KEYPOINT INTELLIGENCE | InfoTrends

PREPARED FOR:

SUPERWEB

WHITE PAPER

SUPER WEB AND THE WEBJET 200D

Filling a Market Need for Mid-range Users

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Executive Summary

Super Web comes to the digital print market with years of experience in high-speed roll-fed web offset printing. In partnership with their imaging technology provider Memjet, they have developed an extremely productive color inkjet printing system and are growing their North American user base with customers in applications like transaction, direct mail, and publications. Users of the WEBJet 200D appreciate the accessibility of the system's acquisition price point, its optional self-service maintenance model, and the market knowledge around printing and finishing that Super Web brings to the table.

Key Findings

- **Affordability and volume:** At a total solution acquisition price in the $1 million range and volume capability up to 15 million duplex color letter-size impressions per month, Super Web has identified an attractive space for end users looking to shift page volume from offset to digital, while also providing an opportunity to shift color toner volume to a more affordable platform.

- **Competitive fixed cost:** A lower acquisition cost is an important advantage—not only because it puts the device within reach of users who might not have been able to afford other systems, but it also creates a fixed cost structure that allows users to be successful without having to produce tens of millions of impressions per month.

- **High-speed inkjet technology:** Today's inkjet devices are capable of very strong quality at high speed. Super Web's WEBJet 200D, for example, is capable of 520 feet per minute. This brings the values of digital print to a broader range of applications.

- **A customer participative service model:** In addition to the high system price of many other high-speed color inkjet printing systems, the expense of service is another concern for many end users. Super Web offers a maintenance model that allows users to take on many key service roles and keep their running costs within reason.

- **Customized integrated finishing:** Super Web's experience with web transport and offset presses puts the company in the enviable position of being able to integrate its own or third-party finishing capabilities according to its customers' needs.

Recommendations

- **Reconsider acquisition cost:** Some print service providers may not believe that they can afford a high-speed color inkjet system. Super Web's WEBJet 200D fits in a price and volume sweet spot that is very attractive to a broader range of sites.

- **Process automation:** Consider how digital print helps automate and streamline a range of processes via a white-paper-in/full-color out process that eliminates pre-printed offset shells, enables just-in-time manufacturing, and allows better use of variable color. This facilitates new services and helps meet changing customer needs. Super Web's ability to integrate customized finishing features into a WEBJet 200D system configuration is a very important aspect of this.

Introduction

With the WEBJet 200D, Super Web builds on its expertise in paper transport and offset printing. The company also leverages Memjet inkjet print technology to create an affordable print system suitable for transaction, direct mail, book, newsletter, and some commercial print applications. In this sponsored white paper, InfoTrends will explore how the product's service model and rugged design are a good fit for users with monthly print volumes ranging from 3 to 15 million impressions per month.

