

**What Are You
Waiting 4.0?**



A 3D rendering of the word "WELCOME" in large, white, blocky letters. The letters are positioned in the center of the frame. Surrounding the letters is a dense cloud of small, rectangular confetti pieces in various colors: red, blue, yellow, and magenta. The background is a light gray wall with a visible brick pattern. The lighting is bright and even, casting soft shadows from the letters onto the wall.

WELCOME

John Broadbent



RealisePotential

Adjunct Prof Engineering

UNIVERSITY of
TASMANIA 



WHY?



DIGITAL TRANSFORMATION

Headwind



Tailwind

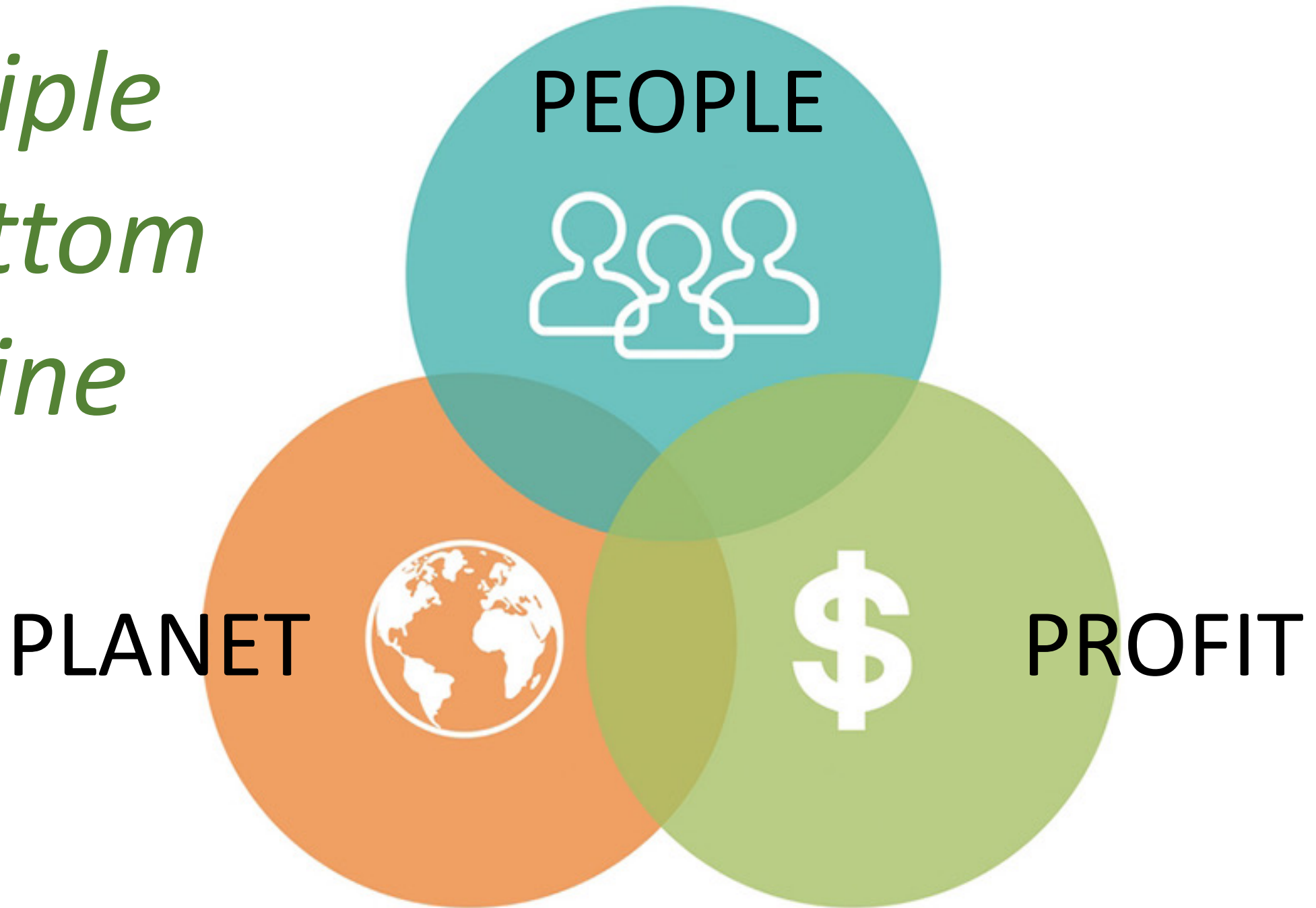


WE HAVE TO DO
MORE WITH LESS.



