



WhatTheyTh!nk

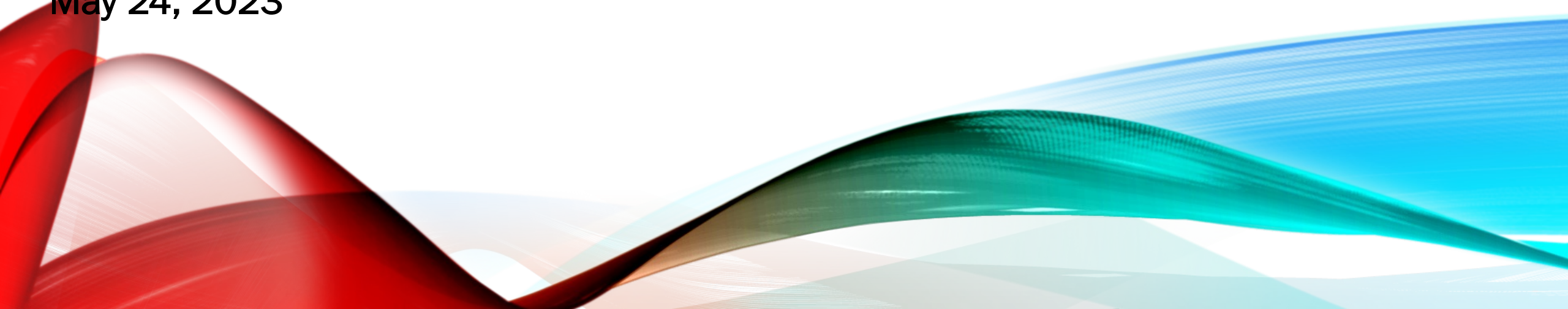
Technology Outlook Week

LunchNLearn Webinar Series

PACKAGING IS ESSENTIAL AND TRANSFORMING

David Zwang

May 24, 2023



GET THE MOST OUT OF THIS WEBINAR...

2

- Send us your questions during the webinar
 - Use the Q&A box instead of Chat box to ask questions
- Video and audio archive will be available later today along with PDF of slides



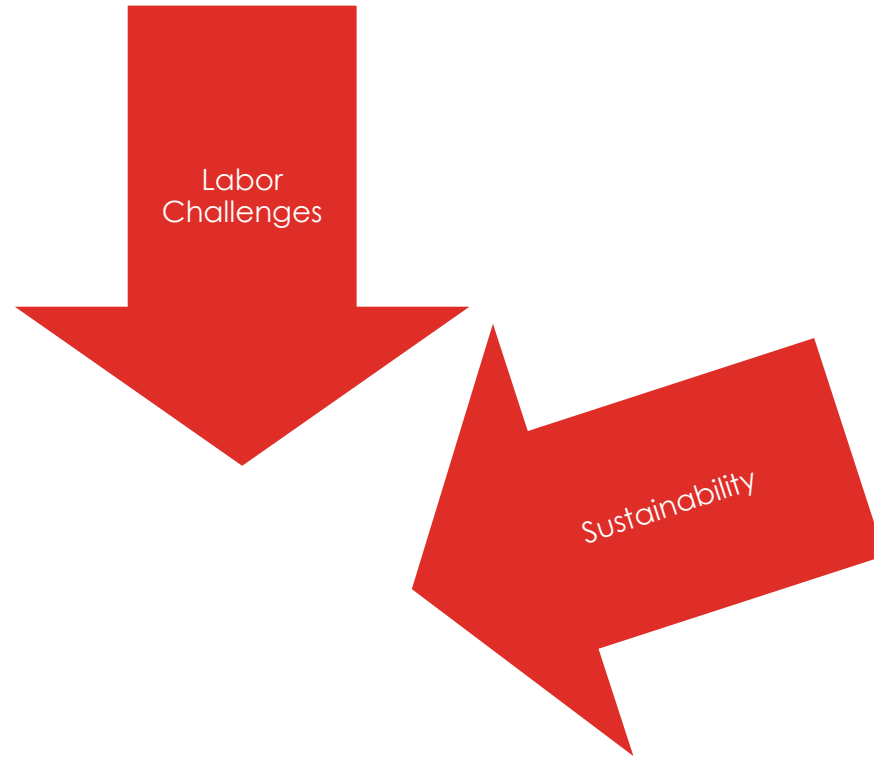
The Truepress Jet L350UV SAI Series from SCREEN – Flexo Speeds, Offset Quality, Unrivalled Digital Flexibility

- Stand-alone, In-Line or Hybrid
- Compact Footprint
- Offset print quality
- Speeds up to 60 meters/minute
- Wide substrate latitude, no priming or coating required
- Durable UV inks in CMYK plus white, orange, and blue
- Compliant with many global ink regulations
- Optional Low Migration Inks
- Achieves one-pass opacity on transparent materials
- Automatic head-cleaning
- Touchscreen operation
- Multiple job scheduling
- Only one operator needed for print and finishing
- Uptimes up to 90%

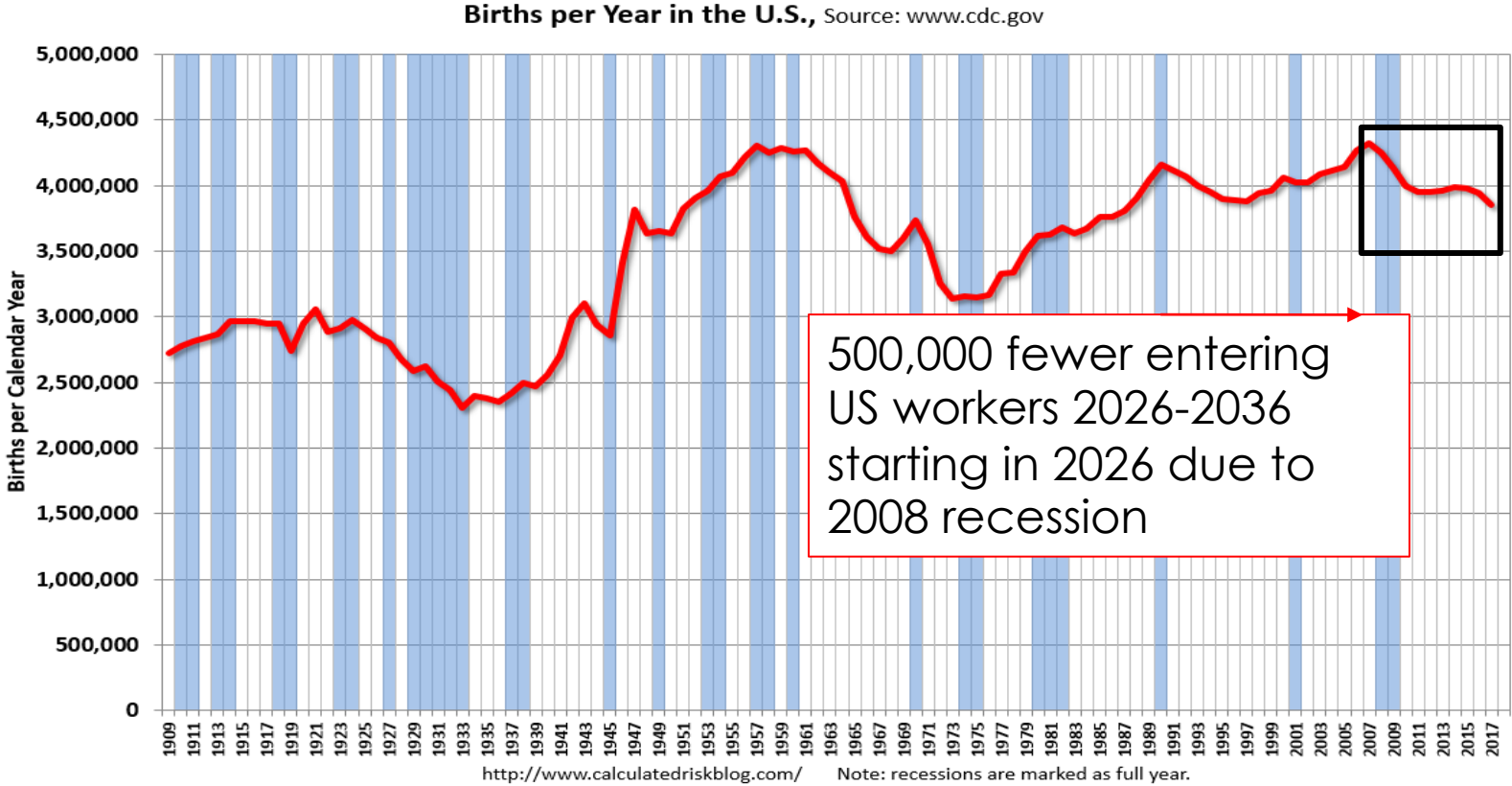


SCREEN

PACKAGING HAS OPPORTUNITIES AND CHALLENGES



LABOR: IT'S ABOUT TO GET WORSE...



