



iken

INDUSTRY 4.0 Revolution

Presented by:

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ABOUT IKEN

IKEN helps organizations become more lean, sustainable, & more profitable through achieving operational excellence, improved assets utilization, optimized production, and enhanced supply chain responsiveness.

IKEN is an industry 4.0 technologies value integrator, providing best specialized business solutions using sensors, applications, big data, analytics, artificial intelligence & actuators with necessary digital security protection to deliver outstanding business results aligned with customers' goals and strategy.

IKEN with its shareholding company ACT (Advanced Computer Technology) have more than 500 employees, 30+ years of market experience, and 100s of references in many sectors, enabling customers to successfully overcome their pressing business challenges such as productivity, quality, and competitiveness by integrating digital transformation emerging technologies to match each customer's specific business challenges.

MISSION

“Optimizing the ROI of our customers through leading resilient & secure Industry 4.0 Digital Transformation by providing best emerging technology solutions with highest quality personalized service.”

VISION

“To become Middle-East & Africa best integrator delivering resilient & secure Industry 4.0 Digital Transformation.”

What we Do?

Organizational Transformation Services

- Industry 4.0 Organizational Readiness Assessment
- Organizational Governance
- Organizational Development based on Best Practices optimized for the Egyptian Market

Industry 4.0 Applications

- Modeling & Simulation
- Integrated Dashboarding
- Advanced Analytics & Big Data
- Digital Twinning
- Artificial Intelligence
- Predictive Maintenance
- Responsive Human Interfacing
- Vertical and Horizontal Integration
- Reverse Engineering
- Additive Manufacturing

Digital Security

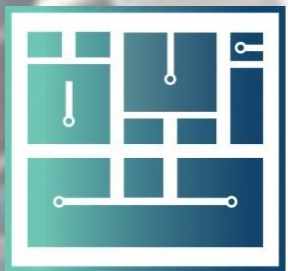
- GRC Service
- VAPT Covering IT, OT and IOT Environments
- Strategy & Governance
- Digital Security (IT, OT, IoT Security Solution Delivery)
- Security Transformation
- Digital Security Consultancy Service

Iken Academy

- Change Management & Digital Readiness
- Industry 4.0 Technology & IT/OT Security

- Shareholding/Strategic Alliance [Advanced Computer Technology (ACT)]
- MENA Strategic Service Partner [General Electric Digital]
- Strategic Digital Transformation Partner [Arab Organization for Industrialization (AOI)]
- Strategic Digital Transformation Partner [Ministry of Military Production (MOMP)]
- Cooperation Protocol [Ain Shams University (E-Hub)]
- Collaborative Organization [Amazon Web Services (AWS)]
- Strategic Local Partner [Contellect/e-File]





Industry 4.0 Transformation



I4.0 Transformation

Iken provide several Industry 4.0 solutions using many emerging technologies such as, Artificial Intelligence, Industrial IoT, Digital Security, Big Data, Additive Manufacturing, & Autonomous Robots. Capitalizing on our compounded years of expertise and our strategic alliances & Partners, we enable our customers to have a unique customized solution that delivers outstanding business results facilitating their Digital Transformation journey.

