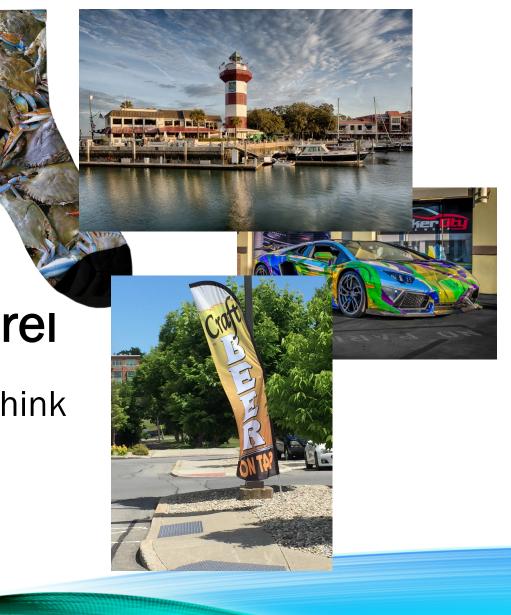
WhatTheyTh

Technology Outlook Week
LunchNLearn Webinar Series
Wide Format, Signage, and Apparei

Richard Romano, Managing Editor, WhatTheyThink Cary Sherburne, Senior Editor, WhatTheyThink

May 21, 2020



Get the most out of this webinar...

- SEND US YOUR QUESTIONS DURING THE WEBINAR
 - Q&A box is at the bottom of your screen
 - Please use Q&A box rather than raising your hand
 - There is a Q&A at the end
 - We may answer during the presentation
 - Any questions we don't get to will be answered offline and posted on the WhatTheyThink Technology Outlook page
- Downloadable archive—slides and audio—will be uploaded later today





Fastest Wide Format Plotter Laser Cutting and Marking System



- Maximum Flexibility for New Profit Opportunities
- Cutting, Kiss-Cutting, Engraving and Dot Etching
- Signage, POP, LED/Backlit, Cosmetic Packaging and Display Cases
- Multiple Substrates
- Sizes Up To 126" x 60"
- Wide Range of Configurations

REQUEST

Sample Kit Live Video Demo matik.com/wide

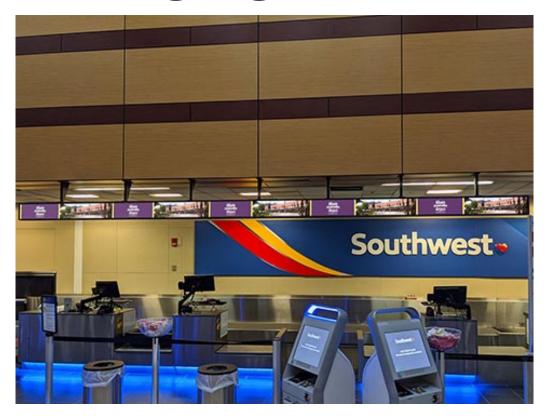








LED Signage Takes Off!





DDS Evolving In Unique Ways





3D Printing for Channel Letters







Wide Format: The Story So Far

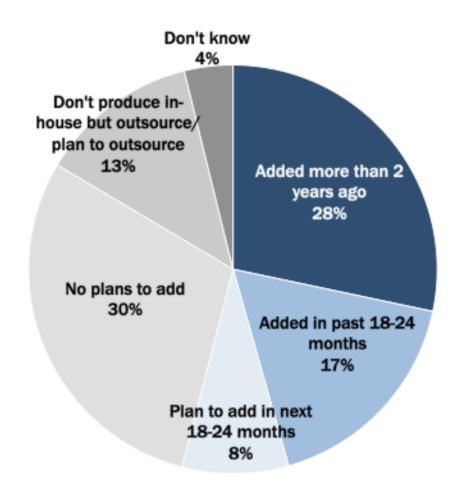
- Tim Greene and I did a LunchNLearn wide-format webinar in January
 - http://whattheythink.com/webinars/217/
- 2006 was the year we felt the growth of wide-format imaging
- After the 2008 recession, new printers, inks, substrates, applications helped wide-format printing take off in the 2010s
 - UV, flatbeds, latex, textile printing, industrial printing, etc.
- The industry diaspora commenced: commercial printers and others moved into specialty printing niches, esp. wide format
 - "The wide-format market is like Florida: everyone is from somewhere else" (Dr. Joe Webb) **WhatThey**
 - photolabs, e.g.

