

Attracting Tomorrow



# Business Strategy Meeting

**TDK Corporation**  
Corporate Communications Group  
May 18, 2018

# Attendees

- President and CEO
- Senior Executive Vice President  
CEO of Electronic Components Business Company, in charge of Magnet Products
- Executive Vice President / General Manager of Corporate Strategy HQ
- Senior Vice President / General Manager of Finance & Accounting HQ
- CEO of Energy Solutions Business Company
- GM of MEMS Sensors Business Group, Sensor Systems Business Company

**Shigenao Ishiguro**

**Hiroyuki Uemura**

**Seiji Osaka**

**Tetsuji Yamanishi**

**Fumio Sashida**

**Behrooz Abdi**

- **Presentation**

Mid-Term Management Plan

Shigenao Ishiguro

Tetsuji Yamanishi

Behrooz Abdi

- **Q&A**

# **Mid-Term Management Plan (FY March 2019 - FY March 2021)**

# Foundation & Innovation

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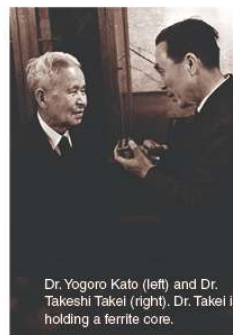


TDK's starting point  
was the first ever commercialization  
of ferrite.



The world's first  
ferrite core

**1935**  
TDK: A trailblazing  
university-generated  
venture company



Dr. Yogoro Kato (left) and Dr.  
Takeshi Takei (right), Dr. Takei is  
holding a ferrite core.



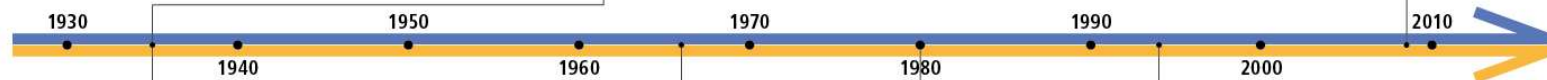
The Kamata Plant in Tokyo  
(TDK's first plant founded  
in 1937)



