YOKOGAWA

Co-innovating tomorrow™

Niet nóg een Proof of Concept:
Let's get SIRIous!

Maurice Houben

PRODUCTIE PROCES
AUTOMATISERING
PPA 22

Industrie 4.0   Cyber Security
Industrial Internet of Things   Data
Cloud   IT/OT Integration

Weersverwachting

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Many digital transformation plans lack coherence

Scattered point solutions; "hyped" ad-hoc IT/IoT applications

Fear of lock-in by incompatible technology choices

Rigid data structures, computational models, programming language and system architectures

Systematic, business driven approach is complicated

Digital Transformation means Business Transformation

Business process centric designs for full exploitation of digitalization potential

Future proofing: adaptive, flexible routings

Smart Manufacturing investments

ROI on asset utilization and operational effectiveness

Componenten

Smart Sensors

- Pressure / temperature
- Vibration
- Proximity
- Orientation
- Corrosion

Network Architectures

- IIoT Gateways
- Edge computing
- Protocols/conversions (OPC UA, MQTT, HTTP/ REST)
- Industrial ethernet, IO-Link
- LoRA LPWAN

Cloud Storage / CPU

- IIoT Platforms
- On-premise private/ hybrid/ public
- IaaS, SaaS, PaaS

Data Analysis

- Visualization
- AI/ML
- Predictivity/ Prescriptivity
- Autonomy
- Open source

Low Cost!

Smart Industry Readiness Index

- **Catalyzing the global transformation of manufacturing**
- **Adopted globally by over 600 companies across 14 industries**

Companies with CSAs

Over **100** CSAs globally | Across **30** Countries | **>500** OSAs completed

TÜV SÜD | McKinsey & Company | accenture

WORLD ECONOMIC FORUM | YOKOGAWA

TÜV Rheinland | INCIT | UL

FUJITSU | STANLEY

Selection of Assessments conducted

Alcon | P&G | AMGEN

vtti | SINGAPORE AIRLINES | COHERENT

BD | Pratt & Whitney A United Technologies Company | Kimberly-Clark

GLOBAL FOUNDRIES | infineon | Coca-Cola

Chevron Oronite | gsk GlaxoSmithKline | Shell

ALPLA

Midea | Rolls-Royce | Rockwell Automation

SIRI has been adopted globally by > 600 companies across 14 industry groups

### The 14 Industry Groups

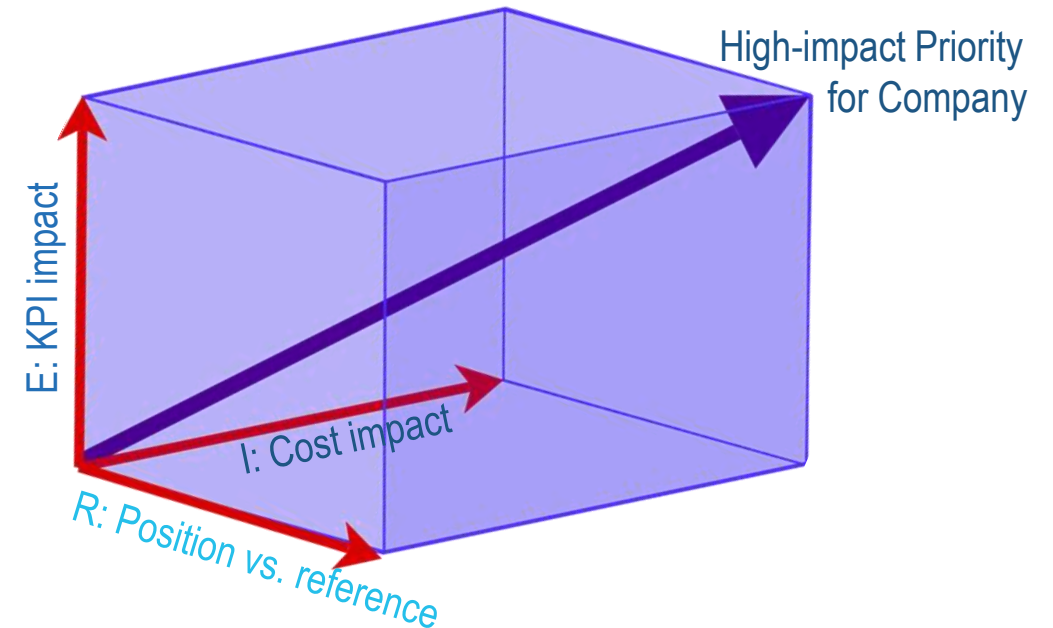|						
Aerospace	Automotive	Electronics	Energy & Chemicals (Downstream)	Food & Beverage	General Manufacturing	Logistics
Oil & Gas (Upstream)	Machinery & Equipment	Medical Technology	Pharmaceuticals	Precision Parts	Semiconductors	Textile, Clothing, Leather & Footwear

