

What will Data make for railway?

28th August 2019

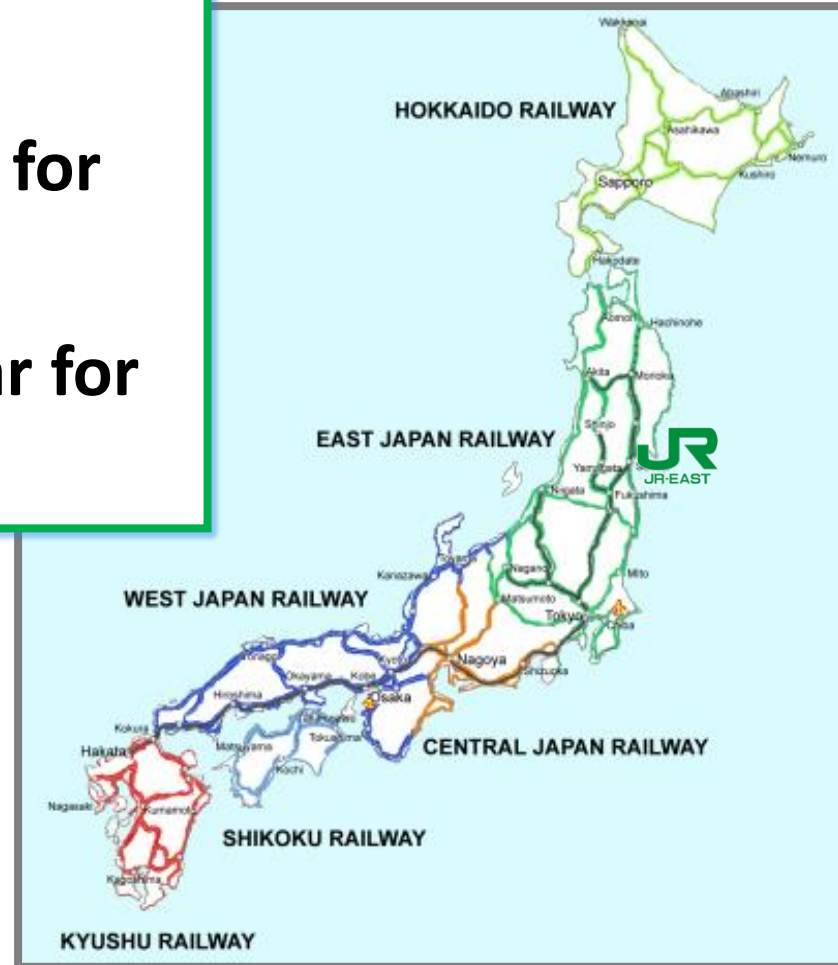
JR East Paris Office, Director
Yasunari NAKAJIMA



Railway in Japan

- **204 Operators (including 6 JR)**
- JR East is one of them**
- **8.8 billion passengers a year for six JRs**
- **22.6 billion passengers a year for the entire Japan**

*Numbers are as of FY ended March 31 , 2013



Current status of JR East

JR EAST: The All-round Railway Company

► Operates All Kinds of Railway Transport

High Speed
(Shinkansen)



