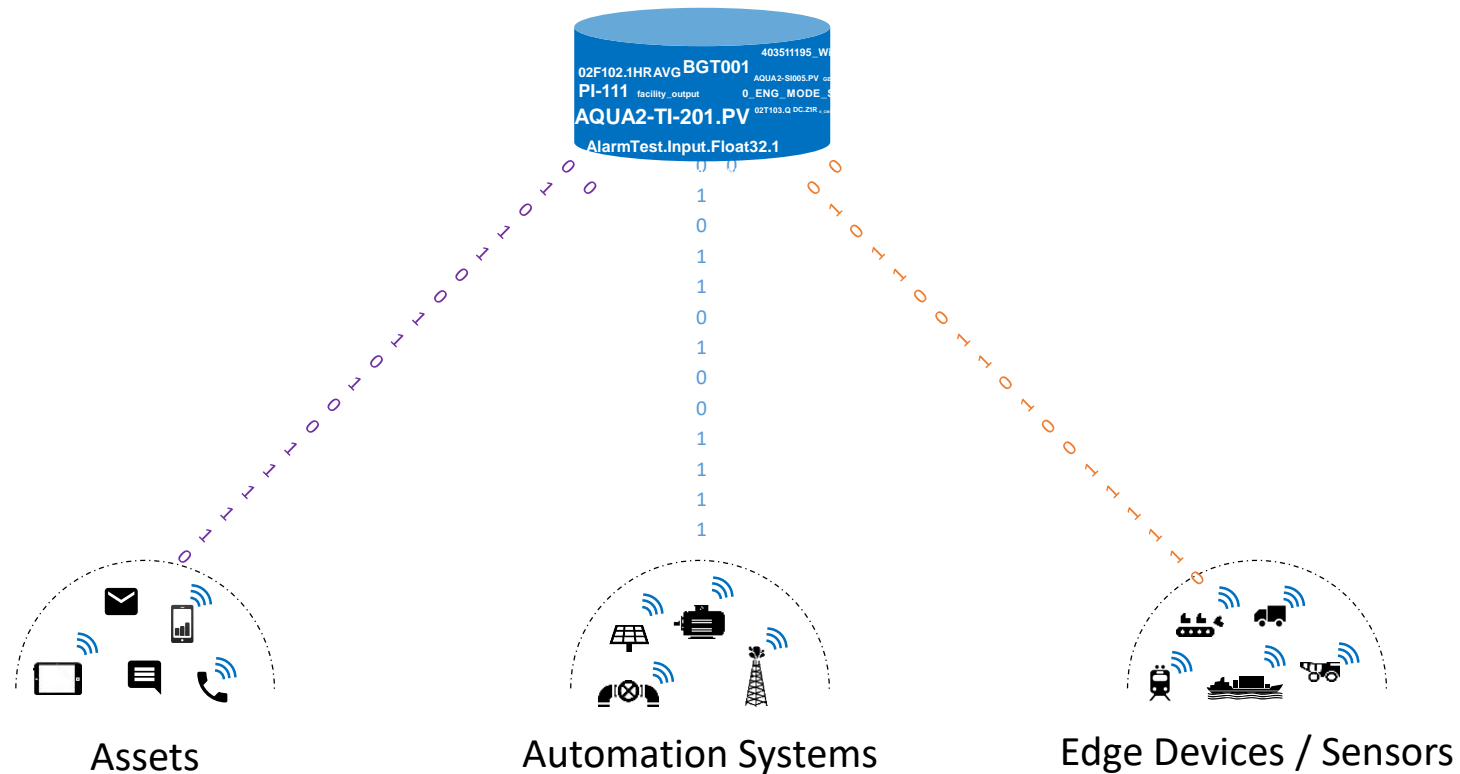
Como posso garantir a mobilidade do dado?



