Quocirca Analytics Landscape, 2024

A review of print and workflow analytics offerings from MPS providers and ISVs

Vendor Landscape
April 2024
Excerpt Report: Lexmark

QUOCIRCA

Executive summary

In an era marked by hardware commoditisation, declining print volumes, and digital transformation, the global print industry faces significant challenges to maintain its relevance. Embracing a data-driven approach is paramount if leading print industry players are to unlock new opportunities and remain competitive. Smart connected printers and multifunction peripherals (MFPs) are generating a wealth of data that can offer valuable insights to optimise operational processes, improve products and services, and enhance the customer experience.

Analytics and reporting are already embedded in managed print service (MPS) offerings and third-party print management platforms. As the industry transitions towards a solutions- and service-centric model, harnessing data across device, user, and applications opens the door to innovative services spanning digital workflow automation, sustainability, workplace management, and cybersecurity. Artificial intelligence (AI), combined with intelligent document processing (IDP) and robotic process automation (RPA) will bring much greater capabilities to the fore in the near future. Deeper analytics will be required, with greater capacity to reach outside of the print world to use data from adjacent areas (such as workflow and document management systems) to ensure that key areas required by customers are met.

To fully embrace these opportunities, a cultural shift towards open-platform ecosystems and strategic partnerships is essential for print manufacturers and managed print service providers.

Key findings

- **Analytics are the foundation of an effective MPS engagement.** Analytics are a crucial part of an MPS providers' assessment, optimisation, and monitoring capabilities. Vendors that build compelling propositions based on data-driven reporting and recommendations will be able to differentiate and develop stronger and more sustainable customer relationships. Advanced analytics cover areas such as workflow, security, and environmental analytics. This opens the door to transformational services that enable MPS providers to build propositions that extend beyond traditional print.
- **Workflow analytics hold the key to unlocking advanced efficiencies and highlighting digital transformation opportunities.** Most leading MPS providers have comprehensive workflow assessment capabilities. In particular, Xerox leads in terms of the breadth and depth of its document workflow assessments and its MPS Advanced Analytics capabilities. Konica Minolta also has a strong workflow assessment offering, enabling customers to implement workflow automation to replace inefficient paper-based processes. Canon offers a range of in-depth discovery assessments identifying current usage, user needs, and areas for workflow improvement. Lexmark's broad assessment service offering includes business process, environmental and security assessments.
- **Security analytics are set to be a key differentiator.** Printers and MFPs are intelligent IoT devices handling large amounts of often sensitive data. Customers increasingly need assurance over data handling and protection for risk management and compliance purposes, and demand for smarter solutions will rise as a result. HP excels with a rigorous approach to security assessments and a broad range of analytics that provide detailed visibility into the security and compliance posture of the print environment, aligning with global security and regulatory frameworks. Canon's uniFLOW reporting platform is a strong solution, storing all print, scan, fax, and copy data in a central database and offering over 60 reports.
- **Analytics integrations offer added flexibility and customisation potential.** ISV solutions that integrate with tools such as Power BI and building information management (BIM) software offer an added layer of flexibility and granularity for more in-depth analysis. MyQ and Printix integrate with Power BI, while MPS Monitor has embedded it, and YSoft's extensive API capability allows it to integrate with Power BI and other tools.
- **Environmental analytics empowers print vendors to drive sustainability initiatives.** While most MPS providers offer some form of environmental reporting, this may be limited across print management

vendors. Most MPS providers offer environmental reporting, and from an ISV perspective PaperCut excels here, with a strong focus on green reporting across both its on-premise and cloud print management platforms. It delivers sustainability insight for customers through intuitive dashboards that leverage data from smart, connected devices that promote eco-friendly and cost-efficient printing practices. MyQ also offers comprehensive green reporting through its My X platform and Pharos enables customers to track sustainability metrics for their print environment.

- **Empowering channel partners with analytics is key to success.** Partners must be supported to understand the advantage analytics can offer customers and market solutions effectively. HP leads here, with its Amplify programme including an AI Data Science enablement specialism to support partners wishing to build presence in the advanced analytics space. It also offers a range of channel security assessment tools and guides, enabling its partners to differentiate their offerings from competitors. Epson has developed a comprehensive sustainability optimisation tool that has been well-received by its channel partners, leveraging data across a multi-vendor environment.
- **Predictive maintenance analytics will grow more intelligent and be integrated into wider processes.** Long embedded in the industry, predictive maintenance analytics are receiving a boost from the enhanced processing power of machine learning and AI to integrate robotic process automation into print-related processes such as part ordering and supplies provisioning. Xerox uses AI and predictive analytics to deliver proactive support and predictive maintenance.
- **AI/ML-driven analytics.** The next generation of data-driven solutions will leverage AI and machine learning to deliver intelligent, evolving services tailored closely to the customer's environment. Manufacturers and ISVs with visibility over vast device fleets will be able to draw on their proprietary datasets to enhance offerings. For example, Lexmark has invested heavily in AI and machine learning to leverage data from its single global IoT system, developing real-time, interactive analytics that are a key differentiator. MPS Monitor's AI/ML-powered predictive business intelligence tool is also impressive, learning from device history to more accurately predict device performance and enable precise forecasting.