Assessment Matrix: assessing status against 6 Readiness levels on each of the 16 Dimensions

Assessment Matrix Score

Facilitated workshop: employee awareness & enthusiasm
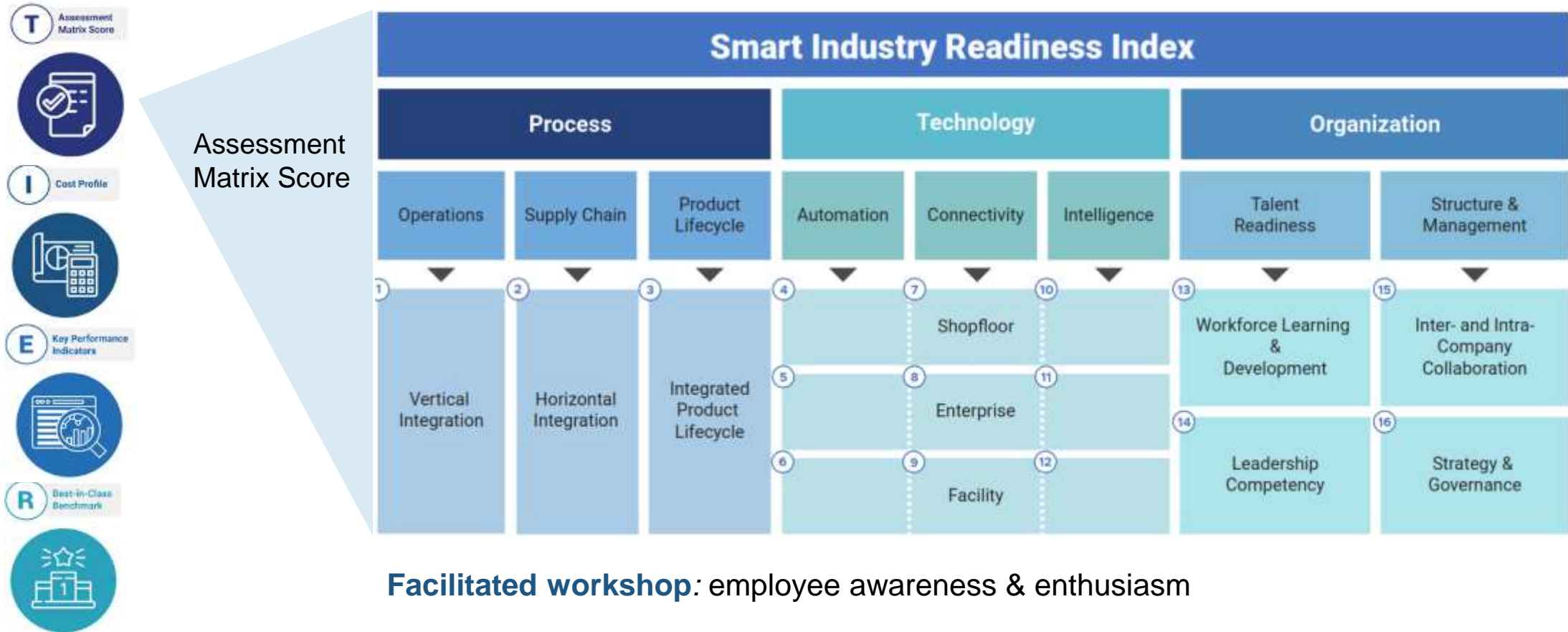
- **Relating assessment to finance and strategic KPI's**
- **Setting high-impact transformation initiatives**