TOM
FISH
BURNE

*Triple
Bottom
Line*

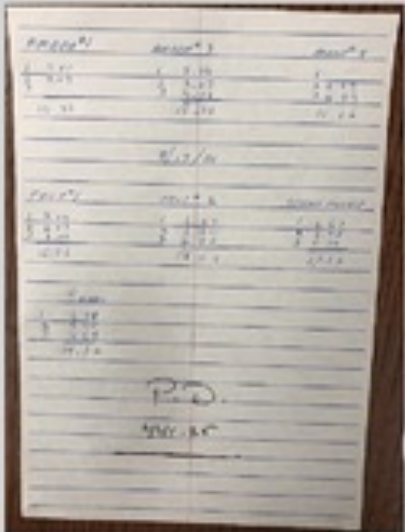




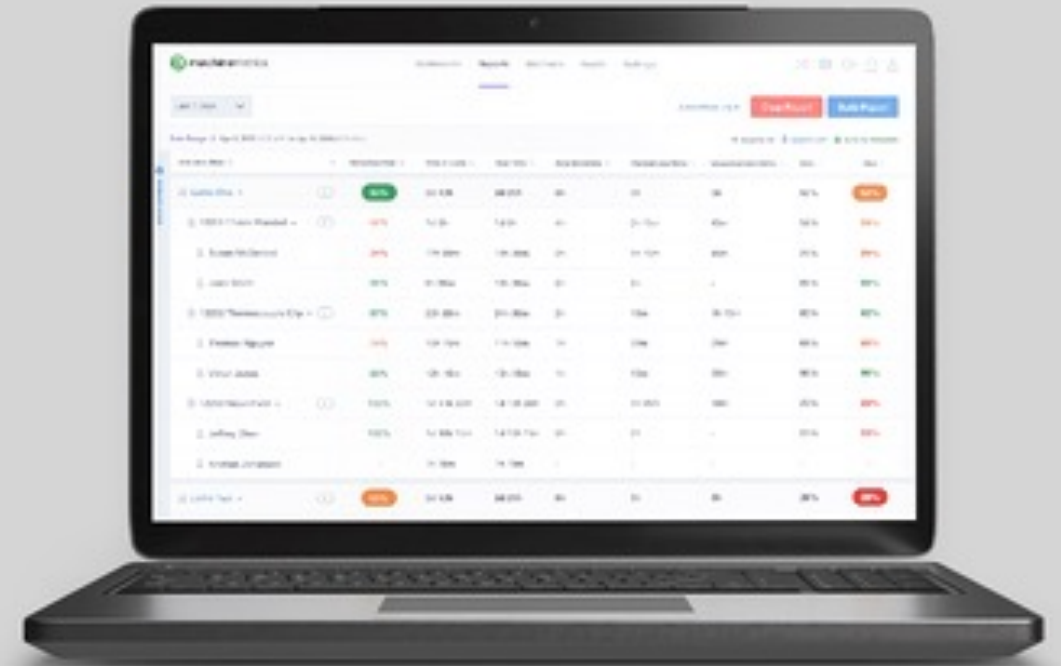
Digital Transformation

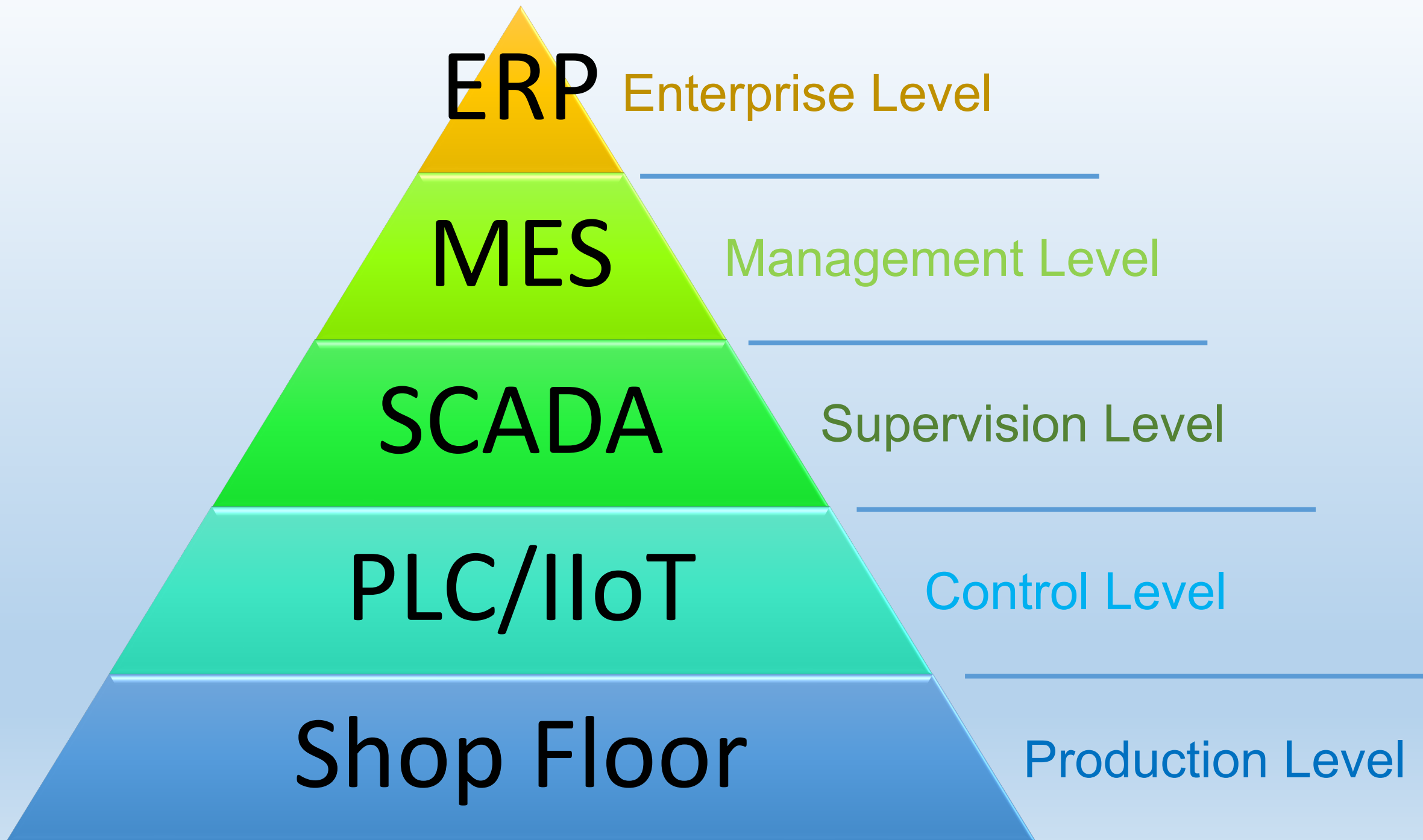


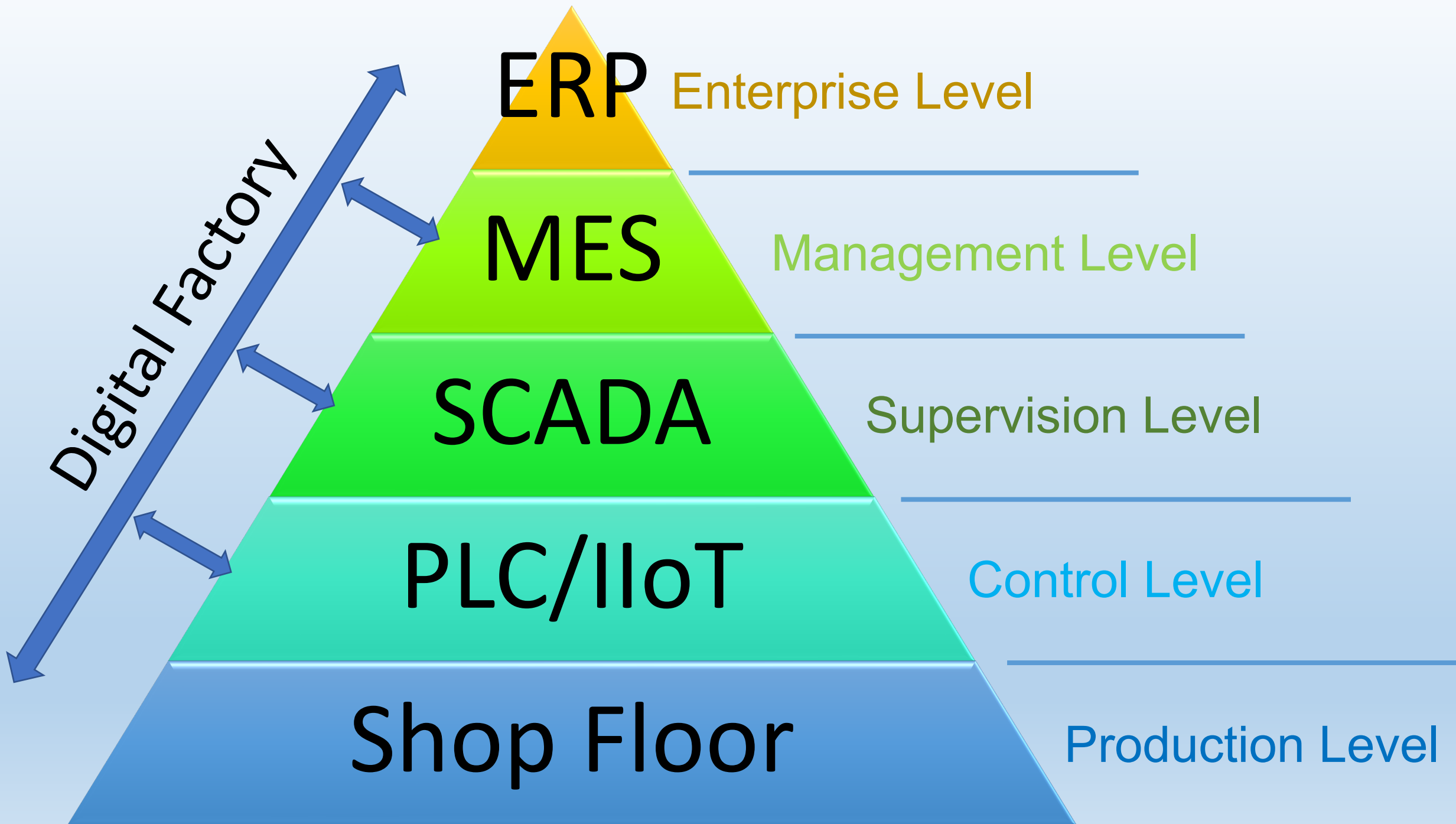
Paper-Based Manufacturing



Paperless Manufacturing







INDUSTRY 1.0



1784

Mechanisation,
steam power,
weaving loom



INDUSTRY 2.0

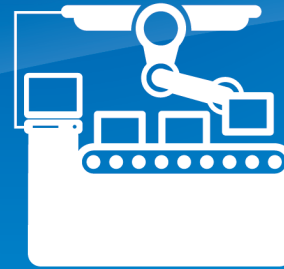


1870

Mass production,
assembly line,
electrical energy

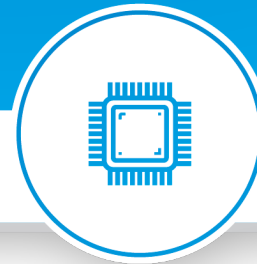