This report highlights the analytics and reporting capabilities of the major MPS providers, along with highlighting the key features of leading print management platforms.

Contents

Executive summary 2
Key findings 2
Introduction 5
Analytics are the foundation of MPS data-driven models 5
Vendor Profile: Lexmark 6
About Quocirca 8

Introduction

Analytics are the foundation of MPS data-driven models

Smart multifunctional printers (MFPs) are sophisticated internet of things (IoT) devices, with a multitude of sensors that generate a wealth of data. Managed print service (MPS) providers have been pioneers in the IoT landscape, with long-established models for predictive service and maintenance. The use of data analytics is therefore well embedded in the print industry to help customers maximise productivity of the device fleet and minimise downtime. As the MPS market continues to mature, a more strategic approach to data-driven MPS models helps providers more strongly differentiate and deliver improved business outcomes for customers. Beyond predictive support and maintenance, understanding device usage and document workflow processes can help organisations uncover opportunities for greater efficiencies – whether this is digitisation of paper-based workflows, improved device and document security, or enhanced sustainability reducing the environmental impact associated with the print infrastructure.

As artificial intelligence (AI) gains a broader foothold in the analytics landscape, the application of AI and machine learning (ML) models creates further opportunities. Cloud-based or 'on-device' AI-powered analytics can help identify security threats by analysing device anomalies to uncover device compromise. Such analytics can enhance security and compliance by monitoring document access patterns. Analysis of environmental data across a device fleet through dashboards can report on the environmental performance of devices and also help with environmental reporting through data collection via the cloud.

Beyond device analytics, content analytics can be applied to documents that are scanned. Sophisticated analytics techniques can optimise scanning workflows by identifying bottlenecks, ensuring high-quality scanned images, and recognising specific content automatically. Advanced analytics can facilitate seamless integration of scanning processes into broader workflows through both intelligent workflow management and data extraction. By understanding how scanned documents move through different stages, organisations can optimise end-to-end business processes. This comprehensive approach, which integrates advanced analytics into printing and scanning processes, is leading to a more complete manifestation of digital maturity, ensuring efficient document management, information routing, and workflow optimisation.

Intelligent document processing (IDP) leverages AI and ML models to extract data from scanned documents and automatically feed it into enterprise applications. User behaviour analysis provides insights into how individuals interact with scanning devices, contributing to improved user interfaces and experiences.

As print vendors and MPS providers navigate this evolution, they have considerable opportunities to unlock new horizons for digitisation. Integration of advanced analytics not only enhances the efficiency of existing printing processes, but also paves the way for profitable innovative solutions and services. From digital workflow automation to intelligent workplace services, MPS providers can leverage data-driven insights to drive transformative initiatives. By tapping into the wealth of data generated by smart, connected devices, they can champion the digitisation agenda, offering value propositions that extend beyond traditional print services and redefine the contours of digital engagement for their customers.

This report highlights the analytics offerings from major print vendors and print management ISVs. It provides details of reporting capabilities, digital workflow automation, sustainability, workplace management, and cybersecurity. This report should be read in conjunction with Quocirca's MPS Vendor Landscape Report.

The following vendors are featured in this report:

- MPS Vendors: Canon, Epson, HP Inc., Konica Minolta, Lexmark, Toshiba America Business Solutions, Xerox
- ISVs: Intuitive, MPS Monitor, MyQ, PaperCut, Pharos, Printix by Tungsten Automation, PrinterLogic by Vasion, and Y Soft.

Vendor Profile: Lexmark

Quocirca opinion

Lexmark's leadership in the MPS sector is underscored by its a comprehensive and innovative analytics platform which provides advanced visualisation and customisation of data insights across print and scan environments. Lexmark MPS leverages the cloud, the IoT, and interactive analytics to enable customers to achieve print simplicity, security, cost, and sustainability benefits. Lexmark uses interactive analytics through its entire MPS engagement lifecycle, giving customers deeper insight into their printing and scanning ecosystem and allowing them to make better, more informed decisions that drive real business value.

