



The Digital Enterprise

How Smart factory is driving sustainable manufacturing

December 13th 2021

We . . .

1 ... are leading the digital transformation for discrete and process industries

2 ... have the most attractive end-2-end portfolio in automation and software

3 ... focus on profitable business with the greatest benefit for our customers

4 ... bring together hardware, software, and cutting-edge technologies

5 ... ensure proximity to our loyal and constantly growing customer base



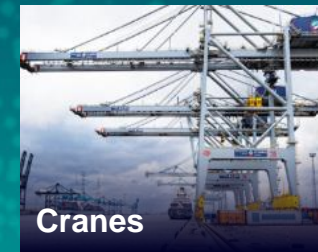
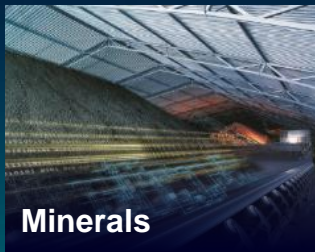
Our offering: **The Digital Enterprise portfolio**

We drive the digital transformation in all industries

Process industries

Hybrid industries

Discrete industries





DIGITAL ENTERPRISE

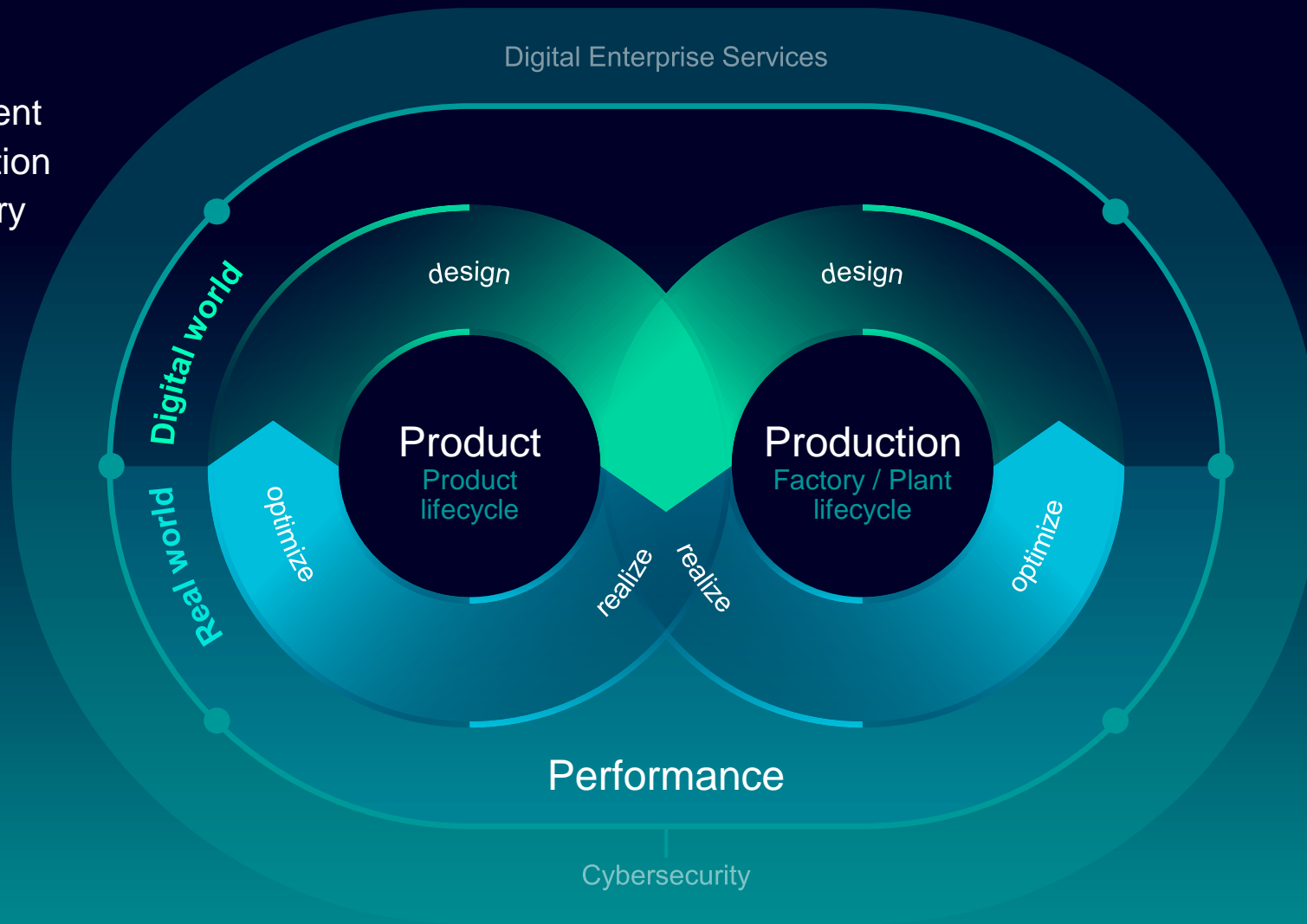
Infinite opportunities from infinite data

