

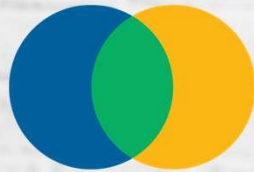


How *SMART* is your Factory?



# John Broadbent

## Founder & MD



**Realise**Potential

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How can Industry  
4.0 and Digital  
Technology make  
your factory  
*SMART(er)*?



# ***DIGITAL TRANSFORMATION***

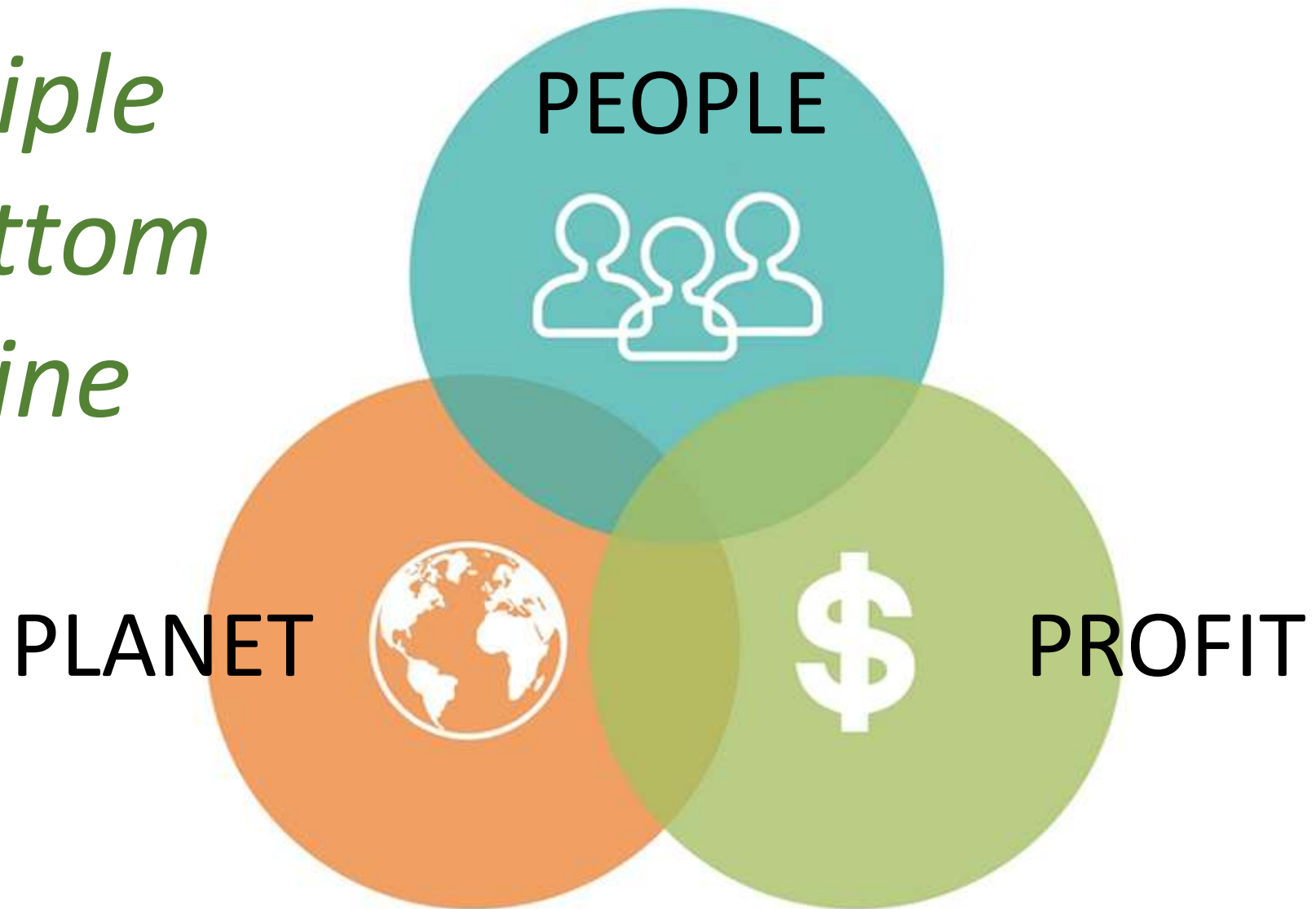
***Headwind***



***Tailwind***



*Triple  
Bottom  
Line*



WE HAVE TO DO  
MORE WITH LESS.



TOM  
FISH  
BURNE



“Digital factory investments have led to an average increase of **10 per cent** in production output, **11 per cent** in factory capacity utilization, and **12 per cent** in labour productivity.”



