

ACHIEVING THE MAINFRAME DEVX FACTOR TO IMPROVE DEVELOPER DELIVERY AND PRODUCTIVITY



The mainframe is a central and vital technology for the digital global economy of the 2020s and beyond, highly valued chiefly for its performance, reliability, and security. This has been enabled by the integration of the mainframe's DevOps practices with other computing environments as part of an agile approach to software development.

But to reach the full potential of DevOps for the mainframe, organizations must also offer a modern developer experience to the current and next generation of developers—one that provides the right tools and training to help them progress, be successful, and feel satisfied in their roles. To attract and retain developers, you must provide them with an improved developer experience we call "DevX."

The Mainframe DevX Factor

DevX is to developers what user experience (UX) is to users and customers: it comes from a coherent functionality that creates an overall positive experience. In the business-to-business (B2B) and business-to-consumer (B2C) worlds, we often assess the quality of a product by its UX, such as the speed at which a phone or computer boots up, the ease of use of the buttons and features, and the overall ergonomic relationship between the device and the user. An excellent UX can make products enormously successful, whereas a poor UX will cause products to flounder and disappear from the market.

Regarding the future of the mainframe, DevX helps solve a problem inherent in the current DevOps toolchain: too many distinct phases and tools.

In many cases, a DevOps toolchain is a patchwork of products and services from different suppliers, and it is up to developers to build and maintain that toolchain. Ultimately, developers are pulled away from writing code—the activity they are employed to do in the first place—and must instead dedicate valuable time and resources toward understanding and managing issues associated with highly complex toolchains that are often being held together by nothing more than “duct tape and wire.” This creates a huge chasm between expectations and reality. A bridge across that chasm needs to be built for organizations to gain the complete benefits of DevOps.

This bridge is formed by tools like Eclipse and Jenkins plugins, Visual Studio (VS) Code, Azure DevOps, and GitHub extensions that enable your current mainframe solutions to fit smoothly into the enterprise DevOps toolchain.

Modernizing the mainframe developer experience for next generation developers

A recent Forrester study commissioned by BMC, [*Developing Your Modern Mainframe Strategy*](#), found that organizations that focus on modernizing mainframe development tools with DevOps processes saw significant improvement in the developer experience, translating into an 18 percent reduction in costs and a 28 percent increase in development velocity. This is doubly important since we must ensure an improved overall environment for DevOps. By improving the developer experience with modern tools, organizations are better suited to attract and retain the next generation of developers and replace developers who change roles or retire.

The Forrester study found that 80 percent of respondents agreed that putting the proper tools in the proper hands and functions is essential to modernizing the mainframe. The emphasis for these organizations has clearly shifted to DevOps for the mainframe—both the organizational changes and the automated tools necessary to make DevOps work and free up time for developers and operators. Seventy-one percent cite automation, and specifically automating repetitive tasks to free up time for developers and operators, as their organizations' top priority to further their modernization efforts.

Mainframe development is complex; no single tool does everything; and many new developers aren't familiar with the platform and its languages and tools. To attract the best people, it is necessary to offer them an optimal environment in which to perform the tasks, empower them with the tools they prefer, and deliver an attractive and intuitive integrated developer environment (IDE).

Drudgery may have been both expected and accepted by previous generations; but in the era of the Great Resignation and Great Reshuffle, “quiet quitting,” and the desire among many to work from home, employees' awareness of and confidence in determining their careers is both an opportunity and a threat. If it takes a company six or nine months to train new hires to a state of productivity, the risk of them growing frustrated and leaving is high. However, an environment that leverages more recent tools and allows new recruits to work on satisfying projects more quickly is better suited to deliver an engaged and dedicated upskilled team.

Creating better DevX will influence your ability to attract new people and enhance your ability to hold on to, empower, and upskill the teams you already have.

DevX is not a single tool—it's a concept that helps developers achieve DevOps and perform their tasks more quickly and efficiently by easily accessing a feature to help with debugging or performance testing and making tasks repeatable with less chance of human error. Similarly, the DevX experience from BMC is not a single tool but a collection of tools and processes that will help developers connect to VS Code, Git, and other best-in-class tools, and provide an all-inclusive dashboard to access everything easily without assembling manually. It will also enable organizations to align the DevOps toolchain and share distributed and mainframe application development tools across their entire infrastructure—which is a goal for more than 80 percent of the organizations surveyed.

As just one specific product example, [BMC AMI DevX Workbench for VS Code](#) empowers developers to create programs, investigate issues, and debug code to support business drivers efficiently. It integrates with key distributed and mainframe platform tools and allows developers to move seamlessly from task to task. With DevX Workbench for VS Code, mainframe teams can extend the value of every program across the organization by making them more maintainable.

Ultimately, DevX is about achieving the primary goals of DevOps by delivering a critical future-forward component. To hear more about the developer experience and BMC AMI DevX Workbench for VS Code, tune in to "[The Modern Developer Experience, Part 1](#)" on the Modern Mainframe podcast.