KEYPOINT INTELLIGENCE | *InfoTrends*

WHITE PAPER

IMPORTANCE OF SERVICEABILITY:

HOW ONE PRINTER BRAND EXEMPLIFIES BEST PRACTICES

FEBRUARY 2018

Executive Summary

U.S. customers rank service and support as a top factor in selecting a product or vendor for their organization, beating out areas like price and software compatibility. They know that if device uptime isn't maximized, the business' productivity and finances may suffer. Also, as printing deployments have evolved to now typically include software integration, workflow automation, document management, and other solutions, the services required to maintain these areas have evolved as well.

Therefore, when it comes to selecting a strong servicing dealer, customers can benefit from an entity that is backed by a reputable and capable brand partner. This type of partner can provide aspects of servicing and training under one umbrella, including capabilities tied to hardware, software, and related integration services. The brand's technology, training, and operational capabilities can help enable its channel partners to address performance issues quickly and skillfully. Canon is one such brand, as it aims to incorporate industry best practices throughout its service continuum. The company and its network of service partners can provide key benefits in helping to maximize device uptime. This includes robust print equipment and software that is designed to require minimal servicing, highly trained technicians that can promptly resolve issues, and cutting-edge monitoring and analytic technologies that enable an outstanding level of servicing efficiency and effectiveness.

Key Findings

- Customers are seeking a print product and service combination that minimizes servicing needs while maximizing service response times and outcomes.

- Capabilities around proactive maintenance, data security, and technology simplification are other key factors driving product and service provider selection.

- Canon and its service network provide important benefits in the areas of device uptime, servicing time, preventative servicing, security, and technology integration.

Recommendations

- Customers are advised to evaluate their current print and document infrastructure to determine what improvements can be made around device uptime and servicing.

- When considering the effectiveness of the current document infrastructure, IT decision makers are encouraged to solicit opinions from the individuals using the technology.

- Customers may want to consider partnering with a Canon-backed service provider to help keep their print and document infrastructure up and running.

Introduction

Today's multifunction printers are highly capable devices that can perform a wide range of document-related tasks, including printing, copying, scanning, faxing, receiving jobs from a wide range of destinations (including mobile devices and cloud services), and routing documents to a breadth of destinations. Furthermore, the devices' layer security features, productivity, and energy-saving features that add to their versatility. With so many layers of functionality, it's important these products are designed for strength and overall dependability. Furthermore, when an issue does arise, it's important that it can be resolved speedily and proficiently. This white paper will dig deeper into the area of product strength and serviceability, focusing on trends and key considerations around office print equipment. It will also review the ways in which one technology brand— Canon—is aligned with these trends.

Servicing Trends and Key Considerations

This section highlights key trends and considerations in servicing print devices and related technology. It is largely based on primary research and associated insight from Keypoint Intelligence-InfoTrends, a global market research and consulting firm focused on the digital imaging and document solutions industry.
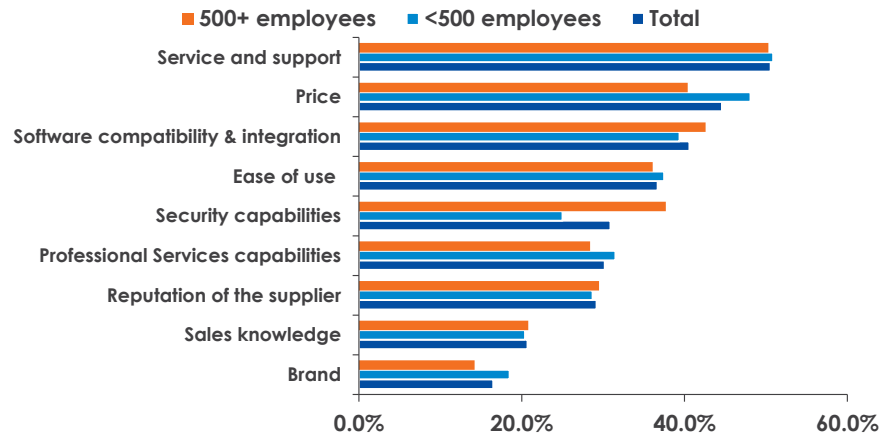
Service and Support a Top Factor in Product Brand Selection

In May 2017, Keypoint Intelligence-InfoTrends surveyed 399 U.S. businesses—216 of which have fewer than 500 employees and 183 of which have 500 or more employees on their printing and document management habits, goals, and preferences[1]. These respondents were either IT decision makers or IT decision influencers. As shown in the chart below, respondents in both categories were most likely to say servicing and support is the main buying criteria for choosing a product or vendor—outside of device features. With serviceability playing such a key role in the buying decision, the quality of the training offered by the manufacturer to the service provider is critical.

