

Introduction



Vision & Direction in the inkjet World

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Industrial Printing Business Group Ricoh Company Ltd.

The Vision of Ricoh IP Business



Ricoh aims to become a leading provider of industrial printing solution that contribute to more eco-friendly production processes for safer and more reliable clothing, food and housing







Ricoh's inkjet technology will contribute to solving social issue

SDG Contributions







Prosperity

Productivity enhancement

Intelligence creation

Helping transform value chains by supplying industrial inkjet print heads, Imaging system solutions, and industrial printers







QOL enhancement

Providing safe and secure clothing, food and housing environments worldwide







Planet

Zero-carbon society

Circular economy

Employing on-demand printing to <u>reduce water</u> <u>consumption and inventory waste</u>

Our Statement for IP Business



For Ricoh, the term *industrial printing* is far too narrow and limits our imagination.

We envisage a future when all kinds of materials with all types of functionality can be "printed" anywhere, anytime, leading to unlimited possibilities. This future will be eco-friendly, sustainable, and will inspire our creative spirit.

People will embark on a journey of freedom, a journey which makes dreams come true.

RICOH Industrial Printing is the future of technology.

RICOH Industrial Printing

Change Impossible to Possible.

Our Business Segment







Provide printheads to printer vendors / distributors

- Cover variety of applications
- High durability, high productivity, high precision
- A lot of experience for jetting all ink technologies for single pass and multi pass





Ink

Provide OEM Ink to printer vendors

 High functional ink UV: low-odor, good adhesion, high gamut

Latex & water based: safety, good durability and adhesion

Imaging system (Module)

Provide single pass/multi pass module and ink to printer vendors

- High reliability with print head, ink and image processing for specific applications
- "Powered by Ricoh" brand





