

Trends in Digital Print since DRUPA 2016

Stephen Palmer

Ricoh, Czech Republic and
Slovakia

PolyGrafikUm Conference
Prague

11th June 2019

RICOH
imagine. change.





Stephen Palmer



MANAGING DIRECTOR

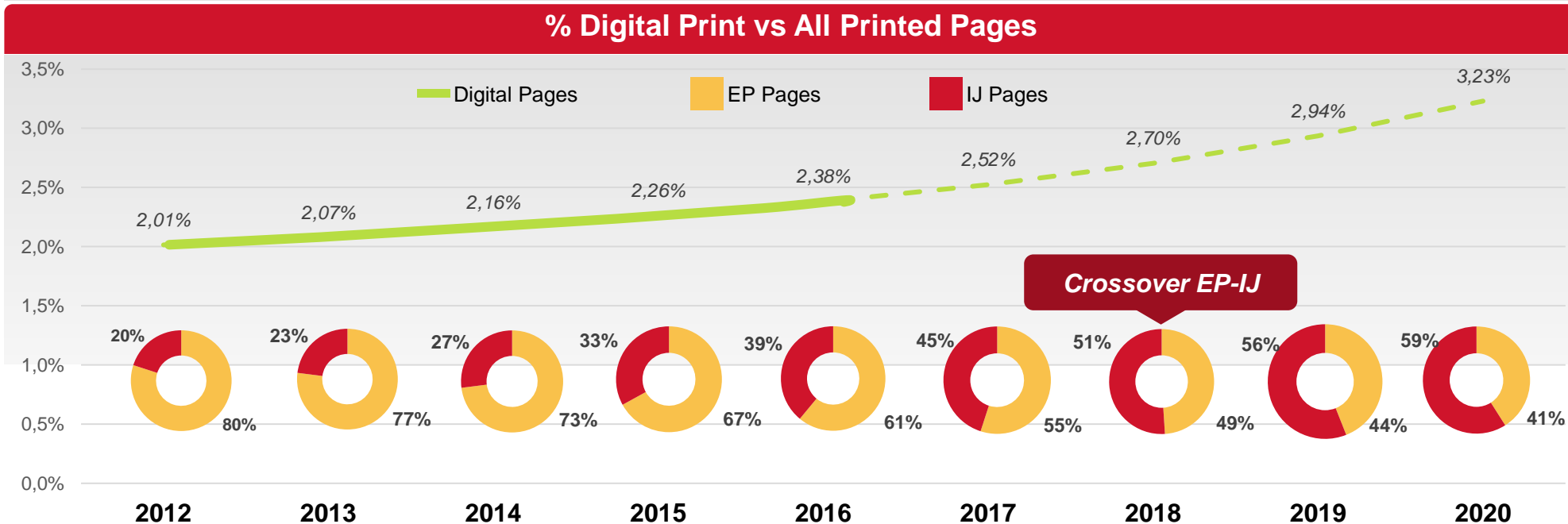
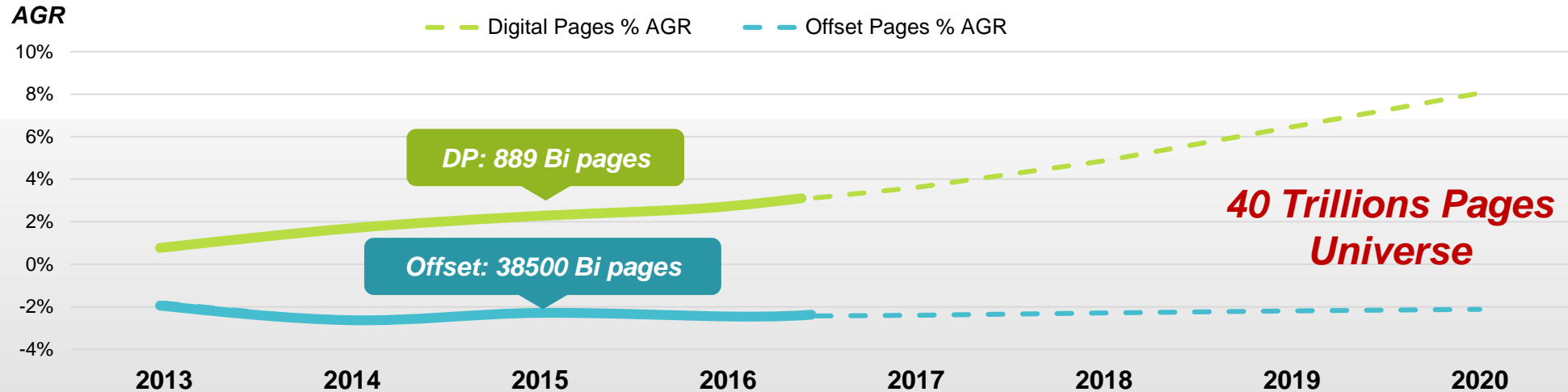
Ricoh, Czech Republic and Slovakia
Since December 2016

- ❑ **1985** – Eastman Kodak
- ❑ **1997** – Danka Europe
- ❑ **2007** – Ricoh Europe

Majority of career spent in Digital Print environment in various Sales, Marketing and General Management roles



Total Print Trends – Offset versus Digital



Electro-
Photographic
Cut Sheet
(EP)

RICOH
imagine. change.



THE POWER OF COLOUR

New Features in EP Cut Sheet since DRUPA

Superb Image
Quality and
Stability

Much higher
duty cycles

5th (and 6th)
Colour
Stations

Outstanding
Registration

Lower Cost –
Improved
TCO

Media
Versatility –
Stocks up to
450gsm

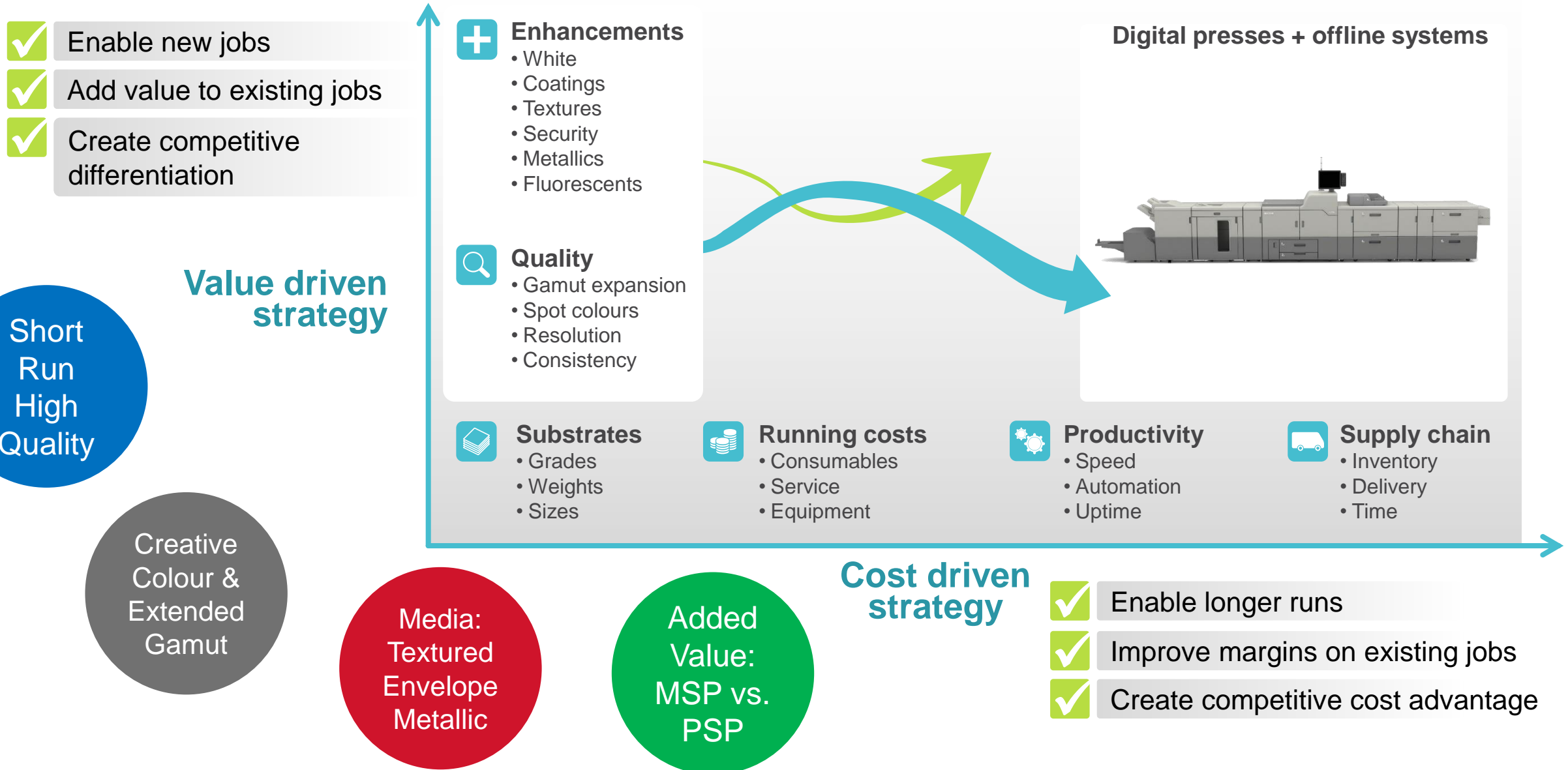
Long Sheet
Feed “Heavy
Production”

More Finishing
and Output
Options





Value and cost driven strategies





Digital Print Enhancement techniques

RICOH
imagine. change.