Where We Are Now

That printing industry diaspora is largely over...



Have you added, or do you plan to add, wide-format printing capabilities (like signs, displays, banners)?





Where We Are Now

- Although...
 - competition in wide-format printing services has become tougher and
 - some wide-format applications (banners, e.g.) have become commoditized
- ...that should not be discouraging
 - it indicates growing demand for wide-format print applications



Where We Are Now: Some Market Drivers



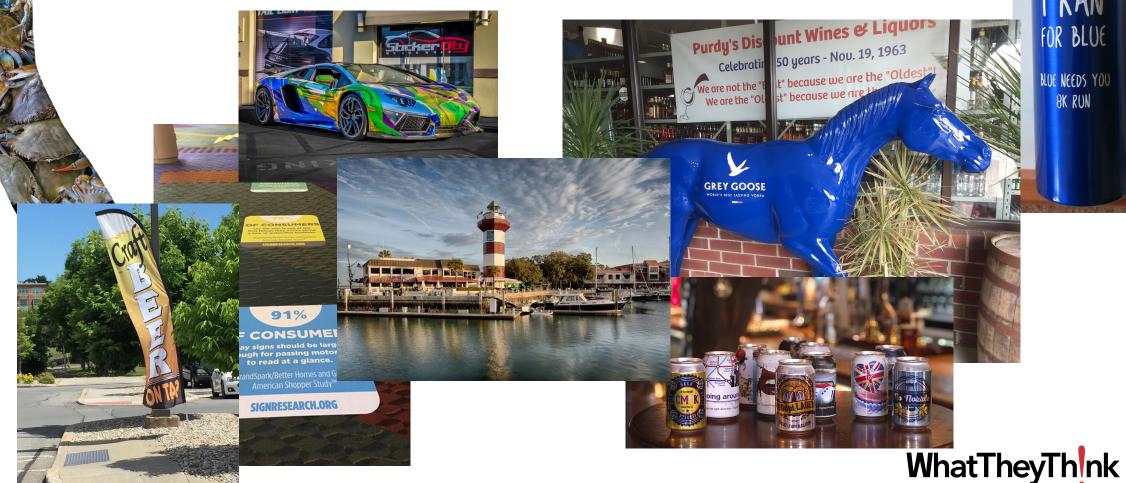
- Demand for wide-format print applications remains high
- It takes a crowd to draw a crowd
- Accelerated rebranding cycles
- Automation and ease of use





FOR BLUE

BLUE NEEDS YOU 8K RUN



The Elephant in the Room

- WF and signage shops classified as "essential businesses" early on in the COVID-19 crisis
- Safety/CDC signage
- Wayfinding for medical centers and virus testing facilities
- Social distancing signage and floor graphics





The Elephant on the Floor







New Product Introductions

- New wide format products largely evolutionary
 - Speed, quality, automation improvements
 - Fleshing out product portfolios
 - Expanding range of applications



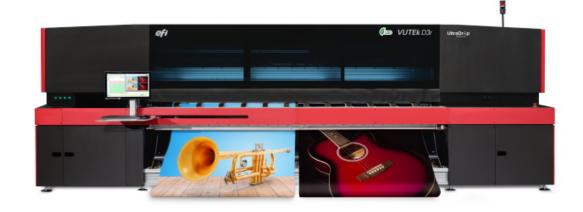
Canon Solutions America



- Océ Colorado series debuted in 2017 with the 1640
 - 64-inch roll-to-roll UV wide-format printer based on new Uvgel ink
 - print first and cure later
- Next-gen UVgel ink introduced with the Colorado 1650
 - FLXfinish—a new approach to LED curing
 - choose between matte or gloss for each individual print







- New mid-range roll-to-roll printer line—3.5m VUTEk D3r and 5.2m D5r LED inkjet printers
 - Designed to produce high-end signage, décor, outdoor graphics, and other applications.
- Soon to be announced: 3.2m EFI Pro 32r+ wide-format roll-to-roll LED printer
 - Economical, all-in-one production-level printer



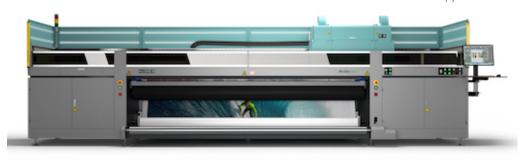




- SureColor T series of printers designed for technical printing/AEC
 - SureColor T2170 24-inch "desktop" wide-format technical printer
 - 24-inch SureColor T3475 and 36-inch SureColor T5475 replace the SureColor T3470 and SureColor T5470 for larger workgroups
 - Use Epson's new high-capacity 700mL cartridges.