The Lexmark single global IoT system manages the 1.5 million devices under MPS contracts around the world, providing real-time fleet and device-level visibility and analytics across all geographies. Lexmark's Customer Governance Portfolio provides enterprise MPS with access to real-time, interactive data visualisations. Customers can drill down to an asset level anywhere in the world. Lexmark excels in offering comprehensive assessment services and innovative analytics solutions.

Lexmark's use of IoT and interactive analytics is a significant differentiator. Its investment in AI and machine learning, combined with over 700 sensor data points in devices, enables predictive service algorithms for remote fixes and proactive consumables management. This data-driven approach provides customers with real-time, interactive insights into their print ecosystem, promoting better decision-making and digital transformation. Lexmark's use of data science teams and partnerships with IT software providers ensures the sophistication of its analytics offerings.

Lexmark's broad assessment service offering, including business process and environmental assessments and a robust security programme, positions Lexmark as a reliable partner for clients looking for a data-first MPS that helps them operate a more efficient, secure, sustainable print environment.

Assessment services

- **Managed Print Services**
    - **Optimisation assessment.** Lexmark consultants work to analyse a customer's current state and develop a recommended future state, leveraging technology, industry expertise, and the knowledge gained from interviews and meetings with a cross-functional selection of customer users. The objective is to optimise end-user productivity and minimise the total cost of print in order to maximise the RoI.
    - **Fleet performance assessment.** This data-driven assessment looks at factors such as device usage, the age of the devices, and the number of service actions to generate recommendations for improvement. Typical results include key metrics that enable customers to measure improvement in their environment, visibility into drivers that affect fleet performance, and identification of root causes. It also provides recommendations.
    - **MPS process analytics assessment.** Lexmark looks at device usage data for MPS customers, including comparisons to industry benchmarks, outlier and trend analysis, and identification of areas for process improvement. The goal is to identify paper-based challenges and analyse end-user output behaviour to make recommendations that improve business process efficiency, lower costs, and reduce risk.
- **Workflow**
    - **Business process and environmental assessment.** Lexmark document workflow, business process, and environmental assessments take a broad approach across the entire enterprise to understand the inter-dependencies of information flow between various business units. The aim is to maximise use of technology, both hardware and software, and develop an implementation plan that will meet customers' business requirements and sustainability goals, as well as reduce costs.

- **Security**
    - Security assessments are a key component of all Lexmark MPS engagements. In January 2023, Lexmark launched its security services programme, which provides a comprehensive approach to device security, vulnerability remediation, and a security-focused device management service. This solution has been designed to identify, categorise, and mitigate security risk through three service components – security consulting, security assessment, and configuration management.
- **Sustainability**
    - **Smart Refresh programme.** Lexmark employs AI/ML/DL as part of its innovative Smart Refresh lifecycle management programme, which uses performance and usage data to replace only the printers and MFPs in a customer's environment that are truly at the end of their useful life. The programme enables devices to be in use for an extended period, beyond the industry average. Customers can save time and money and reduce their carbon footprint by evaluating the print ecosystem performance at the device level, regardless of how long each device has been used.
    - **Product Lifecycle Assessments.** Lexmark assessments deliver environmental impact estimates to showcase the sustainability benefits customers will achieve by using Lexmark ENERGY STAR-rated devices to reduce energy consumption; reducing the number of devices in a fleet to use less energy and require fewer new manufactured products; consolidating single-function printers, faxes, copiers, and scanners into one multifunction device to use less energy and require fewer new manufactured products; using devices with high-capacity consumables with a 100% no-landfill policy and free recycling; and reducing the number of pages printed to consume fewer trees and avoid the carbon impact from the paper production process.

About Quocirca

Quocirca is a global market insight and research firm specialising in the convergence of print and digital technologies in the future workplace.

Since 2006, Quocirca has played an influential role in advising clients on major shifts in the market. Our consulting and research are at the forefront of the rapidly evolving print services and solutions market, trusted by clients seeking new strategies to address disruptive technologies.

Quocirca has pioneered research in many emerging market areas. More than 10 years ago we were the first to analyse the competitive global market landscape for managed print services (MPS), followed by the first global competitive review of the print security market. More recently Quocirca reinforced its leading and unique approach in the market, publishing the first study looking at the smart, connected future of print in the digital workplace. The Global Print 2025 study provides unparalleled insight into the impact of digital disruption, from both an industry executive and end-user perspective.

For more information, visit www.quocirca.com.

Usage Rights

Permission is required for quoting any information in this report. Please see Quocirca's Citation Policy for further details.