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Red Hat and AWS

Authors:  
Gary Chen  
Matthew Marden

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## Business Value Highlights

**661%**  
five-year ROI

**5 months**  
to payback

**54%**  
lower five-year cost of operations

**>2x**  
more new applications per year

**24%**  
higher application developer productivity

**\$32.9 million**  
higher revenue per year per organization

**80%**  
less unplanned downtime

**49%**  
more efficient IT infrastructure teams

# The Business Value of an Agile and Flexible Platform for Developing and Running Applications with OpenShift on AWS

## EXECUTIVE SUMMARY

Enterprises are rapidly moving to containers to develop and run their applications. Containers may be themselves a singular and simple foundational technology, but they have brought with them a large range of inherent attributes and benefits that taken together define a full container platform:

- » Highly automated and agile orchestration with Kubernetes
- » Transitioning from monolithic application architectures to microservices, which allows greater development efficiency and operational scalability and agility
- » Shifting from waterfall software development to agile development
- » Breaking down development and operations barriers with DevOps teams
- » Operational transition to immutable infrastructures

As enterprises adopt containers, they are really adopting a broad set of technologies and making fundamental changes to their applications and processes. However, this doesn't all happen at once, and enterprises will be making this transition for many years. Existing applications can be containerized with benefits and then gradually refactored with microservices over time to improve returns. Ultimately, container technology is a key tool to help enterprises achieve digital transformation by greatly increasing the pace of software development, iteration, and innovation.

Containers and public cloud have always had great synergy. Containers were developed to take advantage of cloud infrastructure in order to meet the needs of cloud-native applications. Technologies like Docker and Kubernetes operate at the application level and a robust, scalable infrastructure is needed underneath. Hyperscale public clouds offer globally available and

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nearly infinitely scalable and resilient infrastructure. These clouds also offer a modern API-driven, infrastructure-as-code interface, which is why many customers choose to deploy their container platforms on the public cloud. The public cloud can also offer many application and data services that container developers often leverage in their code.

IDC spoke with organizations that are leveraging containerization and the public cloud by using Red Hat OpenShift on Amazon Web Services (AWS) to develop and run business applications. These organizations reported benefiting from combining a powerful and flexible platform for developing and running business applications (Red Hat OpenShift) with the agility, elasticity, and efficiency of the AWS cloud. With OpenShift on AWS, their development teams can better serve their businesses and they establish a more cost-effective and reliable IT platform for these applications. As a result, these organizations are capturing strong value through their investment in OpenShift on AWS, which IDC projects will have a value of \$10.89 million per organization per year, by:

- » **Enabling development teams** to better respond to business needs by delivering new applications and features more frequently and in less time, including across multicloud environments
- » **Winning more business and increasing revenue** by reacting to opportunities in a timely manner and delivering higher quality services across disparate business locations
- » **Increasing the productivity of employees** by minimizing the impact of outages affecting business applications
- » **Reducing the amount of IT staff time** required to manage, support, and secure their IT environments
- » **Lowering infrastructure and development platform costs** by moving to the AWS cloud and leveraging OpenShift functionality