Office & Home Printing Business Strategy

November 17, 2022
Seiko Epson Corporation

EPSON
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- **Disclaimer regarding forward-looking statements**
  - The foregoing statements regarding future results reflect the Company's expectations based on information available at the time of announcement. The information contains certain forward-looking statements that are subject to known and unknown risks and uncertainties that could cause actual results to differ materially from those expressed or implied by such statements. Such risks and uncertainties include, but are not limited to, the competitive environment, market trends, general economic conditions, technological changes, exchange rate fluctuations and our ability to continue to timely introduce new products and services.

- **Numerical values presented herein**
  - Years mentioned in these materials are fiscal years unless otherwise indicated.

- **Definition for office domain and SOHO/ home domain (Right hand side chart)**

(Reference) Financial Results	Domain	Category	Function	A4	A3
Office Shared IJP	Office	Office Shared IJP	High-end		I/C
			Mid-range	I/C	I/C, High-capacity ink pack
		Office Personal	Entry	I/C, High-capacity ink tank, High-capacity ink pack	I/C, High-capacity ink tank
SOHO/ home IJP	SOHO/ home	SOHO		I/C, High-capacity ink tank	High-capacity ink tank
		Home		I/C, High-capacity ink tank	I/C, High-capacity ink tank

Presentation contents

■ **Epson's commitment to society**

　　President and Representative Director, CEO

　　　Yasunori Ogawa

■ **Printing innovation societal issues and business growth**

　　Chief Operating Officer, Printing Solutions Division

　　　Junkichi Yoshida

■ **Office & home printing strategy**

　　Deputy Chief Operating Officer, Printing Solutions Division
　　Chief Operating Officer, P Office & Home Operations Division
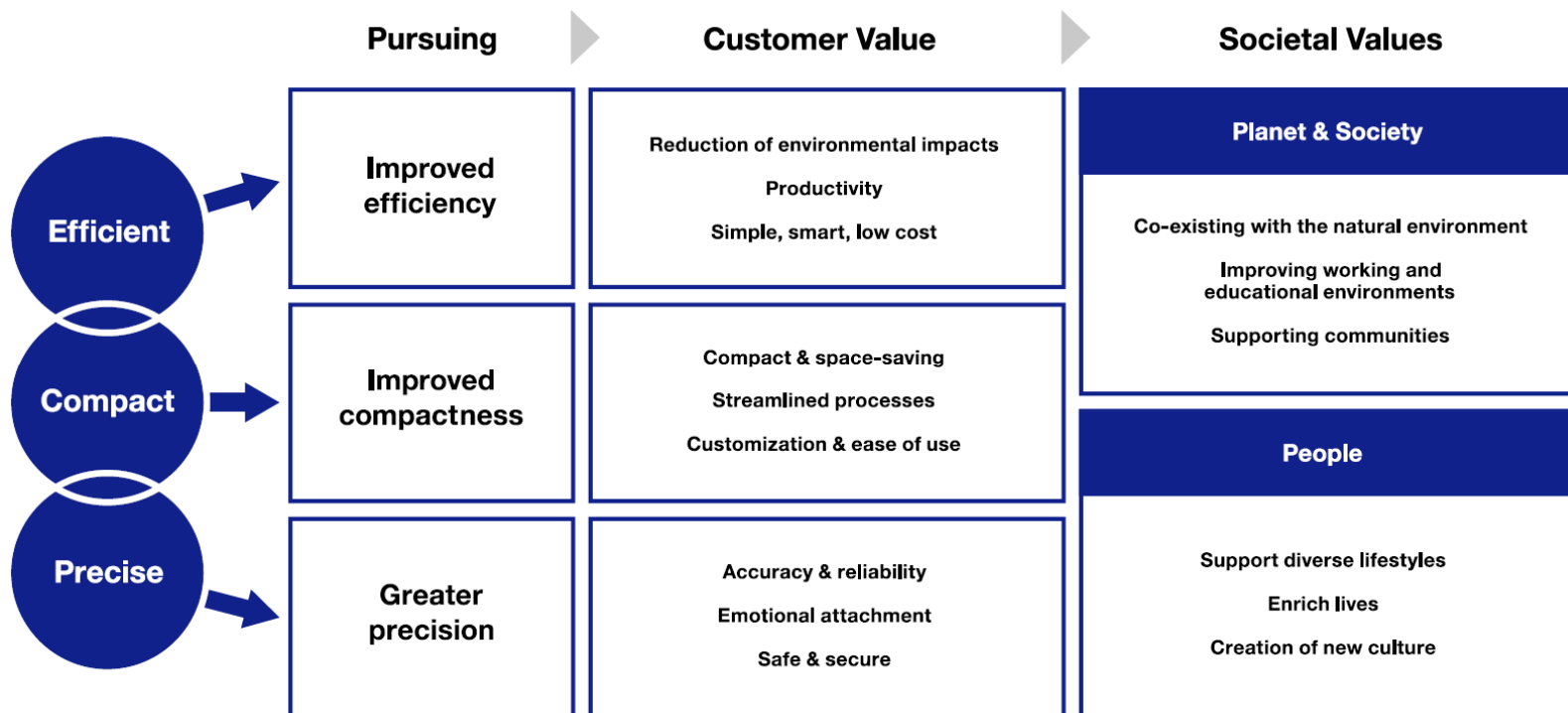
　　　Yoichi Yamada

Epson's commitment to society

Our purpose

Our philosophy of efficient, compact, and precise innovation enriches lives and helps create a better world.

