

The Future of IoT

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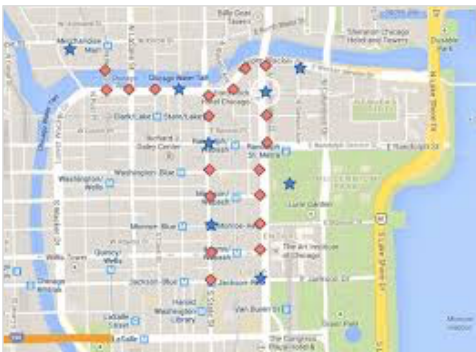
Agenda – What Will You Learn?

- The likely progression of IoT and why the market will shift to a focus from the enterprise view, and what that means
- The key role of data and in particular:
 - Considerations regarding governance, ownership, and stewardship
- The importance of architecture for leveraging IoT data
 - Including the concept of “The First Receiver”



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The “Array of Things” Project



The Future of IoT

- The market will shift from a focus on IoT-enabled products to the IoT-enabled Enterprise
- This will create significant opportunities
- The keys to leverage will be the deployment architecture with particular regard to data primacy and analytics



What do we “know”?

“Tons of data”

IoT has been driven by the Capital Equipment Providers

**But what outcomes do Enterprises
want from the
Internet of Things?**

Enterprises will demand leverage from IoT data

**They will do this by driving
deployment architectures
capable of best accommodating this
for all constituencies**

But...

**We know better what
to do with the data...**

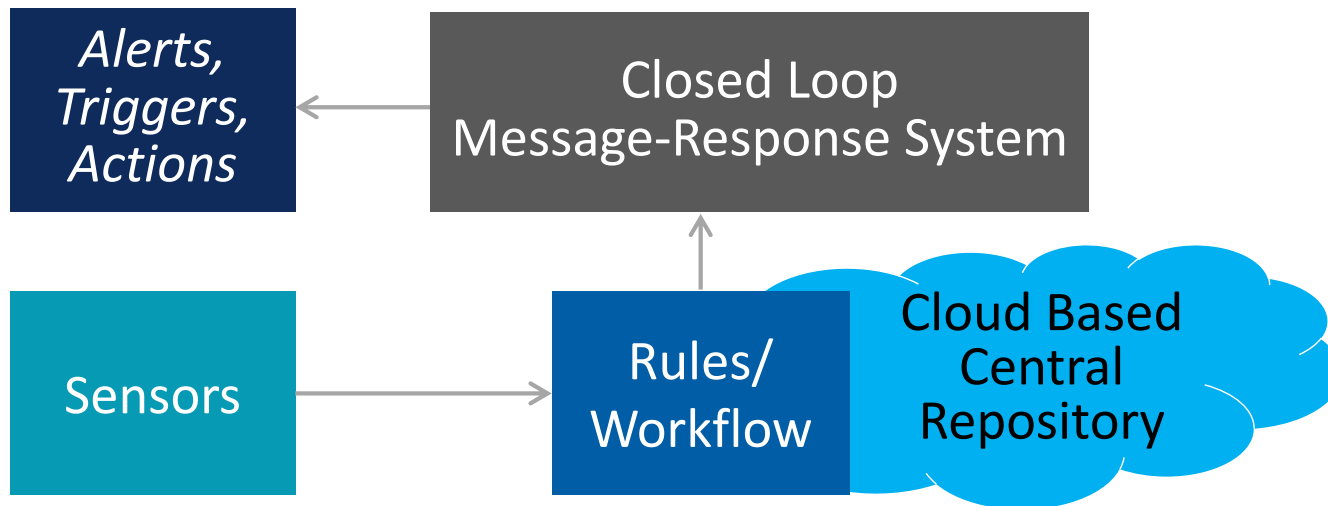
**You don't want to be in
the device driver business...**