Provide complete Printing systems

• End to end solution with H/W. Ink, S/W and services



Provide RIP, Color management and workflow solution

Digital micro factory work flow to digital printing manufacturers





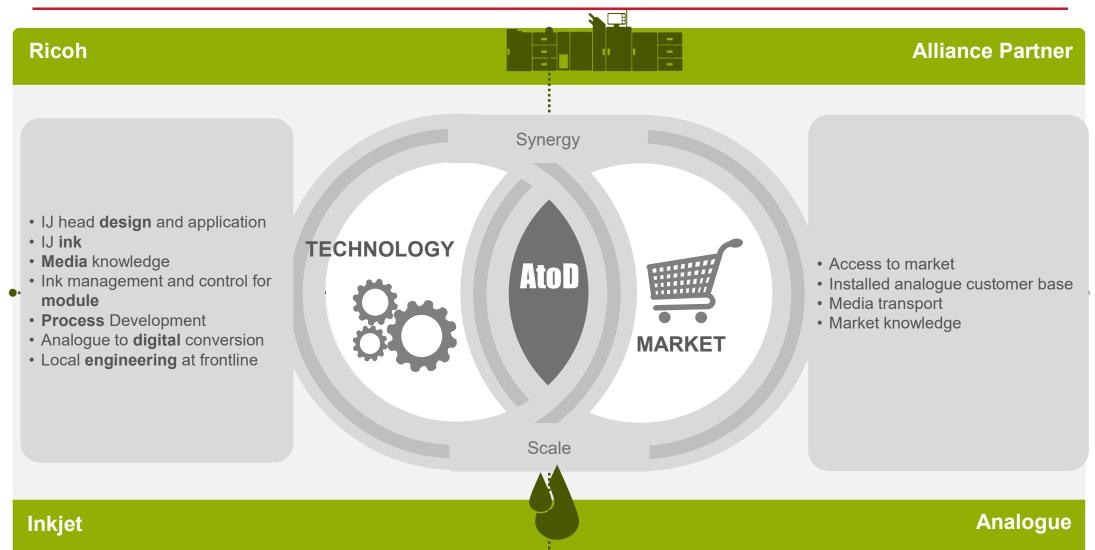






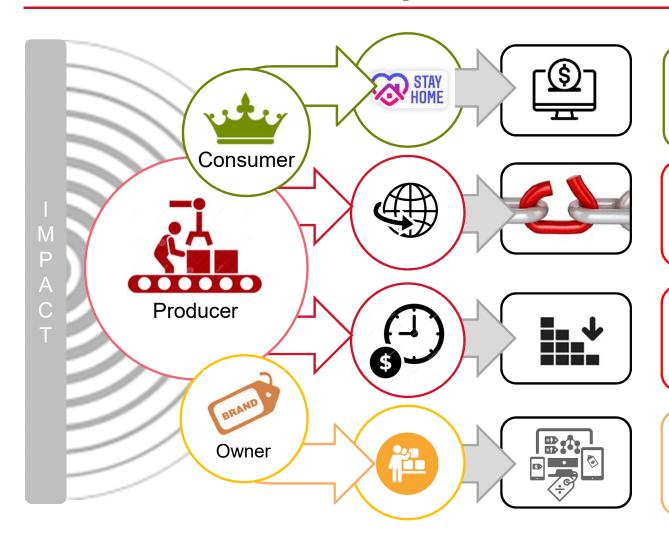
Ricoh IP and the power of partnership





Future trend for post Covid19 era





Stay at home pushes e-Commerce

Off-shore model changes to re-shoring and automation

Cost & time put inventory under biggest pressure

Merchandizing gets huge potential by going digital

To react to this change





• Online shopping, sizing, personalization

• Ethic & Environment compliance

• Shortest possible delivery time

Online customization

Eco-friendly & traceable chain

De-Centralized manufacturing



Low to ZERO inventory

• Effectiveness in small lot production

On-demand delivery

• Made to order & flexibility

Digital manufacturing

Near- & Re-shoring



Short and flexible turn-around time

• Update Customer-In-Store experience

• Flexible product portfolio

✓ • Speed-up Online business

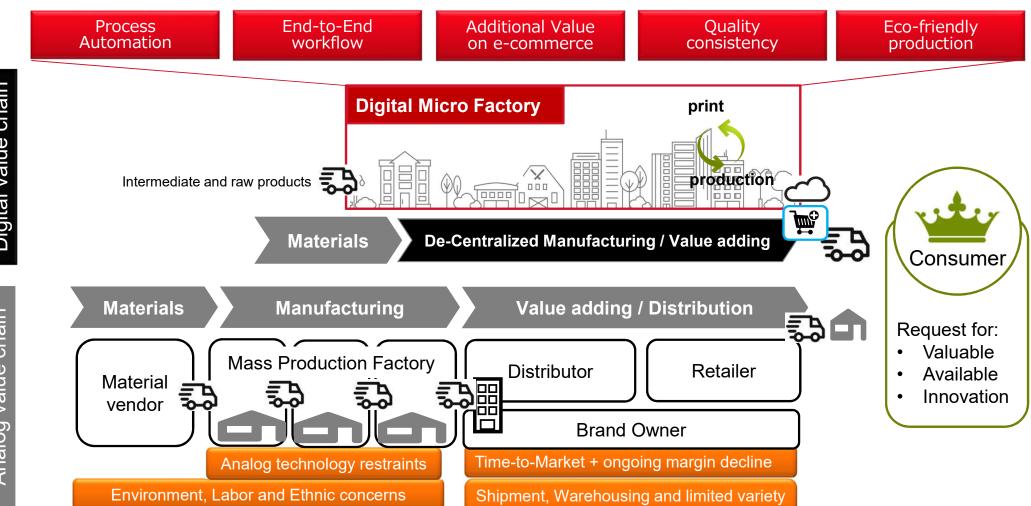
Offering in customizing

Offering Integrated value-chain

Decentralization with digital



Lean and agile supply chain with decentralised manufacturing



Supply Chain Innovation



Overview of benefits provided by Digital Micro Factory

Minimize inventory

- Keep net working capital low
- Reduce cost and risks on all level

Re-Shoring

- Re-design shoring network as required
- Reduce dependencies on a variety of parameter

Market pull

- Drive operation on real time demand
- Reduce assumptions on future scenarios



Short lead time

- **Overall Go to Market acceleration**
- Win customer by serving fast
- Provide agile process towards brand owner and license provider (e.g. short-term collection)

Customization

- From mass-customization to individualization: Meet market and customer needs
- **KPI** driven decision ensure profitability