The Oxide Core catalog of  
ferrite products at the time  
of TDK's foundation



The IEEE Milestone plaque



Four great world-class  
innovations  
by TDK



**1935~**  
Materials technology  
with origins in ferrite



Materials for ferrite  
products and ceramic  
products

**1966~**  
Magnetic tape  
technology  
revolutionized music life

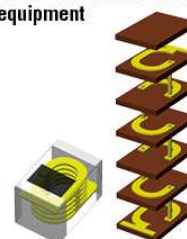


The first Synchro Cassette  
Tape, made in Japan



Equipment for  
manufacturing videotapes  
and cassette tapes

**1980~**  
Fine multilayering  
technology promoted the  
miniaturization of electronic  
equipment



The structure of a  
multilayer chip inductor

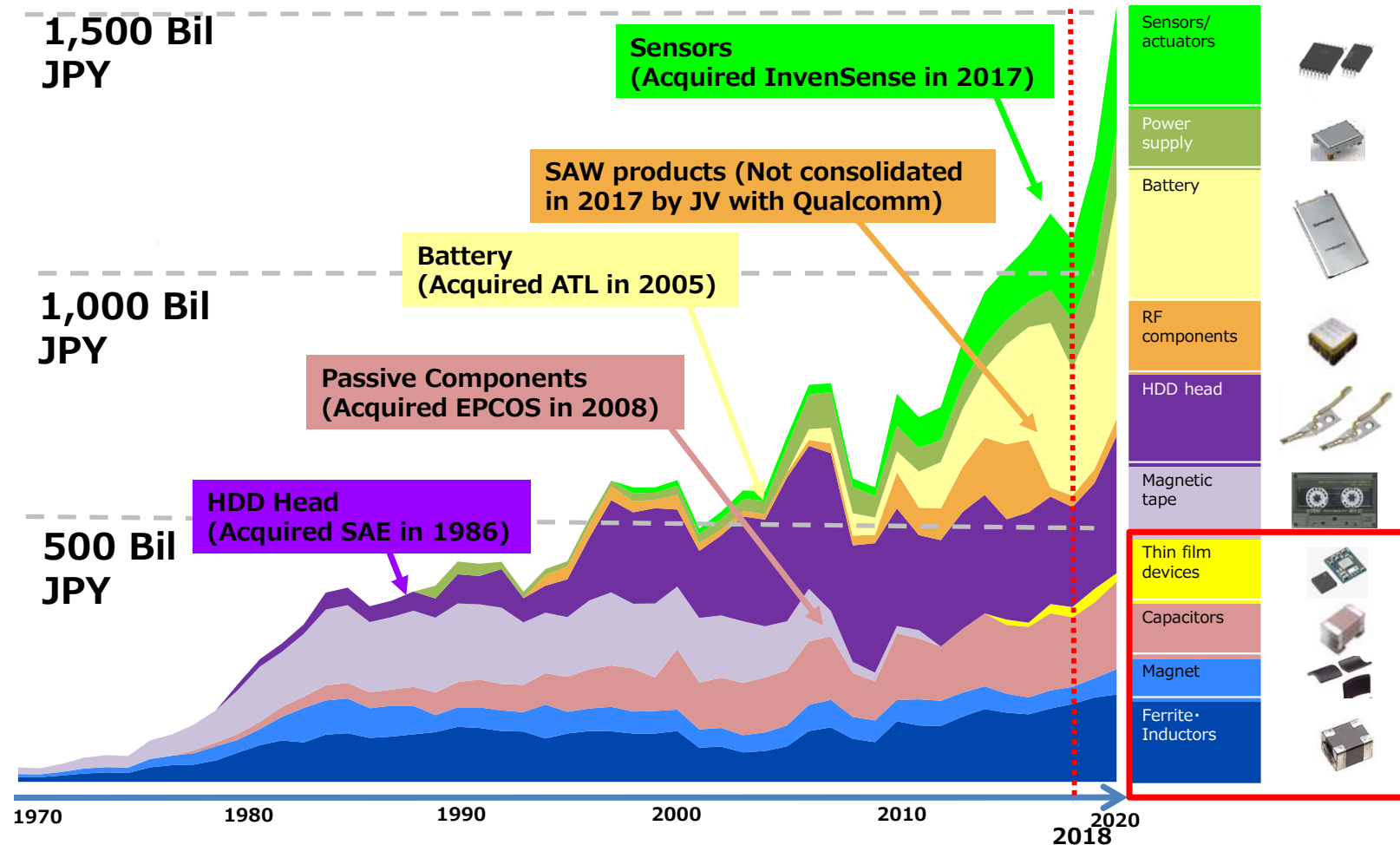
**1994~**  
Magnetic head  
technology achieved  
awesome recording  
density



