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
Creating New Value for People and Society

People & Society

Envisioning an empowering future for people and society

Technology that generates value
Businesses that offer value

Creating new value for people and society

Social value & innovation
Business Transformation

A problem solving digital company

Technology

Business

Business Units

Healthcare
Commercial Printing
Manufacturing
Workplace

Social

Business

One Konica Minolta

Nursing Care
Healthcare
Manufacturing
Industrial Printing
Commercial Printing
Office
Workplace
Facility Management

B2B

B2B2Person
Cyber Physical Systems (CPS)

**Cyber**
- Digital (Cyber)
- Analog (Physical)

**Processing**
- Storage
- Learning
- Assessment
- Control & Visibility
- Analytics & Prediction
- Real-time Edge Computing

**Input**
- Digital twins of invisible objects

**Output**
- Vertical Workflow Solutions

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

**Actual images**
- Analog Quantities
Initiatives with Value-Added Business (overview)

**Office Services**
- Office printing
- Services (MIT/MCS)

**Commercial and Industrial Printing**
- Production printing
- Service (MPM)
- Digital Marketing

**Healthcare**
- Modality + IT services
  - In-hospital workflow
  - Care support

**Industrial Optical Systems**
- Measuring instruments
- Optical components

**Performance Materials**
- TAC films
- New films

**Operations in 5 years**
- Office printing
- Digital workflow services
- Smart Workplace

**Value-added services for commercial printing**
- Industrial printing
- Digital Marketing

**Drug discovery and clinical trial support**
- Primary care/Comprehensive community-based medical care
- High-value-added X-ray

**Monitoring** (Behavior analytics)
- Predictive Maintenance
- Monitoring systems
- Mobile object operating

**Digital Manufacturing**
- Security & monitoring systems
- Measuring instruments

**Digital Marketing**
- Measuring instruments
- Digital Manufacturing

**Materials**
- High-performance films/OLED
- Materials

**Current operations**

- Greater added value

**Performance**
- Measuring instruments
- Digital Manufacturing
- Security & monitoring systems
- Mobile object operating

**Materials**
- High-performance films/OLED
- Materials
Office Services

-Smart Workplace-
Office Services Market – Size

- ¥1 trillion
  - Office Printing
- ¥1.3 trillion
  - BPS (Business Process Services)
- ¥50 trillion
  - MIT (Managed IT services)
  - Smart Workplace
  - Business Analytics
  - Deep Learning
  - etc
Office Services Strategy

Step 1: Digital workflow
- MCS (Managed Content Services)
- Managed IT Services
- MFP / OPS (Revamp document-related workflow)

Step 2: Enhancing value through symantics and analytics + adding value by integration of new domains

Eco System for New Work Style

Collaborative Navigation
- Value Creation Tools
- Project Management

Decision-making support
- Data Science
- AI / Deep Learning

Mobile Work
- Virtual Presence
- AR / VR

Office productivity
- IoT, Robotics
- BYOD, Security

MFP as an Office Services Platform
- Cloud Solutions
- Co-Creation
- Eco System for New Work Style

KM Core Technologies

Acquisitions of ITS business (All Covered, Raber+Märcker, Serians, ECM value added resellers etc.)
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

Process

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

Physical

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

Value
FY2020 Target – Office Services–

Revenue: ¥635 billion

Revenue: ¥750 billion

(100 million yen)

Office printing

Smart Workplace

Digital workflow services

Services (MIT/MCS)

Office printing

FY2015

FY2020
Commercial and Industrial Printing
Commercial and Industrial Printing — Market Size

**Digitized ratio**
- **3.5%**

**North America:** 7%
**Europe:** 12%
**Others:** 1%

**Total Market Size**
- **¥52 trillion**
  - **Industrial printing**
    - **Label:** ¥4 trillion
    - **Package:** ¥28 trillion
    - **Textile:** ¥20 trillion

**Commercial printing (User spending)**
- **¥39 trillion**

**Office Printing**
- **¥10 trillion**

**Digitized ratio**
- **2.7%**

- **Labels:** 11%
- **Packaging:** 1%
- **Textiles:** 4%
Commercial and Industrial Printing Strategy

Value-added services for commercial printing (CPS)

- Optimization of overall workflow including analog printers
- Cloud-based color management services
- Value through data analytics
  Ex.) Job scheduling optimized for post-press operations, deliveries, etc.

Full-scale development of business in the industrial printing (labels, packaging, etc.)

