

KONICA MINOLTA, INC

# **Mid Term Business Strategy**

Shoei Yamana, President and CEO

April 14, 2016



We aim to raise interest and heighten understanding of investors who take a medium- to long-term approach to managing their investments. Accordingly, we continually release important non-financial information which includes details on the direction we are heading and our approach with respect to management and operations over the medium to long term, particularly from the viewpoint of maintaining constructive dialogue with investors, which takes on even more importance now that Japan's Corporate Governance Code has been established.

## 1 Purpose of today's briefing

- The purpose of today's briefing is to describe the direction we are headed with the business as we envision it five years from now, and to convey details regarding our strategy and the scale of our revenues in respective fields of business, and to communicate our sense of profitability overall.

## 2 Timeline

- May 2016: Release of the financial results for FY2015 and financial forecasts for FY2016
- **Oct. 2016: Release of an outline of the next Medium Term Business Plan**
- **Apr. 2017: Official release of the next Medium Term Business Plan in its entirety**



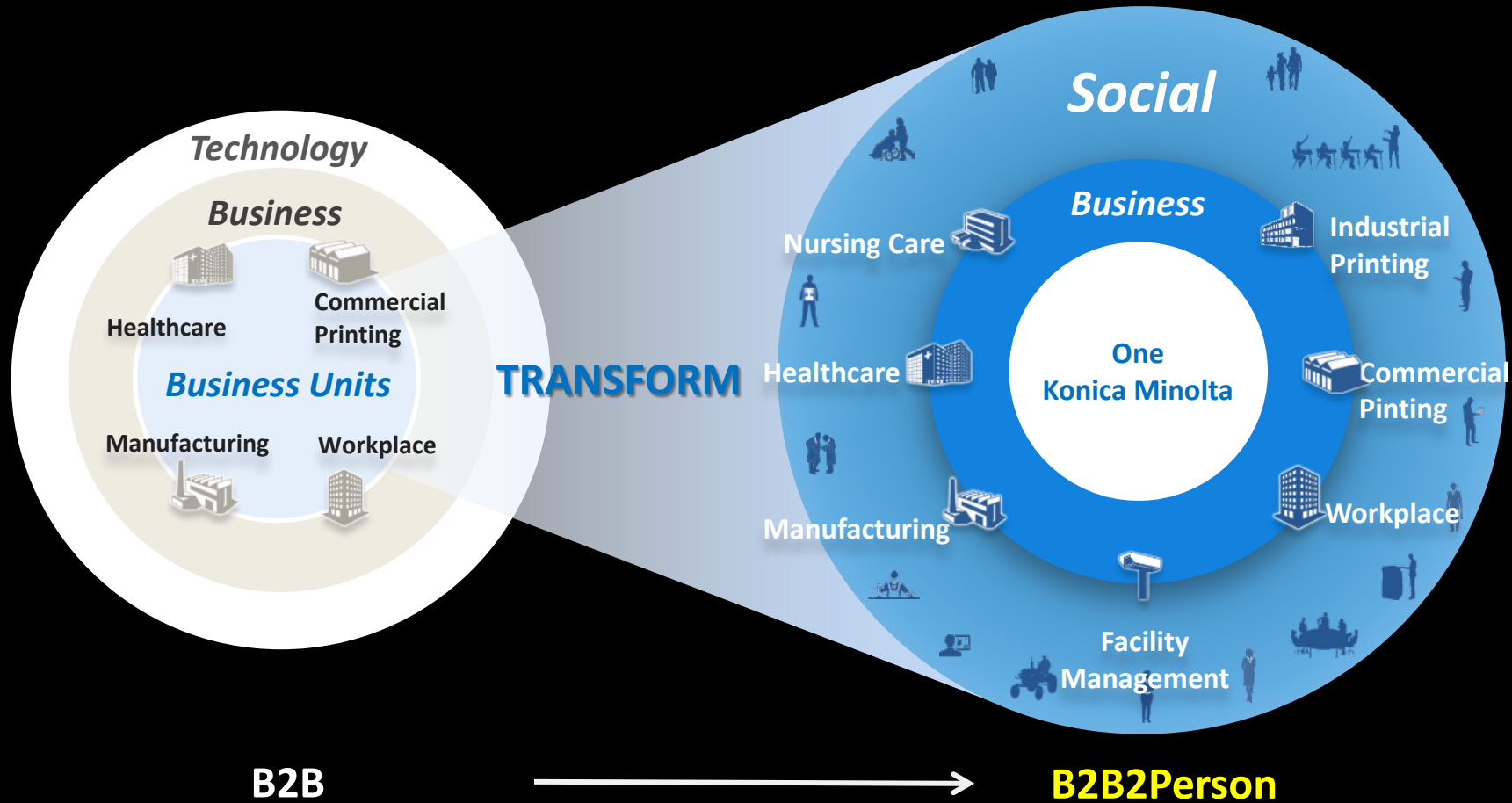
**Envisioning an  
empowering future for  
people and society**



**Technology that generates value  
Businesses that offer value**

**Social value & innovation**

**A problem solving  
digital company**



# KM – Cyber Physical Systems (CPS)



**Cyber**

Data Intelligence

Processing

Cyber  
(Digital)

Cloud

Storage

Learning

Assessment

Edge

Digital Data

analytics &  
Prediction

Control &  
Visibility

Digital twins of  
invisible objects

Real-time Edge  
Computing

Vertical Workflow  
Solutions

Physical  
(Analog)