**That kind of architecture
could be very complicated...**

**It can compromise security to
allow others to just subscribe
to the data....**

First Level IoT

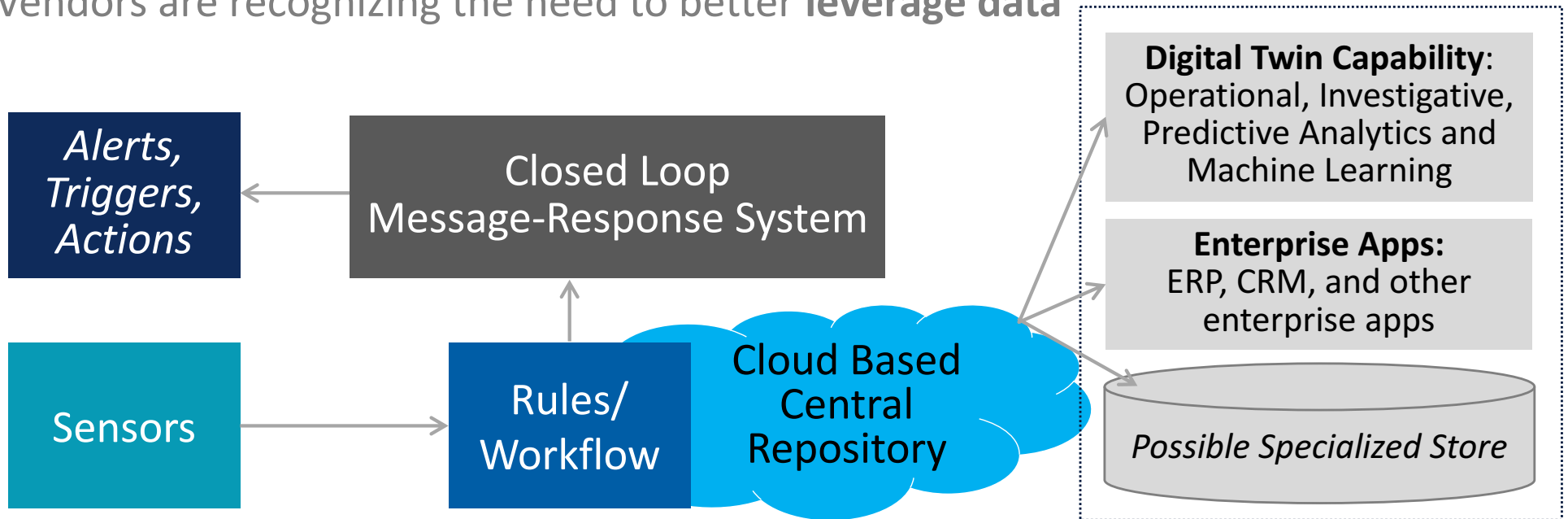
Most IoT deployments are centered around capital equipment and are closed loop silos