INDUSTRY 3.0



1969

Automation,
computers,
electronics



INDUSTRY 4.0



2011

Cyber-physical systems,
Internet of Things (IoT),
networks, cloud



INDUSTRY 4.0



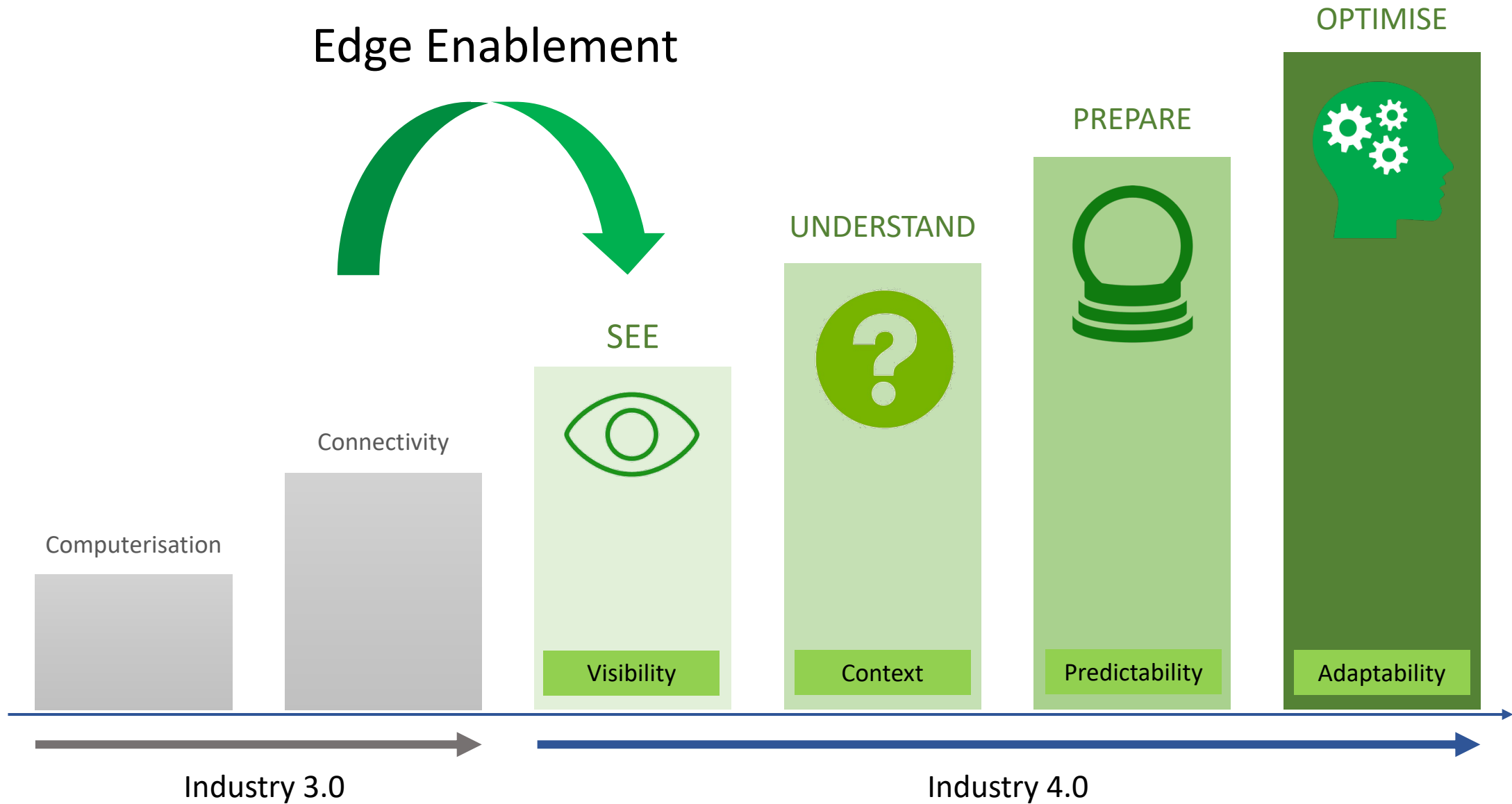
2011

Cyber-physical systems,
Internet of Things (IoT),
networks, cloud



ANNIVERSARY

Edge Enablement





“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.”

IMPACT MANUFACTURING

103 manufacturing sites are scaling innovations on our learning network



Here's what
McKinsey has to
say ...