Input

Output

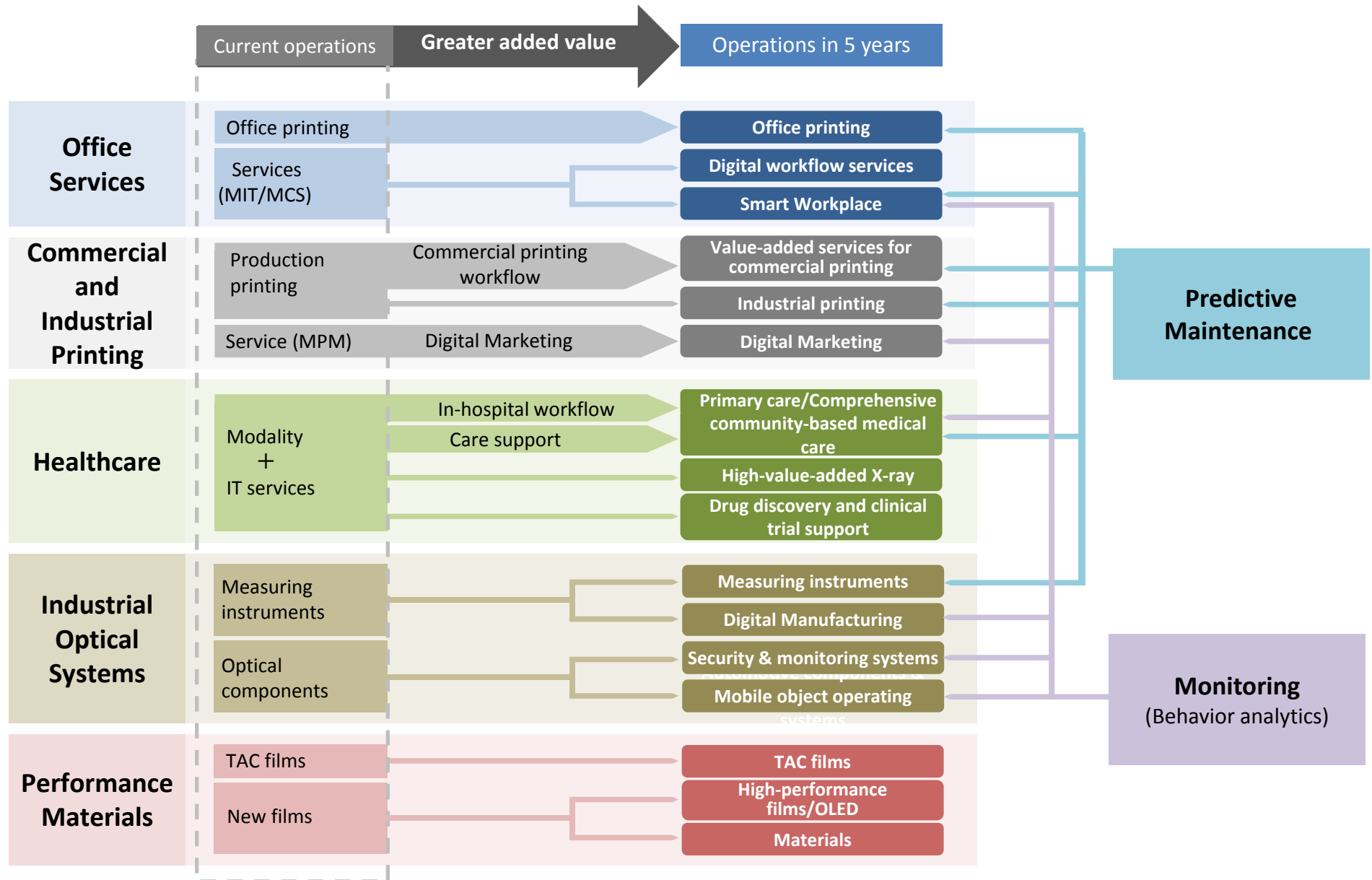
Actual  
images

Analog  
Quantities

**Customer value**  
Security & Safety  
Efficiency & Automation  
Prediction & Optimization

**Physical**

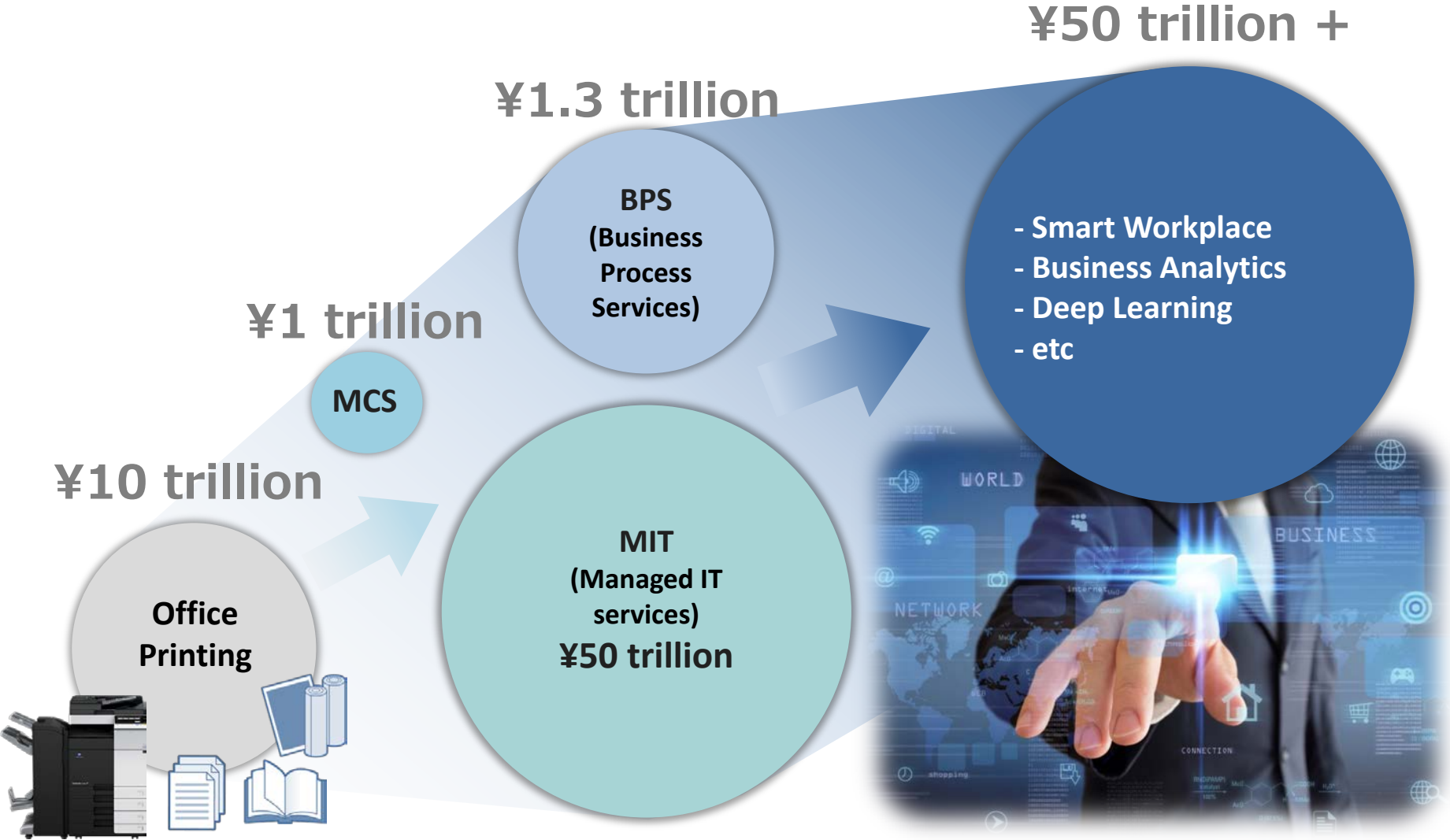
# Initiatives with Value-Added Business (overview)





**Office Services  
-Smart Workplace-**

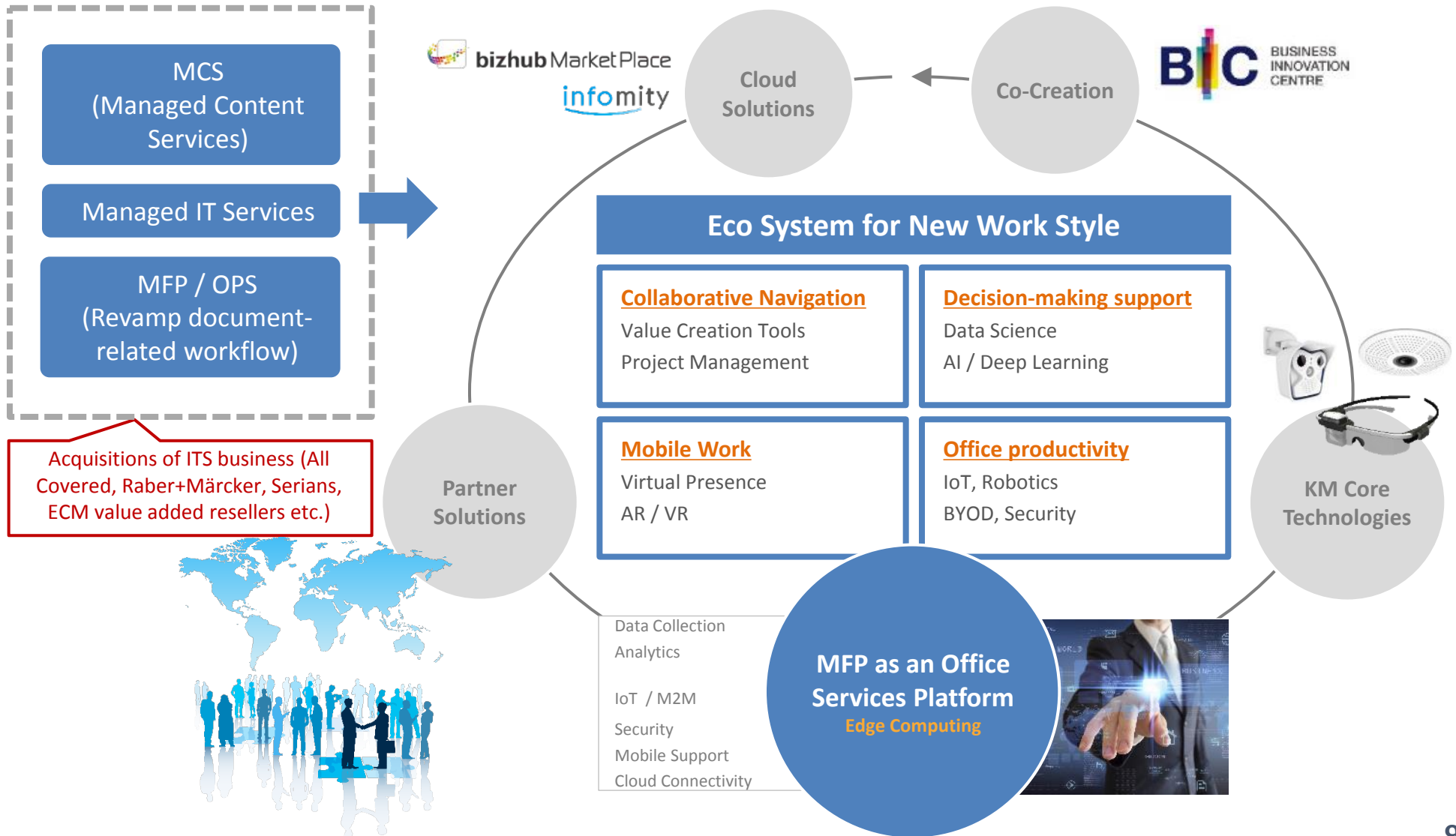
# Office Services Market – Size





# Office Services Strategy

**Step1** Digital workflow      **Step2** Enhancing value through semantics and analytics + adding value by integration of new domains



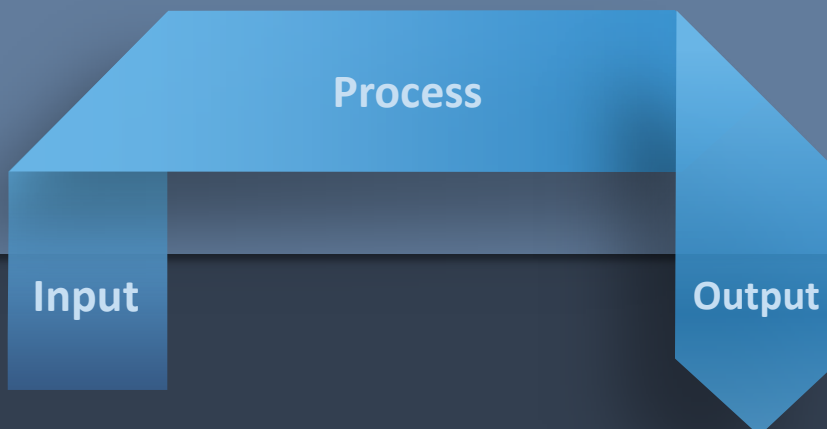
# Smart Workplaces Realized By Cyber Physical Systems (CPS)

## Cyber

- Analytics for working styles
- Analytics of in-company data
- Information automation



## Digital Workflow



- Structured & unstructured data in offices (incl. images)
- Movement of people
- Office environments

- Collaboration
- Secure communications infrastructure
- Remote job support
- Health management