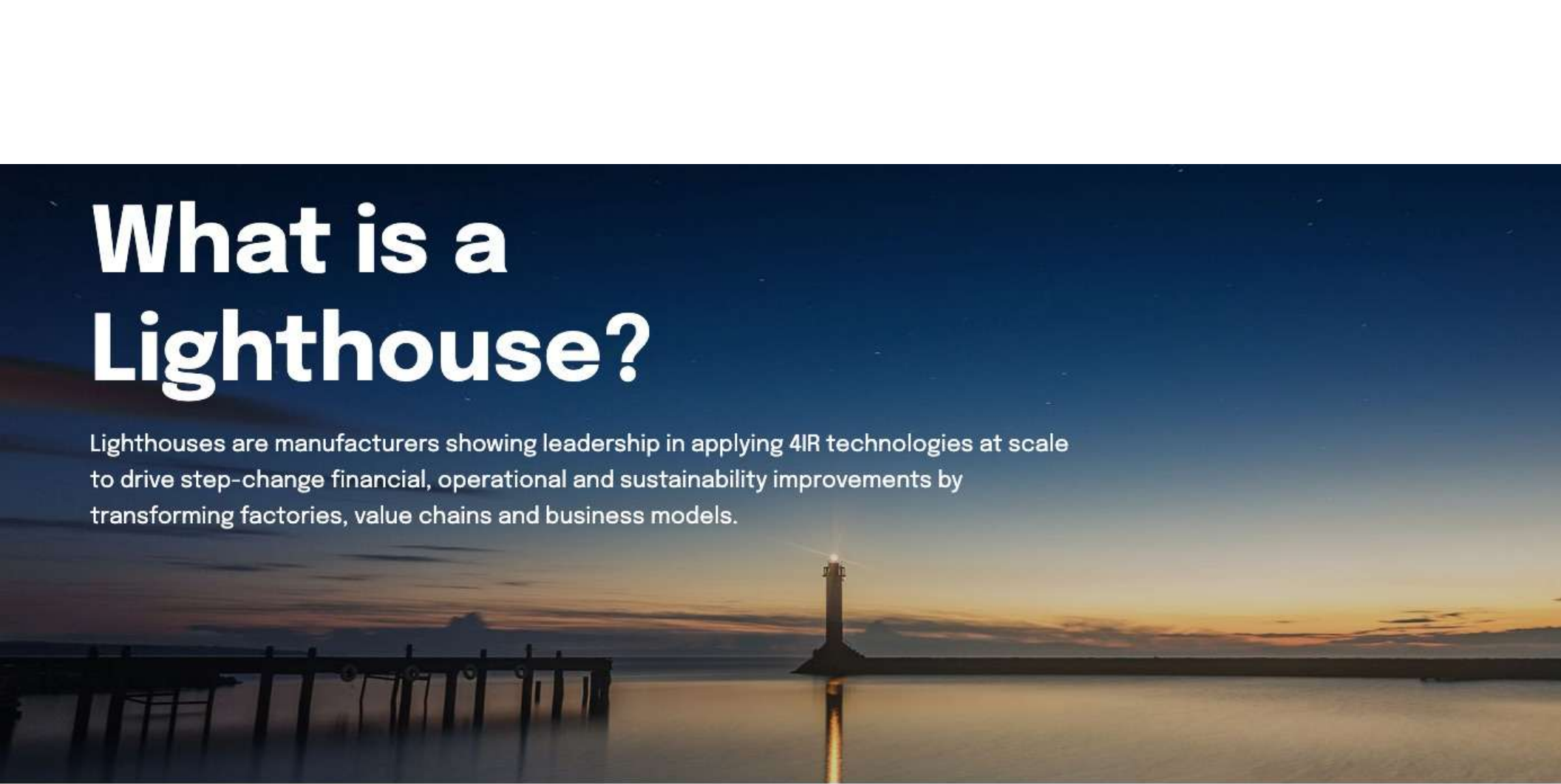
NUCLEUS  
RESEARCH

## *Analysis of potential improvements using predictive maintenance:*

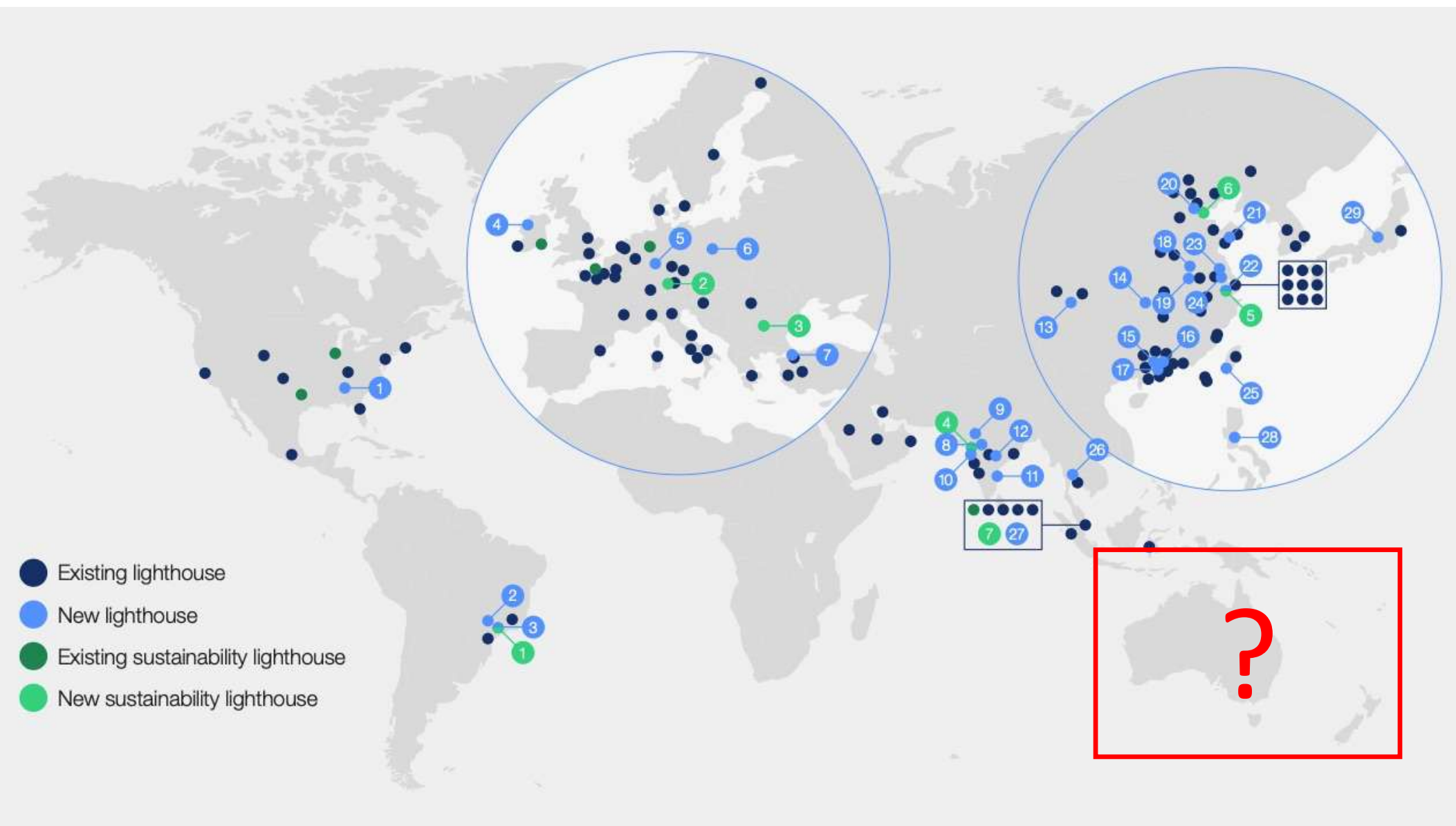
- Reduction of annual unplanned downtime: **60–90%**
- Reduction of excess capacity required to compensate for unplanned downtime: **up to 90%**
- Scrap or rework reduction: **up to 50%**
- Asset life extension improving lifetime return on assets: **5–15%**

