BRIDGING MAINFRAME GAPS WITH DEVOPS

Would you be surprised to learn that nine out of every ten large enterprises surveyed are running their business-critical applications on the mainframe? Some people might think that mainframe computing is yesterday's news, but not only is it still a relevant technology, its value is actually growing. In a recent BMC-commissioned global survey of over 500 companies, conducted by Dimensional Research, nearly two thirds of enterprises polled say that their mainframe usage is increasing due to the rise in new applications, additional processes, and transactions.

According to the survey, 96 percent of respondents report that mainframe data is changing and getting more complex, and over half are experiencing a rapid growth in data volumes. Real-time transactions are also up, demonstrating that the mainframe is supporting an increasing volume of business. Mainframes are now supporting the most progressive and popular application types, web applications (47 percent) and mobile applications (41 percent). New digital experiences delivered to customers via mobile and web applications are driving increased interaction with application data housed on the mainframe. The need for speed and availability to meet consumer demand highlights the long-standing value of an integrated hybrid infrastructure backed by mainframe technology.

The advantages of resilience, scale and speed will be realized by organizations that leverage their mainframe infrastructure and apply continuous improvement to the mainframe to make application development agile and responsive to the demands of the business. Adopting DevOps practices and tooling based on the principles of integration and automation accelerates application development and makes it easier to work in coordination with web and mobile development teams.

The People/Culture Problem

According to the survey, 40 percent of mainframe developers struggle with processes like building a continuous integration/continuous deployment (CI/CD) pipeline and 36 percent grapple with automated testing of mainframe applications. Almost 60 percent of respondents admit that when changes are made to the mainframe, they are not able to predict all the downstream effects to dependent applications and services, putting critical applications at risk.

These statistics highlight the gaps in both skills and processes that threaten to hold mainframes, and the companies that use them, back from full and profitable competition in the marketplace. These gaps can be bridged through the adoption of DevOps and modern tooling.

Improved Efficiency, Higher Quality, Faster Development

The findings of the survey clearly point out that the siloed mainframe needs to be held to the same standards for integration, automation, and developer experience that are commonly used for application development throughout the enterprise. Mainframe professionals cited tremendous benefits from the adoption of DevOps for the mainframe—71 percent said that a mainframe-inclusive DevOps strategy accelerated their mainframe application delivery time by months or weeks versus traditional processes.

Survey respondents also cited many benefits from the adoption of DevOps that are helping them keep pace with the digital economy and customer demand for new services and applications:

- 48 percent realized better efficiency and team productivity
- 46 percent achieved faster development of new applications
- 45 percent improved the quality of their applications and the speed of their releases

Leading by Example

BMC AMI DevX's own quarterly release cadence demonstrates the power of DevOps on the mainframe. By listening to our customers and using our own tools, we are able to quickly develop new features that meet our customers' needs, ensure their quality with thorough automated testing, and deliver new product innovations that improve our customers' ability to integrate the mainframe with their enterprise DevOps toolchain. Demonstrating an ongoing commitment to supporting DevOps, we build and deliver integrations with best-of-class tools like Jenkins, GitHub, SonarQube, and more that help modernize the mainframe development experience and empower customers to create their own CI/CD pipelines.

This spirit of continuous improvement goes beyond our application development tools. By adopting a quarterly release cycle for both our BMC AMI DevX and BMC Automated Mainframe Intelligence (AMI) portfolios, we deliver a holistic approach to mainframe management that allows customers to leverage automation, machine learning (ML), and artificial intelligence (AI) to quickly develop and deliver high-quality software, ensure operational resilience with proactive monitoring, harden mainframe security, and manage data.

Our solutions enable continuous innovation and delivery and a modern mainframe development experience to help advance the mainframe—and the people working to maintain its role as the backbone of the digital economy—to a leadership role in the worlds of industry, commerce, and data management.