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[1]*Note: Unless noted otherwise, all research-related data points referenced in this white paper are based on proprietary research conducted by Keypoint Intelligence*

Figure 1: Besides device features, what are the most important buying criteria for selecting a product or vendor for your organization? Please select the top 3.

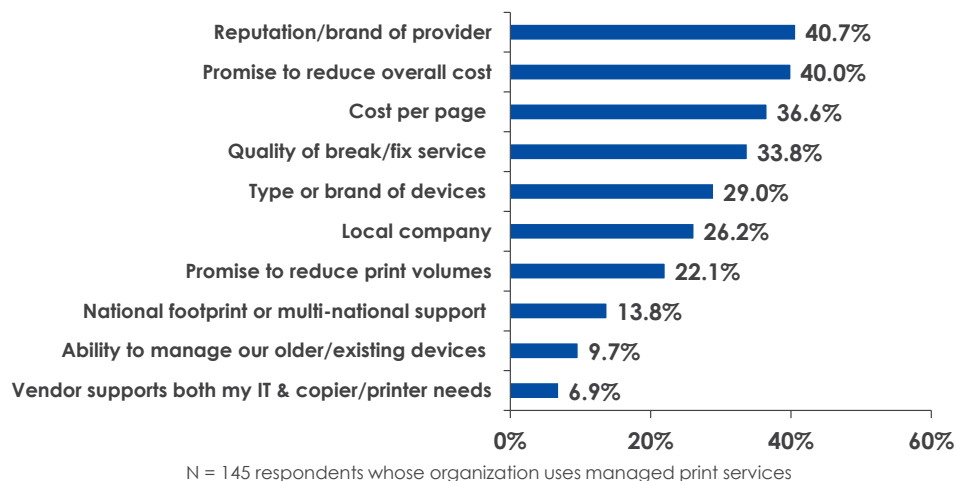*Source: Keypoint Intelligence-InfoTrends primary research (2017)*

Similarly, when asked about the aspect of their print environment they'd most like to see improved, respondents most commonly said "service turnaround time." This was a larger concern than considerations around image quality, software functionality, usability, and hardware functionality.

Reputation, Device Uptime, Expertise Influence Brand Selection

Reputation may not be the main reason a company chooses a particular brand or vendor, but it certainly plays a role. When a brand, for instance, is associated with high-quality, reliable products and deep technical know-how, that brand may have an advantage over the competition. Furthermore, when it comes to choosing a managed print services provider (which is a company that provides devices, supplies, servicing, and other elements under one contract), the provider's brand/reputation is part of the purchase consideration set.

Figure 2: Why did you choose your current managed print service provider?

Reputation/brand of provider	40.7%
Promise to reduce overall cost	40.0%
Cost per page	36.6%
Quality of break/fix service	33.8%
Type or brand of devices	29.0%
Local company	26.2%
Promise to reduce print volumes	22.1%
National footprint or multi-national support	13.8%
Ability to manage our older/existing devices	9.7%
Vendor supports both my IT & copier/printer needs	6.9%

N = 145 respondents whose organization uses managed print services

Source: Keypoint Intelligence-InfoTrends primary research (2017)

That said, reputation can be largely based on results. Well regarded brands tend to design their products and services in such a way that problems like paper jams, empty toner cartridges, and service error codes occur on a limited basis)[2]. In many instances, end-users can resolve these issues themselves; when this is not possible, their servicing partners can provide fast and outstanding servicing.

This can be largely enabled by robust training programs that help provide technicians with a high degree of knowledge about the technology they are repairing. Indeed, many brands do not allow resellers to purchase equipment unless they have completed and passed required training for the devices, software, and related services that they may offer to their customers. These brands may require their servicing partners to have a certain percentage of technicians that have been trained on particular products and mandate that technicians are up-to-speed on the latest features and functionality available. Not only can this training improve the quality of servicing provided on the devices, but it can also boost servicing efficiency. Some brands even offer their servicing partners "train-the-trainer" programs, which give resellers the ability to train new employees themselves—designed to ensure that a sufficient quantity of service technicians is available.

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[2]*Based on product evaluations conducted by Buyers Laboratory*

Opportunity for Streamlining of Service Providers

Keypoint Intelligence-InfoTrends research shows that many companies are still relying on disparate providers to deliver various print and document related services. This includes implementing solutions in areas like scan/capture, printer/copier administration, document management, document security, and workflow improvement.

