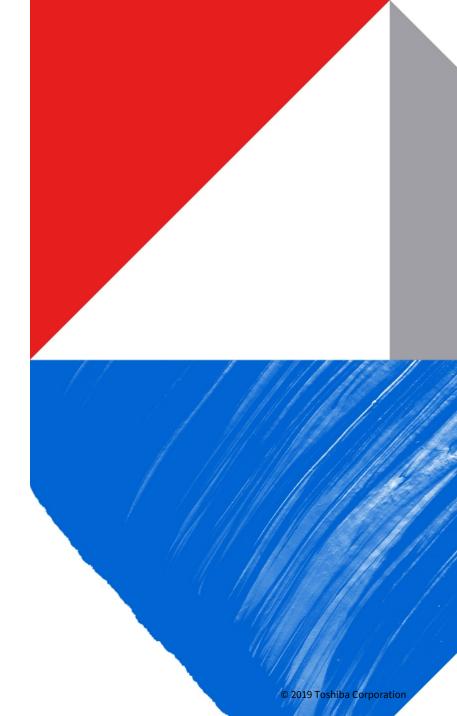
TOSHIBA

Toshiba IR Day 2019

Moving towards becoming a CPS Technology Company

Taro Shimada

Corporate Vice President & Chief Digital Officer (CDO) Toshiba Corporation November 14, 2019



Forward-looking Statements

- This presentation contains forward-looking statements concerning future plans, strategies, and the performance of Toshiba Group.
- These statements are not historical facts; rather, they are based on assumptions and judgments formed by the management of Toshiba Group in light of currently available information. They include items that have not been finally decided at this point and future plans that are yet to be confirmed or that require further consideration.
- Since Toshiba Group promotes business in various market environments in many countries and regions, its activities are subject to a number of risks and uncertainties that are, without limitation, related to economic conditions, worldwide mega-competition in the electronics business, customer demand, foreign currency exchange rates, tax rules, regulations, geopolitical risk, natural disasters and other factors. Toshiba therefore wishes to caution readers that actual results might differ from expectations. Please refer to the annual securities report (Yuukashoken houkokusho) for FY2018 and the quarterly securities report (shihanki houkokusho) for the second quarter of FY2019 (both issued in Japanese only) for detailed information on Toshiba Group's business risk.
- Toshiba's fiscal year (FY) runs from April 1 to March 31. All figures are consolidated totals for 12 months, unless otherwise stated.
- Results in segments have been reclassified to reflect the current organizational structure, unless otherwise stated.

Toshiba Group's Vision

Become the world's leading CPS*1 technology company, ensure profitability by implementing the Toshiba Next Plan

Secure core earning power, **Grow with technology Toshiba Next Plan**

2018

An excellent company with core earning power and growth potential

Infrastructure **Energy Storage & Electronic Devices Industrial ICT solution** R&D

2023 Help solve social issues

Maximize enterprise value

Contribute to social development through the combination of cyber & physical technologies

2030

World's **Leading CPS***1 Technology Company

Evolution

Incubation

Urbanization, Automation, Renewable energy, Edge rich devices,*2 AI and digital solutions, **Batteries, Power electronics, Precision medicine**