# What is a Lighthouse?

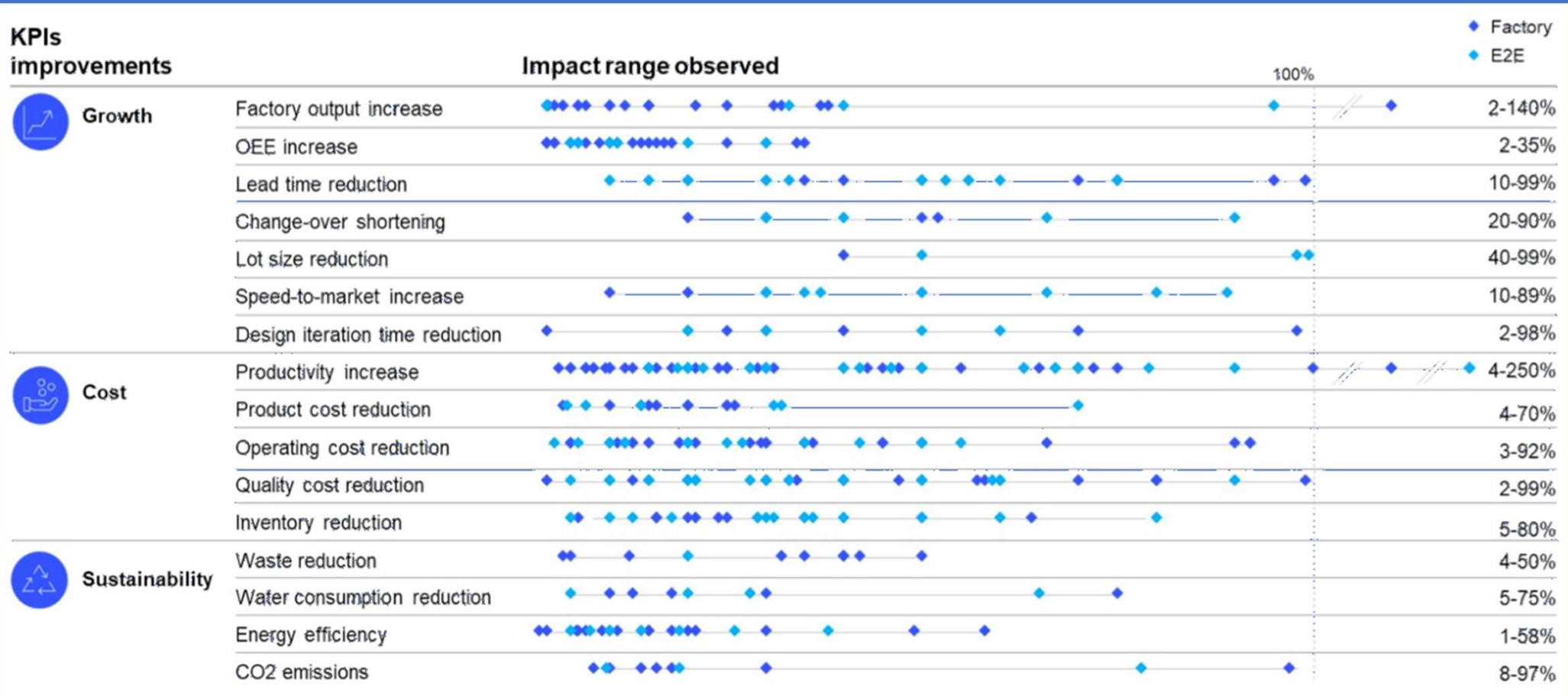
Lighthouses are manufacturers showing leadership in applying 4IR technologies at scale to drive step-change financial, operational and sustainability improvements by transforming factories, value chains and business models.

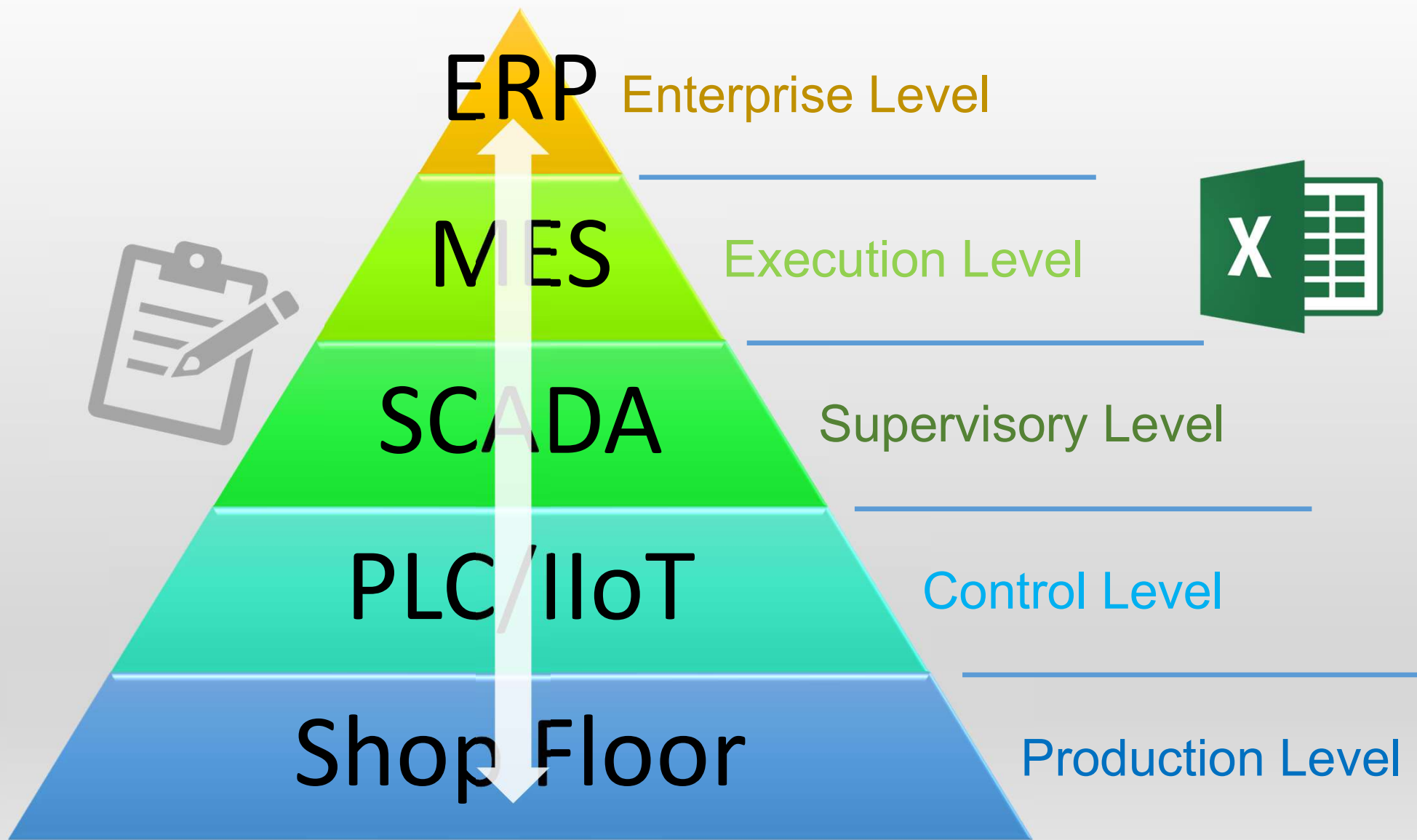
A photograph of a lighthouse situated on a pier extending into a body of water. The scene is captured during sunset or sunrise, with a warm orange and yellow glow on the horizon and a deep blue sky above. The lighthouse is a tall, dark structure with a bright light emanating from its top, which is reflected in the calm water. The pier in the foreground is made of dark wooden posts and beams, also reflected in the water.

