

IDC MarketScape

IDC MarketScape: Worldwide High-Speed Inkjet Press 2019-2020 Vendor Assessment

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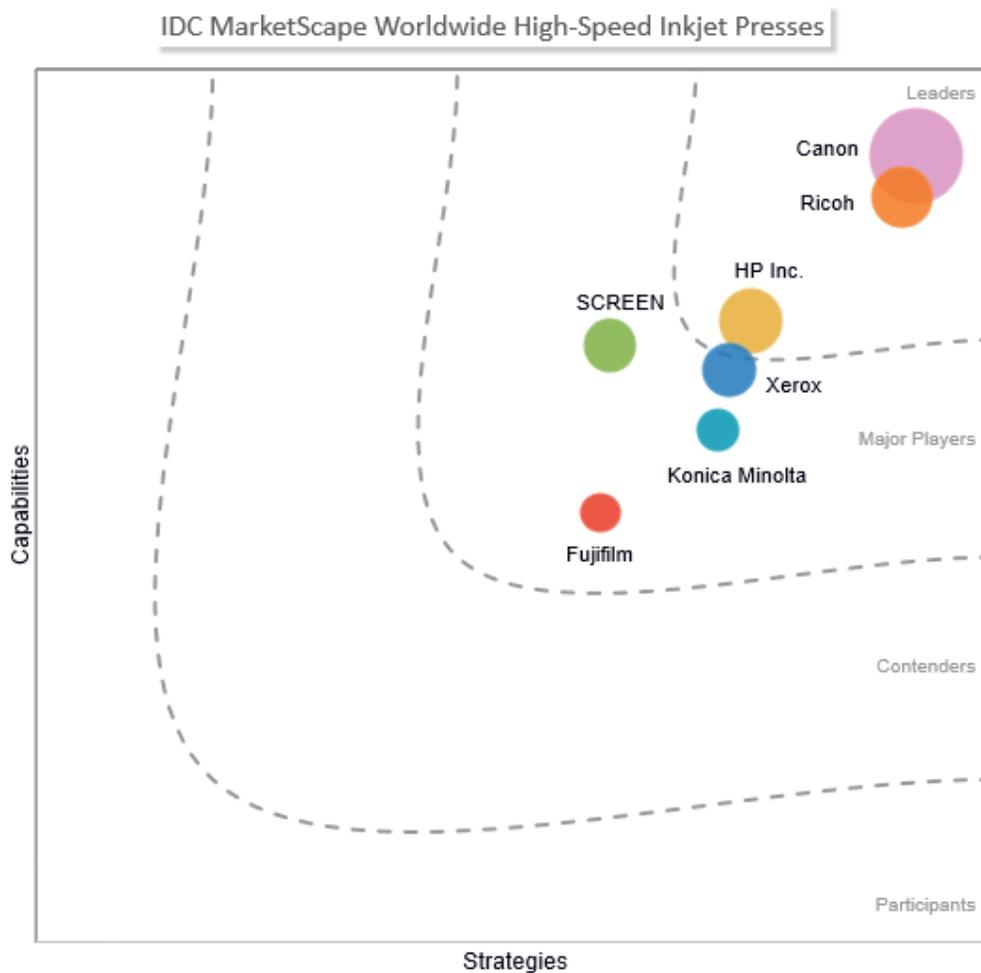
Sharon McNee

THIS IDC MARKETSCOPE EXCERPT FEATURES CANON

IDC MARKETSCOPE FIGURE

FIGURE 1

IDC MarketScape Worldwide High-Speed Inkjet Press Vendor Assessment



Source: IDC, 2019

Please see the Appendix for detailed methodology, market definition, and scoring criteria.

IDC OPINION

This IDC MarketScape assesses the major printer vendors that provide high-speed inkjet presses to the worldwide marketplace. This study is an update to *IDC MarketScape: Worldwide High-Speed Inkjet Press 2016 Vendor Assessment* (IDC #US40331116, September 2016).