Table 1: Most Common Type of Service Provider for Implementing Various Solutions

Print solution type	Most common providers for implementation (in order of popularity)
Scan/data capture	Internal staff, equipment manufacturer, software vendor
Printer/copier administration	Internal staff, software vendor, equipment manufacturer
Document management	Internal staff, software vendor, professional services consultant
Document security	Professional services consultant, internal staff, software vendor
Workflow improvement	Internal staff, software vendor, professional services consultant

Source: Keypoint Intelligence-InfoTrends primary research (2017)

While it can be argued that certain providers excel in certain areas, an ideal scenario may be using one provider with a strong knowledge in each of these domains for solutions implementation and support. Some dealers carry brands that offer a comprehensive suite of solutions and associated training on these products. For instance, they may sell multifunction printers from a brand that also makes its own print and document-related software and solutions. Through regular brand-sponsored training sessions, the service provider can then develop a deep understanding of the entire print infrastructure and its various components—in a holistic fashion.
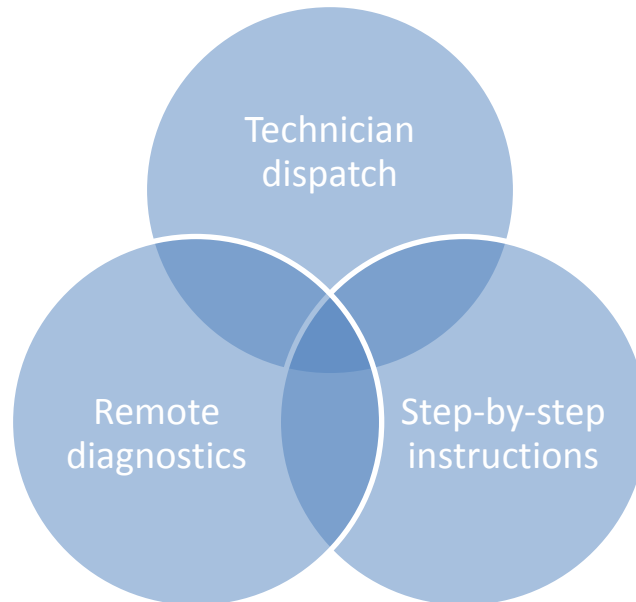
Remote Monitoring a Complement to Other Technical Support

Increasingly, organizations are benefiting from remote monitoring capabilities for their print-related products that allow maintenance issues to be addressed with minimal customer intervention. In fact, Keypoint Intelligence-InfoTrends research shows that close to three-quarters of U.S. companies believe this type of offering is valuable; approximately 45% claim to be benefiting from it. With remote monitoring tools, service providers can monitor the status of network devices in real time; as such, they can quickly address required services. This can save the customer time and effort, as they may not need to call into a center when they detect an issue. Instead, the service provider will theoretically already be handling the issue—whether it involves dispatching a technician, conducting

remote diagnostics (including firmware updates), and/or providing step-by-step instructions to the customer.

Figure 3: Immediate Servicing Approaches Resulting from Remote Monitoring

Source: Keypoint Intelligence-InfoTrends

Service providers can also use remote monitoring to track print volumes (for accurate billing), toner or ink levels (for supplies ordering purposes), and other helpful device information. Robust remote monitoring platforms are often enabled by a provider's relationship with a leading technology brand. These brands tend to have the size, expertise, and research and development capacity to continually update the platforms for accuracy, usability, and efficiency. Remote monitoring can be a complement to other technical resources available to organizations, including help desk and on-site coverage.

Predictive Analytics Increasingly Used to Maximize Device Uptime

Remote monitoring and other device management tools can provide a breath of service data that can be used to help predict and even help prevent upcoming problems. Using reporting and analytics features that are built into the remote monitoring platform, service providers can develop a deep understanding of the types of problems occurring, how often they occur, and why they are occurring. This information can provide guidance as to how to help prevent potential issues from arising going forward. For example, maintenance history records and operational status data may indicate that a specific part should be replaced at a specific time to help facilitate satisfactory device operation. This proactive approach to servicing can help maximize device uptime, which can help boost organizational productivity. Service providers that are partnered with leading technology
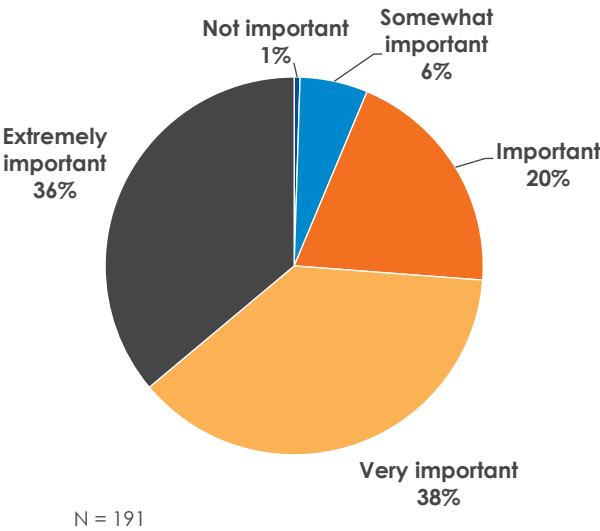
manufacturers may be more likely to have access to predictive analytics technology to benefit their customers, given a manufacturer's capacity for research, development, and overall innovation.