# IIoT riscos e desafios: Contexto do dado

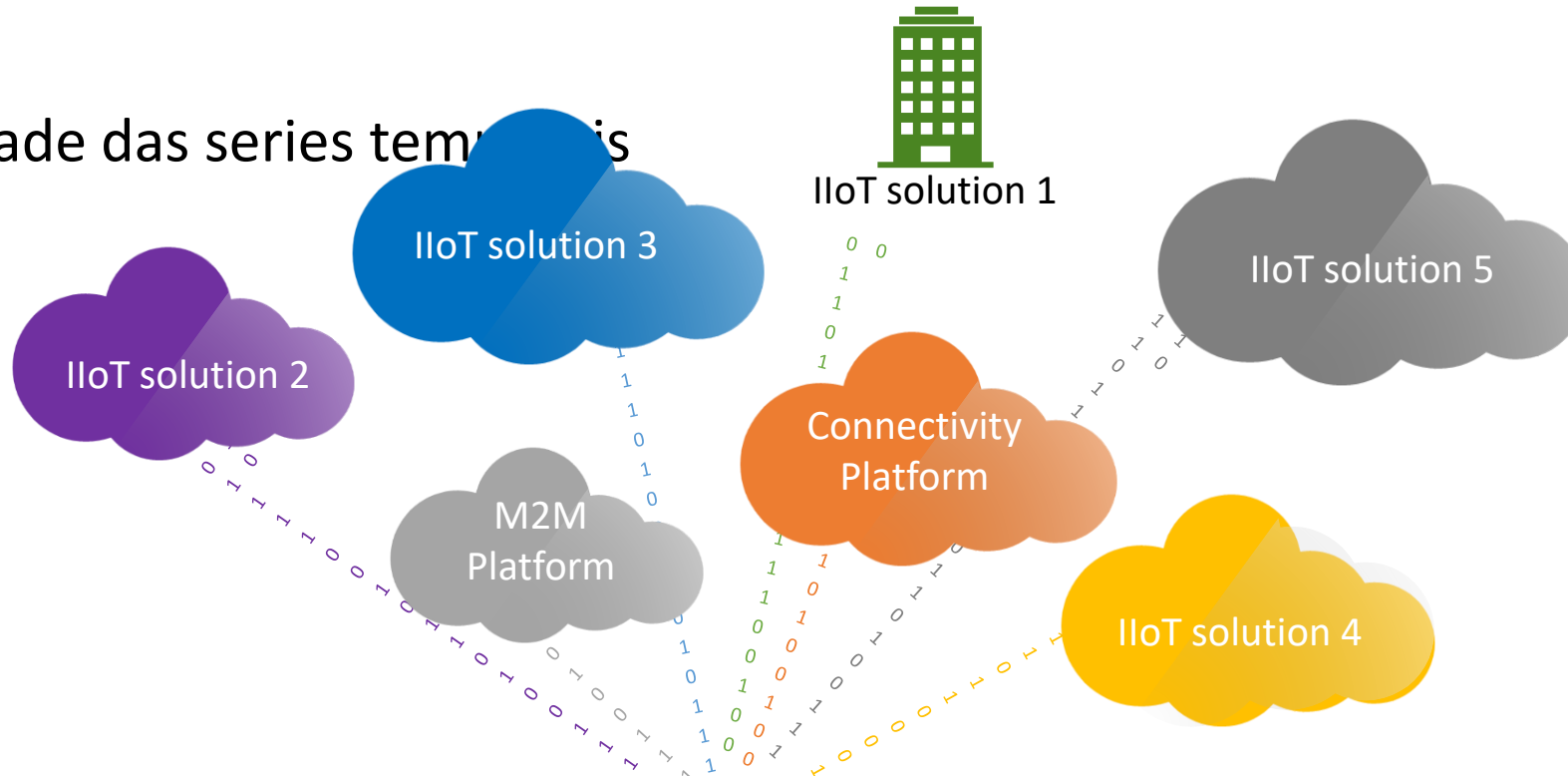
## Contexto do dado

Entender o critério de análise é mais importante que o dado em si  
Quanto maior a mobilidade do dado, maior a importância do contexto





