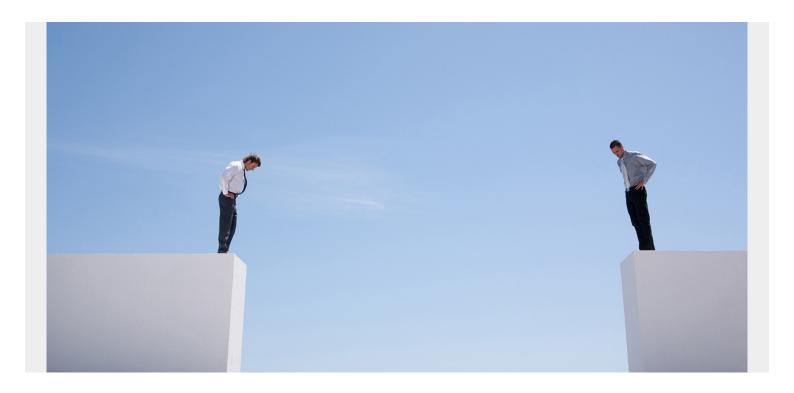
IDENTIFYING WHAT'S MISSING IN THE PEOPLE-PROCESS-TECHNOLOGY TRIFECTA



Even in this age of digital transformation, many organizations lack the workflow automation they need to deliver the high-performing applications and superior services their end users and customers have come to expect.

Disparate systems, islands of automation and siloed teams lead to technological disconnects that require additional manual labor, scripting and troubleshooting to correct.

A new Forrester study brings this issue to light. Titled "Face the Workflow Automation Gap Head On," the report reflects input from 355 global IT leaders, each representing large enterprises. The research shows that automation capabilities are critical to the operational success of organizations, both internally and externally.

By and large IT leaders recognize this, with over 65 percent of survey respondents calling their organization's automation capabilities "'very' or 'extremely' important to meeting their most pressing priorities in the coming year."

Of note, workflow automation is viewed by those surveyed as essential to achieving success in three pivotal areas:

- Responding to business and market changes
- Improving customer experience
- Realizing efficiencies

Yet, those surveyed *also report* that only "a third or less of workflows for various categories under study (e.g., computational engines, file transfers, extract, transform, and load (ETL)) are fully

automated today" within their organizations.

Plus, when automation is in place, it is typically limited in scope. According to the study, "26 percent report using a different technology for each workflow type and 44 percent use the automation (if any) that came with a package for any domain-specific workflow type. Meanwhile, seven percent don't have any formal tool to manage workflows and are instead relying on homegrown methods or tools."

Why Islands of Automation Fail

The repercussions are far-reaching, with more than two-thirds of respondents frequently experiencing an inability to deliver services in time for the business, excessive manual work to create or manage workflows between different applications or environments, and an inability to get ahead of service failures before they occur.

Addressing these challenges requires organizations to build additional staff, processes, and layers of technology into their IT operations. Consider also that every new service and application introduced into the computing environment further complicates the workflows.

"Many organizations have sought to modernize their IT systems by embracing the power of cloud computing, internet of things (IoT), mobile, and artificial intelligence (AI)," the report states, adding that "now, for a digital offering to be delivered, information must pass through multiple heterogenous systems and/or teams."

So how can organizations bring their workflow automation capabilities up to date – and to scale – filling in the gaps between people, processes, and technology throughout the environment in service to customers?

Adopting a Holistic Approach

For today's agile development environments, the right approach to workflow automation is a *holistic* one. Forrester advises companies to reevaluate – and even "reinvent" – their application development and delivery approach...bringing their "people, process, and technology resources together in harmony to drive improvement in their software delivery capability. This includes having processes that are continuous, tools that are connected, and teams that are able to draw from diverse skills and expertise."

According to the study, here's what this approach should look like:

People: Forrester advises organizations to "cultivate an environment of iteration and collaboration and remove barriers that keep teams from reaching their maximum productivity," noting that high-maturity firms are bringing high-demand skills into these collaborative teams, such as data science, algorithm development and AI/ML expertise. "By building more well-rounded teams," the report notes, firms "can reduce time wasted from role handoffs and hierarchies that slow service delivery."

Processes: Organizations must break down their siloed processes and eliminate islands of automation across the enterprise as well. They should adopt an *outcome-driven* approach to DevOps that focuses on achieving quality results.

Technology: To deliver quality services and applications at speed, companies should employ automation across the software development lifecycle (SDLC). They should strive for continuous

integration and continuous delivery (CI/CD), automating processes "for building and testing software and standardizing delivery practices so they're easier to monitor and enforce."

Forrester adds that automation should span the entire technological ecosystem as well, allowing firms to "remove errors from manual processes by standardizing and automating the movement of applications between environments."

Automating Workflows at Speed and Scale

To truly optimize people, processes and technology within a modern DevOps environment takes an end-to-end workflow automation solution, one capable of orchestrating complex and overlapping initiatives at speed and scale.

"Done right," the report notes, "application workflow automation moves the burden of workflow execution from people to software, freeing up IT staff to work on strategic initiatives rather than babysitting technology."

The ideal solution should apply automation to capturing and managing workload output and logs, making it easier for interested stakeholders to diagnose, repair, and learn from service failures. It should also weave automation into the SDLC without complex scripting, allowing companies to bring new features and services to customers much faster.

Role-based access and dashboard views are important to implement as well as they help "right-size" control to the automation tool while promoting greater collaboration between IT and business users.

More than any other feature, though, a single point of control is essential as it eliminates the need to juggle multiple tools across different workflows, expediting productivity while ensuring quality results.

Control-M: Orchestrating Workflows Across the Continuum

Fortunately, this type of technology exists in <u>Control-M</u>, BMC's application workflow orchestration tool. Control-M provides advanced operational capabilities easily consumed by Dev, Ops and lines of business alike, including end-to-end workflow connectivity – any application, any data source, and all critical systems of record – mainframe to cloud.

With Control-M implemented, firms realize these and other benefits:

- Streamlined orchestration of business applications which helps teams deliver better applications faster by embedding application workflow orchestration into the CI/CD pipeline
- Extended Dev and Ops collaboration— which allows workflows to be versioned, tested and maintained, helping developers, engineers and SREs define, schedule, manage and monitor application workflows in the production environment
- Simplified workflows across hybrid and multi-cloud environments complete with AWS, Azure and Google Cloud Platform integrations
- Data-driven outcomes delivered faster making it easy for teams to manage big data workflows at scale
- Control of <u>file transfer</u> operations with intelligent internal and external file movement and enhanced visibility

With Control-M, SLAs are managed with intelligent predictive analytics, compliance auditing and governance are automated, and logs and output are easily captured and managed as well.

Measurable Results

Ultimately, Control-M provides the high levels of automation needed to deploy new applications and features swiftly and reliably in complex DevOps environments. Time-tested in the marketplace, Control-M has proven its stability, with thousands of companies scaling from tens to millions of jobs with zero downtime.

As noted by Forrester, firms that achieve comprehensive automation across the environment "not only have a desired qualitative outcome (such as improved customer satisfaction), but also quantitative targets that teams can use to measure progress. This tactic elevates your evaluation of a capability from 'we have three systems of automation to manage customer success' to 'we have improved customer success by 20 percent and are targeting 35 percent.'"

Click here to learn more about Control-M