SUSTAINABLE BUSINESS

ESG COMPLIANCE:
THE ROLE OF AUTOMAITON AND TECHNOLOGY

DUGA: Robotics Summit 2024

Challenges facing companies in a world when every business process must include Environmental, Social, and Governance considerations.

Presented By
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President & CEO

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CONTENTS

PRESIDENT & CEO PROFILE

KULCHOKE POPATTANACHAI

Education:

- 1986 - Bachelor of Mechnical Engineering, Chulalongkorn University
- 1993 - Master of Engineering, Kobe University
  (SCG and Japanese Government Scholarship)

Working Experience:

- **1993 - Established A.I.TECH** with the goal to create innovations engineering solution for the design and manufacture of high-precision machinery that Thailand has never before produced.

COMPANY JOURNEY

THE RELIABILITY
FOR SMART FACTORY AUTOMATION

1993 A.I.Technology

1994 Set up 1st Factory at Rangsit, Pathum thani

1997 INTRA — Tokai Gauge Technology Joint Venture with Japan & USA

2001 T.G.T. — Move to 3rd Factory at Ladlumkaew, Pathum thani (at present)

2004 1st Filling Machine (LLC MMTH)

2007 A.I. F&M — A.I. Foundry & Manufacturing

2010 2019 CSR Beginner

2011 2020 THAILAND Top SME's Awards

2012 2020 CSR DIW

2013 SCG A.I. TECH

2014 A.I. Industry — A.I. Industry

1st Robot Glass Sealing (Honda MY)

Move to 2nd Factory at Ladlumkaew, Pathum thani

2008 Implement Constructionism Concept

T.G.T. — Set up 4th Factory at Chonburi

2013 Received Golden Award Supplier from Siam Kubota Corp.

2013 TMA SME's Excellence Awards

WHAT IS ESG ?

HOW TO UTILIZE IN BUSINESS

Businesses utilize the **Environmental, Social, and Governance (ESG)** framework to evaluate how their activities impact ethics and sustainability in addition to financial performance.

Environmental: refers to the environmental effect of an organization's operations. encompassing pollution control, water and energy conservation, and resource management. cutting greenhouse gas emissions and using resources sustainably

Social: It has to do with how a company handles its interactions with its workers, clients, and the community at large. Automation is being used to replace risky, injury-prone, or repetitive tasks that don't improve human capabilities in the context of replacing unsafe workers.

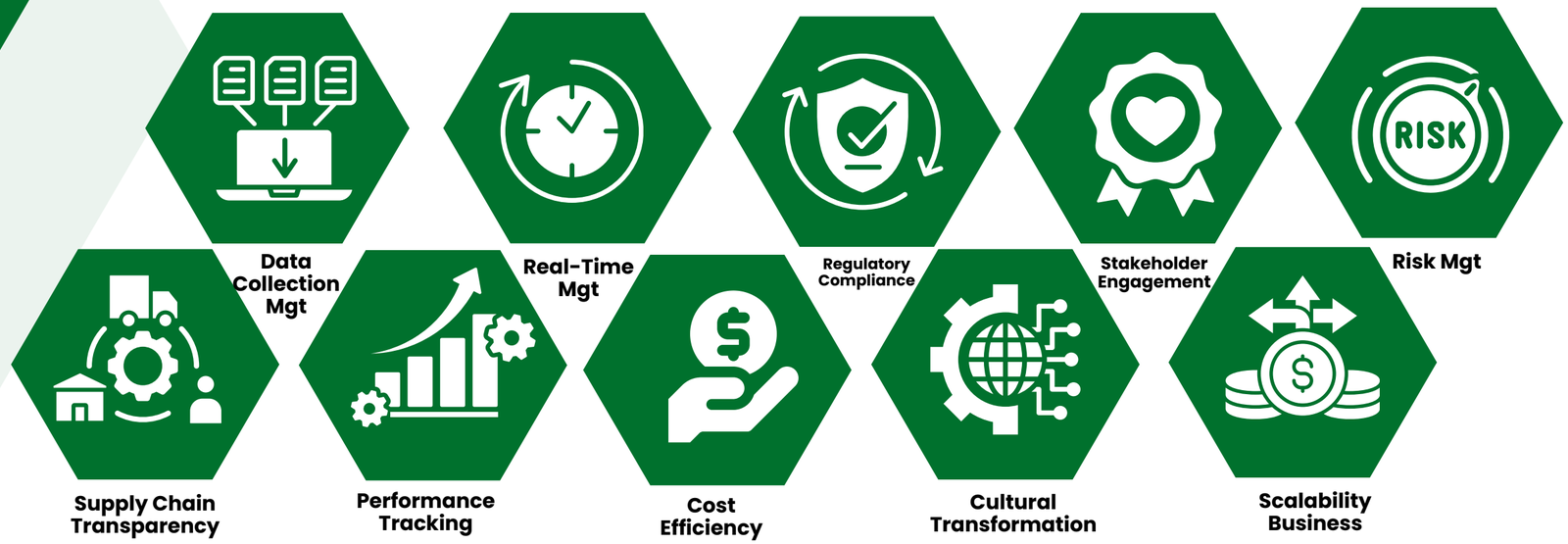
Governance: It describes how an organization is managed and overseen using a transparent system. Utilizing technology to identify electronic processes and computer data processing that can accurately respond and stop deception or corruption

WHY GO ESG ?