# Escalabilidade das series temporais



# OSIsoft®

Enterprise Operations Infrastructure



Edge Devices / Sensors



Automation Systems

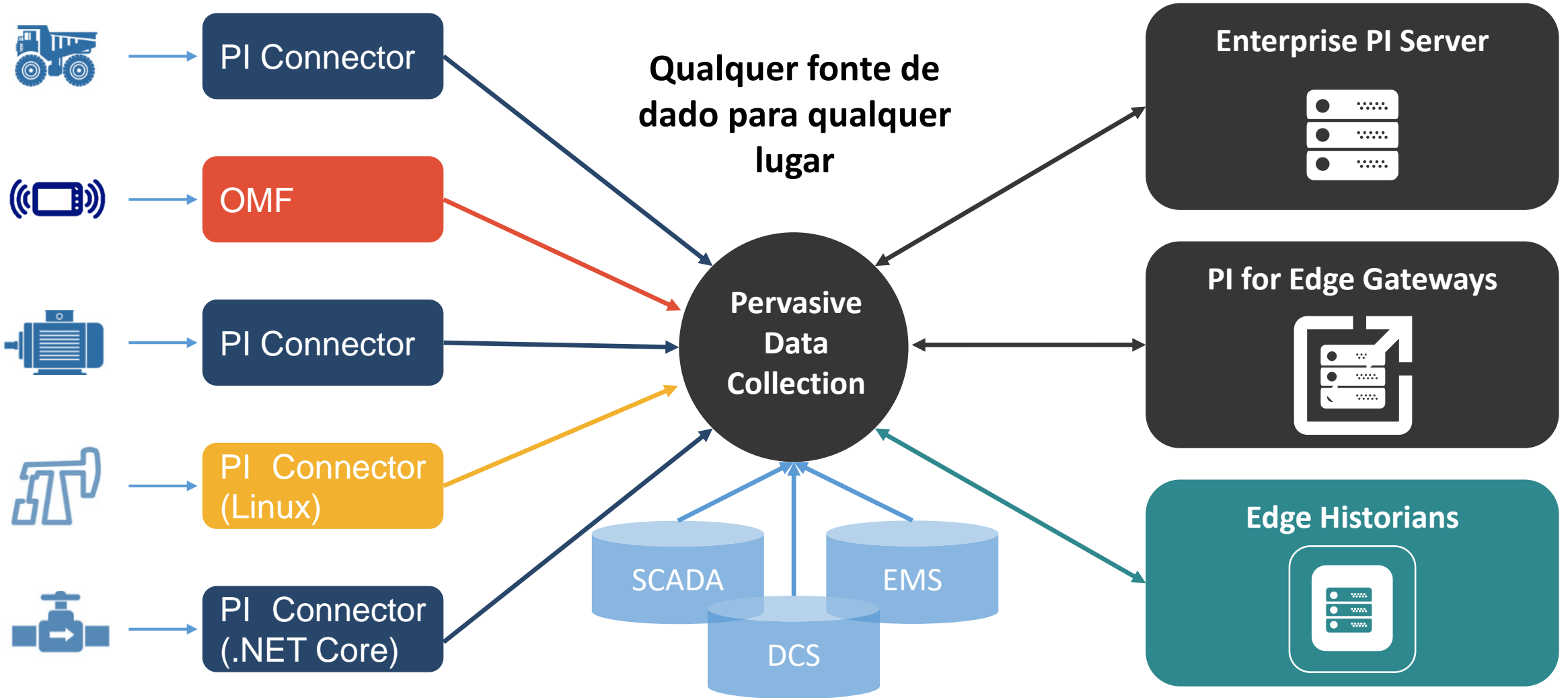


Assets



IoT solutions

# Propriedade do dado



os parceiros

**Monico**  
(OMF application)



**HPE**  
(PI System deployment)

**Dell**  
(PI System deployment)



**Partners**  
(PI Connector on Linux  
(native))

**Cisco**  
(PI Connector on Linux  
(.NET Core))



**Stratus IoT  
Solutions**  
(OMF application)



# Evolução do conceito de Enterprise **2**

# Fortalecendo o PI System Enterprise

**Connectivity**

- Connectors
- Embedded Connectors
- Edge Historian

**Notifications**

- Event Frames
- Developer Technologies

**Archive**

- Asset Analytics
- Health Tool

**Visualização**

- Vision
- Manual Logger
- Datalink

**Integração**

- BA
- SAP
- Streaming
- Esri
- Microsoft
- Enterprise wide Queries

**Cloud Services**

- Cloud Connect
- Data Sharing
- Display Sharing

## Foco inicial: Evolução do PI System

### Expansão



Aumentar o volume e a velocidade dos dados operacionais

### Extensão



Associar qualidade com os dados medidos

### Facilidade



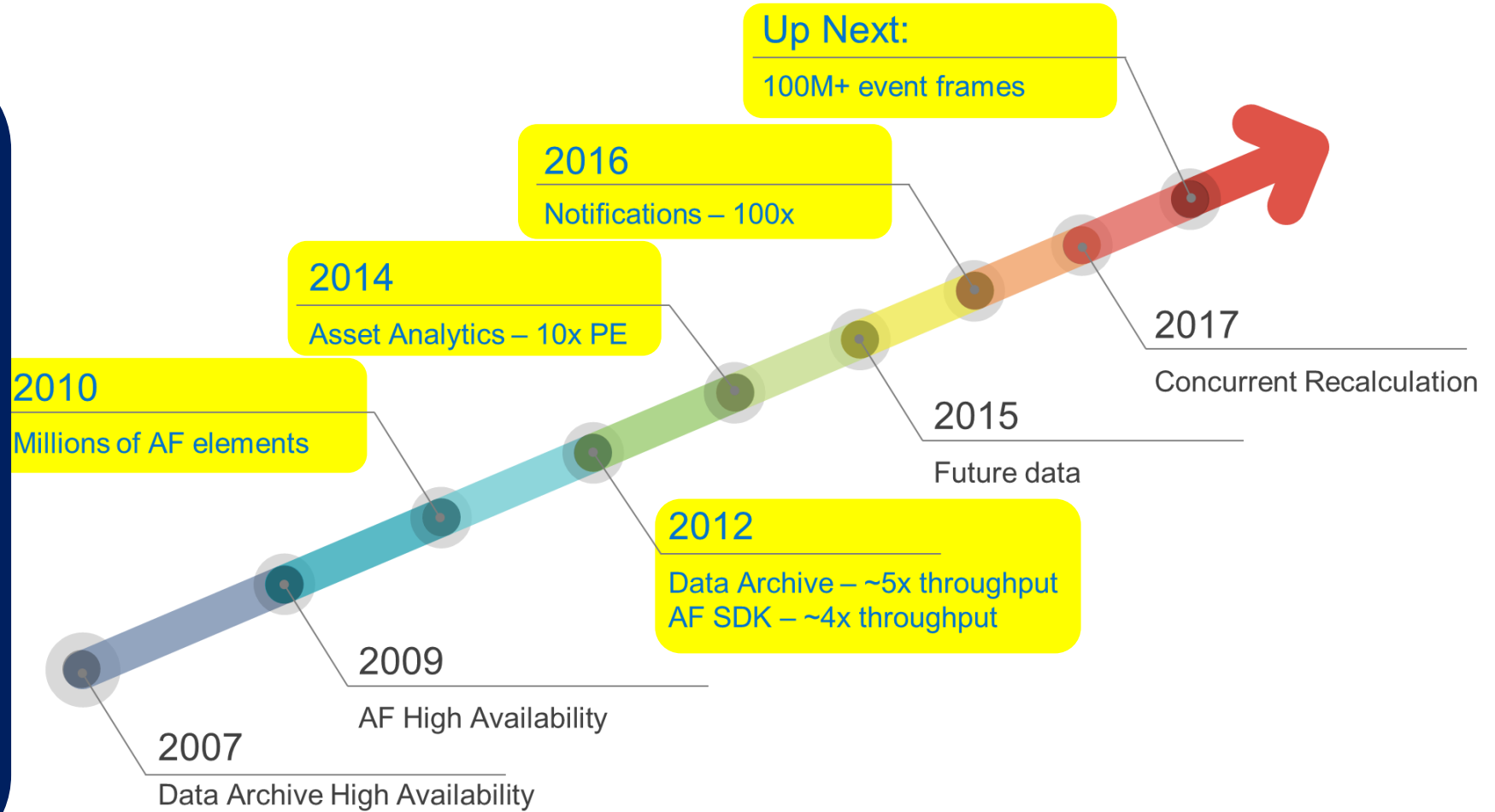
Ferramentas desenvolvidas para trabalhar por toda corporação

