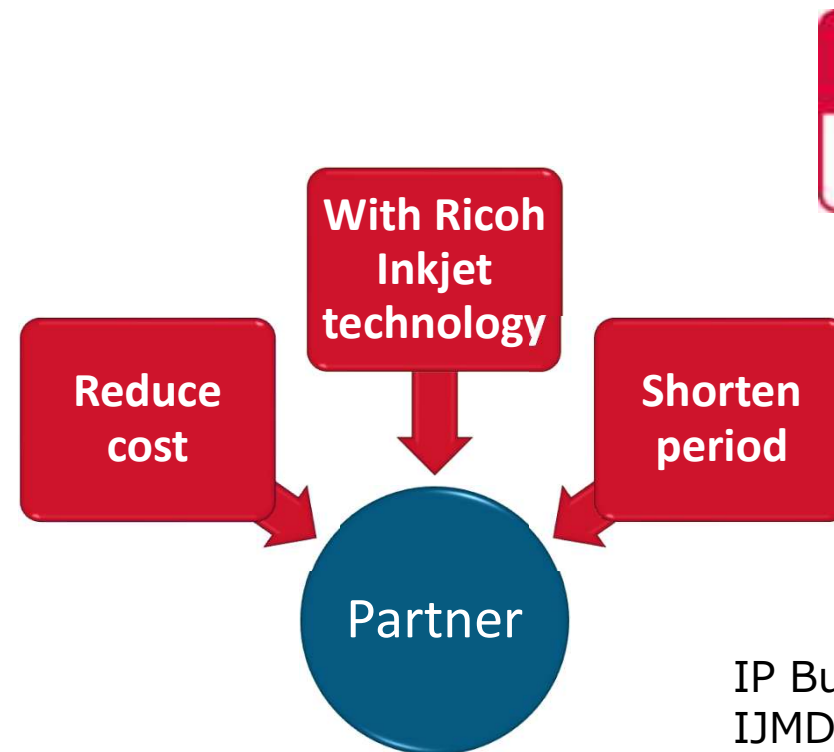


# Ricoh Compact Inkjet Modules

**RICOH**  
imagine. change.

**Modular print systems for  
multi purpose use**



IP Business Division  
IJMD Business Center  
IJMD Promotion Office

# Industrial Printing Business (Vision)

P.2

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

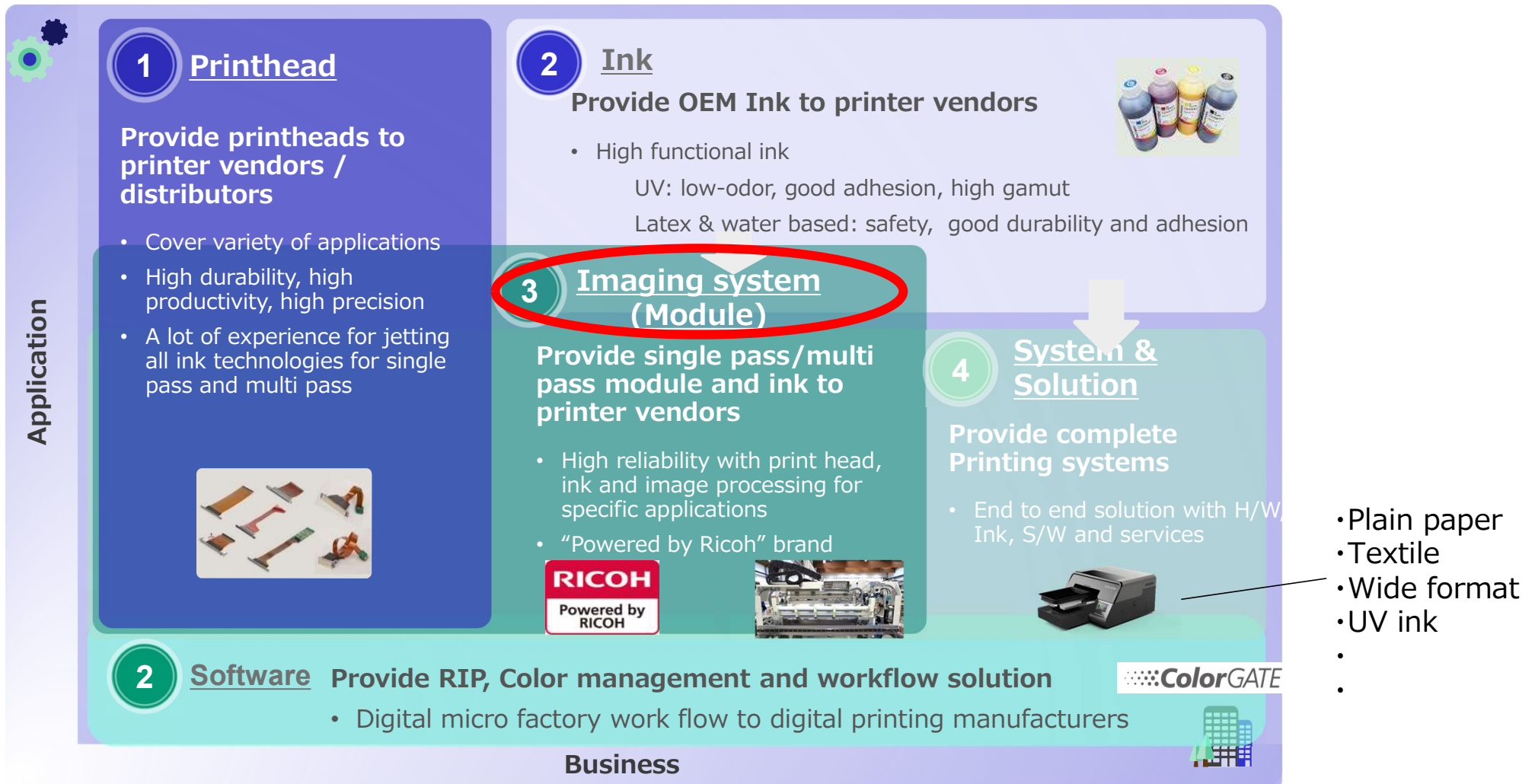


**Ricoh's inkjet technology helps resolve social issues**



# Our Business Segment

P.3



## ■ Ricoh's Imaging system(Modules)

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P.4