2028





























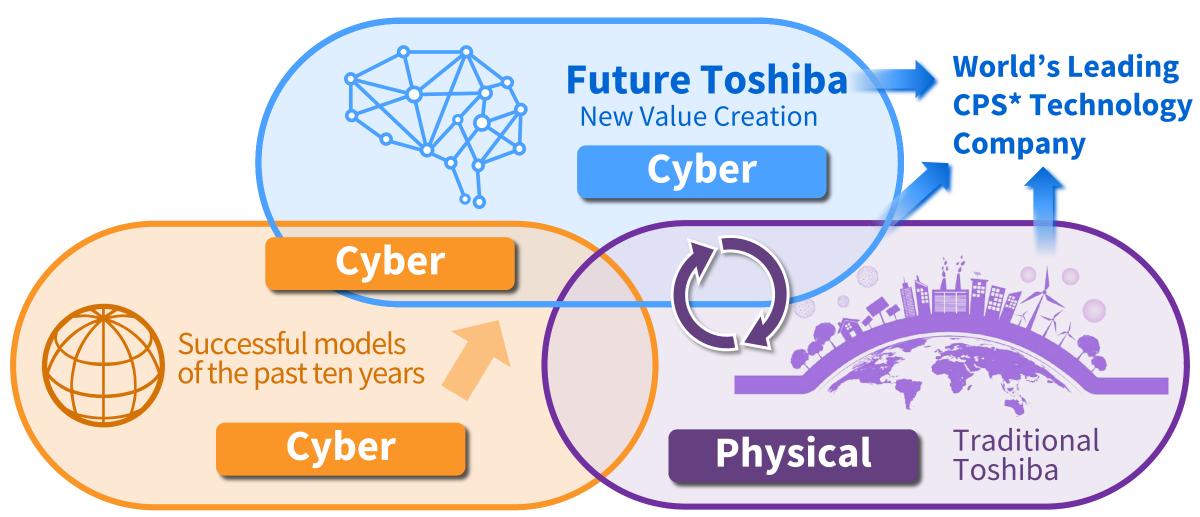




^{*1:}CPS(Cyber Physical Systems): CPS collect data from the physical world to be analyzed and processed using digital technology. CPS create value through a constant feedback loop between the cyber and physical worlds.

The Traditional Toshiba and the New Toshiba

Realize the New Toshiba by the fusion of cyber and physical businesses



Transformation towards a CPS Technology Company

Past

Growth Phase 2

Development

Close/Close

Open/Close

Profit Structure

Physical One-time sales

Physical + Cyber Expanding recurring business

Invested Capital

Heavy Capital

Light Capital

Growth

Major M&A

Organic Growth + Programmatic M&A*

^{*:}Not major M&A encountered opportunistically, but focused on areas that are adjacent and complementary. Carry out planned, small scale M&A as part of annual business strategy. 60 % of companies with top 100 market cap in past decade (2007-2017) employ this method. (Source: McKinsey & Company)

The Road to CPS

- ✓ A revolution in the employees' mindset
- ✓ Cultivation of business creators
- ✓ Creation of a culture small failures
- ✓ End closed innovation

