

Multi-Client Study

Research Proposal

[2022 version of Inkjet Printing Market Forecast]

**"The Latest Market Data for Inkjet
Technology Adoption and its
Significance to Transforming
Manufacturing Sectors"**

*=Comprehensive analysis of the commercial and industrial inkjet market
(hardware, ink, and printheads)=*



September 2022
Data Supply Inc.

<Overview>

I. Theme

[2022 version of Inkjet Printing Market Forecast]

“The Latest Market Data for Inkjet Technology Adoption and its Significance to Transforming Manufacturing Sectors”

=Comprehensive analysis of the commercial and industrial inkjet market (hardware, ink, and printheads)=

II. Abstract

In the office equipment industry, office print volumes fell sharply in the wake of the coronavirus pandemic, and as of 2022, they are still far from the pre-pandemic levels (less than 90% of the 2019 level). And even production print, which is expected to cover the decline in office print, is halfway to recovery.

For struggling office equipment makers, **market development through inkjet technology is becoming more important than ever**. In the commercial and industrial inkjet market, some fields, such as signage and ceramic tiles, are heading toward saturation, but many others, such as textiles and packaging, are expected to grow further. Inkjet technology has originally grown and evolved in the so-called "digital printing" market, where paper printing is converted from analog to digital printing. It is **expected to expand its practical applications to the "digital fabrication" and "printed electronics" markets**, where digital data is used as the basis for manufacturing technology. Some believe that inkjet technology will play a leading role particularly in the 3D printer market, where there are a variety of modeling methods, and HP and Xerox have started selling inkjet-based products.

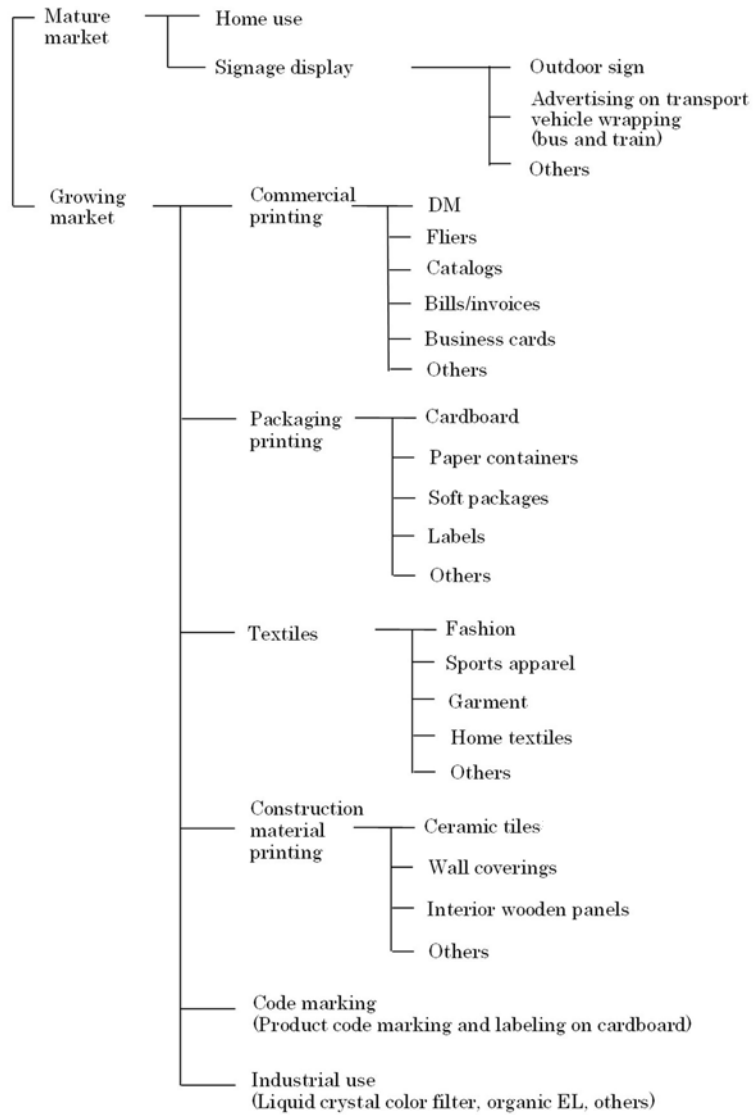
Social contexts also support the expansion of the inkjet technology market in many ways. Analog printing, which produces large amounts of waste water and consumes great energy, is shifting toward digital printing, which prints just the right amount, and this is consistent with modern environmental values. Tighter environmental regulations in China are also likely to be a tailwind for inkjet technology. In addition, as mentioned above, inkjet technology is applied more practically in manufacturing, and companies with diverse backgrounds are expected to increase investment in inkjet technology, not just in printing.