### ✓Vision

Ricoh accelerate “Analog to Digital” movement with our partners.



*and... more!*

***Various *i*deas with inkjet can change the world.***

# Ricoh's Imaging system(Modules)

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## ✓ Ricoh Imaging system(Modules)

Overwhelming performance for digital printing machines.

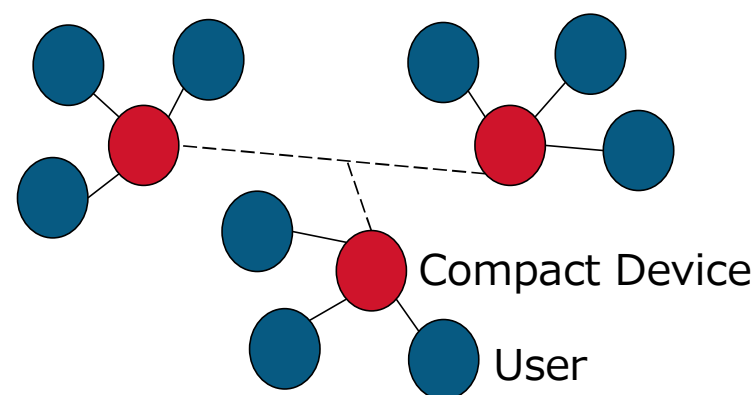
*High-quality, high-productivity, and high-reliability*



## Ricoh Imaging system(Modules)

- Large-size inkjet modules for production use

- Compact inkjet modules

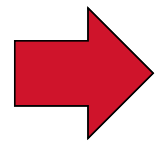
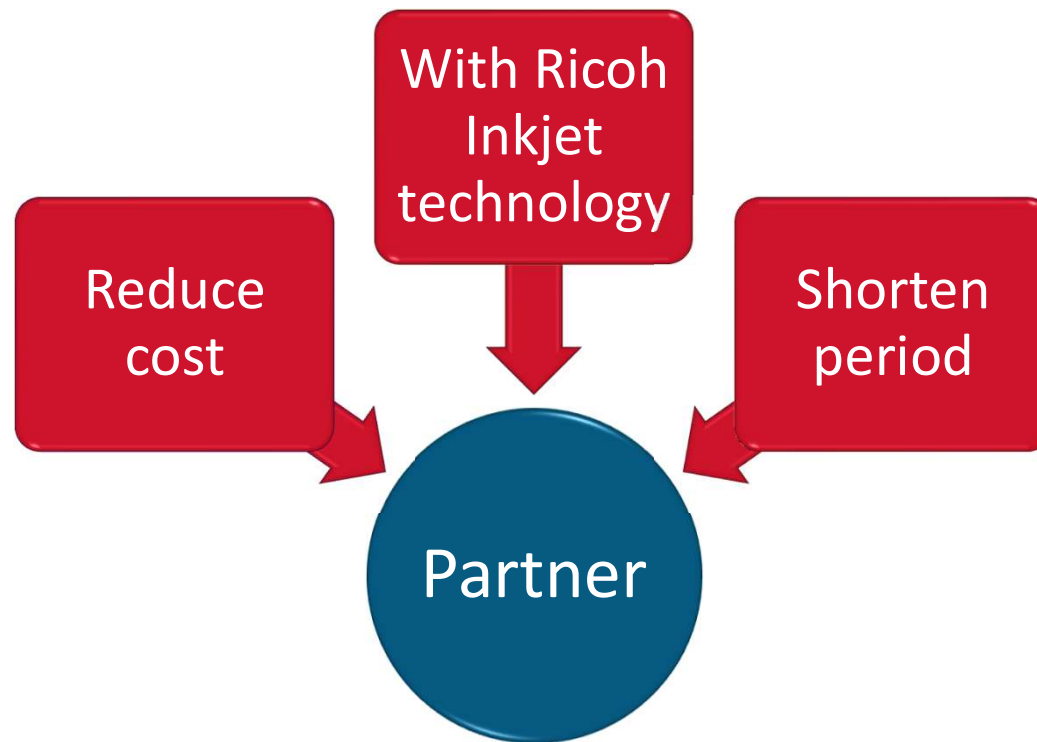