# Expansão do PI System: Performance e Escalabilidade

## Expansão



Aumentar o volume e a velocidade dos dados operacionais



# Extensão do PI System: Qualidade do Dado

## Extensão



Associar qualidade com os dados medidos

Coleta de dados



Coleta de dados de qualidade

Armazenar



Associado com o dado temporal

Asset Analytics



Melhores cálculos associados a qualidade

Desenvolvimento



Entrada e saída de dados conforme qualidade

Visualização



Apresentar dados conforme qualidade

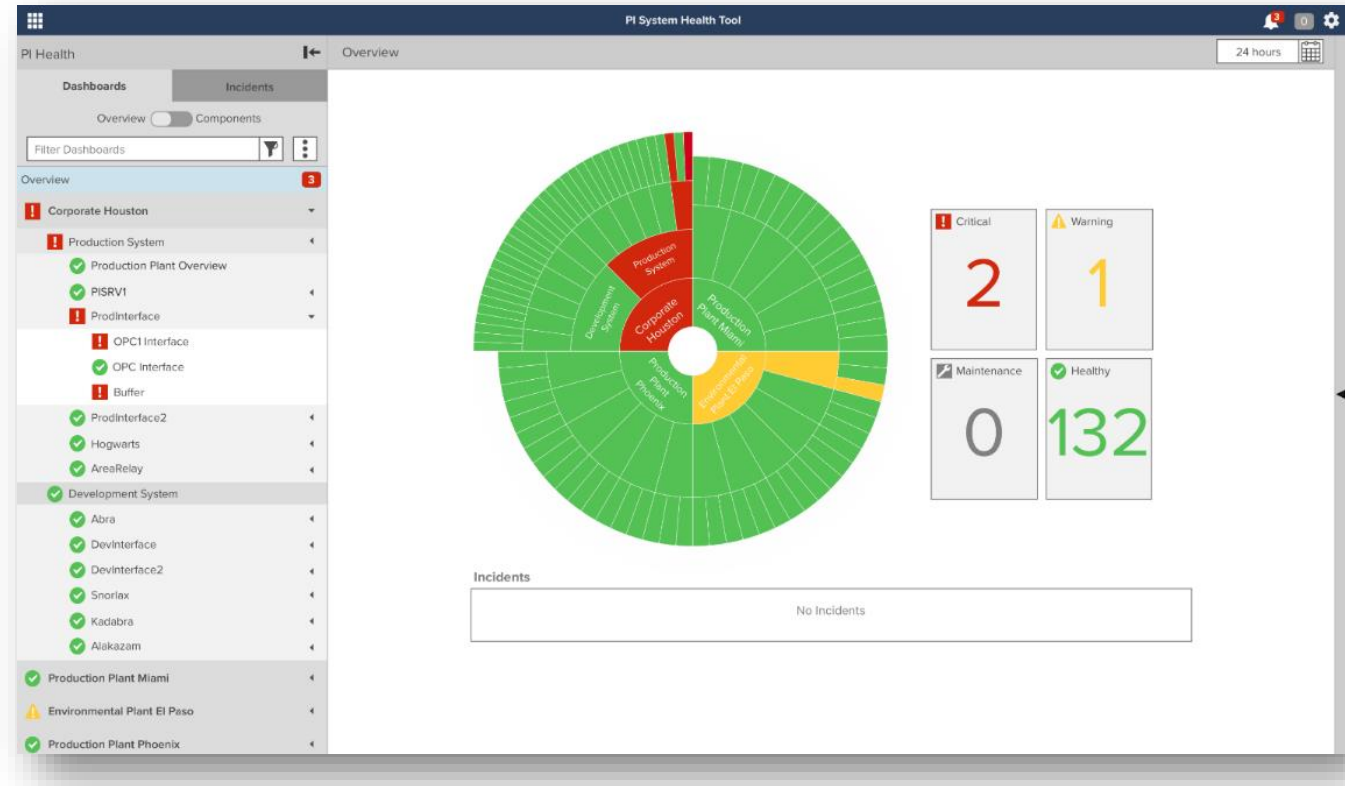


# Facilidade do uso do PI System: Administração e gerenciamento

Facilidade



Ferramentas  
desenvolvidas para  
trabalhar por toda  
corporação





# 3

Visualização de dados operacionais

# Um estratégia de visualização integrada

Connectivity

Enterprise

Visualização

Integração

Cloud Services

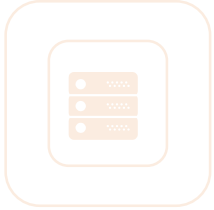
Connectors



