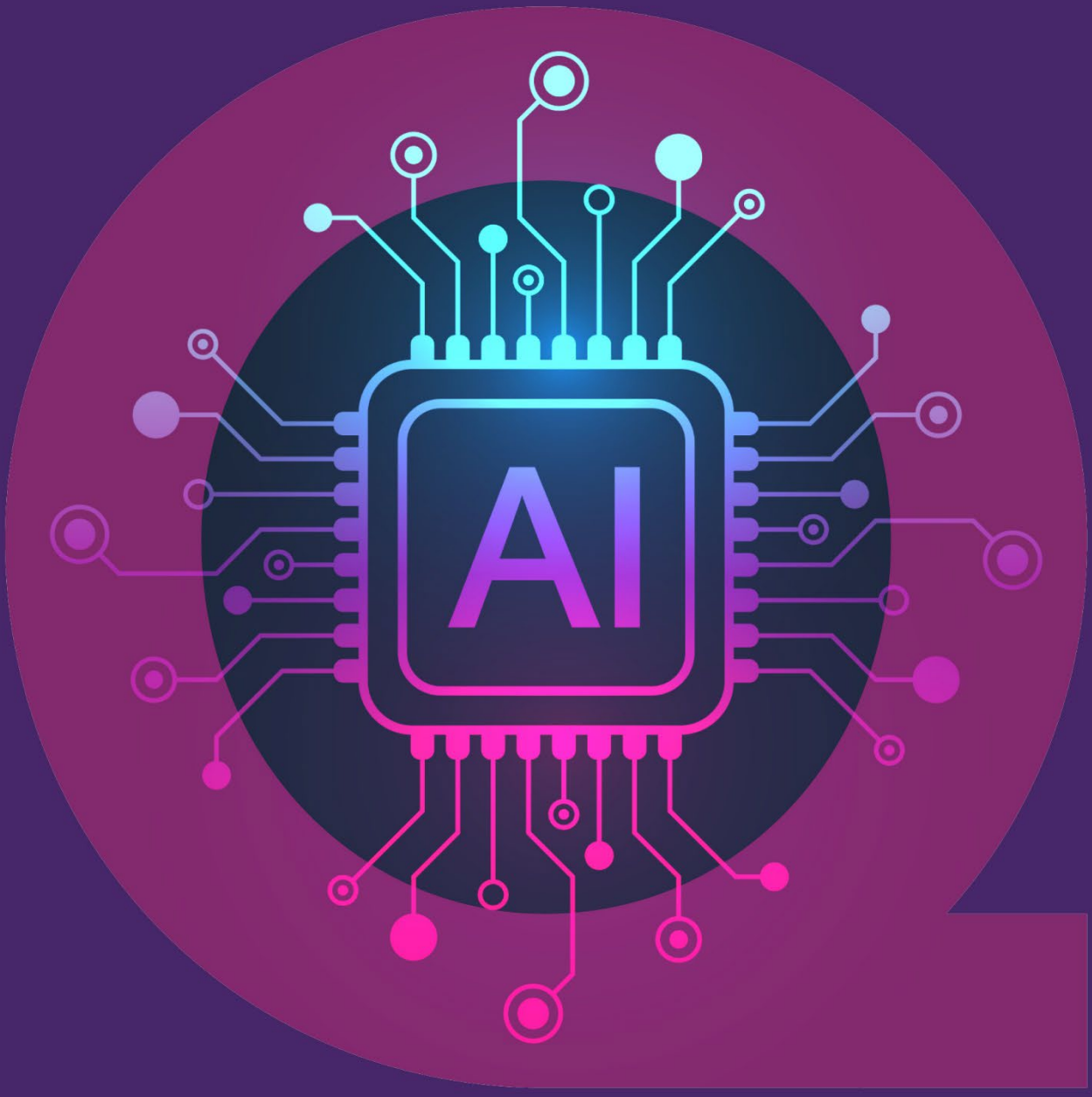
AI Vendor Landscape, 2025

A review of AI-enabled solutions and services from print vendors



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Excerpt report: Ricoh
February 2025

QUOCIRCA

Executive summary

The arrival of generative artificial intelligence (gen AI) has caused a step change in how AI is perceived and where it can be used. Suppliers and organisations are exploring the 'art of the possible,' which is stimulating greater board-level interest and accelerated investment in all types of AI. In Quocirca's 2024 research, 64% of organisations report increasing their investment in AI in 2025, second only behind cyber-security (66%).

