



ENTERPRISE DEVOPS

Enabling Digital Transformation

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Digital Transformation Relies on Software Delivery and Agile DevOps

Enterprises are embracing digital transformation (DX) and innovation – and software is the dynamic enabler for these processes. Adaptive software creation and delivery is essential to agile DevOps.

DevOps adoption drivers



Breaking down business silos and optimizing value chain for DX



Improved quality and deployment consistency



Business agility

DevOps challenges



Legacy manual processes



Lack of business integration/siloed teams



Lack of continuous testing and quality

Digital innovation demands prioritization and management of adaptive project, program, and product portfolios and value streams.

Front-end digital engagement is key, but maturing organizations are also modernizing back-end systems of record (SOR) rather than ripping and replacing.

Key Enterprise DevOps Elements for DX and Innovation

Leverage agile processes, requirements management, project and portfolio management (PPM), and intelligent analytics throughout the portfolio life cycle.

Iterate development and adopt “shift left” testing to manage quality for continuous improvement of software underlying DX and innovation.

- › **Production problems cost up to 100 times or more to fix post-production, with severe business consequences potentially**

Best steps

- › Establish continuous integration (CI) and continuous delivery (CD) for adaptive, high velocity releases.
- › Leverage operations, monitoring, and artificial intelligence and machine learning (AI/ML) for actionable analysis to enable performance, execution, and future planning improvements.
- › Evolve from customer-facing digital media engagement to incorporate and modernize existing systems and SOR as part of an overall DevOps strategy.

Key Enterprise DevOps Elements for DX and Innovation (continued)

Business stakeholders, development (including modernization), security, and ops teams should leverage DevOps to rapidly deliver software to support DX through process automation and team collaboration.

Quality, planning, and governance teams must weave testing and code analytics into software design to improve security, risk, compliance, and performance.

Actionable AI/ML metrics enable continuous improvement for DevOps and predictive analytics to feed effective DX execution.

IDC expects that by 2023:



of enterprises will be beyond piloting AI/ML as part of application development

Nearly 10% will be leveraging AI/ML to optimize development, design, quality, security, and deployment.

Planning and Managing DevOps for Digital Innovation

Without Enterprise DevOps strategies, fractured teams – from stakeholders to developers to operations to data analysts – struggle to collaborate effectively around DX.

Increasingly complex DX sourcing, technology, data demands, and lack of updated project and product data disrupt execution and can be addressed by automation and process change.

To respond to rapidly changing, competitive DX pressures, shift to agile, product-oriented value stream and project/program planning, coordinated with app development and deployment.

Close coordination between governance and DevOps automation capabilities for quality, CI/CD, development, operations, and data analytics combine to enable proactive, organic execution.

Prioritize product, program, and portfolio planning with advanced analytics as data accrues and techniques evolve.

Drivers for Quality Development and Testing

Quickly and iteratively developed applications enable DX.

Complexity resulting from mixed platforms and demand for stellar user experience benefit from automation and AI/ML.

Continuous testing (CT) with agile development cuts costs, catching code issues and business disconnects early — post-production defects cost exponentially more to address.

Quality for functional and performance testing (including mobile, other devices, and hybrid infrastructures) enable applications to address scale, complexity, and speed.

Code analytics for security with static and dynamic analysis can help address vulnerability, compliance, and risk.

Test management, centralized test automation, visual test reporting and analysis, test data management, and data obfuscation give control and visibility to help drive execution as part of DX.

Considering Micro Focus

Micro Focus can help organizations create a comprehensive DevOps approach for DX and innovation with broad Enterprise DevOps capabilities across platforms including operations and infrastructure management, security, risk, and governance, domain expertise, and analytics capabilities.

Micro Focus coordinates its agile capabilities with ALM Octane for DevOps across the pipeline to connect metrics via close integration for projects and portfolios with PPM. Functional test products include UFT One, UFT Developer, UFT Mobile, and Service Virtualization, and incorporate natural language processing and computer vision to identify objects for mobile, web, and other apps. Performance testing with the LoadRunner Family, Enterprise Test Server, and Fortify for code analysis can enable combined CT execution.

Robotic process automation (RPA) helps increase business agility via automated, rule-driven business processes, creating efficiency and opportunity with UFT and across Micro Focus' portfolio over time.

Scaled agile support for SAFe is enabled by a combination of PPM and ALM Octane for enterprises seeking systemic agile engagement. These combined capabilities set the stage for effective CI/CD for quality application delivery.

Micro Focus' modernization provides for analysis, development, testing, and deployment of key SOR apps to help unify delivery toolchains and velocity across functions.

CI/CD and Quality Enable DX

Digital innovation and transformation rely on rapid, high quality deployments driven by CI/CD strategies

- IDC PaaSView and the Developer 2019 research saw weekly and daily builds doubling post DevOps adoption

Micro Focus enables support for CI with ALM Octane and ALM Quality Center, integrating with CI servers such as Jenkins, GitLab, Microsoft Azure DevOps Server, and Atlassian.

The Micro Focus CD portfolio includes both Deployment Automation and Release Control to streamline delivery with drag-and-drop design and orchestration of software releases across complex deployments and environments.

The company's capabilities here underscore leveraging and modernizing existing portfolios and SOR for DX execution, although incumbent apps must be addressed.

Challenges

Micro Focus' Enterprise DevOps portfolio is deep and broad across the DevOps pipeline and the platforms for modern development and modernization. However, portfolio integration and messaging to engage prospects has been challenging due to complexity and multiple acquisitions.

Enterprise DevOps adoption demands agile process and organizational change with automation benefits. Service partnerships are key, and this is an area in which Micro Focus has re-invested.

The company's focus on DevOps is primarily enterprise based and should be complemented with outreach for small and medium-sized business and intuitive products.

Licensing approaches to its broad product portfolio has been onerous. Micro Focus is seeking to address this issue with flexible token pricing models.

The company's cloud strategy was previously challenging to understand and hindered engagement. Micro Focus is seeking to address this issue in part via flexible token pricing models.

Market inhibitors include a crowded DevOps space ranging from innovative smaller companies to enterprise providers.

An End-to-End DevOps Approach for Digital Innovation and Transformation

Enterprise DevOps execution is vital to innovation and transformation velocity and success. It demands agile process and organizational change as well as evaluation and adoption of automation.

To get started, IDC recommends the following actions:

- Assess maturity for all aspects of the DevOps pipeline – from inception and planning, through to development, quality, and CI/CD for the handoff to operations
- Evaluate the benefits from AI/ML and cloud technologies to jumpstart and then sustain systemic Enterprise DevOps adoption
- Become dynamically responsive to the rapidly changing competitive and technology pressures for digital innovation and transformation
- Consider Enterprise DevOps as part of an organic strategy to gain velocity and maximize responsiveness with high quality, continuous, and interlaced software planning, management, delivery, and intelligent analytics

Shifting to adaptive DevOps approaches also demands executive evangelism and grassroots engagement.

Message from the Sponsor

With Micro Focus you can:

- Build on what works by bridging old and new technologies as you navigate change.
- Reduce operational friction by optimizing value streams from request to business value.
- Boost business confidence by engineering quality and security into every application.
- Deliver better outcomes by leveraging feedback and analytics to continuously improve.

Deliver at high speed with low risk with Micro Focus' Enterprise DevOps.

For more information, visit us at <https://www.microfocus.com/en-us/trend/enterprise-devops>

