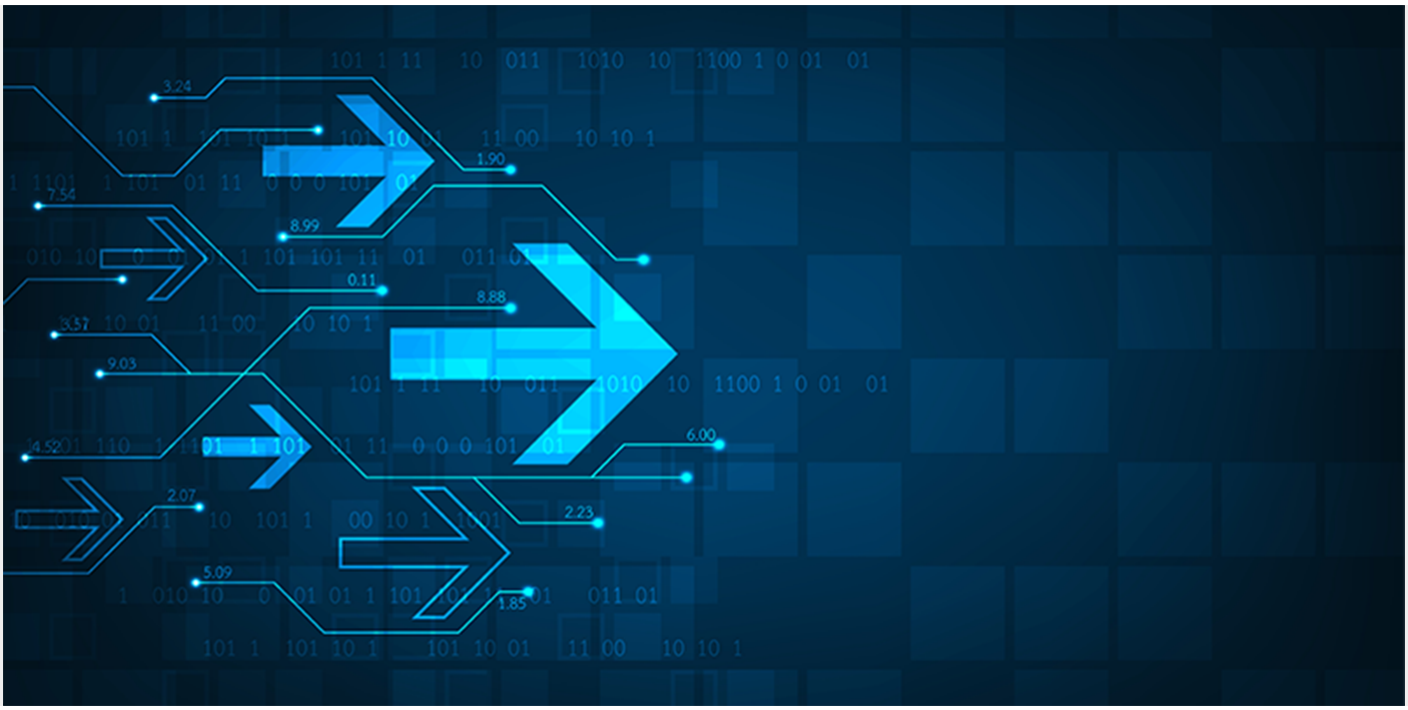
IDC MARKET GLANCE FOR MAINFRAME DEVOPS: A PATHWAY TO QUALITY, VELOCITY, AND EFFICIENCY



Success in the modern digital economy demands innovation and adaptability. Enterprises must meet and exceed customer expectations, offering new services and applications faster than ever before. And as innovation in mobile, web, and distributed applications accelerates, so too must development on the system of record supporting them—the mainframe. So, what can your organization do to ensure that development on the system of record keeps pace with that of front-end applications?

The recent IDC Market Glance for Mainframe DevOps found that embracing a mainframe-inclusive DevOps toolchain enables faster, more frequent delivery of code. Co-author Katie Norton, IDC senior research analyst, DevOps, states in the study, "We have observed forward motion in the mainframe DevOps market as of late, making available the tools and technology needed to make mainframe agility realizable for the organizations that depend on it."

This statement is underscored by the fact that, for the first time, IDC decided to focus specifically on mainframe DevOps. Coming from such an influential analyst group, we see it as further validation of the growth and investment in the mainframe for current and future business operations, and of the need for organizations to start saying "yes" to DevOps on the mainframe. In fact, IDC survey research indicates that 73 percent of DevOps influencers believe that mainframe DevOps is critical to digital business success.