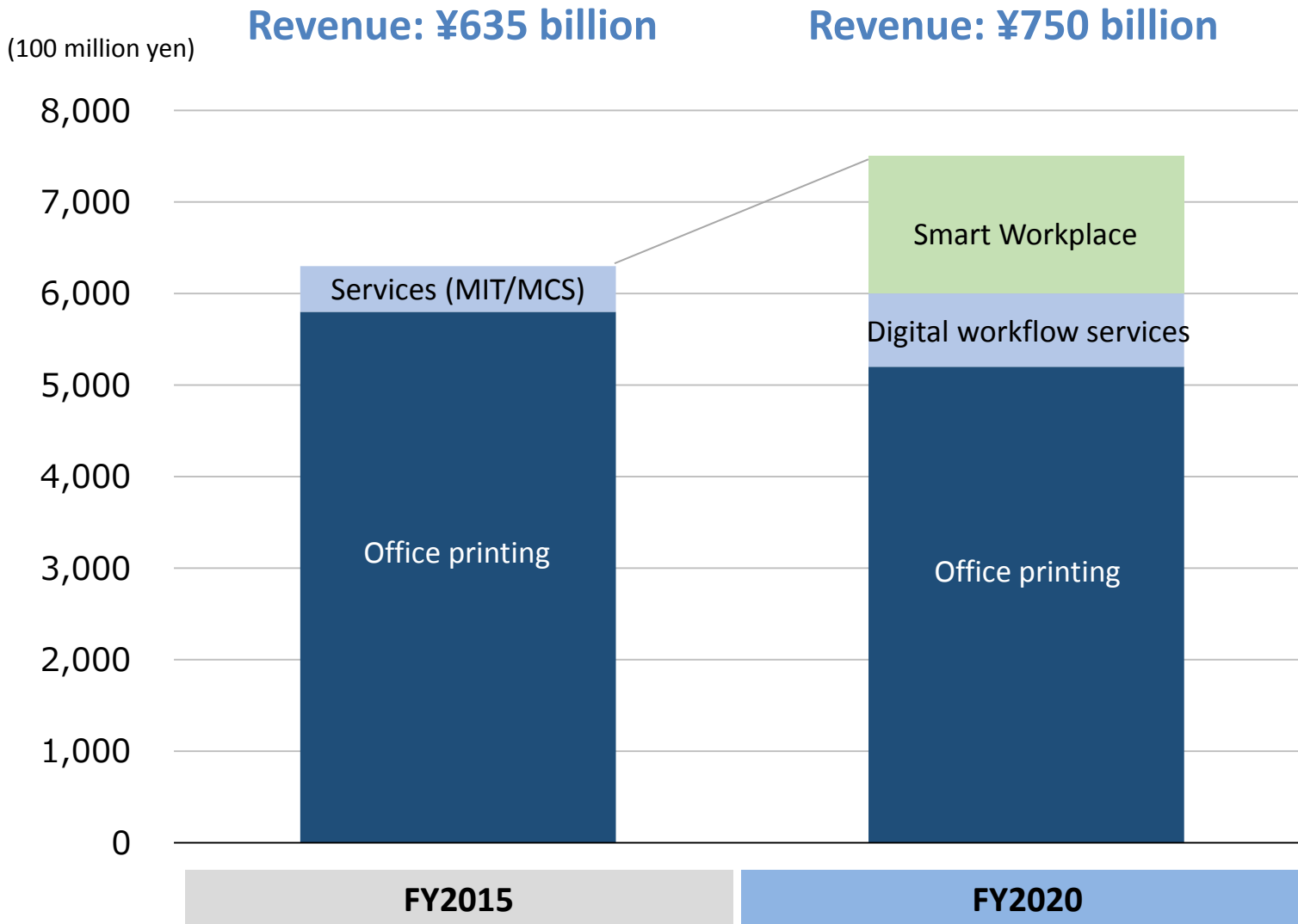
## Physical



## Value

- Business process automation
- Decision-making support
- New working styles

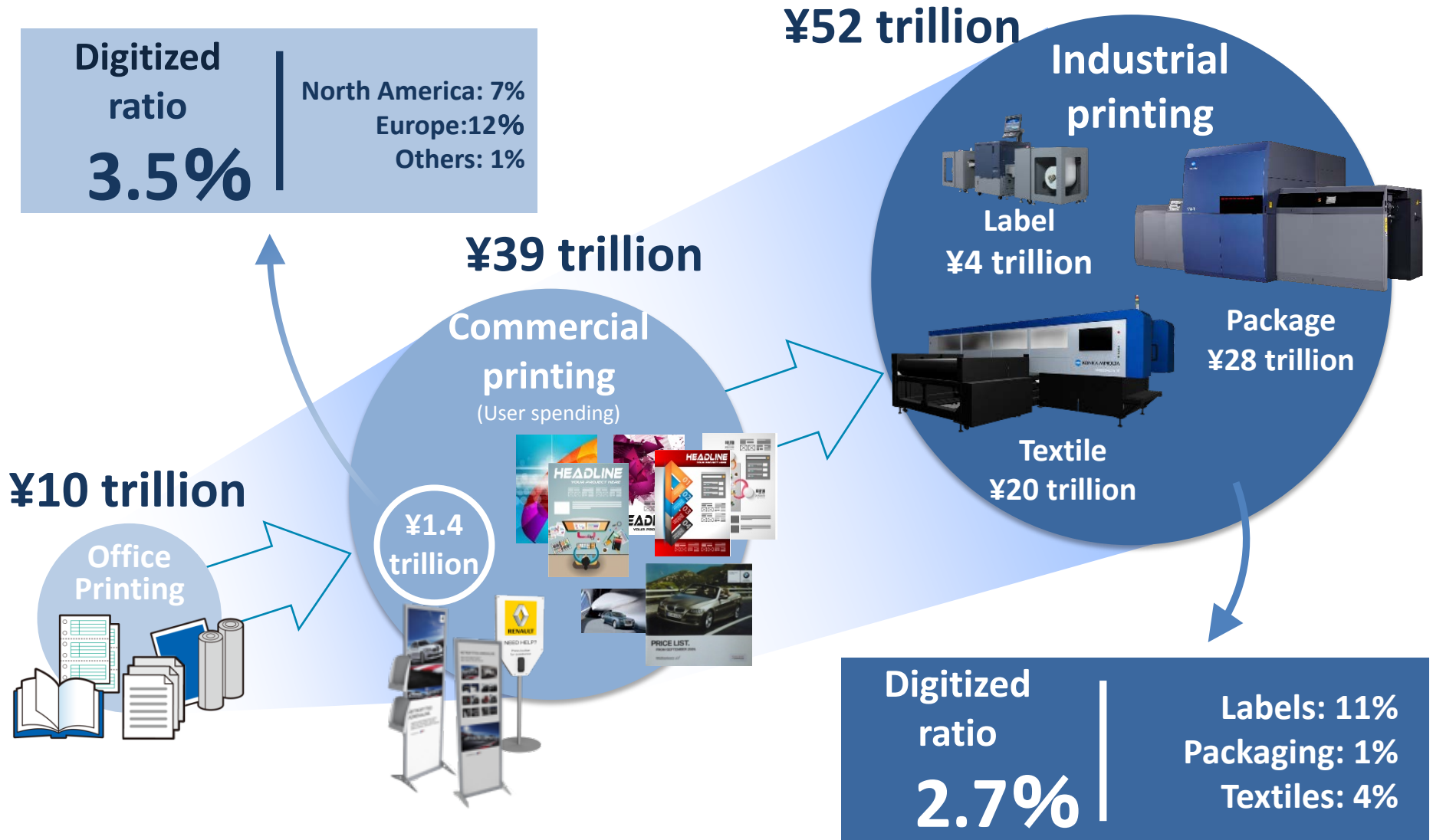
# FY2020 Target – Office Services–



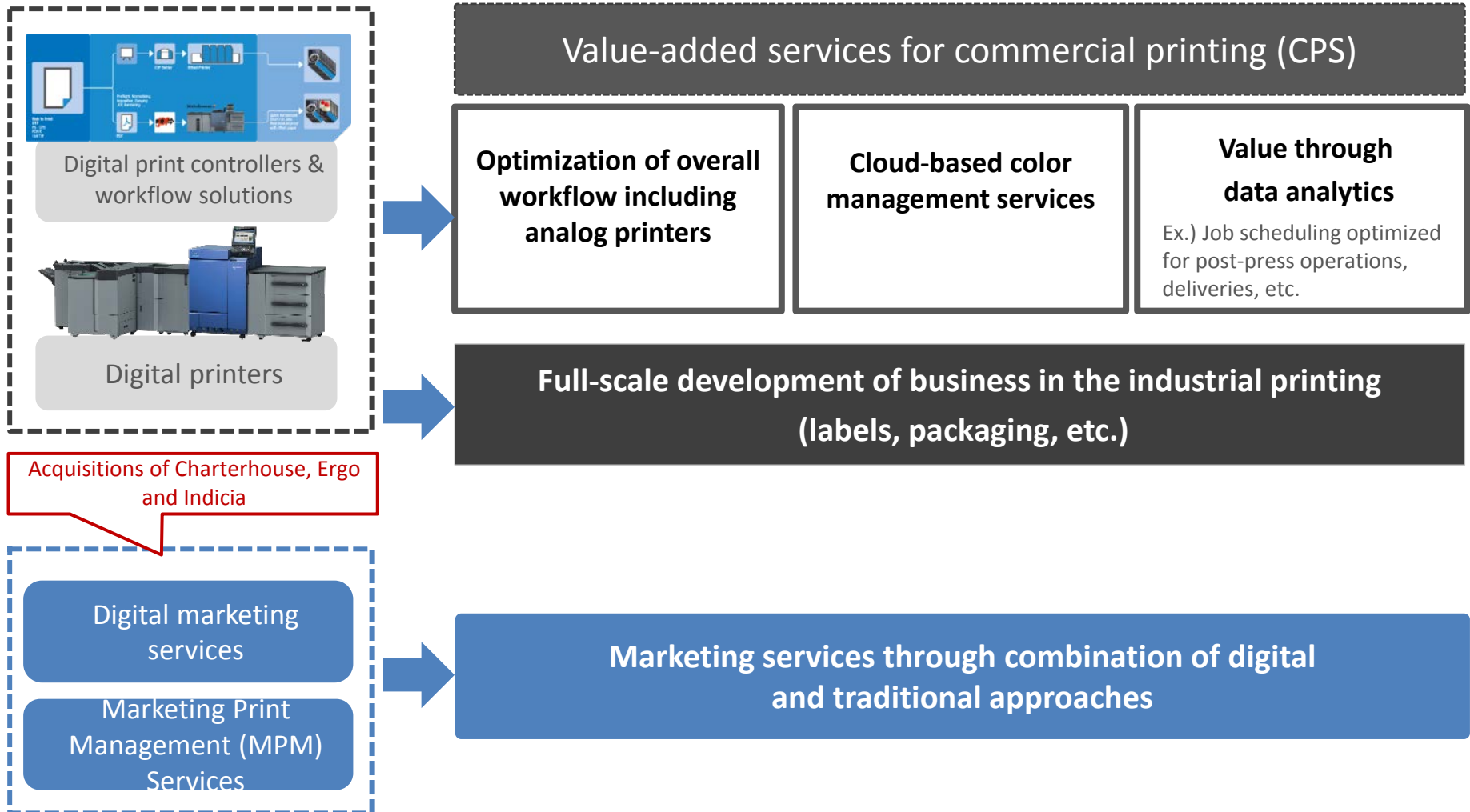
# Commercial and Industrial Printing



# Commercial and Industrial Printing — Market Size



# Commercial and Industrial Printing Strategy



# Industrial Printing Strategy

Accelerating digitization of various analog printing field



## Inkjet



KM-1 (for HPP)

Launched in 2016



Jet Varnish 3DW

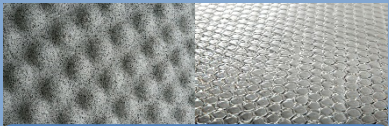
Additional investment in MGI



KM-C



Textiles



3D printing



Decorative printing

Additional investment in MGI

## Electrophotographic digital presses



Meteor (for MPP)



Additional investment in MGI



Printers (for LPP/MPP)



Label printers

-  KM-developed products
-  MGI products

## Marketing procurement

Acquisitions of Charterhouse and Ergo

- ▶ Marketing print
- ▶ POS
- ▶ Direct mail
- ▶ Merchandise
- ▶ Packaging

## Marketing production

- ▶ Design
- ▶ Color management
- ▶ Multi-channel, cross-media solutions
- ▶ Digital asset management
- ▶ App development