Spot colour/
gamut expansion



Metallic



Fluorescent



White



Foil



Security



Textured



Coatings



Continuous
Feed
Inkjet
(CF)

RICOH
imagine. change.





New Features in CF Inkjet since DRUPA

Litho
comparable
quality

Higher speeds
(150m per
minute)

Much
lower
TCO

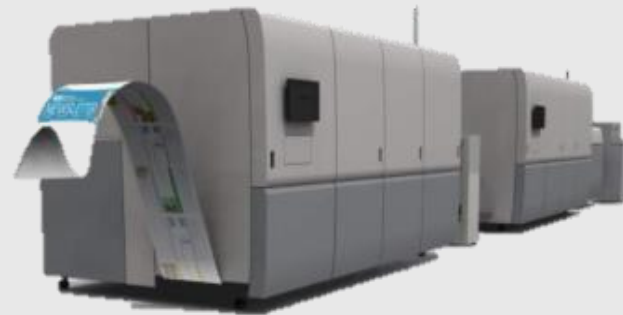
Workflow
Integration &
Automation

No need for
Pre or Post
coat

No need for
External
Dryers

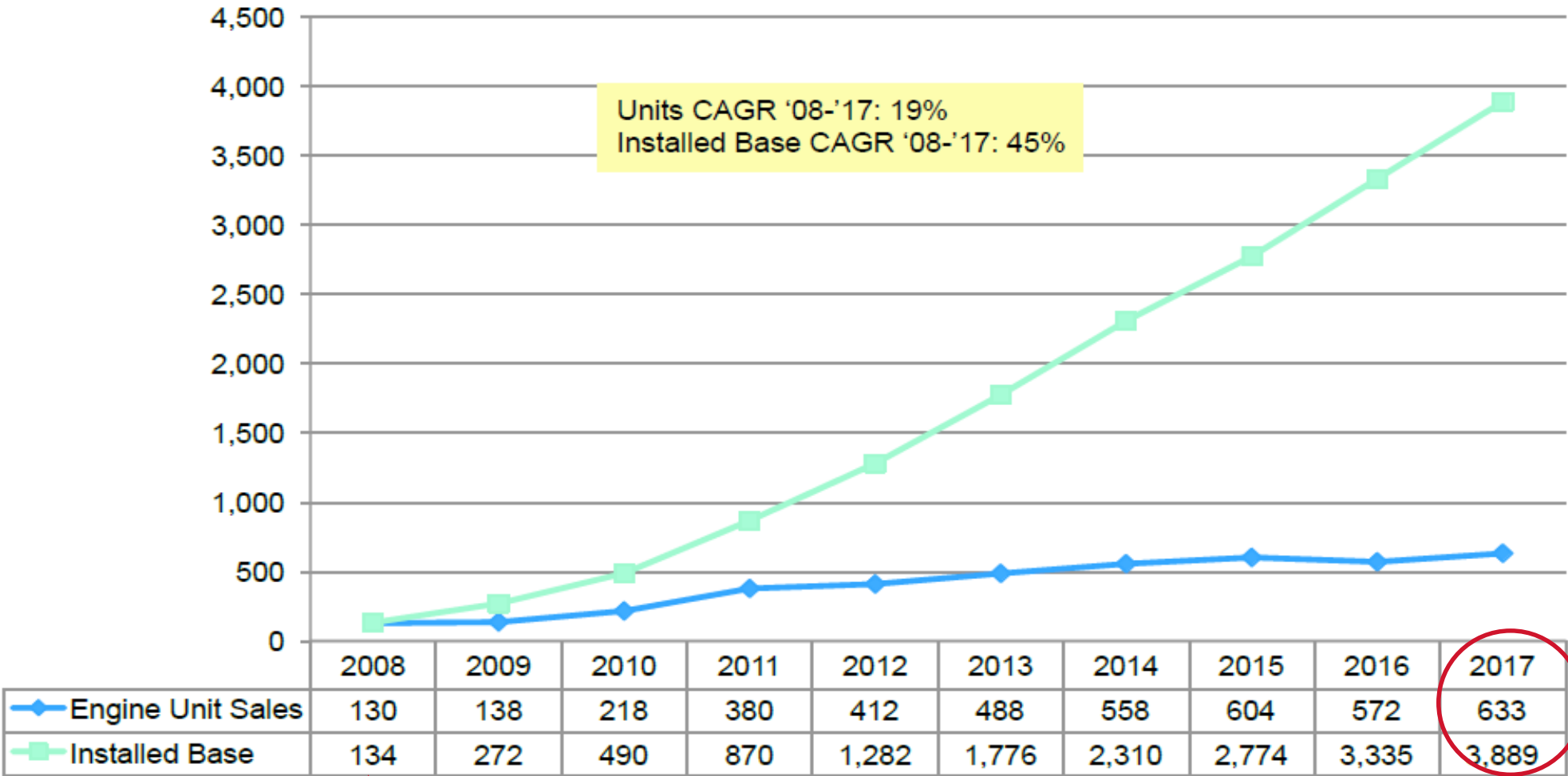
Ability to
control image
quality and
cost

More Finishing
and Output
options





Growth in CF Inkjet Placements

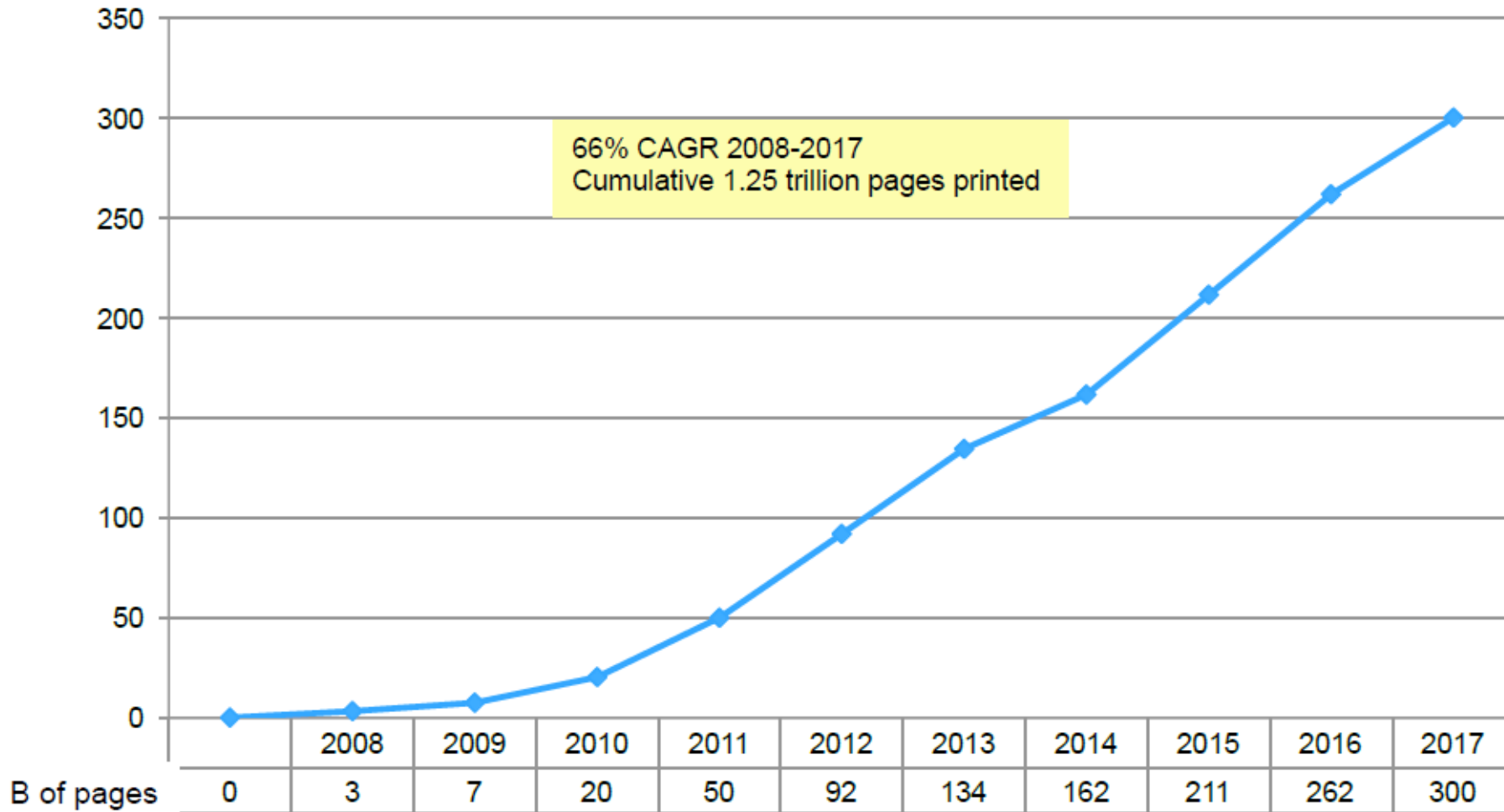


X 29 !!!