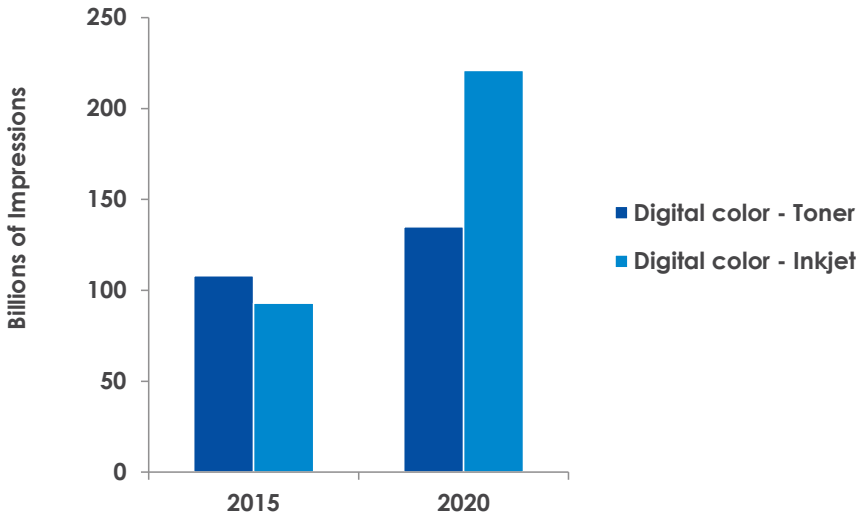
Figure 1: The Super Web WEBJet 200D

Source: Super Web

Market Trends in Inkjet

High-speed inkjet technology advancements are changing the production printing landscape because of their speed, quality, reliability, and low running cost versus other technologies. Since 2008, these systems have found increasing success in applications like transaction document, direct mail, and books. The result has been a staggering increase in the volume of color inkjet pages. As shown in Figure 1, U.S. digital production color volumes totaled about 200 billion impressions in 2015, and InfoTrends expects them to exceed 350 billion by 2020. By 2015, production color inkjet pages had accounted for 46% of the total production digital color volume, and we expect that they will account for 62% by 2020. This occurs despite the fact that digital color toner volume is also growing at a 5% rate. It is simply stunning that the relatively small installed base of production color inkjet systems (about 1,500 print engines in 2017) is producing as many pages as all of the production color toner devices (which have a 2017 installed base of around 200,000).

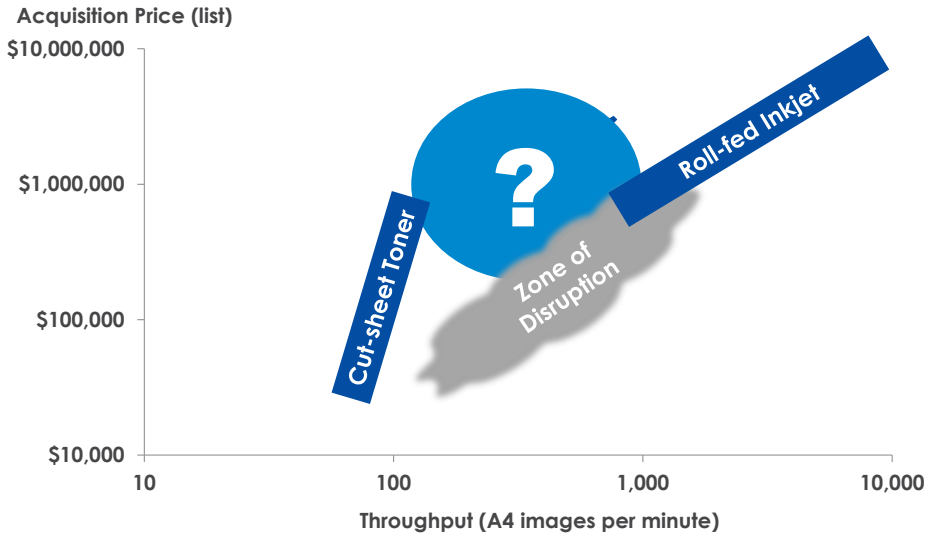
Figure 2: U.S. Digital Production Color Print Volume by Technology



Source: U.S. Production Printing & Copying Market Forecast: 2015-2020, InfoTrends

Despite this success, a large throughput gap remains between the fastest cut-sheet color toner devices and the least expensive continuous-feed inkjet systems. A range of different product types are beginning to enter this gap. The most disruptive ones, in terms of speed and running cost, fall into an area that InfoTrends calls the "Zone of Disruption."

Figure 3: The Zone of Disruption



Source: Keypoint Intelligence InfoTrends

While high speed, reliability, and attractive cost metrics are critical to success in the Zone of Disruption, another key advantage is that these very productive digital print products have significant advantages over conventional processes like offset lithography. These benefits include:

- **Device flexibility:** Digital printers can produce a mix of color, light-coverage color, and black & white pages cost effectively on a single device.
- **Ease of operation:** A single operator can drive large volumes and a single continuous-feed device can match the productivity of multiple cut-sheet digital machines.
- **"White paper in, full color out" workflows:** Sites using offset-printed shells (i.e., pre-printed forms) for the color component of the document and then "lasering" on the variable data can simplify this to a one-step process, eliminating the logistic hassles of warehousing up-to-date preprinted stock.
- **Color flexibility:** Digital printers can allow designers to use variable color in ways that are not possible with pre-printed offset shells.
- **Just-in-time document manufacturing:** Digital print is very well suited to the on-demand or just-in-time production of promotional and publication applications.