The 2022 version of Inkjet Printing Market Forecast is going to be the sixth publication in the series. Ahead of the publication, we are going to cover trade shows in Europe and the United States, such as the FESPA Global Print Expo 2022 (Germany) and Labelexpo Americas 2022 (U.S.), and we are also **conducting the on-site coverage of the Chinese market**. We hope our report will reach as many readers as possible in inkjet-related businesses.

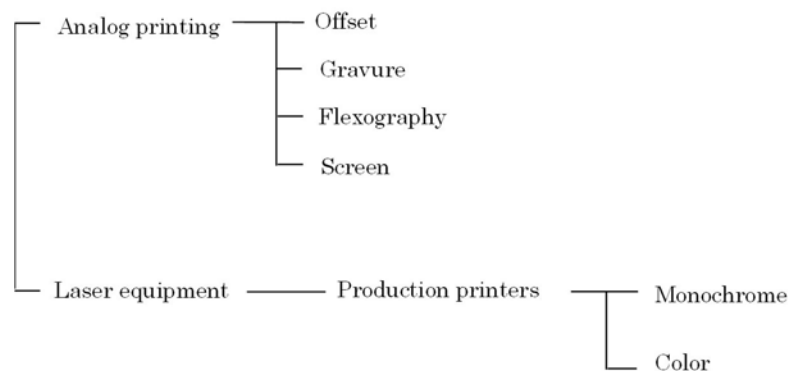
III. Items and Makers

1. Items

1) Inkjet-related Items



2) Competitive Markets



2. Makers

- 1) Hardware makers (Over 100 makers in Japan and abroad)
- 2) Printhead makers (17 makers in Japan and abroad)
- 3) Ink · dispersions makers (Over 150 makers in Japan and abroad)
- 4) Others (post-processing equipment makers and parts makers)

IV. Research Period and Methodology

1. Research period

The research period is set from 2019 to 2025 and target regions are: Japan, North America, Europe, China, and other regions.

2. Methodology

- 1) Based on on-site and in-person interviews with target makers
- 2) Analysis and review of open literatures, materials, statistics, and other sources
- 3) Analysis of Data Supply's own proprietary database

V. Format and Report Preparation Period

1. Research form: Multi-client study

2. Research period: August to October of 2022

3. Expected release date: Mid-December 2022

4. Report format: A4 size (PDF format: 2021 version contains 377 pages)

5. Price: \$5,000-

6. Researchers

Mr. Yukio YAMAMOTO, Mr. Kosuke YOSHIDA, and Mr. Masafumi HARIU

Phone: +81-3-3831-9201

FAX: +81-3-3831-9204

E-mail: <yamamoto@datasupply.jp> <yoshida@datasupply.jp> <hariu@datasupply.jp>

Homepage: <http://www.datasupply.jp>

VI. Research Items

A. Comprehensive Analysis

1. Trend of overall shipment value of the industrial and commercial inkjet (2019-2025)
2. Digital versus analog in the printing market
3. Industrial and commercial inkjet business sales share by IJ maker (2021)
4. Shipment trend of hardware machines by market (volume and value: 2019-2025)
5. Shipment trend of ink (2019-2025)
6. Shipment trend of printheads (2019-2025)
7. Major acquisitions in the industrial inkjet market

B. Market Trend

<Definition of each market>

Graphic market	It's a market of wide-format (A2 or larger) printers and their inks for photos, proofing, and posters.
Technical market	It's a market of wide-format (A2 or larger) printers and their inks for CAD and GIS (Geographic Information System).
Signage market	It's a market of wide-format (A2 or larger) printers and their inks mainly for large outdoor signage, but the market extends to include UV printers for embellishing smart phone cases and cards, and latex printers for indoor wallcoverings.
Textile market	It's a market of DTF (Direct to Fabric) printers, sublimation transfer-based printers, DTG (Direct to Garment) printers and their inks. On top of fabric printing, the market is extending to include home textile printing such as curtains and bedspreads in recent years.
Transaction market	It's a market of printing financial transaction bills and statements in a high-speed mass variable data processing field. The market includes customer-based DM printing.
Commercial printing market	The market normally includes printing of corporate promotional tools such as catalogs and leaflets but also includes publication printing such as books and magazines among others in the report.
Labels market	It's a market of adhesive label printing systems and their inks. Such labels are used for products targeting general consumers. Machines worth 10 million yen or more will be discussed in this report and excludes small desk-top type devices.
Packaging market	It's a market of large printers and their inks for folding carton, soft and corrugated packages. Mass printing machines will be discussed in the report and small proofing devices are excluded.
Marking & Coding market	It's a market of marking and coding printers and their inks for corrugated packages and labels to stamp product information such as data of production, origin, and barcodes.
Ceramic printing market	It's a market of printing machines and their inks for ceramic tiles and other ceramic-based products.
Construction printing market	It's a market of machines and their inks for wallcoverings and exterior walls as well as other construction material printing applications.
Other markets	3D printer market, printed electronics market, anti-counterfeit printing market, food printing market, etc.