Source: IT strategies
Regions: WW
Period 2008-2017



Growth in CF Inkjet Output



*Strictly comparing offset printed transaction, direct mail, and book pages (low ink coverage), inkjet technology has captured about **20%** of the offset printed pages in those applications to date, worldwide*

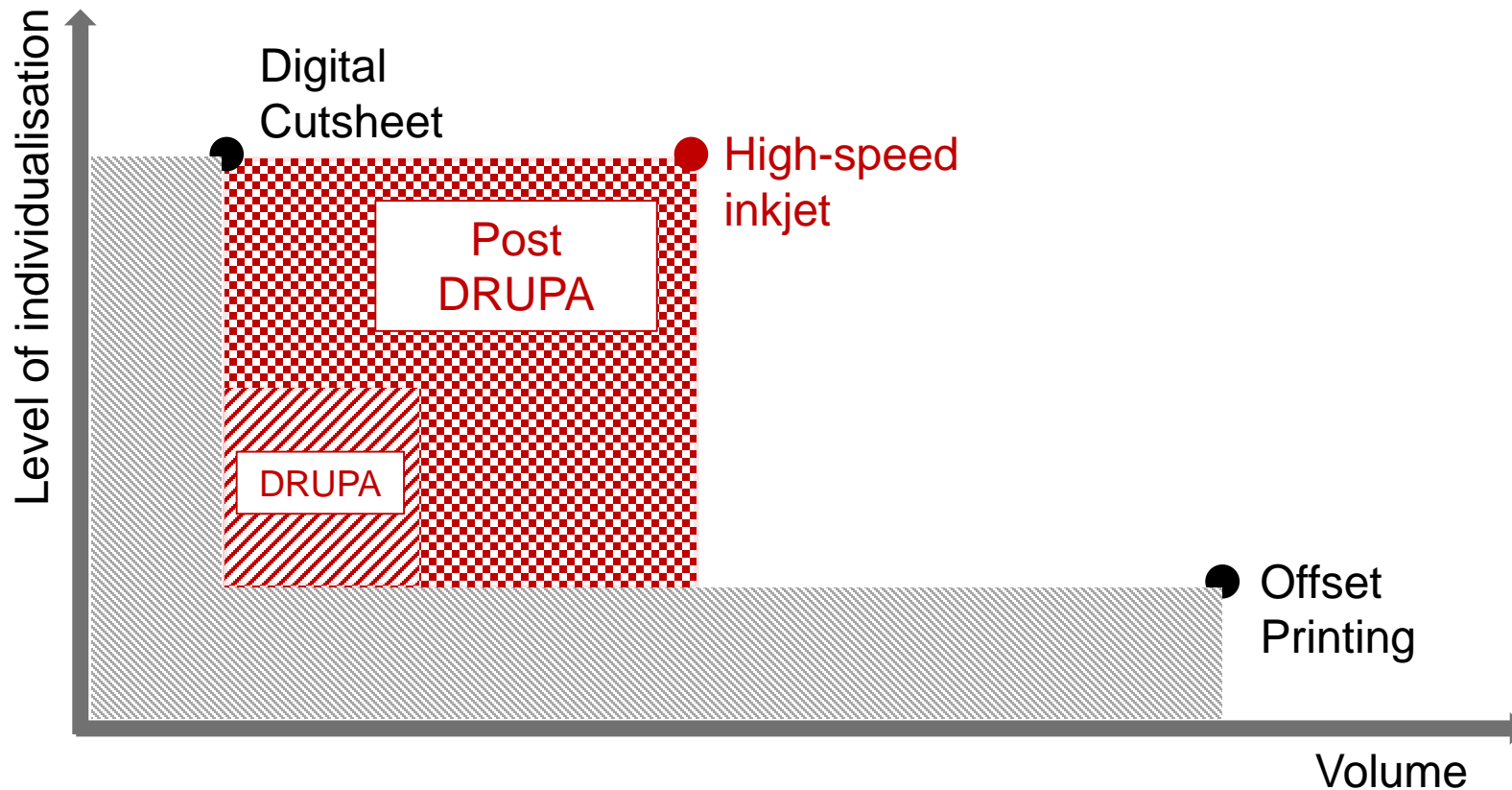
*⇒ Lots of room to GROW
⇒ CFIJ productivity up, running cost down*

Source: IT strategies
Regions: WW
Period: 2008-2017
Page: Letter simplex



Where are the Opportunities for Growth in Inkjet?

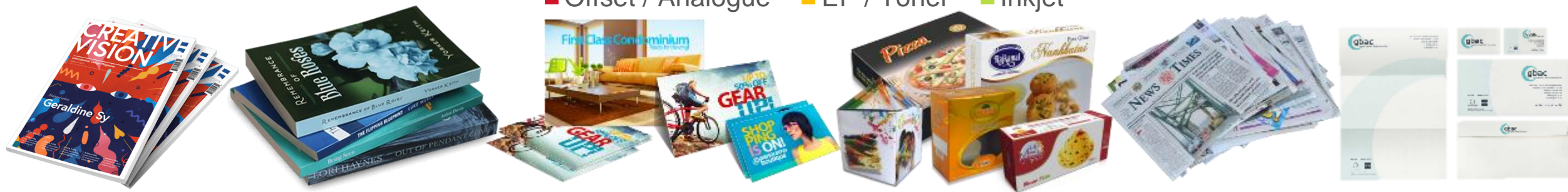
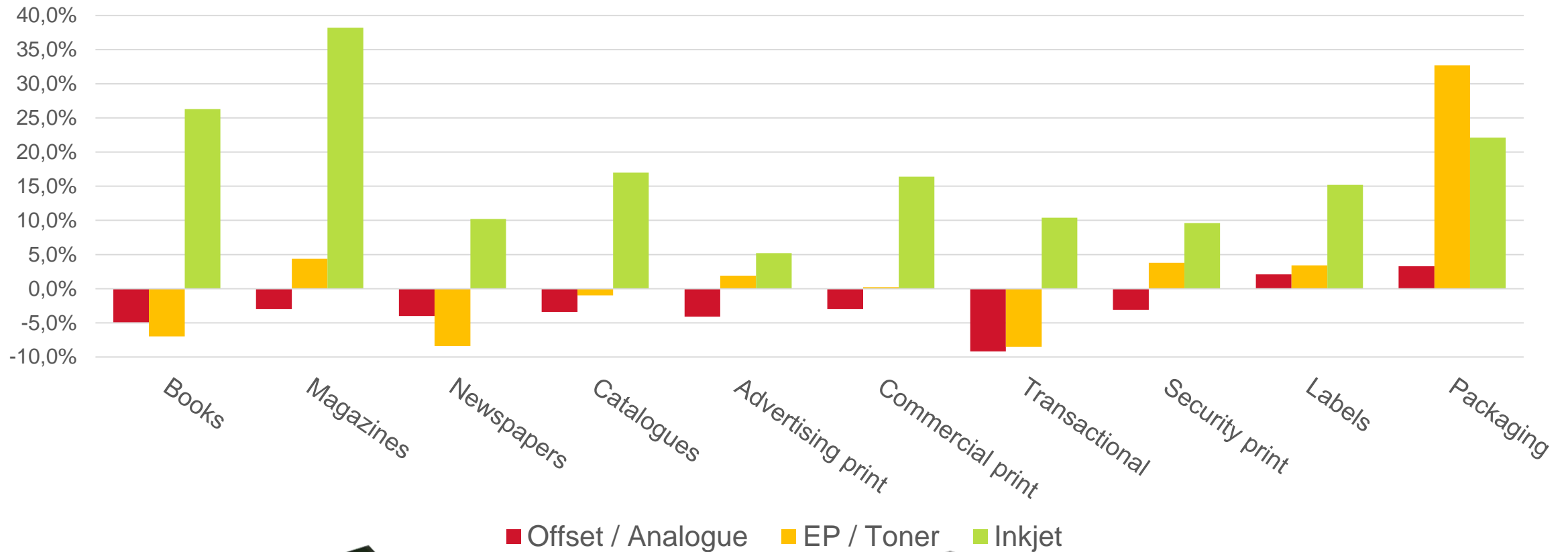
- Higher Speed combines volume with ability to customise