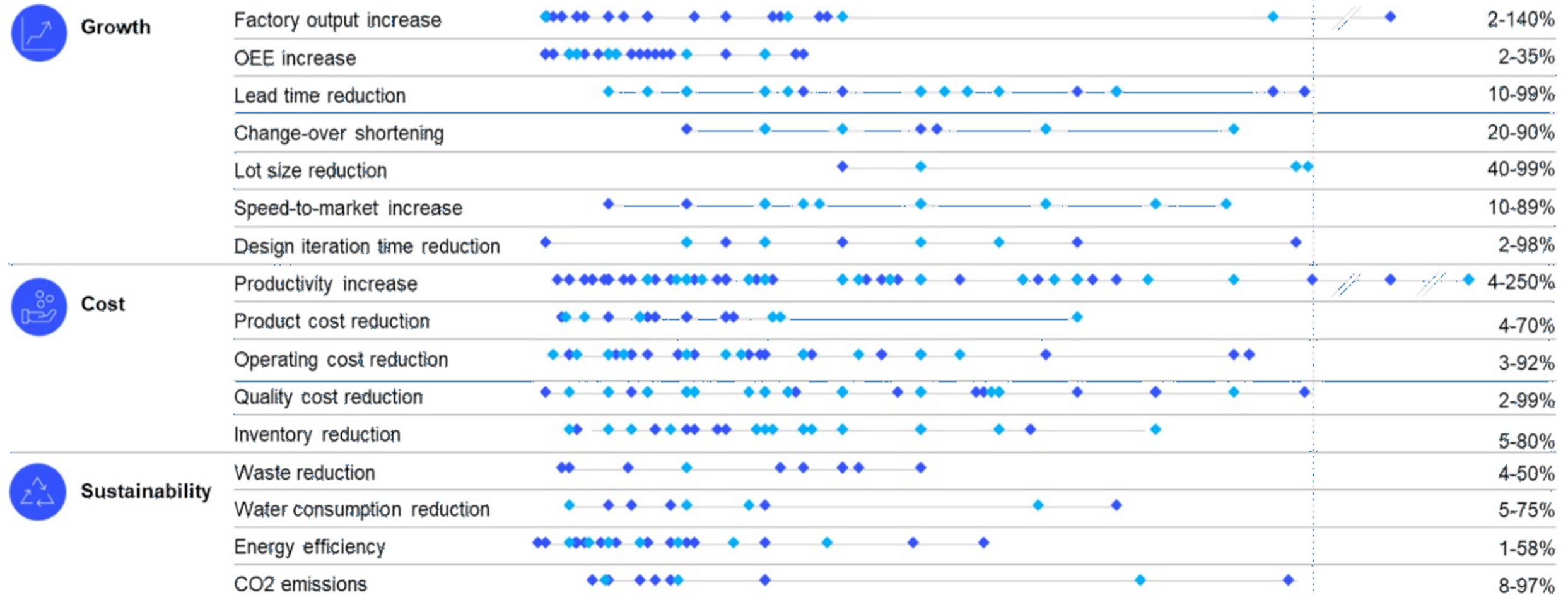
*“The gap between
4IR frontrunners
and the majority
was growing
rapidly.”*

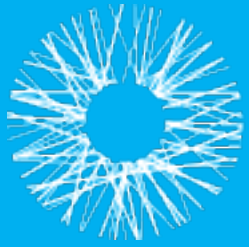
Global Lighthouse Network



Global Lighthouse Network (GLN)

KPIs improvements





NUCLEUS
RESEARCH

Analysis of potential improvements using predictive maintenance:

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

BEWARE

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

🕒 May 23, 2017



Internet Of Things (IoT)

2017: 8,400,000,000

2020: 30,000,000,000

2025: 82,000,000,000





POC

PROOF OF CONCEPT

Will it work?
(functional)

VS



POV

PROOF OF VALUE

Will it save \$?
(financial)

