

The 74th Indonesia National Electricity Day (HLN 74)
October 10, 2019 | Jakarta, Indonesia

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The Role of Big Data Analytic in Modern Utility

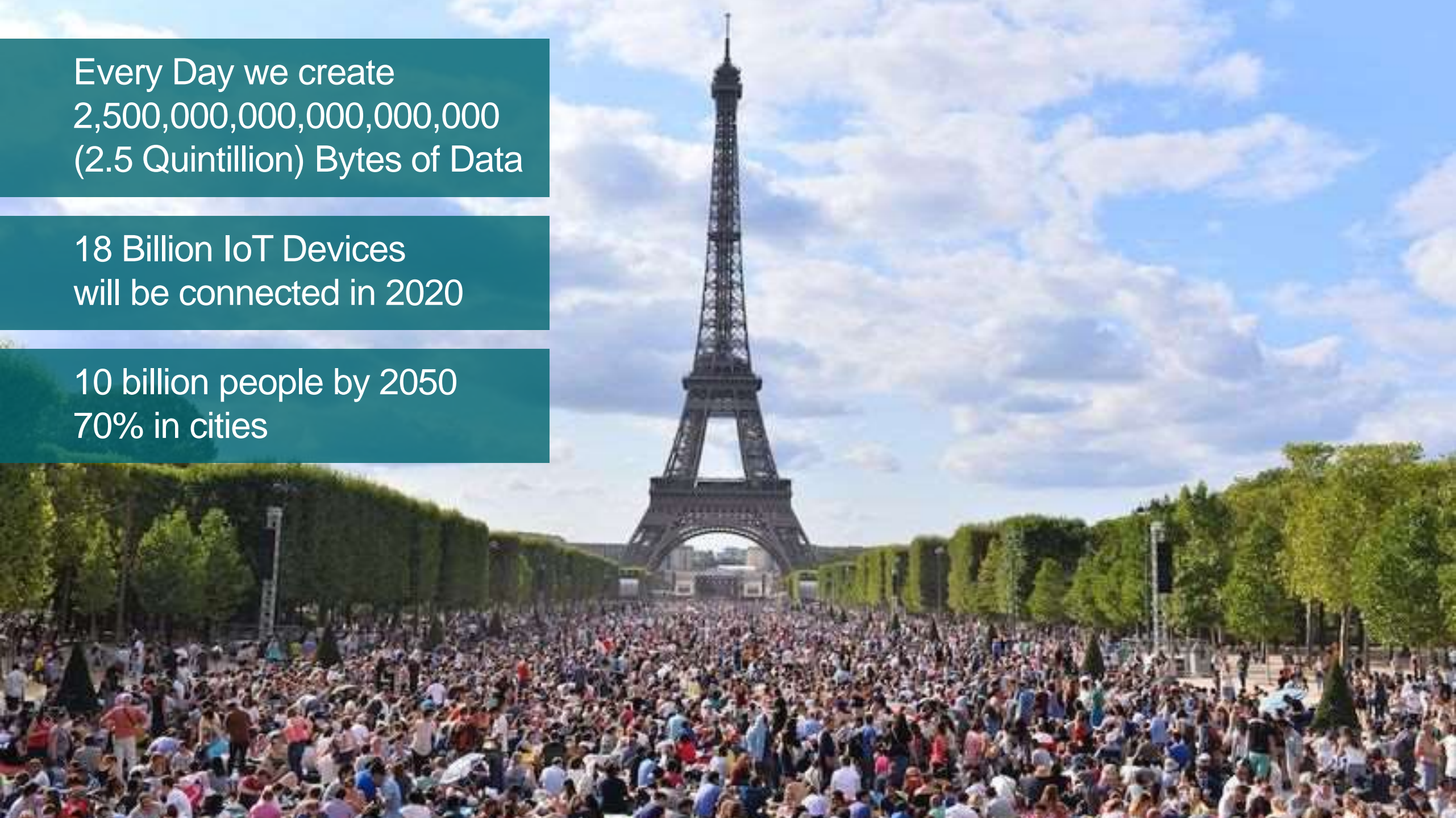
Track 2B - Industry 4.0 in Power Sector

Dr. Viradiansyah Permana – Siemens Smart Infrastructure, ASEAN

Every Day we create
2,500,000,000,000,000,000
(2.5 Quintillion) Bytes of Data

18 Billion IoT Devices
will be connected in 2020

10 billion people by 2050
70% in cities



Big Data: Volume, Variety, Velocity, and ...