Colour Inkjet Growth Sectors

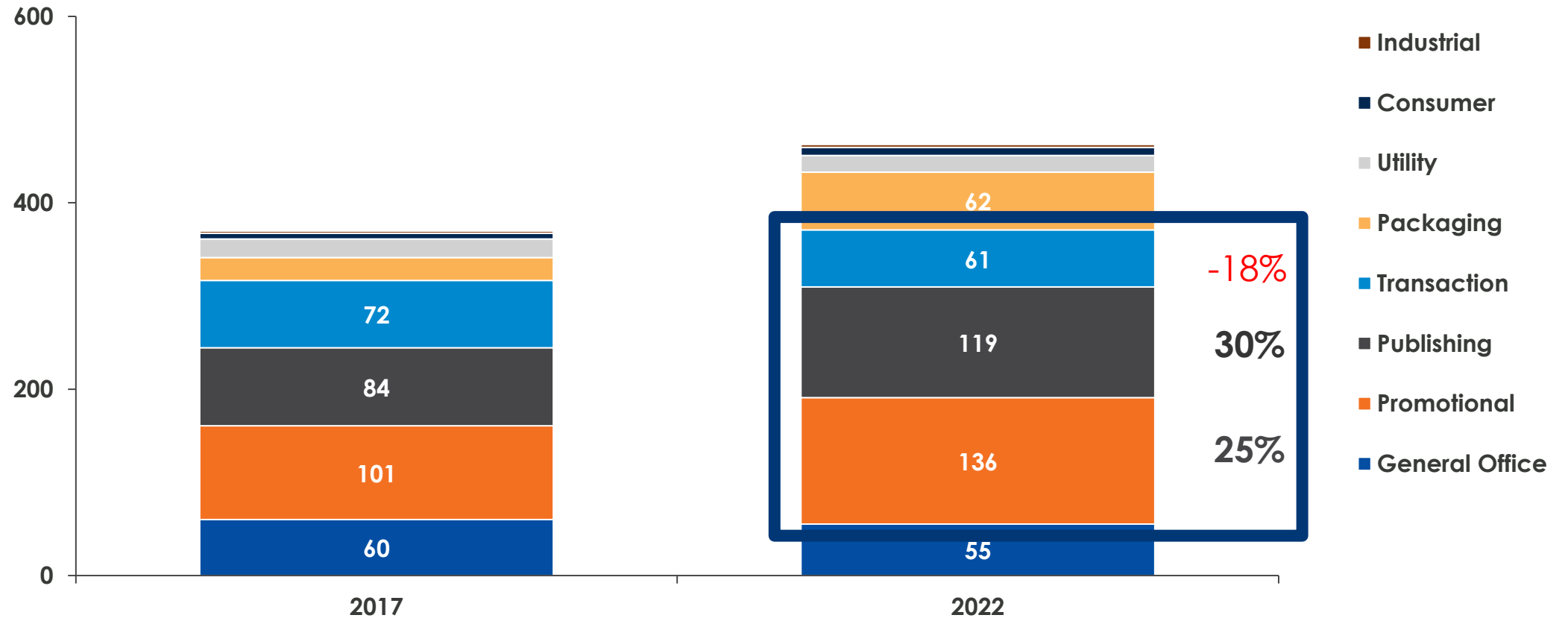
Global CAGR 2017





Digital Growth / Decline by Application

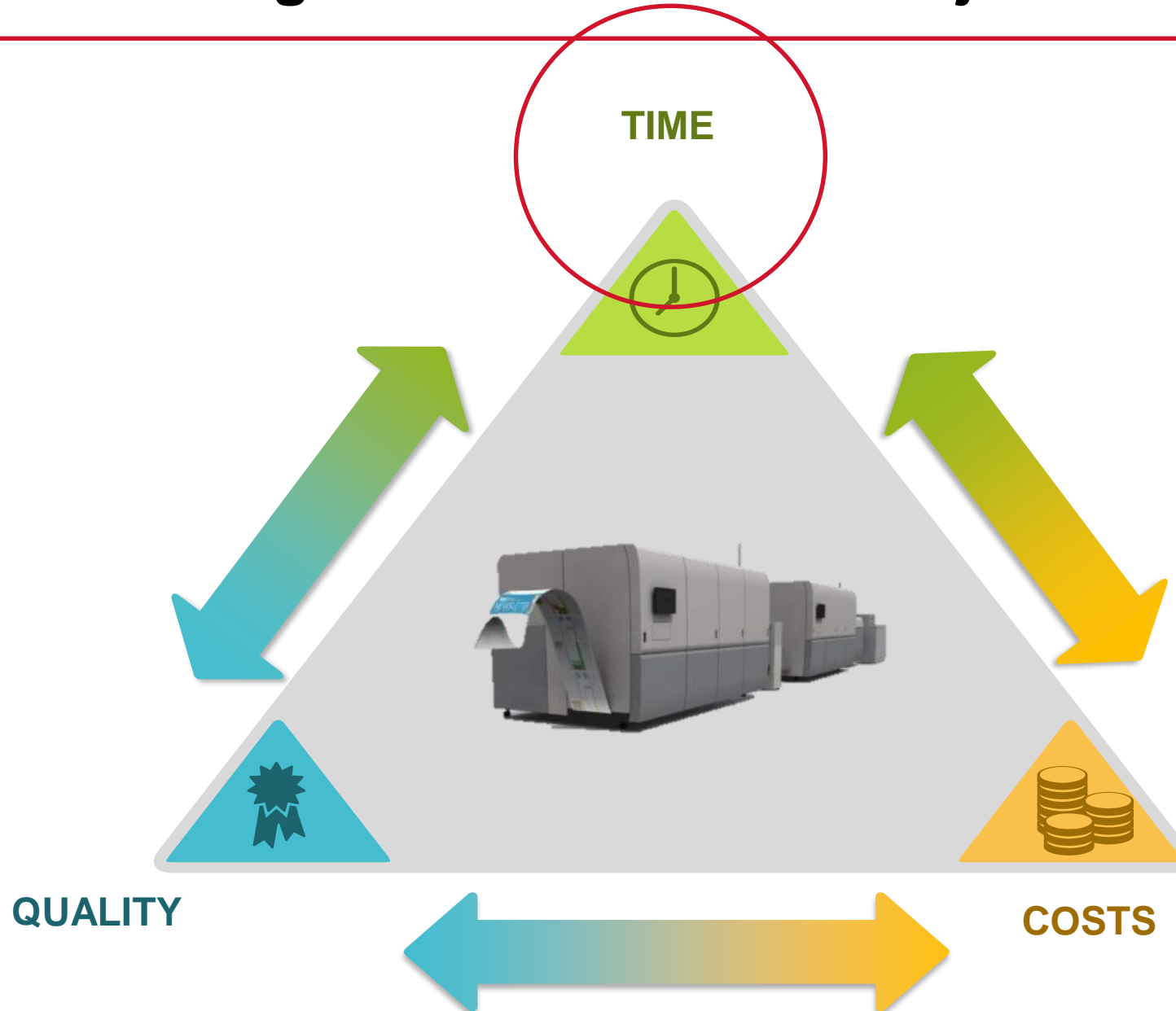
Billions of Impressions (A4)



Source: InfoTrends, Western Europe Digital Production Printing Application Forecast 2017-2022



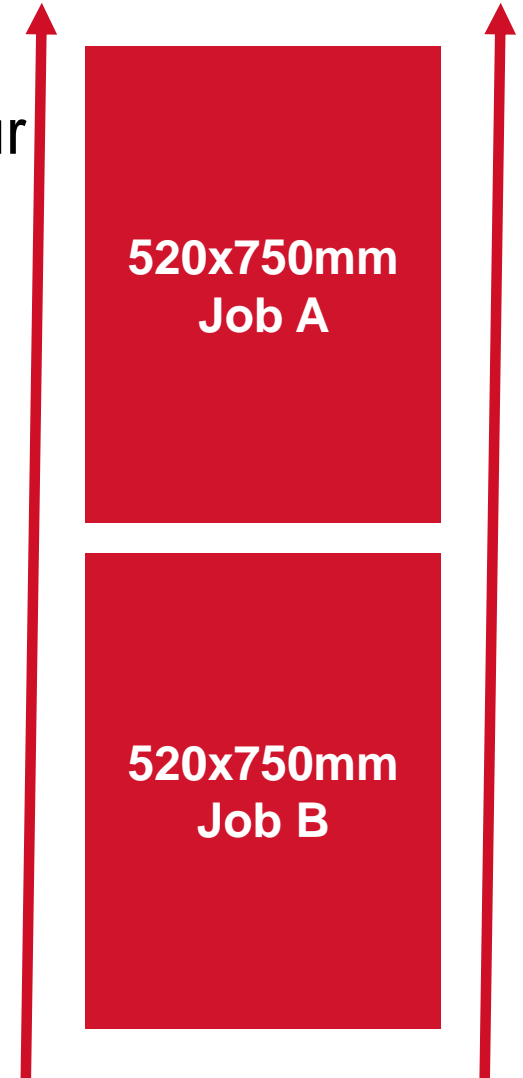
What is Driving the Trend towards Inkjet?