Embedded Connectors



Edge Historian



Notifications



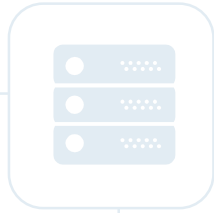
Event Frames



Developer Technologies



Archive



Asset Analytics



Health Tool



Vision



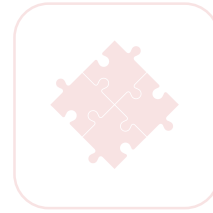
Manual Logger



Datalink



BA



SAP



Esri



Microsoft



Enterprise wide

Streaming



Queries



Cloud Connect



Data Sharing

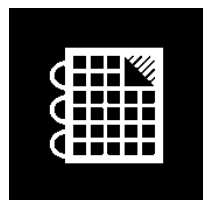


Display Sharing



Uma plataforma única

## Hoje



### PI ProcessBook

Display Editor  
Process Monitoring



### PI Coresight

Ad Hoc Analysis  
PB Display Viewer



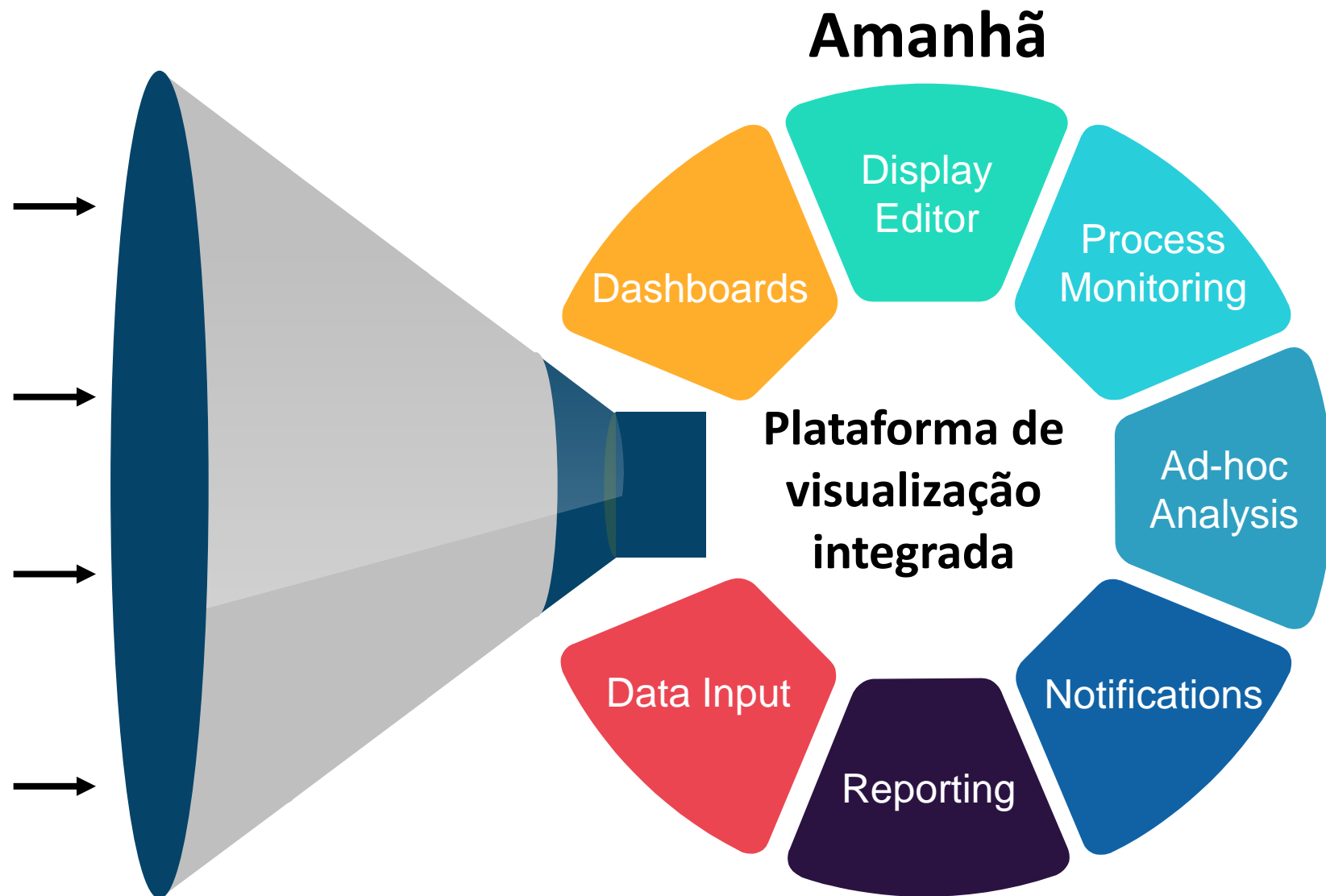
### PI WebParts

Dashboards



### PI Manual Logger

Manual Data Entry



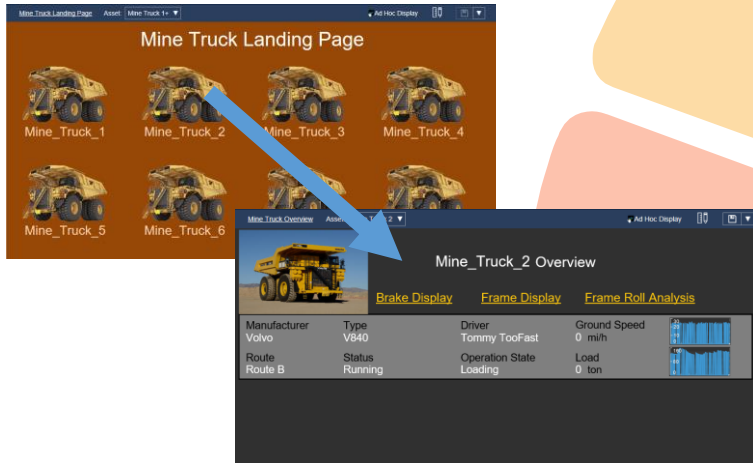
# One Vision:

Uma infraestrutura de visualização integrada para dar suporte às suas necessidades, por toda corporação, em um ambiente confiável, escalável e poderoso.