Security a Chief Servicing Concern

More and more, organizations understand the need to protect the security of their corporate documents, data, and devices. Consequently, some do voice concerns about the potential of a service provider monitoring their device's activity. They question if servicing and administrative benefits are worth the provider potentially having access to detailed information on the company. These concerns are valid but can be alleviated when companies discover that the service providers may not have access to the contents of the documents passing through their multifunction devices.

In addition, the real-time monitoring of print devices' activity can open up the opportunity for providers to simultaneously help track the security vulnerabilities of these devices. According to a recent Keypoint Intelligence-InfoTrends study of U.S. companies with 100 or more employees, 74% of IT managers rank vulnerability monitoring and alerting solutions as very important or extremely important to their organization. The results are similar for automated security patch and update functionality.

Figure 4: How important are vulnerability & alerting security controls for your organization?

Not important
1%

Somewhat important
6%

Important
20%

Extremely important
36%

Very important
38%

N = 191

Source: Keypoint Intelligence-InfoTrends security study (2016)

Canon Benefits[3]

This section will review ways in which one leading print device brand—Canon—as well as its network of service providers align with trends in print device servicing. These efforts by Canon may make it an attractive candidate for print equipment, solutions, and services.

Reputation, Device Uptime, and Technician Expertise

Canon is a well-known and regarded brand worldwide for imaging and optical products like cameras, printers, and medical equipment. In various surveys conducted by Keypoint Intelligence-InfoTrends, Canon is among the top brands for print equipment in office settings.

In addition, customers with Canon multifunction printers indicated that issues around network connectivity, scanning, finishing accessories, and firmware/software release upgrades were rare.. Furthermore, of those experiencing issues like paper jams and empty toner cartridges these problems are occurring less frequently.

When a technician is required for an issue, he or she is not only fixing the problem in less than two hours (on average) but overall providing satisfactory or extremely satisfactory assistance. These technicians perform well in resolving issues like paper jams, empty toner cartridges, driver issues, firmware/software release upgrade issues, scanning problems, and finishing problems.

Service efficiency and quality can be enabled by a highly trained support network that knows the products inside and out. In fact, Canon requires its authorized partner support locations to have a minimum amount of trained technicians. Moreover, Canon assesses its training effectiveness by evaluating technicians with customers 90 days after they have attended training. It's also important to note that 106 dealer locations are certified as Canon Authorized Training Providers (ATPs), which enables them to conduct Canon training classes at their location using Canon materials and courseware.[4] Furthermore, on average, 50% of classes are taught by ATP instructors—of which there are 94 in total.

Some other key elements of Canon's training program include continual updates based on feedback from engineers, dealers, and end users; greater emphasis on areas of software that intersect with the print device; and testing in areas like customer focus.

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[3]*Some content in the Canon Benefits section is based on information provided to Keypoint Intelligence by Canon USA personnel and end-user surveys.*
[4]*These locations span 46 ATP dealerships and 94 ATP instructors*

According to Canon, uptime performance varies based on individual customer requirements and contract terms. That said, the company has reportedly delivered 99% uptime performance for some of its most important and demanding customers.

Training — Simplification and Streamlining of Servicing Capabilities

Service providers backed by Canon have the ability and expertise to service a wide gamut of print and document solutions, including multifunction printers, print management software, security tools, cloud connectors, and other workflow solutions tied to the Canon device. This is largely influenced by the fact that Canon is a manufacturer of hardware and software related to these solutions. Canon has a deep knowledge about these solutions that it in turn can pass along to its service providers.