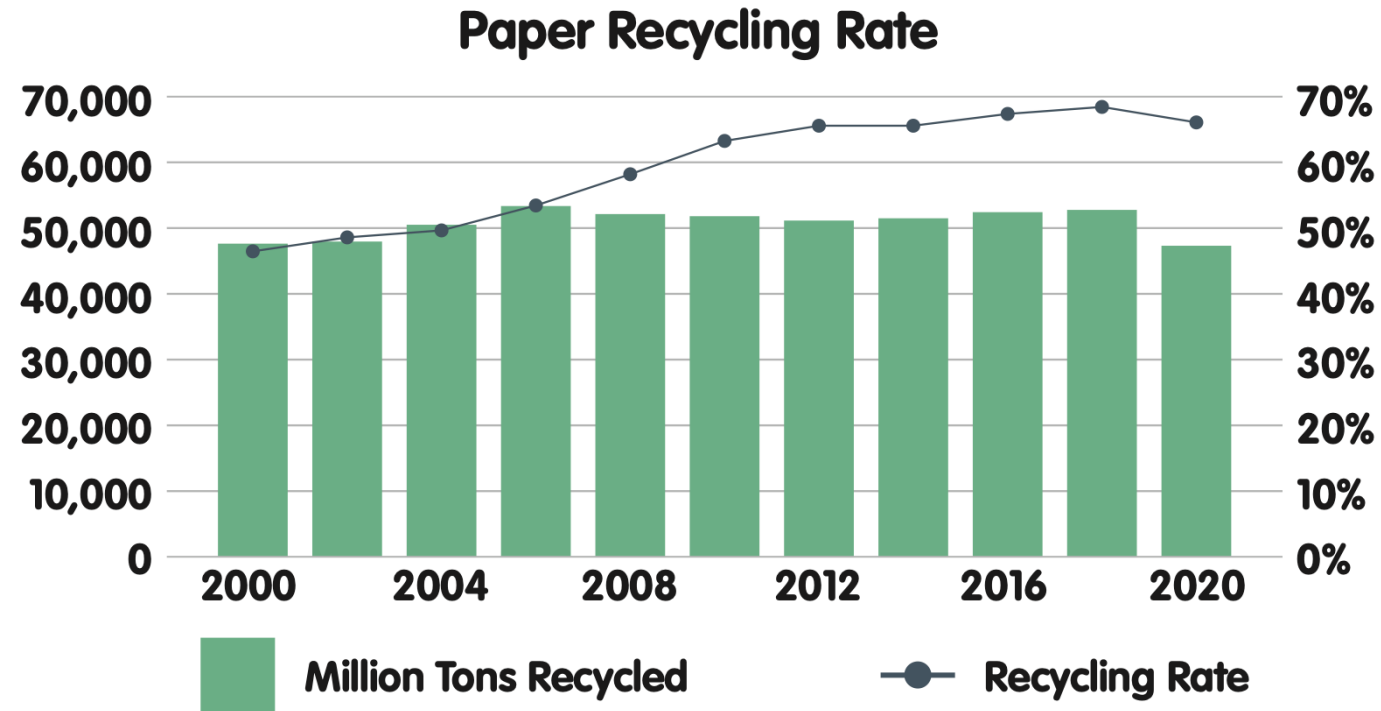
Additional challenge: Few apprenticeships in the print industry, little willingness to train for 2+ years, many options for “cleaner work operating environments” than print industry



THE LABOR WAGE WAR

SUSTAINABILITY

In 2020, the recovery rate for all paper and paper-based packaging used in the U.S. was 65.7%. Corrugated boxes had a recovery rate of 88.8%.



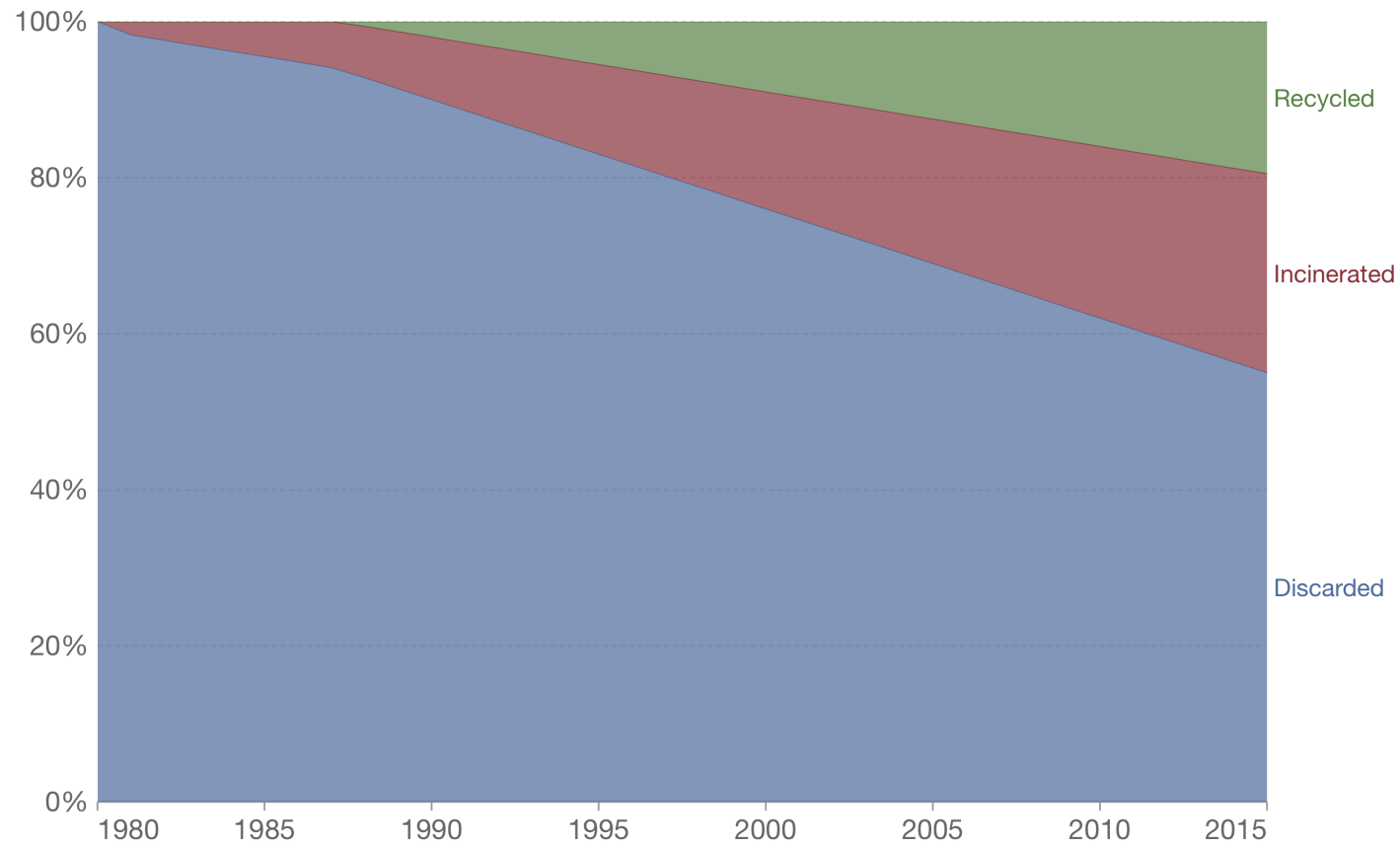
Source: American Forest and Paper Association (AF&PA)

SUSTAINABILITY

Global plastic waste by disposal, 1980 to 2015

Estimated share of global plastic waste by disposal method.