B-1. Graphic & Technical market

1. Overall shipment value (hardware & ink: 2019-2025)
2. Market summary (digital ratio and inkjet ratio)
3. Graphic & Technical business sales share by IJ maker (2021)
4. Shipment trend of hardware machines by application (graphic/technical: 2019-2025)
Shipment volume/shipment value/shipment volume share by maker
5. Shipment trend of ink by type (water-based dye/water-based pigment: 2019-2025)
Shipment volume/shipment value/technological trend/price trend
6. Printhead adoption trend
7. Summary of major makers
8. List of major machines of each company

Primary target

Region	Country	Maker
Japan	—	Seiko Epson/Canon/Ricoh/Mutoh Industries
N. America	USA	HP

B-2. Signage market

1. Overall shipment value (hardware & ink: 2019-2025)
2. Market summary (digital ratio and inkjet ratio)
3. Signage business sales share by IJ maker (2021)
4. Shipment trend of hardware machines by type of ink (solvent/UV/latex: 2019-2025)
Shipment volume/shipment value/shipment volume share by maker
5. Shipment trend of ink by type (solvent/UV/latex: 2019-2025)
Shipment volume/shipment value/technological trend/price trend
6. Printhead adoption trend
7. Summary of major makers
8. List of major machines of each company

Primary target

Region	Country	Maker
Japan	—	Mimaki Engineering/Roland DG/Mutoh Industries/Seiko Epson/Ricoh/Fujifilm
N. America	USA	HP/EFI (VUTEk)
Europe	UK	Inca Digital Printers (SCREEN)
	Italy	Durst
	Netherlands	Canon Production Printing (formerly Océ, Canon)
	Belgium	Agfa-Gevaert
	Switzerland	SwissQprint AG
	Israel	Matan Digital Printers (EFI)
Asia	S. Korea	DGI/Dilli
	China	Beijing JHF/Fei Yeung Union/Gongzheng Group/XULI/ALLWIN/Wit-Color/HANDTOP/FLORA/Human Digital/Fortune-lit/Techwin/Sky Air Ship/New Century/Others

B-3. Textile market

1. Overall shipment value (hardware & ink: 2019-2025)
2. Market summary (digital ratio and inkjet ratio)
3. Textile business sales share by IJ maker (2021)
4. Shipment trend of hardware machines by type (DTF/sublimation transfer/DTG: 2019-2025)
Shipment volume/shipment value/shipment volume share by maker/shipment trend of DTF & sublimation transfer by speed segment/shipment trend of DTG by mass production device and by desktop device
5. Shipment trend of ink by type (reactive/dispersion/acid/sublimation transfer/pigment: 2019-2025)
Shipment volume/shipment value/ink maker share (DTF/sublimation transfer)/technological trend/price trend
6. Printhead adoption trend
7. Summary of major makers
8. List of major machines of each company

Primary target

Region	Country	Maker
Japan	—	Konica Minolta / Mimaki Engineering / Mutoh Industries / Seiko Epson / Toshin Kogyo / Brother Industries / Ricoh / Seiren / Others
N. America	USA	HP / formerly Anajet (Ricoh)
Europe	Italy	MS Printing Solution (Dover) / Reggiani (EFI) / Robustelli (Epson) / Aleph / La Meccanica (Mimaki) / Durst
	Netherlands	SPGPrints / Hollanders Printing Systems
	Austria	Zimmer / Aeoon
	Israel	Kornit Digital
Asia	S. Korea	DGI
	China	Atexco / Homer / Hopetech / Human Digital / ALLWIN / CNTOP / Nocai / Others