While there is a rapidly growing demand for all varieties of AI, such as machine learning, deep learning, and computer vision, the capabilities of gen AI are driving much greater interest in the area because of the more direct results that an organisation can see. A notable 13.5% of IT budgets are being used across all areas of AI, which equates to an average of almost $1.5 million per organisation, according to Quocirca's AI Adoption Trends 2024 study. Key drivers are enhancing productivity, streamlining processes, and driving innovation. AI is now firmly established as a strategic tool that can transform organisations and give them a competitive edge. To keep pace with the market and capitalise on what AI can deliver, vendors and organisations would benefit from AI portfolios that provide ready access to various AI tools, AI techniques, data, and data models.

However, AI also faces a number of hurdles. The main one is from a global regulatory perspective: the EU has introduced its EU AI Act, which covers a range of areas that those providing services in the EU must consider. The US has little to no federal AI regulation – each state has been left to create and manage its own laws. Whether this will remain the case is yet to be seen – particularly with the $500b Stargate announcement and China's release of its open-source DeepSeek AI engine. Along with such worries lie malicious AI usage and whether 'good' AI can fight 'bad' AI meaningfully. Further, the pace of change within AI is enough to confuse most people: is AI an evolution of ML and DL? If so, where does generative AI sit? Is agentic AI a new approach that will replace existing centralised AI approaches, and where does edge computing fit with the various aspects of AI? Will AI-embedded PCs and printers enhance and accelerate the rise of agentic AI – or will these devices have minor capabilities compared to the overall AI universe?

The availability of the right data can also be a problem. General large language models (LLMs) can lead to effective human/device interactions and information management. However, more specific tasks, such as dealing with legal documents and financial matters, may need additional specific language models (SLMs) to ensure AI actions do not result in regulatory, financial, or reputational issues.

Besides the perceived problems, AI is already highly pervasive, partly because it has a co-dependent relationship with other strategic technologies and solutions, including intelligent document processing (IDP), robotic process automation (RPA), analytics, edge, and cloud platforms, as it needs to draw on their capabilities to deliver on its potential. Connecting technologies, data, processes, and business functions could elevate virtually everything it interacts with. Across the print sector, AI is impacting the established area of predictive maintenance, as well as document workflow and automation, cyber-security, sustainability practices, and regulatory compliance. It is also aligned with better business performance.

AI is increasingly integrated into the capabilities of hyperscaler cloud platforms for document processing. All three major cloud providers (Azure, AWS, and Google Cloud Platform) offer AI-powered document processing services. Microsoft has integrated Azure Document AI into its platform, AWS offers its own intelligent document processing (IDP) service, and Google offers Document AI. These platforms enable users to extract data, analyse text, translate content, and automate various document-related tasks. Indeed, AI can be seen as a cloud accelerator: many organisations find it easier to move their workloads to the cloud than to try to bridge the gap between on-premise workloads and cloud-based AI or run AI itself on-premise. Whether this remains the case as edge-based AI and AI-embedded devices using agentic AI to further diffuse the way AI operates is uncertain. However, the cloud is still likely to remain the main engine for AI, as the costs of creating large GPU-based data centres that can manage the compute power required for such powerful engines will be outside the reach of most organisations. This will become even more the case as quantum-based computing encroaches into the AI market – although it remains some years off.

MPS providers are expected to bring innovative AI approaches to print. In this area, providers have an opportunity to use insights derived from MFP and printer data, along with print job usage metrics, to innovate across product and service portfolios.

The application of augmented reality (AR) is starting to appear within AI-enabled predictive support and maintenance to improve customer service. AI-powered analytics deployed to improve the quality and timeliness of print fleet information and alerts and gain insights into usage patterns and user behaviour can provide a foundation for hyper-automation and personalisation. AI-driven IDP is a developing area for print vendors and a route towards diversification into more advanced information management, representing a rich opportunity for print suppliers.

The use of AI to enhance the security of print devices and documents is an active development area, although cyber-security remains an immature area for many print suppliers. AI and cyber-security have an uneasy relationship: while organisations are keen to use AI for defensive purposes, they are concerned that malicious actors can also use it and connected IoT printers present an attractive target. Yet, MPS providers are clearly expected to use AI proactively to hunt for and shut down threats.

