WhatTheyTh nk Technology Outlook: Digital Printing

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Get the most out of this webinar...

- SEND US YOUR QUESTIONS DURING THE WEBINAR
 - Use the Q&A box to ask questions
- Video and audio archive will be available later today along with PDF of slides









Elizabeth Gooding



Mary Schilling



Ralf Schlözer



Topics

- Trends driving volume and profitability for printers and OEMs
- New press offerings in past 12 months
- Market leading features of the newest press technology.
- The impact of inkjet technology on market segments and print businesses.
- Strategies for differentiating and streamlining your inkjet operation.



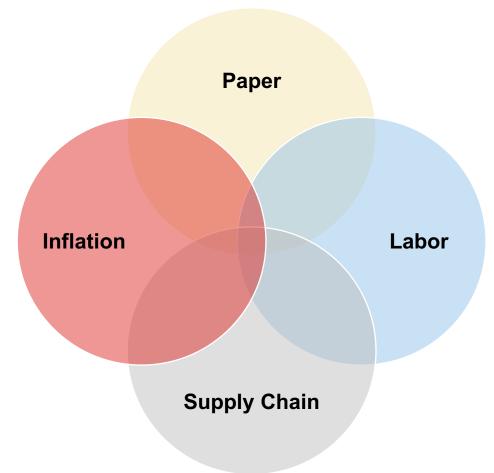


There's a light at the end of the tunnel!

(and I don't think it's an oncoming train)



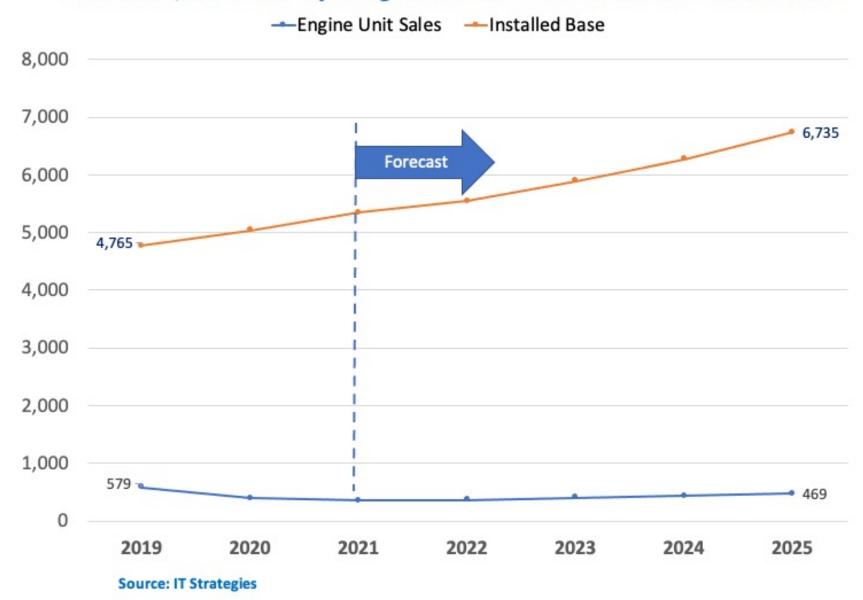
Many current trends are pain points!



- Paper rationing not letting up
- Need to test papers "on the fly"
- You get what you get
- Post-pandemic volumes at 100+% but labor availability at 60+%
- Labor challenges not short-term
- Cost of all materials & financing up
- Fear of growth!



Continuous, Web-Fed Inkjet Engine Sales and Installed Base WW 2019-2025



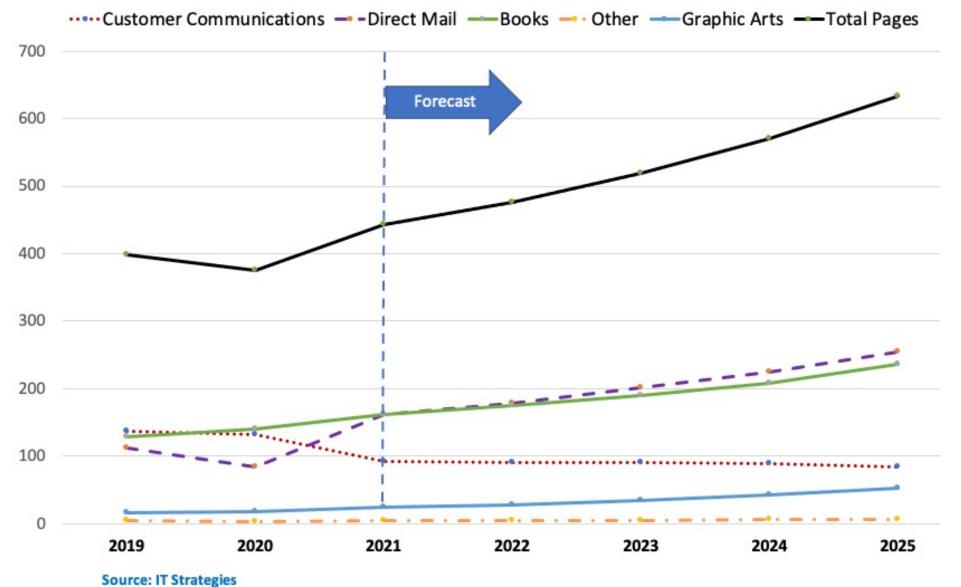
Trends

Annual (new) CF engine sales down since 2019 - but install base growing.