B-4. Transaction market

1. Overall shipment value (hardware & ink: 2019-2025)
2. Market summary (digital ratio and inkjet ratio)
3. Transaction business sales share by IJ maker (2021)
4. Shipment trend of hardware machines by size (2019-2025)
Shipment volume/shipment value/shipment volume share by maker
5. Shipment trend of ink by type (water-based dye/water-based pigment: 2019-2025)
Shipment volume/shipment value/technological trend/price trend
6. Printhead adoption trend
7. Summary of major makers
8. List of major machines of each company

Primary target

Region	Country	Maker
Japan	—	Ricoh / SCREEN / Miyakoshi / Fujifilm / Kyocera DS
N. America	USA	HP / Xerox / Kodak / BlueCrest
Europe	UK	Domino (Brother)
	Netherlands	Canon Production Printing (formerly Océ, Canon)
Asia	China	Founder / HanGlobal

B-5. Commercial printing market

1. Overall shipment value (hardware & ink: 2019-2025)
2. Market summary (digital ratio and inkjet ratio)
3. Commercial printing business sales share by IJ maker (2021)
4. Shipment trend of hardware machines by size (continuous-feed/sheet-feed: 2019-2025)
Shipment volume/shipment value/shipment volume share by maker
5. Shipment trend of ink by type (water-based pigment/UV: 2019-2025)
Shipment volume/shipment value/technological trend/price trend
6. Printhead adoption trend
7. Summary of major makers
8. List of major machines of each company

Primary target

Region	Country	Maker
Japan	—	Konica Minolta / Fujifilm / Ricoh / SCREEN / Komori Corporation
N. America	USA	HP / Kodak
Europe	Netherlands	Canon Production Printing (formerly Océ, Canon)
	Israel	Landa
Asia	China	Founder / HanGlobal / Others

B-6. Label & Package market

1. Overall shipment value (hardware & ink: 2019-2025)
2. Market summary (digital ratio and inkjet ratio)
3. Label & Package business sales share by IJ maker (2021)
4. Shipment trend of hardware machines by application (label/package: 2019-2025)
Shipment volume/shipment value/shipment volume share by maker
5. Shipment trend of ink by type (water-based pigment/UV: 2019-2025)
Shipment volume/shipment value/technological trend (label, corrugated package, folding carton, flexible package)/price trend
6. Printhead adoption trend (label/package)
7. Summary of major makers
8. List of major machines of each company

Primary target (labels)

Region	Country	Maker
Japan	—	Seiko Epson / Iwatsu / SCREEN
N. America	USA	HP (liquid toner machines) / Jetrion (Xeikon) / Mark Andy / Colordyne Technologies / Astro Machine
	Canada	Buskro
Europe	UK	Domino (Brother) / Afinia Label / Daco Solutions
	Germany	KBA-Kammann, mPrint / Gallus
	Italy	Durst
	Switzerland	BOBST / Mouvent
	Netherlands	Canon Production Printing (formerly Océ, Canon) / Amica Systems
	Belgium	Xeikon
Asia	Denmark	Trojanlabel (AstroNova)
	S. Korea	Dilli / APL Korea
	China	HanGlobal / FLORA / Others
	India	MONOTECH

Primary target (corrugated package)

Region	Country	Maker
N. America	USA	HP / EFI / SUN Automation
Europe	Spain	Barberan
	Italy	Durst, Engico
	Germany	Koening & Bauer
	Belgium	Xeikon
	Switzerland	BOBST
Asia	China	Hanglory Group / Wonderjet

Primary target (folding carton)

Region	Country	Maker
Japan	—	Konica Minolta / Komori Corporation / SCREEN
N. America	USA	Kirk Rudy
Europe	France	MGI
	Germany	Heidelberger / Koening & Bauer Durst
	Israel	Landa

Primary target (flexible package)

Region	Country	Maker
Japan	—	Fujifilm / Miyakoshi / SCREEN / Think Laboratory / Tritex
N. America	USA	HP (liquid toner machines)
Europe	Italy	UTEKO
	Israel	Landa

B-7. Marking & Coding market

1. Overall shipment value (hardware & ink: 2019-2025)
2. Market summary (digital ratio and inkjet ratio)
3. Marking & Coding business sales share by IJ maker (2021)
4. Shipment trend of hardware machines by type (CIJ/DOD: 2019-2025)
Shipment volume/shipment value/shipment volume share by maker
5. Shipment trend of ink by type (solvent/UV: 2019-2025)
Shipment volume/shipment value/technological trend/price trend
6. Printhead adoption trend
7. Summary of major makers
8. List of major machines of each company