Metropolitan



Regional



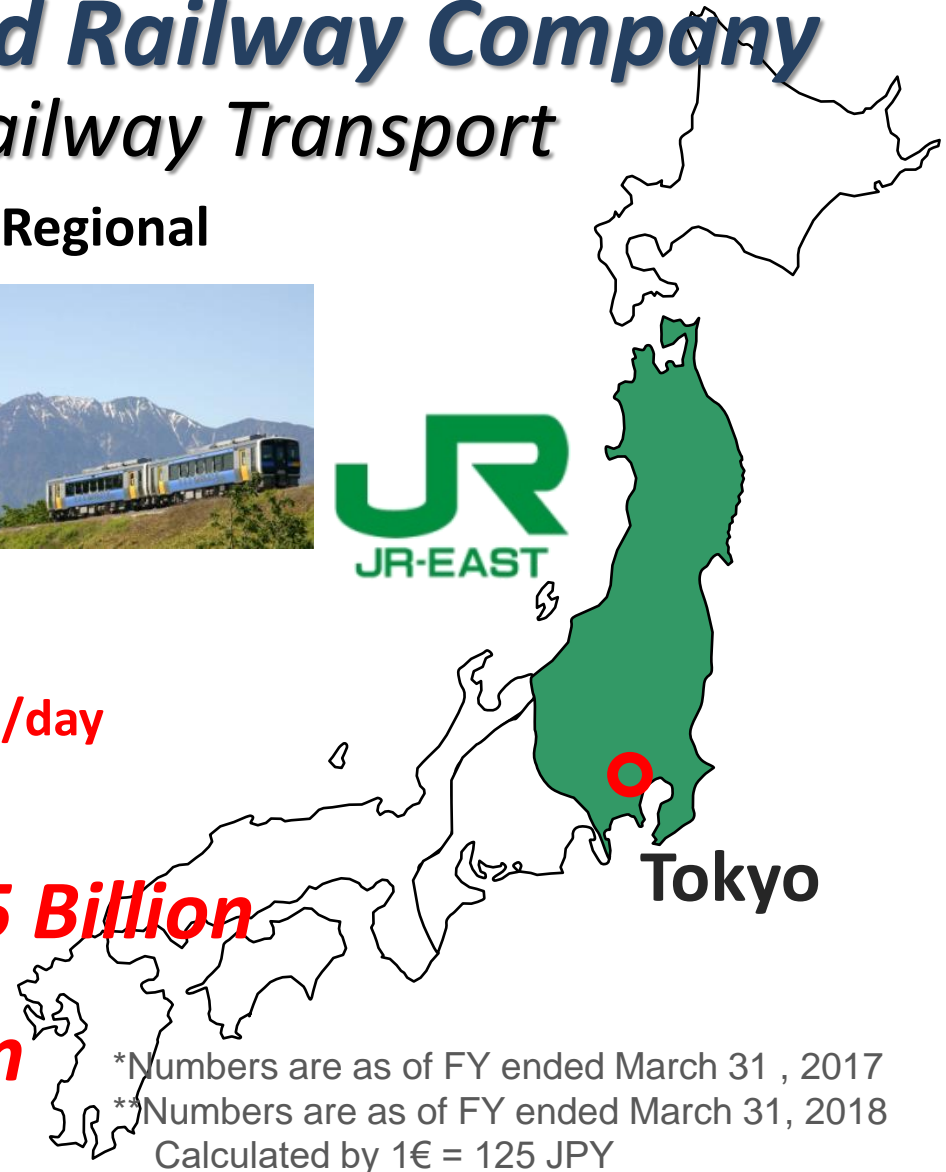
Network: **7,457 km**

No. of Passengers: **17.5 million /day**

No. of Trains: **12,200 /day**

Annual Operating Revenue: **€ 23.5 Billion**
(No subsidies from the government)

Net Annual Income: **€ 2.3 billion**



*Numbers are as of FY ended March 31 , 2017

**Numbers are as of FY ended March 31, 2018

Calculated by 1€ = 125 JPY

Two “withouts”

For the past 32 years (more than quarter century)
and possibly next quarter century.

1. **No Subsidies** *from the central and local government
at all after privatization*

2. **No Raise of Fares and Charges**
except the consumption tax increase.

What is the GOAL of the data utilizing?

1. Customer first

- To prevent disruption
- To assure easy move
- To provide comfortable/attractive/...

⇒ Make more affluent life and smile

2. Sustainable operation/maintenance

- To assure stable found

The footprint on data utilizing example

- ✓ Monitoring on signaling facilities (1990)
- ✓ COSMOS (1995)
- ✓ EWS (1995), TRAMS21 (2008), TRAMS (2008)
- ✓ ATOS (1996)
- ✓ Suica System (2001), Mobile Suica (2006)
- ✓ Railway GIS (2002)
- ✓ Display for unusual at Station (2007)
- ✓ PreDAS (2007)
- ✓ ATACS (2011)
- ✓ JR East Train Infor for smartphone (2014)
- ✓ Monitoring by commercial train for CBM (2017)
- ✓ Telephone center support by AI (2017)