Our purpose

Value proliferation from Efficient, Compact and Precise Innovation

Our products and services, based on our unique philosophy of efficiency, compactness, and precision, create meaningful customer value that extends to the wider world.
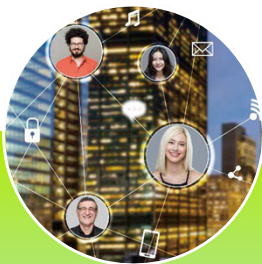

Pursuing	Customer Value	Societal Values
Efficient → **Improved efficiency**	Reduction of environmental impacts Productivity Simple, smart, low cost	**Planet & Society** Co-existing with the natural environment Improving working and educational environments Supporting communities
Compact → **Improved compactness**	Compact & space-saving Streamlined processes Customization & ease of use	
Precise → **Greater precision**	Accuracy & reliability Emotional attachment Safe & secure	**People** Support diverse lifestyles Enrich lives Creation of new culture

Societal issues we will address

Reducing environmental impacts

Improving work environments

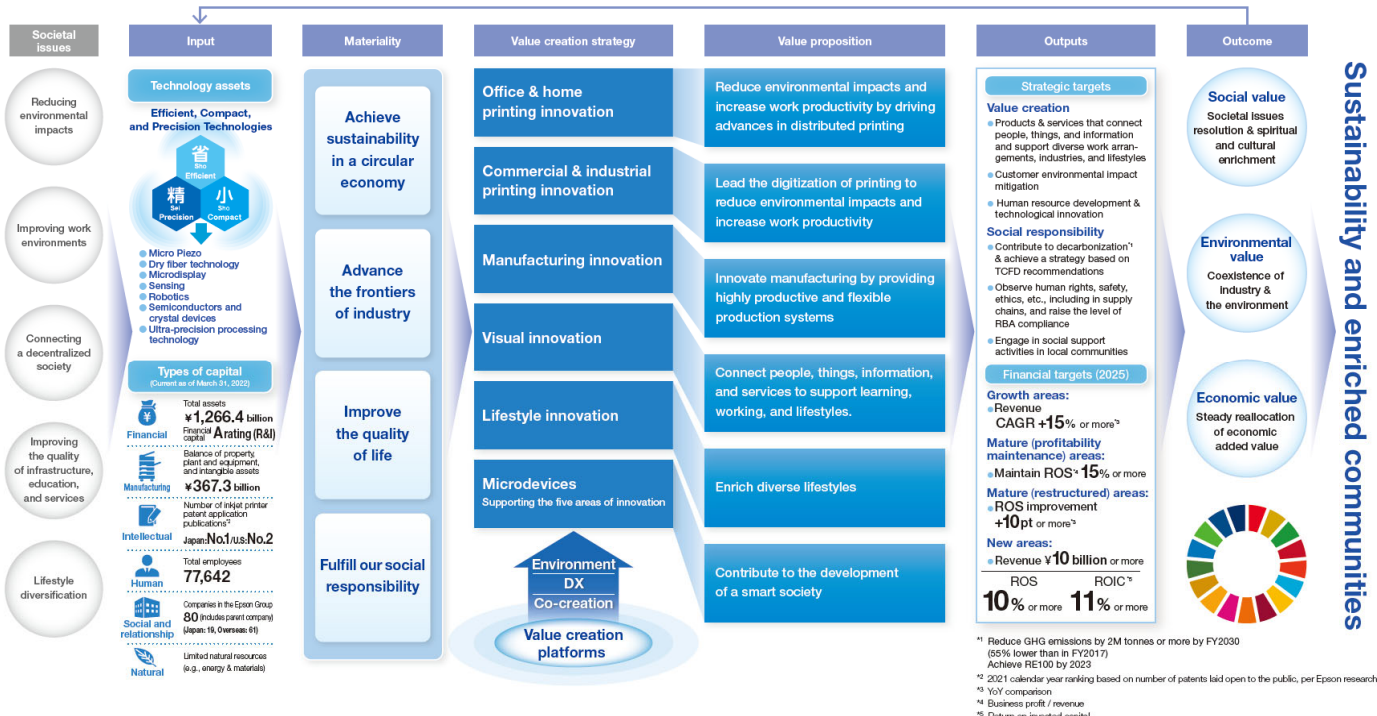**Connecting a decentralized society**

Improving the quality of infrastructure, education, and services

Lifestyle divsersification

6

Value creation story

- We will achieve sustainability and enrich communities by using our unique core technologies to drive innovation that enables us to create social, environmental, and economic value in the form of solutions to societal issues.

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Printing innovation societal issues and business growth