Our World
in Data

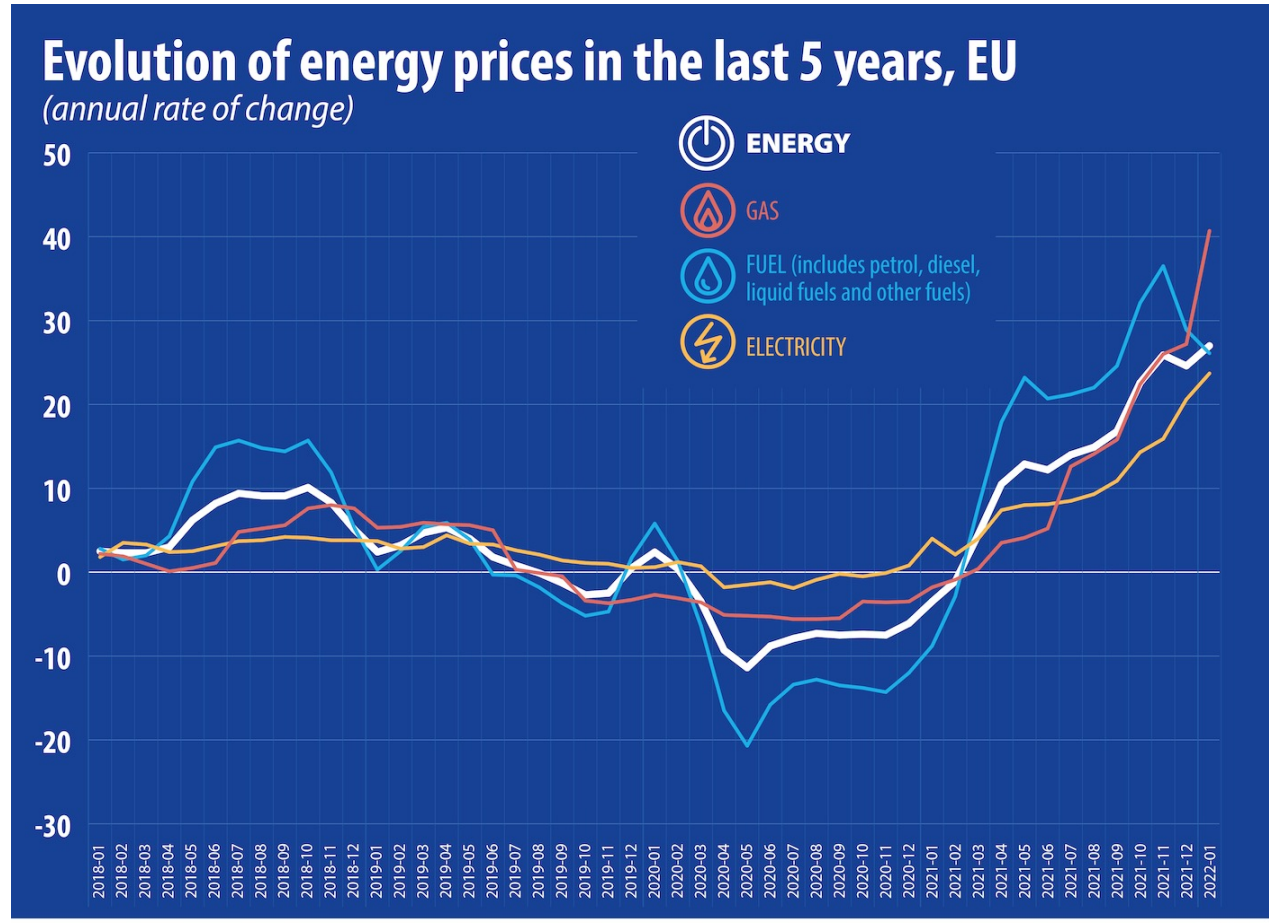


Source: Geyer et al. (2017)

OurWorldInData.org/plastic-pollution • CC BY

WhatTheyThink

ENERGY PRICES



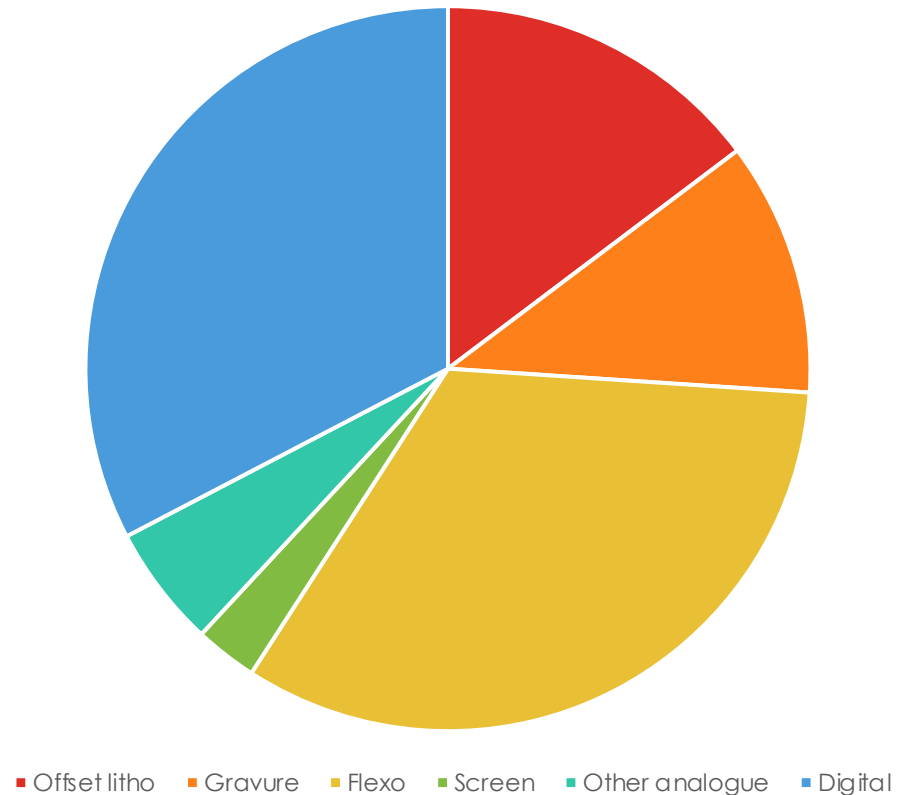
ec.europa.eu/eurostat



LABELS

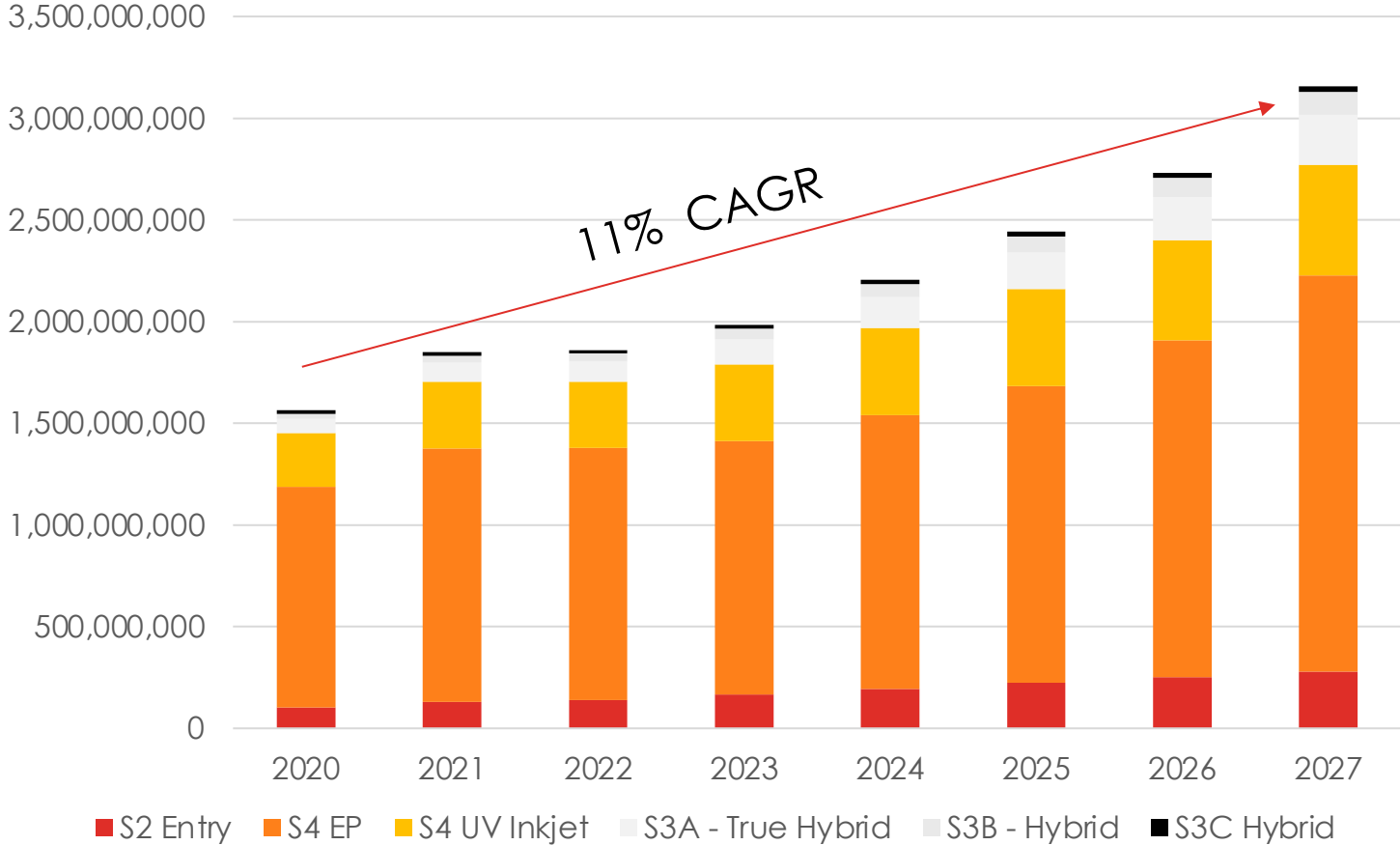
Projected Global Growth 13.41% 2022 - 2027

Relative Label Growth Rates by Technology



LABEL STATISTICS

Digital Label Press M² Printed, 2020-2027 WW





© Omet



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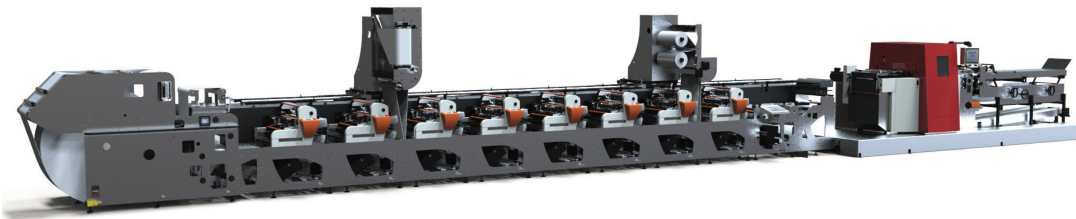
FLEXO