➔ The Analog to Digital change leads to a world where multiple compact devices connected to the network and installed anywhere. This concept get to be game changer.

## ■ With our Compact inkjet modules

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*✓ What Our Compact Inkjet Modules can provide?*

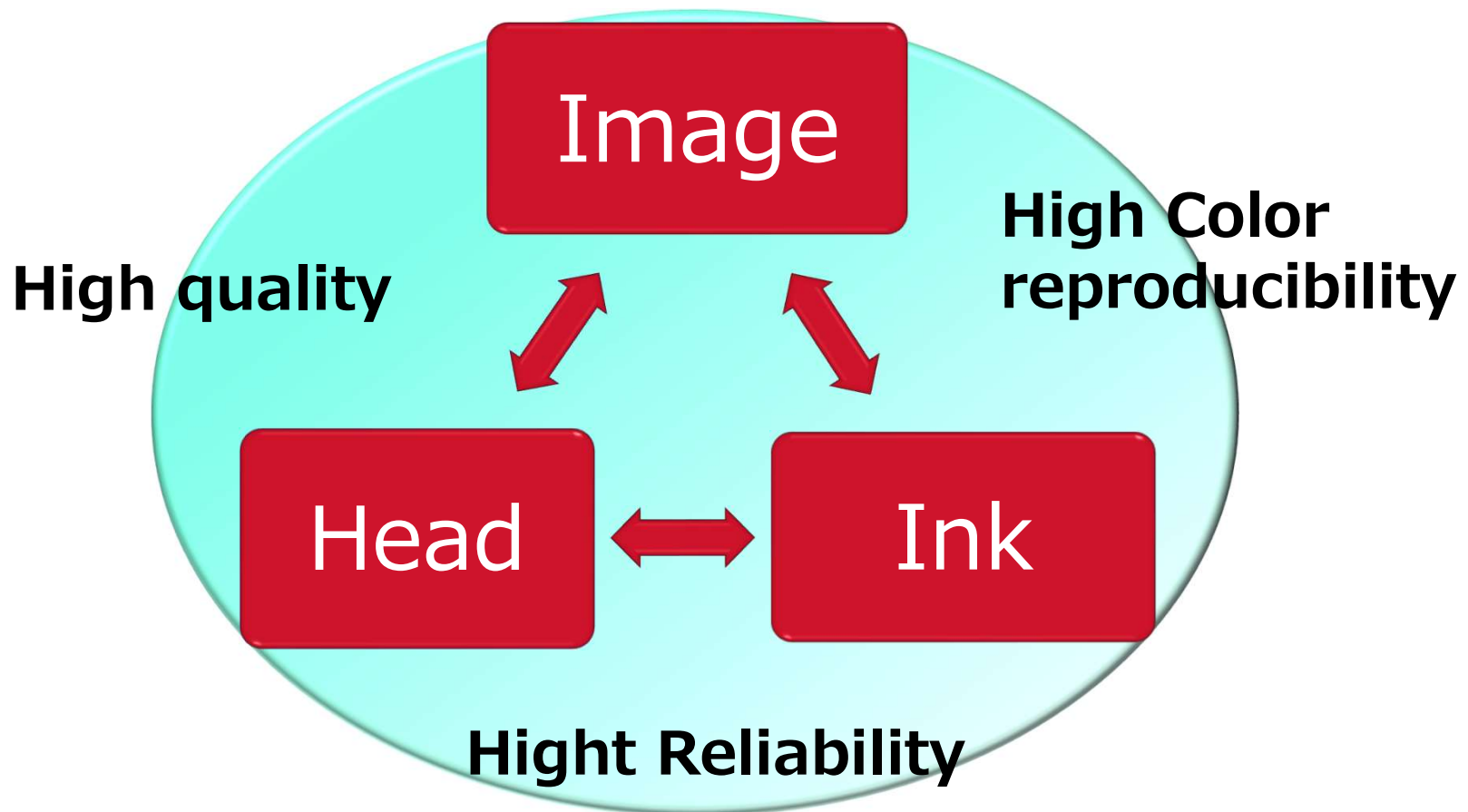


Partner can concentrate printer development  
***without developing inkjet technology.***