Business Creation

Stimulate new ideas



Over 100 new business ideas have been identified periodic in-house pitches

Accelerate development with the in-house fund



Establishing CPS Fund for creation and acceleration of new businesses

External cooperation through open innovation



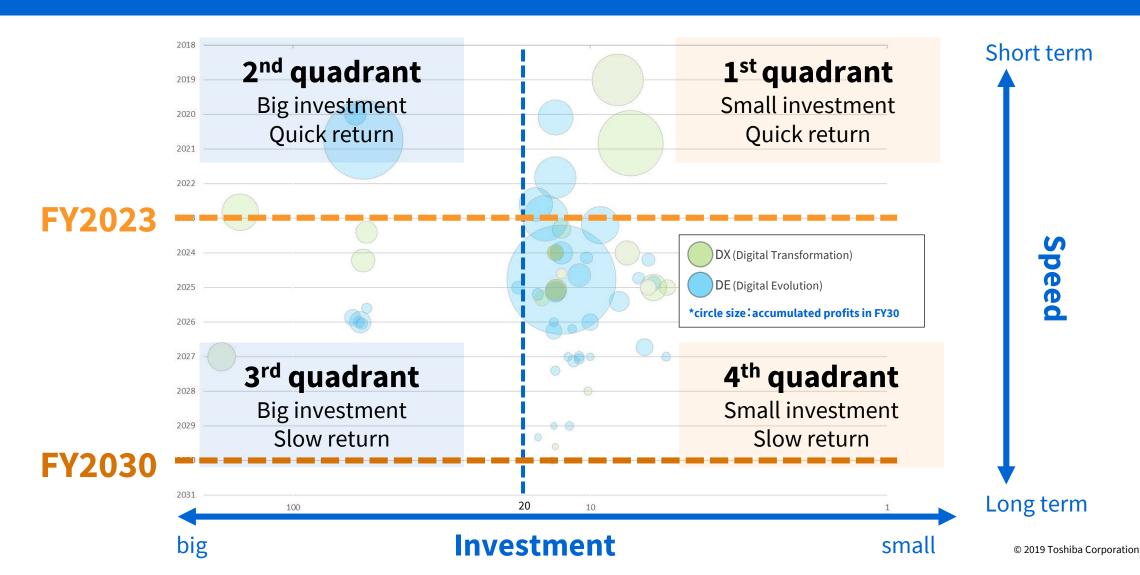
TOSHIBA+

External accelerator

Development of new business models

Toshiba's CPS Business Portfolio

Develop new business ideas with small investment, targeting FY2030



Toshiba CPS Business Roadmap

Develop new businesses step by step, for innovation of social infrastructure

Innovation of Social Smart Grid、MaaS Infrastructure **Commercialization of** ifLink[®] **Open Innovation** technology assets **Purchase data IoT data Data Business Human data O&M* of Current Business O&M* of social infrastructure business**

FY2030

FY2020

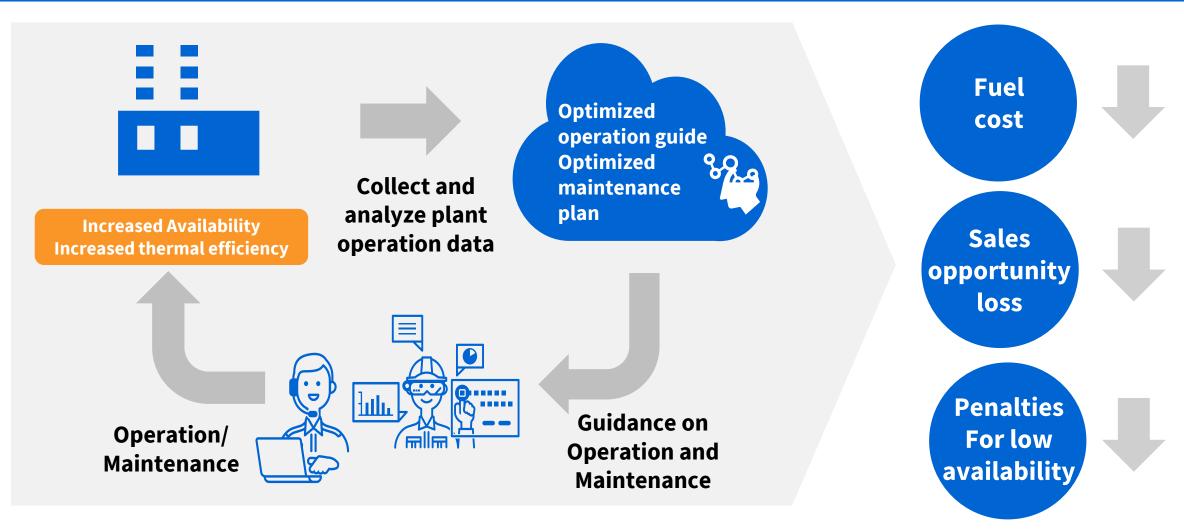
Above business investment, M&A

New Business Investment, M&A

*:Operations and Maintenance

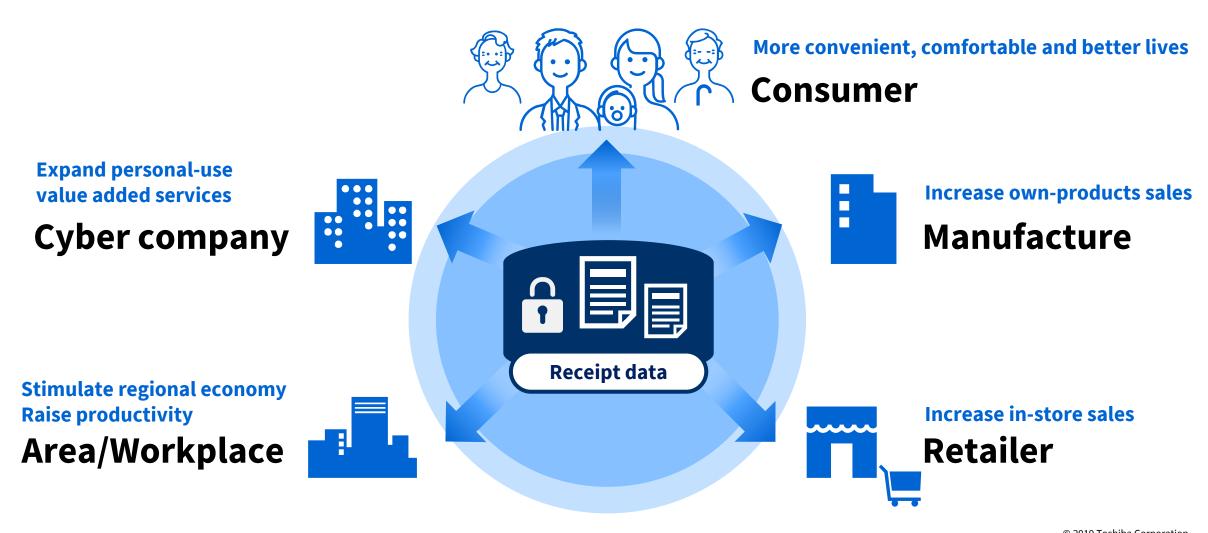
O&M of Current Business: Power Generation