Higher utilization per press



Web-fed Inkjet Pages (in Billions) by Application Type WW 2019 -2025



Trends

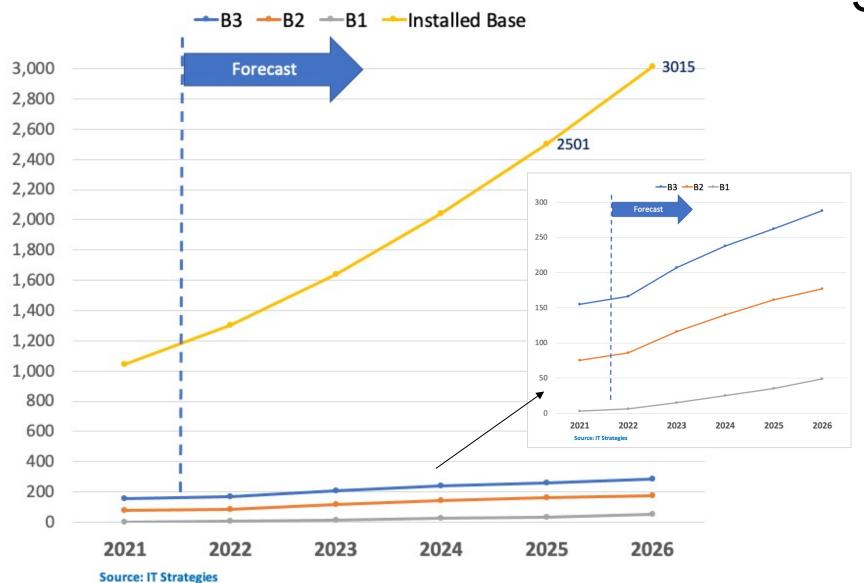
All volumes growing except transaction print

2025

Direct mail 40%
Books 37%
Transaction 13%
Graphic Arts 8%



Cut-Sheet Production Inkjet System Sales 2020-2026, WW



Sheet-fed Trends

Installed base 2025

@ 2500 Sheet-fed presses compared to 6700

Growth 2021 - 2026

B3 CAGR 24%

B2 CAGR 19%

B1 CAGR 74% (starting from single digits)

Share by Format 2026

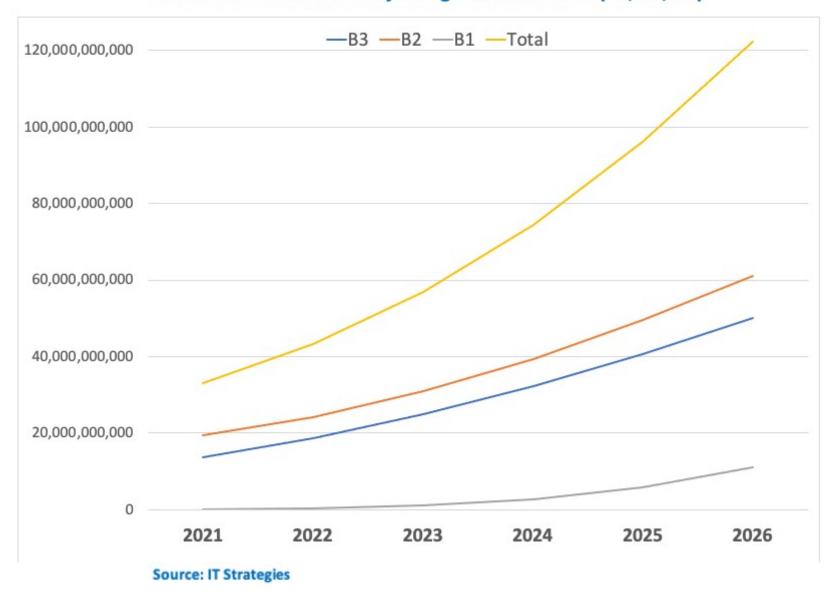
B3 59%

B2 37%

B1 5%



Cut-Sheet Production Inkjet Page Growth - WW (B3, B2, B1)



Sheet-fed Trends

Different Page Story

More B2 pages on fewer presses

Growth 2021 - 2026

B3 CAGR 30%

B2 CAGR 26%

B1 CAGR 140% (starting low)

Segments

B3 85% Direct Mail & Commercial, 10% Book, 5% Transaction

B2 - Even Graphic/Direct Mail, BooksB1 - All Graphic/Commercial



The upgrade/refurbished inkjet market

HP leads in field upgradable press models



"Forklift" upgrades drive secondary market for presses

- Direct mail presses move to transaction print
- Smaller firms gain access to high-volume equipment
- DR/BC options



Factors influencing inkjet R&D



- Why so few presses coming to market?
- Where is R&D happening?
- What are customers asking for?