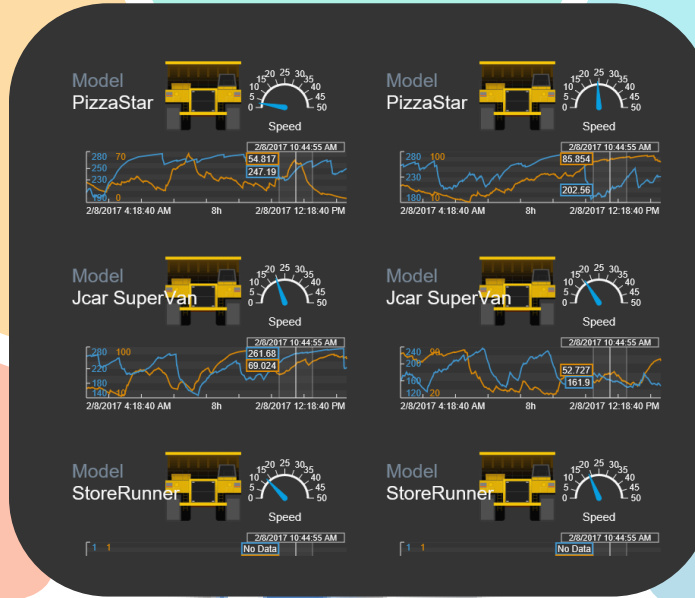


# PI Vision 2017

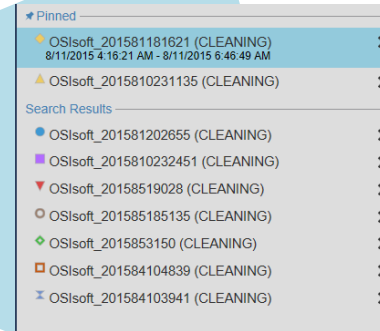
## Drill-in Navigation



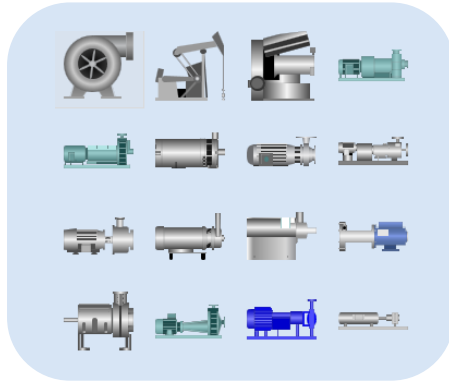
## Collections



## Pinned Events



## Graphic Library



## Events Table

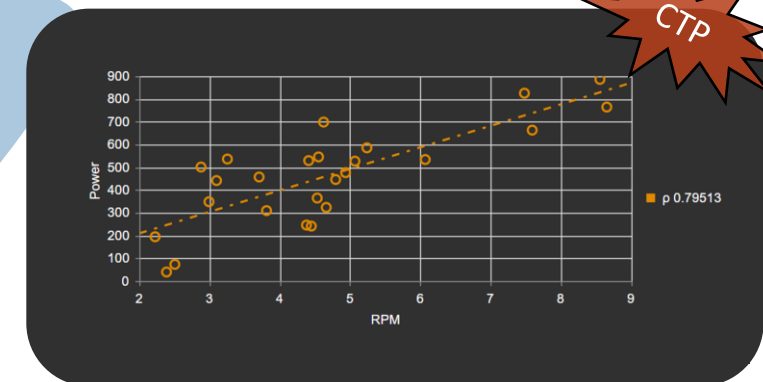
CTP

Event	Asset	Start Time	End Time	Acknowledgement
Engine Temperature High 2017-01-26 06:21:43.000	SP4	1/26/2017 6:21:43 AM	1/28/2017 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	1/28/2017 8:57:13 AM	Acknowledge

## Asset Comparison Table

Asset	Manufacturer	Driver	Engine RPM	Load	Status
Mine Truck 1	Caterpillar	Jason Rice	0	0	Running
Mine Truck 2	Volvo	Tommy TooFast	0	0	Running
Mine Truck 3	Komatsu	Edna Thompson	1,682.6	159.87	Running
Mine Truck 4	Caterpillar	Revill Swivel	0	0	Running
Mine Truck 5	Volvo	John Sintilas	0	0	Running
Mine Truck 6	Komatsu	Steve Kwan	1,744.9	194.14	Running
Mine Truck 7	Volvo	Brian Bostwick	0	0	Running
Mine Truck 8	Caterpillar	Steve Kia	0	0	Running
Mine Truck 9	Caterpillar	Justin Brown	0	0	Running
Mine Truck 10	Volvo	Bob Bonkers	1,719.7	157.74	Running

## XY Plot



# 4

## Respondendo perguntas corporativas



# Respondendo perguntas corporativas

## Connectivity

## Enterprise

## Visualização

## Integração

## Cloud Services

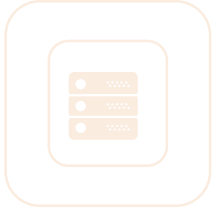
Connectors



Embedded Connectors



Edge Historian



Notifications



Event Frames



Developer Technologies



Archive



Asset Analytics



Health Tool



Vision



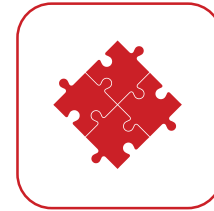
Manual Logger



Datalink



BA



SAP



Esri



Microsoft



Enterprise wide

Streaming



Queries



Cloud Connect



Data Sharing



Display Sharing





## Questões que seus clientes querem responder

Qual foi média de produção de cada região no último ano? Como mudou com o tempo?



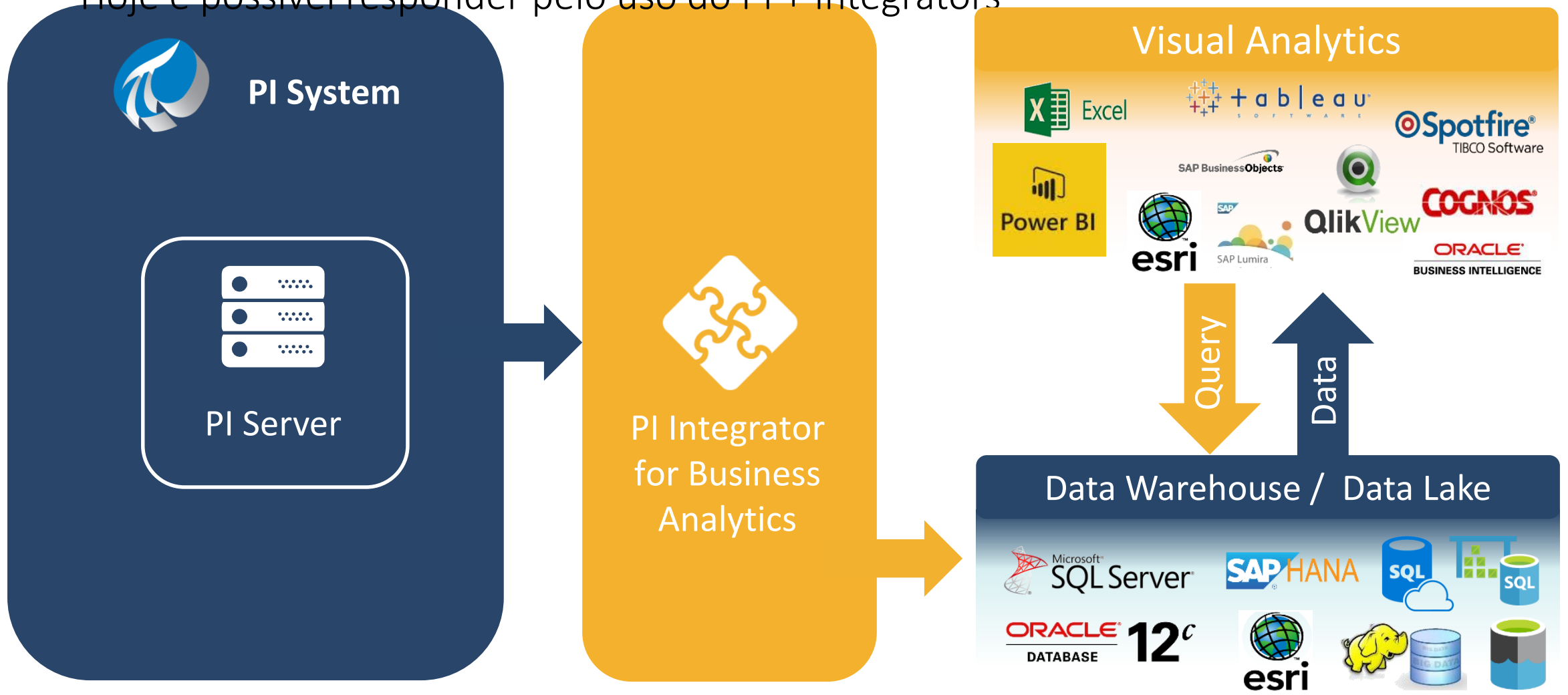
Tudo foi produzido dentro dos limites? Quando não foi? Em que ativos?