Sustainability is a rich area of opportunity for the print industry in applying AI, as it can be used in the design and manufacture of devices, the logistics chains involved with delivering them, the lifetime use of devices, support and consumables delivery, recycling via refurbishment or remanufacture, and the ultimate end of life of certain content. The dual physical and digital footprint that presents a sustainability challenge to print suppliers can also be advantageous because the physical devices provide accurate data to feed into sustainability reporting solutions. Real-world data of this type is a valuable resource for print vendors and the basis for sustainability solutions for customers.

AI embedded into hardware, such as via applications and automation platforms, makes AI more accessible and provides a platform for innovation based on tight integration via MPS software services. The impact of AI-embedded PCs/laptops on the print environment is not yet clear. However, with 79% of organisations planning to refresh PCs and laptops to take advantage of AI enablement over the next 12 months and 73% looking to change their print fleet simultaneously, this could be a disruptive force.

This report highlights key trends in AI for the print market, including the AI Vendor Landscape and in-depth profiles of key print OEM vendors. It also includes research that uncovers the views of IT decision-makers on how they are using and plan to use AI and where they believe AI should be applied to the print environment.

Key findings

- **Leaders recognised in Quocirca's AI Vendor Landscape 2025 demonstrate a commitment to a strategic approach, integrating AI across hardware, software, and services. Leaders include HP, Xerox, Ricoh and Canon.** While AI for predictive service is well established in the print industry, leaders differentiate themselves by applying AI and machine learning across their product and service portfolios to drive significant efficiency and productivity gains for customers. As this market is still developing, we expect to see more investment over the coming year, particularly in workflow/process automation and intelligent document processing (IDP).
- **HP is building a compelling AI-enabled ecosystem for hardware, software, and managed services.** The company continues to invest heavily in AI and machine learning at the device level, enhancing security and threat protection. HP also offers Print AI for print optimisation and HP Scan AI Enhanced, which includes cloud document processing. HP's Amplify AI programme provides unparalleled AI training for its channel partners.
- **Xerox excels in delivering a broad range of AI-enabled document workflow solutions and services alongside embedded device AI**. AI seamlessly integrates into its comprehensive MPS Advanced Analytics platform, powering innovative service offerings such as CareAR. Xerox also offers a robust IDP platform, demonstrating its strength in advanced document processing capabilities. In addition, Xerox ConnectKey technology-enabled MFPs are pre-loaded with AI-enabled applications so users can quickly summarise documents, convert handwritten notes, and automatically redact sensitive documents. Xerox Adaptive Learning uses AI-based algorithms to analyse usage patterns, learn from user behaviour, and automatically adjust device settings to streamline workflows.
- **Canon and Ricoh offer AI-enabled business process automation solutions. Alongside the use of AI** to optimise colour management and image quality, and its new AI/ML security environment estimation technology for its ImageForce MFP platform, Canon offers AI-enabled business optimisation through its IRIS document capture products. Ricoh's good balance between AI enablement across MPS and AI-enabled workflow automation allows it to offer an end-to-end approach across its digital services.
- **Major Players have demonstrated significant advancements in AI capabilities over the past year, each with unique strengths and specialisations.** Among the Major Players, Konica Minolta leverages gen AI across key areas such as document processing, marketing, workflow automation, workplace services, analytics AI, and advanced data management. Its AI-ECM platform for document intelligence stands out, offering third-party enterprise content management (ECM) platform integration. Lexmark leverages AI within predictive analytics and its AI-enabled Optra IoT Platform. Toshiba is a contender with its early-stage Elevate Sky cloud platform.
- **Predictive maintenance and support are still the prime use case for AI.** However, developments such as the use of AR as illustrated by Xerox CareAR and Canon Audio Video Assistance are adding further value to remote service. AI-powered analytics continues to develop, providing deeper insights for predictive maintenance. It also helps enable the emerging area of personalised printing, which HP is moving into through Print AI and Toshiba has as part of its vision for Elevate Sky. Lexmark's Optra IoT platform and Ricoh's IoT Command Center illustrate the importance of IoT capabilities within predictive maintenance.
- **Print security at a device level is a key area of innovation and investment.** HP continues to enhance its AI/ML-driven device security capabilities. Konica Minolta provides device-level security through Workplace Intrusion Patrol. Xerox uses advanced analytics for fleet security through its MPS offering. Canon provides document-level AI-enabled content security through the uniFLOW Image Log Server. Lexmark takes a secure-by-design approach, while Ricoh uses a broad security framework.
- **AI-driven IDP, an important expansion area for print vendors, is gaining traction.** IDP capabilities encompass a range of technologies that automate the extraction, classification, and analysis of data from various document types, such as invoices, contracts, and forms. IDP leverages AI and machine learning techniques, including natural language processing (NLP) and computer vision, to accurately interpret and understand the content within documents, regardless of format or structure. Canon has a range of proprietary data capture and extraction products, while Xerox offers integrated IDP. Ricoh