## Marketing solutions

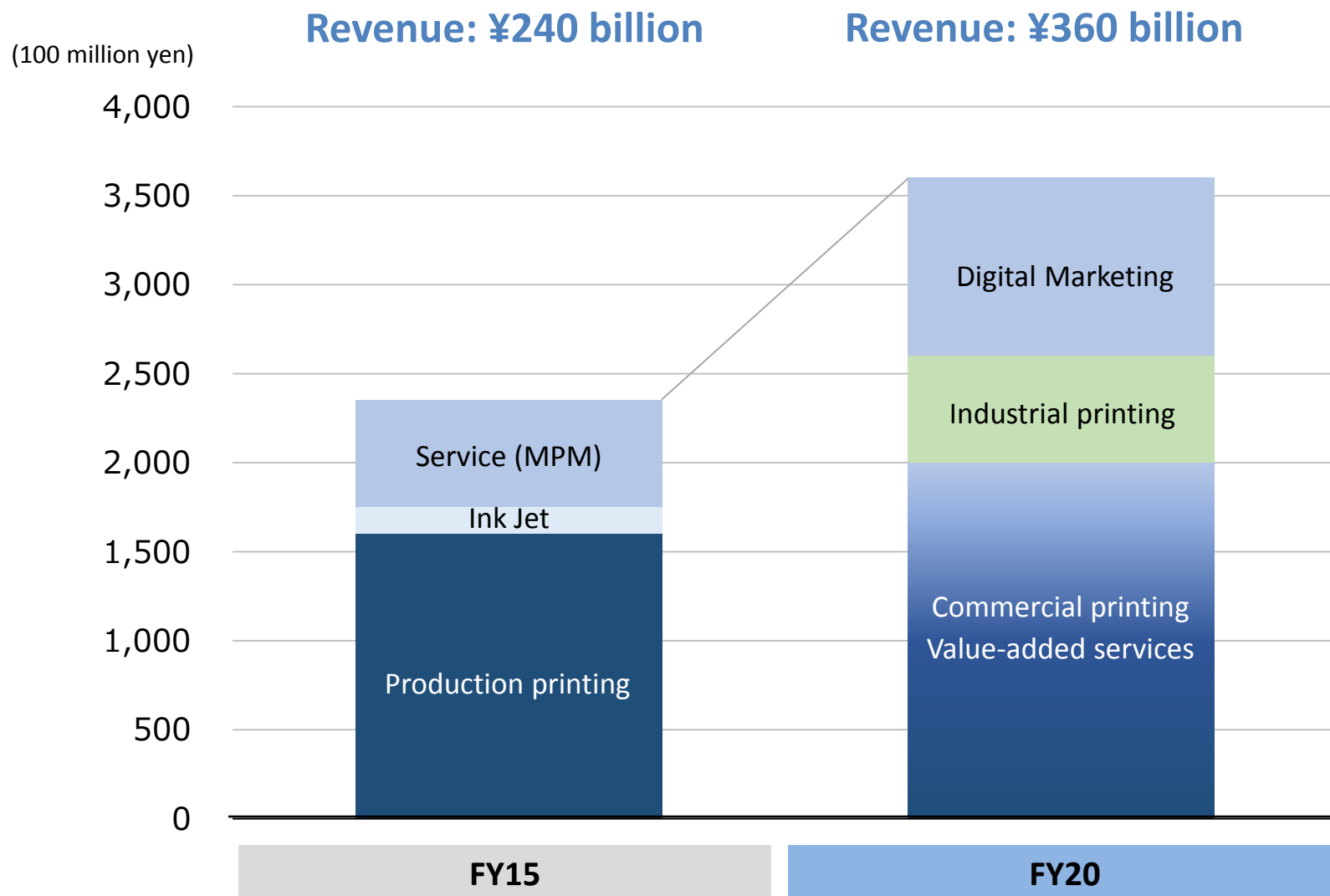
Acquisition of Indicia and investment in Netyear Group

- ▶ Marketing planning
- ▶ Web marketing
- ▶ Data management
- ▶ Data analytics & segmentation
- ▶ Marketing automation
- ▶ IoT



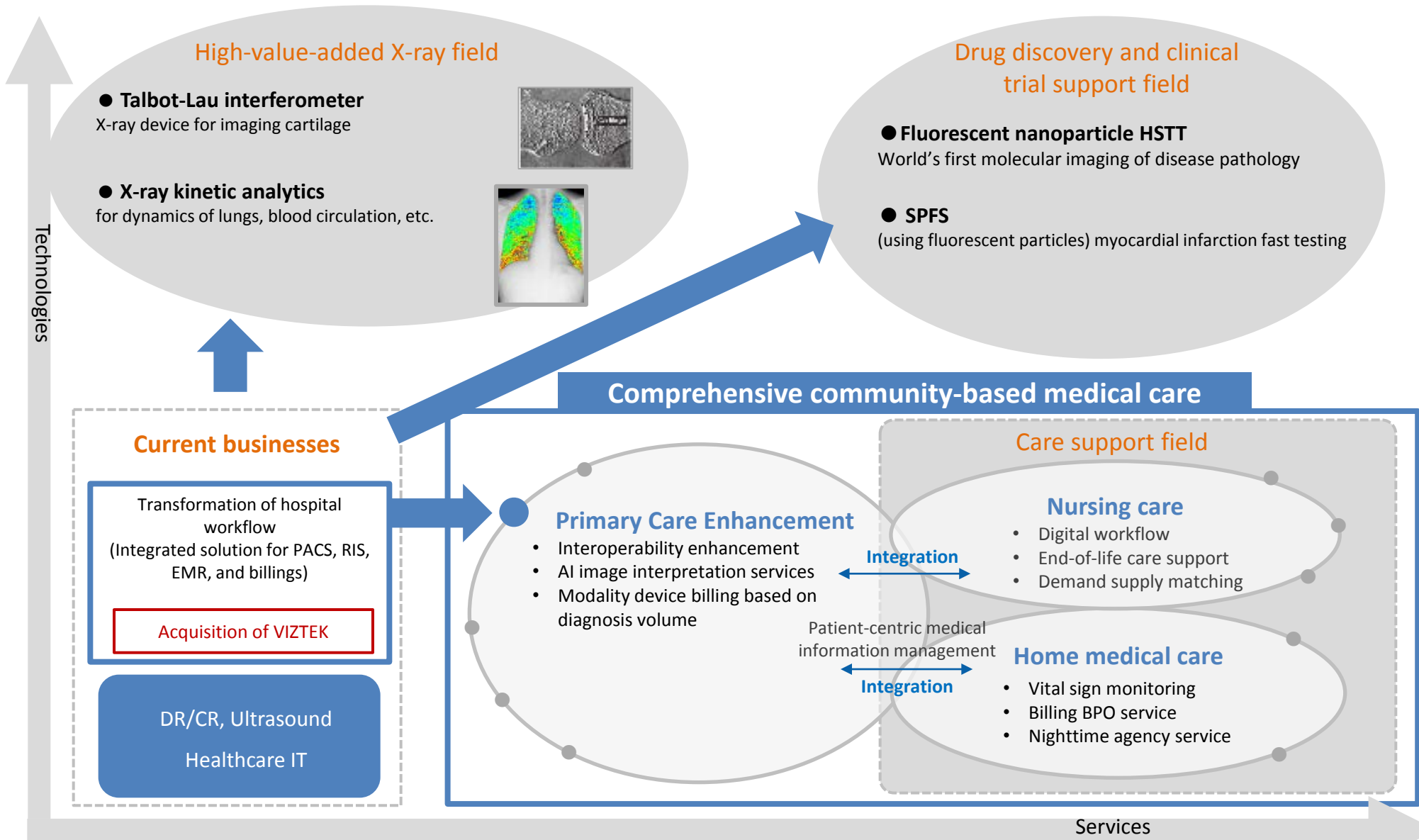


# FY2020 Target – Commercial and Industrial Printing –



A close-up photograph showing a young, smooth-skinned hand gently holding an elderly, wrinkled hand. The young hand is positioned on top, with fingers resting on the back of the older hand. The background is a plain, light gray surface. The overall mood is one of care and support.

**Healthcare**



# Primary care

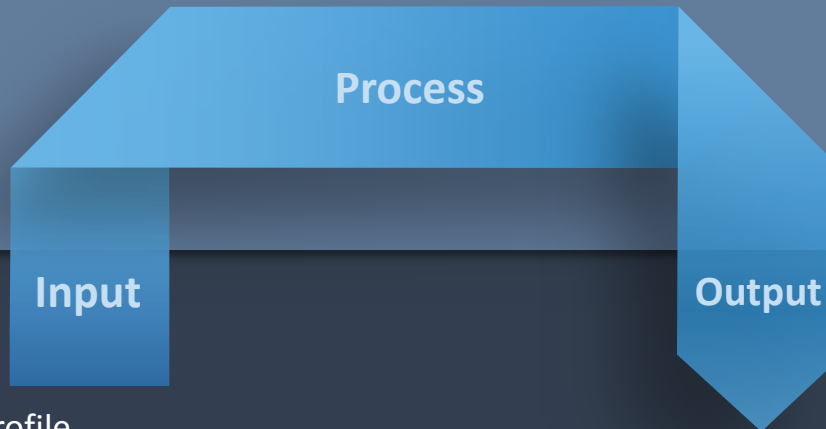
## Cyber

- Image interpretation and diagnoses using AI (automated)
- Visual depiction of workflow (hospitals, clinics, residences, nursing care)



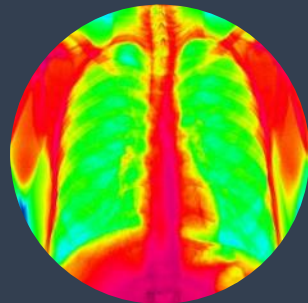
infomity

Hospital group  
networks

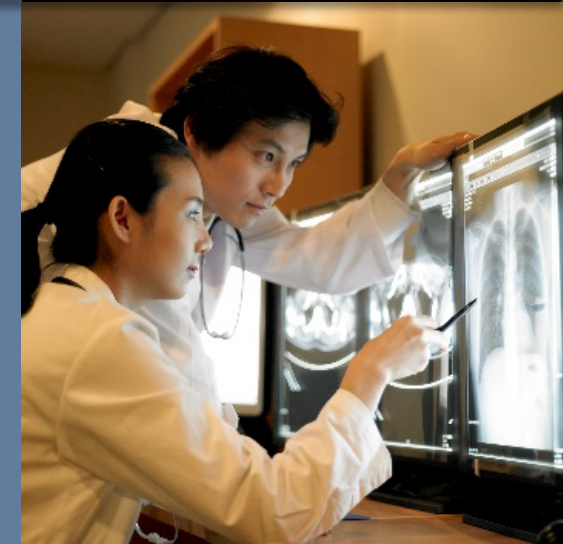


- Patient profile
- Modality image data
- Past diagnostic images and electronic medical records

- AI image interpretation services and diagnostic support



## Physical



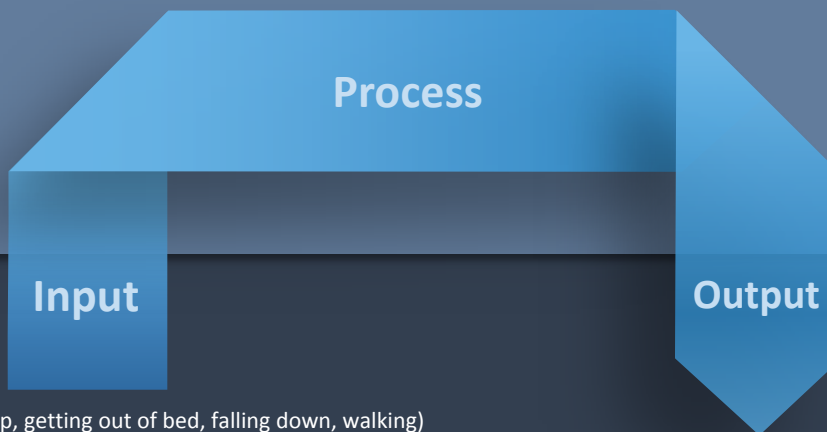
## Value

- Integrated workflow transformation
- Patient-centric diagnostics
- Higher quality diagnosis and treatment