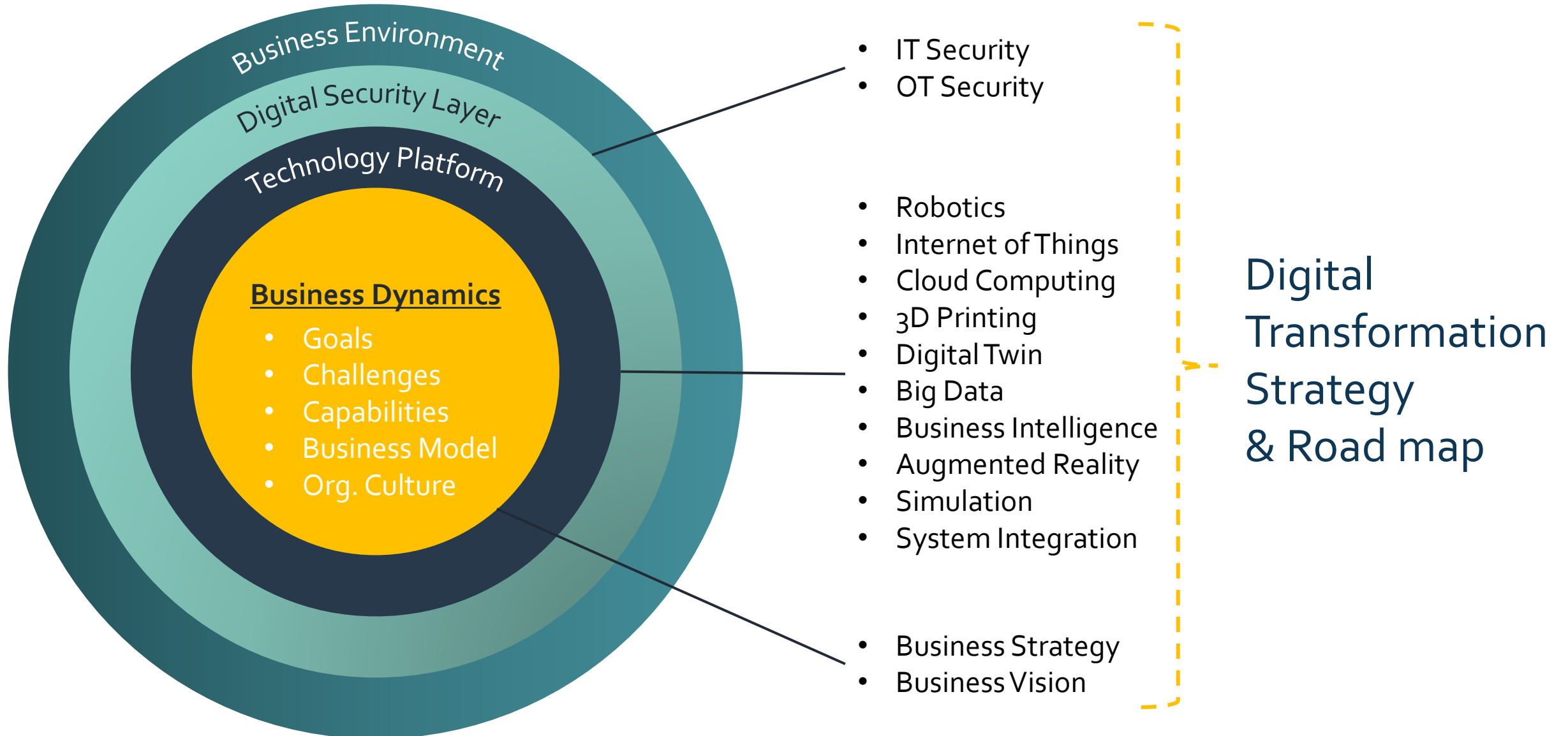


Key Benefits

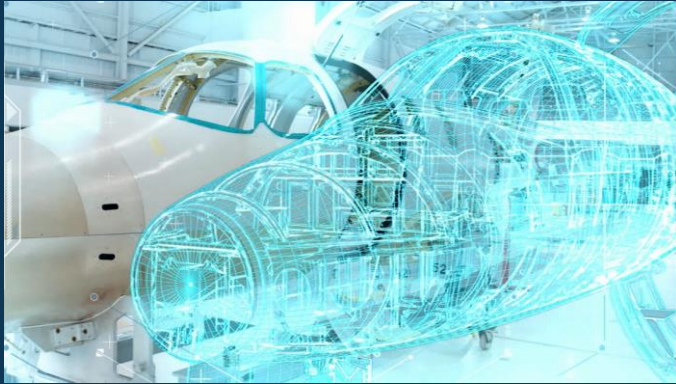
- 1 Noticeable increase in return on investment (ROI) & Competitiveness
- 2 Increase in operational control, and efficiency,

- 3 Improving production Agility, flexibility, & customer centricity
- 4 Live data driven decision support