offers its own proprietary Deep Alignment natural language processing (NLP) technology and continues to invest in its process automation expertise. It acquired Natif.ai, a German software start-up that produces artificial intelligence (AI)-enabled intelligent capture, in April 2024.

- **Hyperscalers are aggressively expanding their IDP and Document AI offerings.** AWS, Google Cloud Platform, and Microsoft Azure are investing heavily in developing and refining their AI/ML capabilities for document processing tasks. This includes services for OCR, NLP, data extraction, redaction, document classification, and intelligent workflows. The availability of powerful, readily accessible AI/ML services from hyperscalers is driving significant market shifts, as smaller players can enter the IDP market and compete more effectively by layering their solutions on the platforms.
- **Print management ISVs are incorporating AI capabilities.** Tungsten Automation is doing this not only through its IDP solutions but also through its content-aware printing capabilities. Celiveo uses Azure Document AI to analyse both scanned documents. This includes simple rules to instruct the AI on handling each document. One example is data loss protection (DLP), where AI can accurately identify sensitive information in documents to be printed or within scanned documents, helping prevent accidental data leaks. Print management vendor MyQ has incorporated AI into its MyQ Roger platform. This integrates with ChatGPT to offer rapid document digitisation and analysis. Users can take a photo of their document, and MyQ Roger's OCR engine will recognise and refine the text. Users can then instantly summarise the document's content and translate it into another language using the ChatGPT integration.
- **Sustainability is an increasingly important use case across the print lifecycle.** AI can support energy efficiencies, drive optimisation on several fronts, improve end-user experiences and sustainability credentials, and assist with legislative compliance. To date, vendors have not been leveraging AI significantly in this area. A notable exception is HP, which has been using AI from design through to end of life to optimise materials, energy, and other resource usage, as well as maximise recycling rates and improve security across its supply chain.

Contents

Quocirca AI Vendor Landscape

Quocirca's AI Vendor Landscape assesses how print OEMs are embedding AI across their products and services. The assessment is based on a range of criteria that determine an overall score for market presence and completeness of offering. Each score is based on a scale of 1 to 5, where 1 is weak and 5 is very strong. This evaluation of AI within the print market is intended as a starting point only. Please note that Quocirca's scoring is based on an unweighted model, although prospective buyers may wish to weight the scores to meet their specific needs.

Strategy criteria

- **Vision and strategy.** The comprehensiveness of the vendor's AI strategy, the quality of its overall value proposition, and its evolutionary vision for AI.
- **Breadth of AI portfolio.** The range of complementary services, software, and hardware-embedded AI capabilities available across functions, including predictive maintenance, document process automation, cyber-security, sustainability, and regulatory compliance.
- **Balance of AI capabilities.** The level of AI provision for device and print management functions, document workflow, and process management.
- **AI maturity.** How long the vendor has been active in the market and how developed its offerings are, including the use of emerging approaches such as gen AI.
- **Investment and dedicated resources.** The vendor's investment in its AI portfolio and resources and innovation that will improve approach, governance, processes, or service offerings, such as dedicated AI facilities, training, and best practices.

Completeness of offering criteria

- **Managed print services.** AI-supported capabilities for devices and data to improve efficiency and innovation around printer management, data collection and analysis, predictive maintenance, and consumables replenishment.
- **Document workflow.** AI-aided document and process workflow provision, including intelligent document processing (IDP), process automation, document capture/extraction/translation/redaction, IoT integration, cloud provision, and preconfigured task-specific offerings.
- **Print security.** The use of AI to improve device and document-level security and secure-by-design approaches.
- **Enterprise integration.** This includes solutions and provision of APIs and cloud services to enable integration with IoT devices, IDP platforms, enterprise content management (ECM), enterprise applications, and robotic process automation (RPA) for intelligent document capture, routing, and processing.
- **Collaborative partnerships.** Collaborative partnerships with enterprise customers to drive AI use case innovation and adoption.
- **Channel partnerships and programmes.** AI-specific business support, skills development, and certification programmes with third-party entities.