The current example of JR East

➤ JR East Application connected to customer directly

“JR-East Train Info App”



運行情報一覧

Disruption of
Train Service



山手線トレインネット

Condition of
Each Car



リアルタイム列車位置情報
(京浜東北線で提供)

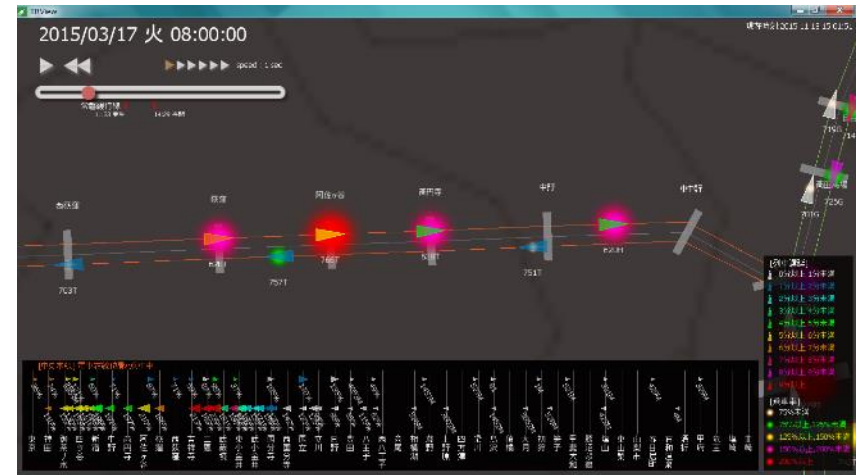
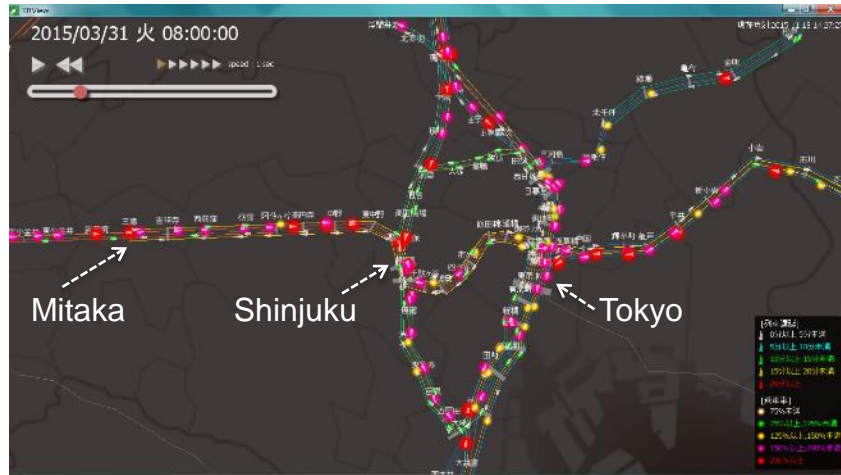
Location



Time table
(individual trains)