Value creation story

■ Societal issues and materialities we will address

Societal issues

Reducing environmental impacts

Improving work environments

Connecting a decentralized society

Improving the quality of infrastructure, education, and services

Lifestyle diversification

Materialities Key themes for solving societal issues

Achieve sustainability in a circular economy

Advance the frontiers of industry

Improve the quality of life

Fulfill our social responsibility

Epson 25 renewed vision

Co-creating sustainability and enriching communities to connect people, things, and information by leveraging our efficient, compact, and precision technologies and digital technologies
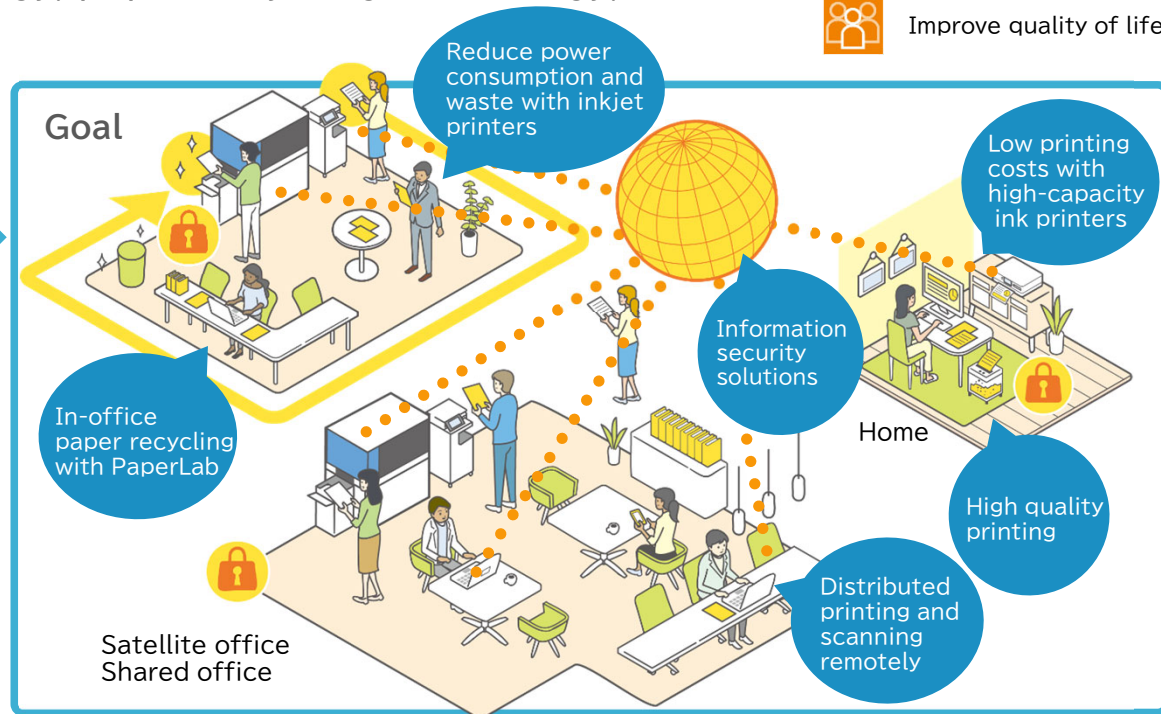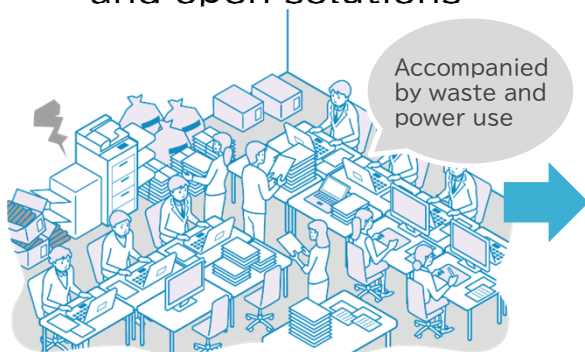
Innovation areas

■ Promote strategy in five innovation areas

Office & home printing innovation

- Lead the evolution toward distributed printing to reduce environmental impacts and increase work productivity by proposing inkjet technology, paper recycling technology, and open solutions

Achieve sustainability in a circular economy
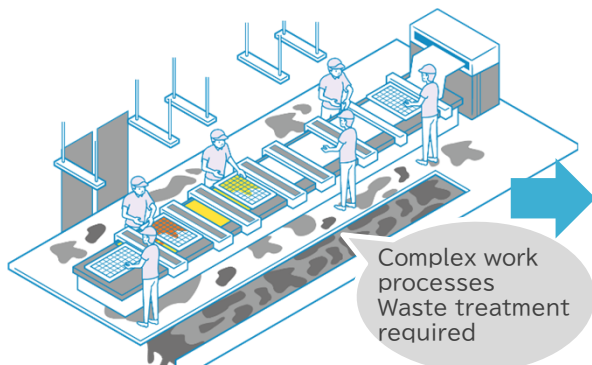
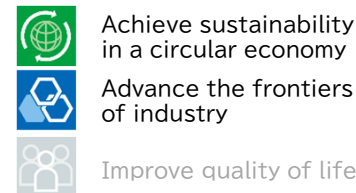Advance the frontiers of industry

Improve quality of life

Value proposition

- Increased work productivity
- Reduction of environmental impacts
- Distributed printing
- Support for at-home learning
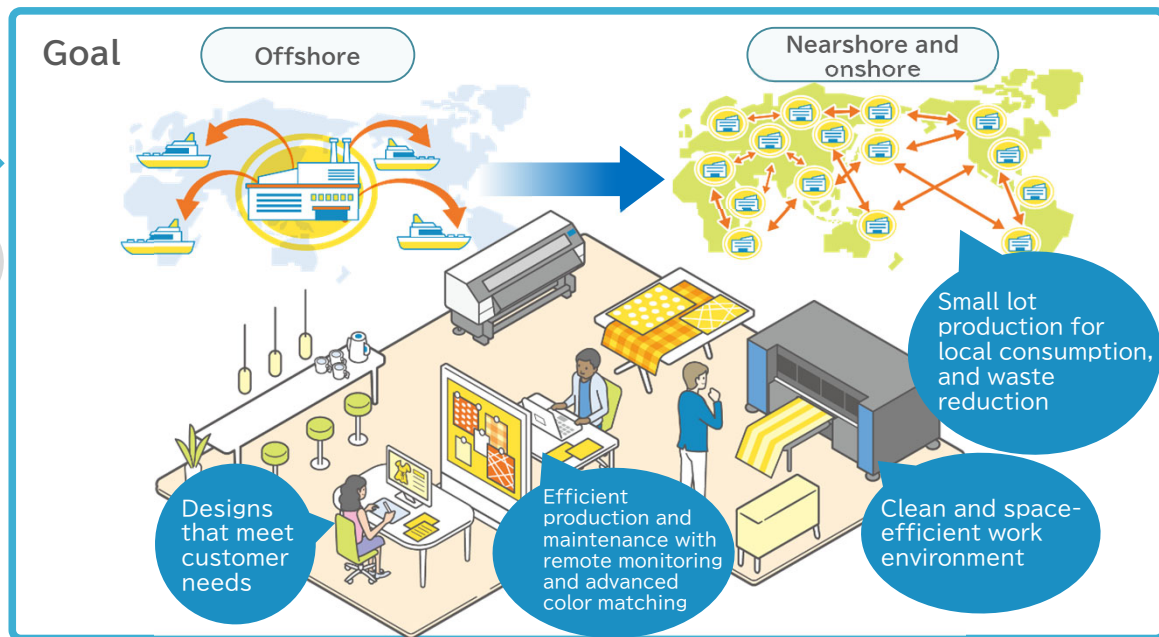- Lower printing costs
- High-quality printing