Figure 6: Key Areas of Print/Document Software Developed by Canon

Output Management   Document Capture and Distribution   Mobile Solutions   Information Management and Workflow   Device Management

The ability of one service provider to efficiently and effectively maintain and repair print infrastructure components can really cut down on the waiting and complication that may be involved with using multiple providers for different purposes. Another benefit of this scenario is that because the various technology components are optimized for one another, fewer problems are likely to occur in the first place. In addition, Canon authorized partners may be capable of servicing non-Canon devices and solutions that are part of a customer's fleet.

Simplification and streamlining of servicing can also be attained through common accessories across Canon print devices, a designated operating system across multifunction printers, and remote monitoring capabilities already imbedded.

Remote Monitoring Capabilities

Canon's authorized service partners offer an array of remote monitoring capabilities designed to increase service partner's first call effectiveness— which can help to reduce the overall number of service visits required and helping to assist machines in the field with the latest firmware levels. Access to these capabilities is a result of their strong relationship with Canon, including their ability to leverage Canon's latest programs and innovations. A key component of Canon's remote monitoring platform is proactive device maintenance,

through which a local service provider receives an alert when an issue arises. Should a repair be required, a technician can be dispatched with the necessary parts to perform the job.

Other remote monitoring capabilities include automated meter reading (i.e., tracking of print and copy levels); assisted toner replenishment; and remote firmware delivery. In addition, while at the multifunction device users and technicians can benefit from remote capabilities to install the latest features and/or access up-to-date information on service procedures.

Table 1: Remote Monitoring Solutions Used by Canon Service Providers

Solution	Description
imageWARE Remote Service Monitor	Includes automated meter collection (i.e., tracking of pages printed and copied) and automated service notification or dispatch
Content Delivery System (CDS)	Includes remote firmware delivery, ability for users to install productivity features on device in one step
Service Browser	Accessible on the screen of the device being serviced, this tool can deliver up-to-date, precise information on service procedures to technicians

Predictive Servicing Capabilities

Increasingly, many Canon service partners are shifting from a proactive servicing approach to a predictive servicing approach. Once again, this is fostered through their relationship with Canon and its technological competences. This means that instead of simply monitoring devices, identifying issues, and having the ability to act more quickly than before to resolve the problem, Canon service providers are becoming more equipped to predict what will happen and help address the problem before it actually happens. This is possible through a combination of device sensors, rich service data on areas like maintenance history and operational status, and analytical tools that make sense of the information and provide recommendations for preventative servicing. When problems can be pre-empted, device downtime can be reduced even further. Furthermore, Canon is engaged in additional research and development efforts to help

enable its service partners to improve the accuracy and breadth of predictions going forward.

Predictive servicing capabilities are enhanced by the ability of many Canon service partners to procure next-day deliveries of needed parts.[5] In addition, Canon's 24-7 parts program for production (i.e., high-speed) equipment can support customers beyond typically 9-5 business hours.

Security Services

Canon has designed its imageWARE Remote monitoring platform with security issues in mind. The data communication from the device is encrypted and outbound only; it can only be sent to the Canon server. In addition, data is restricted to meter data, service alerts, and other diagnostic device information. As such, the contents of documents passing through the device as well as user-specific information is not transmitted to the service partner.

Beyond the remote monitoring platform, a Canon service provider can advise customers on how to include security around their print infrastructure. They can help them develop an integrated security plan that considers access to sensitive documents, tracking versions, and monitoring the use of files. They can also train them on the security-related features of their print devices, including potential support for user restrictions, user authentication, hard drive encryption, feature lock capability, and job auditing.

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[5] *This is enabled by bi-coastal warehouses that allow for shorter delivery lengths and later order entry deadlines to meet next-day deliveries.*

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Keypoint Intelligence - InfoTrends' Opinion

Serviceability is top of mind for U.S. businesses; as such, it's important that when issues with a print device and/or related technology arise, they can be swiftly and properly addressed. As part of this notion, it's crucial that print and document technology is built in such a way that the need for servicing is kept to a minimum. Canon is one print hardware and software brand that offers the combination of powerful and reliable technology; highly trained service partners and technicians; and remote monitoring, proactive servicing, and parts fulfillment programs to maximize servicing efficiency and effectiveness. Organizations are encouraged to consider the service components of their current print infrastructure and determine whether they can be improved upon. If this is deemed the case, a service provider backed by Canon would be well worth considering.

This material was prepared by Keypoint Intelligence – InfoTrends specifically for Canon USA. The opinions expressed represent our interpretation and analysis of information generally available to the public or released by responsible individuals in the subject companies. We believe that the sources of information on which our material is based are reliable and we have applied our best professional judgment to the data obtained