More variety

Lean processes provide cost effective ways to address customer needs

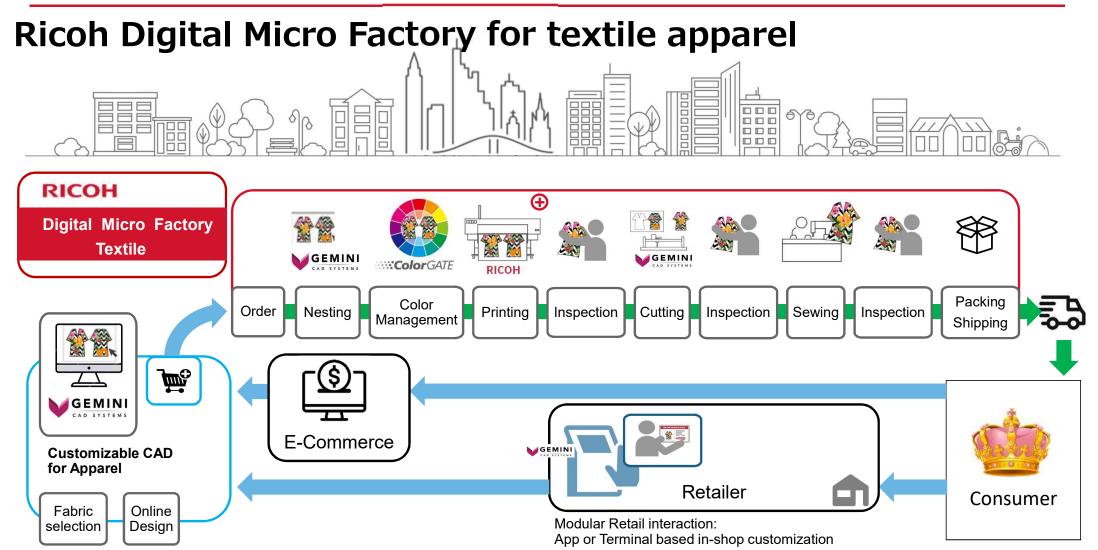






Case of Textile









Ricoh provides total solutions with our key components, printers and software

Component Products (printhead, ink and software)



GH series

-Low-cost print head for office printers



TH 5421

-High-performance with low-cost silicon micro-electric mechanical systems

MH series

-Outstanding durability,

performance, and viscosity

Industrial inks

- -Safety and high adhesion (UV/Latex)
- -high reliability with Ricoh printhead

:::::ColorGATE



ColorGATE PRODUCTIONSERVER

- -Industry leading color workflow and RIP
- -Field proven with 15,000 installations
- -Latest technology and components (PDF/X, APPE, Pantone)

Imaging system (Inkjet module)



Industrial single pass imaging system

-High productive and reliable single pass module



Compact imaging system

-Small inkjet module based on Ricoh office printers

Provided to our partners



System and Solution



RICOH Ri 100

-Compact direct to garment printer



RICOH Ri 1000

-Entry model direct to garment printer



RICOH Pro L5100 series

-Sign graphics R2R printer with safety latex ink



RICOH Pro TF6250 T7210

-Decorative Flatbed printer With high adhesion UV ink



RICOH Digital Micro Factory printer & solution for textile

- -Water based pigment ink and sticky belt
- -End to end solution with e-commerce
- -Cover apparel production process



Our schedule at JIVM



Sun	Mon	Tue	Wed	Thu	Fri	Sat
	6/1 Web site open	2	3	4	5 17:00-18:00(JST) Ricoh IP Vison <english> for WW "Ricoh. Challenges in the Inkjet World"</english>	6
7	8	9	10	11	12 16:00-17:00(JST) Printhead <japanese> for Japan</japanese>	13
14	15	16	17	18	19 15:00-16:00(JST) Objective Digital Painting <japanese)> for Japan</japanese)>	20
21	22	23	24	25	26 15:00-16:00(JST) Digital Micro Factory for Textile <japanese> for Japan</japanese>	27
28	29	30	7/1 Web contents renewal	2	3 17:00-18:00(JST) Printhead <english> for Europe</english>	4
5	6	7	8	9	10 17:00-18:00(JST) Objective Digital Painting < English > for Europe	11
12	13	14	15	16	17 17:00-18:00(JST) Wide Format Printer <english> for Europe</english>	18
19	20	21	22	23	24 6:00-7:00(JST) Printhead <english> for NA 17:00-18:00(JST) Digital Micro Factory for Textile<english> for Europe</english></english>	25
26	27	28	29	30	31 6:00-7:00(JST) Objective Digital Painting <japanese)> for Japan</japanese)>	8/1