Accompanied by waste and power use

Goal

Reduce power consumption and waste with inkjet printers

Low printing costs with high-capacity ink printers

In-office paper recycling with PaperLab

Information security solutions

Home

High quality printing

Satellite office Shared office

Distributed printing and scanning remotely

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Commercial & industrial printing innovation

■ Offer inkjet technology and solutions that lead the digitalization of printing and contribute to lower environmental impacts and higher productivity
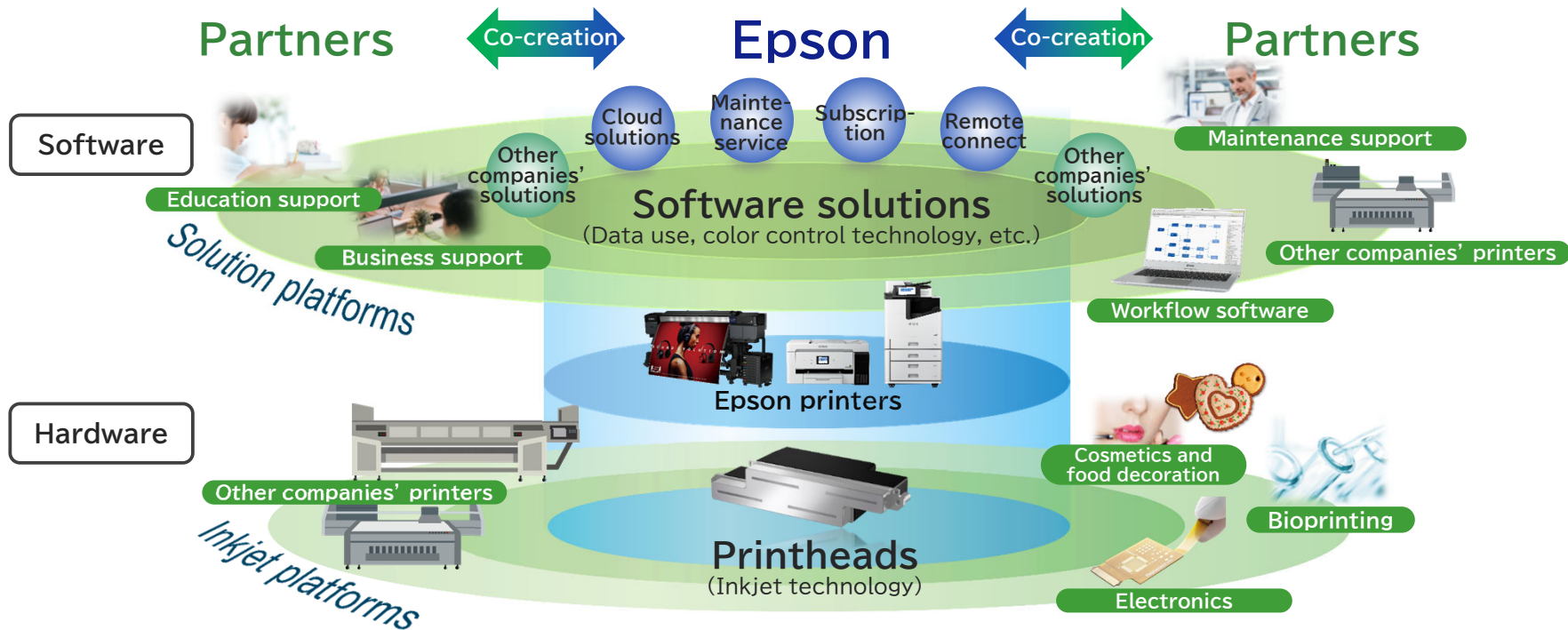
Achieve sustainability in a circular economy

Advance the frontiers of industry

Improve quality of life

Complex work processes
Waste treatment required

Value proposition

- Power of digital expression
- Small lot production and fast delivery
- Distributed production, and local production for local consumption
- Waste reduction
- Improved work environment
- Accommodate logistics changes

Goal

Offshore

Nearshore and onshore

Small lot production for local consumption, and waste reduction

Designs that meet customer needs

Efficient production and maintenance with remote monitoring and advanced color matching

Clean and space-efficient work environment
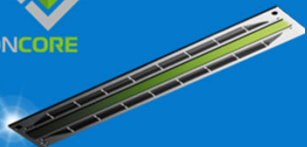
Printing innovation ecosystem

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- Build lasting customer relationships around inkjet technology, and further expand printing uses and solutions with partners

Partners — Co-creation → Epson ← Co-creation — Partners

Software

- Cloud solutions
- Maintenance service
- Subscription
- Remote connect
- Other companies' solutions

Software solutions
(Data use, color control technology, etc.)