The internal structure of  
an HDD and magnetic  
heads

# TDK Business (Technology & Products) Transition

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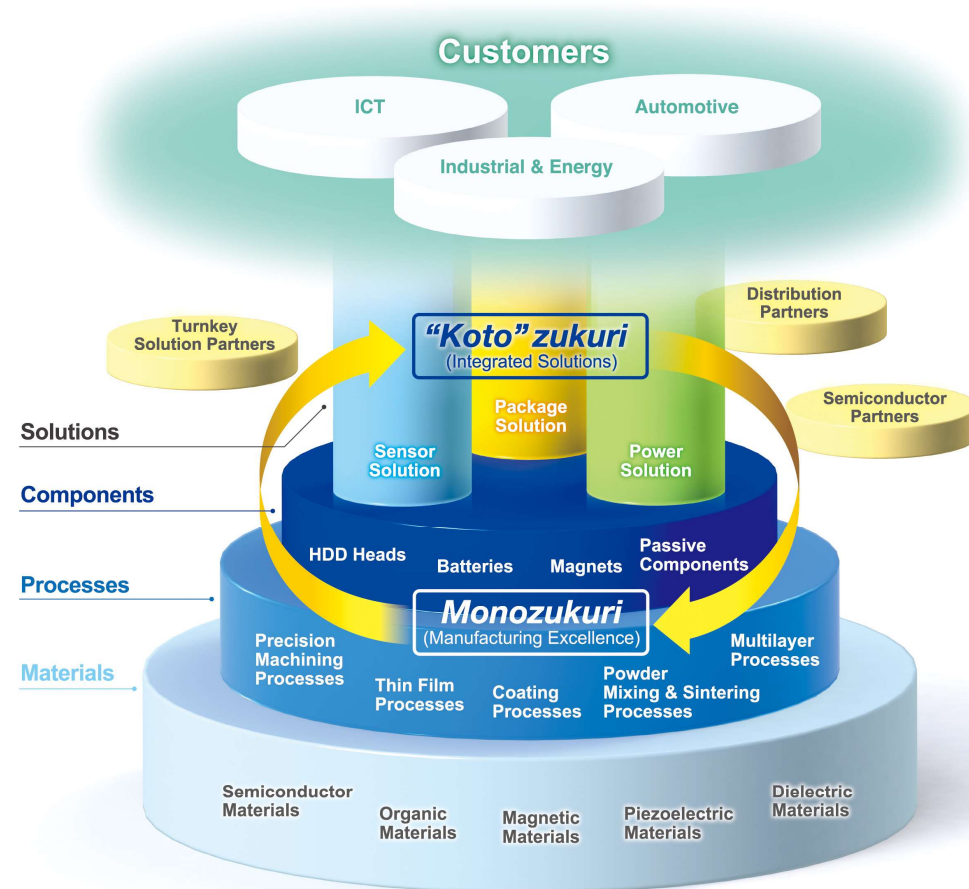
# Mid-Term Vision



Commercial Value

Asset Value

Social Value



## “Value Creation 2020”

Leap to new heights by providing market-needed solutions  
based on our electronics components business

### Commercial Value

Execute Growth Strategy

**Sales**     **1,650.0 billion yen**

### Asset Value

Improve Asset Efficiency

**OP margin**     **Over 10%**

**ROE**     **Over 14%**

**Capex (3 years)**     **500.0 billion yen**

### Social Value

Enhance Enterprise Value

**Contribute to society through  
sustainable business activities**



# Commercial Value

## Management Target in Mid-Term : Sales by Segment

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(Yen billions)	FY March 2018 Results	FY March 2021 Target	CAGR
Net sales	1,271.7	1,650.0	9%

Segment	CAGR
Passive Components	7%
Sensor Application Products	35%
Magnetic Application Products	2%
Energy Application Products	8%

# Commercial Value

## Mid-Term Growth Strategy : Passive Components

Achieve steady and sustainable growth  
by expanding targeted markets and applications

### Refine automotive components

- Product development matched to automotive needs
- Reference activities for automotive ECUs
- *Monozukuri* (manufacturing excellence) to enhance quality and reliability

### Capture communications demand for 5G & Beyond

- Develop optimal millimeter-wave ceramic materials
- Develop various LTCC-based products

### Upgrade and expand power-related components and propose new solutions

- High Reliability Power Inductors
- Wireless power transfer
- $\mu$ -POL™
- Develop all-solid-state batteries

### Develop PZT applications

- Piezo Hapt & Power Hap
- Medical & Hygienic Application

### Mount timely production responses to growing demand

- Invest in ramping up production
- Continue to drive *Monozukuri* Innovation

Appropriately capture diversifying and growing sensing needs and grow this field into one of TDK's future core businesses

### ●Steady expansion in Automotive Sensors

- Commence mass production of various TMR Sensor projects (including redundancy design products)
- Develop higher performance Hall Sensors (2D/3D sensors)
- Develop new applications of Temperature and Pressure Sensors
- Automotive applications of MEMS sensors (Accel/Gyro/ToF)

### ●Expansion in Sensors for consumer applications

- Develop higher performance 6D Sensors and expand the customer base
- Expand consumer applications of TMR Sensors (CMA, e-Compass)
- Expand applications of MEMS Sensors (microphones, fingerprint recognition, gas detection)

# Commercial Value

## Mid-Term Growth Strategy : Magnetic Application Products (HDD head & components)

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Survive as the world's only specialized manufacturer  
in this field by supplying technologies catering  
to the needs of the era of large-capacity storage