The inkjet market has expanded and grown in sophistication since our previous study, especially around expansion of platforms, ink and dryer technology, and better image quality. IDC believes inkjet is the future of digital production print, and the IT suppliers in this space are driving that transformation. As productivity expands (both upstream and downstream), we see inkjet doing battle with both analog and digital toner markets. For a print service provider (SP), inkjet is a game-changing technology, allowing for high-speed, variable printing at lower costs per page. Inkjet will change a print SP's sales, production, and workflow model. Because of the mass effect inkjet can have on the business, a print SP should consider a vendor partner that can ensure the following:

- **Reliable delivery of product and reliable ongoing delivery of supplies.** Especially within the transaction/CCM space, when a company is producing tens of millions of pages per month, printing is an important business process that requires reliable equipment and a consistent source of ink and media to ensure its uninterrupted 24 x 7 operation. As we see inkjet expand into more commercial print applications, reliability of product depends on good image quality and color management.
- **Extensible for end-to-end solutions with partner integration.** "Extensible" refers to working closely with partners for a complete solution including integration of bindery or mail finishing lines, driving manufacturing efficiencies.
- **Upgraded path:** OEMs will continue to make new technology developments and improvements, so to ensure you are not left behind, look for a press with an upgrade path that gives existing customers the "latest and greatest" when it becomes available, to protect your investment.
- **Commitment to ongoing innovation with substantial research and development (R&D) expenditures.** Customers purchasing million-dollar-plus inkjet presses expect a substantial ongoing commitment to innovation from their vendor partner to add features, support for new substrates, and remain competitive or expand their markets.
- **Global sales distribution.** It is important to support the top-tier buyers with multinational locations. Savvy vendors need to have a globally integrated sales force with channel partners in remote geographies and emerging markets.
- **Flexible ink, click, and service models.** Increased operational reliability drives the trend toward users, with some users preferring self-service models with no "click" charges. Users that self-maintain and buy supplies as needed gain flexibility by varying ink usage according to quality requirements and job pricing.
- **Workflow standards and MIS integration.** Vendors offer integration to address a range of customers' digital print workflows, including web to print, scheduling, process optimization, and finishing. They utilize industry standards such as ADF, PDF, JDF/JDM, ISO, and SAS. Custom MIS integration involves core line-of-business systems from vendors such as IBM, Oracle, and SAP.

- **Optimization and control over aspects of the vendors' own supply chain.** Vendors should have the ability to react and adjust to profit margin pressures as market maturity and increased competition cause price compression of hardware and inks.

IDC MARKETSCOPE VENDOR INCLUSION CRITERIA

The vendors selected for inclusion in this IDC MarketScope were determined to be among the current market participants for high-speed inkjet hardware presses with more than five installations total and one install minimum in each major region (North America, EMEA, and Asia/Pacific [including Japan] [APJ]). This determination was made by a combination of historical market share data analysis from IDC's Worldwide Quarterly Hardcopy Peripherals Tracker and analyst opinion.

ADVICE FOR TECHNOLOGY BUYERS

IDC expects inkjet to be the technology of the future when it comes to production document printing. Toner-based devices are not going away, but inkjet offers a new pricing paradigm, with lower cost per page at high volumes. As inkjet grows in maturity, the technology is expanding and spreading across new markets. It is expanding downstream, with vendors offering smaller platforms with lower acquisition costs. IDC calls this "the democratization of inkjet," meaning that more print SPs can start to invest in a technology that had been beyond their reach. But inkjet is expanding higher as well, as some vendors are looking to grab more analog share with faster, robust "big iron" devices that can print well over 50 million pages per month.

As part of this research effort, we spoke with a number of end-user customers and asked what advice they would give to buyers of high-speed production inkjet and related technologies. The following list provides a synopsis of the recurring themes in these interviews:

- **Total cost of ownership (TCO) is the biggest influencer, and it can be a moving target.** After speaking with customers, IDC found that the biggest influence on customers choosing their technology supplier is total cost of ownership. Typically, that means evaluating the price of the machine along with the running cost of *existing* programs, with the expectation of running the device for at least five years. TCO and running costs consider quality, service, supplies, and speed of the press. And you can't forget to add in finishing requirements when considering the costs.

However, inkjet almost always changes your print volumes – it increases them. As volume changes, it has click charge implications. And customers tell us that 5 years is perhaps too short of a life cycle. It is more reasonable to expect the equipment to last at least 10, 12, or 15 years. In that time, service needs will change. Applications, substrates, and ink coverage amounts will evolve, especially for customers that can upgrade their presses to accept new technology advancements.

When running TCO analysis, the hardware vendor must offer you a variety of scenarios and a model to help you understand "how much is this investment *really* going to cost me." Price of the equipment is only one factor. And many buyers are replacing toner-based machines, which adds another layer of complexity to the model. Moving from a different click and cost-per-page model with increasing volumes can instantly offer savings, but it can be a complex math exercise to figure out just how much. Considering most vendors have different pricing models, finding the real apples-to-apples comparison can be hard. Most buyers we spoke with appreciated a vendor's ability to show a multitude of pricing scenarios quickly (within two

weeks or less) based on life of equipment, increasing in page volumes, expected new business, and higher coverage.