- Education support
- Business support
- Other companies' solutions
- Maintenance support
- Other companies' printers
- Workflow software

Solution platforms

Epson printers

Hardware

- Other companies' printers

Printheads
(Inkjet technology)

Inkjet platforms

- Cosmetics and food decoration
- Bioprinting
- Electronics

Inkjet printheads (advances in IJ technology)

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- Able to expand to any type of printer, with high durability, scalability, and ink choice

PRECISIONCORE

Using the print chip as the basic module, offer scalable print head configurations from home printers to digital textile printers at low cost

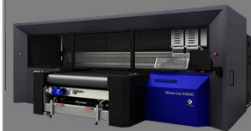| Office & Home printers	High-speed linehead inkjet multifunction printers	High-speed Label printers	Large format printers	Digital inkjet label press	Digital inkjet textile printers

Switch all printing with printheads and ink

Office & home printing strategy

- Summary
- Business status
- Actions for office printing toward lower environmental impact and convenience
- Actions for distributed printing to support diverse workstyles

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Summary

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- **Office & home IJP**
  - Revenue for FY21 was approximately ¥500B, capturing at-home print demand
  - Revenue target for FY25 at ¥700B, by expanding the lineup in the office domain and growth in SOHO/ home domain high-capacity ink tank models
  - Offer a wide range of home printers and office multi-function printers to support diverse work and education needs after COVID-19 to capture print demand

Summary

- **Office domain***
  *Office domain: Office shared IJP + office personal (high-capacity ink tank and ink cartridge printers for business use)

  - Revenue growth continued in FY21. With the launch of high-speed line inkjet printers in FY17, we were able to increase our customer base, especially in education and in the office
  - Launch a new line inkjet multifunction printer in the mid-speed volume zone, which was vacant in our lineup, to further expand our inkjet value offered to our customers
  - Revenue target FY25 ¥200B (FY21 ¥120B)

- **SOHO/ home domain**
  - Print volume per printer for ink cartridge models increased in FY20 due to COVID-19 at-home print demand. Current print volume has returned to pre-pandemic levels.
    On the other hand, print volume for high-capacity ink tank models, which are also used for business, dropped due to lockdowns in FY20, but recovered in FY21 after business activity returned
  - Co-create new recurring businesses with partners as a mid-term revenue base, by utilizing cloud services such as Epson Connect

- Summary
- **Business status**
- Actions for office printing toward lower environmental impact and convenience
- Actions for distributed printing to support diverse workstyles

Epson inkjet printer timeline

1990　　　　　2000　　　　　2010　　　　　2020

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1993～

Home Ink cartridge models

1993｜MJ-500

1994｜MJ-700V2C

2008～

Office entry models

2008｜PX-B300/500

2014｜PX-M740F
PRECISION**CORE**

2010～

High-capacity ink tank models

2010｜L100/L200

PRECISION**CORE**

First Epson inkjet printer
1984｜IP-130K

2014～

Office shared
（Mid to high end models）

2014｜PX-M7050
PRECISION**CORE**

2017｜LX-10000
PRECISION**CORE**

Aspire to create the ultimate print technology

**Higher speed
More precise
Smaller**

3rd Generation (2013)

2nd Generation (1993)

1.5 Generation (1995)
1st Generation (1984)

dpi: dots per inch

	Production technology	Head cross-section nozzle pitch	Piezo distortion (ratio)
PrecisionCore — Piezo element:0.001mm, Ink flow path, Pressure chamber, Nozzle	**Thin-film + MEMS** — MEMS: Micro Electro Mechanical Systems	Piezo distortion — 300 npi = 0.08 mm — npi: nozzles per inch	**2.5**
MACH: Multilayer Piezo — Piezo element, Pressure chamber, Nozzle	**Precision Machining + MEMS**	180 npi = 0.14 mm	**1.5**
Sintered piezo slurry — Piezo element:0.01mm, Pressure chamber, Nozzle	**Precision Machining**	120 npi = 0.21 mm	**1**

Printer market trend and Epson unit sales share

- Market decreased in CY2021 mainly due to supply constraints
- Epson was able to increase share by increasing sales of high-capacity ink tank models

K Units

		CY2018	2019	2020	2021
WW Printer Market	Total	95,973	91,745	92,220	89,100
	Inkjet	59,811 (62%)	56,909 (62%)	58,583 (64%)	57,860 (65%)
	Laser	36,163 (38%)	34,836 (38%)	33,637 (36%)	31,240 (35%)

Epson Office & home IJP market share*

CY2018	2019	2020	2021
16.4%	17.2%	16.3%	19.2%

*Office & home IJP units / WW printer market units (IJP+laser)

Source
IDC Worldwide Quarterly Hardcopy Peripherals Tracker 2022Q3 Share by Brand
Color Laser under 69ppm, Mono Laser under 90ppm
Printers include multifunction printers. Reproduction or republication of this data is prohibited

Office & home IJP revenue trend

- Revenue growth in both office and SOHO/ home domains

Office & home IJP

Approx. ¥500B

Office domain

SOHO/ home domain

FY19   FY20   FY21

Office domain breakdown

Office domain

Approx.¥50B

Office shared IJP

Approx.¥70B

Office personal*

FY19   FY20   FY21

*Office personal: high-capacity ink tank and ink cartridge printers for business use