About Super Web

How does Super Web fit into this picture? Founded in 1971, Super Web has a long history manufacturing printing presses and has operated as a secondary brand for Didde web offset parts, sales, and service. This experience provides a solid foundation for the company's understanding of robust paper transports, high quality web printing, and integrated finishing. Super Web manufactures its products in its West Babylon, NY location on Long Island, where it also maintains a dedicated customer demonstration center.

In 2011, Super Web partnered with Memjet and had launched the WEBJet line of production color inkjet printing systems by 2013. Since then, the installed base has grown to include leading-edge customers like Church Bulletin Inc. (West Babylon, NY), Data Service Solutions (Bolingbrook, IL), Flex, (Birmingham, AL), High Cotton (Irondale, AL and Coppell, TX) and Laser Print Plus (Columbia, SC).

Super Web's stated vision is "to partner with customers to deliver digital print solutions that maximize quality and productivity, while minimizing acquisition and operating costs." The company works to accomplish this by manufacturing and integrating customizable presses to high mechanical standards. With the addition of inkjet, that means that web handling, ink delivery, and system control software are integrated together in each WEBJet printing solution and customized for each individual customer.

Super Web's sales focus today is on the United States but, as the customer base increases, the company will likely expand to other geographies. In addition to Memjet, other Super Web partners include adphos, Bosch, Erhardt & Leimer, EMT International, Meech, Tecnau, and Xitron.

About the WEBJet 200D

The WEBJet 200D is designed as a direct mail, transaction, book, and commercial printing solution that integrates with a range of in-line finishing equipment from Super Web or its partners. Systems can be configured as roll to roll, roll to sheet, or roll to fold. With finishing installed, the system can stack, punch, perforate, and fold in-line. Slitting, die-cutting, and booklet-making are also possible. A variable cutter can create sheet output up to 22". Running at speeds of up to 520 feet per minute (158 meters per minute), the WEBJet 200D fits nicely at the high end of the productivity gap between cut-sheet color toner and most continuous-feed color inkjet systems. The duty cycle (i.e., maximum monthly volume) is 15 million four-color duplex letter images per month. Super Web reports that its customers' average monthly volumes range from 3 to 15 million letter images.

Integral to the WEBJet 200D are the printheads supplied by Super Web's technology partner Memjet. These 1,600 by 1,375 dot per inch printheads are capable of firing over 774 million drops of ink per second at a droplet size of 1.2 picoliters. The system uses water-based dye CMYK inks from Memjet and supports a continuous print width up to 17.2" (436.9 mm). A fifth color is available, if desired.

An additional level of flexibility comes from the fact that users can adjust the spacing of the printheads and use them as one combined 17.2" array or separate them and print to two unstitched 8.64" zones across the web. This enables larger finished pages with some flexibility with page bleed.

Table 1: Super Web Jet WEBJet 200D Specifications

Specification	Description
Maximum Color Speed	520 fpm /158 mpm
Duty Cycle	15 million four color duplex letter images per month
Web Width	Up to 20.5" / 520.7 mm
Print Width	Up to 17.5" / 444.5 mm
Print Technology	Memjet 8.64" printheads, dye-based inks
Native Resolution	1,600 x 1,375 nozzles per inch
Media Weights	10 bond to 110 lb. index (45 to 210 gsm)
Media Types	Uncoated offset media and inkjet-optimized coated media
Digital Front End	Xitron Workflow, Harlequin RIP and color management, PDF, IPDS, PS support
Web Handling	Tight web continuous roll feed

Super Web's service model options are another important benefit—particularly for customers who wish to take on more aspects of maintenance. The company takes a strategy that embraces the operator and combines it with robust transport and reliable imaging technology. With training, many aspects of the maintenance can be handled by a mechanically inclined, computer literate operator. Printheads can be changed easily in a matter of minutes. For situations requiring additional help, Super Web offers a service maintenance program that connects users with trained technicians within an average of 15 minutes.