TIER

- T: TODAY'S STATE
- I: IMPACT TO YOUR BOTTOM LINE
- E: ESSENTIAL BUSINESS OBJECTIVES
- R: RELATIVE POSITION TO THE BEST-IN-CLASS

E: KPI impact
I: Cost impact
R: Position vs. reference
High-impact Priority for Company

An independent, data-guided i4.0 benchmarking and maturity check, and insights on where to focus initiatives
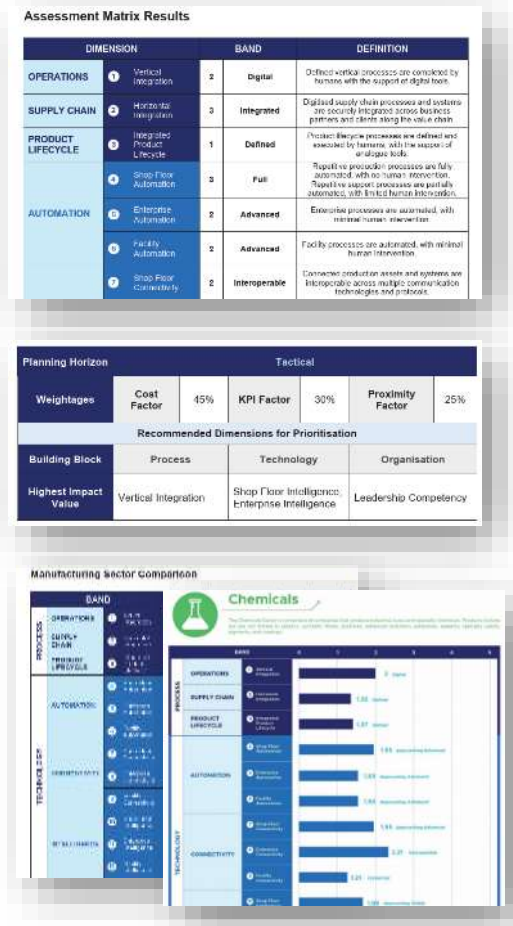
- ■ **Assessment Matrix Results**

  Detailing the current state of a company's manufacturing operations

- ■ **Prioritization Matrix Recommendations**

  As reference points to guidance the scoping of following up activities

- ■ **Whole of Manufacturing / Industry-Specific Benchmarks**

  To help companies take into considerations external yardstick to determine the aspiration and commitment levels