Office & home IJP ink production volume

- Ink production volume increased mainly from high-capacity ink models and office models, although hardware was under supply constraints caused by COVID-19
- Low print cost for high-capacity ink tank models captured a wide variety of customer needs

(t)

Ink production volume

FY15 FY16 FY17 FY18 FY19 FY20 FY21

Print volume per printer

- **Ink cartridge models:**
  Returned to pre-COVID-19 levels as at-home print demand subsided

- **High-capacity ink tank models, office entry models:**
  Recovering after FY20 to pre-COVID-19 levels

- **Office mid range models:**
  Monthly print volume are recovering, but has not returned to pre-COVID-19 levels

Ink cartridge models — 2019 2020 2021 2022

High-capacity ink tank models — 2019 2020 2021 2022

Office entry models — 2019 2020 2021 2022

Office mid range models — 2019 2020 2021 2022

Monthly print volume

*Examples for the represented models are shown on pg47
*The range of vertical scale are different for each graph

- Summary
- Business status
- Actions for office printing toward lower environmental impact and convenience
- Actions for distributed printing to support diverse workstyles

Value of inkjet printing

- Inkjet printers use a simple, heat-free process

Print process

Epson Inkjet Printer

Firing

ABCDEF GH
****
****

****
****

Laser printer

Charging

Exposure

Develop ment

Transfer

Con tact

Fixing

Heat

Pres sure

ABCDEF GH
****
****

****
****

Value of inkjet printing

■ Inkjet printers use a simple, heat-free process

Low power consumption during print process

High speed printing

Lower environmental impact

Stress-free (convenience)

No warmup needed

Smaller hardware

High-capacity ink

Fewer scheduled replacements

Challenges | inadequate office lineup

- -2013 offering inkjet value to limited customers through limited channels

Price

Compact and low price

A3/-26ppm

A4/-24ppm

Print speed

*ppm: pages per minute, 26ppm=printing up to 26pages per minute

Challenges | inadequate office lineup

- 2017 Launched LX series
  Ramped up channel development worldwide

High speed printing

A3/60-100ppm

Price

Compact and low price

A3/-26ppm

A4/-24ppm

Print speed

Customer examples

Italy | hospital

- Major hospital with more than 40 locations, with a high environmental awareness
- Drastically reduced printer management workload by creating a new printer control environment connected to Epson remote monitoring and device control tools, customer legacy control systems, and reseller billing systems

The Netherlands | accounting firm

- Accounting firm with more than 40 offices throughout the Netherlands
- Won order with proposing resolving print wait time with high-speed line inkjet, fewer consumable replacements, low power consumption, and smaller CO_2 footprint
- Installed Epson remote monitoring tool and billing system

Customer examples

- Increased order wins from schools and hospitals with lower environmental impact and convenience as a major factor
- Order wins also seen in locations that are difficult to offer maintenance and repair, such as high elevation areas and areas with unstable power supply

India｜Elementary school

- School at the base of Himalayas
- Many power outages and difficult to offer service during winter
- Main reasons for order win are high-capacity ink, stress-free with no periodic maintenance needed, and usable with UPS (Uninterruptible Power Supply)

Japan｜Hospital

- Impacted by typhoons every year
- Even in the off chance of power outage, medical care cannot be impacted
- Also important to lessen the time patients wait in the examination room
- Main reasons for order win are BCP measures and FPOT(First Print Out Time) performance

Challenges | inadequate office lineup

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High speed printing

Price

A3/60-100ppm

Compact and low price

A3/-26ppm

A4/-24ppm

Print speed

A3 color laser printer market trend

■ Epson unable to lineup volume zone mid speed model

WW A3 Color LP Market H/W trend (K units)

-16%
-2%

2,470
51

2,077
41

2,028
40

A4 color speed
61-69ppm

1,454
(59%)

1,163
(56%)

1,127
(56%)

30-60ppm

965
(39%)

873
(42%)

867
(42%)

under 29ppm

CY2019   2020   2021

WW A3 Color LP Market H/W price trend (US$M)

-20%
-3%

15,336
982
(6%)

12,324
770
(6%)

11,935
739
(6%)

A4 color speed
61-69ppm

11,154
(73%)

8,777
(71%)

8,472
(71%)

30-60ppm

3,200
(21%)

2,777
(23%)

2,724
(23%)

Under 29ppm

CY2019   2020   2021

Source
IDC Worldwide Quarterly Hardcopy Peripherals Tracker 2022Q3
Printers include multifunction printers. Reproduction or republication of this data is prohibited

High speed printing

Price

Print speed

Compact and low price

A3/60-100ppm

A3/40-60ppm

A3/-26ppm

A4/-24ppm

Offer inkjet value in all offices by expanding the lineup

New product LM(AM) series

- Lineup | A3 60/50/40ppm
- Footprint similar to existing copier (32% less compared to existing LX series)
- Removed middle unit which was necessary for LX series, when connecting to external finisher. Inner finisher also available
- New cartridge design suited for easier refill

Office domain │ actions to strengthen sales

Business agreement with Duplo (Japan)

- Accelerate sales to office, education, and commercial facilities by leveraging Duplo group's broad sales and service network, and knowledge of MFP sales
- Create new products and services by combining Epson and Duplo products

LX customized model

Copier dealer (North America)

- Dealer recognized stress-free as a strong point for IJ technology, and adopted Epson A4/A3 MFPs
- Expanding revenue and locations while reducing service cost by implementing no-visit solutions and reducing number of visits through the use of Epson remote monitoring tools
- Early reveal of LM(AM) series to jointly deliver inkjet value to customers