Digital Transformation Framework



Some DT I4.0 Solutions



Digital Twinning



Predictive Maintenance



Energy Optimization



Smart Grid



Smart Inventory



Smart Farming

Industry 4.0 Applications



Agriculture

- Supply Chain Efficiency
- Increase production yield
- Accurate traceability
- Increased farming quality
- Cost & Time Reduction
- Improved Produce Safety
- Early Pests/Weather Threats Notification

Utilities

- Increase Network control
- Decrease non-revenue waste
- Improve distribution efficiency
- Remote working capabilities
- Troubleshoot blinks, sags, and swells
- keeping track of peak usage timings

Manufacturing

- Dashboarding
- Efficient Automation
- Mass Customization
- Reverse Engineering
- Vertical / Horizontal Value Chain Integration
- Through-engineering

Industry 4.0 Applications



City Management

- Enhanced citizen & government engagement
- Safety and community management
- Reduced environmental footprint
- Utilities Smart Management
- Predictive Maintenance



Retail

- Personalized Shopping Experience
- Smart Warehousing
- Advanced Check-outs
- Online/Offline Integration
- Dynamic Pricing
- Responsive Merchandising
- High Product Information Visibility
- Customers Data Monetization



Health

- Reducing healthcare costs.
- Predicting epidemics.
- Avoiding preventable deaths.
- Improving quality of life.
- Reducing healthcare waste.
- Improving care efficiency & quality
- Developing new drugs and treatments.

Industry 4.0 Applications



Banking

- Block chain and distributed ledger technology
- Process digitization
- Digital/Mobile Banking
- E-commerce & Point of Sale
- AI Risk Mitigation & Calculation

Oil & Gas

- Dashboarding
- Efficient Remote Working System
- Enterprise Learning Systems
- Digital Twin
- Asset Information System

Aviation

- Ground Handling
- Master Planning
- Airport Safety and Security
- Converged Communications IOT
- IT-OT Infrastructure
- Land Side
- Air Side
- Facility

Education

- Accelerate Remote Learning
- Personalized Learning
- Choice of Education Tools
- Project-based Learning
- Field-specific Experience
- Exam Pattern and Assessment