Figure 1 represents Quocirca's view of the AI Vendor Landscape:

- **Leaders.** Leaders demonstrate a strong vision and commitment to AI and have strength and depth across the board for both completeness of AI offerings and strategy vision and execution.
- **Major players.** Vendors that have established AI-enabled products and services but may have a more limited vision or differentiated AI roadmap.
- **Contenders.** These vendors have a weaker strategy and AI product portfolio but can grow into the space.

The Quocirca Vendor AI Landscape Assessment is a graphical representation of Quocirca's opinion of the market based on Quocirca's scorecard methodology. This information is provided as a visual representation only and should be combined with other sources to determine the suitability of any vendor. Quocirca does not endorse any vendor, product, or service. Information is based on the best available resources, and opinions reflect judgement at the time. All opinions are subject to change.

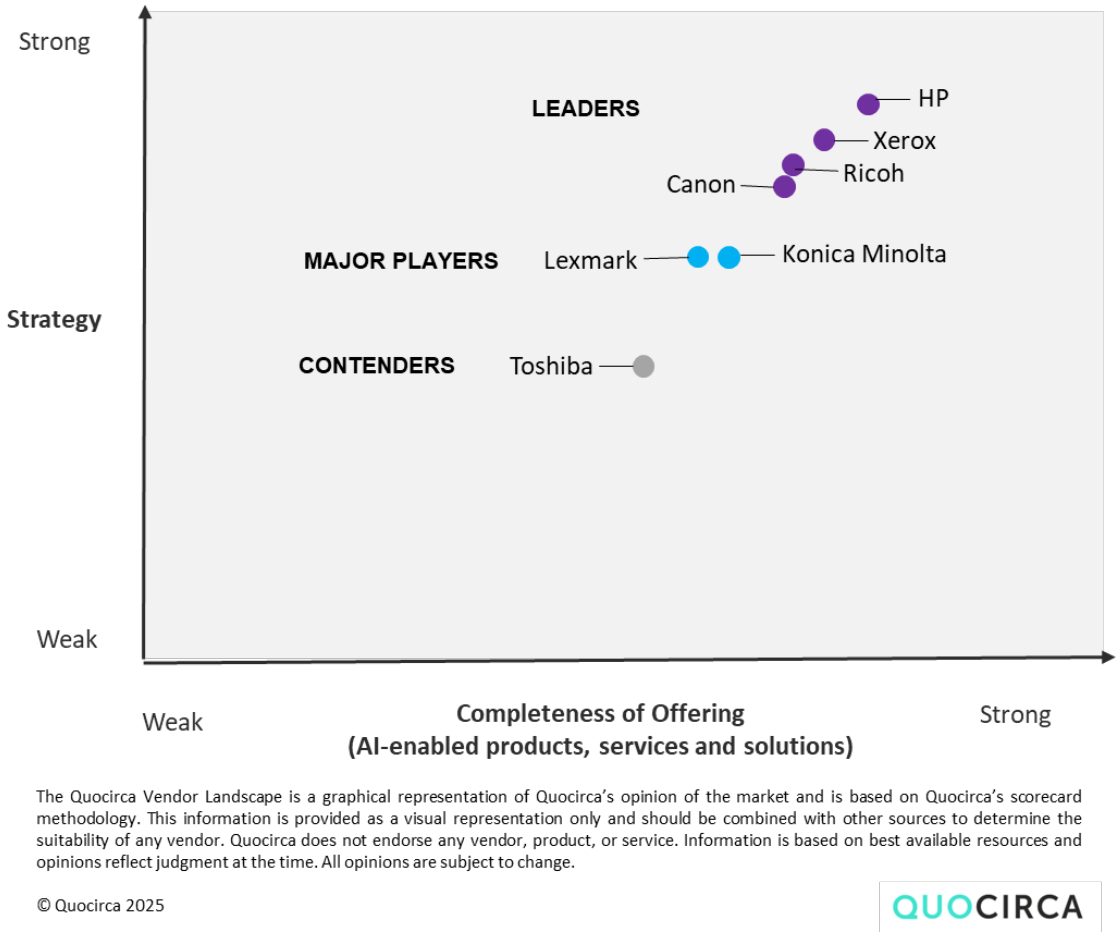

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Figure 1. Quocirca AI (Print) Vendor Landscape 2025

Vendor profile: Ricoh

Quocirca opinion

Ricoh is positioned as a Leader in Quocirca's assessment of the AI Vendor Landscape in 2025. Ricoh has a good balance of AI enablement across MPS and document workflow. This reflects a growing position in workflow software alongside its traditional areas of office equipment and IT services. It can offer rich, end-to-end print-to-document management capability.