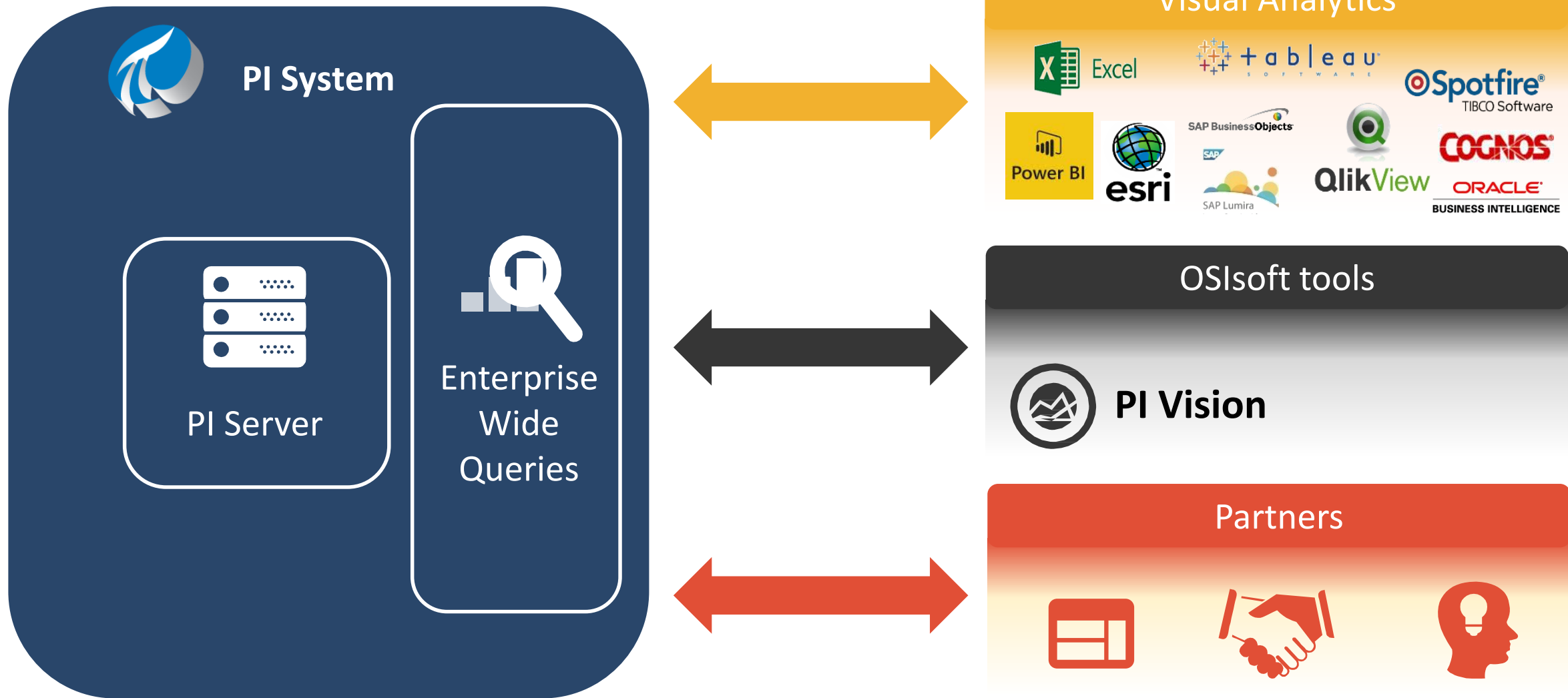
Quais ativos performaram melhor ou pior? Quais fatores contribuíram para esta performance? Quais ativos precisam de mais manutenção?



Hoje é possível responder pelo uso do PI + Integrators



# Acesso Direto pelo PI Vision, Apps de parceiros e ferramentas de BI



## Posicionamento

### **Integradores**

---

Misturam dados operacionais e de negócios em análises complexas

### **Questões de corporação**

---

Fonte única para análise com dados múltiplos

### **APIs**

---

API para construção de aplicações nativas

The background of the slide is an impressionist painting, likely by J.M.W. Turner, depicting a landscape with a river and trees. The brushstrokes are thick and visible, with a rich palette of reds, oranges, yellows, and blues. The overall effect is one of light and color, characteristic of the Impressionist style.