Fast and confident decisions
with the Digital Enterprise

Digital Enterprise

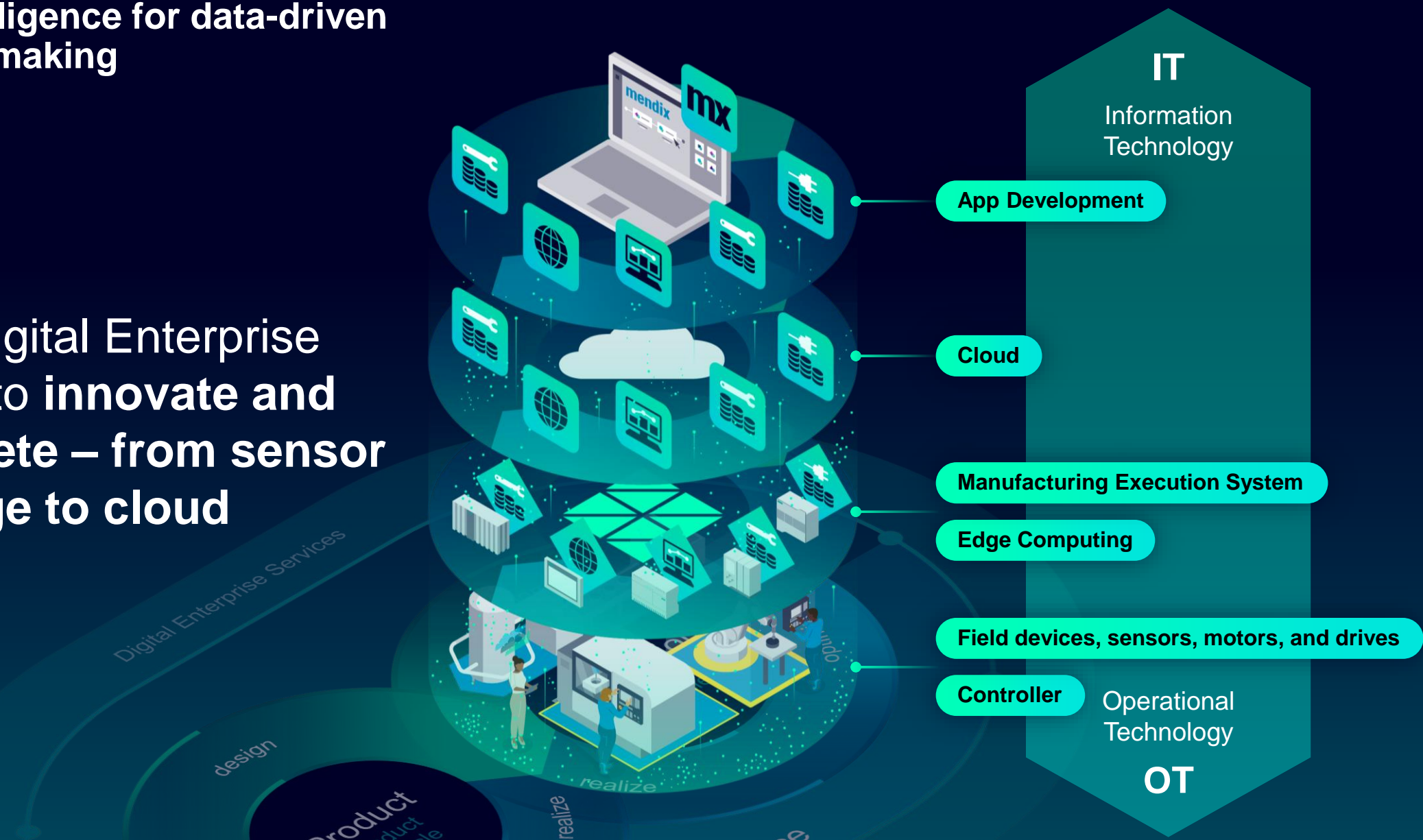
The comprehensive Digital Twin approach

Continuous improvement
of product and production
in a data-driven industry



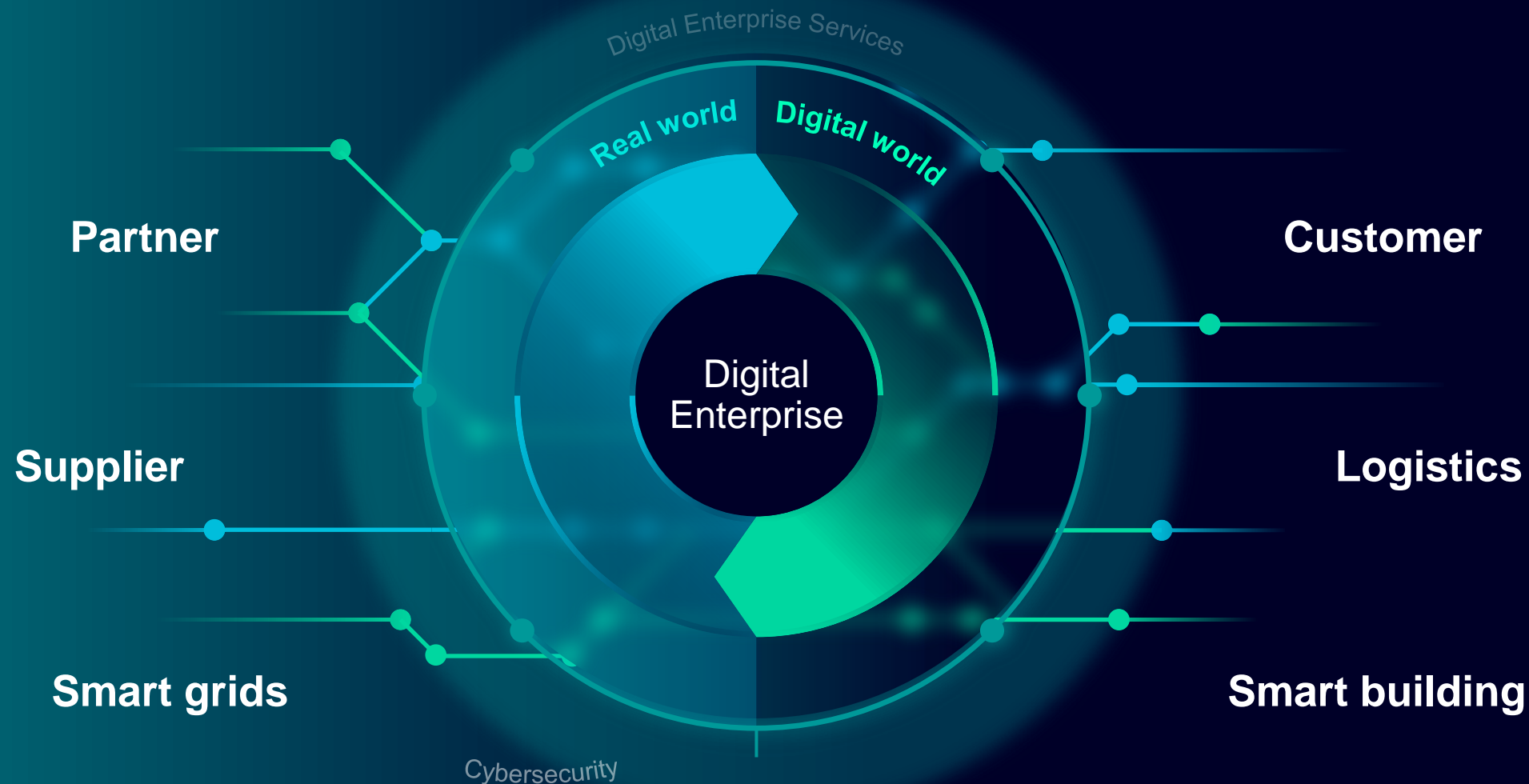
Bringing together OT and IT – Data intelligence for data-driven decision making

The Digital Enterprise
helps to **innovate and
compete** – from **sensor
to edge to cloud**



Linking all relevant data
with open, collaborative data models

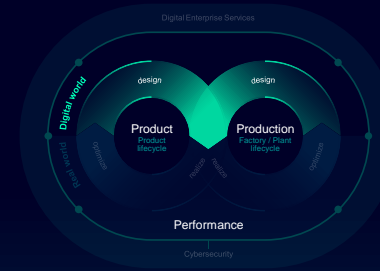
This is the true Digital Enterprise



Start your successful digital transformation

Digital Enterprise

combines the real and the digital worlds for continuous improvement of product and production in a data-driven industry.