**The Global Lighthouse Network is comprised of 153 'Lighthouses', across a range of sectors ...**



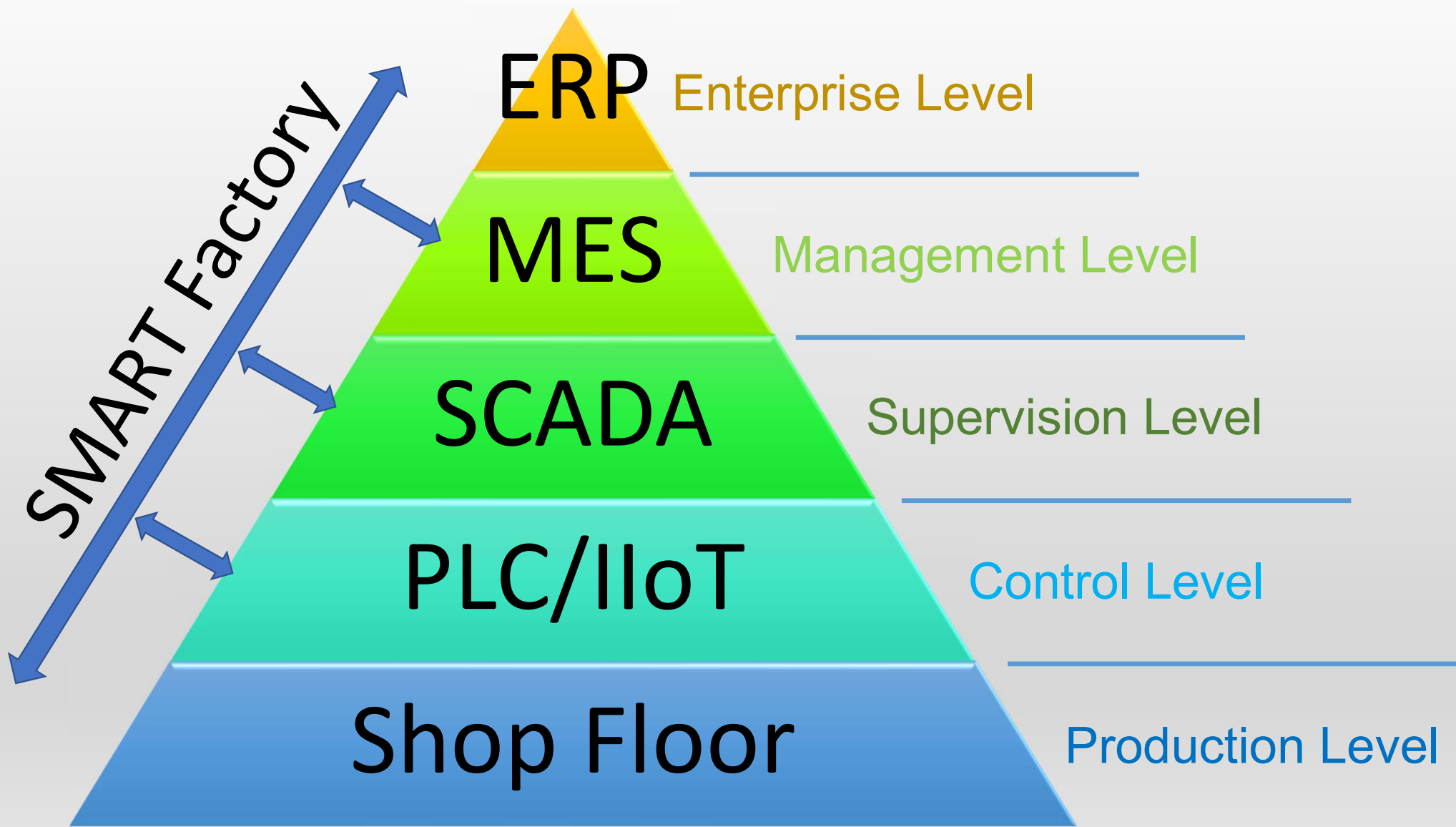
# Metric Improvements



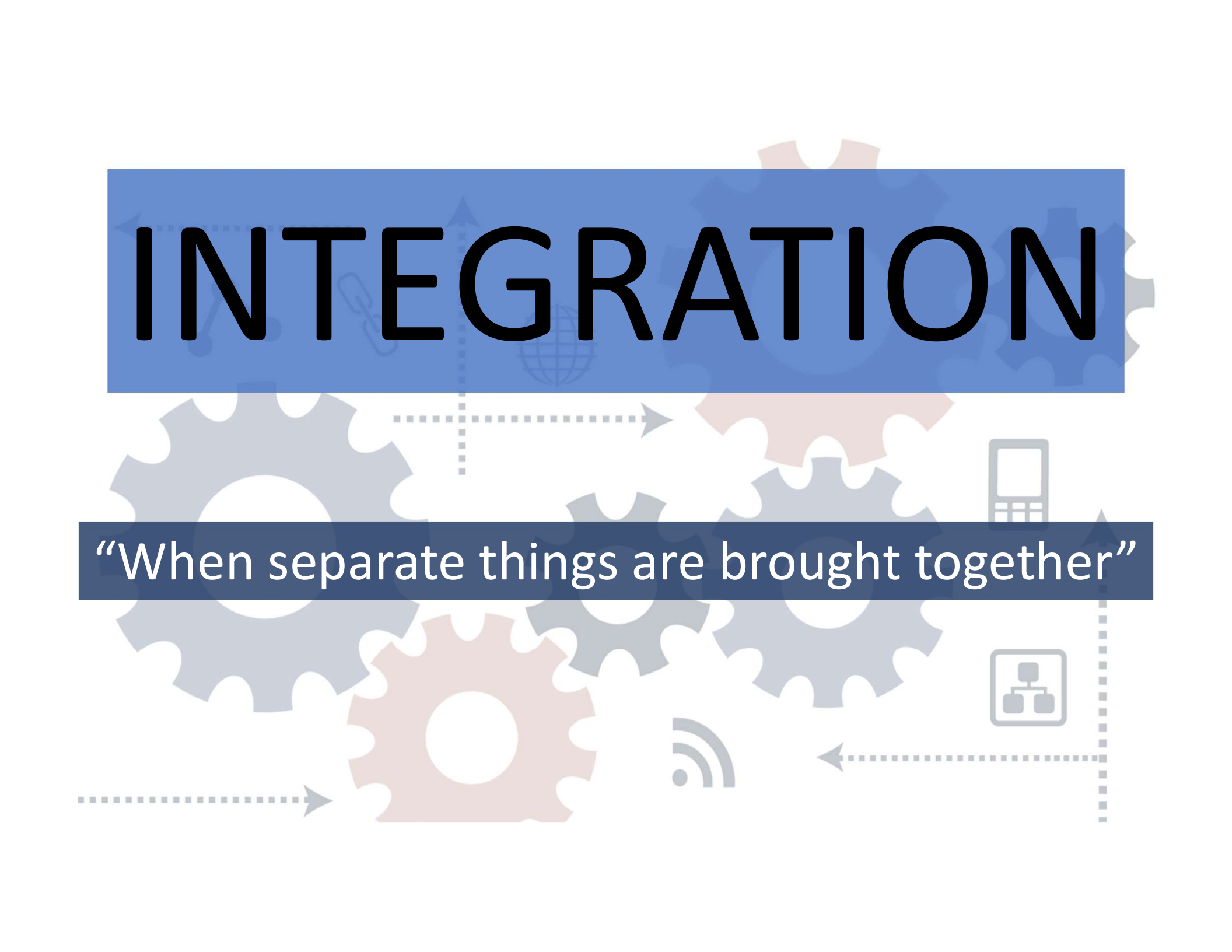


# Paperless Manufacturing

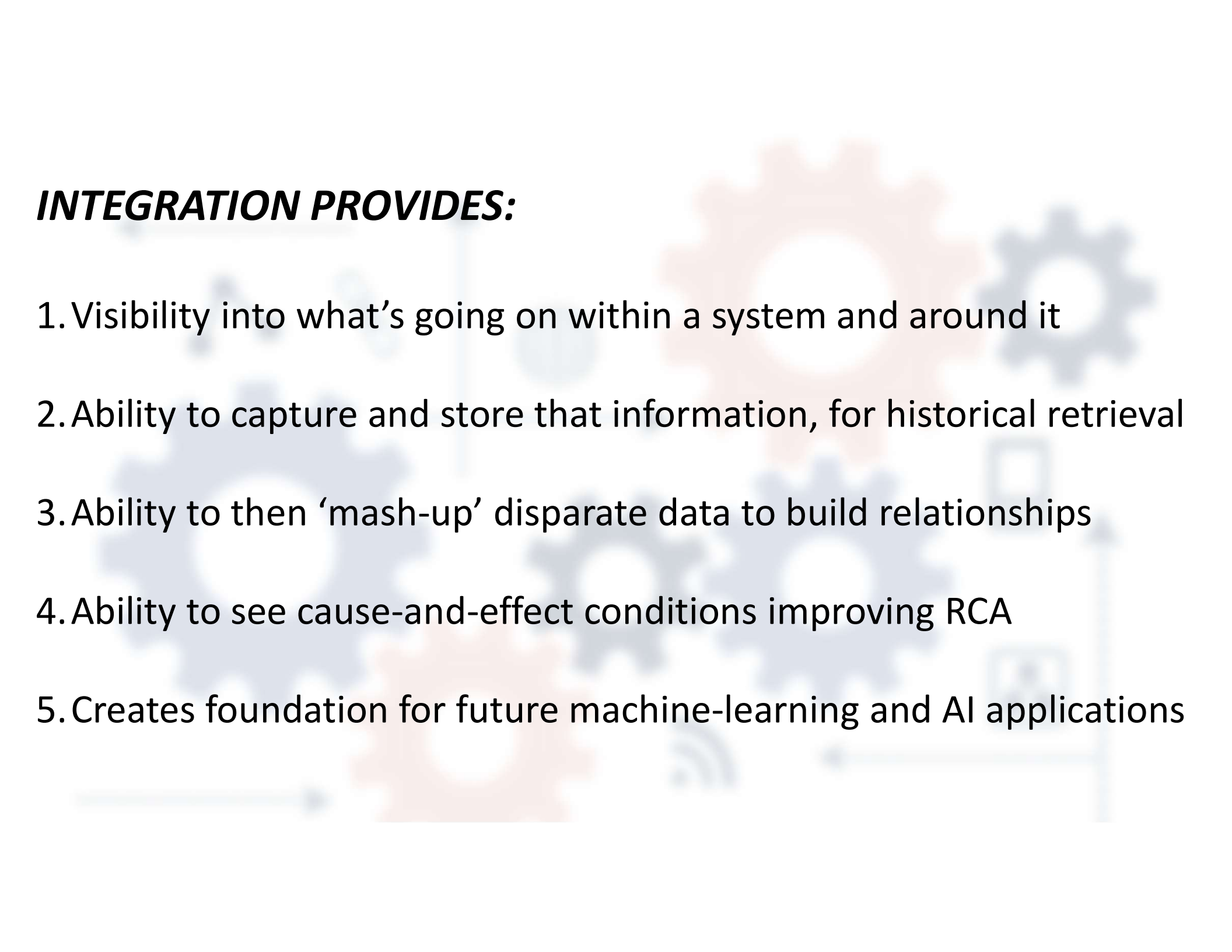




# INTEGRATION

The background features a complex arrangement of light blue and reddish-brown gears of various sizes. Overlaid on these are several dashed grey arrows pointing in different directions. There are also faint icons: a chain link, a globe, a smartphone, a Wi-Fi symbol, and a hierarchical organizational chart.

“When separate things are brought together”