The company takes a pragmatic approach to AI, developing its own technology (e.g., document comparison and alignment NLP-based Deep Alignment capability) and using AI components from partners (e.g., Microsoft Azure AI, Amazon Web Services Textract, and Llama 2 NLP). This flexible and practical approach supports the need for agility in the digital world. Access to Microsoft Azure and AWS AI services aids in building credibility and can help accelerate the development of Ricoh's AI offerings.

AI capabilities are widespread across the Ricoh portfolio and have been deployed to improve MPS, deliver business insights, optimise workplaces, and manage documents. They are also embedded within industrial applications for tasks such as road surface infrastructure inspection and tunnel monitoring, manufacturing quality control, and 3D printing applications. Based on its existing industry expertise, industry-specific AI could represent a growth area for Ricoh.

Acquisitions are also part of Ricoh's overall AI strategy. Its recent acquisition of intelligent document processing (IDP) provider Natif.ai is important because it moves Ricoh into the fast-developing IDP sector. It also underlines Ricoh's shift from a hardware-centric company to a provider of cloud-based solutions. Ricoh typically uses its own IP for document management and workflow processing, partnering with third-party suppliers where required. With IDP capability within its walls, it should have a stronger end-to-end proposition.

Ricoh Spaces is a cloud-hosted workplace experience platform designed to optimise tasks such as desk bookings, space bookings, and wayfinding. It is expected to evolve to include the ability to understand working habits and processes and improve them using AI-enabled insights.

According to Ricoh, the need for sovereign AI is expected to grow by 16.8% over the next five years. The company aims to leverage its reputation in data management and migration capability and expects many of its existing data centre operations to shift toward AI workloads.

Plans are to use CoPilot Studio to provide more advanced assistants and 'how-to' capabilities for Ricoh resellers, partners, and clients to streamline onboarding and adoption.

Ricoh should capitalise on Natif.ai's API-first design to dive deeper into enterprise business systems, which would also help foster strategic customer relationships. It should use the IDP solution as a springboard to deeper AI-enabled document workflow, processing, and automation and to accelerate workforce experience initiatives for hybrid environments.

AI strategy

Ricoh's strategy is to embed AI widely within its process and work experience solutions and managed services. AI for managing print services and devices, along with all other managed devices in the workplace, is a particular area of focus.

AI initiatives are built around optimisation, including automation, discovery to find patterns in data and transform data into insights, as well as enhancement, such as boosting customer experience with AI assistants and uncovering customer sentiment.

AI is an important feature of Ricoh's customer-facing offerings, but deployment across several internal functions is also significant. Ricoh's perspective is that the more efficient it is as an organisation, the better customer service it can provide. It has adopted AI across multiple areas, including enabling sales, marketing, and finance to

automate manual repetitive tasks within supply chain operations. This responds to demand changes and enables customer service to provide quicker responses or predictive maintenance services.

Another component of Ricoh's AI strategy is rapidly adopting the most relevant AI technologies to provide the most productive improvements. The company uses its own AI technologies (such as Deep Alignment). However, it employs third-party services such as ChatGPT, Llama 2, Microsoft, and Amazon Web Services to gain capability and a competitive edge.

AI is often used within Ricoh cloud solutions and services to enhance and automate microservices. Many of these services are provided through direct and indirect channels using the 'as-a-service' model. Partner-developed solutions contribute to Ricoh's AI strategy, and partners have significantly grown their sales of Ricoh Smart Integration apps. These include cloud print, scan, and workflow solutions. RSI LogicFlow, for example, leverages multiple AI and machine learning technologies to help with data extraction, classification, validation, and routing of documents to their own cloud storage systems.

Key AI offerings

MPS

- **Print services.** Ricoh uses AI within its print services operations to analyse print support and usage data and improve service delivery. It helps automate the management of print services and devices and all other Ricoh-managed workplace devices and IoT assets. Automated event handling and remediation processes are supported.