Marketing services through combination of digital and traditional approaches

Acquisitions of Charterhouse, Ergo and Indicia

Digital marketing services
Marketing Print Management (MPM) Services
Industrial Printing Strategy

Accelerating digitization of various analog printing field

Transformation of offset printing

Labels

Packaging

Others

Inkjet

KM-1 (for HPP)

Launched in 2016

Jet Varnish 3DW

KM-C

Electrophotographic digital presses

Meteor (for MPP)

Additional investment in MGI

Printers (for LPP/MPP)

Label printers

Additional investment in MGI

Additional investment in MGI

Textiles

3D printing

Decorative printing

KM-developed products

MGI products
## Marketing Services By Combining Digital and Traditional Approaches

<table>
<thead>
<tr>
<th>Marketing procurement</th>
<th>Marketing production</th>
<th>Marketing solutions</th>
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<tbody>
<tr>
<td>• Marketing print</td>
<td>• Design</td>
<td>• Marketing planning</td>
</tr>
<tr>
<td>• POS</td>
<td>• Color management</td>
<td>• Web marketing</td>
</tr>
<tr>
<td>• Direct mail</td>
<td>• Multi-channel, cross-media solutions</td>
<td>• Data management</td>
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<tr>
<td>• Merchandise</td>
<td>• Digital asset management</td>
<td>• Data analytics &amp; segmentation</td>
</tr>
<tr>
<td>• Packaging</td>
<td>• App development</td>
<td>• Marketing automation</td>
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</table>

- Acquisitions of Charterhouse and Ergo
- Acquisition of Indicia and investment in Netyear Group

- Marketing procurement
- Marketing production
- Marketing solutions

- Marketing planning
- Web marketing
- Data management
- Data analytics & segmentation
- Marketing automation
- IoT
FY2020 Target – Commercial and Industrial Printing –

Revenue: ¥240 billion

Revenue: ¥360 billion

(100 million yen)

FY15

FY20

Service (MPM)

Industrial printing

Digital Marketing

Production printing

Value-added services

Ink Jet

Commercial printing

Revenue: ¥240 billion

Revenue: ¥360 billion
Healthcare
Healthcare Strategy

High-value-added X-ray field
- Talbot-Lau interferometer
  X-ray device for imaging cartilage
- X-ray kinetic analytics
  for dynamics of lungs, blood circulation, etc.

Drug discovery and clinical trial support field
- Fluorescent nanoparticle HSTT
  World’s first molecular imaging of disease pathology
- SPFS
  (using fluorescent particles) myocardial infarction fast testing

Current businesses
- Transformation of hospital workflow
  (Integrated solution for PACS, RIS, EMR, and billings)
- Acquisition of VIZTEK
- DR/Cr, Ultrasound
- Healthcare IT

Primary Care Enhancement
- Interoperability enhancement
- AI image interpretation services
- Modality device billing based on diagnosis volume

Care support field
- Nursing care
  - Digital workflow
  - End-of-life care support
  - Demand supply matching
- Home medical care
  - Vital sign monitoring
  - Billing BPO service
  - Nighttime agency service

Comprehensive community-based medical care
- Digital workflow
- End-of-life care support
- Demand supply matching
- Vital sign monitoring
- Billing BPO service
- Nighttime agency service

Technologies

Services
Primary care

Cyber

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

Input

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

Process

Output

- AI image interpretation services and diagnostic support

Value

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

Physical

Hospital group networks
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

Process

Input

Output

- Nursing care management support services
- Home medical care support services

Physical

Value

- Better quality nursing care services
- Facilitating home medical care
FY2020 Target – Healthcare –

<table>
<thead>
<tr>
<th>Modality + IT services</th>
<th>High-value-added X-ray</th>
<th>Drug discovery and clinical trial support</th>
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</thead>
<tbody>
<tr>
<td>Revenue: ¥85 billion</td>
<td>Revenue: ¥170 billion</td>
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</table>

- **FY2015**
  - Modality + IT services
  - Primary care/ Comprehensive community-based medical care

- **FY2020**
  - Drug discovery and clinical trial support
  - High-value-added X-ray
Industrial Optical Systems
Digital Manufacturing Business

- **Wearable device solutions** (e.g., picking, assembly)
- **Demand forecast based production**
- **Business deal & order entry**
- **Product planning**
- **Agile designing & production launch**
- **Automated operations**
- **Document based workflow solutions**
- **Quality/inventory data sharing**
- **Post-sale service**
- **Equipment remote tracking for services**
- **On-demand parts through 3D printers**
- **Management cockpit > Production navigation**
- **Data management and sharing**
- **Quality inspection**
- **Internal inspection through Talbot-Lau interferometry**
- **Automated surface inspections (through imaging)**
- **Acquisition of Radiant**

Activity monitoring and behavior analytics using **thermal/visible-light cameras and 3D-LiDARs**

...KM’s intellectual property
Cyber

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

3D-LiDAR
Visual access to color and optical data
Reliable color management
Data sharing

- External inspection devices, 3D-LiDAR, etc.
- Data of other vendors’ equipments, customers, and IoT

Process

- Process control for preventing quality defects, process design, and product design
- SCM & service management with suppliers and customers

Physical

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

Value
Monitoring
Monitoring Business Strategy

Integrated Video/Data Platform

- MOBOTIX cameras
- 4K camera
- PTZ camera
- FIR camera
- Fence sensors
- 3D-LiDAR

**VMS**

- Video management system
- Sensor fusion
- Video capture
- Detection of gas leaks

**Applicable vertical segments**

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

**Processing, analytics and recording of big data**

- High-compression technology
- Various analytics functions

**Video data and analytics results accessible over a network from anywhere**

- Monitors
- Alarm equipment
- Smartphones
- Tablet computers
- Notebook PCs
- Videoconference systems
- Signage
- MFPs