# Care support field

## Cyber

- Visual depiction of workflow (hospitals, clinics, residences, nursing care)
- analytics of management data (status of beds, patient turn-over, workforce, skill levels)
- Business process automation (insurance claims)

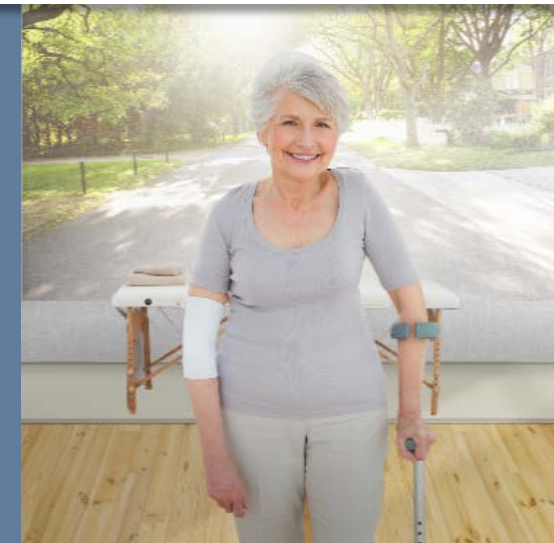


## Nursing care support

- Patient behavior (waking-up, getting out of bed, falling down, walking)
  - Staff behavior (hours of providing care and whereabouts)
  - Biometric data (respiration, body temperature, blood pressure)
  - Smart sensors
- Nursing care management support services
  - Home medical care support services



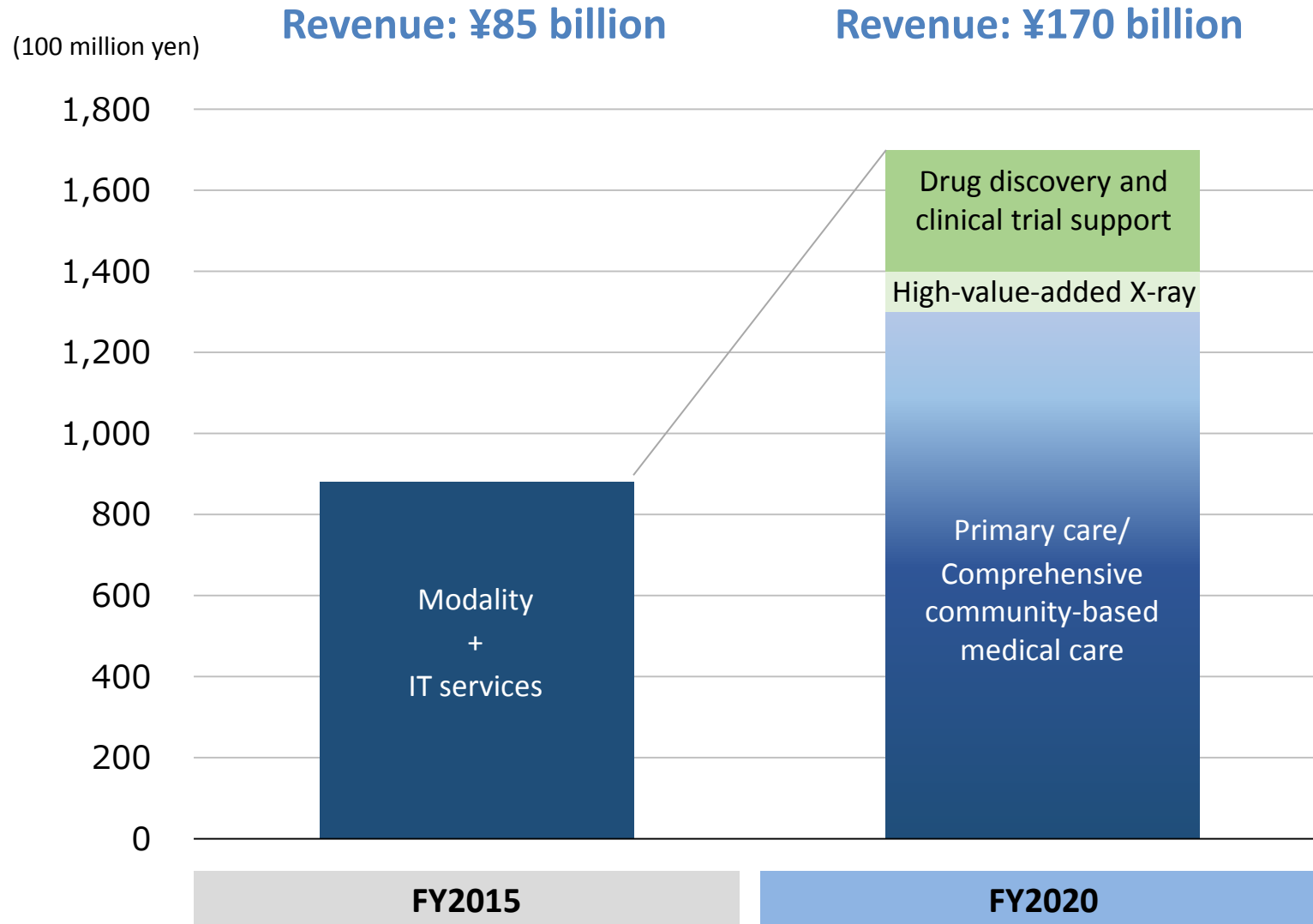
## Physical



## Value

- Better quality nursing care services
- Facilitating home medical care

# FY2020 Target – Healthcare –

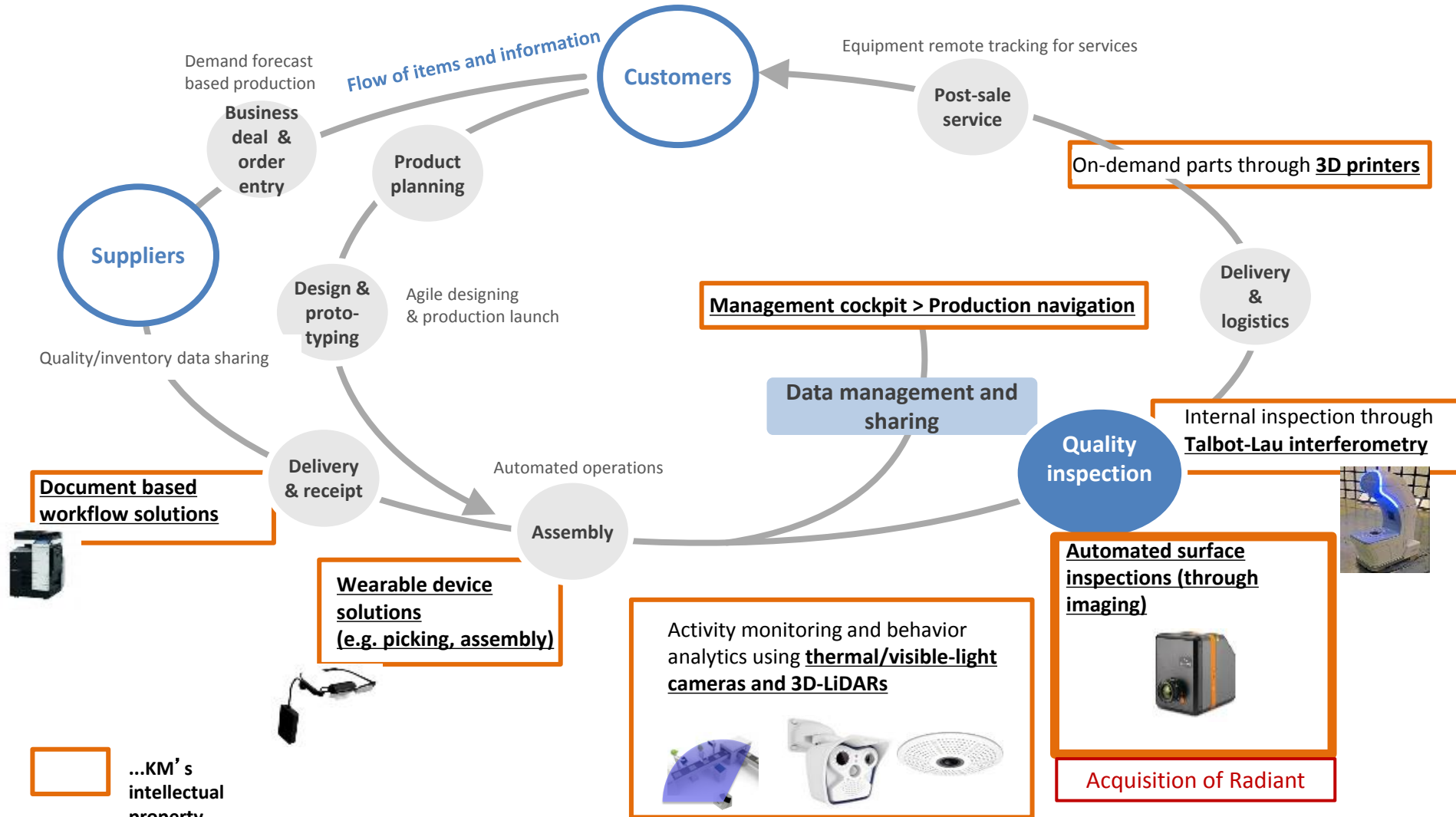




# Industrial Optical Systems

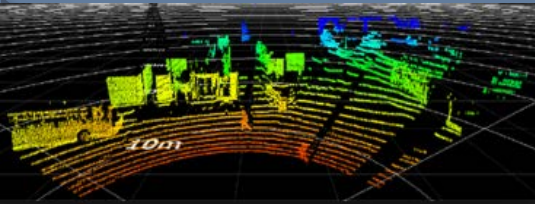
---

# Digital Manufacturing Business





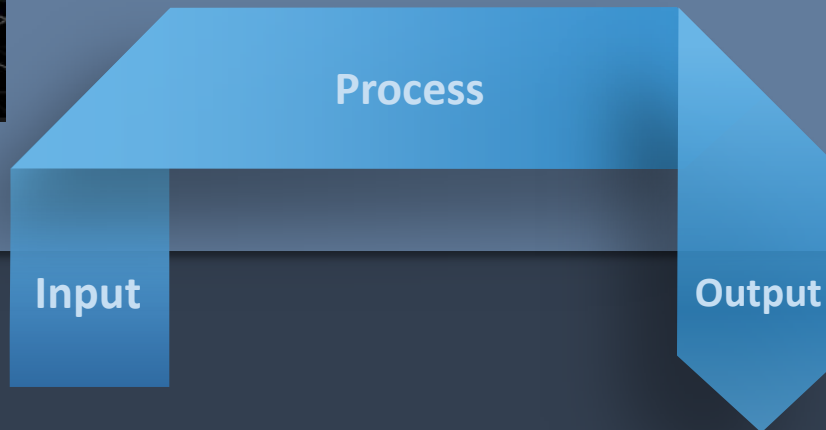
## Cyber



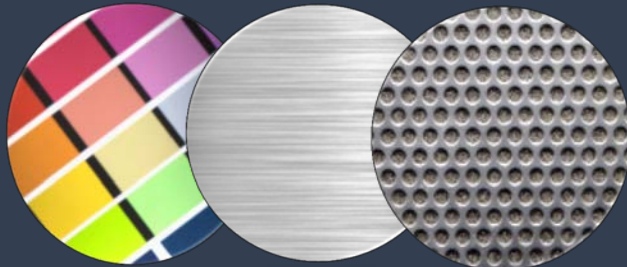
### 3D-LiDAR

- Visual access to color and optical data
- Reliable color management
- Data sharing