Data is mostly owned and controlled by the vendors

Today

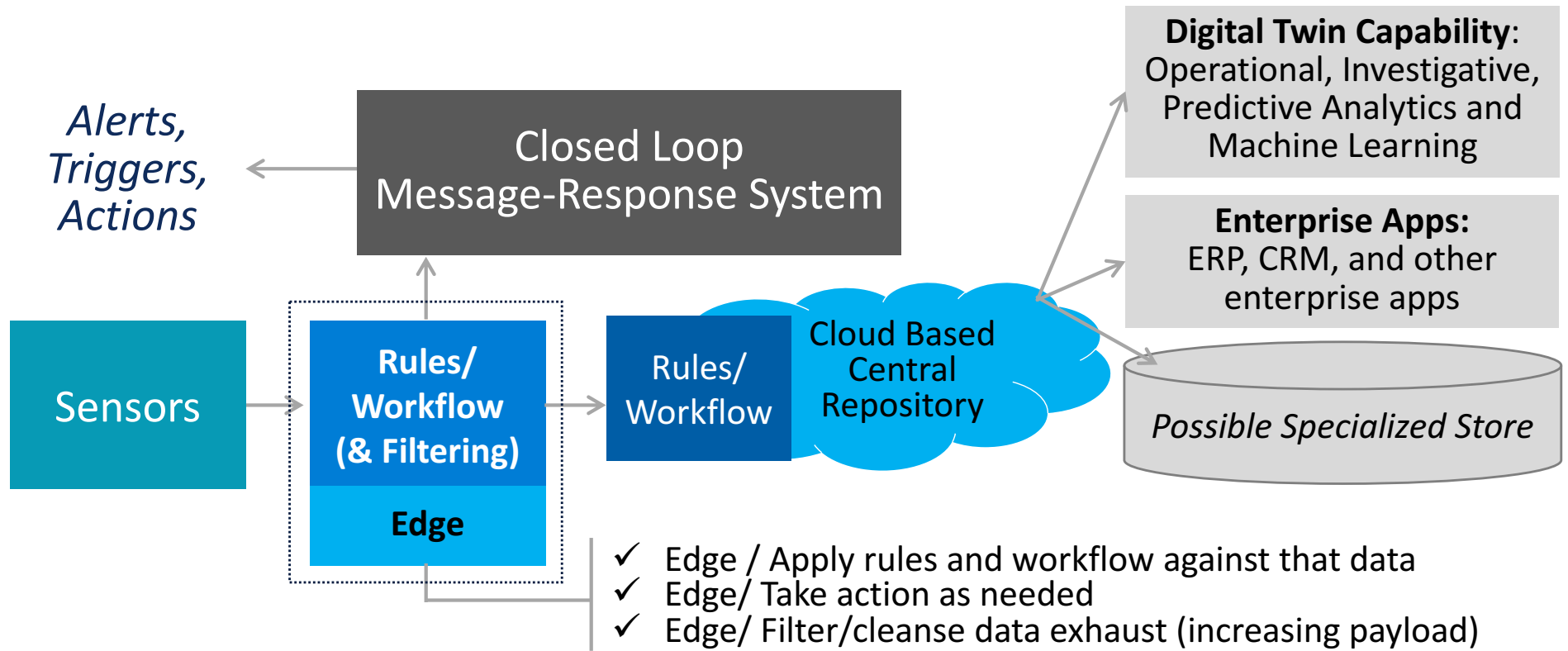
Vendors are recognizing the need to better leverage data



“Fryer gets predictive maintenance”