Fujifilm



- 5m superwide Acuity Ultra
 - Prints on a wide variety of materials with low-density Uvijet inks
 - Billboards, backlit signage, indoor displays, trade show graphics, POP signage, high-value graphic art, backlit displays, interior décor and wall coverings, outdoor displays, outdoor signage, and more
 - Acuity Ultra also available in a 3.2-meter version



HP



- HP has expanded its Latex R series with the brand new entry-level 64in. Latex R1000
 - 64-in. HP Latex R1000 Plus comes in a sheetfed or rollfed configuration
 - 98-in. HP Latex R2000 Plus for high productivity
- HP now offers white ink for the Latex line







- UVx40R PLUS, an enhanced edition of the UVx40R tabletop UV flatbed printer
 - Designed for printing and decoration of three-dimensional items
 - Features a longer print bed to accommodate larger media sizes—18 x 24 inches—33% more print area than the earlier model



Mimaki



- 1.6m UJV100-160 roll-to-roll UV LED printer
 - Designed to fit where machine and ink pricing is an obstacle to investment
 - Two-layer printing with white+CMYK or CMYK+white and also has a clear ink option
- SWJ-320EA solvent printer w/ BOFA Air Purifier Unit
 - Virtually eliminates any odor or VOCs from solvent printing
 - The printer has been in the market for a while, but the BOFA unit will be available starting this month



Ricoh



- Recently launched UV flatbed line
 - 98.4 x 51.2 x 3.4-inch Pro TF6250
 - 82.7 x 126 x 4.3-inch Pro T7210
- Pro L5160 latex printer
- At PRINTING United: direct-to-truck printing





Roland

- New VersaUV LEF2-300D benchtop UV printer for direct printing (and simulated embossing) on three-dimensional items
 - Smartphone cases, awards, souvenirs, giftware, leather goods, electronic devices, and more
 - Larger than previous units in the series, supporting a height of up to 7.87 inches—twice that of previous LEF2 models
- Last year, launched the IU-1000F high-volume UV flatbed printer
 - 4 x 8-foot rigid boards weighing up to 99 pounds
 - CMYK + Gloss and White GREENGUARD Gold-certified UV inks, with a Primer ink option to promote greater adhesion on fussy substrates



Textiles and Apparel

- Already under pressure due to sustainability issues, the industry now must address the fragility of its supply chain exposed by the pandemic
- New developments in inks—especially pigment—are making digital textile printing more competitive
 - 6.9% of printed fabrics worldwide are printed digitally, up from 6% last year (WTIN)
- Automation across the manufacturing workflow is driving increased interest in on-demand production and microfactories (reshoring)
 - Sewing is the last mile opportunity
- Digital textile printer manufacturers continue to add speed and functionality





- P5 digital production platform launched at FESPA 2019 with the P5 350 and P5 210 printing systems
 - Grown to include the 250 HS and 200 HS
 - Involved in a variety of sectors—display and signage, corrugated and packaging, industrial printing, as well as textiles
 - Had been looking to use FESPA 2020 to showcase its pigment-based textile printing capabilities



Epson



- SureColor F3070, Epson's first "industrial" direct-to-garment unit
 - Can print custom garments on variety of fabric types including cotton, linen, and rayon
 - Can print one full-size shirt in about a minute





Kornit

- Introduced next-generation Kornit Vulcan Plus for DTG mass customization at Impressions Expo in January
 - Capable of delivering more than 2,000 retail-quality impressions in a 12hour shift
- Also launched the Storm HD6 Lite system
 - Brings industrial DTG printing to smaller businesses
 - Specifically designed to allow commercial printers to move to the industrial market and broaden their production capabilities
- NeoPigment Robusto Softener Addresses Hand Feel Issues with Pigment Inks
 - Used with Presto printers, improves and intensifies color with no impact on fastness
 WhatTheyThink

Mimaki



- TX300P-1800 MKII can use two different ink sets
 - Pigment/dye sublimation, pigment/direct sublimation configurations, or dye sublimation/direct sublimation configuration
 - Provides an added level of flexibility for printing textile applications
 - Can be acquired with a dedicated ink system
 - reactive, acid, pigment, direct sublimation, or disperse dye
 - Ideal for small runs or sampling



Neenah Coldenhove

- Texcol: Innovative Digital Transfer Paper for Natural Fiber Fabrics
 - Natural fiber fabrics are used in an estimated 40% of apparel
 - Typically require direct-to-fabric printing
 - Digital transfer process uses 33% less ink than direct-to-fabric
- Texcol 1.0 most suitable for home décor/ applications not in direct contact with the skin
- Texcol 2.0 expected to be suitable for apparel coming soon!