SIRI resultaten: De-Briefing Slide-pack

16-dimension benchmarking of operations against global and industry-specific peer-group
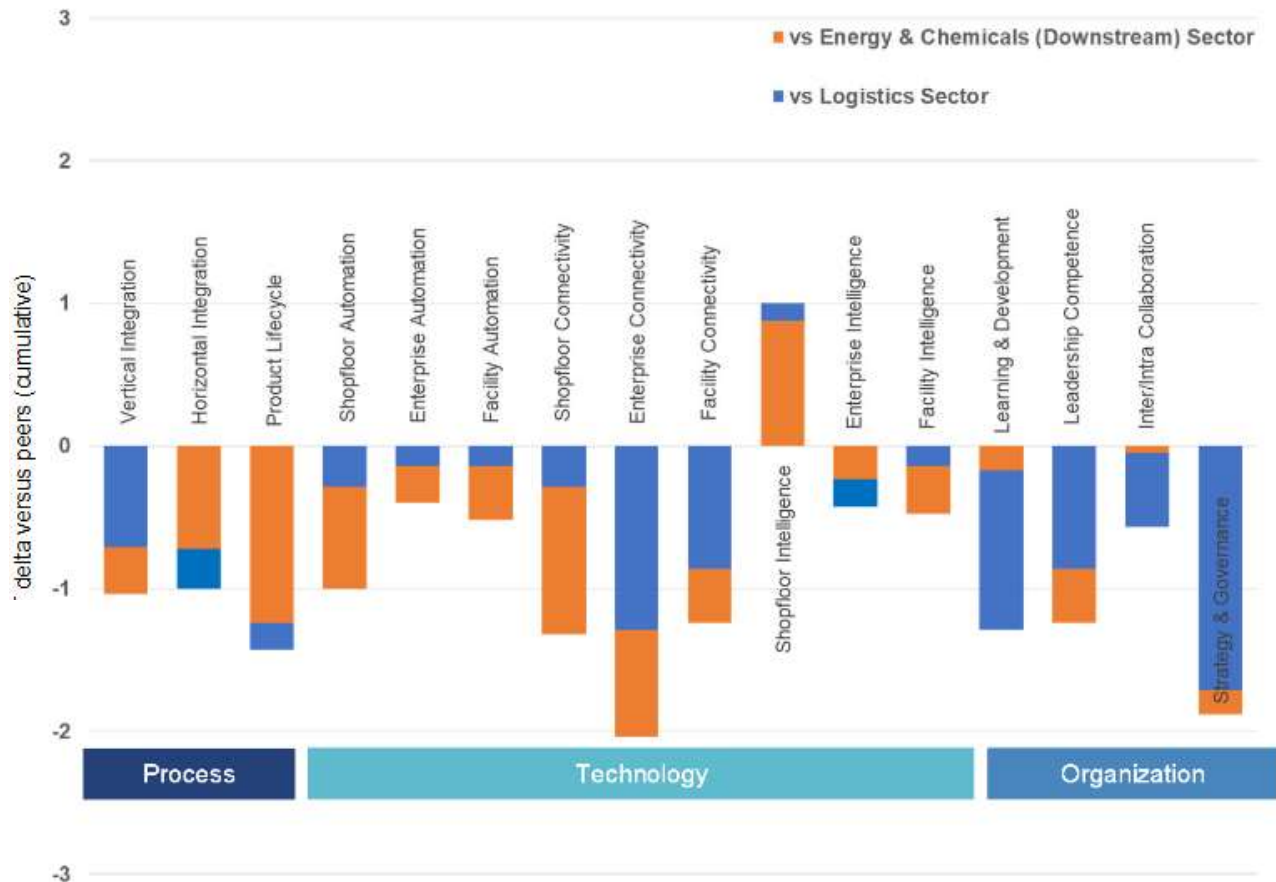
■ Outlooks