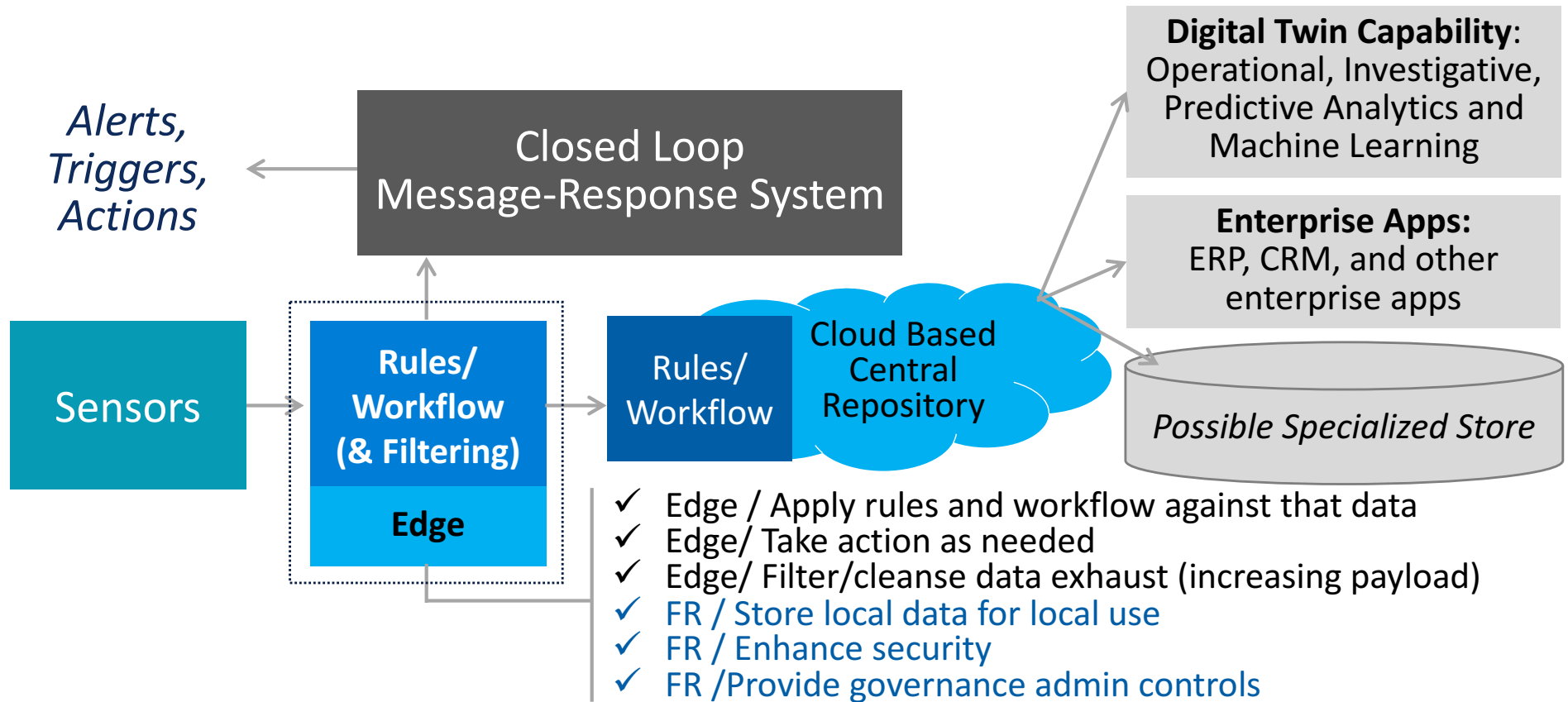
Beginning to

See the need to accommodate **Edge Processing**



The First Receiver

This will begin to call into question who owns and controls the data



Market Direction

Technology Delivery / Data Focus is on the **Enterprise**: “How do we effectively leverage all of these smart connected products?”

