IBM - Application Platforms

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COMPANY ASSESSMENT

WHAT'S NEW

- **July 2018:** IBM announced its production-ready Java EE 8 compatible WebSphere Liberty server, combining the latest Java EE and MicroProfile technologies to support cloud-native app development, as well as increased support for Spring Boot apps running on WebSphere Liberty.
- **May 2018:** Red Hat and IBM partnered to accelerate hybrid cloud adoption, namely through Red Hat OpenShift and IBM Cloud Private scenarios. This follows IBM's heavy hybrid private cloud play emphasizing equipping developers with tools and capabilities for deploying and managing applications in multi-cloud contexts.
- **April 2018:** IBM Blockchain Platform, which leverages the OSS Hyperledger project, has been updated to include the IBM Blockchain Platform Starter Plan, aimed at helping customers establish a blockchain network.

GLOBALDATA COMPETITIVE INDEX

GlobalData Competitive Index
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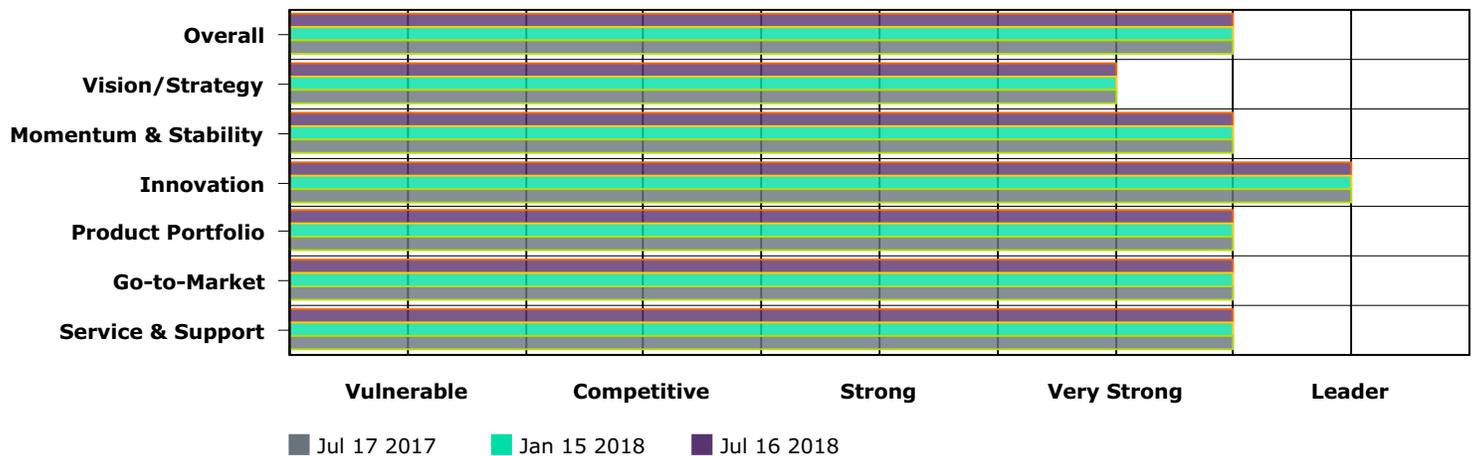
RATING UPDATE SUMMARY

VERY STRONG

IBM Cloud is positioned as the preeminent enterprise cloud offering supporting modern app development/deployment with CICD, backed by a comprehensive cloud stack, private/hybrid cloud, and heavy investments in key OSS cloud technology initiatives.

Strengths

• **WebSphere Evolution:** IBM WebSphere, including its lightweight Liberty developer option, is at the foundation of IBM Cloud's PaaS services, supporting cognitive app development built on Watson components and a cloud-native microservices architecture with containerized applications.

• **Comprehensive Cloud Stack:** IBM is among the few app platform and cloud providers offering a single-source cloud stack, the result of a consolidation of SoftLayer IaaS and Bluemix hybrid cloud PaaS. It continues to evolve its multi-cloud strategy via key partnerships.