Into the desired future digitalization state, as per business needs
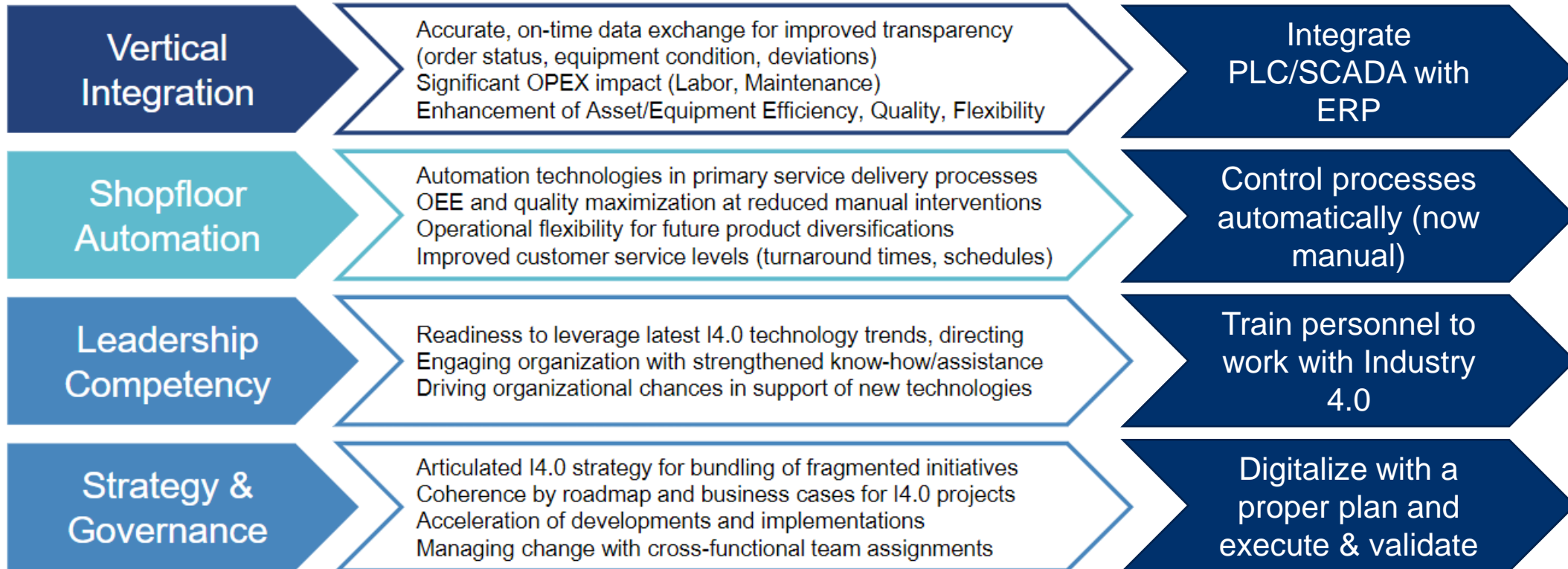