- **Remember that choosing a supplier begins a true partnership.** One customer that IDC spoke with said, "Determine which company is best aligned with your own when it comes to values, work styles, ethics, integrity, honest, and trust." Many times, a sales decision is based on people, especially when technology gains are making it harder to differentiate with technology alone. Another customer said, "You need to determine who will be the best partner for your business. Who remembers you at industry conferences and events? Who values and listens to you, no matter the size of your company?" Another customer said, "We have a daily working relationship with [our supplier]."
- **Installation can be quick, but the learning curve can be extended.** An inkjet press can be huge on a physical scale. Where to put the press is an important question. Another important question is, "When should we install it?" Installation takes a lot of planning when you consider how adding a new technology will affect your SLAs and existing contracts. The installs usually go quite quick once the date is chosen. The typical timeline we heard about is:
 - **Pre-install prep:** 2-3 weeks
 - **Actual press installation:** 2-3 weeks
 - **Post-install tweaking:** 1-2 weeks

The biggest bottlenecks print SPs encountered typically had to do around the digital front end (DFE) and finishing, especially if you are adding a new finishing line to accommodate new applications. IT is a huge part of the equation, and some customers had to dedicate additional IT resources during the process, especially as the amount of variable data increased and aligning their security infrastructure with the device took some time. Another part of the long learning curve is automation. Don't let manual touch points and labor costs slow down the efficiencies and savings gained with inkjet.

- **Ask for sales training along with business development.** Leaders in the production inkjet world offer business development services for their customers. Selling inkjet is different than selling toner or analog, so a large part of the transition becomes a sales training issue. Successful customers we spoke with understood that being successful with inkjet went far beyond understanding how to use the technology; the internal sales force and customer service employees needed to be trained in how to sell inkjet to the print buyers. One customer said, "Our sales and client service approach needed to be updated to support the high-quality personalized print this press could produce. Our internal processes also needed to be updated to support larger sheet sizes.

Another customer told IDC, "We choose our partner because they offer solutions to better position our company for growth and relevance."

- **Service for inkjet is different when compared with toner.** When customers are making their inkjet buying decision, they weigh the service force head count, geographic coverage, and expertise/experience very heavily. However, in reality, the usage of the service organization ends up being quite low once the installation process is complete. This is especially apparent when they compare their inkjet experience with their previous experiments with toner devices. Toner devices require a lot more service calls. One customer said of its inkjet device, "We turn it on in, and it just runs." Apart from basic maintenance, service calls are few. And suppliers are coming up with inventive ways to offer nimbler service, including training their finishing hardware partners to service machines and helping more customers move to a self-service model.

VENDOR SUMMARY PROFILES

This section briefly explains IDC's key observations resulting in a vendor's position in the IDC MarketScape. While every vendor is evaluated against each of the criteria outlined in the Appendix, the description here provides a summary of each vendor's strengths and challenges.

Canon

Canon is positioned in the Leaders category in the 2019-2020 IDC MarketScape for worldwide high-speed inkjet presses.

Canon has a comprehensive range of high-speed inkjet production printers incorporating both continuous feed and cutsheet platforms. Canon has a complete direct sales force to cover all global regions, and an experienced supplier to this market, it has high levels of expertise in not only installations and support but services and business development as well. Canon has excellent workflow with its PRIMSA solutions and invests most heavily in inkjet with R&D spend. Canon has strengthened its position in its core markets of transaction and corporate/large enterprise print while expanding out into the graphics and commercial printer space with its latest ProStream series platform and VarioPrint i-series.

Product Capabilities

The continuous feed inkjet portfolio includes the ColorStream, JetStream, and ProStream platforms. Its inkjet portfolio is further strengthened by the VarioPrint i-series family of sheetfed inkjet presses, and Canon entered the packaging market for the first time in 2018 using its inkjet technology with the launch of the LabelStream series.

In addition to its inkjet products, Canon also has a full range of cutsheet and continuous-feed toner-based devices in its product locker. An expanding collection of inkjet and toner printers enables Canon to address the needs of a large spectrum of customers with varying print needs and requirements, including the capability to run coated and uncoated paper jobs, various run lengths, wide format, and a myriad of applications that span the internal CRD environment through commercial print.

Canon has the technology and expertise to address markets such as book and photo printing, postcard printing, graphics arts work, transactional and transpromotional, and premium direct mail jobs regardless of budgetary constraints and print room size and dimension limitations. The vendor views the analog/offset market as still largely untapped and wants to be the analog customer's pathway to digital.