HOW DOES THE ROLE OF AUTOMATION AND TECHNOLOGY SUPPORTED ESG MISSIONS?

The role of automation and technology in Environmental, Social, and Governance (ESG) compliance is increasingly crucial as organizations face the challenge of integrating ESG factors into all business processes.

Key Point Highlight to the Role:



AUTOMATION SUPPORT FOR ESG: ASPECTS AND METHODS

1. Data Aggregation and Reporting:

o Method: Implementing automated data collection systems can streamline the aggregation of ESG-related data from various sources.
o Aspect: Organizations can utilize software to automatically gather data related to energy usage, waste generation, diversity metrics, and more, thus enhancing reporting accuracy.

2. Real-Time Monitoring and Analytics:

o Method: Utilize IoT devices and AI analytics to monitor environmental impact in real-time.
o Aspect: For example, companies can track energy consumption patterns and emissions continuously, allowing them to respond swiftly to any deviations from established benchmarks.

3. Automated Compliance Checks:

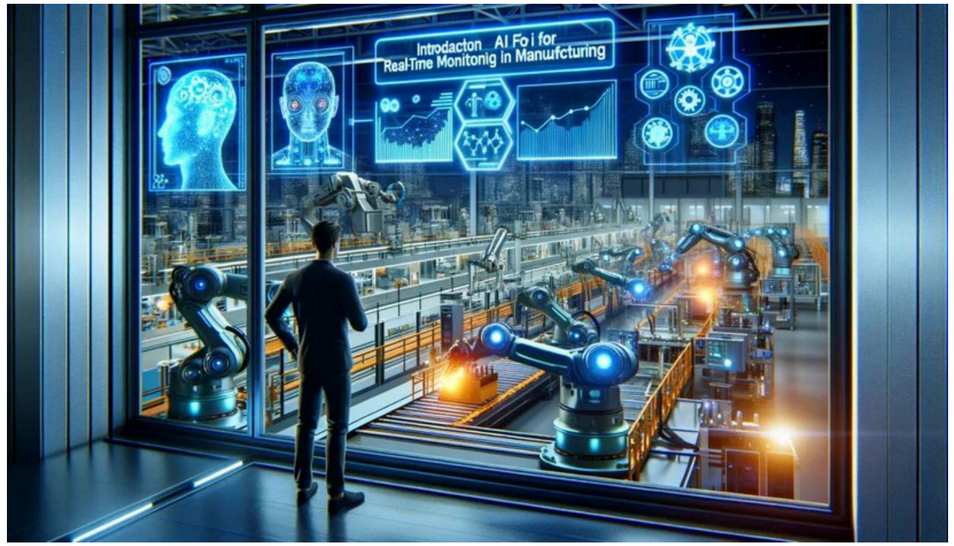
o Method: Deploy compliance management software to ensure adherence to regulations.
o Aspect: These tools can automate audits and checks, helping organizations stay compliant with changing ESG regulations and standards.

4. Supply Chain Management:

o Method: Use blockchain for transparency and accountability in supply chains.
o Aspect: Blockchain technology can provide an immutable record of supplier ESG practices, thereby ensuring ethical sourcing and compliance.

5. Stakeholder Engagement:

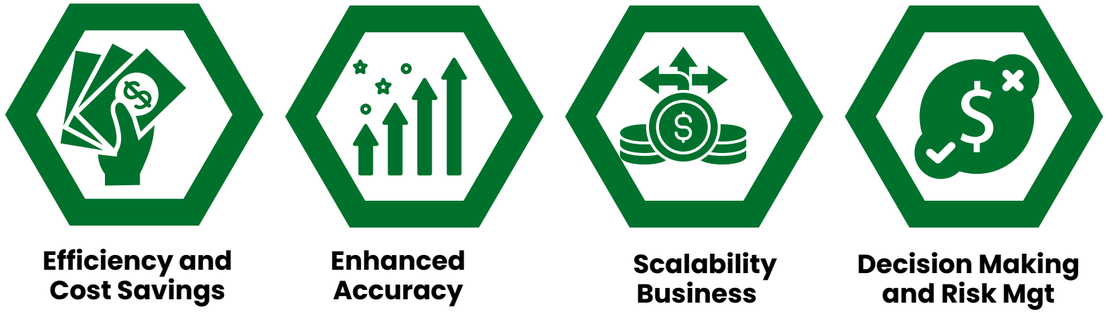
o Method: Leverage digital platforms and social media to engage stakeholders.
o Aspect: Technology can facilitate dialogue and transparency, allowing companies to share their ESG initiatives and receive feedback from customers, investors, and communities.