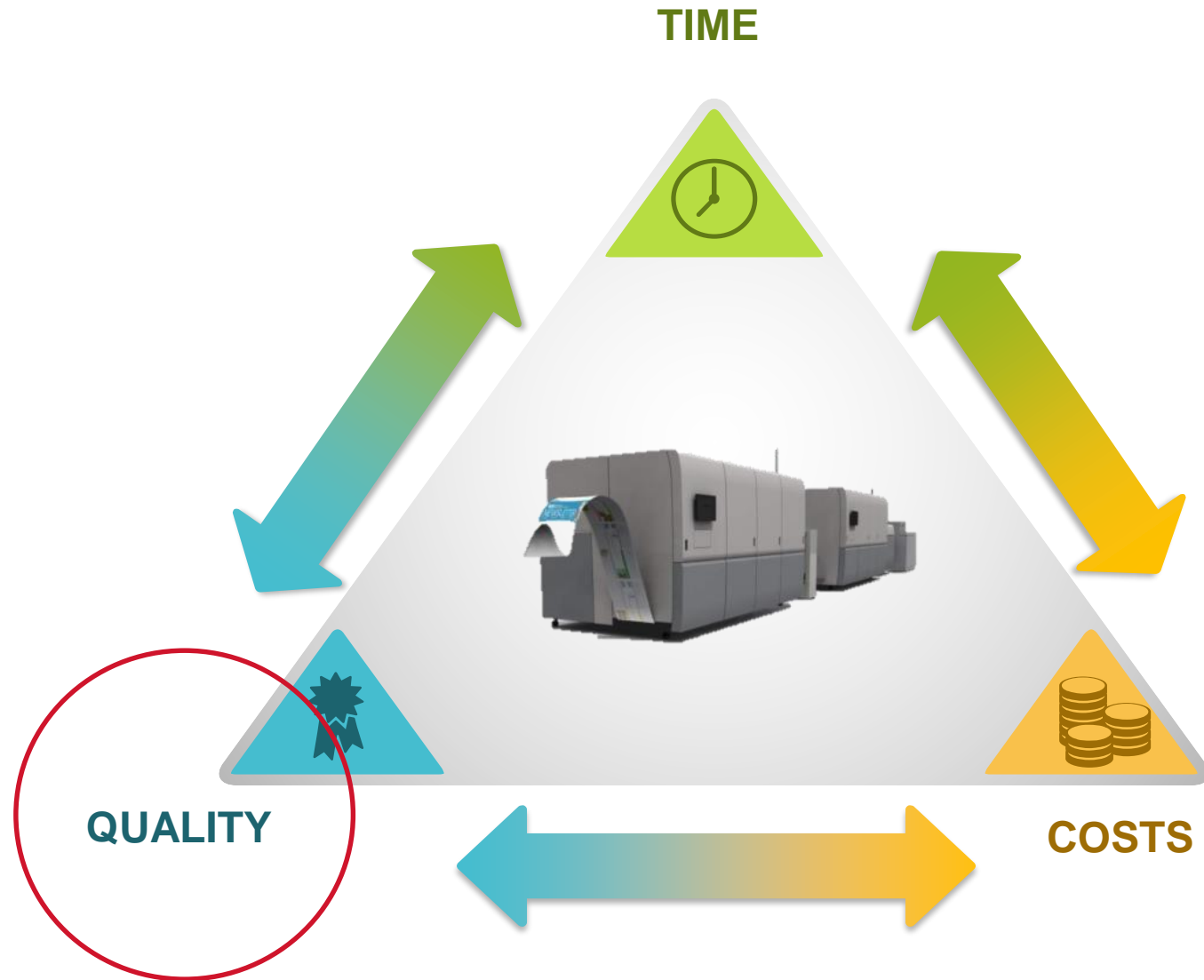
Shortening production time

- 150m/min is the same as 12,000 B2 perfected sheets per hour
- Savings to be made on set-up costs
 - No plates or make-ready
 - Jobs printed in batches
- Finishing that can be simplified
- Create finished product as single process
 - Cutting, Folding, Gluing, Perforating
 - Bingo tickets is great example





Production Printing: TQC figures





Improving print quality

RICOH
imagine. change.

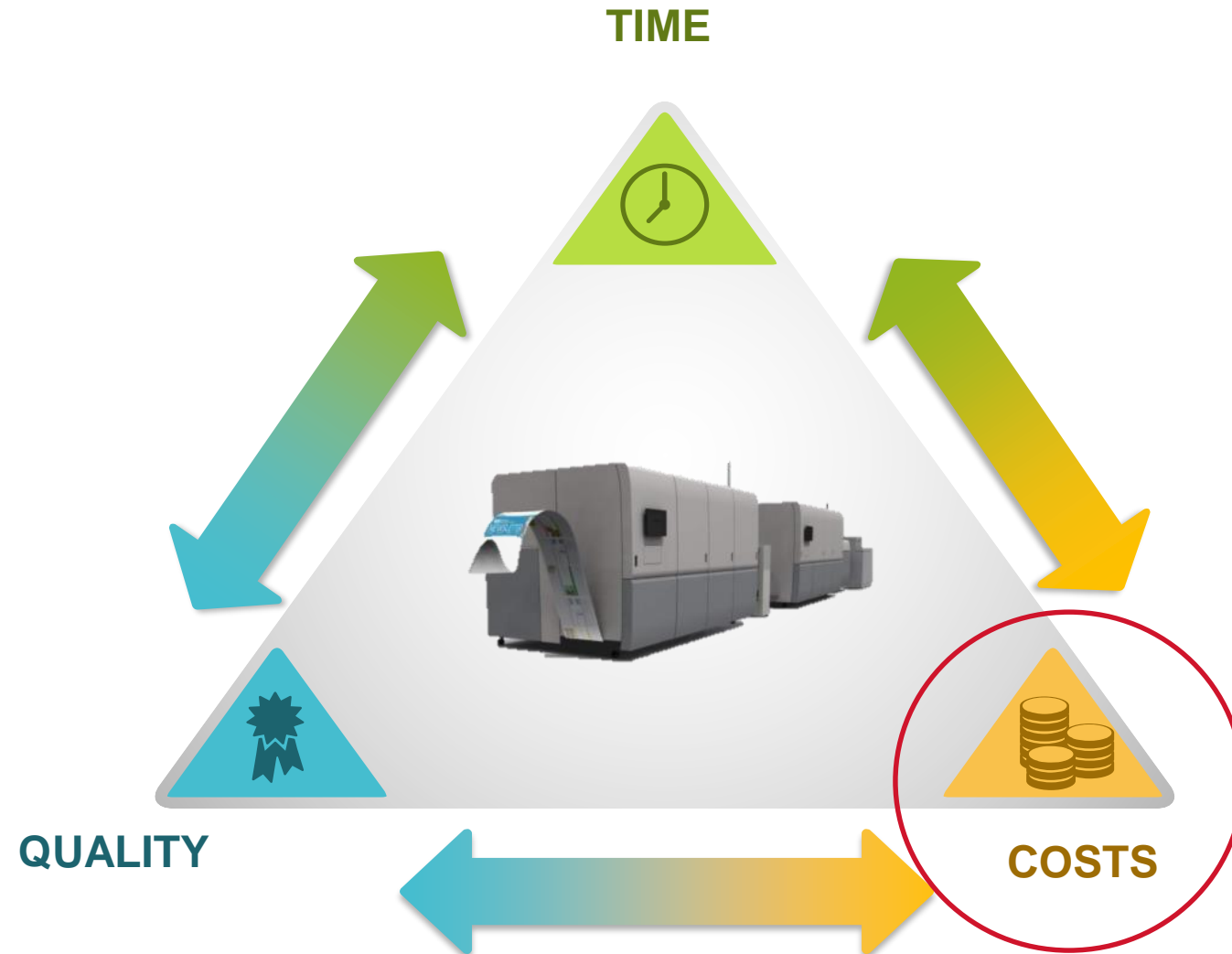
- New ink technology
- Capable of printing direct to litho stock
- All printed on coated papers





Production Printing: TQC figures

RICOH
imagine. change.