**Acquisition of majority stake in MOBOTIX**

**All types of IP devices and sensors**
Cyber

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

Digital workflow

- Sensor fusion
  (Lasers, infrared, visible image, etc.)
- Environmental changes
- Movement of humans and objects

Process

- Input
  - Sensor fusion
  - Environmental changes
- Output
  - Decision Support
  - Greater efficiency & optimization of operations
    (Distinguish between urgent and non-urgent tasks)

Value

- Safety and security
- Workflow improvement
- High efficiency through automation
Automotive Components & Mobile Object Operating Systems

Step 1 Components

- 3D-LiDAR
- Sensors
- Cameras

ADAS (Advanced Driving Assistant System) / Autopilot

Autonomous vehicle optical units and parts
- For head-up displays
- For automotive cameras
- For headlights

Step 2 Systems & solutions

Mobility

Optical components

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

- Optical communications
- Magnifying glasses for healthcare
FY2020 Target – Industrial Optical Systems –

(100 million yen)

Revenue: ¥60 billion

Revenue: ¥120 billion

- Optical components
- Measuring instruments
- Automotive components & mobile object operating systems
- Security & monitoring systems
- Digital Manufacturing

FY2015

FY2020
Performance materials
High-Performance Films & OLED Lightings

Display field

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

High-performance films for the mobile & IoT field

Signage
Flexible devices
Flexible sensors
OLED + Sensor

Accelerate creation of a new market for OLED lighting
Entry into Materials Businesses

Business assets
Photographic films
Electrophotography (toner)

Materials
Molecular design technologies
Materials production technologies
Microparticles forming technologies

Industrial field
3D printer materials
Industrial printing inks

Display field
OLED materials
Film additives

Healthcare field
Pharmaceutical intermediates
Active pharmaceutical ingredients
FY2020 Target – Performance Materials –

(100 million yen)

Revenue: ¥60 billion

Revenue: ¥100 billion

TAC films

High-performance films/OLED

Materials

FY2015

FY2020
Predictive Maintenance
Predictive Maintenance

Step 1: Data collection

- Data on device operations
- Information relayed upon malfunction
- Meter readings
  - Automatic Toner delivery
  - Optimal resource management of field service technicians

Millions of printing devices operating worldwide

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 device by predicting device malfunction with AI (deep learning)
  - Determine future user needs
FY2020 Target – Business Framework –

<table>
<thead>
<tr>
<th>FY2015</th>
<th>FY2020</th>
<th>CAGR (FY2015 → FY2020)</th>
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<tbody>
<tr>
<td>Revenue: ¥1.08 trillion</td>
<td>Revenue: ¥1.5 trillion</td>
<td>Consolidated: 6.8%</td>
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- **Office Services**
- **Commercial and Industrial Printing**
- **Healthcare**
- **Industrial Optical Systems**
- **Performance Materials**

- **Office Services**
  - **Industrial Optical Systems**
  - **Performance Materials**
  - **Commercial and Industrial Printing**
  - **Healthcare**
  - **Office Services**

- **CAGR (FY2015 → FY2020)**

- **Industrial Optical Systems**
- **Healthcare**
- **Performance Materials**
- **Commercial and Industrial Printing**
- **Office Services**
FY2020 Target – Business Transformation –

**FY2020 Target**

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

**FY2015**
- Growth of peripheral businesses (Mainly IT services business)
- Existing businesses

**FY2020**
- High-value-added services business
- Growth of peripheral businesses (Enhancing digital workflow)
- Existing businesses
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)

Process

Input

Output

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
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.

Current concerns (ex. nursing care facilities)

- Uncovering factors that provide **true client value** through interviews held in roughly 70 nursing care facilities
- Aiming to boost operational efficiency while decreasing the ratio of scheduled nursing care staff to beds.
- Aiming to secure a sufficient number of staff members, and increase the number of facility residents
- Aiming to lower operational burdens when accidents occur, and decrease operational risks

Inefficiencies with respect to regular tasks

- Information sharing
- Read/Write reports
- Nurse care
- Move/preparation

Workload associated with non-regular tasks

- Wasted motion
- Occurrence of fall-related injuries
- Risk of litigation

Miscommunication

Unnecessary details posted to nursing care records

Systems proposed by KM and results of adopting such systems (CVP)

- Input
- Processing
- Output

- Sensor box
- Motion detection
- Sleep analytics
- VMS
- Smartphones

- Transformation of nursing care workflow with respect to staff members rushing from place to place and sharing/recording information
- Greater quality of nursing care by making active care possible
- Sleep analytics decreases risk of illness/disease
- Car dashboard cameras reduce litigation risk in the event of an accident

- Increase the ratio of scheduled nursing care staff to beds from 2.5:1 to 3:1, thereby improving operational efficiency by 30%
- Income increased by over ¥300 million annually as a result of being able to operate an additional facility due to the reduction in nursing care employees
- Reduced risk of damages from litigation: ¥15 million / 1 facility

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.

Note: Established in Japan, Konica Minolta Japan, Inc. is embarking on commercial business involving care support services, using office equipment and information channels in that regard.
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