Planning, simulation
and engineering

Automation
and control

Maintenance,
monitoring and service



The cloud



connected
grid assets



connected
edge devices



connected
industry



connected
buildings

Value Creation



Enhance
Revenue Protection



Reduce
Maintenance and
Generation Cost



Maximize
Energy and
operational efficiency



Achieve
DG and RE goals



Approach: Smart Grid and Smart Meter

1. Free up Capital Through Efficiency
2. Improves Understanding of Customers
3. Creates New Digital Products and Services

Failure
Probability
Modeling

Dynamic
Energy
Management

Preventive
Equipment
Maintenance

Realtime
Customer
Billing

Optimizing
Asset
Performance

Outage
Detection and
Prediction

Security and
Theft
Detection

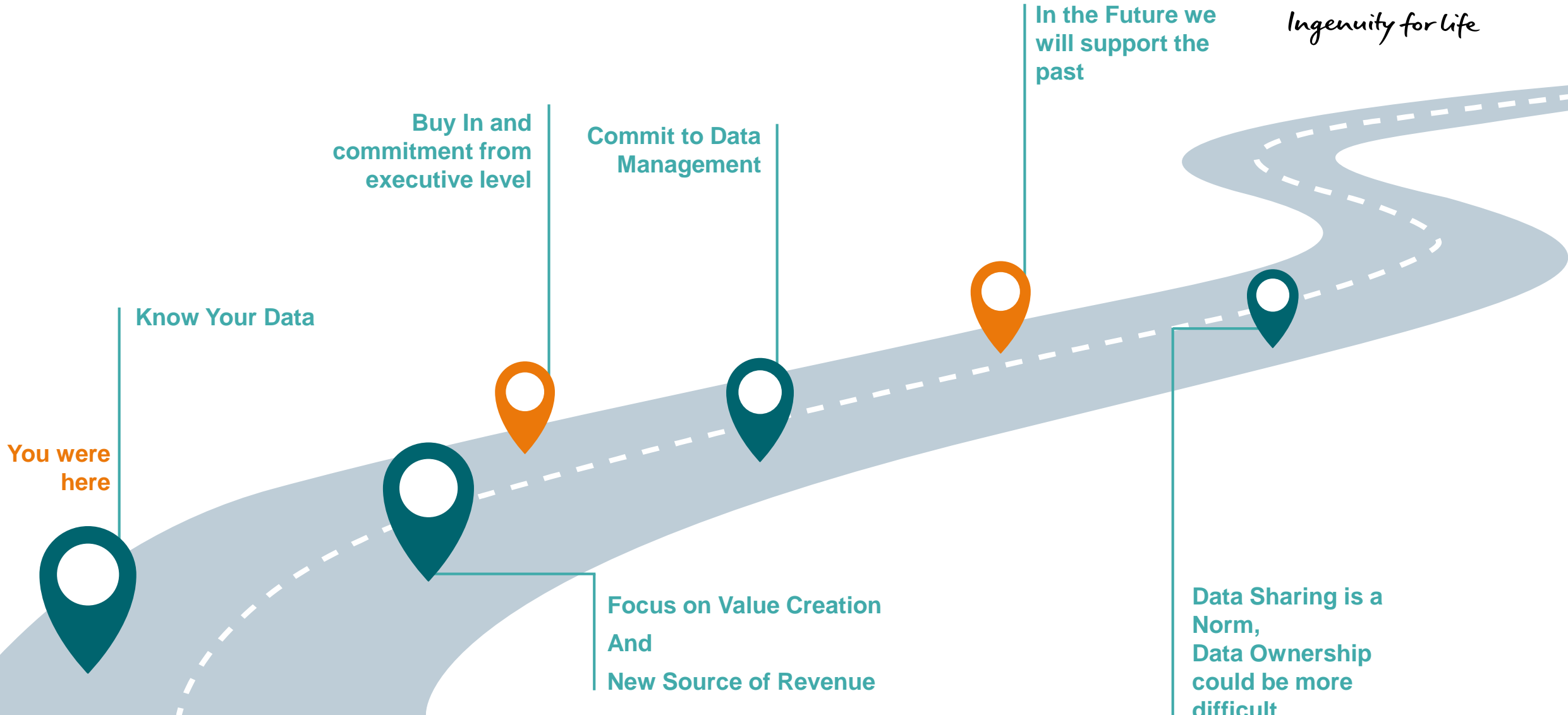
Demand
Response
Management

Realtime
Customer
Billing

Enhancing
Customer
Experience

It's a Journey

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Let's get started!

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Thank You!