IBM WebSphere Hybrid Edition allows organizations to embrace containers and microservices, reduce IT costs and complexity, and improve productivity for IT and developer staff

For organizations to drive infrastructure efficiency, increase the speed of software development, and transform apps with cloud enablement at the forefront, they must embrace technologies such as containerization and microservices while continuing to enable their developers and IT staff with the tools they need to flexibly deliver timely and secure functionality to the business.[1]

WebSphere Hybrid Edition is comprised of multiple IBM solutions that support an organization's application modernization journey all under one license. WebSphere Liberty is a Java Enterprise Edition (Java EE), Jakarta EE, and a MicroProfile runtime that provides a low-overhead Java runtime environment well-suited for hosting cloud (native) applications and microservices. WebSphere Liberty is designed to be highly composable, to start fast, to use less memory than other solutions, to easily scale, and is optimized for containers. Developers have access to popular tools and Liberty features that increase their productivity. Open Liberty is also an option for developers looking for the flexibility and community of open-source. Included in WebSphere Hybrid Edition is additional functionality, like IBM Cloud Transformation Advisor and IBM Mono2Micro, which ensures an optimized and efficient path to cloud, containers, and microservices for an organization's workloads.

To better understand the benefits, costs, and risks associated with this investment, Forrester interviewed four customers with experience using WebSphere Hybrid Edition. For the purposes of this study, Forrester aggregated the experiences of the interviewed customers and combined the results into a single composite organization.

Return on investment (ROI)
195%

Net present value (NPV)
$4.69M

After the investment in IBM's WebSphere Hybrid Edition (from traditional WAS and other Java EE servers), interviewed organizations embraced technologies such as containers and microservices to reduce costs and IT complexity, all while removing friction from the day-to-day responsibilities of their developers and IT staff. This yielded increased productivity and shortened development cycles.

INVESTMENT DRIVERS

- **Efficiency for key staff.** With WebSphere Liberty, the interviewed organizations can quickly migrate applications to Liberty (with Transformation Advisor and included modernization tools), easily provision and configure runtimes, minimize the size of the runtimes for fast start-up, low memory and disk footprint, and provide developers access to innovative features like microservices, containers, and cloud integrations to speed

application modernization. Interviewees noted that these efficiencies help to address the skills shortages their organizations often face for developer and IT talent.

- **Support for business-critical microservices and migration to containers.** Some interviewees noted that WebSphere Hybrid Edition allows their organizations' developers to create and support microservices that reduce application complexity while supporting the objectives of the businesses. Some applications can be refactored as microservices on WebSphere Hybrid Edition via Mono2Micro.

- **Flexibility for developers to leverage open source and deploy applications.** Interviewees said WebSphere Hybrid Edition gives developers the flexibility to select traditional WebSphere Application Server, WebSphere Liberty, and Open Liberty for their applications, which greatly increases their productivity while supporting the best path forward for their applications. Interviewees also cited the benefit of community support with Open Liberty for their developers, regardless of the WebSphere option selected.

- **Improvement to hardware and infrastructure utilization and increased capacity both on-premises and in the cloud.** Components of WebSphere Hybrid Edition allow organizations to continually evaluate their on-premises applications to determine which ones may be primed for modernization. This yields infrastructure savings as workloads are moved to the cloud while reduced complexity allows organizations to take advantage of less-expensive, less-specialized hardware.

> **"WebSphere has allowed us to mitigate issues related to staff shortages, staff skills, and time pressure to deliver applications and changes as quickly as possible to production."**
>
> *– AVP and business transformation architect, banking*

KEY RESULTS

- **Improved developer productivity by up to 50%.** Developers reap productivity benefits along both application migration and application development workstreams, allowing each developer to accomplish more while shortening development cycles by up to several months per project.

- **Improved IT administrator productivity by 40%.** IT administrators save time from tasks supporting their developers such as web application server instance provisioning, patching, and monitoring.

- **Accelerated profit from customer-facing application development of $1.8 million.** By enabling developers to more quickly develop and iterate on applications, functionality, and microservices, organizations recognize the revenue and profit associated with these applications and services faster.

- **Infrastructure cost savings of $2.6 million.** Interviewees reported infrastructure savings (and savings related to power, cooling, and maintenance) from an improvement in density by up to 40%, as well as utilization of less-expensive hardware because their organizations adopted IBM WebSphere Hybrid Edition.

READ THE FULL REPORT

For more information, download the full study: "The Total Economic Impact™ Of IBM WebSphere Hybrid Edition," a commissioned study conducted by Forrester Consulting on behalf of IBM, August 2021.

TOTAL ECONOMIC IMPACT STUDY FINDINGS

Forrester interviewed four decision-makers at organizations with experience using WebSphere Hybrid Edition and combined the results into a three-year composite organization financial analysis. Risk-adjusted present value (PV) quantified benefits include:

- Improved developer and IT administrator productivity of $2.6 million.

- Accelerated revenue (gross profit) of nearly $1.9 million.

- Infrastructure cost savings of $2.6 million.

Return on investment (ROI)

195%

Net present value (NPV)

$4.69M

Appendix A: Endnotes

[1] Source: "Adoption Profile: Containers In North America, Q1 2021," Forrester Research, Inc., January 6, 2021.