Products

Smart Products

Smart Connected Products

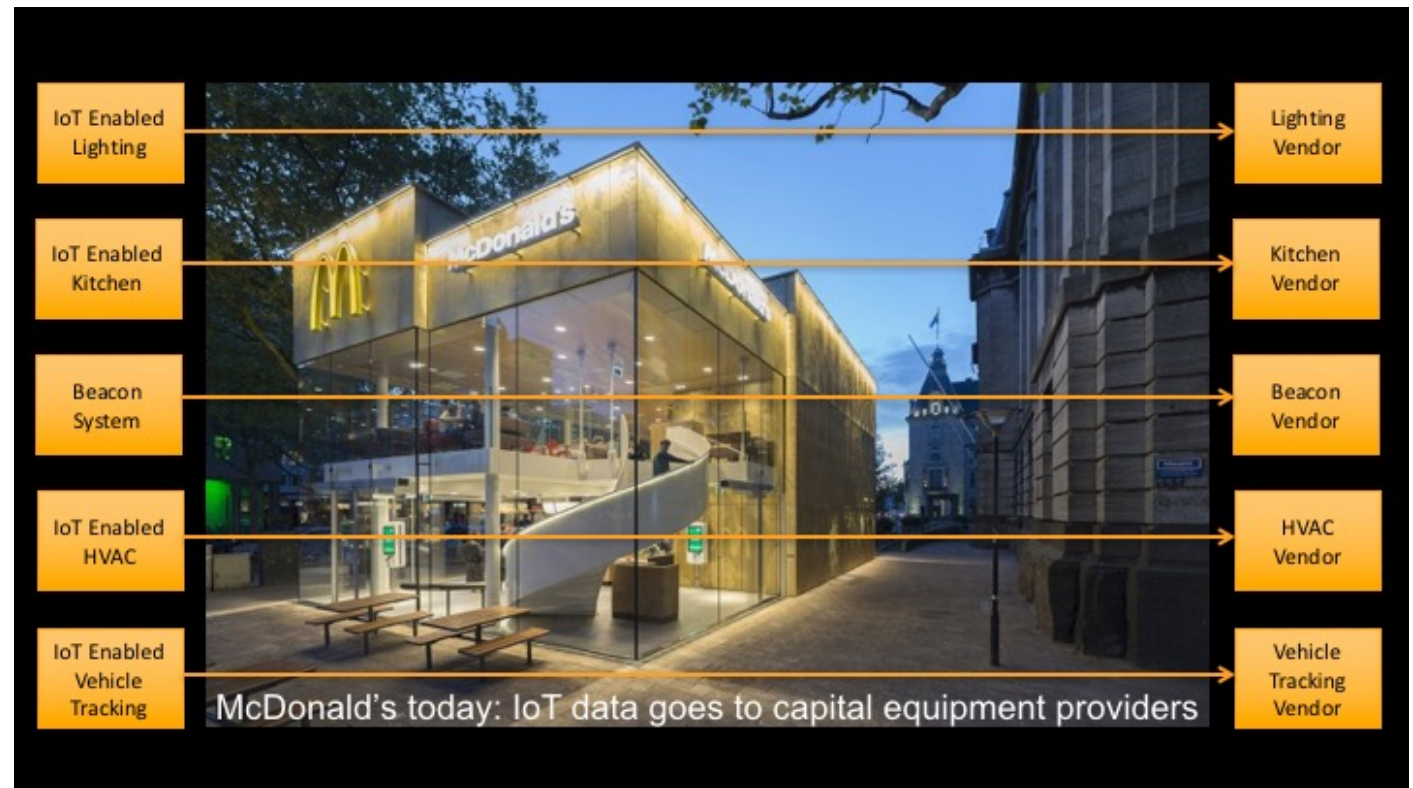
Product Systems

System of Systems

Technology Delivery / Data Focus is on the **Product Providers**: “How do we deliver smart connected products customers will love?”

Illustration of the Progression

- McDonald's Hypothetical
- Array of IoT-Enabled products operating as individual silos



What is new about this?