• **Mobile Services:** IBM MobileFirst is integrated into IBM Cloud via the Mobile Foundation console with pre-integrated mobile services including security, backend integration, and ALM.

Limitations

• **Beyond WAS:** IBM supports WAS, Liberty, Node, and Swift. It is challenged to displace platform services in which competitors aim to differentiate through open source solutions in emerging development services, although it responds via OSS project Open Liberty.

• **IT Ops Management Needs:** IBM lacks centralized management solutions (which include data center technologies), such as integrated Tivoli management. However, IBM Cloud Automation Management is a move in that direction via operations management of governance and multi-cloud deployments.

• **Enterprise Application Gap:** Oracle and SAP continue to pose a major threat to IBM because of their ability to integrate mobile app development with their popular backend enterprise applications.

CATEGORY RATINGS AND JUSTIFICATION

Vision/Strategy

Rating : Very Strong

• IBM is prompting customers to move from cloud-based dev/test to workload production through new architectures and tools, which support microservices for building mission-critical apps that scale and are still maintainable over time.

• IBM takes a broad vision of the application platform lifecycle management (APLM) market, leveraging its dominant position as a provider of end-to-end development tools and modern architectures. It fosters frequent, non-disruptive updates to ensure continuous delivery, continuous integration - enhanced through analytics, fueling cognitive computing.

• IBM emphasizes its ability to support what it calls 'composable business' through a set of connectivity services, including an API catalog to expose existing data and apps for new mobile and cloud services.

Innovation

Momentum & Stability

Rating : Very Strong

• IBM has tremendous momentum around a comprehensive IaaS/PaaS cloud. IBM Cloud supports public, private, and on-premises; plus, it leverages enterprise-grade infrastructure technologies and advanced technologies like AI, machine learning, and APM to support sophisticated capabilities that can determine where workloads are run.

• IBM continues to reinvent itself to focus on next-generation app development around microservices/containers, IoT solutions, serverless computing/orchestration, and development tools, which broaden its audience of potential business users.

• IBM is investing into new areas of opportunity in application platforms including blockchain, rolling out early on-ramp tool-sets and announcing initial customer projects.

Product Portfolio

Rating : Leader

• IBM's evolution of WebSphere solidifies IBM Cloud as a platform services leader via better integration, featuring API management, integration with important apps (i.e., Watson, Cloudant), and portability via cloud containers.

• IBM is investing in compelling new ALM capabilities to support a microservices framework, including application performance management (APM), leveraging traditional management technologies. Further supporting operational management/monitoring concerns, IBM Cloud App Service supports a toolchain format wrapped around a typical DevOps lifecycle such as build, deploy, manage, auto testing, and A/B testing.

• Software engineering collaboration with Apple addresses backend integration, security, device/app management, and analytics around iOS and Apple technology, including Swift.

Rating : Very Strong

• IBM is demonstrating value around IBM Cloud Private in the form of agile tools that leverage IBM's innovations around containerization, microservices, and analytics, and ALM, built upon IBM's WebSphere, Liberty, and Microclimate. New cloud migration tools under Cloud Private include Application Transformation Advisor, which provides insights and guidance for modernizing traditional apps on the cloud, and Cloud Automation Manager, which helps businesses deploy and run modernized applications on-premises or in the cloud of their choice.

• Having accomplished single integration between its various IaaS, PaaS, and private cloud platforms, cloud services are integrated into the app development process via Cloud App Service, including advanced services around cognitive, analytics, and blockchain through a console that brings key components together to support CICD.

• Mobile Foundation helps drive business to IBM's broader set of services, building and connecting apps to existing systems quickly via API management with intelligent mapping capabilities to deliver backend services and pre-built hypervisor images.

Go-to-Market

Rating : Very Strong

• IBM promotes its support for hybrid cloud development/deployment leveraging mature integration/SOA portfolios, as customers refactor apps by moving from monolithic approaches to frameworks, including microservices, loosely coupled and delivered on cloud services.

• IBM programs, such as Bluemix Cloud Garage, promote the idea that the IBM Cloud runtime platform supports DevOps velocity, to dynamically deploy apps across a set of environments in various stages of testing and monitoring for performance, security, and updates.