Canon has responded to this in many ways including introducing the latest iteration of the iQuarius MX inks for the VarioPrint i-series+, which have been specifically developed to meet the needs of customers working with offset-coated papers for high-quality graphic arts application. For the higher quality demands of commercial, publishing, and premium direct mail applications, the ColorStream 6000 Chroma features the Chromera ink set, which offers high color fidelity, a wider gamut, and higher optical densities. PreFire technology and advanced image processing with consistent droplet size and positioning allow for smooth image shading, extend the application fit of the press, and ensure higher quality over a wider media range. The ProStream platform, which replaced the ImageStream for commercial printing, also benefits from these technology advancements (see Table 1).

TABLE 1**Canon High-Speed Inkjet Portfolio**

Model	Speed	Width	Feeding	Ink
Océ VarioPrint i300/i200	294 letter images/minute	Up to 13.9 x 19.7in.	Sheetfed	Pigment
Océ ProStream 1000	Up to 262fpm	16–22in.	CF	Pigment
Océ JetStream Graphira	Up to 833fpm	8.5– 30in.	CF	Dye
Océ ColorStream 6000	Up to 417fpm	6.5–21.25in.	CF	Dye and pigment
Océ ColorStream 3000Z series	Up to 127mpm	6.5–21.25in.	CF	Dye and pigment
Océ JetStream Dual series	Up to 656fpm	6.5–20.5in.	CF	Dye, pigment, and MICR
Océ JetStream Wide series	Up to 833fpm	8.5–30in.	CF	Dye, pigment, and MICR

Source: IDC, 2019

Product Road Map and R&D Strategy

Canon invests heavily in intellectual property and typically diverts 8-9% of revenue to R&D. While clearly strong in device manufacturing, Canon's technology expertise extends beyond hardware to its solutions offerings too. Canon continues to develop its sheetfed Voyager technology, working to make the wider-sheet platform cost competitive when it comes to commercialization.

As Canon has a large installed base of engines, the company is actively working to help its customers increase their print volumes, ensuring that product developments are backward compatible for its installed base of customers. Furthermore, the company operates Project 360 – an initiative designed specifically to help customers move more applications and jobs to their inkjet presses.

To expand more into graphics arts with the ProStream, Canon acknowledges a longer sales cycle. Canon is deploying more sales task forces that are familiar with these specific print environments and product segments. Sales has been reorganized with a more direct line from R&D to customers, allowing for a more customer-focused approach and quicker reaction time. Customer references laud Canon sales by citing that its relationships with their account managers was one of the main reasons for doing business with Canon.

Support and Services

Over a period of many years, Canon has built up a strong direct sales force and service organization including worldwide parts and consumables distribution across global regions. Canon has a powerful direct sales force with reps operating across the United States, Europe, and Asia. In addition, Canon employs color and application specialists to help build its capabilities as a consultative sales

organization. Canon's salespeople are trained to be customer focused, integrating Canon systems while transforming the customer's print business.

Canon deploys an eight-step customer investigative/desire process: discovery, what, how, who, when, how much, aftersales, and ongoing support. Its proprietary PRISMA workflow and output management software is a key component of Canon's production print ecosystem.

Canon employees 1,000 production print service technicians with over 600 of them specializing in high-speed inkjet. Depending on the customer's location, Canon can offer a variety of flexible service options tailored to the customer's needs, including 24 x 7 on-call support, contingent on the customer's SLA demands. Canon also offers remote monitoring and remote support as well as customized billing schemes. Recently, Canon has employed predictive analytics coupled with remote machine monitoring to proactively address service needs and minimize downtime. Canon places strong emphasis on training. Training courses can take place at the customer site or at one of Canon's hubs such Boca Raton (the United States), Poing (Germany), and Venlo (the Netherlands) and are conducted in local language.

This long-standing sales distribution and service asset along with its evolving business development offering have shaped Canon's reputation as a supplier that can not only manufacture but can also help sell and service production printers, thus enabling customers and partners to produce quality work and to grow and create existing and new business revenue streams.