Example: Smart Factory



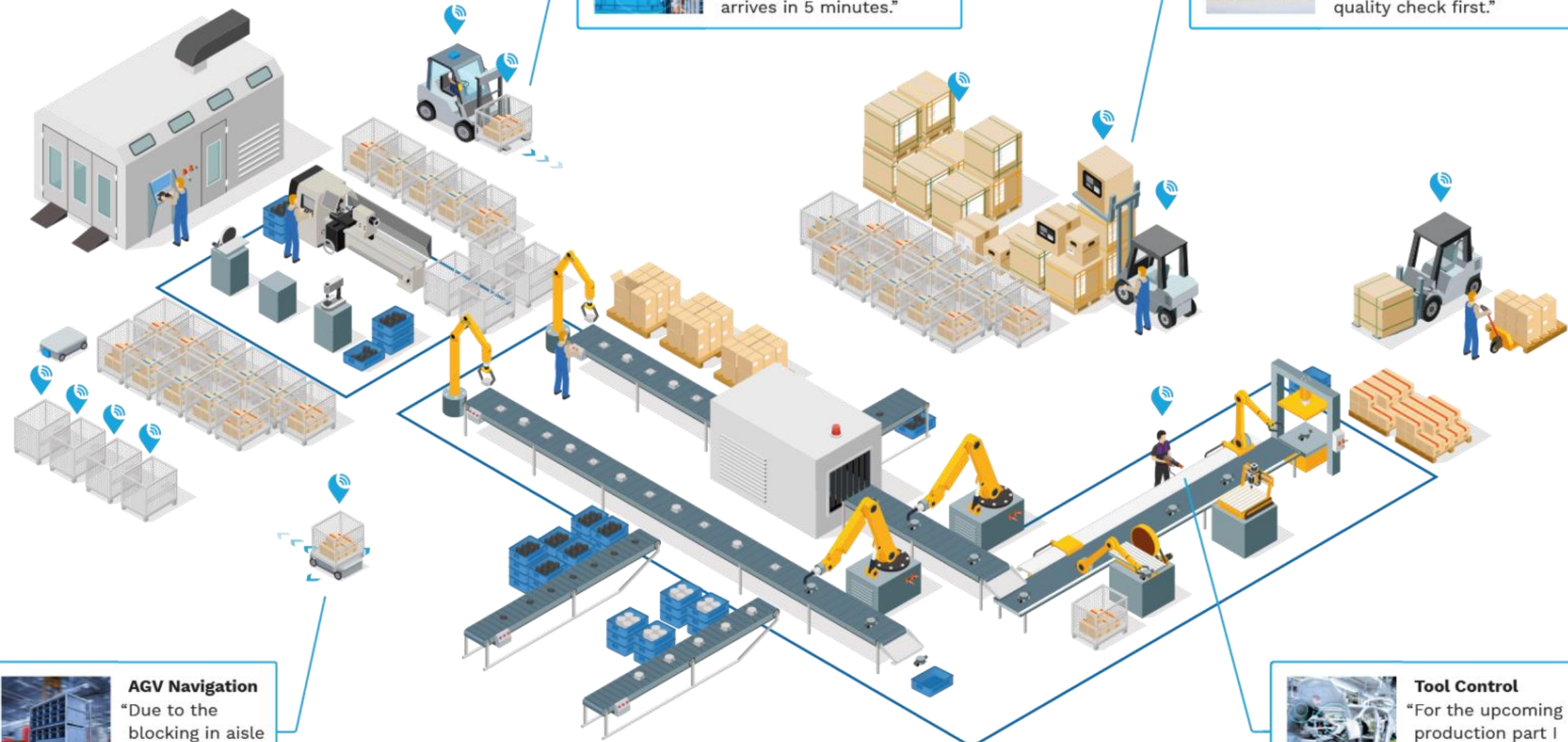
Material Flow Management

"The required material for the next step of assembly arrives in 5 minutes."



Paperless Production

"I belong to the order C756. As I have been in the warehouse for a week, I have to go to the quality check first."



AGV Navigation

"Due to the blocking in aisle 4, I go through aisle 7."



Tool Control

"For the upcoming production part I have already set the torque to 1.300 Nm."