■ With our Compact inkjet modules

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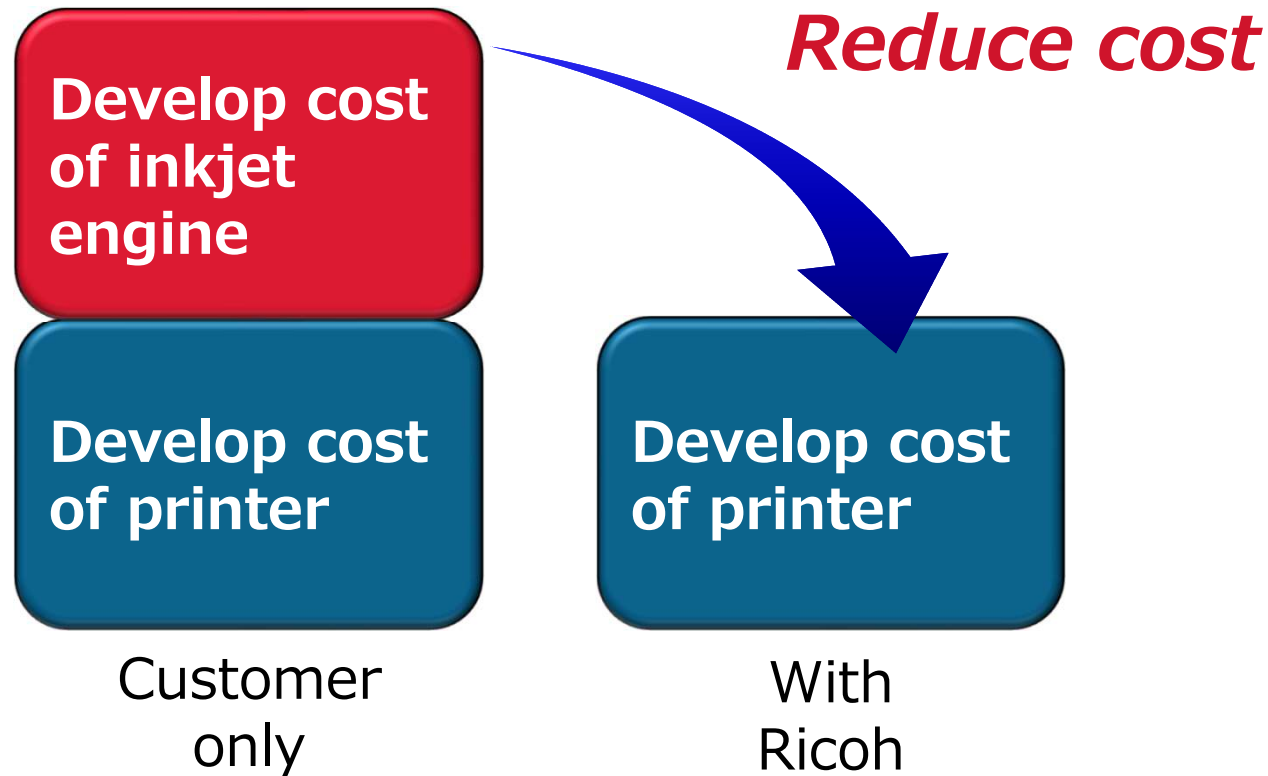
✓ Achieve high performance *With Ricoh inkjet technology.*