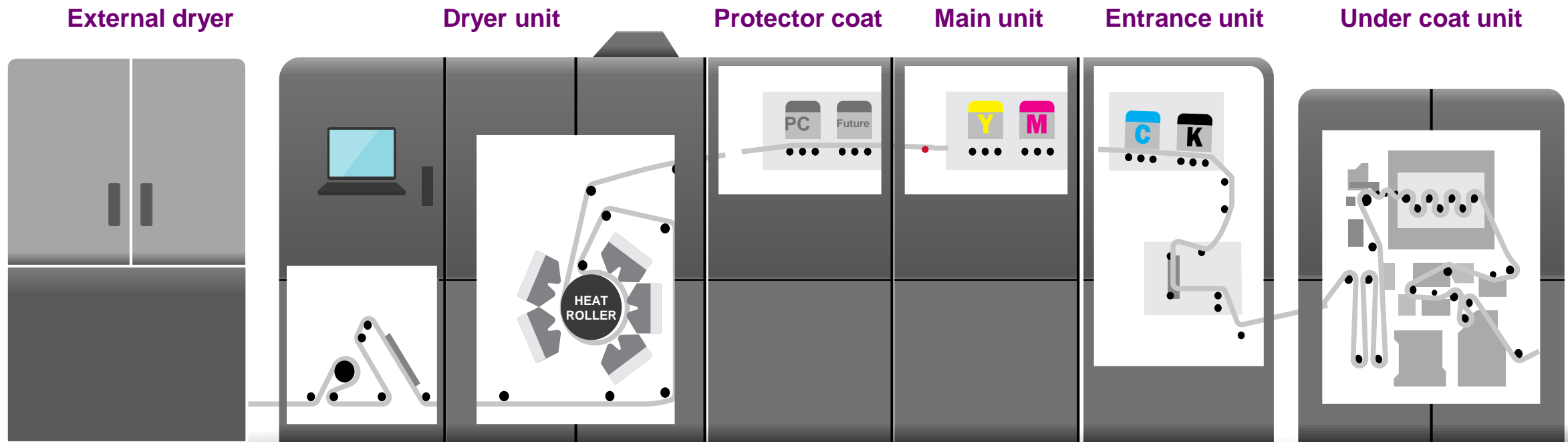




Ricoh Pro™ VC60000 breakthrough product in 2014

RICOH
imagine. change.

POD configuration for offset replacement limited to 50m on coated papers
(666 pages per minute) – approx. 4 x speed of toner



Capital cost = €3 per 1000 pages



Ricoh ProTM VC70000 breakthrough product in 2019

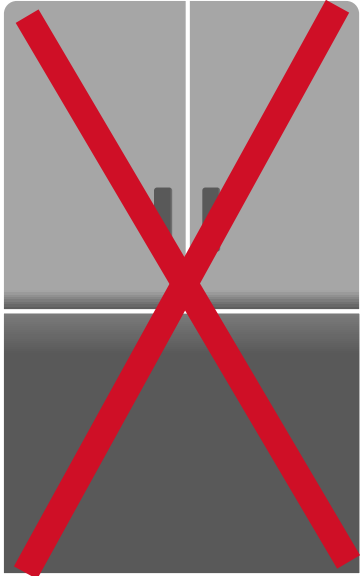
RICOH
imagine. change.

**Ricoh ProTM
VC70000**

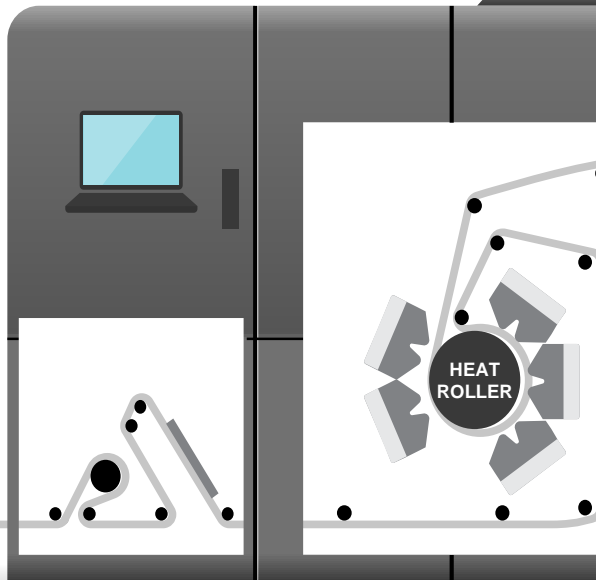
Offset replacement full speed (150m) on a wide
range of offset papers (2000 pages per minute)

NEW INK

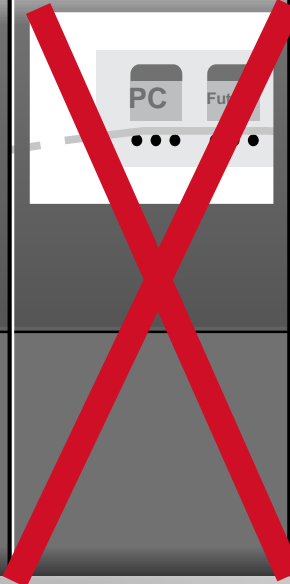
External dryer



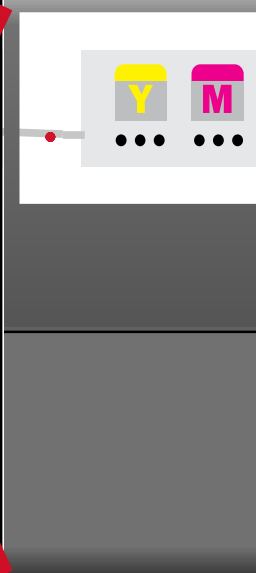
Dryer unit



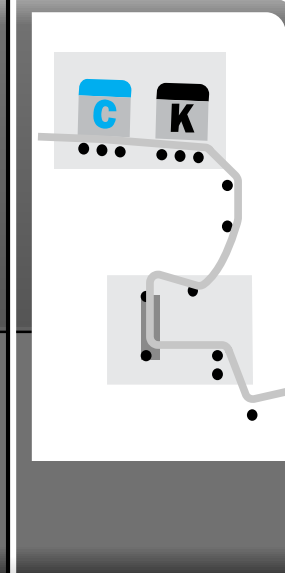
Protector coat



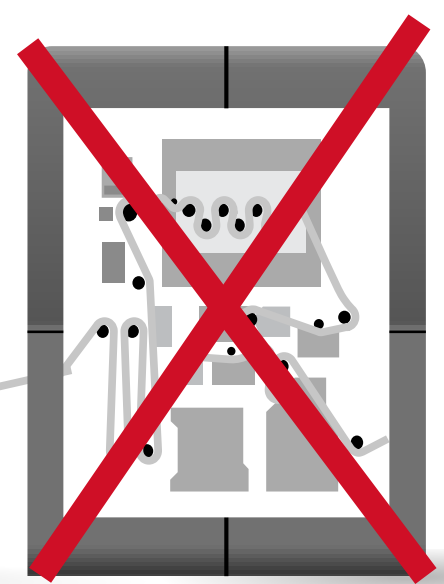
Main unit



Entrance unit



Under coat unit

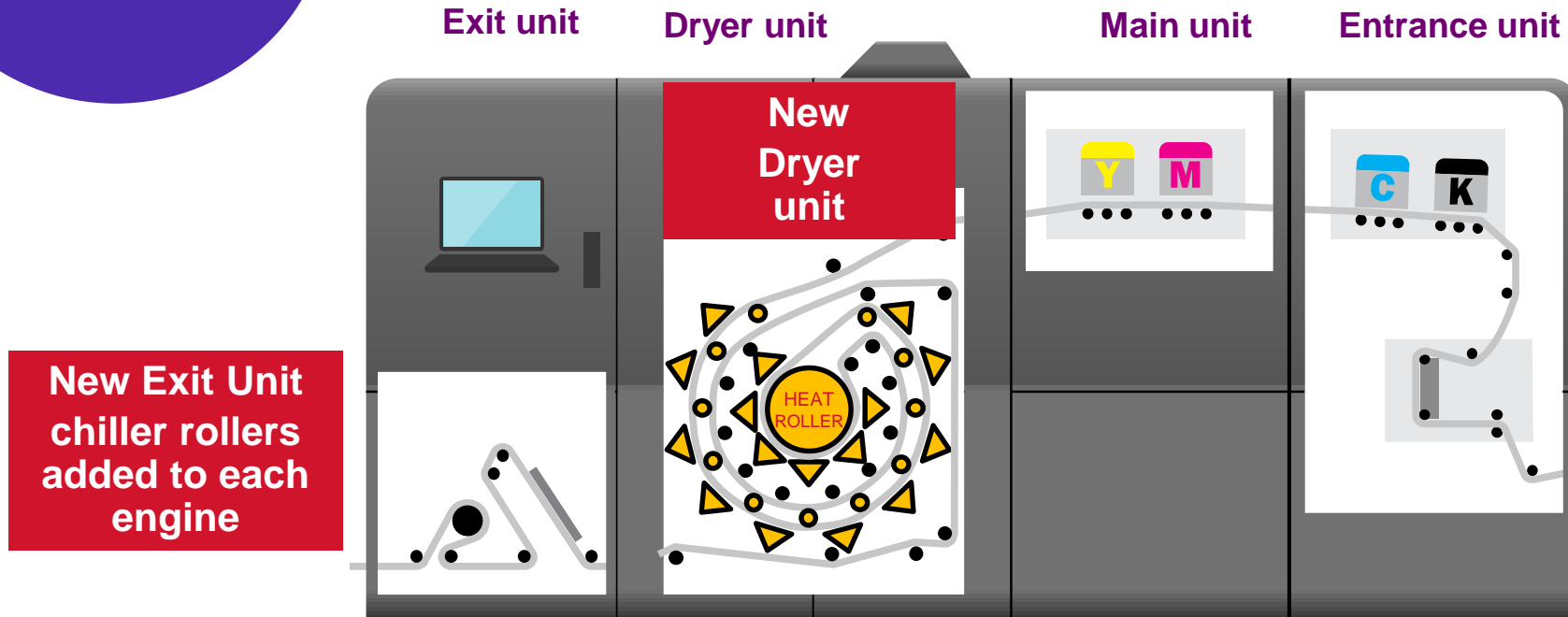




**Ricoh Pro™
VC70000**

Offset replacement full speed (150m) on a wide
range of offset papers (2000 pages per minute)