Deploying PoC in Mexico, India and Japan



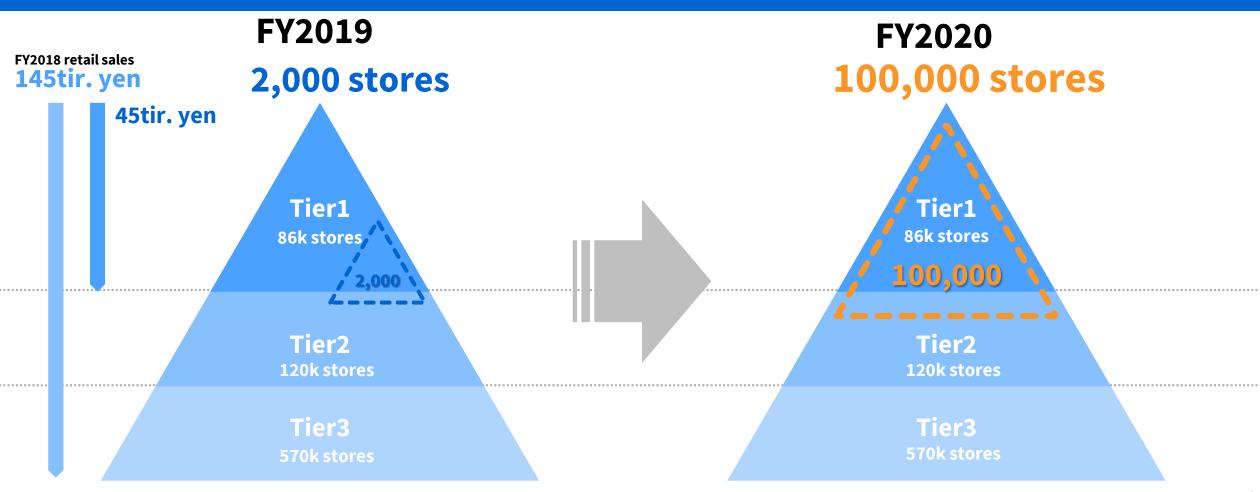
Data Business: Concept (Purchase Data)

Create better future providing valuable receipt data with safe and secure



Data Business: Accelerator Program (Purchase data)

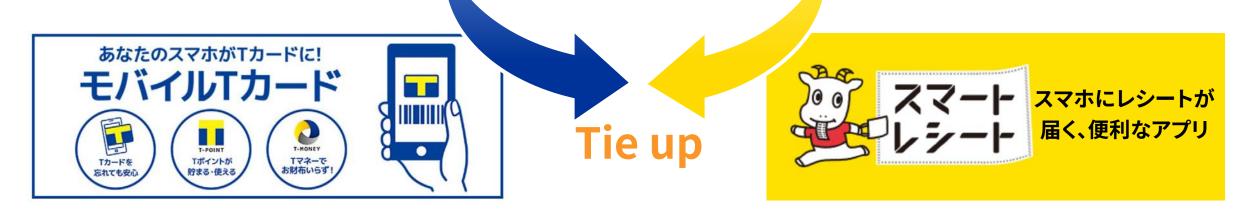
Establish database based on No.1 share in POS business **Expand stores with business partners**



Data Business: Smart Receipt, Case1

Improve user-friendliness by tie-ups with Mobile T CARD & Smart Receipt

Tie up with "Mobile T Card" & "Smart Receipt" From FY2020, we can use e-receipts in the Mobile T- Point app.