- Analytics of quality defects and ways to avoid them
- Analytics & prognosis of operator behavior
- Forecasting of inventory & demands
- Smart sensor and device management



- External inspection devices, 3D-LiDAR, etc.
- Data of other vendors' equipments, customers, and IoT
- Process control for preventing quality defects, process design, and product design
- SCM & service management with suppliers and customers



## Physical



## Value

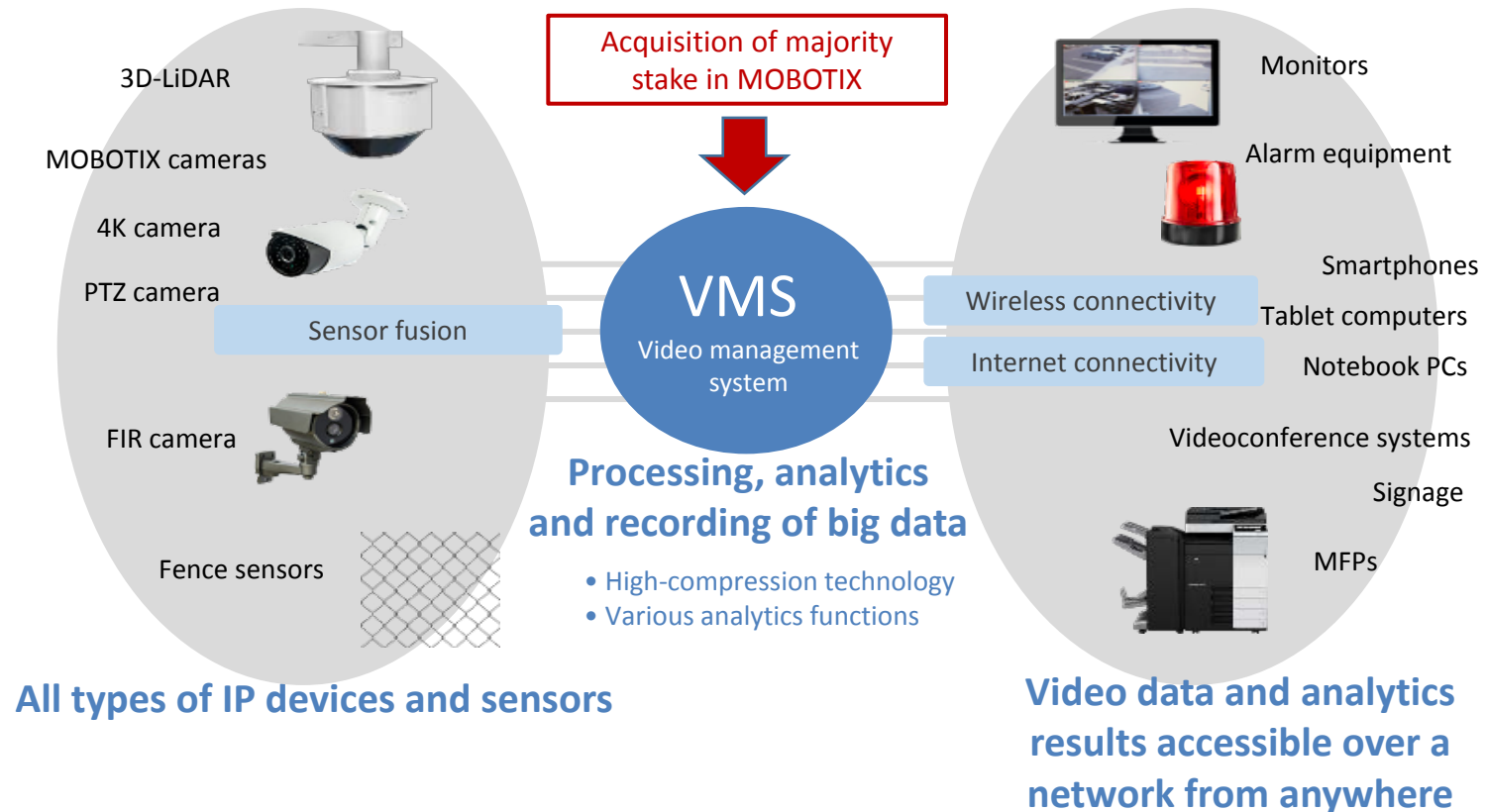
- Quality improvement
- Minimizing loss expenses
- Shorter lead-times



**SECURITY**

**Monitoring**

## Integrated Video/Data Platform

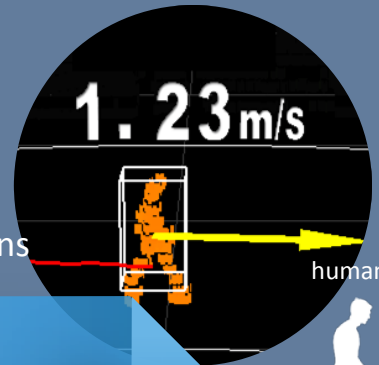
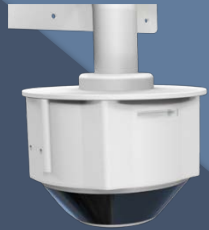


### Applicable vertical segments

|                                    |   |  |
|------------------------------------|---|--|
| High-security & monitoring systems | Marketing                                 | Workflow transformation in Manufacturing & Logistics |
| Detection of gas leaks             | hospital, nursing care and human services | ADAS   |

## Cyber

- Image processing
- Filtering of environment data
- Object identification / Analytics for actions



Process

Input

Output

Sensor fusion

(Lasers, infrared, visible image, etc.)

Environmental changes



Movement of humans and objects

- Decision Support
- Greater efficiency & optimization of operations

(Distinguish between urgent and non-urgent tasks)

## Physical



## Value

- Safety and security
- Workflow improvement
- High efficiency through automation

## Digital workflow

High security

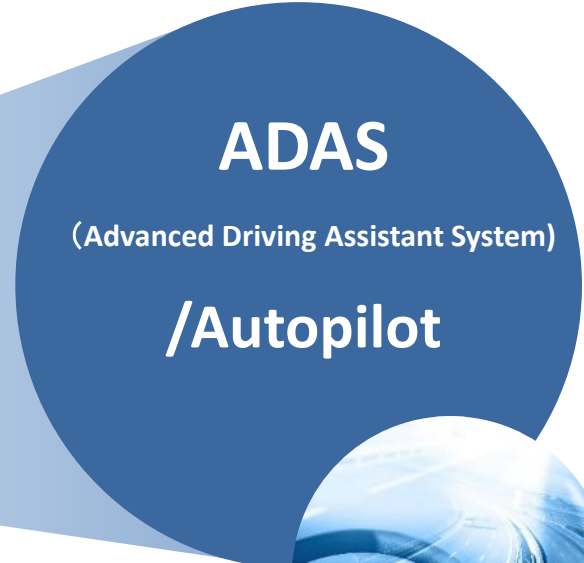


- 3D-LiDAR
- Sensors
- Cameras



### Automotive optical units and parts

- For head-up displays
- For automotive cameras
- For headlights



### Mobility



- Optical units for projectors
- Optical units for cameras
- Pickup lenses
- DSC lenses
- Optical design