Stakeholder

Decision Makers

Business Strategy

● Cost Saving ● Responsiveness ● Agility ● Efficiency ● Lean ● Innovation

Enterprise Dashboard

Business Intelligence

AI & Big Data Predictive Analytics

● ● Competition

Market Insight

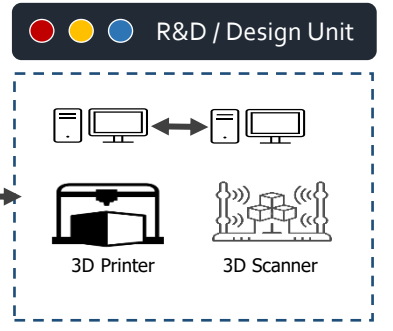
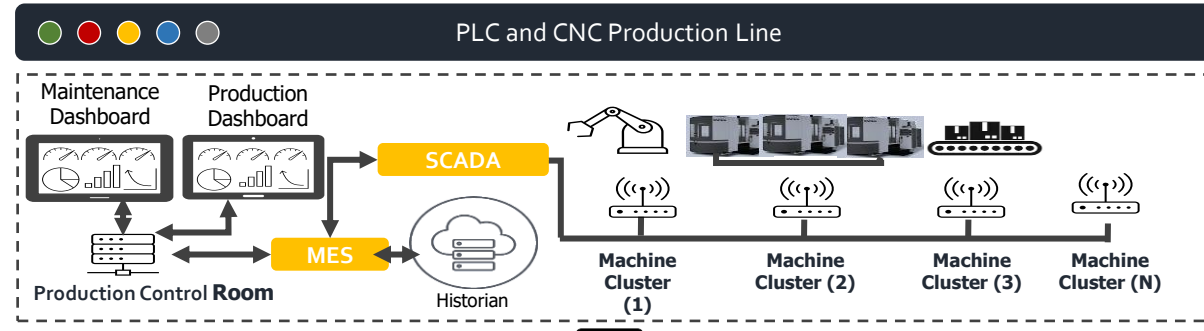
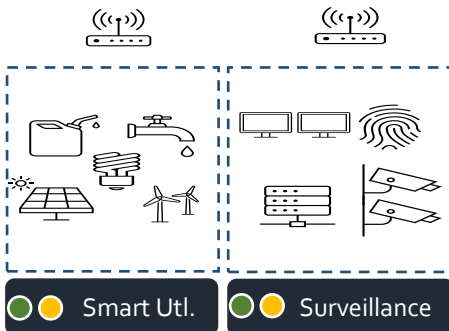
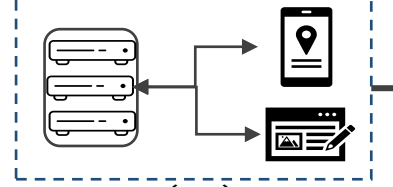
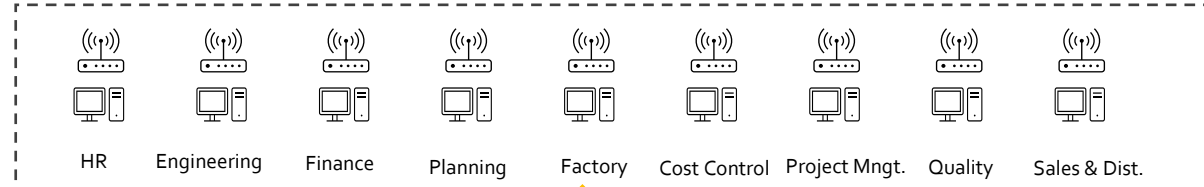
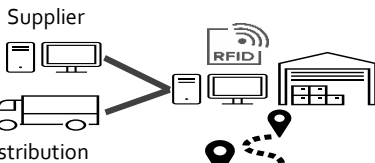
Smart Warehouse

Enterprise Resource Planning (ERP)

Customer Interface

PLC and CNC Production Line

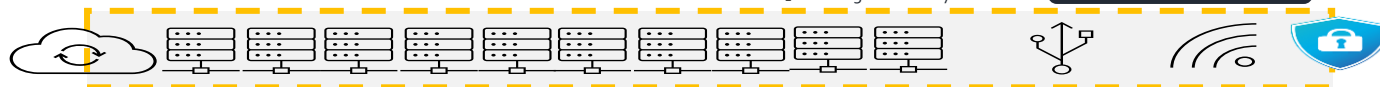
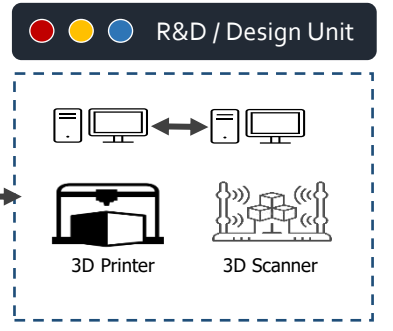
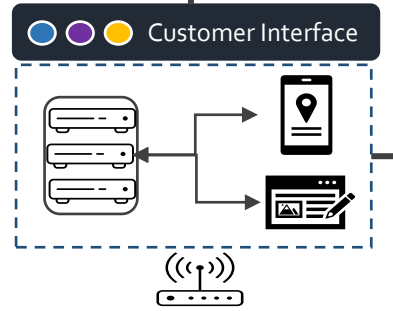
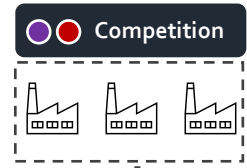
R&D / Design Unit