## ■ With our Compact inkjet modules

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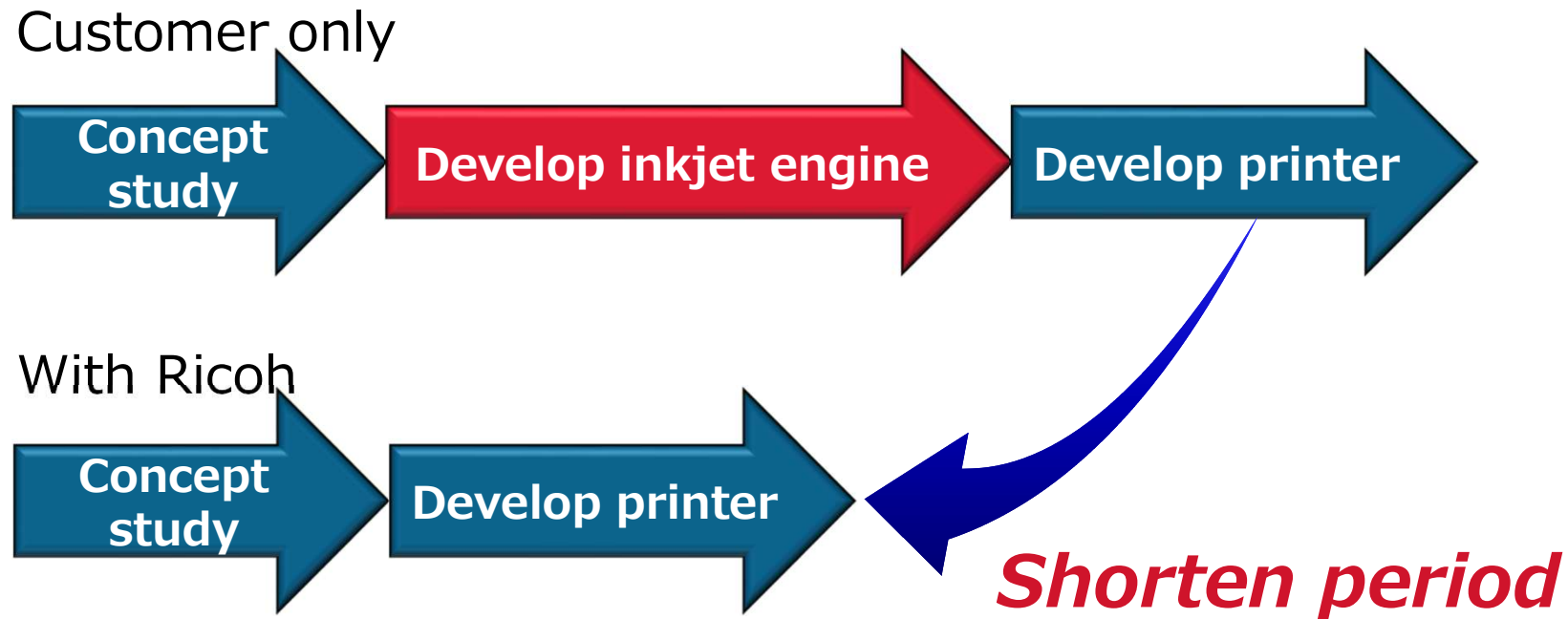
✓ Reduce *development cost*



## ■ With our Compact inkjet modules

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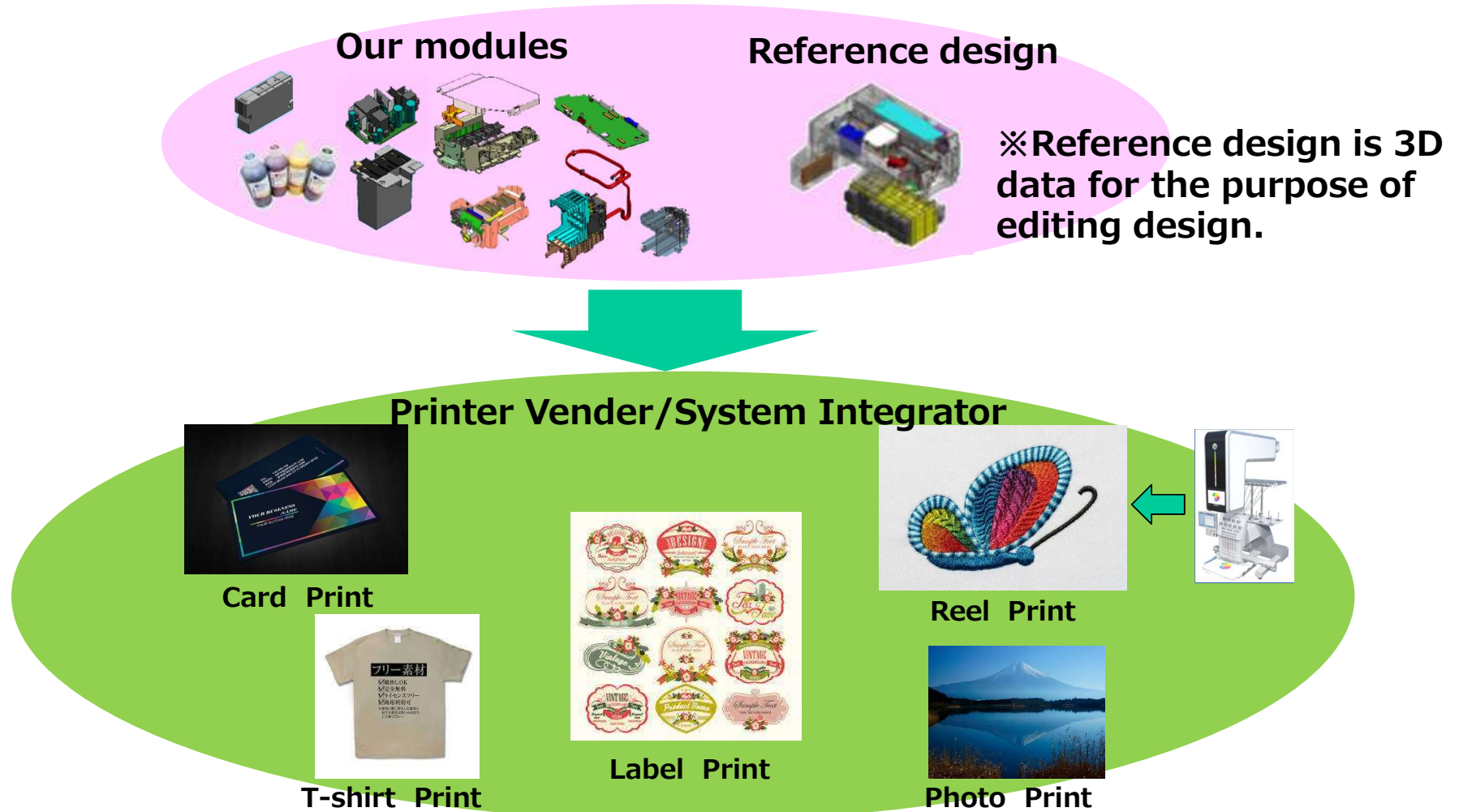
✓ Shorten *development period*