NEW INK



Capital cost = €1 per 1,000 pages (67% reduction)

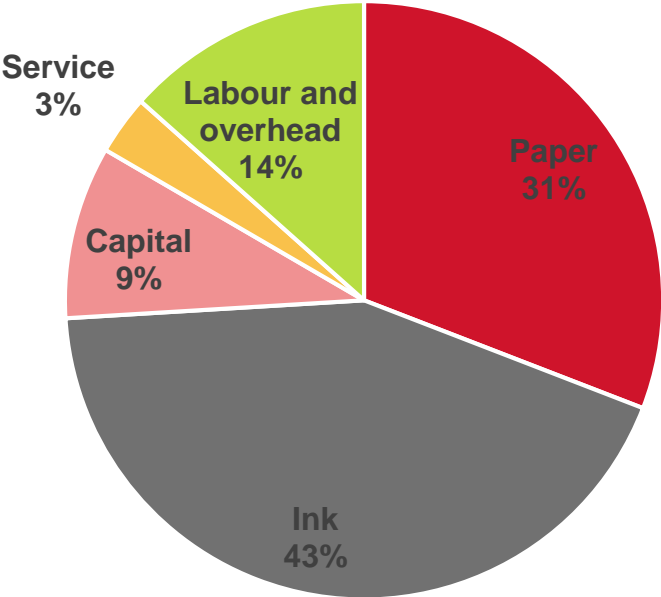


Both machines running 65% x 2 shifts

*Includes 15% profit

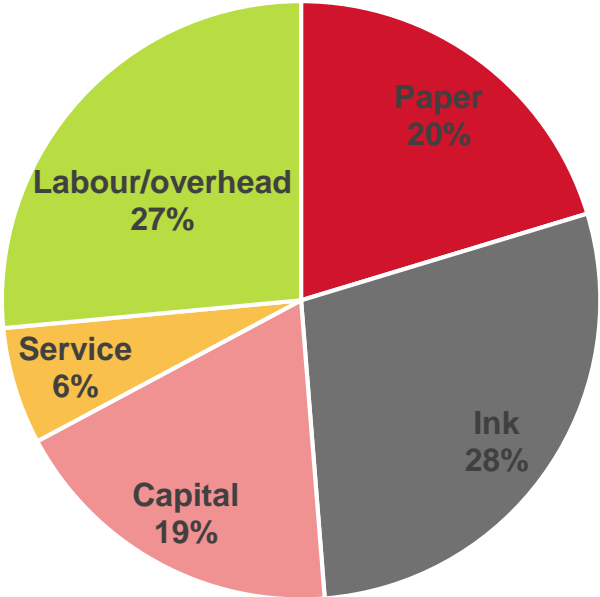
VC70000 150m = €14.00* per 1,000 pages

50m POD total = €19.30* per 1,000 pages



■ Paper ■ Ink ■ Capital ■ Service ■ Labour and overhead

26 million pages per month



■ Paper ■ Ink ■ Capital ■ Service ■ Labour/overhead

9 million pages per month

Workflow Automation

RICOH
imagine. change.



Order

Planning

Pre-press

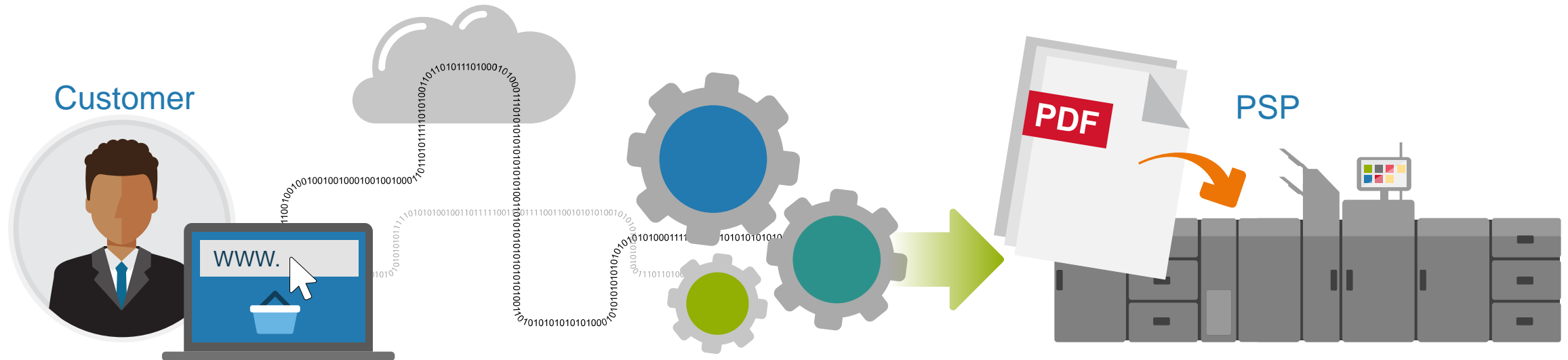
Press

Post-press delivery



The search for lights out automation

More and more jobs are received from the web where removing manual touch points is a key challenge...



Automation combined with the ability to customise the workflow for a PSP's exact requirement is key !

Two types of digital production investment

As a complementary solution to existing offset technology



Reduce costs



Produce complementary products

- ✓ Handle short run work / jobs not viable to run on offset
- ✓ Handle reprints of previous longer offset runs
- ✓ Proofing of jobs to be printed offset
- ✓ Handle elements / components of offset jobs (personalisation, covers, inserts *etc.*)

Produce specific digitally produced products



Online business

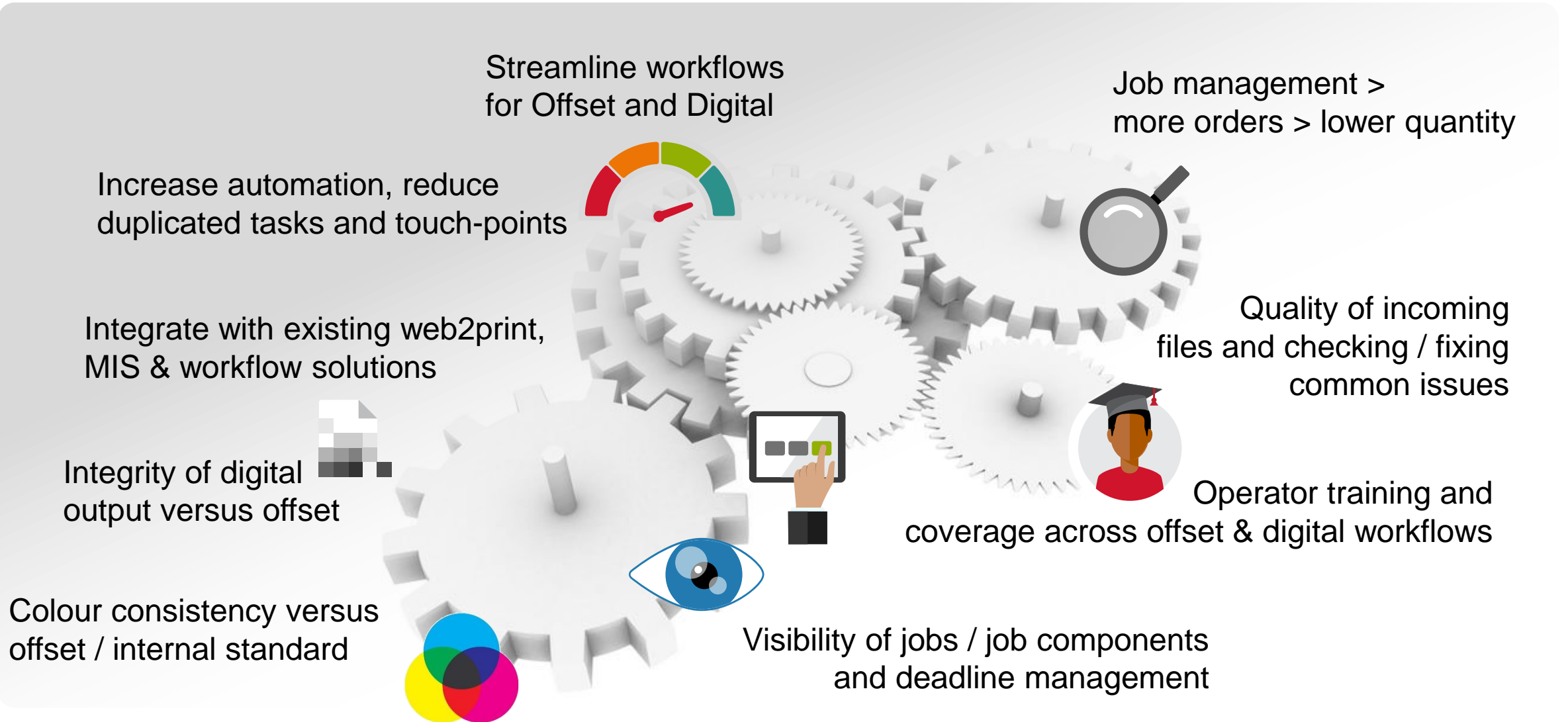


Connect new and existing clients

- ✓ Personalised products / Direct Mail
- ✓ Specialised media / substrates
- ✓ Digital print enhancement / 5th colour (neon, white, varnish *etc.*)
- ✓ Web2Print & online products (photobooks, business cards *etc.*)
- ✓ Automation & templated jobs is key !