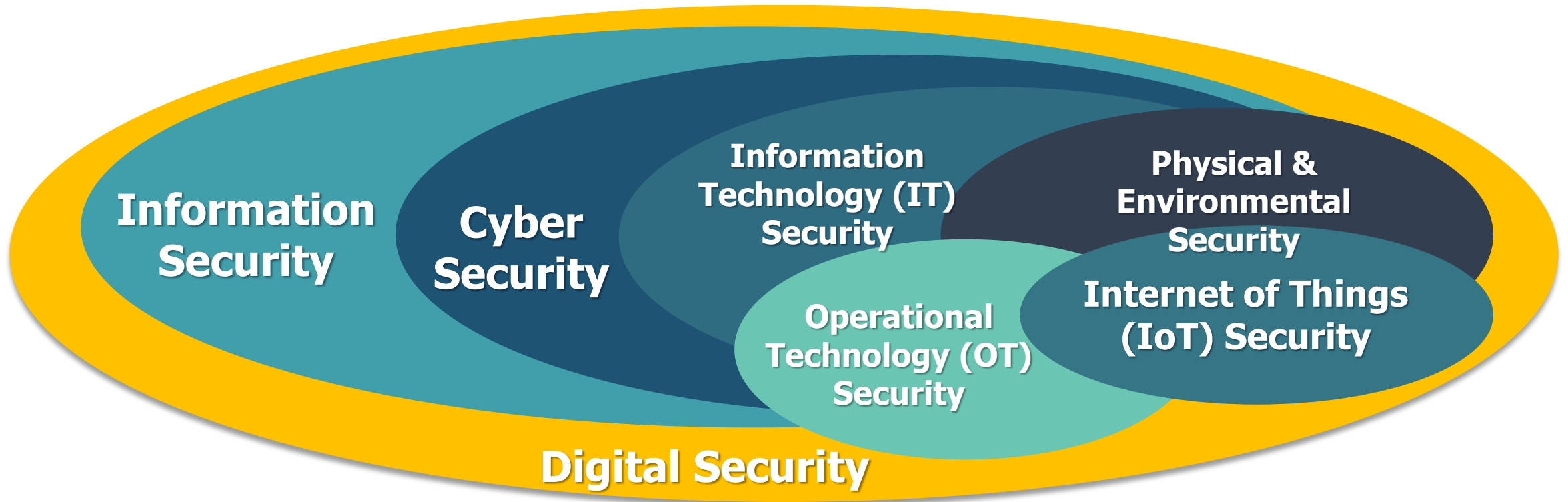
Traceability

Digital Security Shield

Secured Data Center



Digital Security Inclusion



Building on its long-term expertise in IT/OT security & its expertise in emerging technologies, Iken power up your Industry 4.0 Digital Transformation process through architecting, deploying, and maintaining a complete 360 Digital Security Solutions



Iken Industry 4.0 Organizational Maturity Level

**What is your organizational
I4.0 Maturity/Readiness
Level?**

Industry 4.0 Maturity Level (Business Value)

Industry 4.0 Turning Point



Computerized



Connectivity



Visibility



What Happens?

Transparency



Why does it happen?

Predictability



What will happen?