The Super Web WEBJet SmartStacker

Expanding on its existing finishing expertise, Super Web has recently announced a new stacking system solution called WEBJet SmartStacker that features two sheet deliveries, which allows sheet sets to be continuously delivered to the operator without stopping or slowing down the press. The printed web is cut and then the stacker creates sets of stacked sheets for applications like statements or books. Once the first stacker reaches its capacity, incoming cut sheets are sent to the second stacker. SmartStacker supports sheet sizes ranging from 8.5" by 11" to 11" by 17" and supports paper weights from 10 lb. bond to 110 lb. index (45 to 210 gsm).

Feedback from WEBJet 200D Users

In conversations with end users, a few things become clear:

- **Acquisition price is a game changer:** The pricing of the WEBJet 200D allowed customers to enter the high-speed color inkjet market with confidence that it was a good fit for their budget and print volume requirements.
- **Seeing is believing:** Early WEBJet 200D customers have been open and generous with their time and have shown Super Web prospects the benefits of the system. Seeing a digital device running at hundreds of feet per minute is enough to convince a digital print skeptic that a tectonic shift has happened in the market.
- **Productivity shift:** Some users found that print jobs now take a quarter of the time that they did previously. This speaks to overall productivity, but also to the burst speed that may be required for quick turnaround jobs. One user noted: "It has given us great flexibility, great productivity."
- **Reliability:** Inkjet users have been pleasantly surprised with the uptimes of inkjet devices. This is particularly true when much of their experience is with toner-based devices whose system complexity and paper paths contribute to less than optimal uptime. One user said that he was "elated with the reliability" of the WEBJet 200D.
- **Service expansion:** High-speed inkjet fits into an overall business plan that embraces a multi-channel approach to customer communications. This allows users to broaden their services and gain a greater share of their customers' spending.

- **In-house automation as a customer benefit:** Because one of Super Web's customers was able to remove the logistical hassle and cost of pre-printed offset-shells, they were able to tell their customers: "I'm upgrading you to color without raising your price." In this scenario, both the customer and the site benefit. Another customer added: "Everything's white paper going in, and if they call us two hours before we're running one of their jobs, we can make the changes."

- **A preferable service model:** Some sites find it very appealing to take on maintenance tasks, particularly when the device is designed, as the WEBJet 200D is, so that parts are easily accessible (unlike many toner-based devices). "It has room for a wrench," said one new user.

- **A company without a lot of bureaucratic layers:** One disadvantage of working with a large corporate partner is that your requests can get lost in multiple corporate layers of bureaucracy. Customers report that this does not happen with Super Web and that they are able to get a direct line to company decision makers.
- **Compact footprint:** Size constraints can be an issue with the large footprint of some continuous-feed inkjet systems. One WEBJet 200D user noted: "With the other devices that we were looking at, we were going to have to remove some additional equipment in order to make a turn and get both the perfing and the offset stacking in there. Super Web put it all right where we had the old device."

opinion

InfoTrends' Opinion

Super Web, with its history in web offset and a future defined by high-speed inkjet, has created a product offering with a unique appeal to sites looking for an affordable and productive inkjet solution that bridges the gap between production color cut-sheet toner and continuous-feed inkjet systems, while also providing a customer participative service approach which keeps costs in check. The company's success with initial WEBJet 200D users will build momentum and should convince other sites that its acquisition price, customized integrated finishing, its optional self-service maintenance model, and other appealing features must be considered when evaluating competitive solutions.

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Comments or Questions?