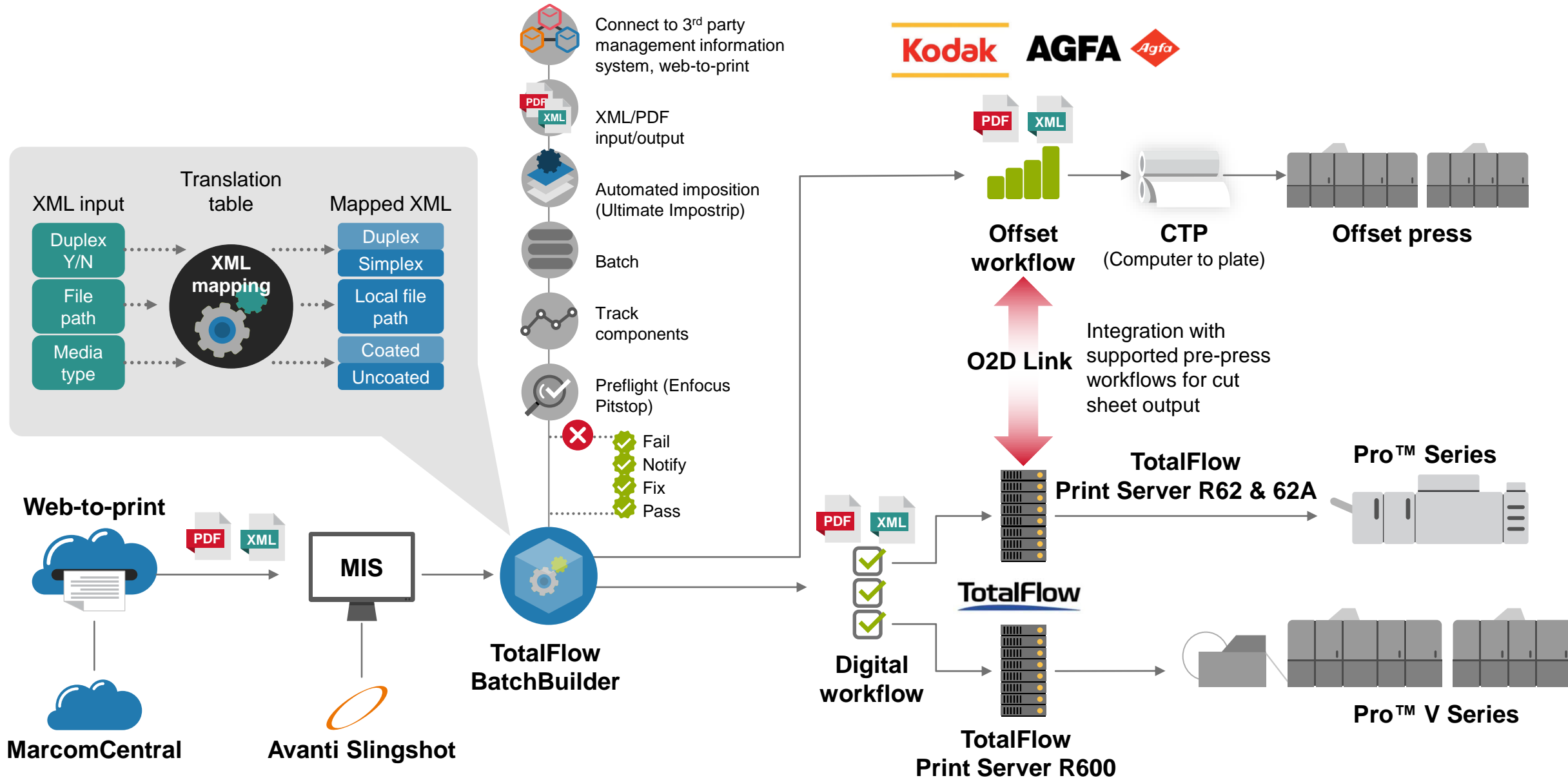


Workflow challenges





O2D workflow schematic (Commercial)





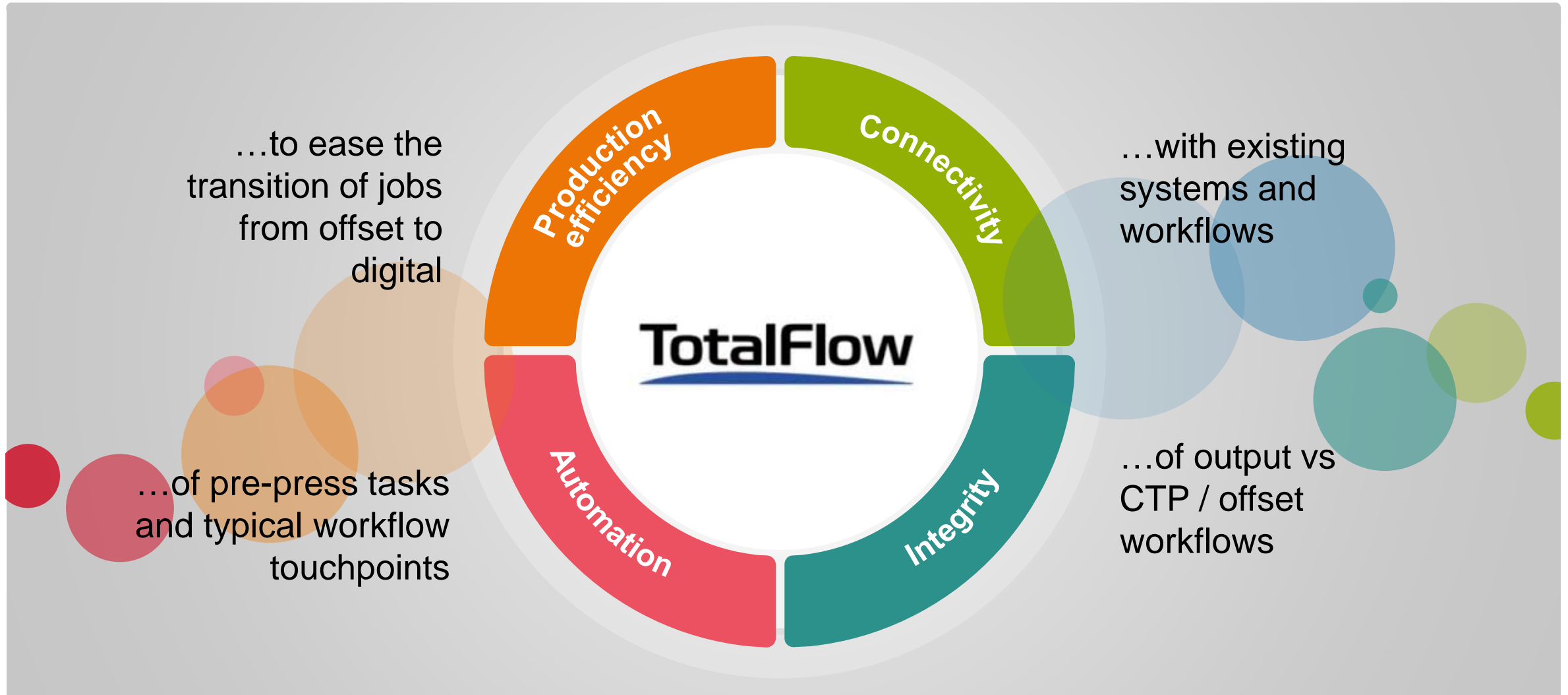
Intelligent print production – Summary

Benefits





Ricoh's TotalFlow workflow solutions



Thank You for
your Attention

RICOH
imagine. change.

POLIGRAKIKUM Conference
Prague

11th June 2019



RICOH
imagine. change.