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- Provided Value Book, illustrating IJP technology and value, to dealers world-wide
- Eliminate concerns toward IJP and thereby increase sales power by showing the values that IJP offers, and the technologies that realize them

- **Deployed Heat-Free Technology communication globally**

Europe, Middle east

Asia

Americas

Future development

- Deliver inkjet value to more customers by leveraging developed platforms to strengthen lineup for the office
- Challenge broadening the range of products, which includes light/quick printing

Price

Light/quick printing

MFPs

Serial IJPs

Light/quick printing, Commercial printing, advertising, business forms

High speed MFPs Office use

Line IJPs

Strengthen mid-speed lineup

Challenge to increase speed

100ppm

Print speed

- Summary
- Business status
- Actions for office printing toward lower environmental impact and convenience
- **Actions for distributed printing to support diverse workstyles**

Actions to meet the changes in printing after COVID-19

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- Printing outside of the office increased due to diversification of how people work. Printer downsizing also progressed in the office
- Education also changed with school lockdowns, remote at-home education printing increased
- Offer value where a wide lineup supports easy and safe printing in any workplace

Social distancing in the office, reduction in people per printer

Office

Diversification and distribution of workplace

Satellite office

Shared office

Home

Education

Lineup to meet distributed printing demand

- Efficiently develop products by platforming mechanical parts
- Offer a wide range of products to meet customer needs in ink variation (pigment, dye) and ink supply according to printing volume (ink cartridge, bottle, ink pack)
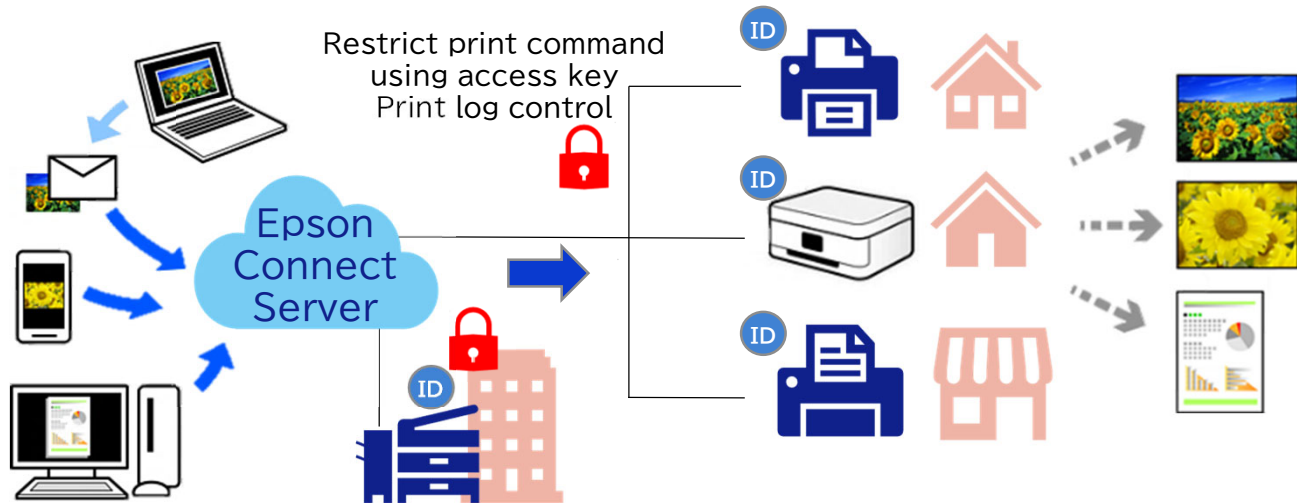
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			Mid-range	I/C	I/C High-capacity ink pack
		Office Personal	Entry	I/C High-capacity ink tank High-capacity ink pack	I/C High-capacity ink tank
SOHO/ home IJP	SOHO/ home	SOHO		I/C High-capacity ink tank	High-capacity ink tank
		Home		I/C High-capacity ink tank	I/C High-capacity ink tank

Distributed printing | Epson Connect cloud service

To become an essential social infrastructure

- Print to printer with Epson ID any time, anywhere from PCs and smartphones using Epson Connect
- Epson Connect started service in 2012, free for basic service. Users are growing worldwide

Restrict print command using access key
Print log control

Epson Connect Server

Print services to meet diverse workstyles

Print opportunities in collaboration with Via-at

Epson Connect

- Printer installed in print spots (hotels, cafes, co-working offices) offering print services using Epson Connect
- Install smaller printers to offer stress-free usage and maintenance
- Improve software and business model to capture print opportunities

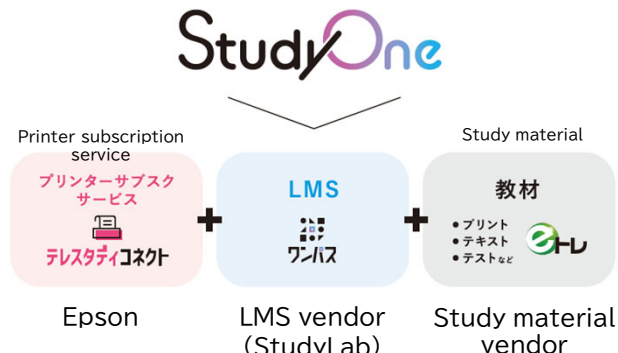## Education & tutoring｜collaboration with StudyLab

Epson Connect

- Cooperation with LMS and study material vendors to create "Study One", an integrated service to offer printing from tutoring school to the home
- Digitalization of study history using scanner data via Epson Connect