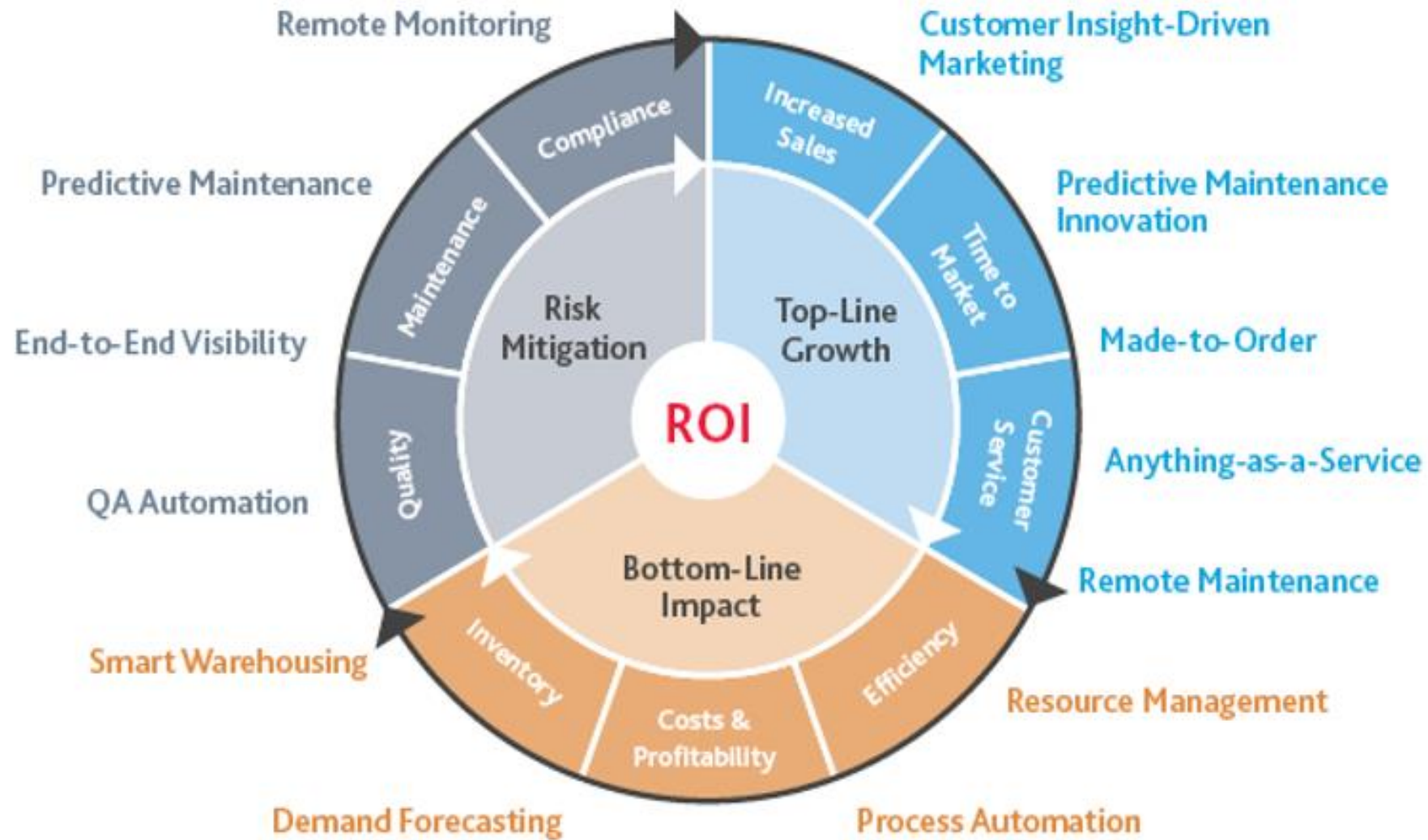
Adaptability



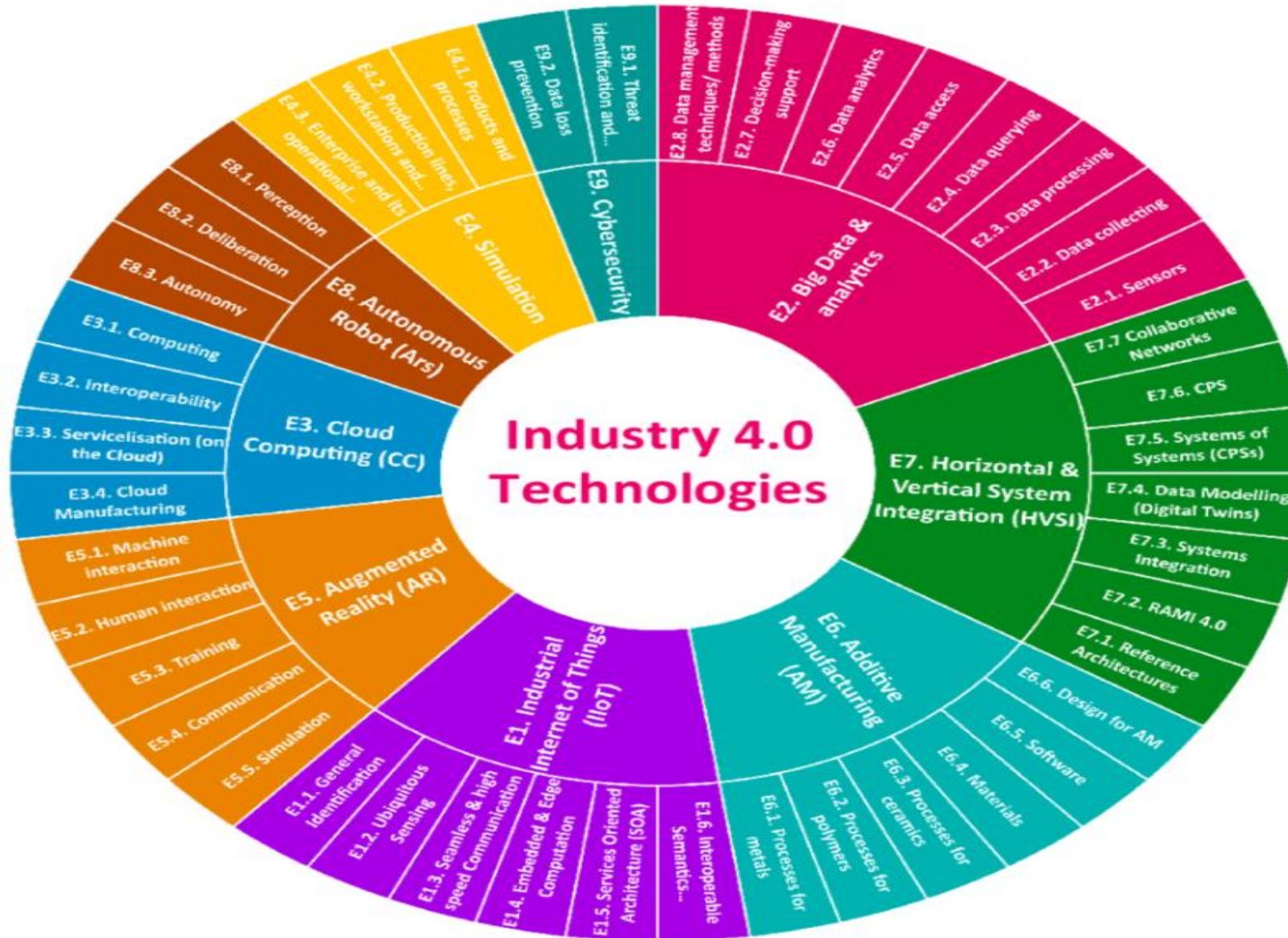
How can an autonomous reaction take place

Industry 4.0 Capabilities

Industry 4.0 Value Creation



I4.0 enablers and technology



Some of Our I4.0 Vendors

everteam

SIEMENS

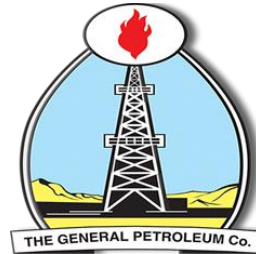


GE Digital

VEATIV



References



Iken Academy

To complete its support for Digital Transformation, IKEN helps its customers prepare their workforces for Digital Transformation by providing specialized capacity building opportunities that are supported by the world's leaders in Digital Transformation. Our customers easily realize the direct ROI generated from improving their team's digital skills, represented in faster operations, higher agility, decreased downtime, and improved efficiency & waste.

Some of our Capacity Building Partners



Some of our Capacity Building Programs

- AWS re/start Program
- Digital Security
- MES and SCADA Training Programs
- Digital Transformation Strategy

Some of Iken Academy Initiatives



AWS re/Start Program with UNDP



Launching of "The National Initiative for Building Industry Digitization Leaders" and the graduation of certified trainers' group in cooperation with Ministry of Military Production & GE Digital

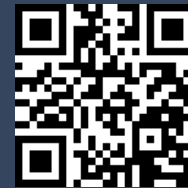


Graduation of the first group of Ministry of Military Production Engineers



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