### ● Contribution to attain higher density of HDD

- TAMR
- MAMR
- $\mu$ DSA

### ● Application of Suspension technology

- Additive Metal Deposition Components

# Commercial Value

## Mid-Term Growth Strategy : Magnetic Application Products (Magnets)

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Restore growth and profitability by steadily  
capturing growing demand for motors and generators

● Achieve the design, prototyping, and mass production of magnets that maximize the efficiency of motors and generators (shape, magnetization, material)

● Implement *Monozukuri* Innovation to realize TDK's *Arubeki-Sugata* (ideal process) that will minimize losses

Provide high efficiency, high reliability power storage and power supply solutions through vertical integration of materials and components

### ● Battery

- Develop the mini-cell market based on successes in the ICT (Information and Communication Technology) markets
- Apply materials technologies and develop the power cell market based on collaboration with a strategic partner.

### ● Power supply solutions

- Address high-quality power supply solutions such as medical devices and robotics
- Expand programmable power supply and bidirectional power supply solutions
- Launch the EV power supply business targeting full-fledged expansion of the EV market
- Pursue smaller, lighter and higher efficiency Automotive Power Supplies

# Commercial Value

## Mid-Term Growth Strategy : Other (CMA)

### Restructure the camera module actuator business

- Apply TDK's unique technologies

- ⇒ TMR Sensors, SMA, High-Precision Coils, Thin-Film Actuators

- Shift from smartphone use to automotive use

# Asset Value

## Mid-Term Financial Strategy

- Steadily recover growth investments executed towards restructure the business earnings model
- Execute further growth investments based on a well-balanced capital allocation

### Well-balanced capital allocation

- Growth investments
- Shareholder returns
- Repayment of interest-bearing debt

Negative free cash flows



Positive free cash flows

### Mid-Term Financial Target

#### Capital efficiency

- OP margin Over 10%
- ROE Over 14%

#### Return to shareholders

- Increase dividends stably through growth of income per share
- Target a 30% dividend payout ratio

#### Financial soundness

- Stockholders' equity ratio Over 50%
- Net cash



## “Aiming for a sustainable society and enterprise”

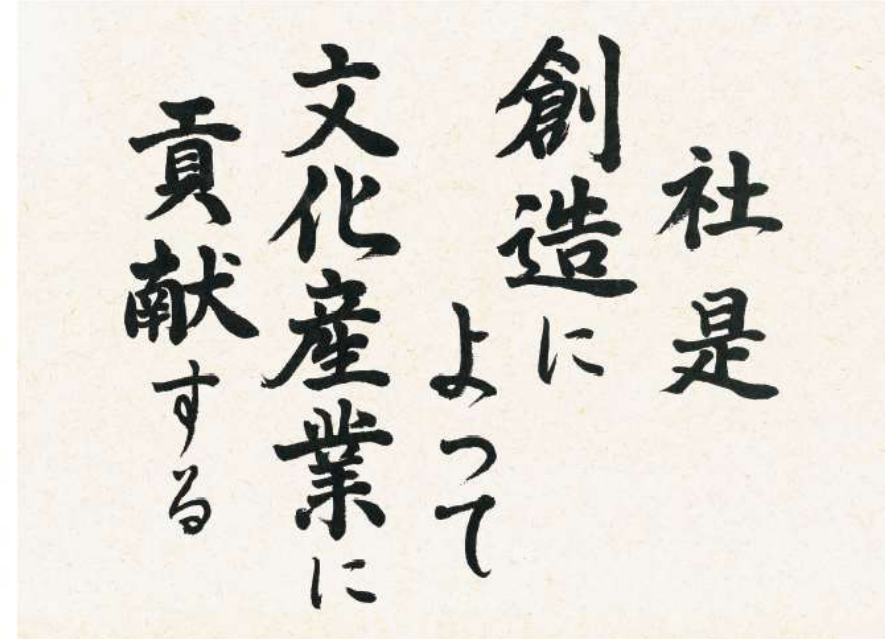
- TDK will realize greater happiness and well-being in society through cutting-edge technologies
- TDK will effectively utilize finite resources
- TDK will be a global and diversified enterprise

# Corporate Motto & Principles



Corporate Principles

Vision Courage Trust



Corporate Motto

Contribute to culture and industry  
through creativity