*LMS: Learning management system

Via-at hompage

1. Uploads   2. Check at Printer   3. Print

教育機関向けプリンティングソリューションサービス

StudyOne

Printer subscription service
プリンターサブスクサービス
テレスタディコネクト

LMS
ワンバス

Study material
教材
● プリント
● テキスト
● テストなど
eトレ

Epson   LMS vendor (StudyLab)   Study material vendor

Actions outside Japan

Taiwan | Print opportunities with LINE print

Epson Connect

- Promotions to cultivate print demand for at-home work and education
- User data such as age group and usage time period shows increased print volume at-home education use for children

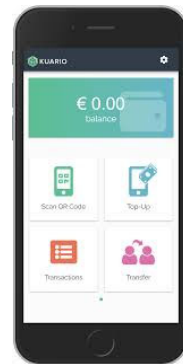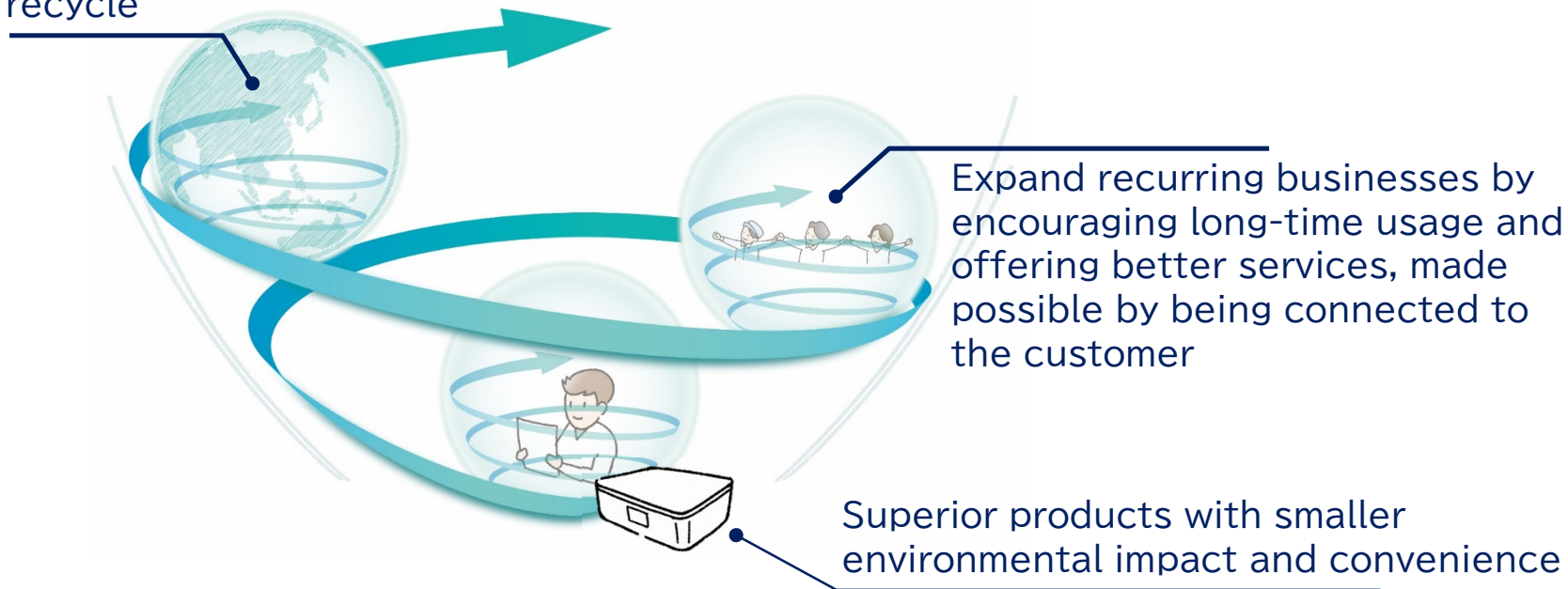| Examples of promotions for at-home work and education	Total Friends(Blue), Monthly PV(Orange)
Post on portal sites and major EC sites	
Article posting by influencers	

Conducted promotion

Europe | Public printing service through collaboration with KUARIO application

- In-store kiosk print services at libraries and retail stores
- Coordination with KURARIO application which covers authentication, payment, and print management
- Contribute to efficient maintenance using remote monitoring system

KUARIO

Better use of resources by connecting with customer to recover and recycle

Promote circulation of renewable resources through collection, long-time usage, reuse, and recycle, which is made possible by connecting one to one with customers and recognizing the usage lifecycle

Expand recurring businesses by encouraging long-time usage and offering better services, made possible by being connected to the customer

Superior products with smaller environmental impact and convenience

Wrap up

PRECISIONCORE

Expand and apply developed technology to all printing areas to innovate printing

Office & home printers	High-speed linehead inkjet multifunction printers	High-speed Label printers	Large format printers	Digital inkjet label press	Digital inkjet textile printers

Offer IJP value to printing everywhere

Definition of Terms

IJP	Inkjet printers
LIJ	Line inkjet printers
High-capacity ink tank printers	Inkjet printers with high-capacity ink tank (includes EcoTank)
Office Shared IJP	Printer category for high print volume office users. This includes LIJ, RIPS, and I/C printers
LX series, LM series	LIJ printer product series
SOHO	Small office, home office
I/C	Ink cartridges
MFP	Multi function printers
LP	Laser printers
RIPS	Replaceable ink pack system
Epson Connect	Epson's mobile cloud service for Epson products and services
Distributed printing	Printing method that prints out same images/ documents using several printers
UPS	Uninterruptible Power Supply
LMS	Learning Management System
FPOT	First print out time