Year

Qtr

Mth

Week

Day

Shift

Hour

Min

Sec

LAG MEASURES

*Business
Intelligence*

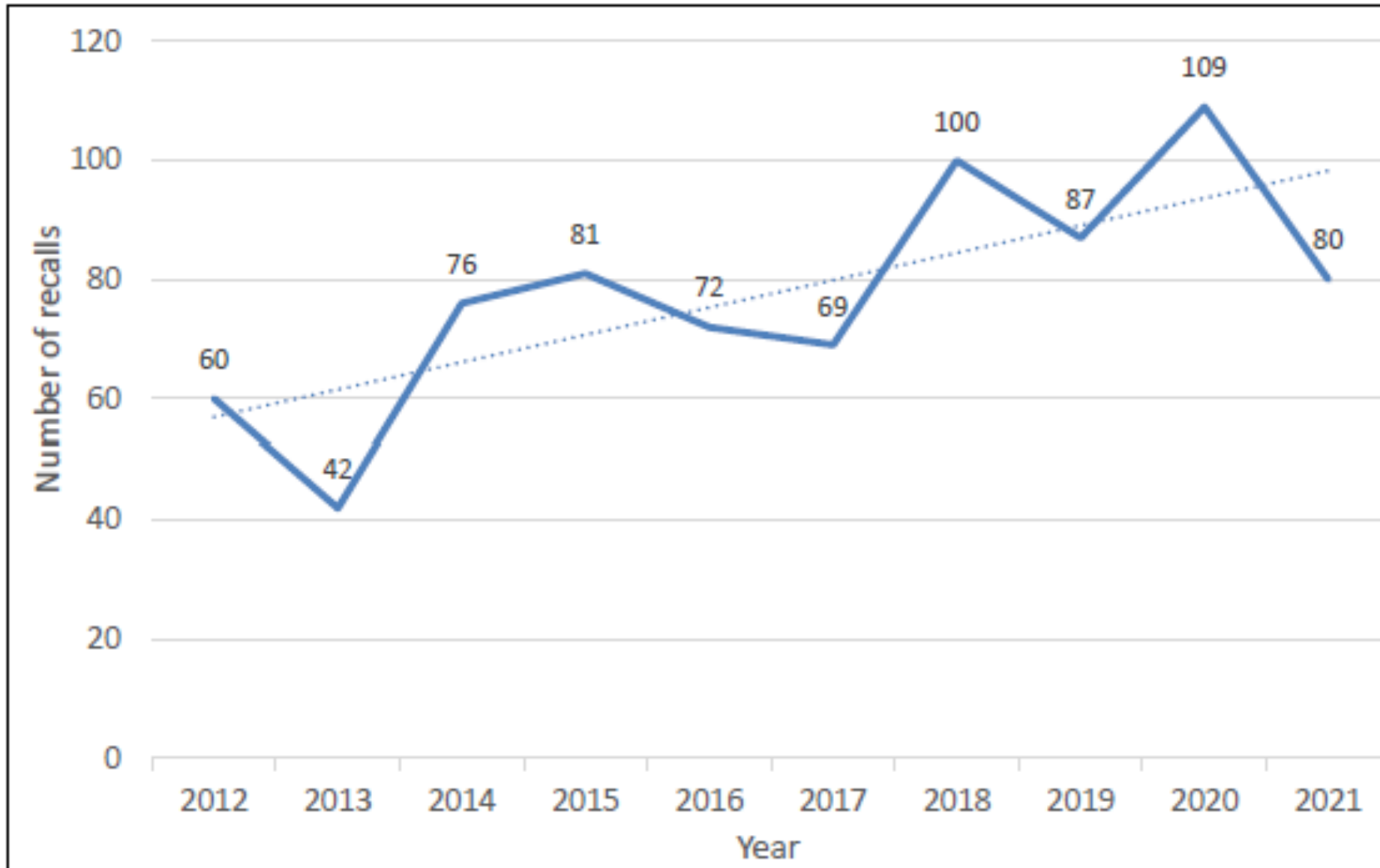
LEAD MEASURES

*Manufacturing
Intelligence*

VELOCITY

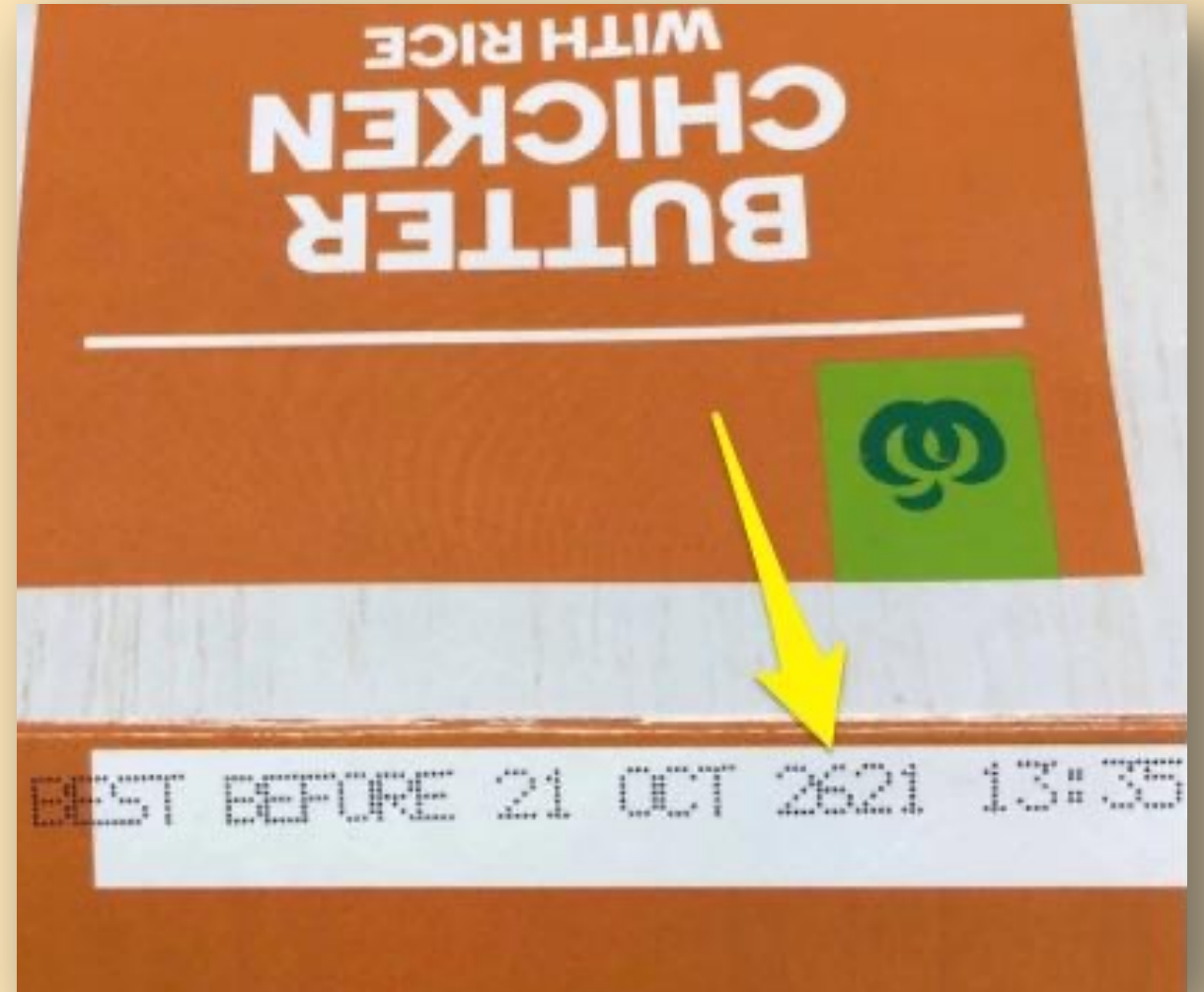


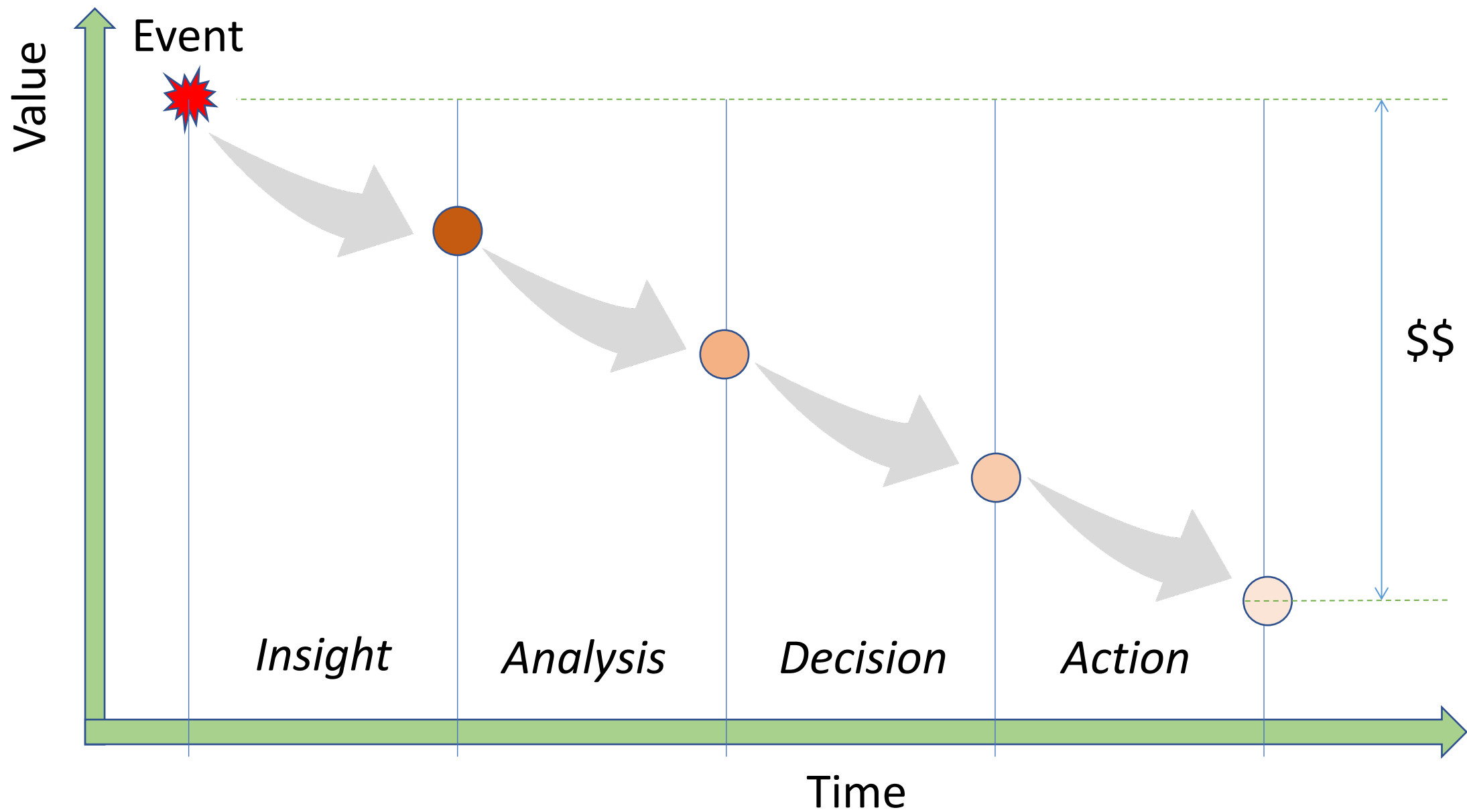