• IBM's platform services include lightweight versions of runtime app servers alongside Java EE support, addressing the need for flexibility via quick-start development of Java microservices based on standardized container support.

Service & Support

Rating : Very Strong

• Considering the rapidly evolving cloud, IoT, and mobile markets, IBM's global professional services organization (IBM GTS) is often at the forefront of sales efforts, whether a complete SOA stack or a business process optimization solution coupling ECM and BPM.

• For enterprises adopting Apple mobility solutions, GTS provides comprehensive kits with reference architectures, APIs, process flows, journey maps, and sales kits outlining users and purchase decision-makers within particular industries.

• Not only does IBM Cloud/Bluemix open up advanced management, development, and integration services that can be provided by IBM Global Services, including AI, IoT, and blockchain, but IBM also works with a network of partners in more than 100 countries, leveraging its 54 IBM Cloud data centers, set to grow by another 18 globally.

Segment Ratings

Market	Perspective
Application Platforms	Very Strong
Data and Analytics Platforms	Leader
Development	Leader
Mobility	Very Strong
Servers	Very Strong
Services	Very Strong

THREATS AND BARRIERS

• **Beyond WAS:** IBM supports WAS, Liberty, Node, and Swift. It is challenged to displace platform services in which competitors aim to differentiate through open source solutions in emerging development services, although it responds via OSS project Open Liberty.

• **Enterprise Application Gap:** Oracle and SAP pose a major threat to IBM for their ability to integrate new application services and tools with popular backend enterprise applications.

• **Oversized Middleware Portfolio:** Despite cross-product synergies across the WebSphere portfolio, IBM's middleware/services can be characterized as overly specialized and therefore complex.

• **RAD Gap:** IBM has not done enough to capitalize upon the growing resurgence of RAD by building workflows, committal tools, and such into its development tools.

• **IT Ops Management Needs:** IBM lacks centralized management solutions (which include data center technologies) and has not done enough to bring Tivoli management to IBM Cloud.

RECOMMENDED ACTIONS

Vendor

• **So RAD:** IBM needs to highlight the progress it has made in easy-to-consume RAD/MBaaS alternative solutions aimed at both greenfield accounts and PaaS providers, as pure plays in these categories pose a threat. IBM offers this technology through IBM Cloud's platform services.

• **Publish Pricing:** In light of vendors moving to the cloud, a new age of transparent pricing is evolving, and IBM (and others) should release a comprehensive pricing structure that illustrates its IaaS, PaaS, and SaaS offerings relative to competitive market offerings in order to illustrate value.

• **Microservices Advancements:** IBM should better publicize its innovations around an evolving , containerization, analytics and ALM methodology, based on its WebSphere, Liberty, Istio, and Microclimate.

Competitors

• **Inflated Portfolio:** Competitors should position the sheer scope of IBM's application infrastructure products as evidence that IBM can't construct a simple solution to a specific problem.

- **Expand Partnership:** SAP should highlight its success in leveraging an IBM Cloud IaaS certification on which to run S4/HANA and NetWeaver, as NetWeaver has not been a success as a standalone design, integration, and governance platform.

Buyers

- **Portability:** IBM eases complexity around deploying multiple workloads in multiple public and private cloud scenarios via software patterns delivered on a single platform.

- **Integration Support:** Through both on-premises and cloud services, IBM's strong technological leadership and its globally based professional services give it an advantage over competitors.

- **Coopetition:** IBM puts competitive differences aside, establishing key partnerships with one-time rivals to meet customers where they're at as they embark on advanced app development projects.

COMPANY DETAILS

Company Snapshot

Employees	377,757
HQ	Armonk, New York
Market strengths/solutions	IBM SOA Software, IBM WebSphere/Liberty, ESB Solutions, IBM SmartCloud Foundation, IBM MobileFirst, IBM PureSystems, IBM Bluemix, API Harmony
Key ecosystem partners	Pivotal/Cloud Foundry, Apple, Microsoft, SOA Software, SAP, Red Hat, AT&T