# Current Applications

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## ✓Current applications with Partners



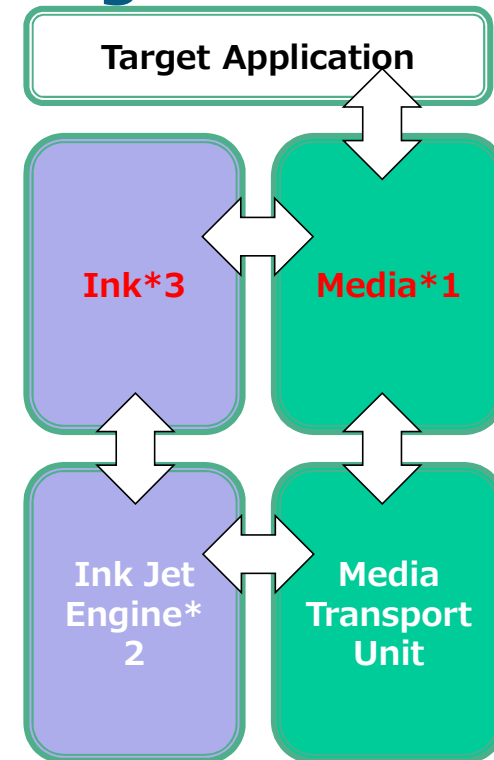


# Ink, Media and Transport unit with Ink Jet Engine

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## ✓ Ink, Media and Transport unit with Ink Jet Engine

Target Application	Media Transport Unit			Ink*3		Ink Jet Engine*2	
	Transport Type	Provider	Media Type*1	Ink Type	Provider	Engine type	Provider
T-shirt coloring	Flat bet	Ricoh, 3rd party	Cotton T-shirt	Reactive dye ink	3rd party	Compact Inkjet Modules	Ricoh
Plate printing	Plate move	3rd party	Plastic plate	Heat curing ink	3rd party		
Thread coloring	Thread move	3rd party	Polyester thread	Sublimation dye ink	3rd party		
T-shirt coloring	Flat bet	Ricoh, 3rd party	Polyester T-shirt		3rd party		
Transfer printing	Paper move	Ricoh	Transfer sheet		3rd party		
Food printing	Flat bet	3rd party	Food	Edible ink	3rd party		
Office printing	Paper move	Ricoh	Plain paper	Pigment ink	Ricoh		
Medicine package printing	Package move	3rd party	Medicine package				
Photo printing	Roll move	3rd party	Photo paper	Dye ink	Ricoh, 3rd party		
Label printing	Roll move	3rd party	Roll paper		Ricoh, 3rd party		
Cleaning	-	-	-	Cleaning ink	Ricoh		