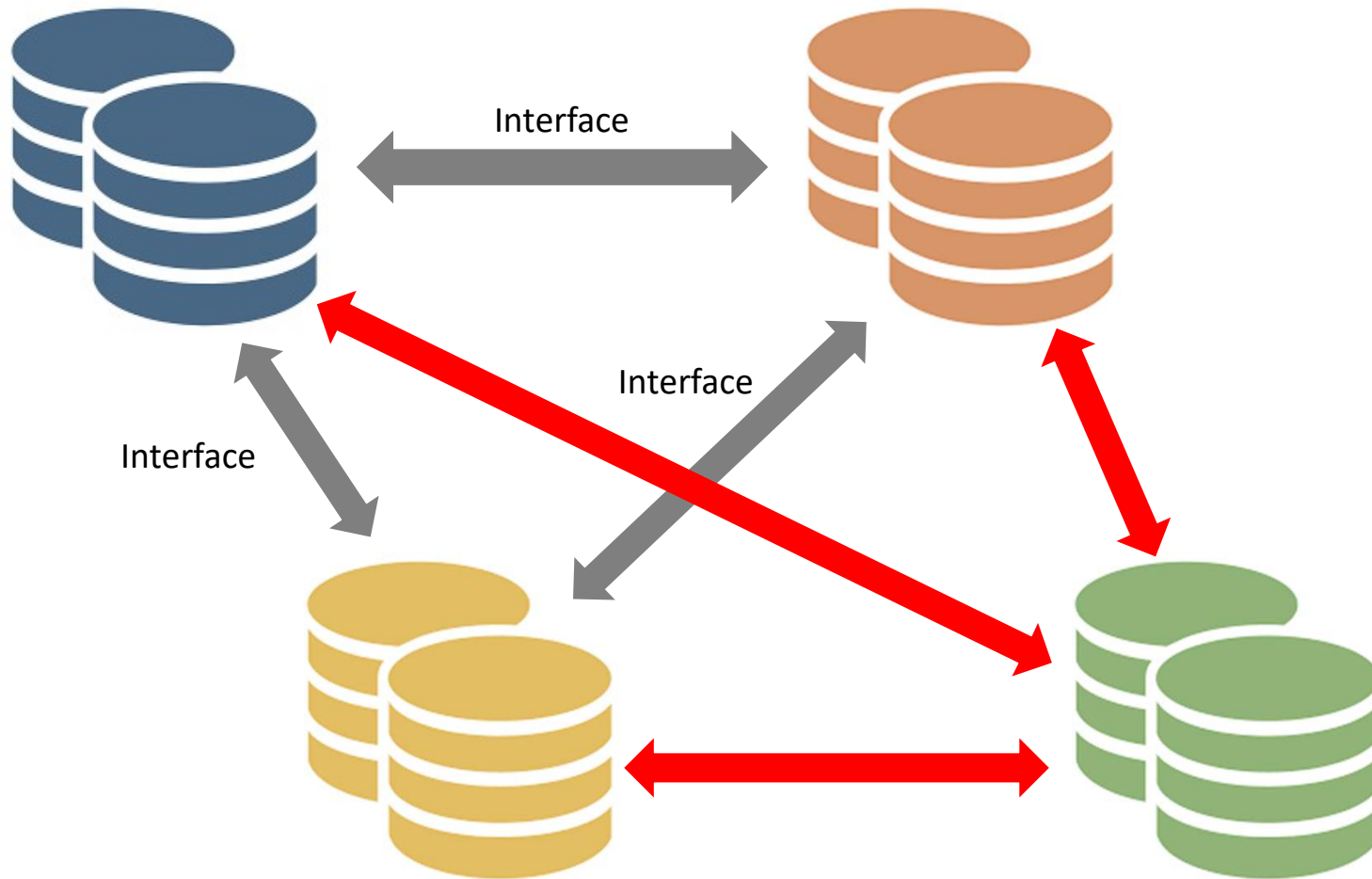


## ***INTEGRATION PROVIDES:***

1. Visibility into what's going on within a system and around it
2. Ability to capture and store that information, for historical retrieval
3. Ability to then 'mash-up' disparate data to build relationships
4. Ability to see cause-and-effect conditions improving RCA
5. Creates foundation for future machine-learning and AI applications

**BEWARE**

## MANY-TO-MANY MODEL ...



# Ravensthorpe Nickel Operation (RNO) in 2007



63 Interfaces!





SE CR ET SA U CE

# Hub 'n' Spoke





100%



Year

Qtr

Mth

Week

Day

Shift

Hour

Min

Sec

LAG MEASURES

*Business  
Intelligence*

LEAD MEASURES

*Manufacturing  
Intelligence*

**AGILITY**

News Release

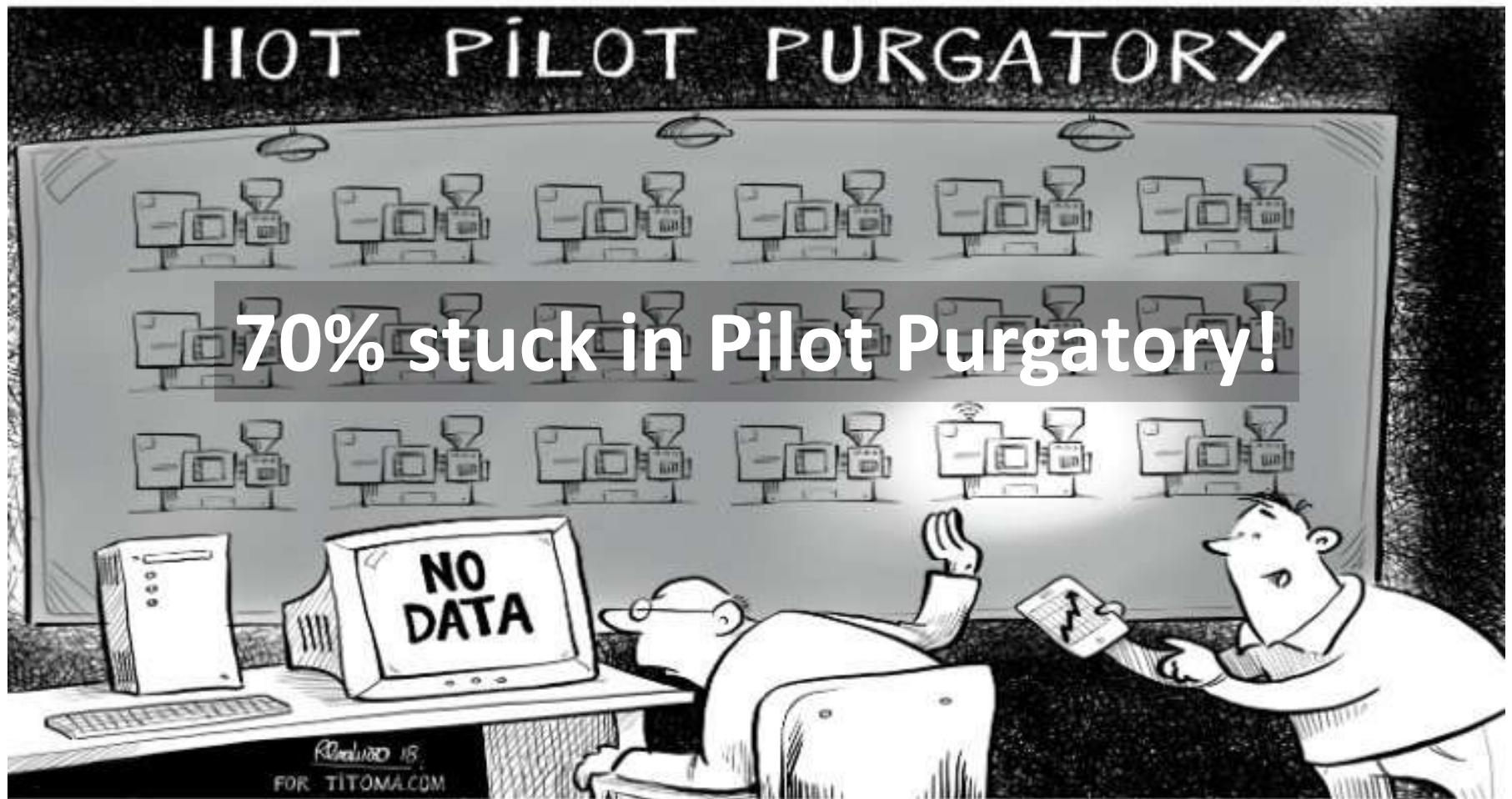
# Cisco Survey Reveals Close to Three-Fourths of IoT Projects Are Failing

🕒 May 23, 2017



# HOT PILOT PURGATORY

70% stuck in Pilot Purgatory!





POC

PROOF OF CONCEPT

Will it work?  
(functional)