Primary target

Region	Country	Maker
Japan	—	Hitachi Industrial Equipment Systems / Kishu Giken / Keyence / Others
N. America	USA	Videojet Technologies (Danaher) / Weber Packaging Solutions
Europe	UK	Domino (Brother)
	Germany	Leibinger
	Switzerland	Markem-Imaje (Dover)
Asia	China	Beijing Hipack
	Taiwan	Anser Coding
	India	Control Print

B-8. Ceramic tile & Construction material market

1. Overall shipment value (hardware & ink: 2019-2025)
2. Market summary (digital ratio and inkjet ratio)
3. Ceramic tile & Construction material business sales share by IJ maker (2021)
4. Shipment trend of hardware machines by type (ceramic tiles/construction materials: 2019-2025)
Shipment volume/shipment value/shipment volume share by maker
5. Shipment trend of ink by type (oil-based/water-based: 2019-2025)
Shipment volume/shipment value/technological trend/price trend
6. Printhead adoption trend
7. Summary of major makers
8. List of major machines of each company

Primary target

Region	Country	Maker
Japan	—	Ricoh
Europe	Italy	Sacmi/Durst/System Ceramics/SITI-B&T/Tecno Ferrari
	Spain	Cretaprint (EFI)/KERAjet
Asia	China	Hope Ceramics/Meija/KEDA/FLORA/Teckwin

B-9. Other markets (3D printer, printed electronics, others)

1. Market scale and market summary (inkjet ratio, etc.)
2. Summary of major makers
3. List of major machines of each company

Primary target (3D printer)

Region	Country	Maker
Japan	—	Mimaki Engineering/Keyence/CMET
N. America	USA	Stratasys/3D Systems/HP/Xerox Elem Additive Solutions /Desktop Metal/ExOne
Europe	Israel	Xjet
	Germany	Voxeljet
	Switzerland	Scrona
Asia	China	AFS/ALPHA/AMSKY Technology/CHN (MAXLEADING)/ EasyMFG / Fenghua Zhuoli Technology (FHZL) / KOCEL / Laseradd/Sailner/7th Technology
	Taiwan	XYZprinting

Primary target (printed electronics, other industrial applications)

Region	Country	Maker
Japan	—	Ishii Hyoki/AIMECHATEC/SHIBAURA MECHATRONICS /Tokyo Electron/Toray Engineering/MicroCraft
N. America	USA	Kateeva/MicroFab Technologies
Europe	Israel	Nano Dimension/Orbotech/PV Nano Cell
	UK	M-Solv
	Germany	Notion Systems/SÜSS MicroTec/SCHMID Group
	France	CERADROP
	Netherlands	MuTracx
Asia	S. Korea	SEMES

C. Inkjet Printhead Market

1. Changes in shipment value by maker (2019-2025)
2. Breakdown of total shipment value by market (2021)
3. Summary of individual companies

Primary target

Region	Country	Maker
Japan	—	Kyocera / Seiko Epson / Konica Minolta / Ricoh / SII Printek / Toshiba TEC / Brother / Funai Electric
N. America	USA	Fujifilm Dimatix / HP / Xerox
Europe	UK	Xaar
Asia	China	Suzhou Real Fast Print Technology / AMSKY Technology / Others

D. Related Market (Home & Office Inkjet Printer Market)

1. Shipment trend of hardware machines (2019-2025)
Shipment volume/shipment value
2. Shipment trend of ink (2021)

E. Individual Makers

E-1. Business summary of major makers

— 《Common items》 —

Sales of industrial inkjet by field (2021)/shipment trend of hardware machines and ink (shipment volume of machines, shipment volume of ink: 2021)/market-by-market trend

E-2. Summary of each company (Japanese maker/overseas maker)

— 《Common items》 —

Company name/address of head office/representative/established year/capital/sales (most recent FY)/number of employees (most recent)/summary of the industrial inkjet business

E-3. List of industrial inkjet-related makers (overall/ink • dispersions makers)