On a Hopeful Note for Fashion

- Vogue editor Anna Wintour told CNBC's "Closing Bell" yesterday that she believes the virus crisis won't derail the fashion world:
 - "Yes, certainly there are going to be a lot more people working remotely and that probably means more of an emphasis on comfortable clothes. But I also think there's going to be a huge desire to dress up and to have fun and to go out and to look your best. So I don't believe that only comfortable clothes are going to be all that we see on the horizon."
 - "I think there's going to be a great demand and a great yearning for beautiful clothes and creativity and self-expression."





Finishing for Wide Format

- Finishing is an important consideration for wide format/signage shops
 - Cutting
 - rollfed X-Y cutter for paper, vinyl, or other soft materials
 - cutting tables can improve productivity and expand applications
 - Better alternative than "employee with X-Acto knife"
 - laser cutting ideal for fabrics (sealed edges)
 - Other Processes
 - Laminating
 - Mounting
 - Grommeting
 - Sewing/welding (textiles)
 - Etc.



Cutting Tables

- Improvements to cutting tables boost speed and automation
 - Hardware automation—conveyor systems or robotic arms that load and/ or offload printed boards
 - Hundreds of swappable tools
 - knives
 - routers which "rout" or bore out board, plastic, wood, etc.
 - other tools that can mill, perforate, crease, engrave, and even create Braille lettering
 - Some tables can also automatically swap out the tooling based on the parameters specified in the cut file





Laser Cutters

- Tables from Esko (Kongsberg), Zünd, Gerber MCT, and others offer laser modules that can be swapped in and out
- Dedicated laser cutting systems:
 - SEI Laser (SEI Mercury, SEI X-Type)
 - Trotec Laser



Case in Point: Maverick Concepts



- Creative design and fabrication company always seeking innovative products/services
 - Engages with customers very early in the planning process
 - Marketing campaigns, displays, interior décor for top retailers and major CPGs
- Positioned to address a wide range of signage and interior décor needs
 - 2 EFI H5 hybrid printers, 2 FabriVU 340i dye sub printers, EFI VUTEk GS3250 TF for thermoforming, all Fiery-Driven
 - Unique process for dye sub transfer to rigid substrates
 - Example: Produced 5,000 pieces of rigid sublimated items for national retailer with 1,000 locations
- Plans to go-live with EFI Pace July 1

Q&A

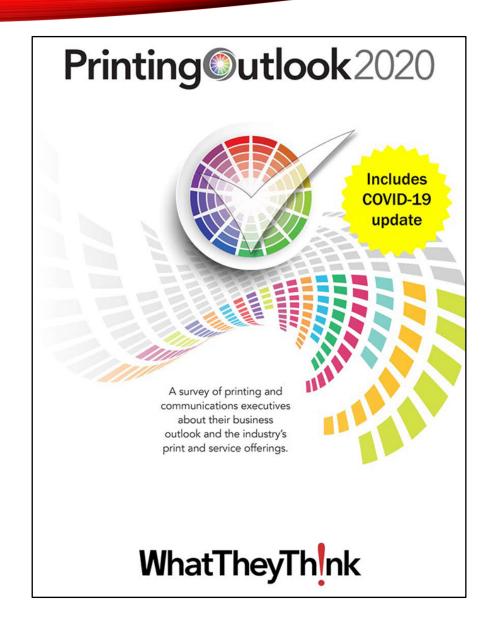
Send us your questions!

questions
are a burden to others
answers
a prison for oneself

Coming Up!

- Technology Outlook Week—May 18–22
 - May 22—Finishing (Hosted by Trish Witkowski)
- Printing News 100 Top Shops—June 24
 - Special guests TBA





Printing Outlook 2020 Special Report

Featuring:

- The results of our Fall 2019 Business Outlook Survey
- Industry and macroeconomics data
- Industry trends and forecast

Includes COVID-19 Update



WhatTheyThnk



Thanks for joining us!