■ Birds-eye view
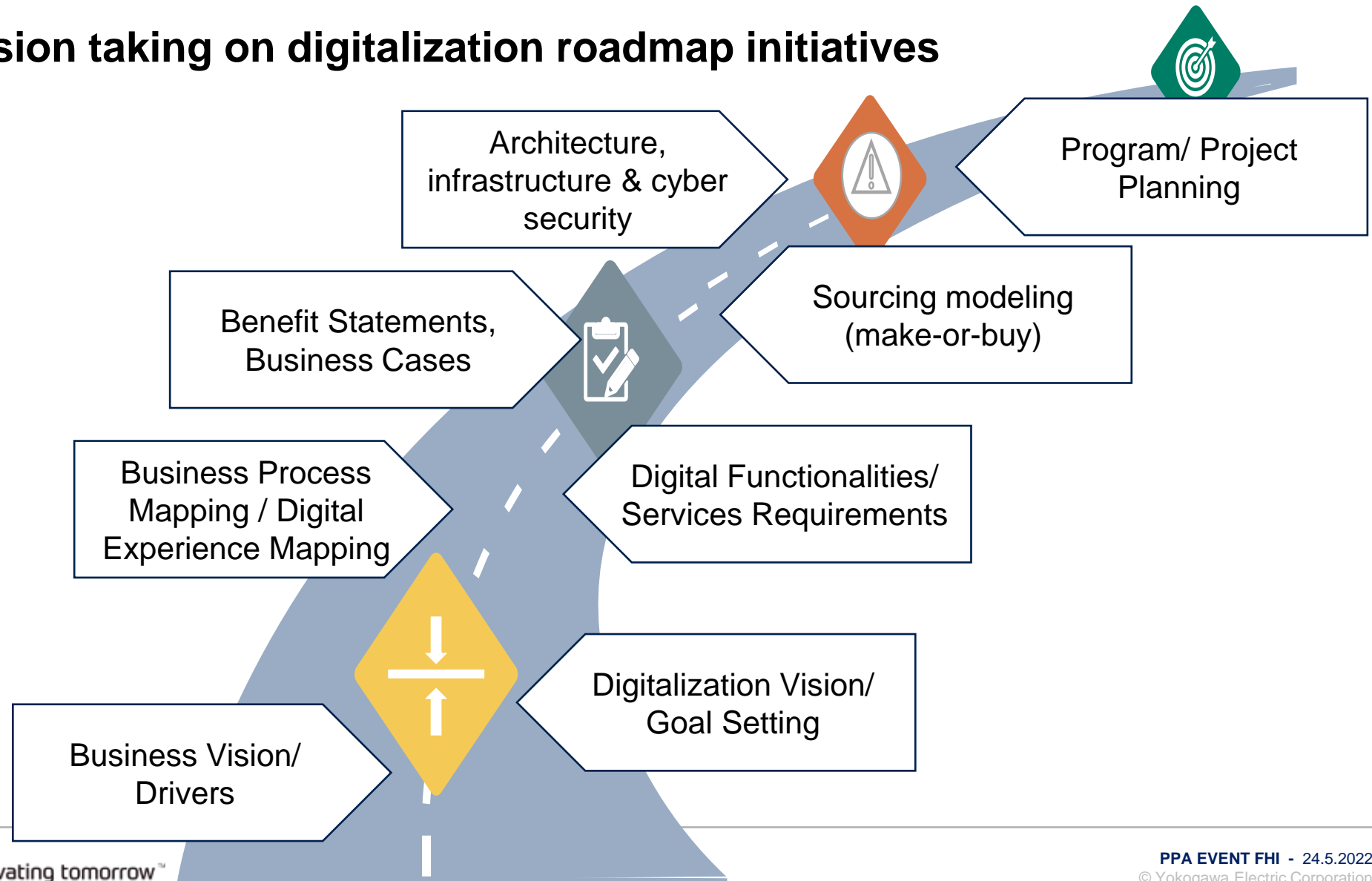
Across network of operations