5

# Cloud Services

# Criando valor adicional para nossos clientes

## Connectivity

## Enterprise

## Visualização

## Integração

## Cloud Services

Connectors



Embedded Connectors



Edge Historian



Notifications



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Archive



Asset Analytics



Health Tool



Project Vision



Manual Logger

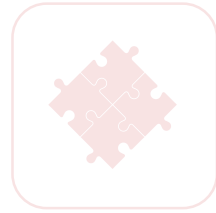


Datalink



Project Vision

BA



SAP



Streaming



Esri



Microsoft



Enterprise wide

Queries



Cloud Connect



Data Sharing



Display Sharing



# Construindo o conceito de infraestrutura

## Cloud Services Platform



Sign-up  
Services



Account  
Management



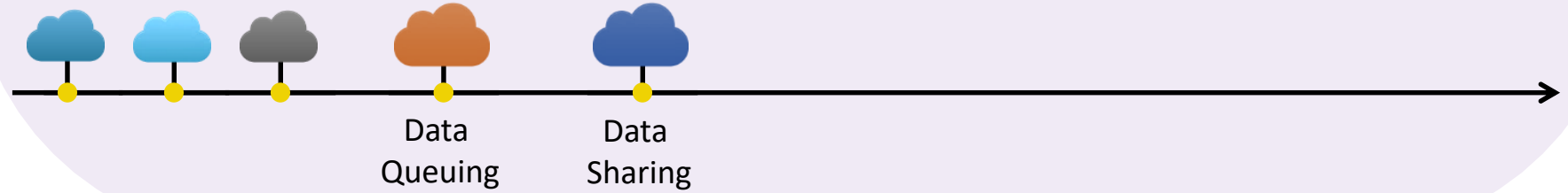
Logging &  
Telemetry

Construindo capacidades adicionais  
Cloud Connect

**Commercial  
Cloud Services  
Offerings**



**Cloud Services  
Platform**





# Transformando a plataforma em uma possibilidade comercial

**Commercial  
Cloud Services  
Offerings**

Cloud Connect



Data Sharing



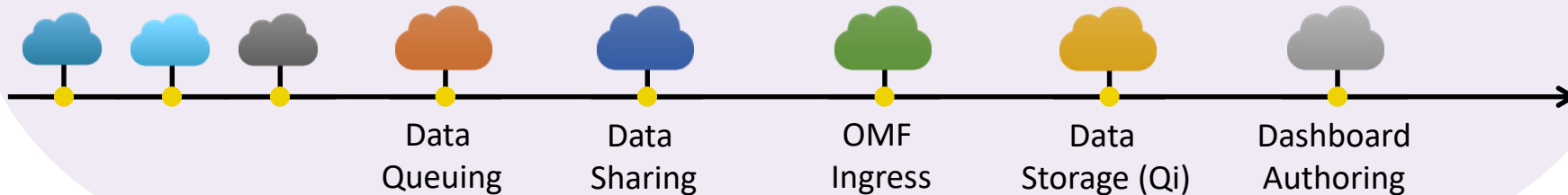
Display Sharing



Partners



**Cloud Services  
Platform**



Construindo capacidades adicionais

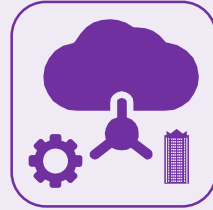
Commercial  
Cloud Services  
Offerings

Cloud Connect

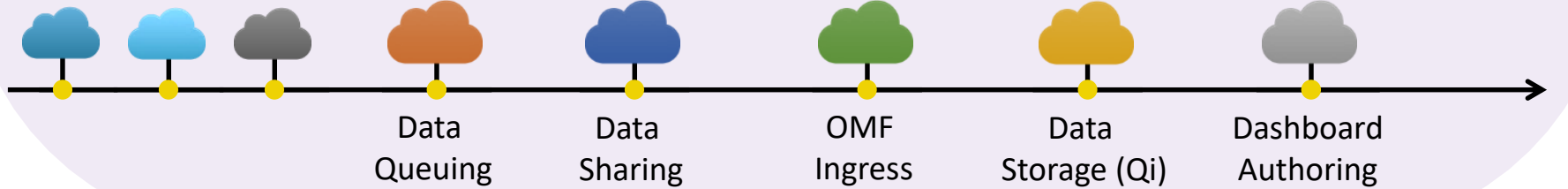
Data Sharing

Display Sharing

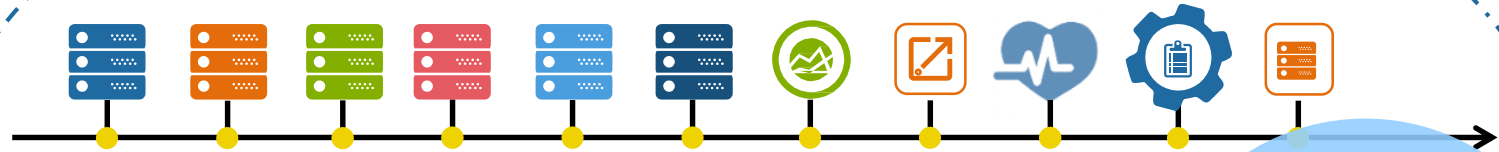
Partners



Cloud Services  
Platform



On-premises  
capabilities



# Imagine as possibilidades para a comunidade



Government /  
Regulators



Service  
Providers



Other Industrial  
Enterprises



Utilities



Other Industrial  
Enterprises



Municipalities



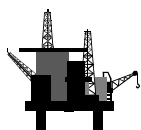
**Industrial Enterprise**



Suppliers



Manufacturers



Plants



Mobile Assets



Plant Assets



Remote Assets

# Contact Information

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[cmuller@osisoft.com](mailto:cmuller@osisoft.com)

Gerente de Contas

OSIsoft



# Thank You



**OSI**soft®