OPPORTUNITIES AND BENEFITS OF AUTOMATION IN ESG

1. Efficiency and Cost Savings:
o Automation reduces the time and labor costs associated with manual data collection and reporting, allowing organizations to allocate resources more efficiently.
2. Enhanced Accuracy:
o Automated systems minimize human error in data reporting and compliance checks, leading to more accurate and reliable ESG data.
3. Scalability:
o Automation tools and technology solutions can easily scale as the business grows, accommodating new regulatory requirements and expanding operational needs.
4. Proactive Risk Management:
o Automated monitoring systems can identify potential ESG-related risks in real-time, enabling organizations to act quickly to mitigate those risks.
5. Improved Decision-Making:
o Access to real-time data analytics allows for better-informed decision-making regarding sustainability initiatives and resource management.

AUTOMATE PROCESS IN BCG INDUSTRY



LIMITATIONS AND CHALLENGES OF AUTOMATION IN ESG

1. High Initial Costs:

o Implementing automated systems and technologies can require substantial initial investment, which may deter some organizations.

2. Complexity of Implementation:

o Integrating new automated systems into existing processes can be complex and time-consuming, often requiring change management and employee training.

3. Data Privacy and Security:

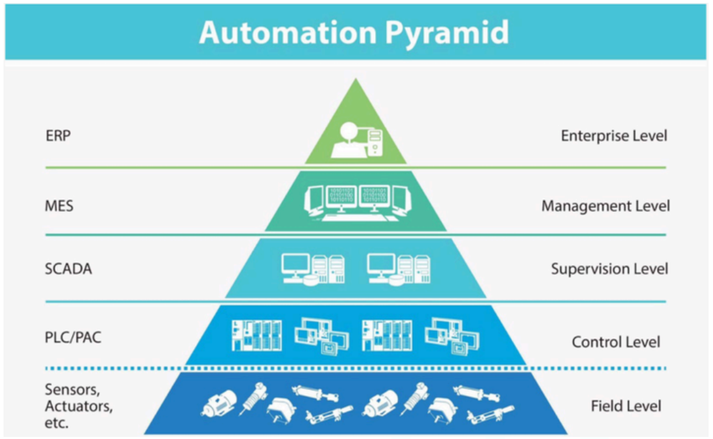
o Automation raises concerns regarding the security and privacy of sensitive ESG data, necessitating robust cybersecurity measures.

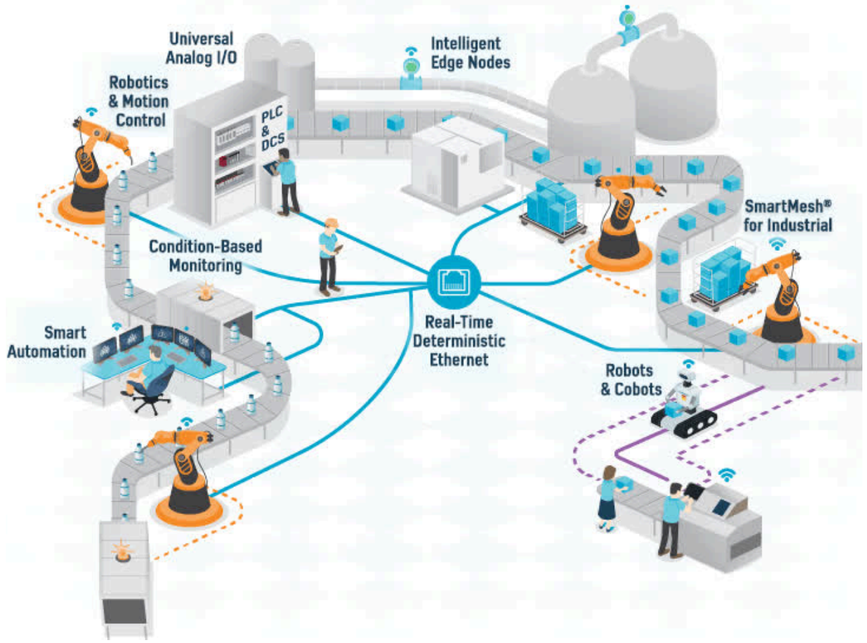
4. Dependence on Technology:

o Over-reliance on automated systems might lead to neglecting human insights and qualitative factors that are essential for a comprehensive ESG strategy.