■ Comprehensive reference

To develop Industry 4.0 roadmaps and identify specific digitalization transformation measures

Structured, facts-based guidance on recommended focus areas

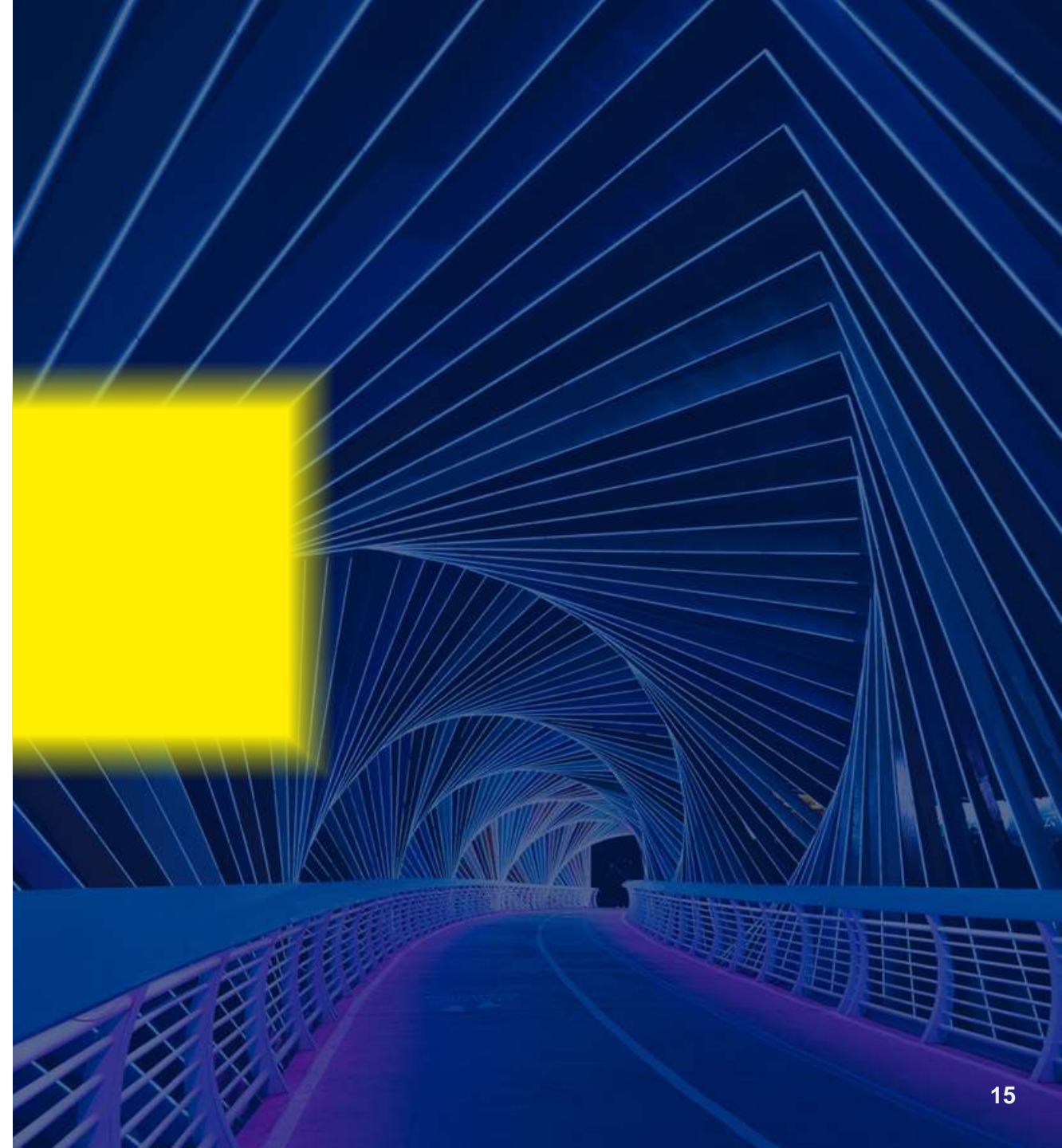|		
Vertical Integration	Accurate, on-time data exchange for improved transparency (order status, equipment condition, deviations) Significant OPEX impact (Labor, Maintenance) Enhancement of Asset/Equipment Efficiency, Quality, Flexibility	Integrate PLC/SCADA with ERP
Shopfloor Automation	Automation technologies in primary service delivery processes OEE and quality maximization at reduced manual interventions Operational flexibility for future product diversifications Improved customer service levels (turnaround times, schedules)	Control processes automatically (now manual)
Leadership Competency	Readiness to leverage latest I4.0 technology trends, directing Engaging organization with strengthened know-how/assistance Driving organizational chances in support of new technologies	Train personnel to work with Industry 4.0
Strategy & Governance	Articulated I4.0 strategy for bundling of fragmented initiatives Coherence by roadmap and business cases for I4.0 projects Acceleration of developments and implementations Managing change with cross-functional team assignments	Digitalize with a proper plan and execute & validate

Niet wéér een Proof of Concept!

- **Hoe creëer ik overzicht in het Smart Industry werkveld?**

- **Zou het goed zijn om te weten waar ik feitelijk sta t.o.v. vergelijkbare bedrijven in de industrie?**

- **Zou ik mijn I4.0 roadmap beter eens aan een onafhankelijke review onderwerpen?**

- **Hoe krijg ik de niet-technologie-gebonden zaken goed in kaart (processen, organisatie)?**

- **Hoe mobiliseer ik sleutelfiguren in mijn organisatie voor dit thema?**

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Onafhankelijke SIRI Assessor

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Tot ziens op standnr. 11

Weersverwachting

PPA EVENT FHI – 24.5.2022

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