© Mark Andy



© Bobst



© Edale



© Soma



© SCREEN



© Durst

LABELS - INKJET



© Epson



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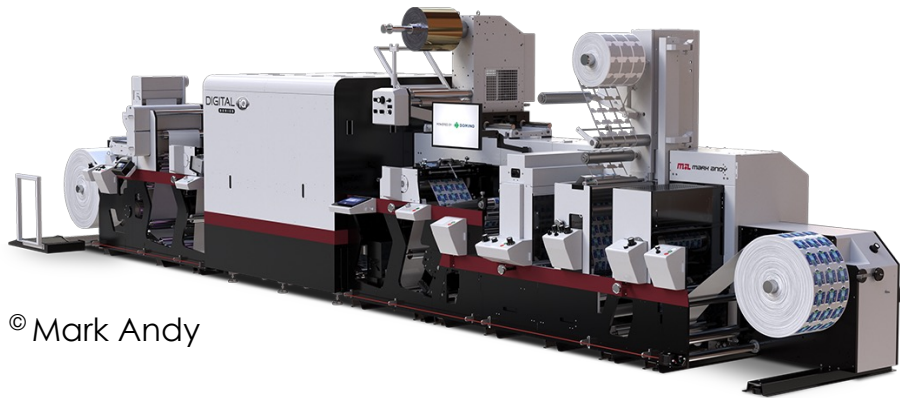


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© Fujifilm

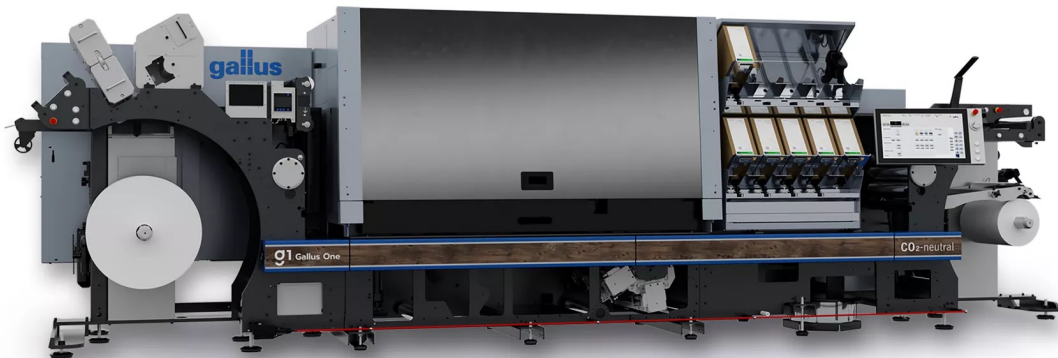
LABELS - HYBRID/ALL IN ONE



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© Bobst



© Gallus



© Durst

LABELS - EP



© Konica Minolta



© Xeikon



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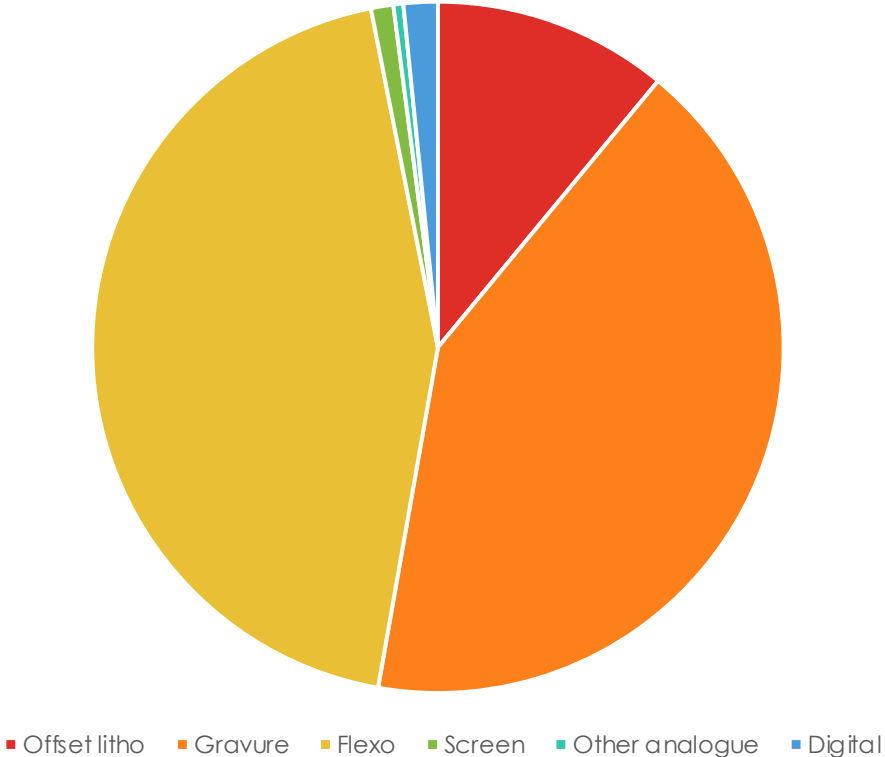


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FLEXIBLE PACKAGING

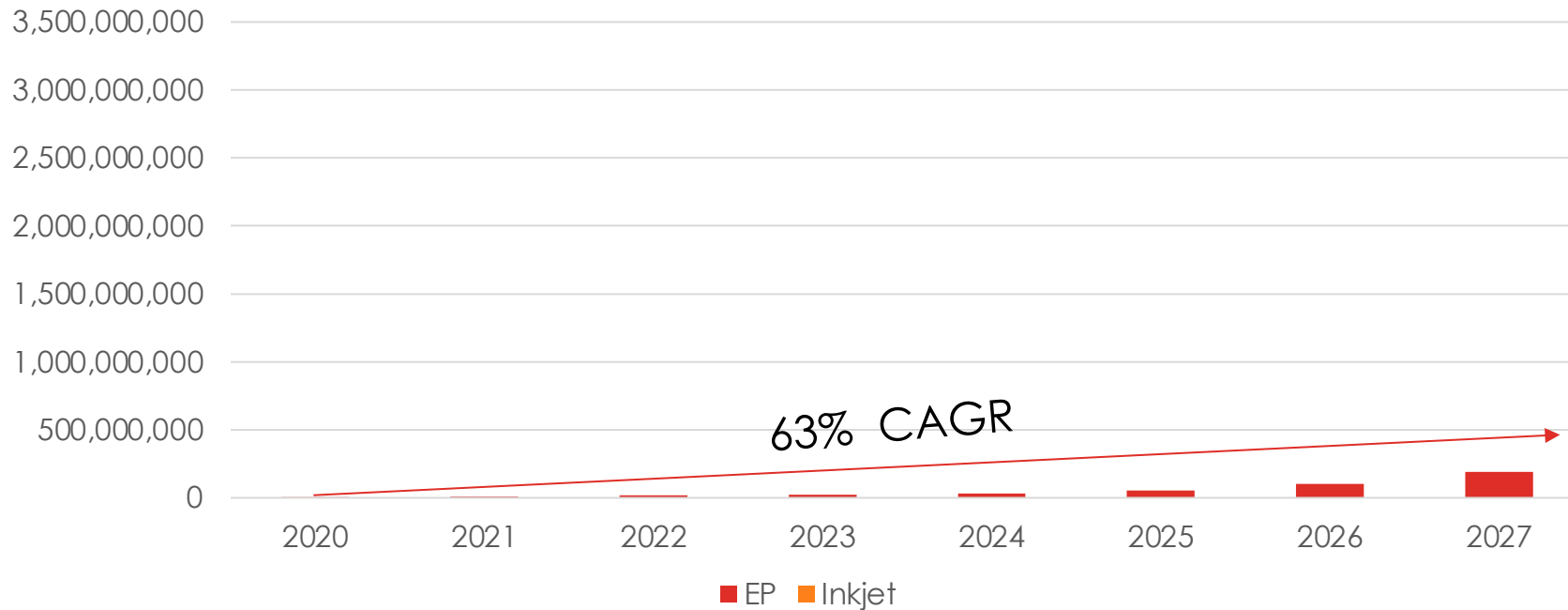
Projected Global Growth 17.80% 2022 - 2027

Relative Flexible Packaging Growth Rates by Technology



FLEXIBLE PACKAGING STATISTICS

Digital Flexible Packaging Press M² Printed,
2020-2027 WW



FLEXIBLE PACKAGING



© Miyakoshi



© Screen



© HP

ZWANG &
COMPANY



© Kodak



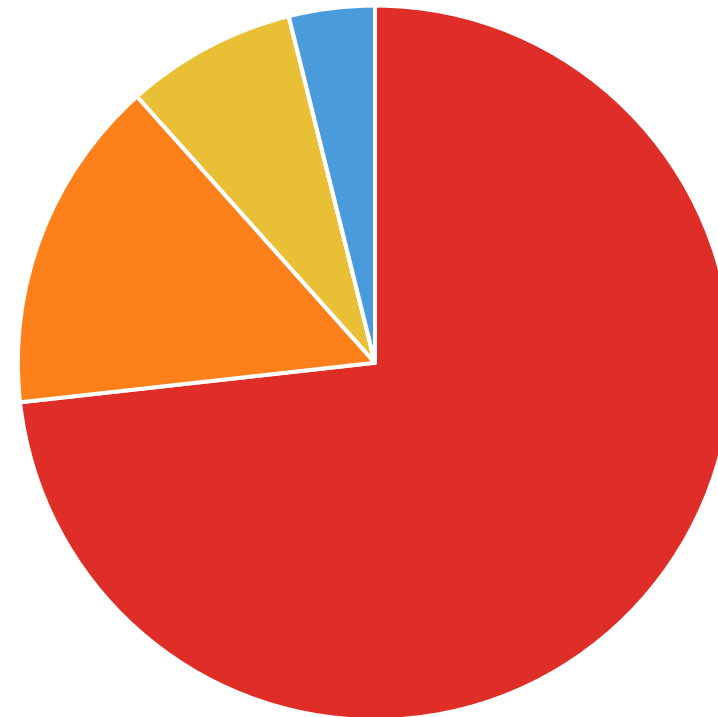
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WhatTheyTh!nk