5. Resistance to Change:

o Employees may resist adapting to new technologies, especially if they feel that their roles will be diminished as a result.





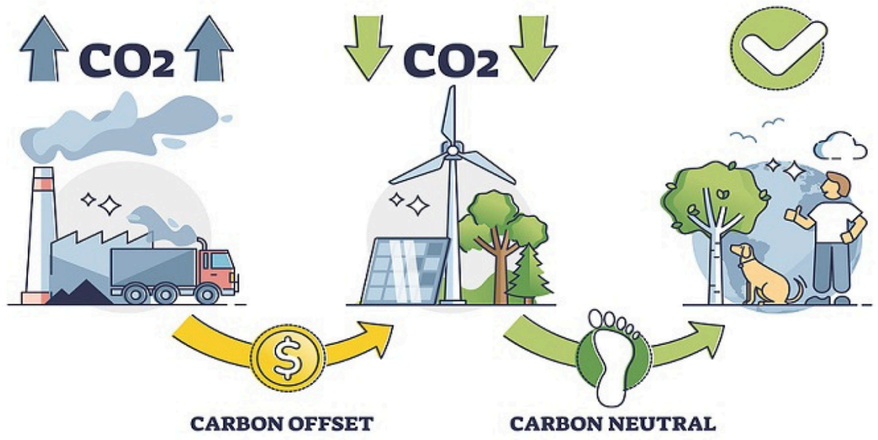
COMPARING CARBON FOOTPRINTS OF HUMAN WORKERS AND DIGITAL WORKERS

1. Human Workers:

o The carbon footprint of human workers includes factors such as daily commuting, energy consumption in the workplace, food consumption, and overall lifestyle choices.

2. Digital Workers:

o Digital workers (like software algorithms and AI) have eco-footprints tied to data center operations, electricity consumption in cloud computing, and the energy used to run the hardware they reside on.

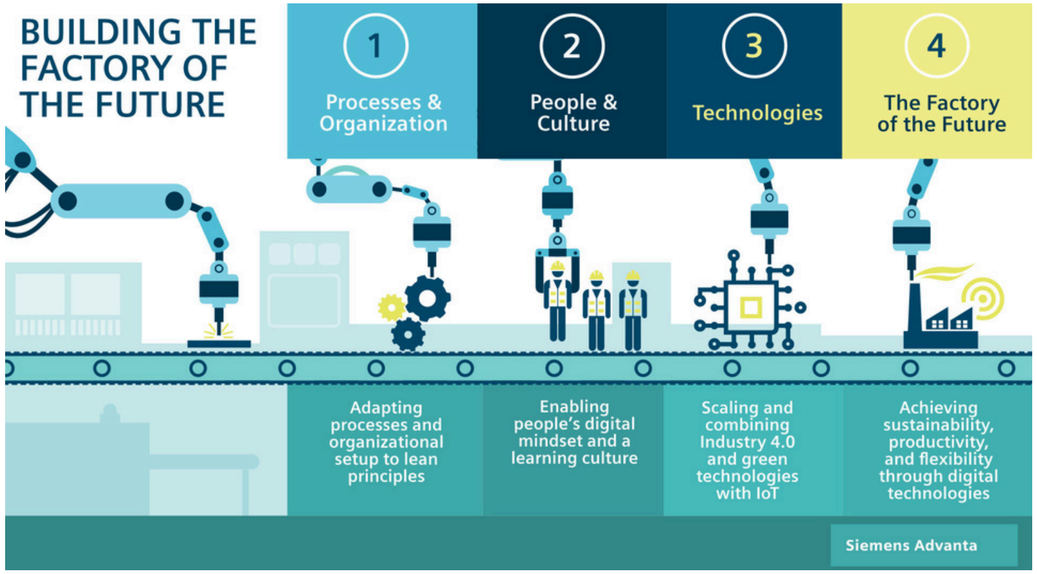


USED CASE FOR DIGITAL APPLICATION WORK

CONCLUSION: 5 TRANSFORMATION STEP TO SMART AND SUSTAINABLE BUSINESS

The A.I.TECH approach for increased efficiency production in line with customer requirements is called the **Optimized Manufacturing Concept**. focusing on the best-performing investment, reduce waste and loss , and increase productivity **toward to Smart and Sustainability**. which conforms to the ESG principles as follow.

1. **Self-Assessment Thailand I4.0 Checkup**
2. **Lean Process**
3. **Initiative project I4.0 Roadmap**
4. **Automation Solution Expert Consultant**
5. **Implementation & Operation**



THANK YOU
FOR YOUR ATTENTION

A.I.TECH Extra's Special Offer: Invest $100 Earn $100 by making any significant **commitment toward a SMART and SUSTAINABLE FACTORY** productivity improvement project. Accept all rights and advantages pertaining to the value of your investment from BOI.

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