\*1:Media is related to the target application

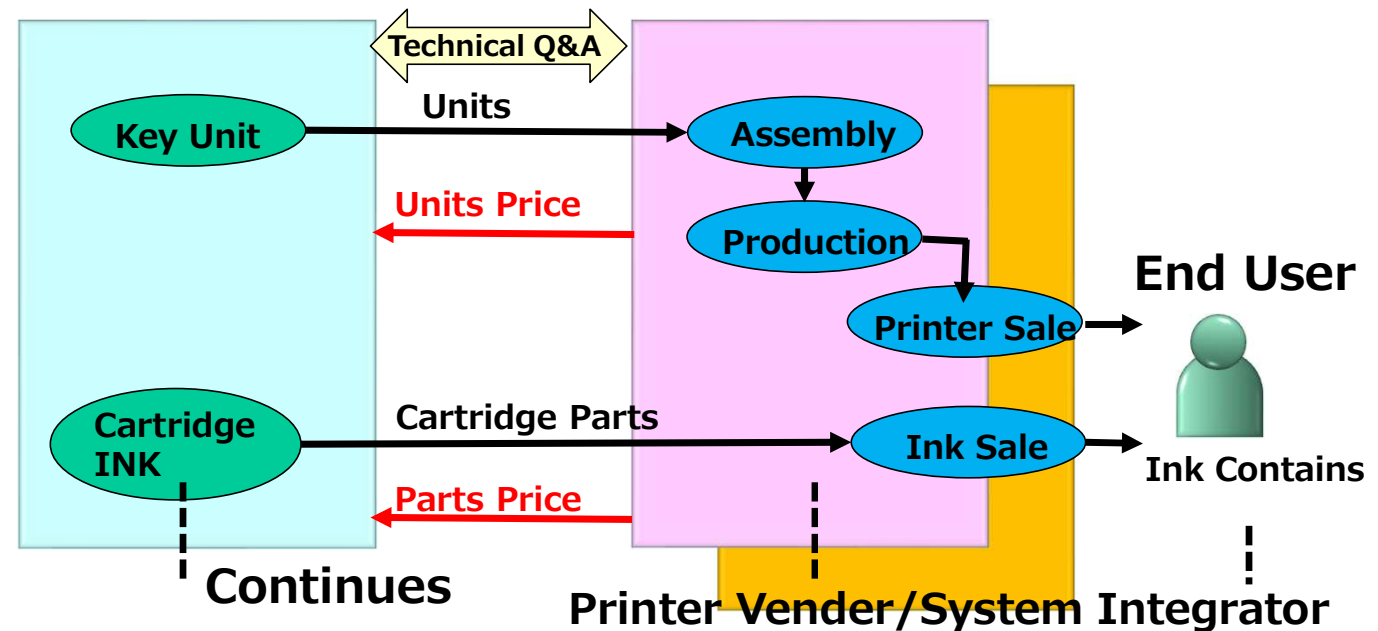
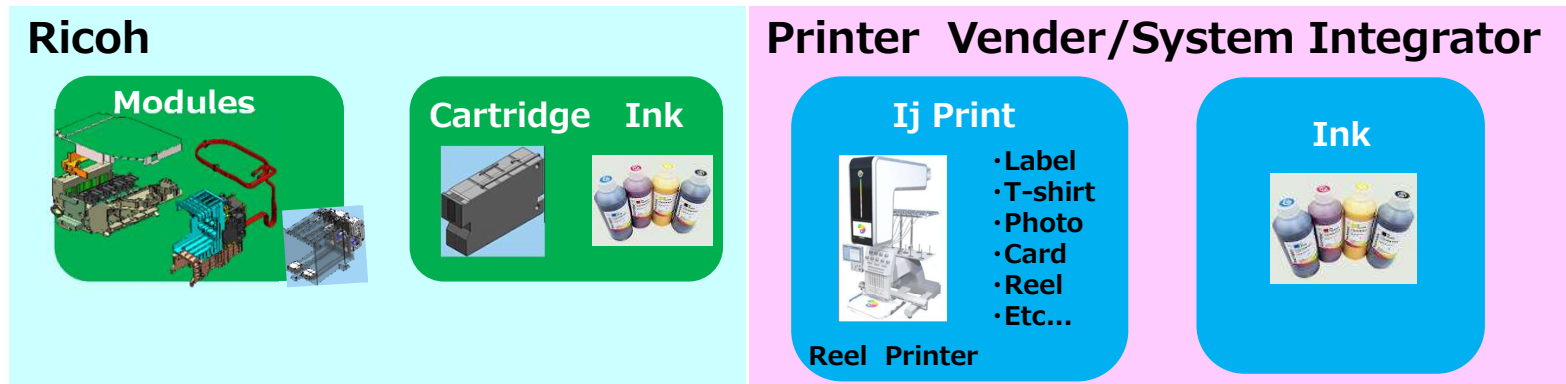
\*2:Inkjet engines are related to ink and media transport unit

\*3:Ink has been commercialized by Ricoh or 3<sup>rd</sup> party

# Our Business model

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◆ Ricoh provides Key modules which make up the inkjet printer, empty cartridges and ink.



※Customer can choice Ricoh's ink and customer's ink.

※Ink material test service for our print head is available.

※Ink filling service for our cartridge is available.