FOLDING CARTON

Projected Global Growth 14.38% 2022 - 2027

Relative Carton Growth Rates by Technology



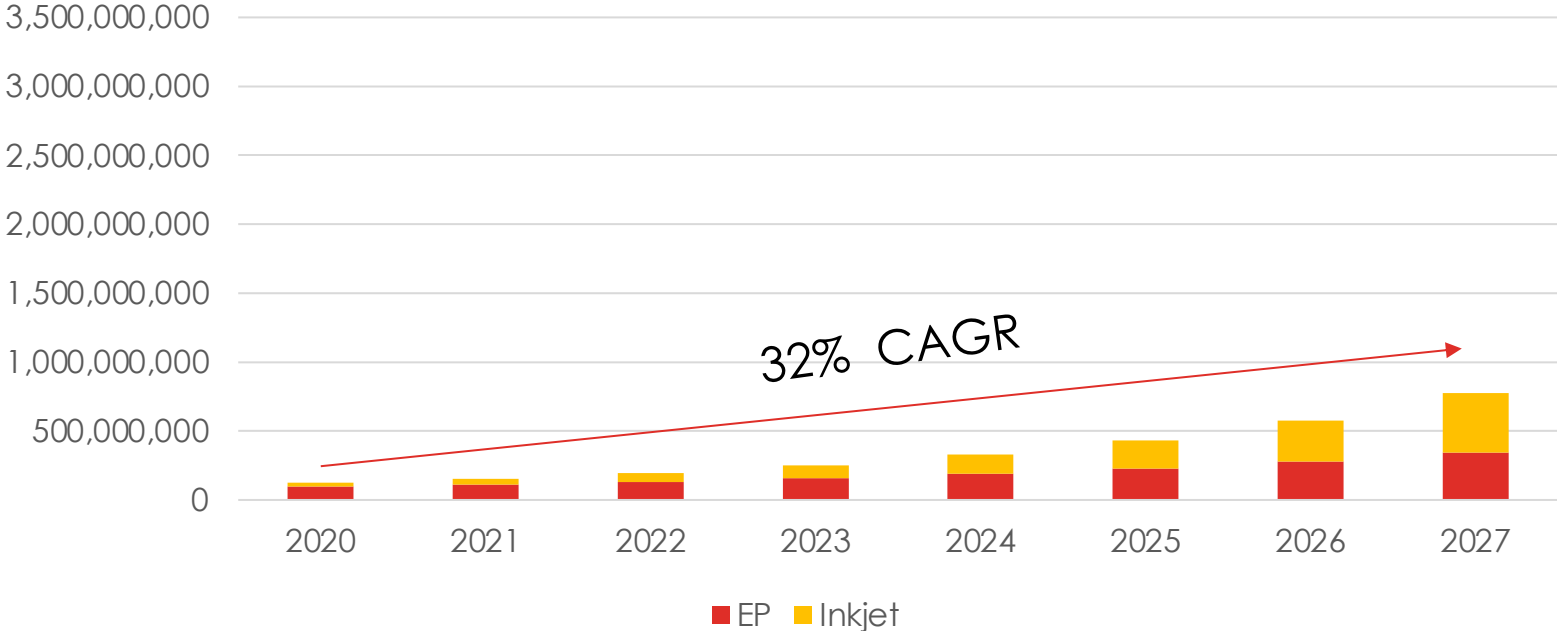
■ Offset litho ■ Gravure ■ Flexo ■ Screen ■ Other analogue ■ Digital

Source: Smithers

In constant 2020 prices and exchange rates

FOLDING CARTON STATISTICS

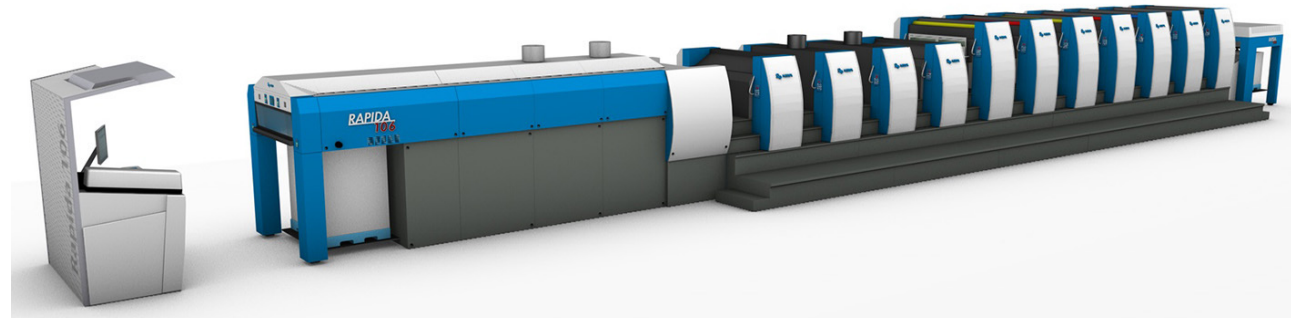
Digital Folding Carton Press M² Printed,
2020-2027 WW



FOLDING CARTON ANALOG



© Heidelberg



© KBA

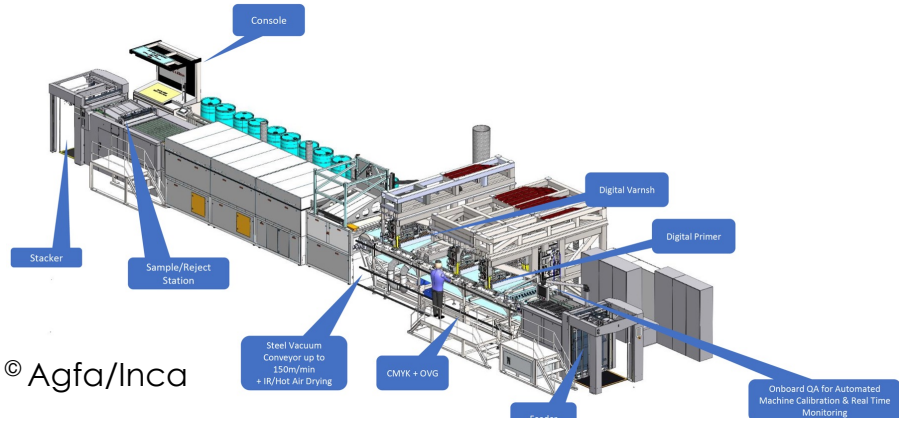


ZWANG &
COMPANY

© Komori

WhatTheyTh!nk

FOLDING CARTON - INKJET



© Agfa/Inca



© Landa



© Kodak

ZWANG & COMPANY



© KBA Durst



© Konica Minolta



© Fujifilm

WhatTheyThink!

FOLDING CARTON EP



© Canon



© HP Indigo

MGI ALPHAJET



RICOH Z75 (DRAGON)