Data governance? Time Tested

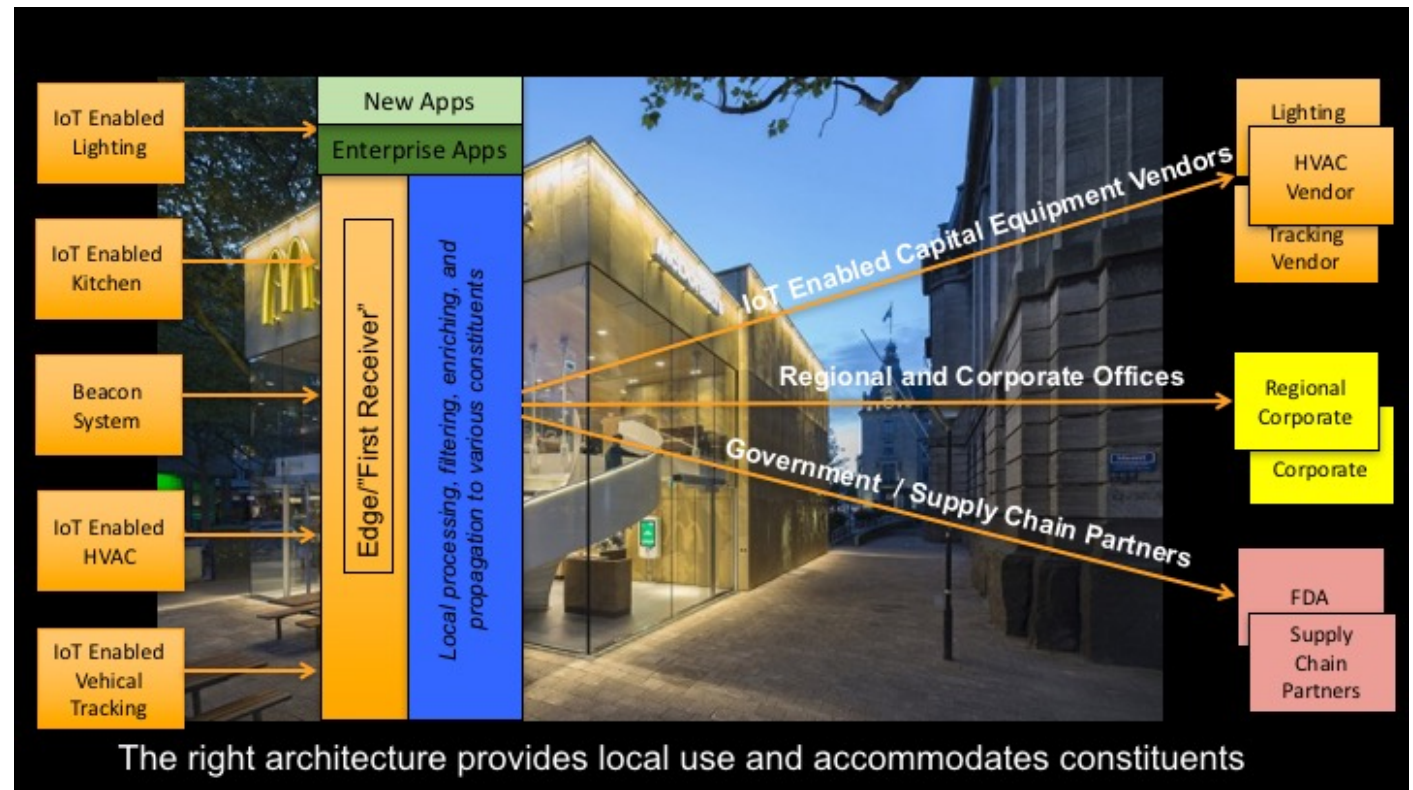
Pub-Sub Architecture? Time Tested

Device Drivers? Time Tested

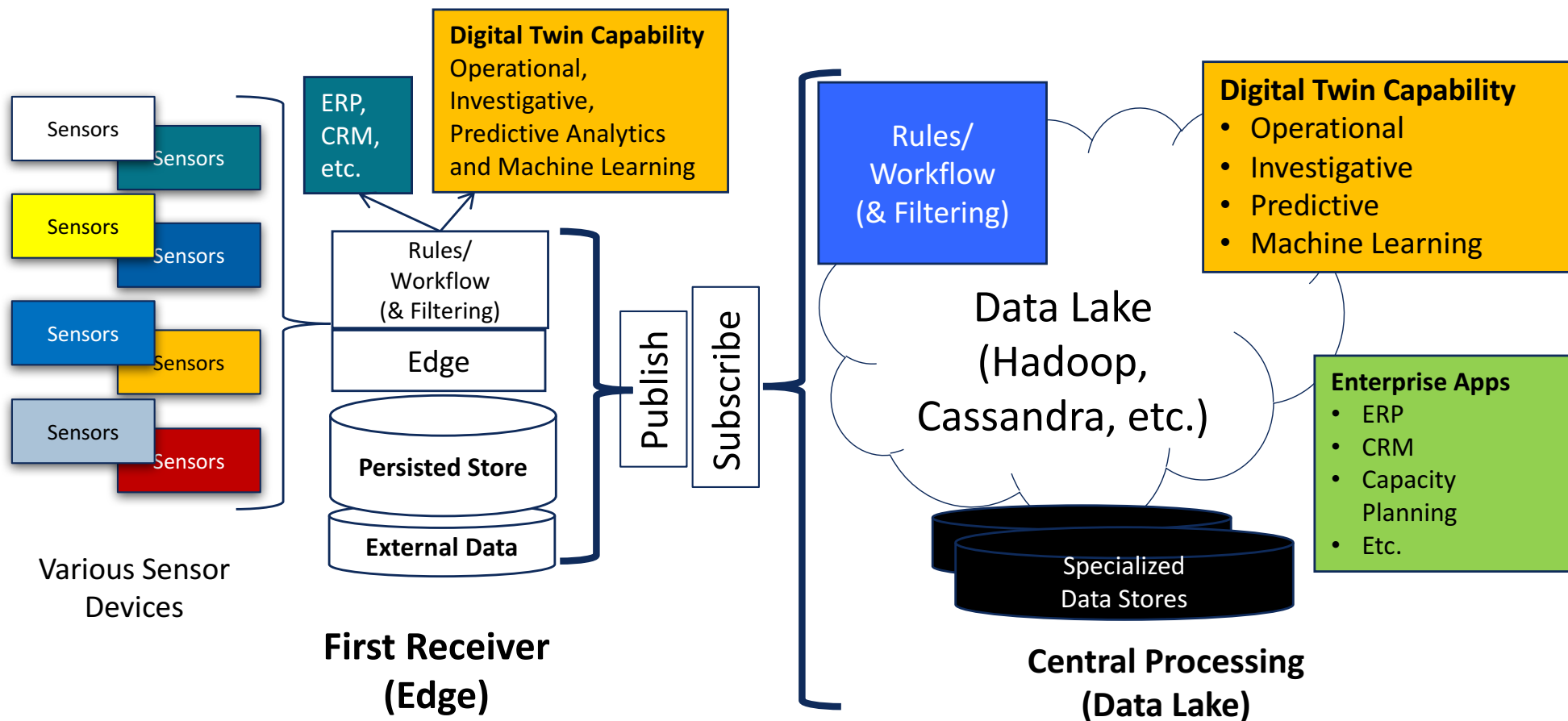
Utility Value of Data? Time Tested

The First Receiver to Leverage Data

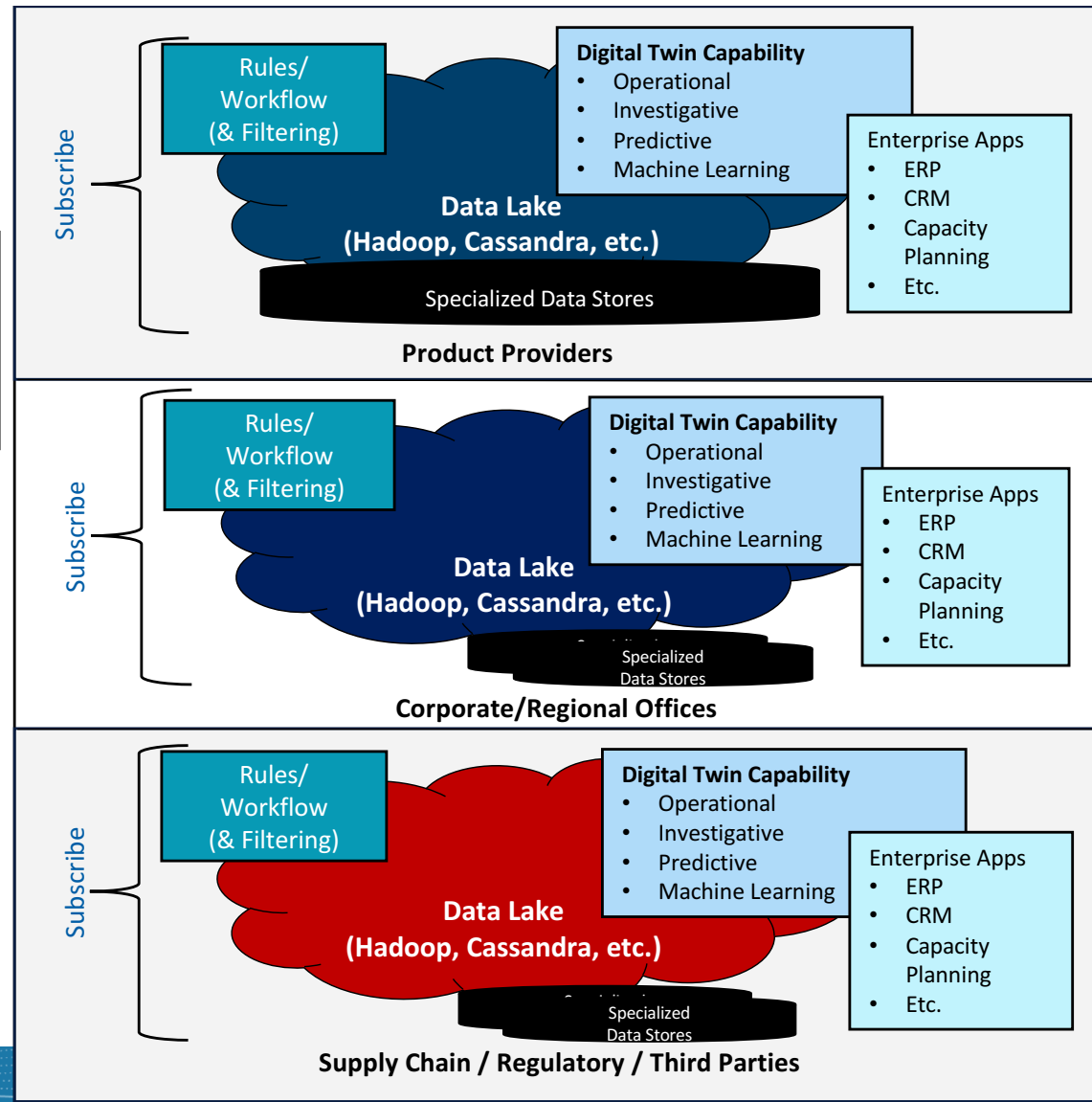
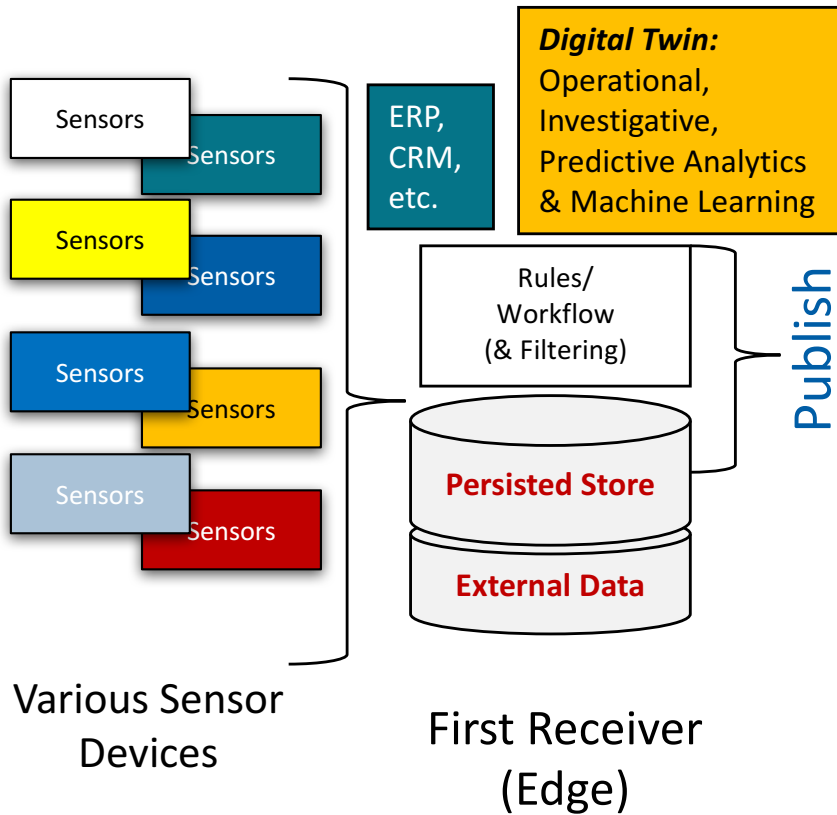
- McDonald's Hypothetical
- Array of IoT-Enabled products leveraged via First Receiver architecture



An Even-Driven Pub/Sub Architecture



Leverage



Key Takeaways – What Did We Learn?

- We are moving from “Smart Connected Products” to a “System of Systems”
- The market drivers will shift to the users of multiple IoT-enabled products
 - They want to become IoT-enabled Organizations!
- The key value in IoT is in the data
- Maximum leverage of the data – thus maximum value – requires the right architecture
- This is possible using time tested and proven technology – but requires some re-thinking of the delivery
- If done right, everyone wins – with the right data delivered in the right way to the right constituent at the right time.



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