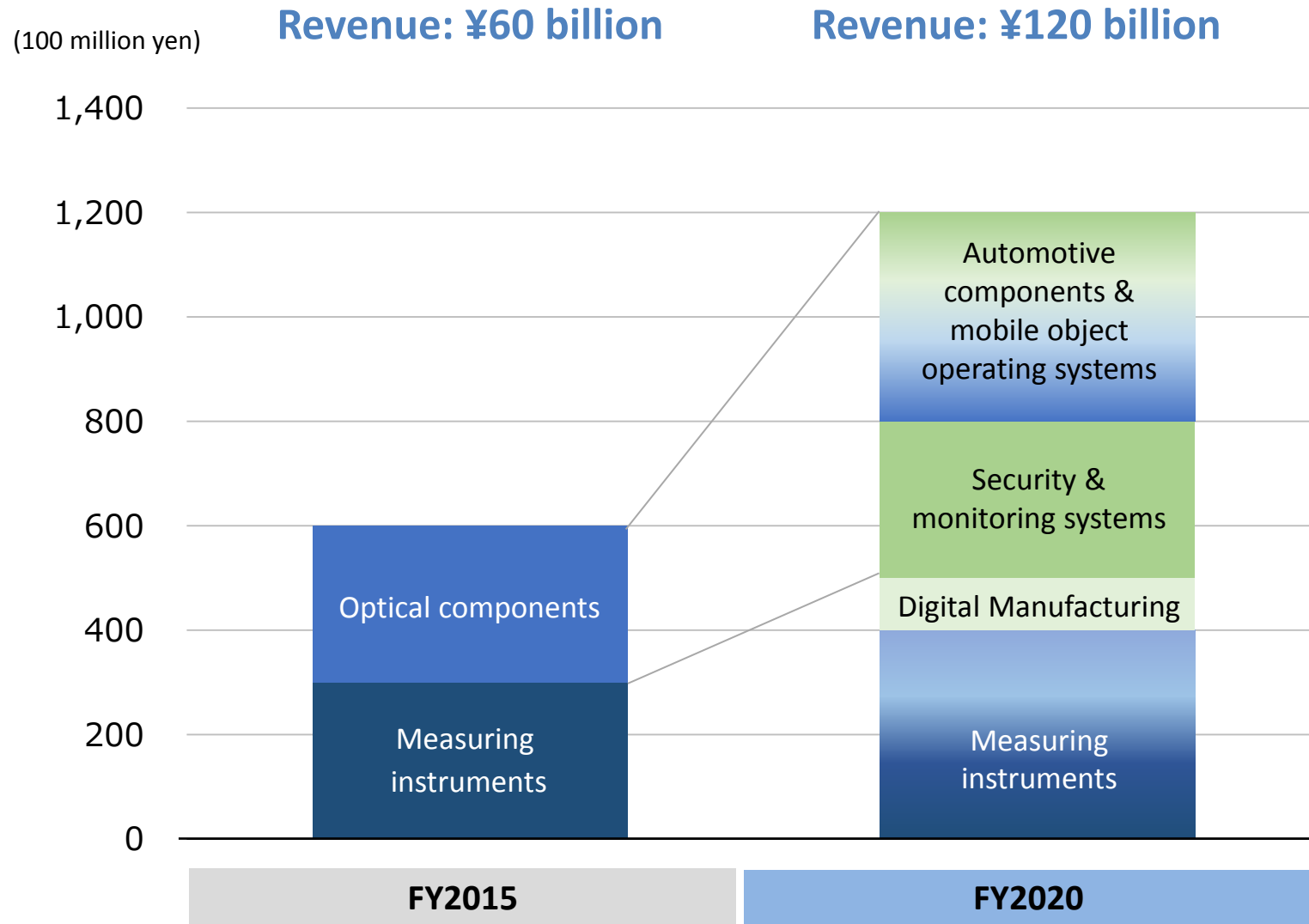


- Optical communications
- Magnifying glasses for healthcare



### Optical components

# FY2020 Target – Industrial Optical Systems –





**Performance materials**

High-performance films for the mobile & IoT field



Display field



Film for mobile devices while wearing polarized sunglasses  
Antireflective film for OLED displays



Signage

Flexible devices

Flexible sensors

OLED+Sensor

Accelerate creation of a new market for OLED lighting



# Entry into Materials Businesses

Molecular design technologies  
Materials production technologies  
Microparticles forming technologies

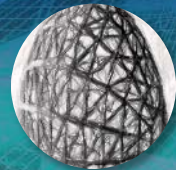


## Business assets

Photographic films  
Electrophotography (toner)

## Industrial field

3D printer materials  
Industrial printing inks



## Display field

OLED materials  
Film additives

## Materials business

## Healthcare field

Pharmaceutical intermediates  
Active pharmaceutical ingredients

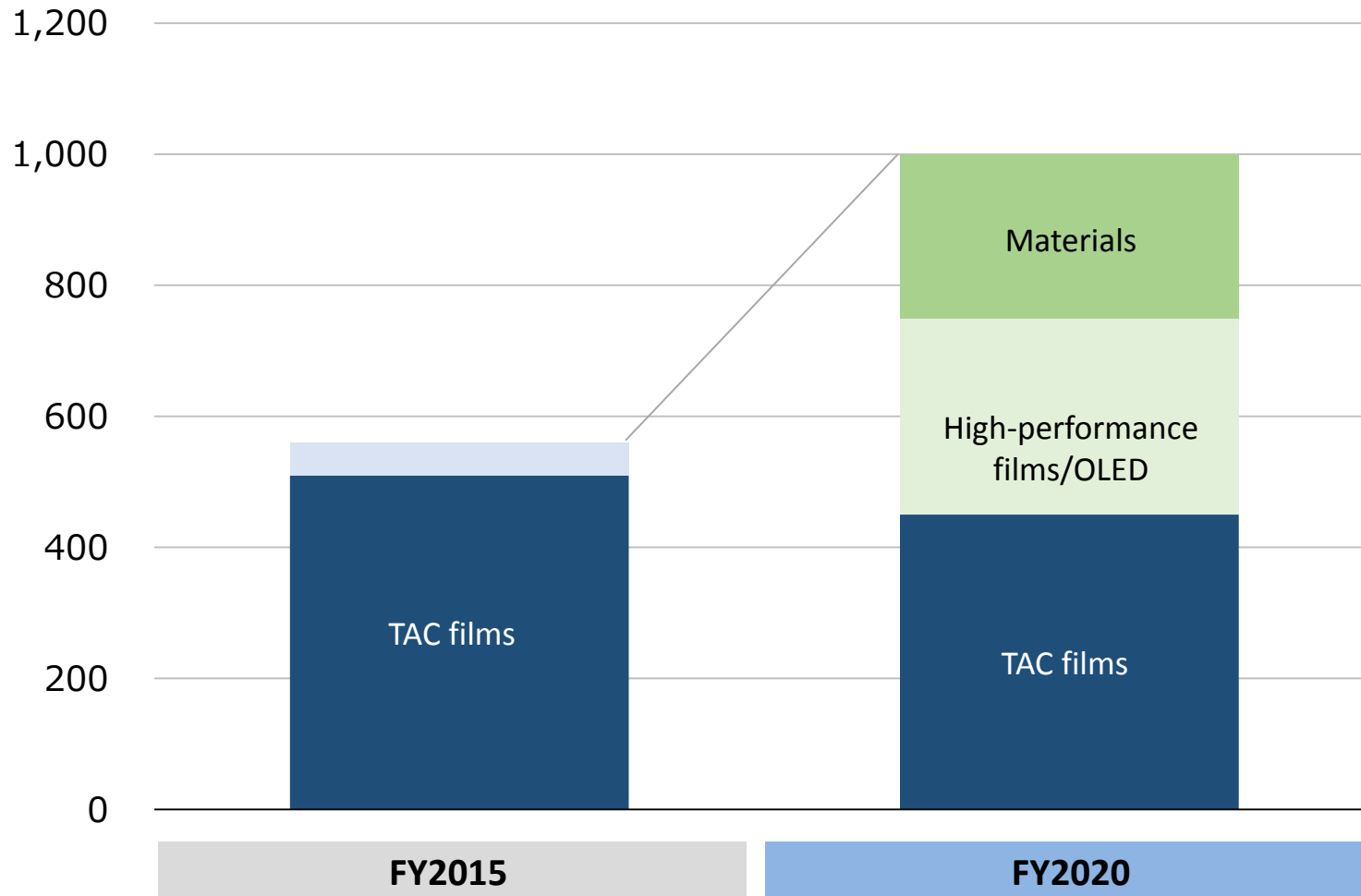


# FY2020 Target – Performance Materials –

(100 million yen)

**Revenue: ¥60 billion**

**Revenue: ¥100 billion**



# Predictive Maintenance



## Step 1 Data collection

Millions of printing devices operating worldwide



- Data on device operations
- Information relayed upon malfunction
- Meter readings

- ▶ Automatic Toner delivery
- ▶ Optimal resource management of field service technicians

## Step 2

Pre-emptive maintenance by data analytics and prediction

Implement IoT capabilities encompassing data other than that from printers

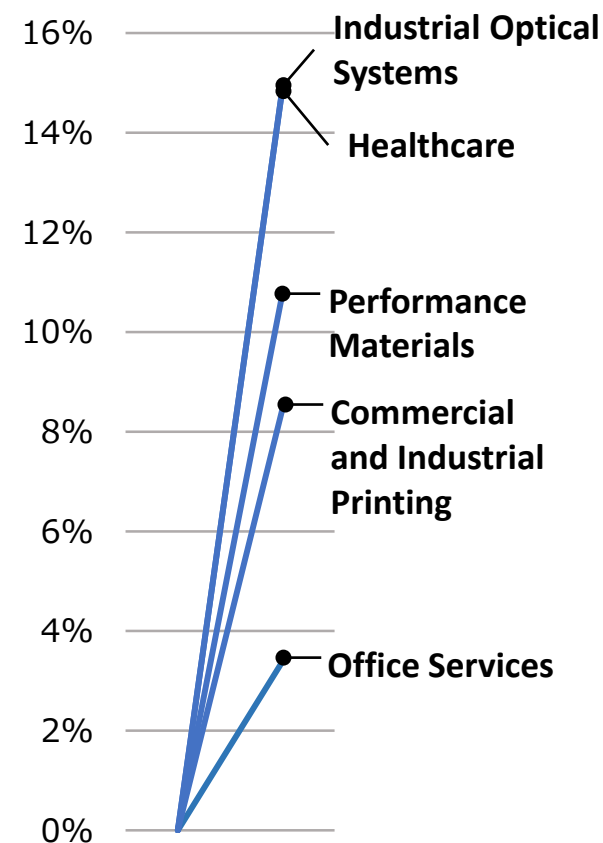
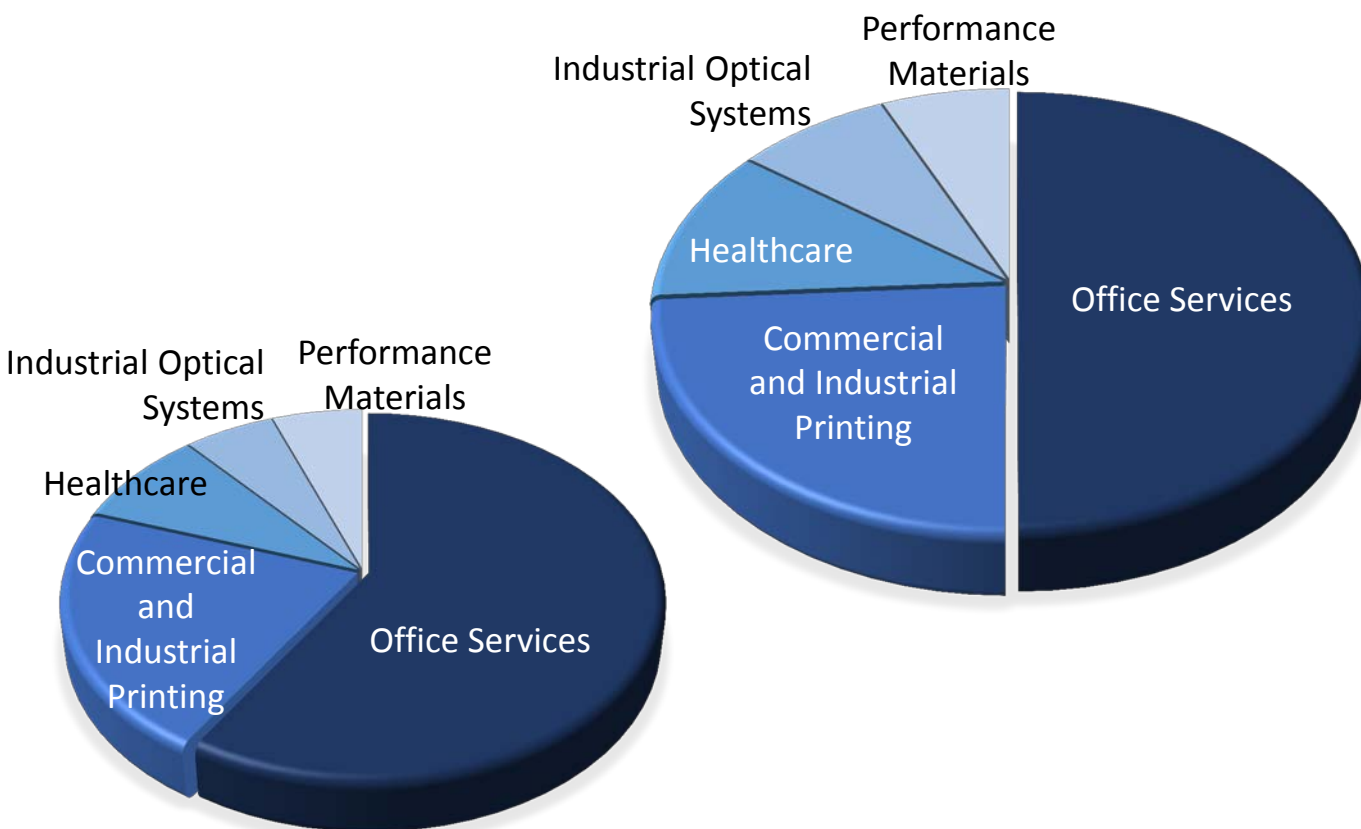