- **Ricoh's IoT Command Center.** This leverages AI and machine learning for real-time problem detection, resolution, and actionable insights from connected devices.

- **Always Current Technology and @Remote.** Hardware-related AI is enabled via Always Current Technology and @Remote. These check device conditions, firmware versions, issues, and supplies status and communicate alerts to the Ricoh cloud-based managed service. AI and machine learning remotely monitor and manage the devices to ensure they are up-to-date, secure, healthy, and reliable. Ricoh avoids using AI directly within devices because of local and sector restrictions.

Security

AI capability is incorporated across Ricoh's extensive cyber-security framework and services to monitor IT systems, analyse threats, and respond to cyberattacks. Ricoh has sovereign data centre capability across multiple EMEA markets and provides data migration and application development to clients of all sizes. The Ricoh Digital Operations Centre (combined SOC & NOC) provides pan-EU capability for client services and solutions hosted in the cloud. Ricoh says data migration to sovereign or private cloud stacks is core to the AI planning of many organisations.

Document workflow

AI capabilities are embedded across Ricoh's business process and workplace experience offerings to improve employee engagement and performance by creating an efficient work environment. Workflow automation solutions, including Ricoh Smart Integration, DocuWare, and Ricoh Kintone Plus, employ AI for document and data capture, extraction, and classification. Generative AI is used alongside process automation solutions such as Ricoh's Axon Ivy to study customer service emails and analyse the content for extraction, classification, and emotion. This triggers workflows, looks up and validates data, and provides response content in the right language.

- **Natif.ai IDP.** Acquired in April 2024, Natif.ai uses deep learning and a large document model (LDM) to redefine document classification, data extraction, and validation. Ricoh says this approach outperforms existing OCR, ICR, and classification models while streamlining learning behaviour for specific document types, languages, and functions. The API-first IDP solution is integrated with Ricoh's DocuWare ECM platform to provide seamless workplace management from unstructured documents to fully automated

business processes. Natif.ai is being implemented at Ricoh's Business Process Management services centres across Europe to provide advanced scanning and data processing. It is available as a cloud service or on-premise deployment.

- **Ricoh Smart Integration.** Within process automation, Ricoh Smart Integration leverages Microsoft Azure AI, Amazon Web Services Textract, and Llama 2 NLP services to support capture, workflow, and process orchestration services.
- **Hyper Automation Factory.** The Ricoh Hyper Automation Factory works with multiple AI models to create client-specific AI projects. This includes visual AI from cameras, robotics data for factories, and working with clients in the Azure and Microsoft 365 space to help manage data sources for AI consumption. AI is also employed to automate microservices within business process services offerings.
- **Deep Alignment.** Ricoh developed this natural language processing technology, which aligns sentences and paragraphs of documents to identify overlaps and differences. It is built for document solutions such as contract alignment and leverages deep learning to understand the meaning of words and their contextual similarities.
- **Meeting Rooms.** As a strategic Microsoft and Zoom partner, Ricoh works with clients to implement AI in the meeting experience.