HP T700I

Corrugated Preprint + Carton Press



© HP

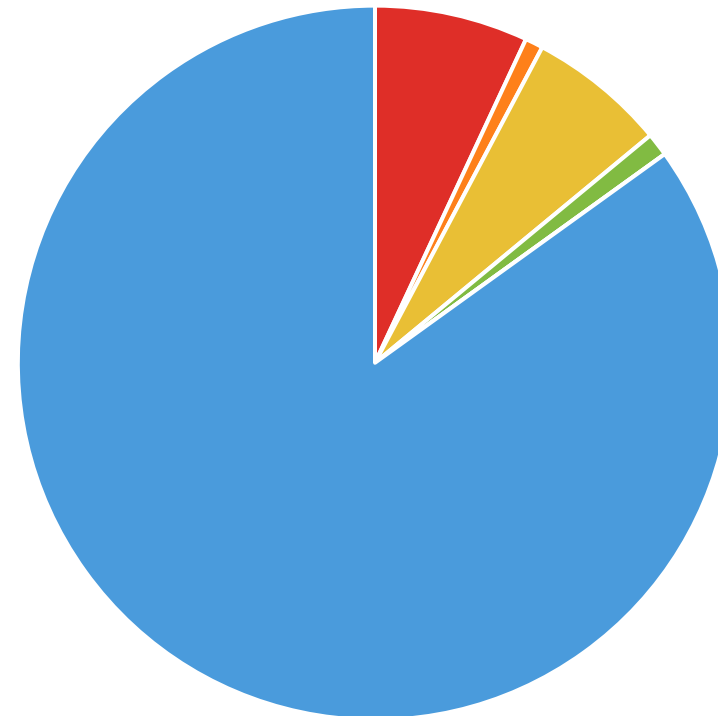
AUTONOMOUS FLEXO FOLDING CARTON



CORRUGATED

Projected Global Growth 13.79% 2022 - 2027

Relative Corrugated Growth Rates by Technology



■ Offset litho ■ Gravure ■ Flexo ■ Screen ■ Other analogue ■ Digital

Source: Smithers

In constant 2020 prices and exchange rates

CORRUGATED POSTPRINT - INKJET



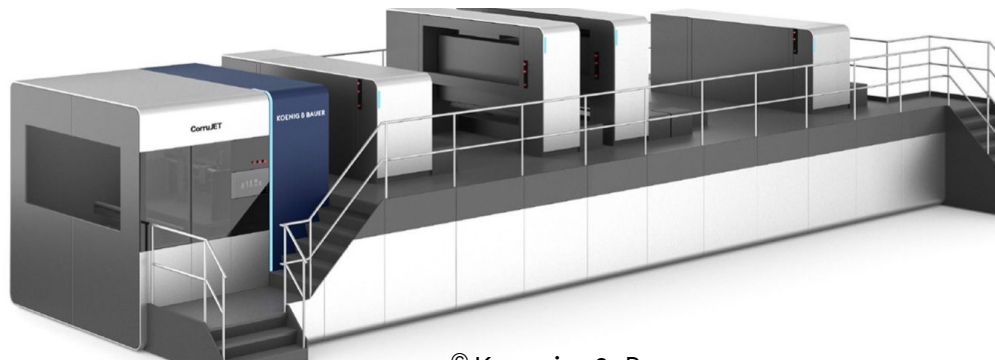
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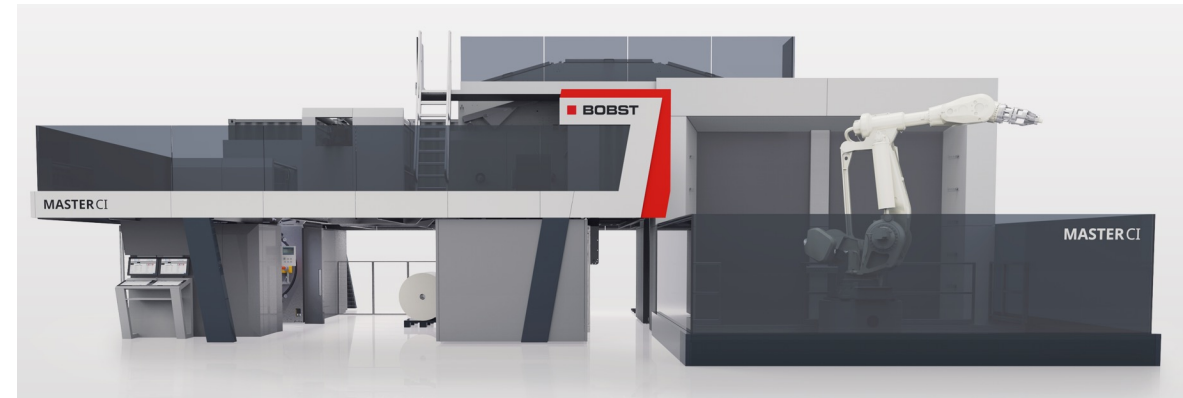


© EFI

CORRUGATED PREPRINT

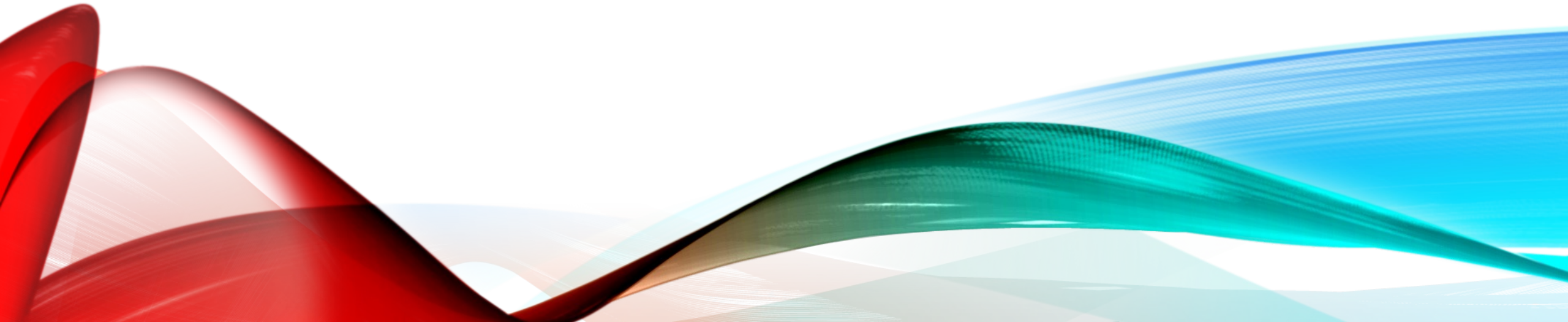


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© Bobst

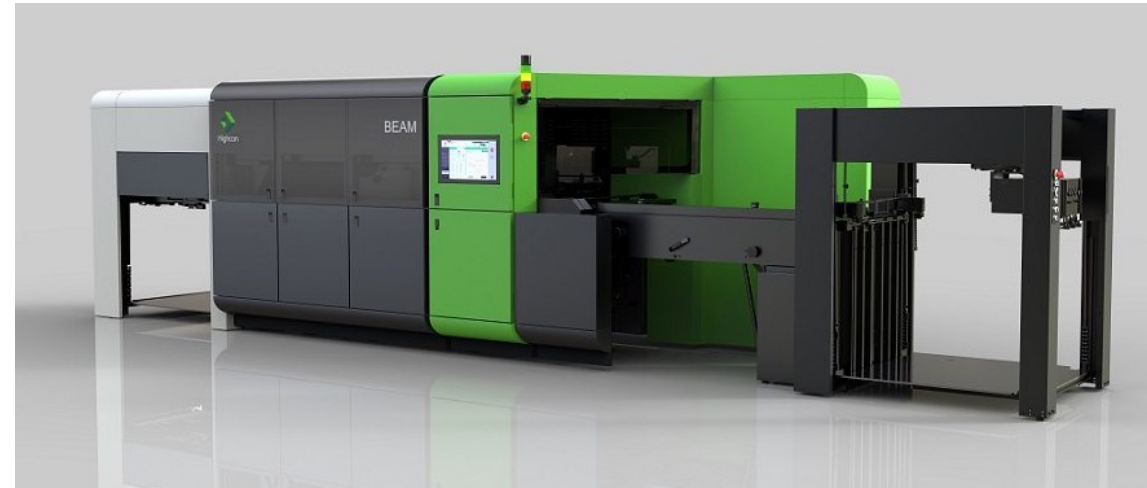
FINISHING THE PRODUCT



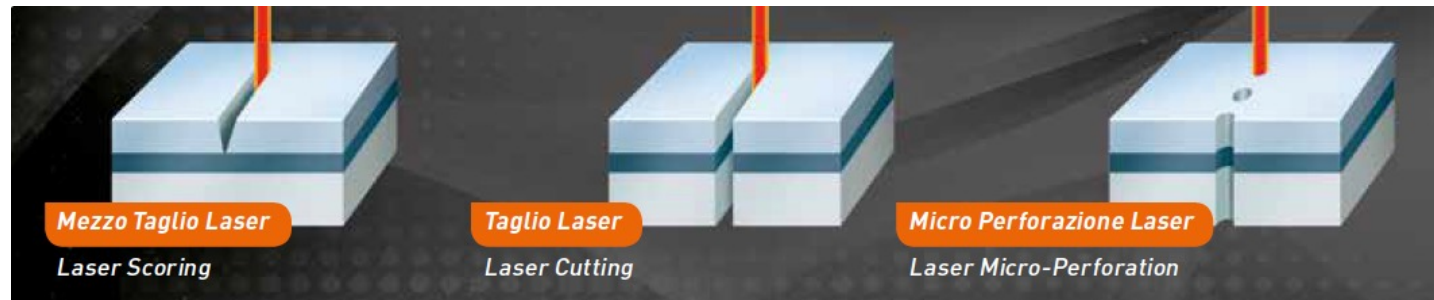
LASER FINISHING



© sei



© Highcon



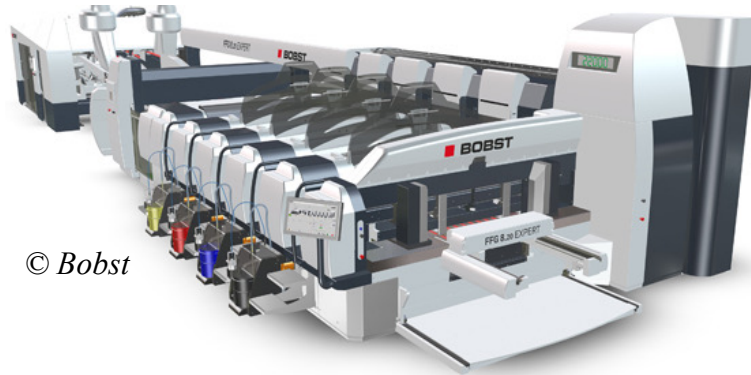


© Scodix

EMBELLISHMENT AND...