June 2019 - May 2021

12 launches

42% Web-fed 58% Sheet Fed

Plus 5 upgrades

KM Accuriojet 1e

Canon VarioPrint iSeries+

Ricoh Pro VC40000 mono

Fujifilm JPress (JetPress 750S) speed upgrade

Xeros Baltoro - Color Accelerator

	Graphic Arts Focused	Efficiency / Accessibility in Transaction Print and Direct Mail Markets
Web	HP T250 HD BlueCrest Intellijet HD*	Canon ColorStream 8000
	Kodak Prosper Ultrastream 520 HD Canon ProStream 1800	
Sheet	Landa S10P	MCS Merlin K146c*
	Xerox Baltoro HD	RISO Valezus
	Canon VarioPrint iX 3200 (& 2100)	BlueCrest Evolujet*
	Ricoh Z75	



June 2021 to May 2022

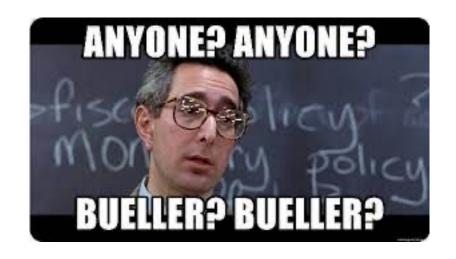
1 new launch

Super Web WEBJet 2100P

May 2021 launch comes to market

Canon ColorStream 8000

1 more coming to market next month





What's New in 2022 - Super Web WEBJet 2100P



- 3 Modes 1,600 x 1,260 dpi 300 fpm. 1,600 x 925 dpi 410fpm. 1,600 x 790 dpi 490 fpm
- Aqueous Pigment
- 2.1pl fixed drop / 5X Nozzle Redundancy
- 60 160gsm
- 4 Print Stations
- 9 20.5" Width Paper



What's New in 2022 - Canon ColorStream 8000



- 2 Speeds @ 1200dpi 436-525fpm
- Aqueous Pigment
- Variable Drop 2-5pl
- 40 160gsm
- Up to 6 Print Stations
- 6.5 22" Width Paper



Kodak

June 2022 - Customer Event

Prosper Ultra 520 HD

- C version high coverage
- P version publishing
- Kodak UltraStream CIJ heads
- 600 x 1800 dpi
- Kodak nano-particulate pigment inks
- NIR drying
- Coated/Uncoated 45 to 270 gsm
- Offline or inline priming options

Kyocera TaskAlfa Pro 15000C

- Big push in 2022
- Added Ricoh to resellers
- New dealer network
- New US Sales offices







Where is the development focus?

- Inline quality control
- Simplified operator environments (labor savings)
 - Auto Splicing
- Streamlined maintenance
- Drying
- Finishing and embellishments
- Substrate compatibility





Substrate compatibility

Inkjet OEM supplied

- Integrated priming flood coat
- Integrated priming where needed
- Robust inks no primer
- Advanced drying

Optional equipment

- Nearline pretreatment
- Inline pretreatment





Ha

In-line Coating

Harris & Bruno ExcelCoat ZRW Web Coater for HP PageWide Web Press T250 HD



- Almost standard in offset
- For protection and/or appearance
- Relatively cost efficient way to alter/improve/protect paper
- In-line coating is most efficient
- Still slow adoption in inkjet
- Options slowly increasing
- Paper shortages might be a driver



Supply Growth and Collaboration

Expansion of ink chemistry and supply facilities.









Canon's acquisition of Edale opens up packaging web handling collaboration.





Top Trends for Each Market

- Transaction print
- Direct mail
- Books
- Graphic Arts/Commercial





Q&A

Send us your questions!

Upcoming Webinars

- Technology Outlook Continues!
 - Monday, May 9—Digital/Inkjet Printing w/Elizabeth Gooding, Mary Schilling, and Ralf Schlözer
 - Wednesday, May 11—Software & Workflow w/Pat McGrew and Ryan McAbee
 - Friday, May 13—Labels & Packaging w/David Zwang
 - 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 <u>whattheythink.com/webinars</u>



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Thanks for joining us!