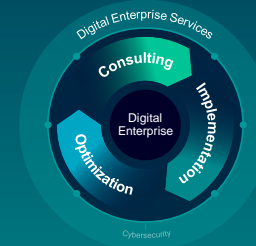
Digital Twins

for precise simulation and validation of products, machines, lines and complete plants. They are the foundation for flexible and efficient manufacturing.



Digital Threads

are the maps for the digital journey based on specific business workflows and help to becoming a real Digital Enterprise.



Digital Services

help you master today's challenges with service experts who accompany and support you along the entire digitalization journey.

Integrating cutting-edge technologies

Industrial 5G



Cloud



**Artificial
Intelligence**

**Additive
Manufacturing**



Industrial Edge



Flexibility

VINGROUP

From zero to cars in 21 months – from smartphones to ventilators in 3 weeks

Customer challenge

Shift from manufacturing smartphones to manufacturing ventilators

Solution

- License of Siemens customer Medtronic design for ventilator
- Digital twin for manufacturing by Siemens (Teamcenter, NX)

Customer benefit

- Shift to ventilator manufacturing technology from scratch in three weeks
- Were able to manufacture 55,000 ventilators/month



3
weeks
changeover



55k
throughput
per month



Productivity

SWIRE COCA-COLA

Significant expansion of productivity and increase in sustainability

Customer challenge

- Improve line performance and availability

Solution

- Tracking and analysis of downtimes
- Customized manufacturing information system and mobile app for asset overview, faster fault diagnosis and predictive maintenance

Customer benefit

- Unlock annual production capacity of 550 million cans
- Benchmark and standard for Swire Coca-Cola worldwide: to be extended to 100 production lines in next two years
- Starting point for building 18 digital plants in the future and saving 10 million kWh of electricity p.a.



550M
cans
production
capacity ↗

-10M
kWh ↘

Speed



1
year
develop-
ment



-7
months
conversion
time



BIONTECH

Vaccine against Covid within one year – from development to release to production

Customer challenge

- Rapid production of Covid-19 vaccine in large quantities

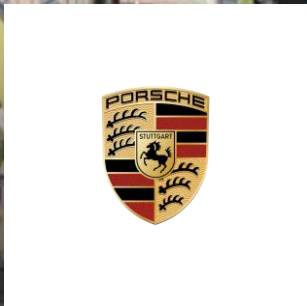
Solution

- Paperless documentation of development and production, immediately fulfilling all documentation requirements

Customer benefit

- Accelerated vaccine development and production within one year
- Conversion time for existing production facility cut from one year to five months

Flexibility



PORSCHE

Innovative technology for the production of the Porsche Taycan

Customer challenge

- Tough implementation time schedule for the new construction in parallel with ongoing production
- Customization is very important for Porsche's customers, that's why every station needs the necessary flexibility

Solution

- Maximum flexibility using AGVs with SIMOVE
- Fully automated final assembly based on SIMATIC controllers and drive components, engineered on a common platform – TIA Portal.

Benefit

The production facility for the new Taycan eCar was constructed amid the existing factory in the shortest possible time, despite sportscar production running at full speed in parallel.

Sustainability

TRAKRAP

Providing an innovative “pay-per-wrap” solution

Customer challenge

- Provide eco-friendly packaging technology faster and cost efficiently

Solution

- Digital twin technology to develop a new form of plastic wrapping
- Innovative "pay-per-wrap" business model for end customers enabled via Siemens Financial Services

Customer benefit

- Reduces plastic use by 70% and energy consumption by 90%
- Driving environmentally sustainable technology



-70%
plastic use



-90%
energy
consump-
tion





“
ฐานรากเทคโนโลยีก้าวไกล
พัฒนาไทยก้าวหน้า
”

DIGITAL TRANSFORMATION FOR
SUSTAINABLE MANUFACTURING AND SERVICES

13-16 ธันวาคม 2564

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| Contact

Published by Siemens Ltd.

Joseph Kong

Head of Digital Industries

2922/320-323 Charn Issara Tower II, New Petchburi Road

Huaykwang, Bangkapi

Bangkok

Phone +662 715 4000

Mobile +665 524 9433

E-mail Joseph.kong@siemens.com