Data Business: Smart Receipt, Case2

Adopted by "Shibuya PARCO"

Using Smart Receipt to prove e-receipts for users of POCKET PARCO, the official PARCO app.







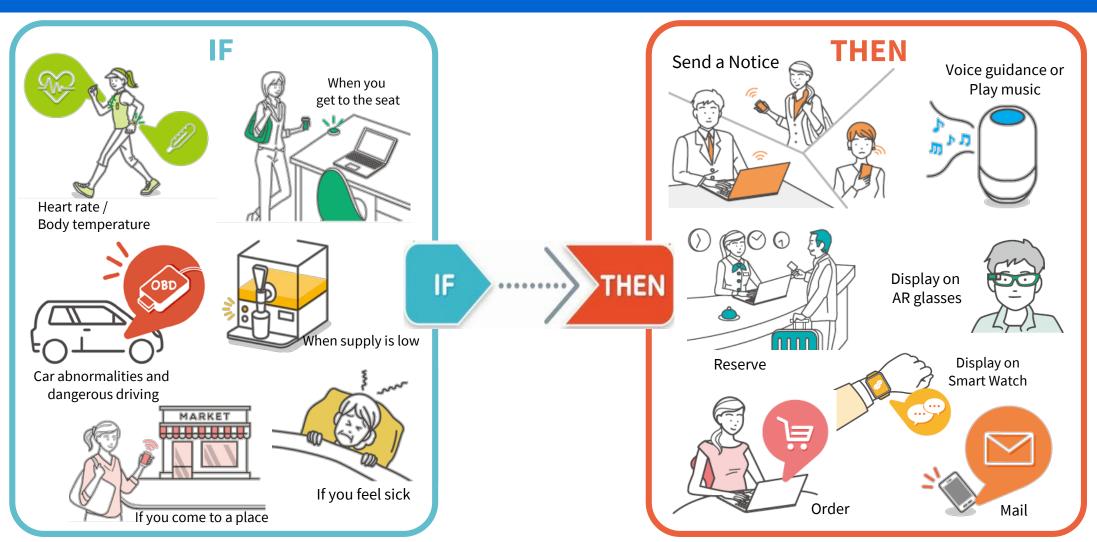




Nov.22 open 「Shibuya PARCO」

Open Innovation : ifLink®

Realize IoT by an "IF-THEN" combination



Open Innovation: IF-THEN Card

Only reading the cards by smartphone, it realized the device connection

Combination





Open Innovation: ifLink® Open community

if Link® Open community

To make a world where people can freely combine modules and create value and participating companies' business grows spontaneously

Consortium

operation



Members



Open marketing program



Place to increase connected modules



Web service Micro service











(published/own jointly)



