



It's Just the Beginning

Kyocera's perspective on the evolution of AI

by: Gordon Darling, Kyocera Document Solutions America Inc.

With the rapid rise of artificial intelligence (AI) in virtually every area of business, it is a very exciting time to be in the office technology industry. AI has already proven to have significant benefits in workflow automation, decision making, complex data analysis, customer service and, of course, content creation and enhancement.

This technology is continually advancing in effectiveness through innovations in the application of machine learning, natural language processing and computer vision.

For the office technology industry, this has meant a step up in the capabilities of print hardware and software, such as predictive device maintenance, smarter scanning, print quality optimization, resource management, cost control and image recognition. These advancements in document management solutions have allowed companies to take back control of their time and resources, improve output quality and boost operational efficiency.

We at Kyocera Document Solutions are excited about the potential of AI to enhance our products and services, and are continually innovating to implement the latest tools and features into our devices and software. That being said, it is important to maintain perspective when assessing the trajectory of AI and its capabilities.

Consider how office technology experts felt in the 1990s with the introduction of the World Wide Web into everyday business processes. People were incredibly excited and knew it was a revolutionary advancement, and the web soon became an indispensable business tool. However, looking back, we can see that those initial ideas about the web's use in business were more a reconfiguration of traditional processes rather than a true transformation of business that took advantage of the web to its full potential. For the first years of its existence, the web was more of an electronic billboard than the real business tool we know it as today.

It took years of learning and experimenting to arrive at the "Web 2.0" stage of evolution where we really started to leverage the true potential of this groundbreaking new technology. With this comparison in mind, it is clear that, despite the revolutionary feel of our current AI applications, this is only the beginning.

AI's full potential for business workflows has yet to be discovered. New applications for AI emerge almost daily, and natural language processing is becoming more and more advanced. Ongoing research and development promise even



greater efficiencies and innovations in document management and beyond. As AI systems become more sophisticated and integrated, they could revolutionize operational efficiency, but the scope and impact of these changes are still unfolding.

At Kyocera, we pride ourselves on being innovative, passionate pioneers in business technology and document management, with a customer-centric core philosophy. Therefore, not only are we embracing the application of AI for our internal operations, but we are also constantly exploring ways in which AI can enhance our offerings for our customers to streamline their own business workflows.

This commitment to meeting customers' evolving needs can be clearly seen in the recent updates we have made to our portfolio.

Some of our printers and MFPs, such as the TASKalfa 3554ci, are equipped with AI capabilities to improve the user experience and print results. The super resolution AI feature enhances low-resolution print data to produce clearer, more professional outputs. With this tool, pixelated images are smoothed to create more visually appealing documents and images. Moreover, the AI handwriting tool can scan handwritten notes on an original document and make them computer-readable, saving time and improving accuracy by making digitized documents text-searchable. This tool can also enhance or highlight handwritten notes or remove them altogether.

Meanwhile, our commercial printers use automation features to optimize the high-volume printing process and reduce the need for manual interventions of print-room operators. With greater reliability and uptime, print providers can offer their customers more for less, allowing them to accept more orders and grow their businesses. Our inkjet solutions also use variable data printing powered by AI to customize outputs to individual recipients, thus adding a more personal touch to mass-produced prints. Disruptive AI technology is already allowing smaller commercial printers to reach a greater potential, creating new possibilities in the industry.

What is more, Kyocera's production presses and office hardware are backed by in-house software solutions that rely on AI to help large organizations monitor their consumable use, print costs and data security. All of these AI upgrades to our print and document solutions have ushered in a new era of efficiency and reliability for modern businesses, and we are eagerly waiting to see where AI will take us next.

Advancements in end-to-end automation of complex, high-volume printing processes could see much greater reductions in manual intervention, opening doors for round-the-clock print runs. Additionally, intelligent document processing is likely to become standard, with AI tools automatically classifying, extracting and processing information from digitized documents, thereby optimizing workflows and minimizing human error. We can also expect AI to enhance security and compliance processes by monitoring document activity, detecting anomalies and managing access controls.

Kyocera has already made strides in these areas with tools such as our latest software release, Kyocera Cloud Information Manager, but this is just the beginning of what could be possible. The future of AI in office technology looks bright, and we are only now at the inception of what is to come. As we saw with the early application of web technology, the future of AI will be driven by innovative thinkers who set out to reimagine operational efficiency.

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In 20 years, we will look back and see how our initial ideas about AI were just the start of a long revolution in business processes. The evolution of AI in business will follow a similar path to the web, where truly innovative companies will start thinking outside the box, forging new paths, and driving the growth and practical application of this technology. It is going to be an exciting next 20 years, and we cannot even begin to imagine the exciting future ahead of us. ■

Gordon Darling serves as director of digital transformation at Kyocera Document Solutions America Inc. He joined the company in 2023. Darling leads initiatives to modernize business applications using AI-enabled technologies from Microsoft, Google, OpenAI and others.

He is responsible for creating the vision, architecture and road map for a fully automated, process-driven and collaborative future. Darling can be reached at gordon.darling@da.kyocera.com. Visit www.kyoceradocumentsolutions.us.