Food Recalls Australia (2012 - 2021)

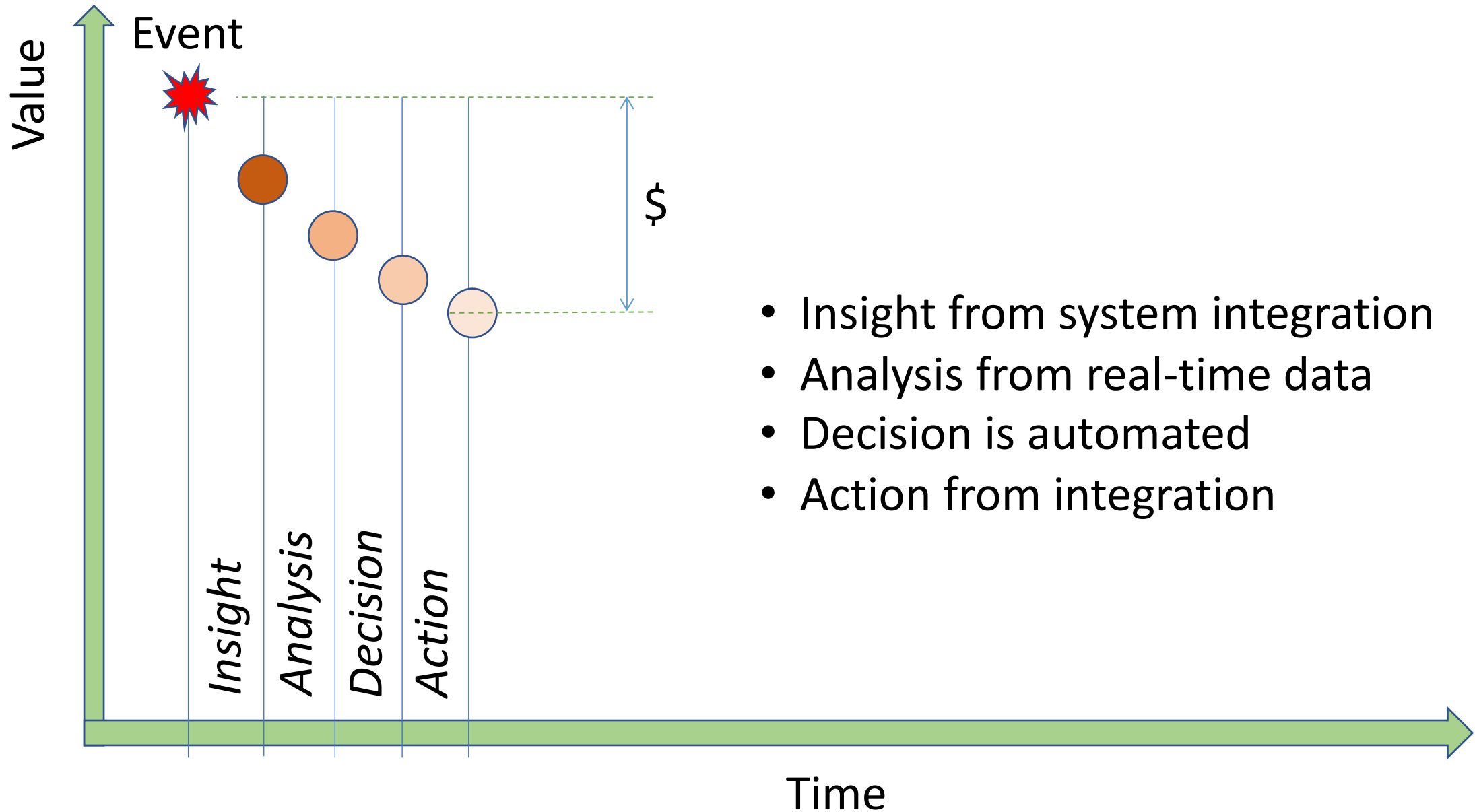




Caution: human error







- Insight from system integration
- Analysis from real-time data
- Decision is automated
- Action from integration

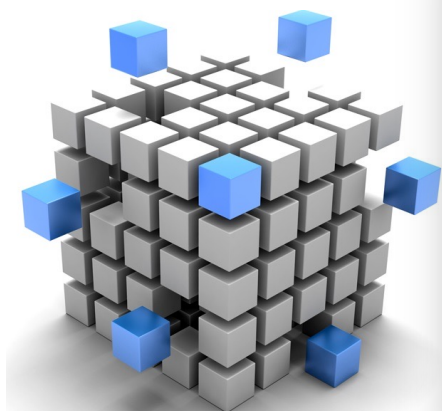




What Do We Already
Have?