- Data on operating environments (location, temperature, humidity)
- Data on operating history, seasonal variation and other devices

- ▶ Maximize the operation of each devices by predicting device malfunction with AI (deep learning)
- ▶ Determine future user needs

# FY2020 Target – Business Framework –

| FY2015                  | FY2020                 | CAGR (FY2015 → FY2020) |
|-------------------------|------------------------|------------------------|
| Revenue: ¥1.08 trillion | Revenue: ¥1.5 trillion | Consolidated: 6.8%     |



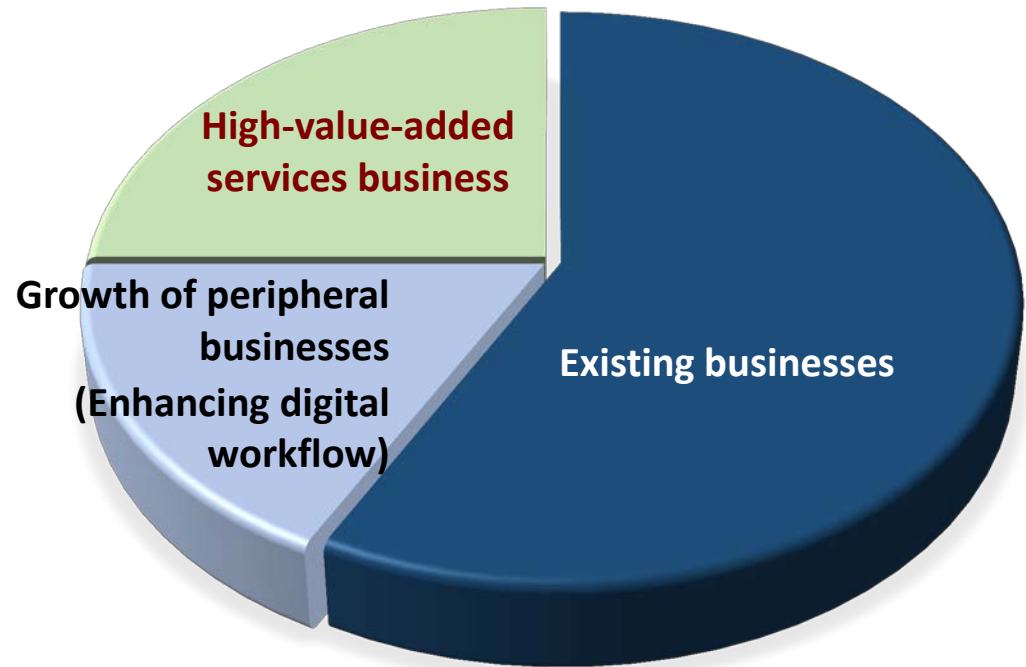
# FY2020 Target – Business Transformation –

**FY2015**

**Growth of peripheral businesses  
(Mainly IT services business)**



**FY2020**



**FY2020**

**Target**

|                        |               |
|------------------------|---------------|
| Revenue                | ¥1.5 trillion |
| Operating profit ratio | (8) - 10 %    |

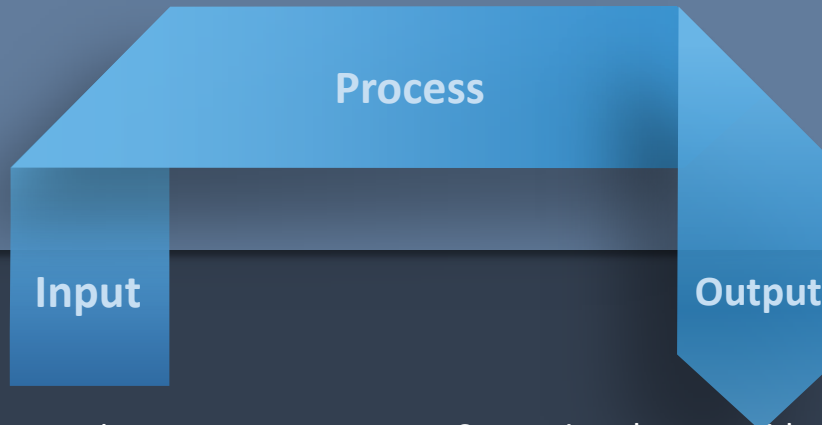
# Appendix

# Cloud services and information automation for Commercial Printers

(color management / equipment control / MIS solution-related)

## Cyber

- Analytics of disparity between printed colors and reference colors
- Optimal print job allocation and production scheduling (optimized for post-press processing and delivery)



## Printing services

Digital printers

Digital workflow

- Color meter sensor data and equipment operating history
- Order information, operating information for all printers, post-press devices, operating status, and delivery schedules
- Correction data provided by image configuration control unit (ICCU)
- Optimal control of printer operations
- Printer control data geared to developed production schedules



## Value

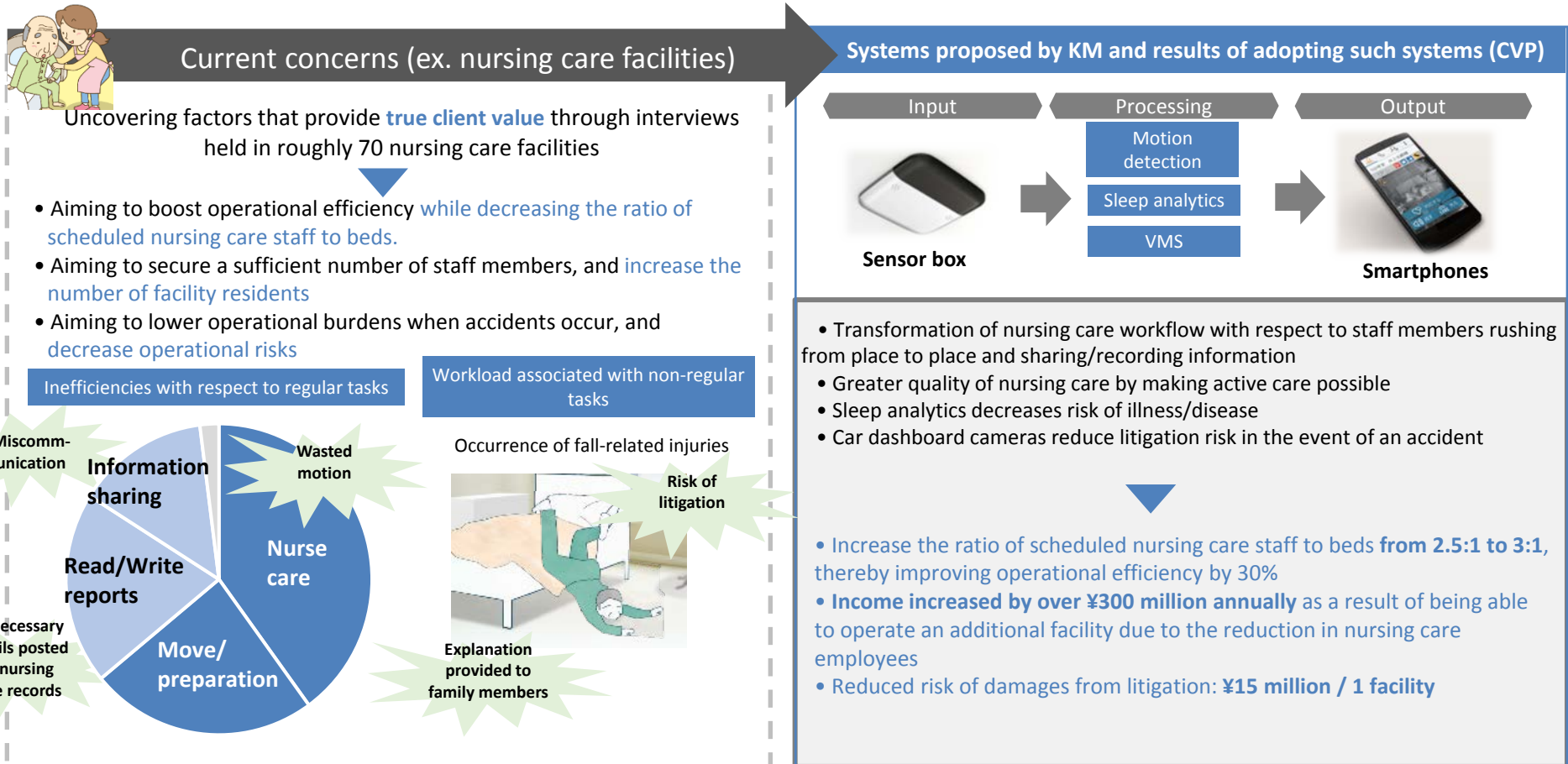
Higher productivity and greater quality consistency through automation

physical



# Care Support Overview (nursing care field)

We provide support for transforming nursing care workflows which involves analyzing the actions of nursing care staff members and making use of vital-sign data of the elderly population, amid the advent of the swiftly aging society coupled with a declining working-age population.



**Why KM outranks the competition** KM succeeds because only KM is able to totally transform nursing care workflows as a result of making unprecedented active care possible. KM does this by providing computing services on the basis of on-site analysis which encompasses data on behavior/actions of elderly people from nursing care locations to the patient's back yard, their vital signs, healthcare records, and all forms of healthcare management information.

- Remarks:

Yen amounts are rounded to the nearest 100 million.

- Cautionary Statement:

The forecasts mentioned in this material are the results of estimations based on currently available information, and accordingly, contain risks and uncertainties. The actual results of business performance may sometimes differ from those forecasts due to various factors.

**Giving Shape to Ideas**



**KONICA MINOLTA**