Place to increase user cases and recipes





Module bank



Business users

Co-create end users

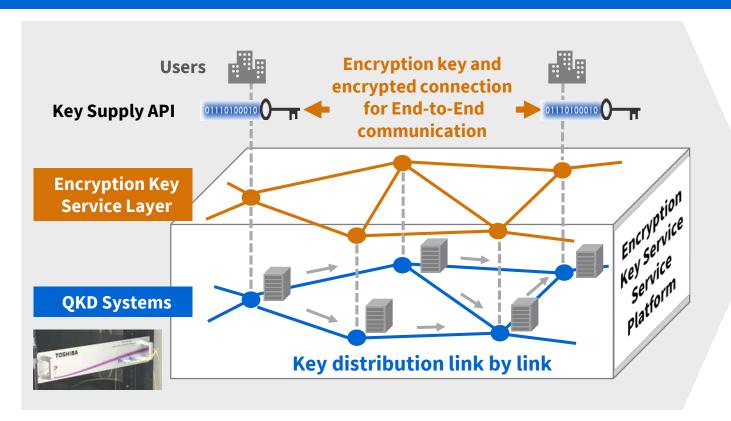


Consumers

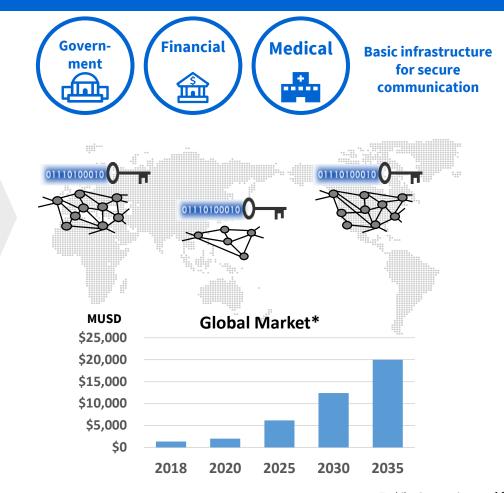
Web site / Cloud

Open Innovation: Quantum Key Distribution (QKD)

Use our world's #1 technologies to establish de facto standard in global market for "Encryption key supply service"

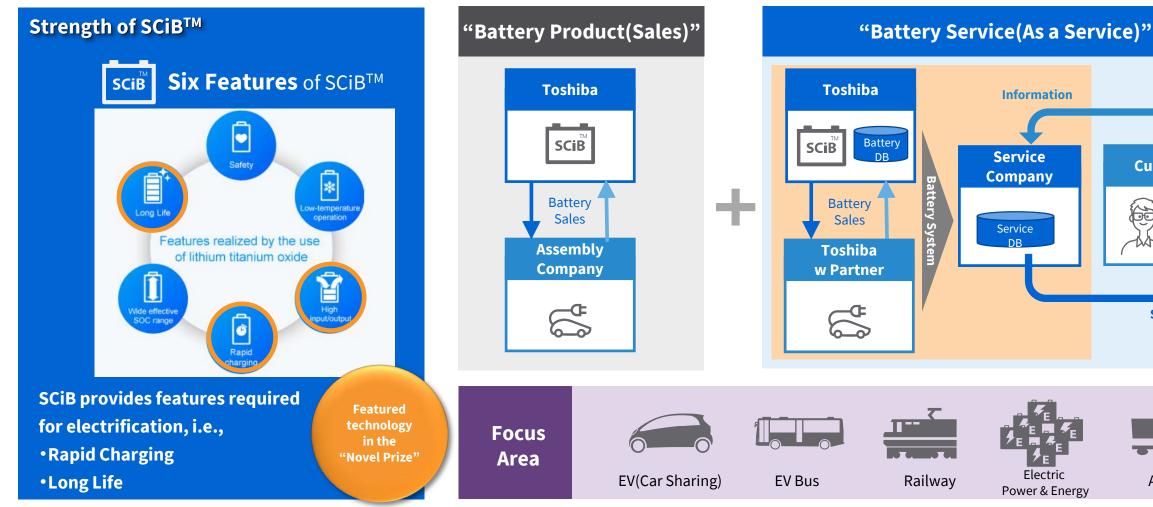


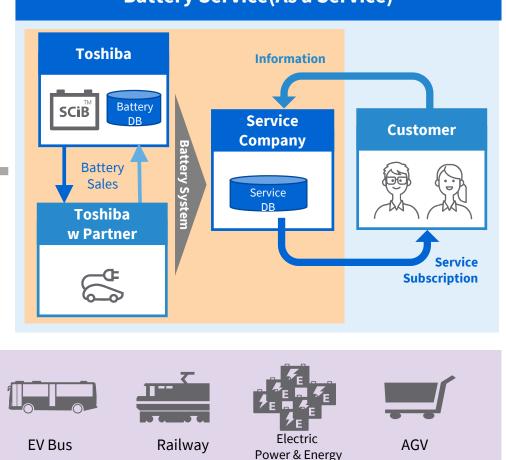
QKD Systems + Encryption Key Service Layer to be promoted as our platform for QKD service



Innovation of Social Infrastructure: SCiBTM Rechargeable Battery

Contributing to a sustainable electrification society





Target for Toshiba CPS business

Target High profitability & High growth

Target

High profitability

High growth

Conditions

Data centric



Utilize own assets



Light assets



Recurring Business model



The customer base, technologies and products that Toshiba has accumulated over many years

Committed to People, Committed to the Future.

TOSHIBA