— 《Common items》 —

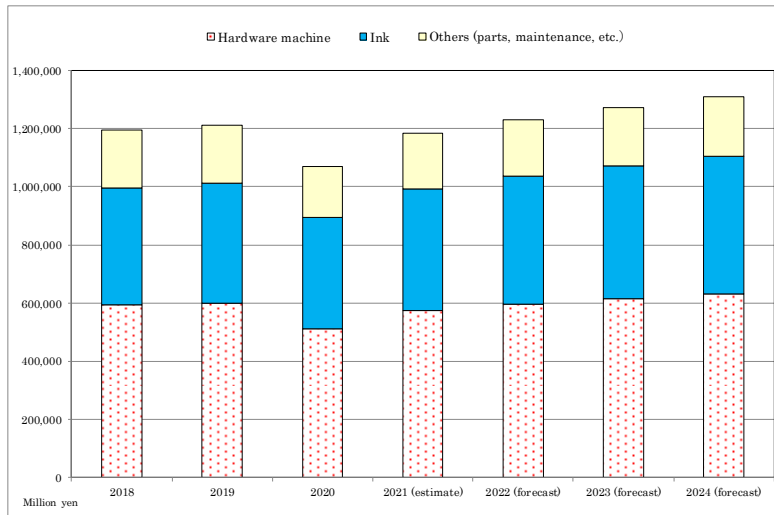
Company name/address of head office/target market (water-based/solvent/UV/textiles/ceramics/others)/production capacity, etc.

◆ Sample pages of the report (2021 version)◆

A. Comprehensive Analysis

1. Overall trend of shipment value of industrial/commercial inkjet printing (2018-2024)

1) Overall (hardware machines, inks, others)



	Million yen							
	2018	2019	2020	2021 (estimate)	2022 (forecast)	2023 (forecast)	2024 (forecast)	
	%	%	%	%	%	%	%	%
Hardware machine								
%								
Ink								
%								
Others (parts, maintenance, etc.)								
%								
Total								
%								

.....

Inkjet ratio	
	Nearly 100%
	70-75%
	Nearly 100%
	Nearly 100%
	80-85%
	5-10%
	25-30%
	Around 20%
	50%
	100%
	100%

The table shows the ratio of digital and inkjet printing to the total printing demand in each market.

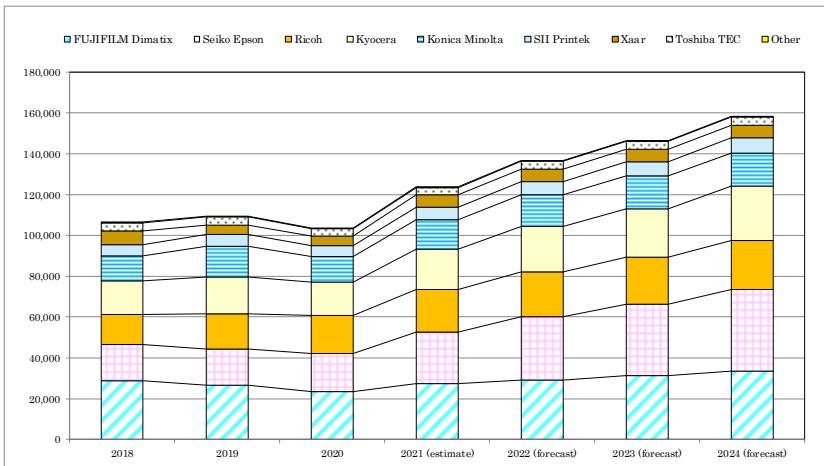
The commercial printing, labels and packaging market digitalization rate is less than 10% and their inkjet rate is less than 30%. They are the target markets for inkjet makers. The labels and packaging market is among the largest as it has an annual production demand of 60 billion square meters.

The textile market digitization rate is exceeding 10%; the market also has an enormous annual printing volume of 35 billion square meters carrying high growth expectations.

2. Changes in shipment value by maker (2018-2024)
 1) Piezo head

Million yen

	2018		2019		2020		2021 (estimate)		2022 (forecast)		2023 (forecast)		2024 (forecast)	
		%		%		%		%		%		%		%
FUJIFILM Dimatix														
Seiko Epson														
Ricoh														
Kyocera														
Konica Minolta														
SII Printek														
Xaar														
Toshiba TEC														
Other														
Total														



in yen in 2020. HP offers
 d system (22-42 inches)
 implemented long-term
 e to 14 units. But ink
 ard trend.



ng segment were about
 HP offers a continuous-
 the business. The 2020
 at eight units and 400

a major US on-demand
 ts and the installations

have continued since then. In Japan, Kodanoha Ltd. started operating T300 in 2013, followed by two other companies, Well Corporation and KADOKAWA Corporation, which have installed T490. Due to its high market share with publishers, HP reports that it accounts for 75% of the world's inkjet printing demand in the book printing segment.



HP PageWide Web Press T300 Color