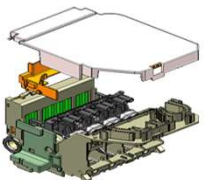
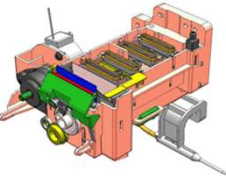
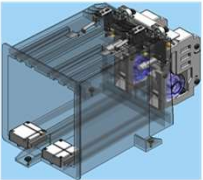

※Ricoh ink cartridge have ID chip to manage data with high level encrypted.

# Product: Example of our modules

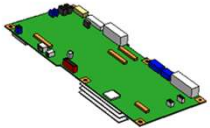


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## ◆ Our various modules and their features

### A.Head Carrier/Maintenance/Ink Supply Unit

Module	Illustration	Comment
Head Carriage Unit		4-head configuration. Water system head 1200dpi
Maintenance Unit		Head capping, wiper configuration.
Ink Supply Unit / Cartridge Holder (Single pump)		Selectable(4-color or 6color)
Ink		Water based ink

### B. Board

Module	Illustration	Comment
Controller Board & Firmware		EngineControl software configuration
Serial I/F Board		EngineControl and Media transfer Unit Interface
Right Waste ink collector unit		Same parts as GXe5500

### C.PSU Other

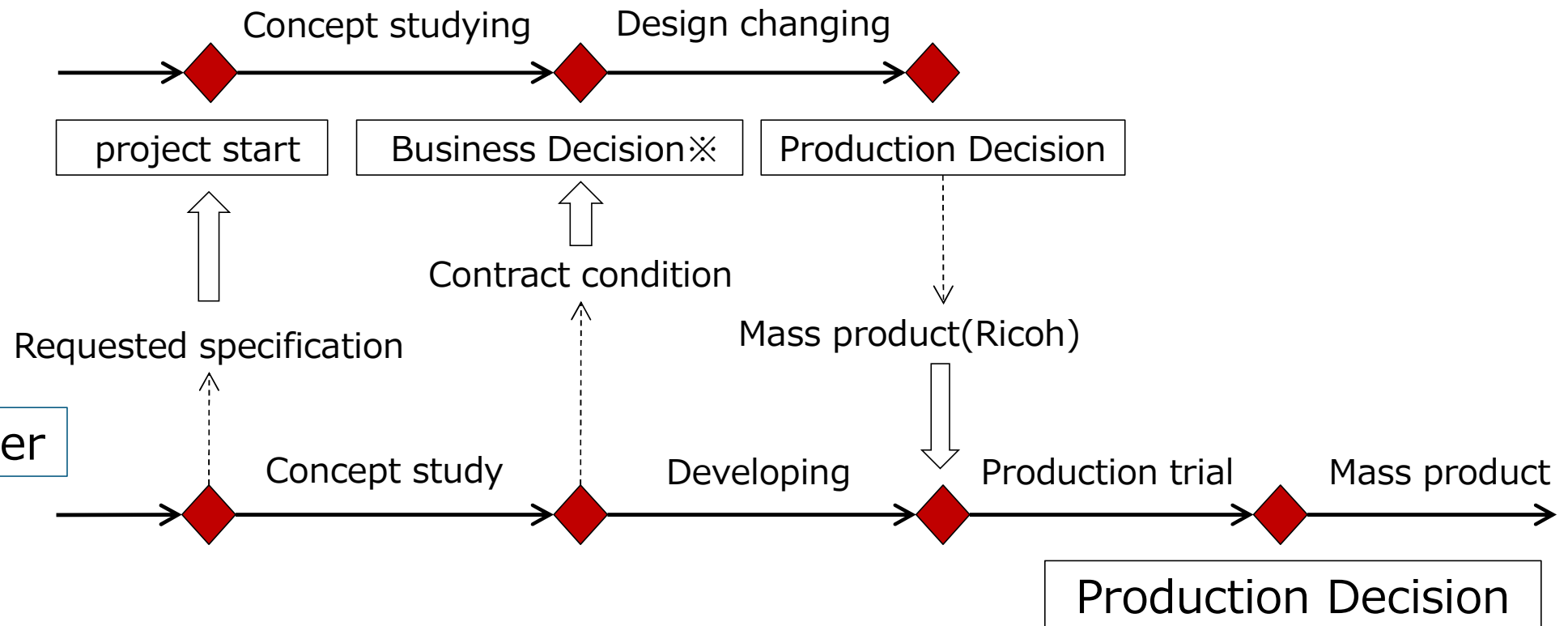
Module	Illustration	Comment
NIC		Same parts as GXe5500 Network Interface card
ACTUATOR UNIT:VALVE:ASSY		Same parts as GXe5500 Head Air Open Unit
Pressure: Roller: A'ssy		Same parts as GXe5500 Carriage Drive roller unit
Left Waste ink collector unit		Same parts as GXe5500
PSU		Same parts as GXe5500

# Typical Project plan

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※Business Decision ; After both company agree with the specification and dealing condition , We sign the development contract.

Ricoh



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