Strengths

- A complete integrating ecosystem, including a hardware portfolio comprising both continuous feed and cutsheet products, proprietary PRISMA software, and an expanding range of own inks, stocks, and media
- An experienced and well-established sales and service organization across global regions
- Manufacturing innovation fueled by a substantial investment in R&D funding
- Customer events held at manufacturing sites such as Boca Raton, Poing, and Venlo (Production Printing Business Days and Cutting Edge)

Challenges

- Carefully managing the rebranding exercise, which will see the disappearance of the Océ logo; the Océ badge enjoys tremendous global brand equity, and while Canon brand recognition will improve, there may be a period of difficult transition
- Developing more connections and pathways among its customer base to allow cross-fertilization of best practices and business ideas beyond the periodical customer events; further develop and expand the Canon think Forum globally

APPENDIX

Reading an IDC MarketScape Graph

For the purposes of this analysis, IDC divided potential key measures for success into two primary categories: capabilities and strategies.

Positioning on the y-axis reflects the vendor's current capabilities and menu of services and how well aligned the vendor is to customer needs. The capabilities category focuses on the capabilities of the

company and product today, here and now. Under this category, IDC analysts will look at how well a vendor is building/delivering capabilities that enable it to execute its chosen strategy in the market.

Positioning on the x-axis, or strategies axis, indicates how well the vendor's future strategy aligns with what customers will require in three to five years. The strategies category focuses on high-level decisions and underlying assumptions about offerings, customer segments, and business and go-to-market plans for the next three to five years.

The size of the individual vendor markers in the IDC MarketScape represents the market share of each individual vendor within the specific market segment being assessed.

This worldwide high-speed production inkjet press market segment is defined by three distinct groups. While this IDC MarketScape is similar to what was depicted in the past, there are changes in the graphic due to changing vendor strategies and as substantive plans to go after the commercial print sector grows in importance. Uncertainty about strategy, a more limited portfolio, or current financial performance were big factors when it came to the Major Players.

IDC MarketScape Methodology

IDC MarketScape criteria selection, weightings, and vendor scores represent well-researched IDC judgment about the market and specific vendors. IDC analysts tailor the range of standard characteristics by which vendors are measured through structured discussions, surveys, and interviews with market leaders, participants, and end users. Market weightings are based on user interviews, buyer surveys, and the input of IDC experts in each market. IDC analysts base individual vendor scores, and ultimately vendor positions on the IDC MarketScape, on detailed surveys and interviews with the vendors, publicly available information, and end-user experiences in an effort to provide an accurate and consistent assessment of each vendor's characteristics, behavior, and capability.

Market Definition

IDC's definition of a high-speed production inkjet is as follows:

- Continuous inkjet presses capable of printing across an 18in. or greater width and at speeds in excess of 200fpm
- Sheetfeed devices with a print width of 8in. or greater (does not include narrow web for labels and packaging)
- The main production print markets including transaction (statements, envelopes), publishing (books, magazines, newspapers), direct mail (catalogues, brochures, marketing collateral, postcards), and general commercial print
- Inkjet presses including a variety of inkjet printhead types: thermal, continuous, and piezoelectric, using aqueous (pigment or dye) or UV inks

LEARN MORE

Related Research

- *IDC FutureScape: Worldwide Imaging, Printing, and Document Solutions and 3D Printing 2020 Predictions* (IDC #US45586119, October 2019)

- *Landa Digital Printing Gearing up to Disrupt at drupa 2020* (IDC #EUR145020219, September 2019)
- *U.S. and Worldwide Production Color Forecast, 2019-2023: Get More Colorful Output in a Smaller Footprint with Lighter Production Devices* (IDC #US45371319, July 2019)
- *U.S. and Worldwide Production High-Speed Inkjet System Forecast, 2019-2023: Despite Economic Uncertainty, Inkjet Will Continue to Make Gains* (IDC #US42615018, May 2019)
- *Hunkeler Innovationdays 2019 Highlights the Importance of Automated Print Production* (IDC #EMEA44905019, March 2019)

Synopsis

This IDC study represents a vendor assessment of providers offering high-speed inkjet presses through the IDC MarketScape model. The assessment reviews both quantitative and qualitative characteristics that define current market demands and expected buyer needs for high-speed inkjet presses in the production print market. The evaluation is based on a comprehensive and rigorous framework that assesses each vendor relative to one another and the framework highlights the key factors that are expected to be the most significant for achieving success in high-speed inkjet over the short term and the long term.

"High-speed inkjet presses are the biggest growth opportunity in production print. Not only will they grab share from toner devices, they will help push the analog-to-digital conversion. Inkjet changes not only the pricing model for print SPs but also how they handle workflow and automation because of the increase in uptime and print volume. For the print SPs, inkjet is a game changer, and choosing the right technology supplier is imperative in riding that inkjet wave of success." – Amy Machado, research manager, Imaging, Printing, and Document Solutions

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