Robots



© Bobst



© Actega



© Actega SIGNITE

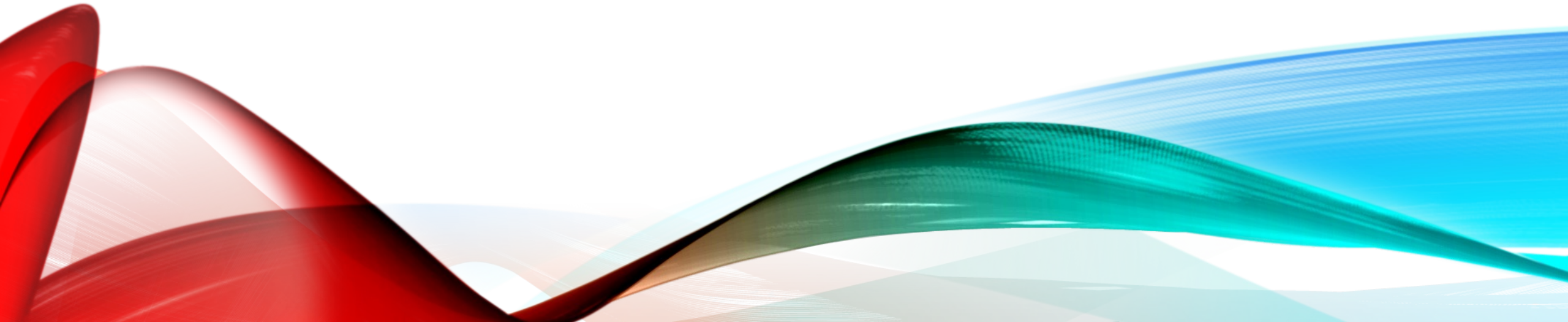


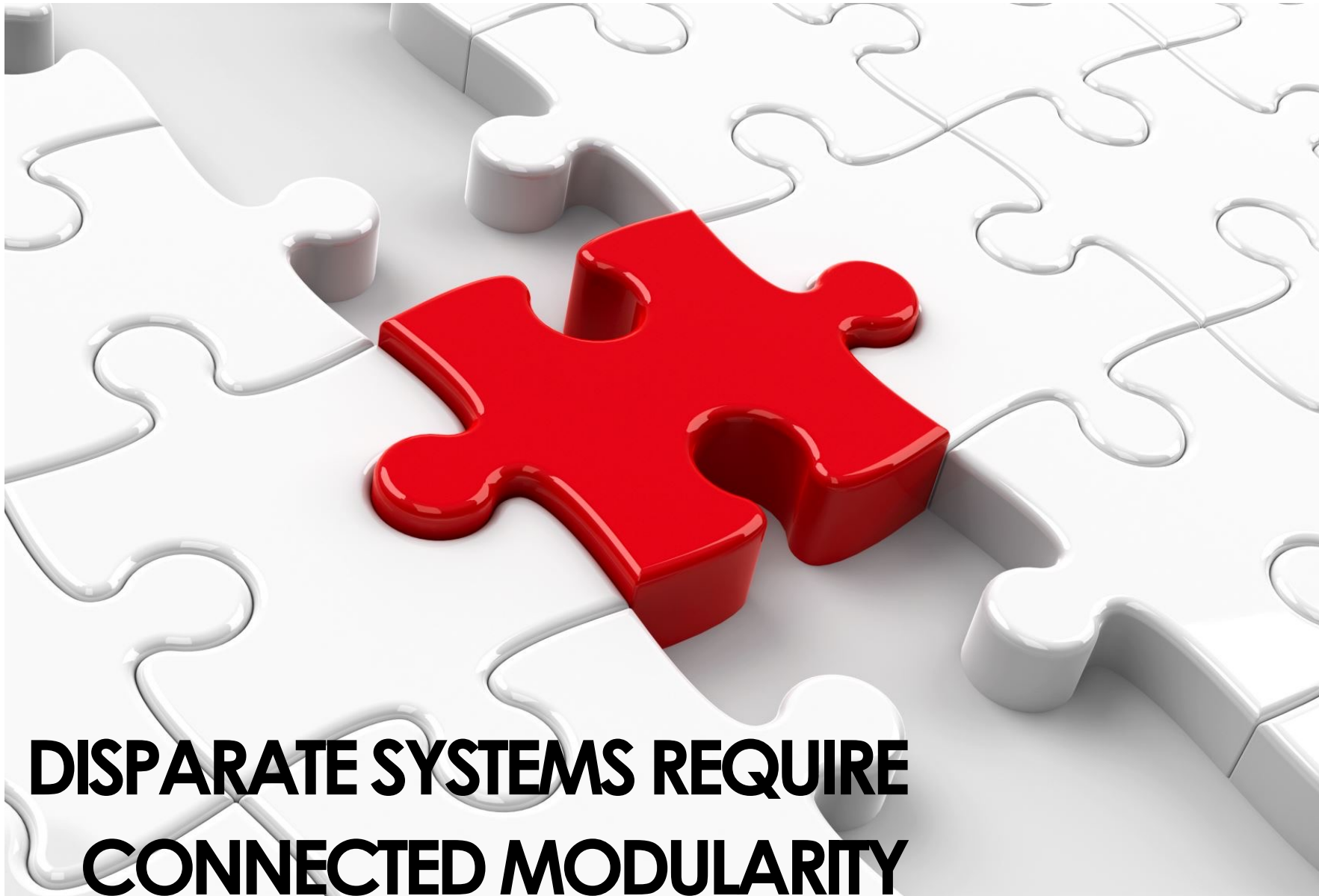
© GM



© ABG

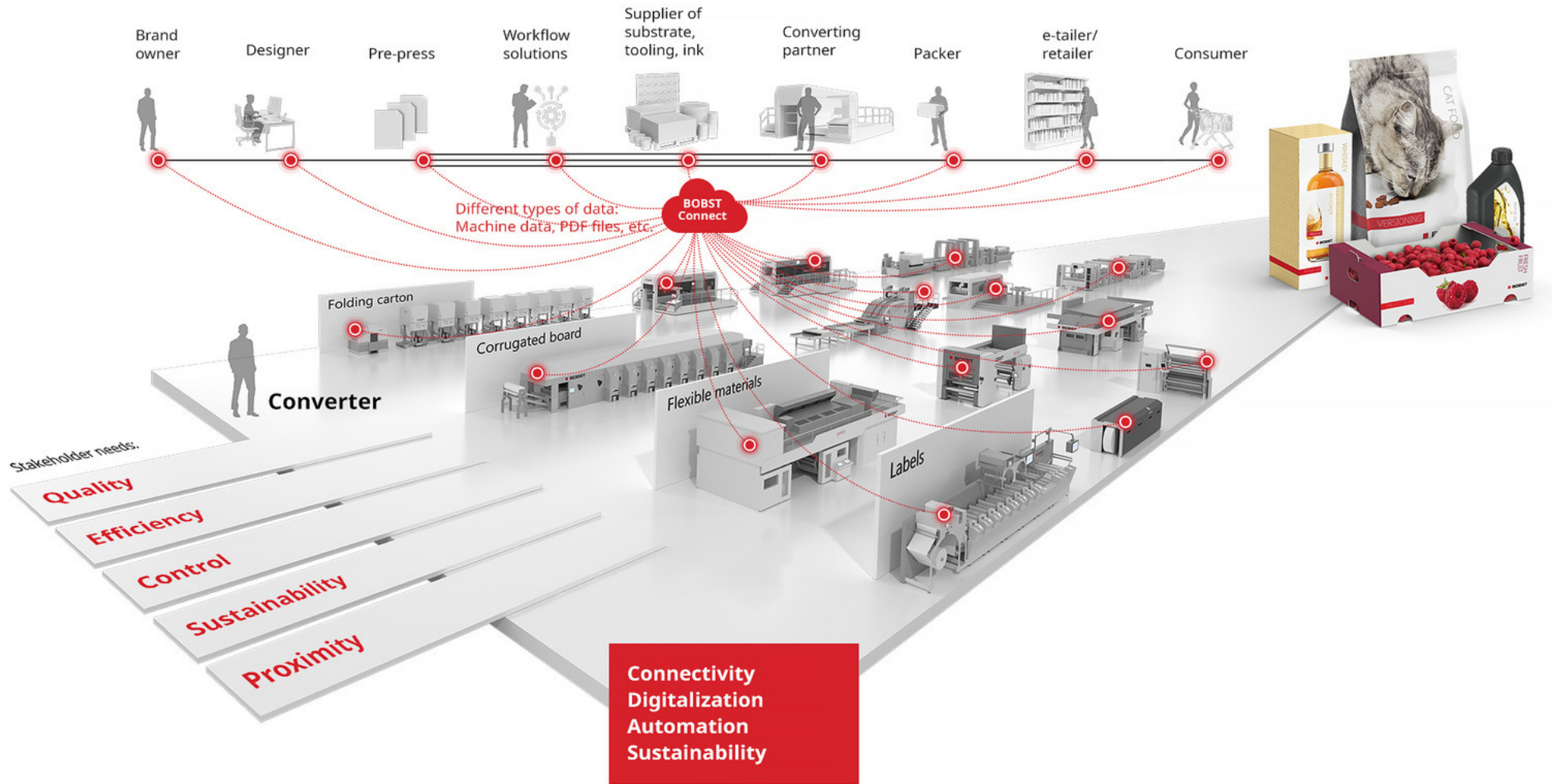
CONNECTING THE DOTS



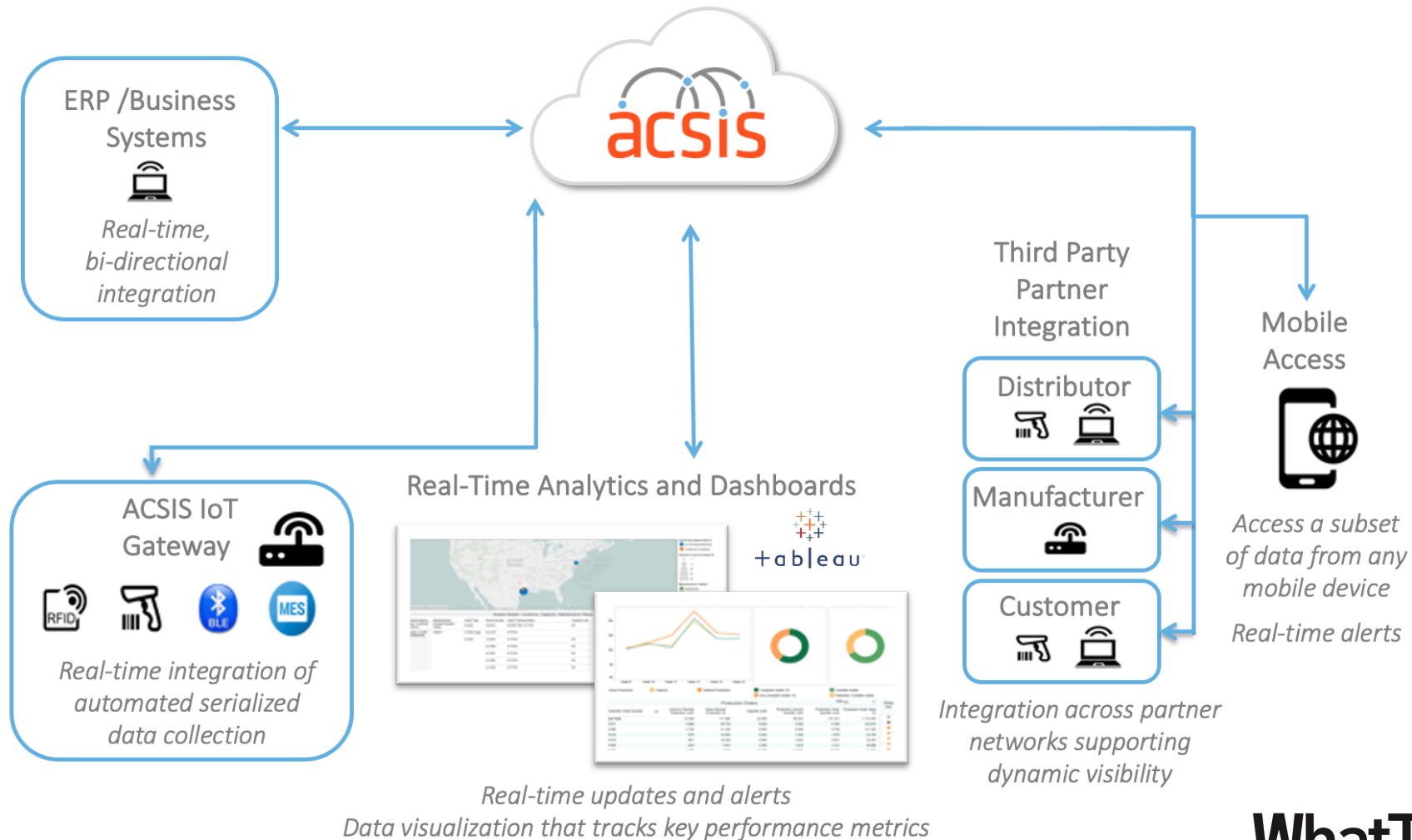


**DISPARATE SYSTEMS REQUIRE
CONNECTED MODULARITY**

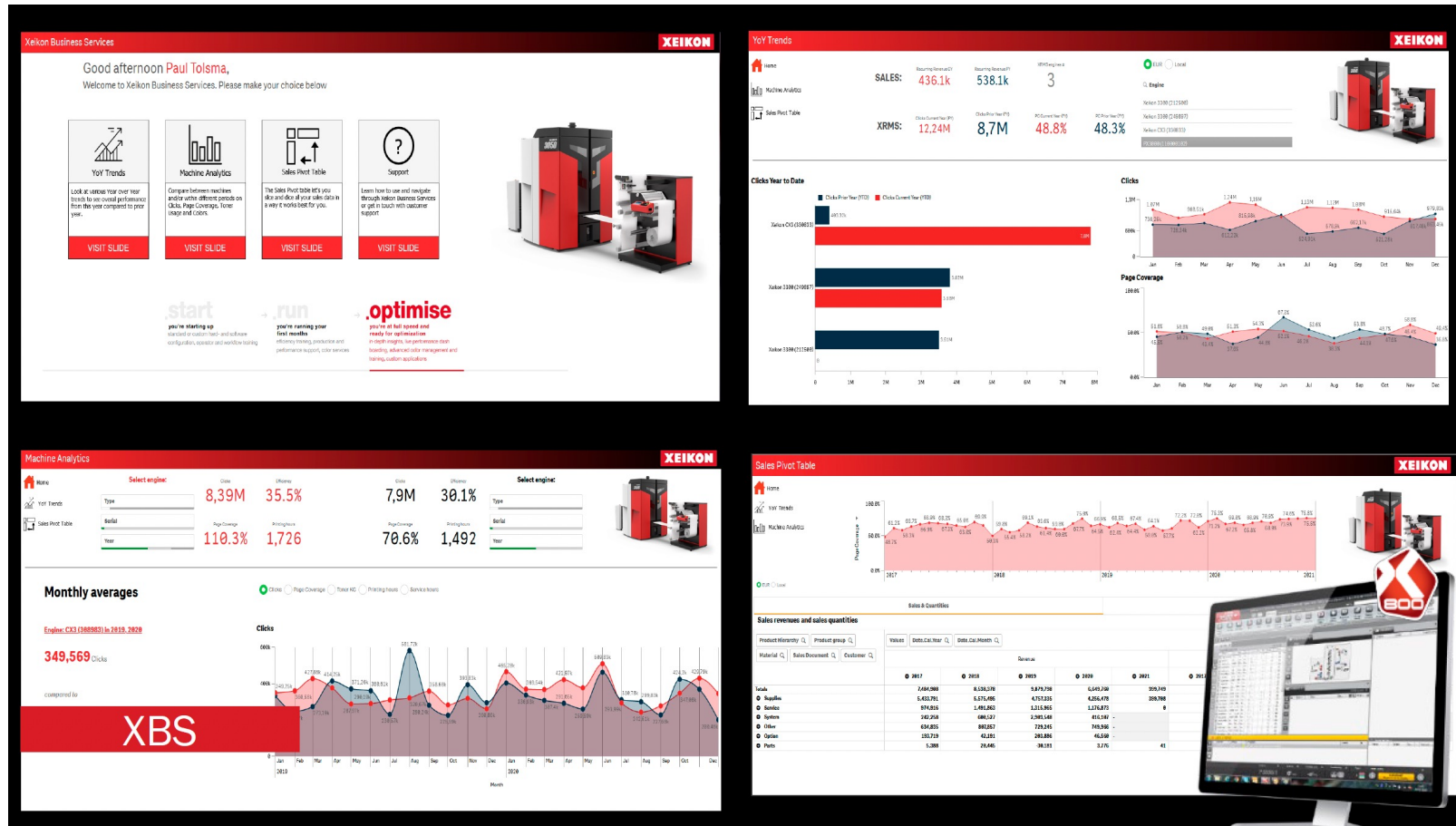
INDUSTRY 4.0



CONNECTED SUPPLY CHAIN - 14.0



MACHINE LEARNING; INFORMATION ASSISTANCE



DRUPA WATCH

- Cut Sheet Inkjet – B1 and B2
- Digitalization of analog (flexo/offset/hybrid)
- Next generation converting and finishing equipment
- Automation, Automation, Automation
- Integration, Integration, Integration

SPARGEL!



Q&A

Send us your
questions!

UPCOMING WEBINARS

- Technology Outlook Continues Next Week!
 - Tuesday, May 17—Wide-Format & Signage and Textiles & Apparel w/Richard Romano and Cary Sherburne
 - Thursday, May 15—Finishing w/Trish Witkowski
- Top 100 Small Printers
 - Wednesday, June 22 w/Richard Romano and this year's winner (TBD)

All times at 1 pm ET

- For more information and to register visit whattheythink.com/webinars



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