Extra example on passenger management

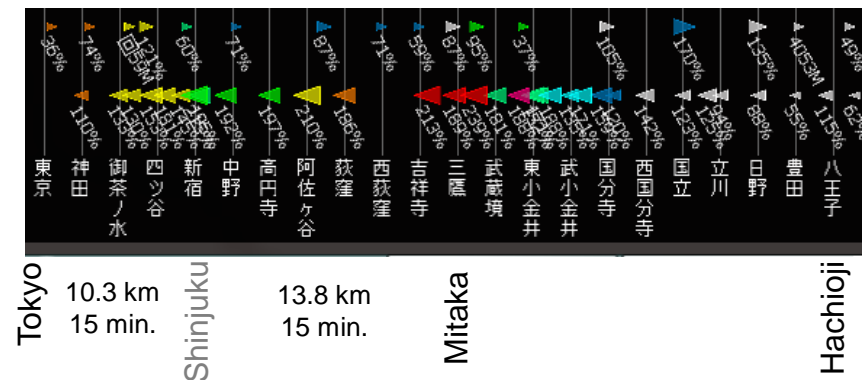
➤ Train congestion monitor



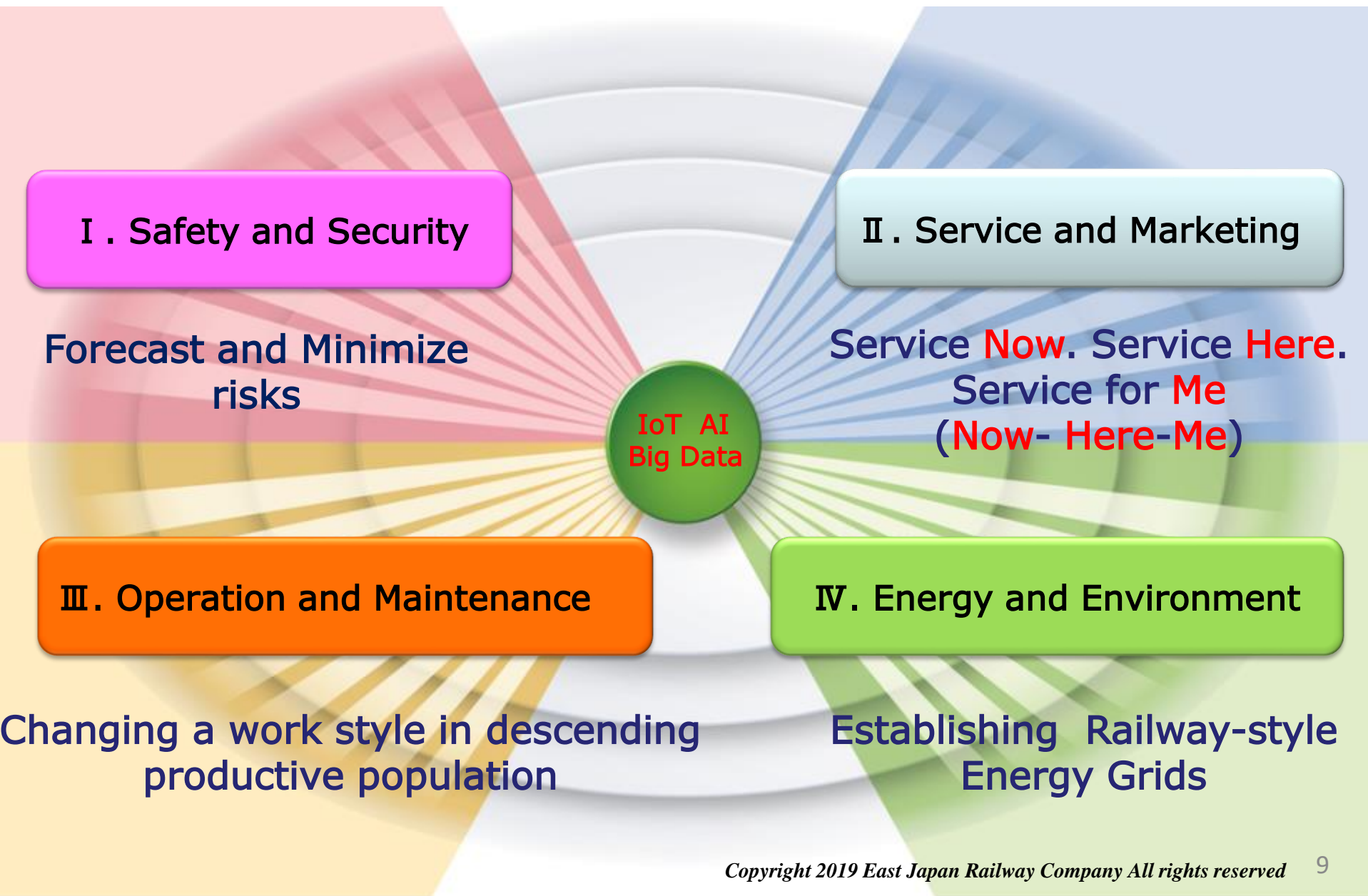
“Delay”



“Occupancy rate”



JR-EAST Innovation Vision



JR East Group Management Vision **"Move UP" 2027**



Thank you for your
kind attention