Three Buckets Model



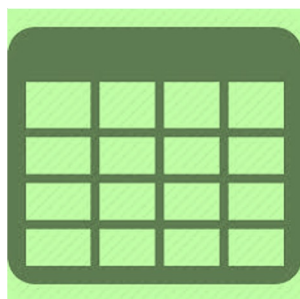


NEW ANSWERS
TO
OLD QUESTIONS

NEW ANSWERS
TO
NEW
QUESTIONS

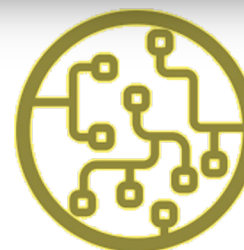
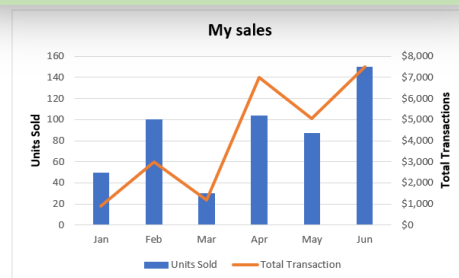


INNOVATION



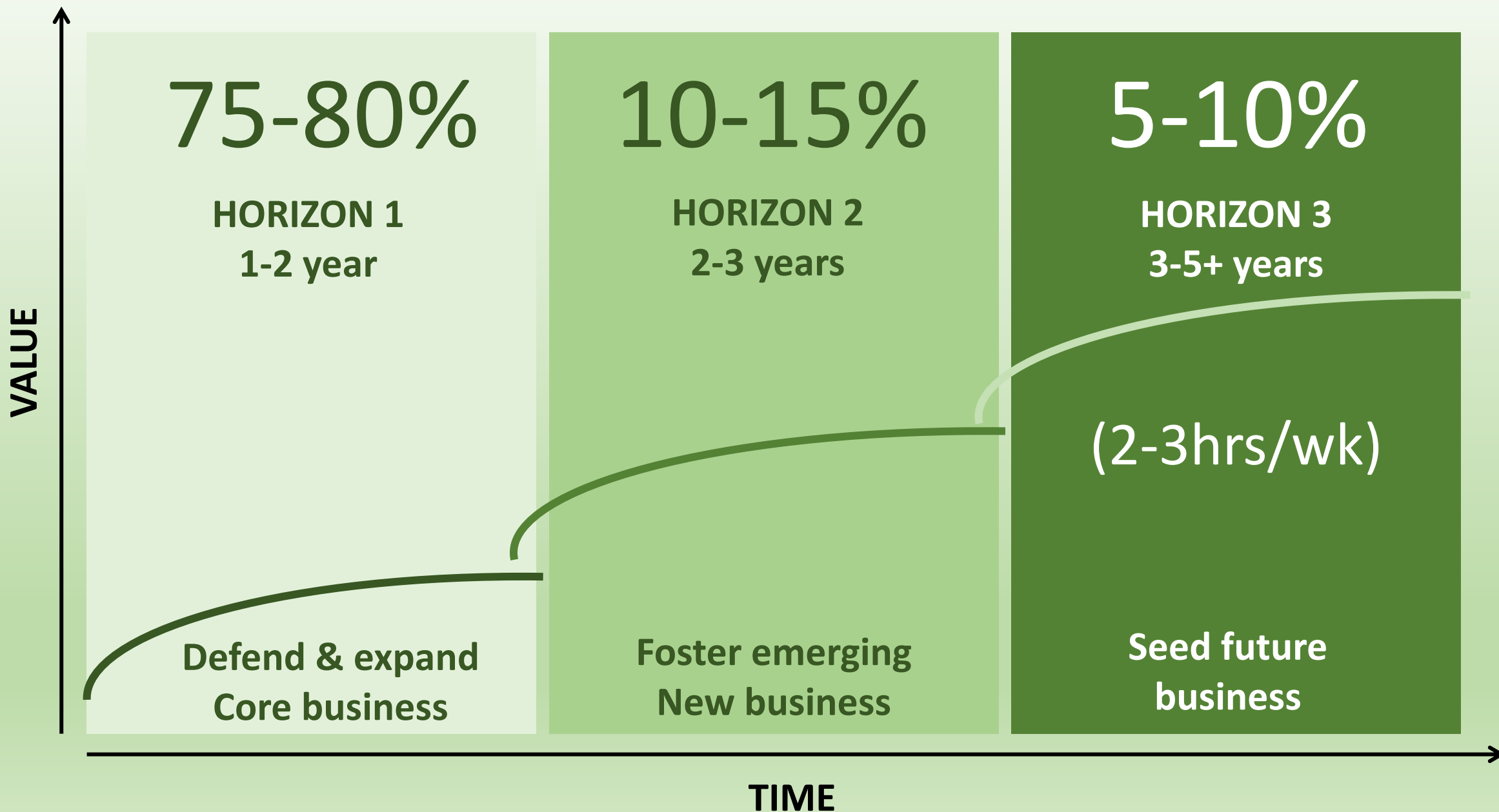
OLD ANSWERS
TO
OLD QUESTIONS

OLD ANSWERS
TO
NEW
QUESTIONS



Three Horizons Model







**SET YOUR
VISION
FOR THE FUTURE**

— & —

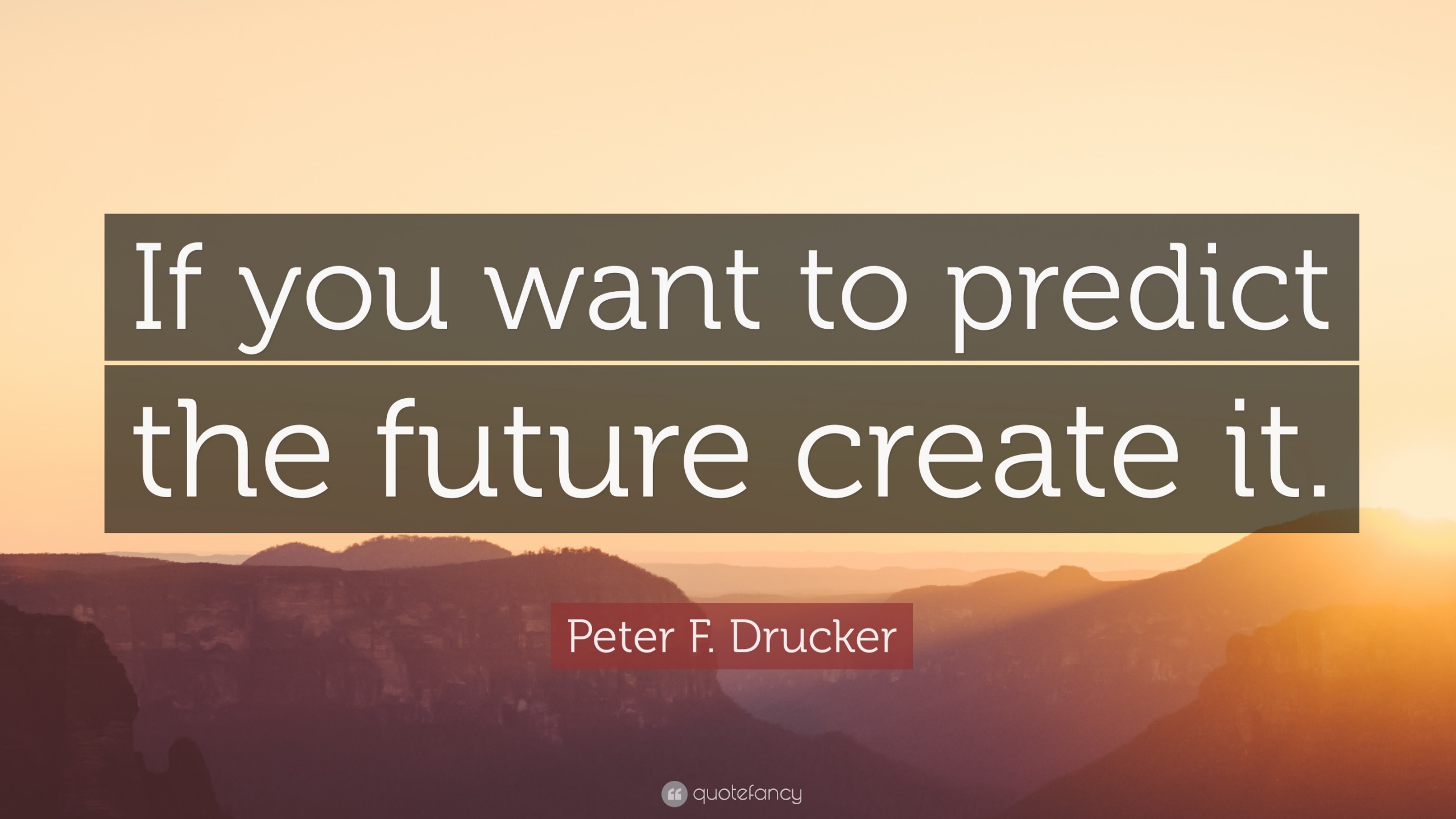
**DESIGN YOUR STRATEGY
TO GET YOU THERE**

One size does not fit all ...





*High cost of
doing
NOTHING!*



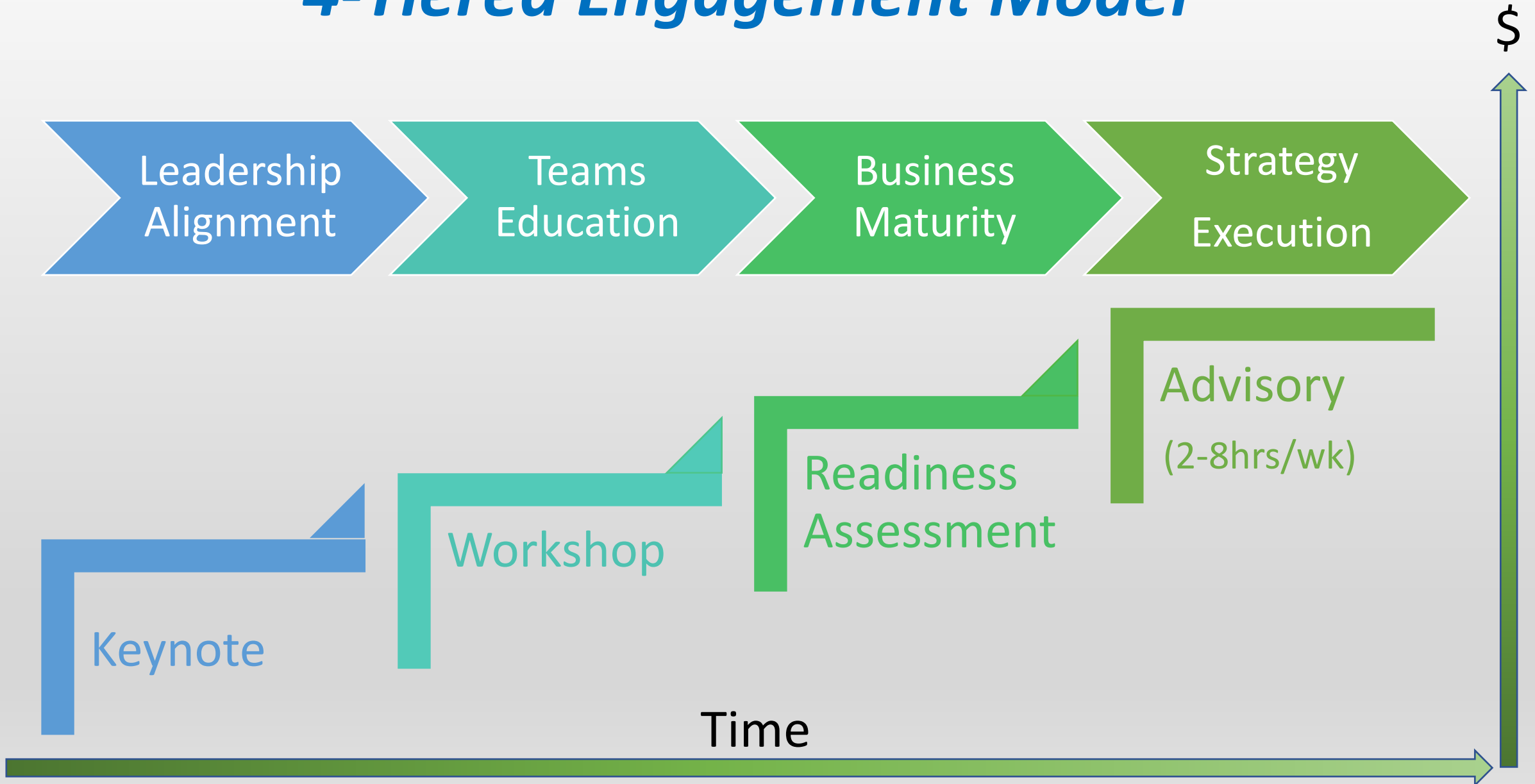
If you want to predict
the future create it.

Peter F. Drucker

**What Are You
Waiting 4.0?**



4-Tiered Engagement Model





RealisePotential

INDUSTRY 4.0 COACHING
SMART FACTORIES MENTORING
SMART MANUFACTURING IIOT
REDUCE WASTE **IMPROVE EFFICIENCY**
ADVISORY INCREASE PROFIT



...

John Broadbent

Industry 4 Educator • Smart Factory Specialist • Advisory
Board Member • Coach

Sydney, New South Wales, Australia · 500+ connections

[Join to Connect](#)



Realise Potential



Company Website [↗](#)

White Paper

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THANK
YOU