VS

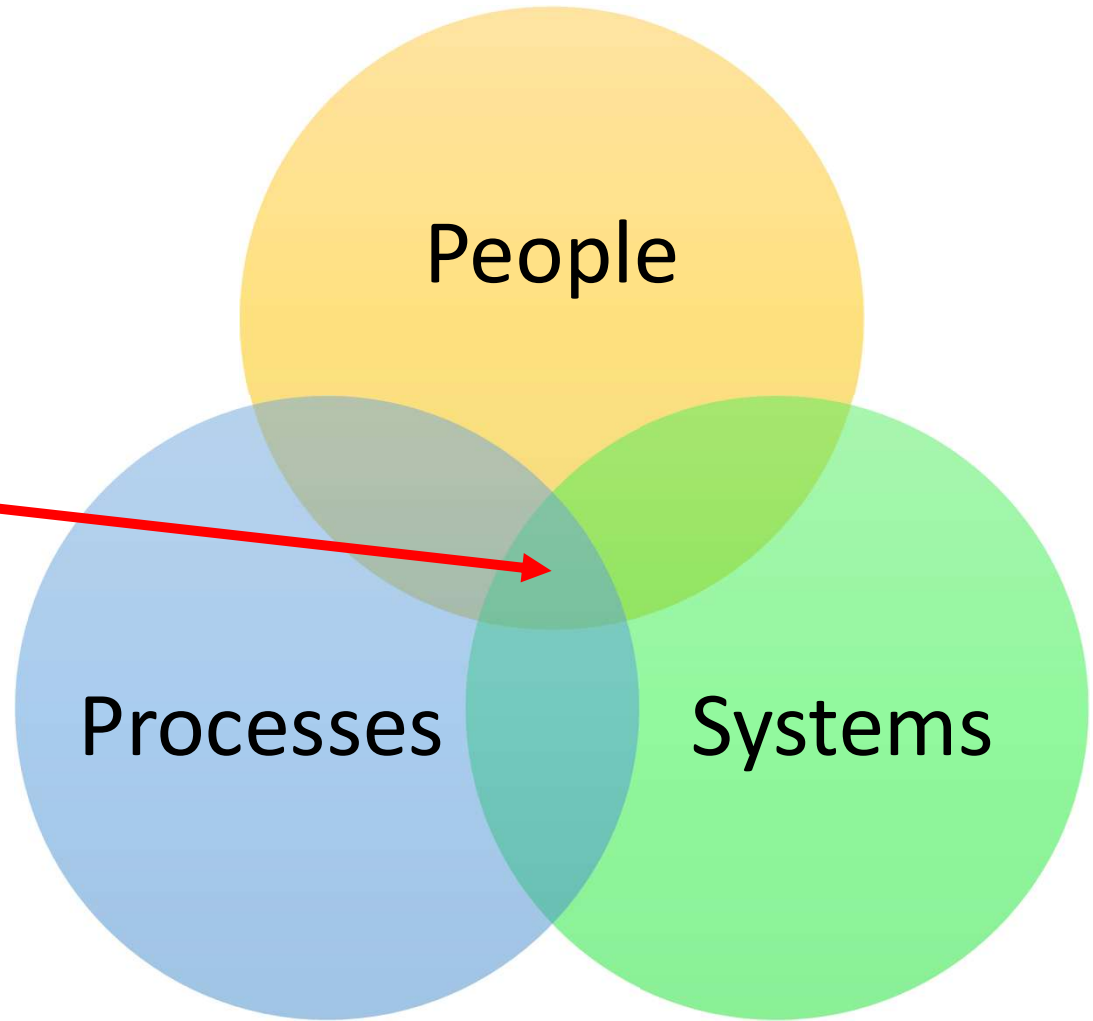


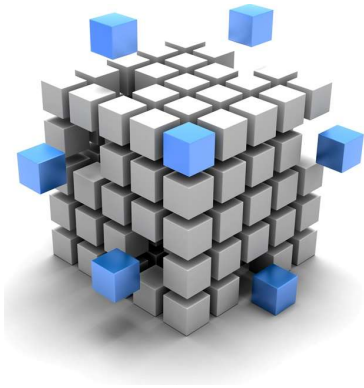
POV

PROOF OF VALUE

Will it save \$?  
(financial)

Alignment:





NEW ANSWERS  
TO  
OLD QUESTIONS

NEW ANSWERS  
TO  
NEW  
QUESTIONS

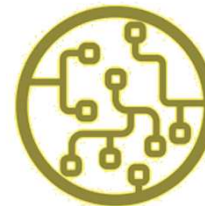


INNOVATION



OLD ANSWERS  
TO  
OLD QUESTIONS

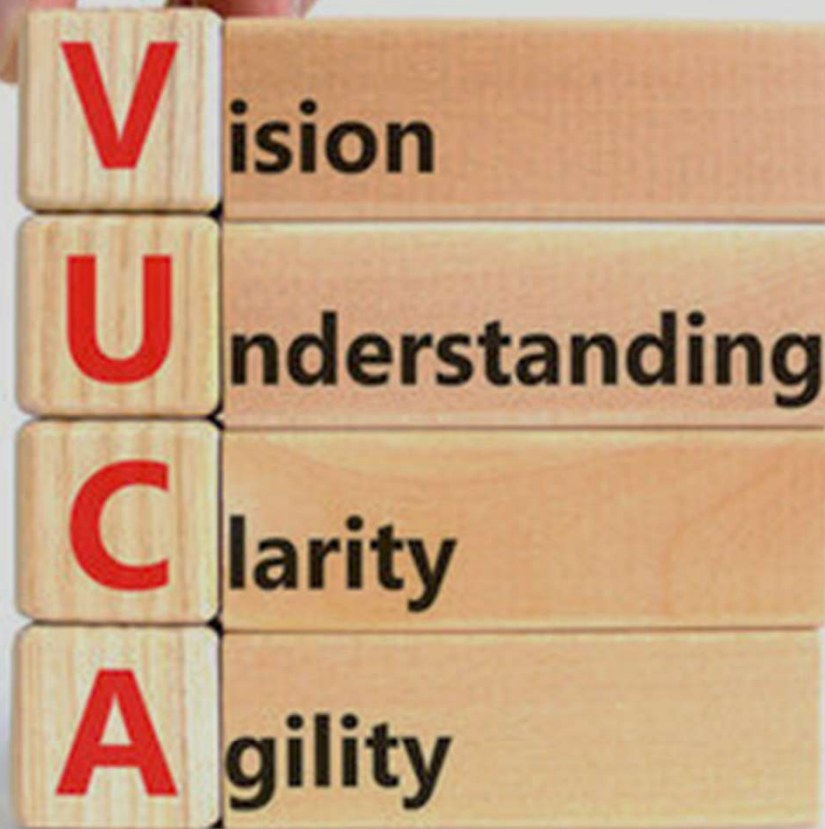
OLD ANSWERS  
TO  
NEW  
QUESTIONS



Source: LNS Research



**V**olatility  
**U**ncertainty  
**C**omplexity  
**A**mbiguity



**V**

ision

**U**

nderstanding

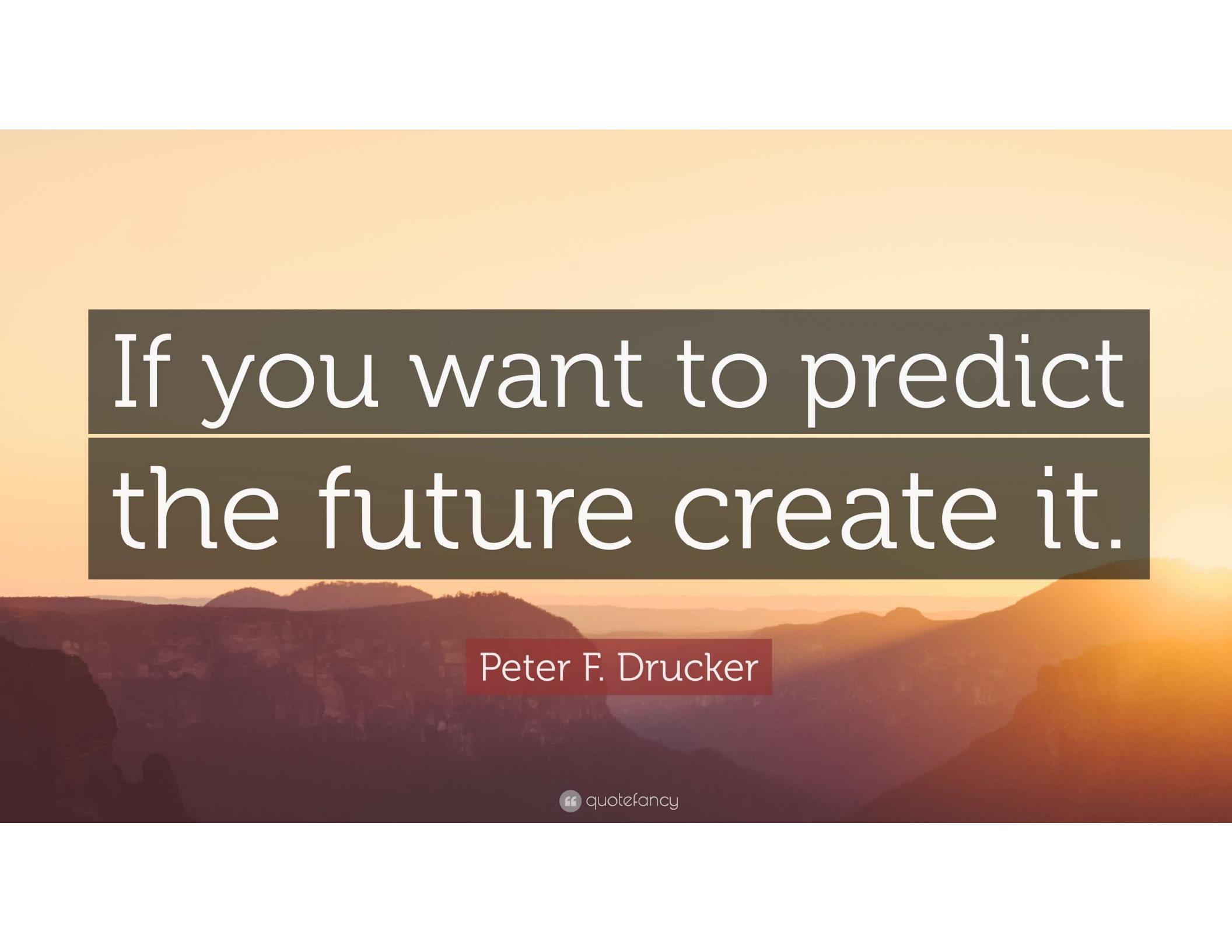
**C**

larity

**A**

gility





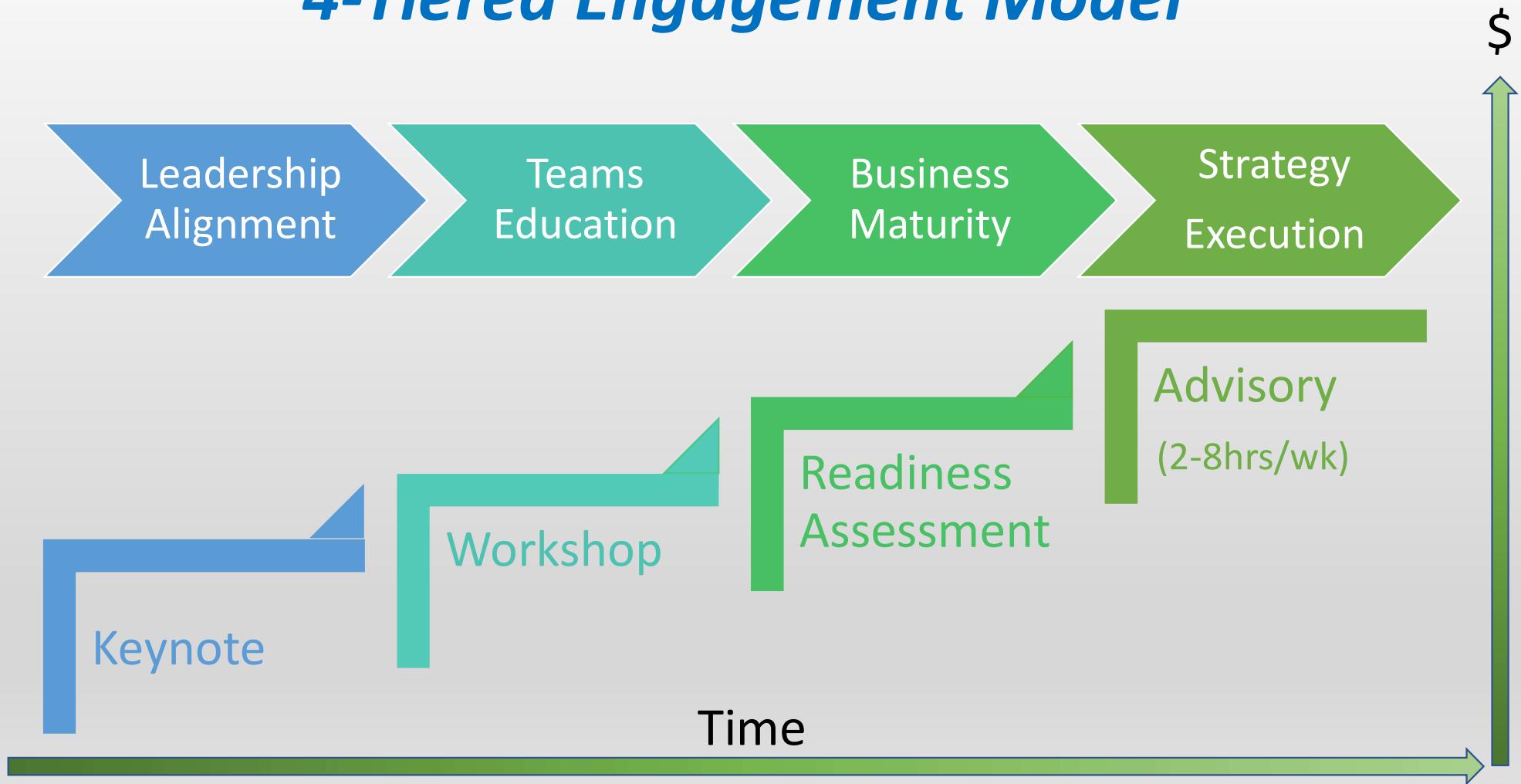
If you want to predict  
the future create it.

Peter F. Drucker

A human skeleton is seated at a dark wooden table, with its arms crossed in front of it. The skeleton is positioned centrally, facing the viewer. The background is a plain, light-colored wall. A semi-transparent brown banner is overlaid across the middle of the image, containing the text "High cost of doing NOTHING!".

*High cost of doing NOTHING!*

# *4-Tiered Engagement Model*





**RealisePotential**  
**HELPING MANUFACTURERS  
DO MORE WITH LESS**



## John Broadbent

Industry 4.0 Educator ♦ Smart Factory Specialist ♦  
Keynote Speaker ♦ Workshop Facilitator ♦ Mentor ♦  
Advisory Board Member

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4K followers · 500+ connections

 **Realise Potential**

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Sydney**

 **Company Website**   
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THANK  
YOU