IDC's take was that organizations committed to digital transformation should consider the following:

- The mainframe continues to play a central role in mission-critical applications for public and private enterprises, such as banking, finance, and insurance.

- Owing to today's "mobile-to-mainframe" applications, two-speed application delivery is not enough. DevOps toolchains that incorporate the platform enable more frequent delivery of mainframe code, giving them a competitive advantage.
- Mainframe DevOps helps organizations modernize in-place by reducing time-to-market and improving application quality and security.
- Mainframe DevOps is considered critical to business success by three-quarters of mainframe DevOps influencers.
- Advancements in mainframe DevOps tools make mainframe agility easier and faster.
- New integration solutions allow teams to leverage and share best-of-breed DevOps tools.

Where BMC AMI DevX Fits In

The IDC Market Glance breaks down mainframe DevOps into six market segments: Plan, Integration Solutions, Develop, Quality, Deliver, and Operate, each of which is then further subdivided into 24 key areas. BMC AMI DevX mainframe DevOps solutions was recognized in 17 of these areas:

Integration solutions

- **Data Access** – Enabling access to mainframe data and make it consumable in modern and distributed tools

Develop

- **Source Code Management (SCM) –** Version and revision control systems for tracking changes in source code files
- **Integrated Development Environment (IDE)** – Facilitates software development in a unified interface and contains a source code/text editor, debugger and compiler
- **Build Tools** – Automate the packaging of source code into a usable or executable form, and manage dependencies and unit test.
- **CI/CD Tools** – Ensure that all the code committed to the SCM is automatically built and tested in a production-like environment

Quality

- **Functional** - Tests software functionality via unit testing, system testing, user, integration, regression testing
- **Performance** – Verify quality attributes of the system such as responsiveness, speed, scalability, and stability under a variety of load conditions
- **Test Data Management** - Facilitates the process of planning, designing, storing, and managing production-like test data
- **Code Inspection** – Observes, measures, and evaluates application source code
- **Application Analysis** – Gain an understanding of application architecture through a visual representation of the components, logic, and dependencies

Deliver

- **DevOps Platform** (orchestration and connection of processes, teams, and technologies via

integration, automation, and seamless exchanges along the software delivery lifecycle)
- **Automation** – Coordinates automatic delivery and operation of application configuration, provisioning, compliance, or workflows
- **Release Orchestration** – Connects tools, teams, and processes enabling centralized management of the overall release management process
- **Deployment** – Orchestrates and automates the deployment of applications and configurations into development, test, and production environments

Operate

- **Monitor** – Examines an application's performance at run-time to ensure service levels are being maintained
- **Troubleshoot** - Fault management tool that analyzes and corrects application and system failures through abnormal ending (ABEND) diagnostics
- **Event Management** – Uses automation to orchestrate the response to production incidents and events.

Where to Get Started on Your Mainframe DevOps Journey

These are all vital components of the process, but your organization may wonder just where to get started on your mainframe DevOps journey. BMC recommends the following when choosing modern mainframe development tools:

- A modern, integrated development environment (IDE) for editing and debugging code and automating testing – including Test Data Management
- Modern source code management for better version control and deployment capabilities
- The ability to provide process metrics, such as velocity, quality, and efficiency

BMC addresses these needs with a **mainframe-inclusive toolchain** to **enable DevOps across the enterprise**. The solution includes:

- **BMC AMI DevX Code Pipeline**, a mainframe SCM, build, and deploy tool enabling CI/CD to ensure a secure, stable, and streamlined mainframe code pipeline throughout the DevOps lifecycle
- **BMC AMI zAdviser**, an advanced analytics tool leveraging machine learning (ML) to continuously measure and improve mainframe DevOps processes and development outcomes based on key performance indicators (KPIs)

Assessment

Overall, the IDC Market Glance demonstrates that DevOps for the mainframe is vital to the success of organizations of all sizes. IDC recognizes how a mainframe-inclusive toolchain is a key step toward improving software development and delivery with quality, velocity, and efficiency, and that mainframe DevOps is already making a significant positive impact.

The great news to extract is that even though there is more road ahead before the mainframe fully modernizes itself with the help of DevOps, the path we all tread leads to great results. And of course, BMC is proud to be a major player in the journey.