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Recommendations

Suppliers

- **AI is transforming the way organisations work.** Both technology providers and users are quickly adopting AI. This will create challenges for many, as users find it hard to keep pace with the AI evolution and organisations and governments monitor how AI is applied, while addressing any negative impacts of its use. However, AI is not going away, and print vendors need to be prepared to embrace and adjust to these technology advancements.
- **Ensure that data is collected, aggregated and used**. AI has to have a sufficiently rich source of data to operate effectively. MPS providers should have relatively easy access to such data through their own platforms. AI providers often struggle to find relevant data to train data models on, but MPS providers have this on tap (with due respect for data use regulations). Importantly, an ongoing stream of new data can ensure training data and models are kept fresh; stale data is highly detrimental to AI systems.
- **Apply AI to improve print management and sustainability.** By learning print usage trends and preferences, print settings can be automatically configured (such as specifying duplex, paper size, colour or mono printing) and unnecessary printing jobs identified based on content or sender, which minimises waste and environmental impact while optimising resource usage. Using AI to give users information on how to optimise ink or toner usage and recommend double-sided printing when appropriate or copilots for layout recommendations and document summaries encourages responsible printing, which supports sustainability practices reduces and waste.
- **Print industry players must take a dynamic and innovative view to embracing AI across their products and services.** Beyond embedding AI into device hardware, for instance, to improve print quality or optimise consumables usage, vendors should work with software partners that are building AI into their platforms – including print management and security vendors, as well as those in the document automation space, such as IDP and RPA.
- **Cultivate a holistic approach to AI.** Develop an understanding of the co-dependent relationship between AI, IDP, RPA, edge, and cloud technologies because AI needs to draw on their capabilities to deliver on its potential. This could be via sharing AI processing loads between local IoT devices and the cloud. Likewise, solutions such as IDP need to tap into the data-driven value AI provides to accelerate the move to digital document management and workflow processes.
- **AI-based IDP is an opportunity to offset declining print volumes.** As print volumes continue to decline and organisations accelerate their digitisation initiatives, IDP may be a key opportunity for print vendors to offset physical print volume declines, particularly in industries that deal with a large volume of documents, such as banking, insurance, and healthcare. This will require collaboration and partnerships with IDP and RPA vendors to integrate and align solutions with evolving market needs and expectations.
- **Be clear and transparent about how AI is used.** As privacy and ethical concerns continue to prevail in relation to AI, print vendors – along with all technology vendors – must provide clarity around its use. Vendors must build trust and credibility by being transparent and ethical about AI-enabled products and how they handle data and ensure data privacy and security. Ultimately, future AI-enabled printers, solutions, and services will help organisations improve efficiency, lower environmental impact, and deliver more personalisation. In a relatively commoditised hardware market, AI offers a significant opportunity for print vendors to differentiate and innovate – but they must move fast.
- **Resist the temptation to go it alone.** AI technologies and cross-function deployments are complex. Few vendors have the expertise and resources to undertake every aspect, from AI engine development to industry- and task-specific AI-enabled solutions. Print suppliers should identify specific areas of expertise and engage with the AI community to build a value-enhancing AI partner ecosystem.
- **Look to the hyperscalers for a strong platform.** With AWS, Azure, and GCP all now providing embedded AI services, vendors can get an easy starting point by leveraging the services on offer. These hyperscalers are also likely to progress faster than many other players – it is highly likely that vendors will, therefore, gain access to better capabilities at a fast rate.

- **Leverage pre-trained AI/ML Models.** Integrate pre-trained AI/ML models from hyperscalers such as AWS, Google Cloud, and Azure into your document platform. This provides access to cutting-edge capabilities in areas such as OCR, NLP, and image recognition without the need for extensive in-house development.

Buyers

- **Consider predictive maintenance as 'AI 101'.** Predictive maintenance is an effective and well-established entry point into understanding the value of AI. Increasingly, users will demand greater use of AI to help them in their day-to-day business activities. AI use cases for print technology are becoming more complex and sophisticated, especially where document management and processing platforms form part of the portfolio. Customers should collaborate with print suppliers to proactively identify more advanced use cases. Part of that requires a commitment to mapping out technology, data, and process interdependencies within the organisation to ensure seamless document management operations and moving towards straight-through processing.
- **Seek out suppliers with balanced AI-supported portfolios.** Successful AI deployments stimulate additional and more sophisticated deployments. Choosing a print supplier with a balanced AI portfolio across today's key areas of predictive maintenance, document management and automation, cyber-security, and sustainability should reduce the risk of the supplier being unable to meet future requirements.
- **Identify print suppliers that are developing gen AI offerings now**. Even if gen AI is not a current priority, it is such a step change that this could change quickly. Be prepared by identifying and (where feasible) engaging with leading edge gen AI print providers to build an understanding of how the technology could be used: for example, in areas such as augmented reality support, customer service bots, document summaries, and direct content creation.
- **Explore the value of specialist printer sustainability skills.** Their physical and digital environmental footprint means printers are a challenge when it comes to sustainability compliance. Allying with print vendors with specialist knowledge – and data resources – around print sustainability requirements and pitfalls could deliver more accurate ESG reporting data.
- **Be alert – printer security is not a complete cyber-security solution.** Suppliers are delivering more AI-driven device and document security solutions, but they are components within a broader cyber-security landscape. Assess how print suppliers' security offerings integrate into the broader cyber-security landscape. Connected IoT devices present challenges, so pay particular attention to this area and explore vendor plans for document security too.
- **Avoid AI cul-de-sacs.** As AI is such a dynamic environment, many solutions on the market today will not be the right solution for tomorrow. Look to providers offering flexible AI solutions that can adapt and enable system adaptation without the need for wholesale system replacement.

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 pint 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.

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