

Artificial Intelligence Is Impacting Everything— Including Workload Automation



Automation is everywhere. The word "automation" may make you think of a factory floor with cost-efficient robotic assembly or e-commerce companies with sophisticated operations for massive fulfillment centers.

A whole other realm of automation, known as workload automation (WLA), goes mostly unseen. Retailers use WLA to track and update inventory data across physical and online stores. A brokerage may use WLA to reconcile its daily financial transactions prior to the start of market trading. For large organizations, WLA is crucial for employee payroll, customer billing, customer onboarding, employee onboarding, and so forth. The list is endless.

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WLA has long been integral to core business processes, enabling businesses to operate on schedule, orchestrate complex workflows, and enhance audit and compliance with centralized controls. WLA is pivotal for scaling enterprise automation that is essential to digital business operations—what can be automated will be automated.

Enter artificial intelligence (AI) to the automation landscape.

As AI takes its place in the portfolio of critical enterprise technologies, the symbiotic nature of AI and WLA can lead to greater business results when their strengths are combined.

An Enterprise Workhorse of a Different Color

Automation tools are common in today's enterprise. Many have emerged in recent years to meet new and improved processes, such as robotic process automation, business process automation, and workflow automation. Their descriptions are often similar to that of WLA, but their scope is limited to specific domains and use cases.

Essential in enterprise IT environments since the 1970s, when it was developed to manage batch processing, WLA has now transformed into a solution to orchestrate complex business and IT processes through the diverse ecosystems that define today's hybrid IT environments.

WLA acts as a "manager of managers" for disparate automation and orchestration technologies, ensuring business processes are orchestrated end to end and data is processed with integrity and compliance. It coordinates and monitors processes that contain hundreds or thousands of task dependencies across mainframe, enterprise resource planning, data pipelines, cloud services providers, and other mission-critical cloud-native and onpremises technologies.

Today, augmented by rapidly evolving AI, WLA can strengthen a business with exponentially greater potency.

WLA Powers GenAI: Compiling Clean and Compliant Data

Machine learning (ML) is an application of AI that uses algorithms to extract knowledge from data and enables generative AI (GenAI) to imitate the way humans learn.

The integrity of any AI system depends on the quality of this foundational data. The term garbage in, garbage out" applies directly to ML and AI; poor training data will quickly: make itself known when AI responds with "hallucinations," presenting incorrect or misleading data as fact.

Getting clean, accurate, trusted training data is critical. An enterprise may feel the damage of poorly trained AI not only internally but also in negative public exposure, reputation damage, and financial consequences.

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In many organizations, the information essential to training AI is trapped in fragmented, niche, or legacy systems scattered throughout the environment. WLA orchestrates the data pipelines from those siloed technologies, ensuring all data for ML is delivered in a trusted, secure, compliant manner.

GenAI Powers WLA: Automating at Scale

GenAI can produce a range of content, including text, imagery, video, synthetic data, and more, in response to its context. The power of combining GenAI with WLA is in gaining the ability to convert strategic vision into action and to expedite innovation initiatives.

Transforming strategy and new ideas into business outcomes requires the ability to create and manage automated processes—preferably at speed and scale—to gain and maintain competitive advantage.

The ability to automate at scale and speed requires that even nonspecialist users can contribute to automation without having the nuts-and-bolts details of automation technologies. And that's when automation can truly be democratized.

As ownership of automated business processes shifts closer to functional business areas, these teams rely on the speed and efficiency of an automation platform. However, they often lack the technical skills needed to create and manage automations, which can involve a steep learning curve.

GenAI can solve this challenge, guiding users to create automated processes with a natural language interface or even executing the steps for them based on conversational exchange. Having such a system in place can significantly improve time to value, enabling a business to realize the benefits of innovative ideas that may alter its trajectory.

The ability of GenAI technologies to scale automation, combined with automation's role in augmenting GenAI initiatives by orchestrating the supply of clean and compliant data, signifies a new beginning of an automation renaissance.

Learn how Automation by Broadcom helps organizations automate their critical business processes for greater efficiency and cost savings.