Azure Red Hat OpenShift Provides More Value And Support To Cloud-First Organizations

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Cloud nativity is emerging as a business requirement across many industries for a number of reasons. Application development needs more automation, B2C and B2B applications require scalability, and software stability is becoming increasingly important. The intersection of cloud and containerization creates a unique opportunity for increased business agility as cloud infrastructure supports development and deployment of containerized applications at scale.

Azure Red Hat OpenShift brings a jointly managed enterprise-grade Kubernetes solution to a leading public cloud, Microsoft Azure. With Azure Red Hat OpenShift, customers can also bring containerized applications into workflows where they exist, while mitigating many of the inherent complexities of container management. Furthermore, it simplifies application development and deployment; Red Hat and Microsoft handle the infrastructure, empowering business users to focus solely on application development and business growth.

To better understand the benefits, costs, and risks associated with Red Hat OpenShift cloud services, Red Hat commissioned Forrester Consulting to interview six customers and conduct a Total Economic Impact[™] (TEI) study.¹ This abstract will focus on the use of Azure Red Hat OpenShift and its value to organizations.

Reduction in infrastructure management effort **50%** Reduction in development time **60% to 70%**

resource management resulted in missed opportunities for higher-value innovation and delivery of new technologies that would drive business forward.

- Limited time and budget. Interviewed customers noted that the operational overhead to maintain and upgrade their prior monolithic architecture was too costly and time-consuming.
- Lack of flexibility and scalability. Interviewees described looking for a solution that could adapt to their specific business needs and change over time, which were qualities that their incumbent systems lacked.

AZURE RED HAT OPENSHIFT FEATURES

Interviewees found the following attributes of Azure Red Hat OpenShift to be particularly beneficial for their organizations:

INVESTMENT DRIVERS

Prior to Azure Red Hat OpenShift, the interviewees' organizations struggled with common challenges:

• Stifled innovation. Interviewees said that having to dedicate developer time to platform and

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- Developer innovation empowerment. Azure Red Hat OpenShift allows developers to build and scale applications in a consistent, stable environment without worrying about underlying operations or infrastructure management. The platform also provides support for a range of traditional, cloud-native, and serverless tools, and it enables users to easily connect their applications to hundreds of Azure services.
- Flexibility and scalability. Azure Red Hat OpenShift enables organizations to quickly deploy business-critical applications and scale as the business grows. Developers can choose between standard, high-memory, or high-CPU application nodes and scale on demand, using their Microsoft Azure contracts and commits to pay as they scale.
- Enterprise-grade operations, security, and compliance. Azure Red Hat OpenShift features industry-leading 99.95% availability and 24/7 support to help organizations meet a plethora of compliance and regulatory requirements. A specialized global Site Reliability Engineering team manages the full stack, from infrastructure to daily operations, reducing operational complexity, increasing speed-to-market, and allowing organizations to focus on businesscritical needs.

"We're a large Azure shop and we're partners with Microsoft in many areas....we want to be 100% managed services as much as we can on all the major building blocks in Azure because we know that it saves us a lot of time and energy and money."

Director of engineering, conglomerate

"One of our pain points is we don't want to do infrastructure. We just want to focus on building great experiences. We wanted to find somebody who could manage this for us so we didn't have to."

Director of operations and infrastructure, telecom

KEY RESULTS

The following results are based on a composite organization as modeled in the full study.

Increased development velocity. Before investing in Azure Red Hat OpenShift, customers were using applications that were large, burdensome, and expensive to manage. Interviewed customers shared that implementing Azure Red Hat OpenShift's microservices- and container-based architecture allowed their application development and testing process to be much faster, which opened time in their developers' day that could be recouped for further productivity.

Development time reduced by 70%. Using Azure Red Hat OpenShift provides access to integrated tools and continuous integration/ continuous delivery (CI/CD) pipelines that help modernize development approaches and streamline application development and deployment. Such features lend themselves to a 60% reduction in development time in Year 1, 65% in Year 2, and 70% in Year 3. The developer in apparel said: "You reduce the line of code you have to monitor when you change things. This means smaller, faster release cycles, which means [the] business gets new features faster. We are more flexible in setting up new applications and new models because it's less code to get started."

Offloaded infrastructure management. Beyond slowing down the development process, legacy

environments also required developers to procure new environments manually, which could take weeks and involve multiple stakeholders. With Azure Red Hat OpenShift, developers no longer needed to allocate time for infrastructure maintenance work and were able to repurpose that time for more productive work supporting application development. Microsoft and Red Hat manage all aspects of the cloud-based container environment.

 Developers recouped 20% of their time. In their previous environment, infrastructure maintenance work could consume as much as 20% of a developer's time. The innovation manager in nonprofit education shared: "With Red Hat OpenShift cloud services, we don't have to create new servers or install anything. We can focus on other things. The workload shifted from doing infrastructure maintenance to supporting application development."

Improved operational efficiency. In addition to recouping developer time that was previously spent on infrastructure maintenance work, using Azure Red Hat OpenShift also allowed interviewed customers to repurpose full-time DevOps staff that were responsible for managing the infrastructure. Organizations were able to reduce costly downtime and maintain reliability with managed upgrades, patching, and threat monitoring and remediation.

 Infrastructure management effort reduced by 50%. With Azure Red Hat OpenShift, organizations did not have to allocate as many DevOps staff to maintain the environment for application development. Within the conglomerate organization, two FTEs were previously tasked to support the application development process for a team; both were reassigned once the company onboarded Azure Red Hat OpenShift. The project coordinator in higher education added, "We reassigned 25% [of] people out of operations and into development." "The managed service really checked a lot of boxes for us: not only is it cheaper but it saves us a lot of operational overhead as we have the power of Microsoft behind us in terms of supportability and stability. Microsoft's now also managing the carrying and fitting of the versions as they roll out each quarter from Red Hat, so we no longer have that responsibility."

Director of operations and infrastructure, telecom

TOTAL ECONOMIC IMPACT ANALYSIS

For more information, download the full report "<u>The Total Economic Impact™ of Red Hat OpenShift Cloud Services</u>," commissioned by Red Hat and delivered by Forrester Consulting.

STUDY FINDINGS

Forrester interviewed six organizations with experience using Red Hat OpenShift cloud services and combined the results into a three-year composite organization financial analysis. Risk-adjusted present value (PV) quantified benefits include:

- Development velocity of nearly \$1.5 million.
- Offloaded infrastructure management of more than \$2.1 million.
- Operational efficiency of more than \$1.3 million.



Return on investment (ROI)

468%



Appendix A: Endnotes

¹ Total Economic Impact is a methodology developed by Forrester Research that enhances a company's technology decision-making processes and assists vendors in communicating the value proposition of their products and services to clients. The TEI methodology helps companies demonstrate, justify, and realize the tangible value of IT initiatives to both senior management and other key business stakeholders.

DISCLOSURES

The reader should be aware of the following:

- The study is commissioned by Red Hat and delivered by Forrester Consulting. It is not meant to be a competitive analysis.
- Forrester makes no assumptions as to the potential ROI that other organizations will receive. Forrester strongly advises that readers use their own estimates within the framework provided in the report to determine the appropriateness of an investment in Red Hat OpenShift.
- Red Hat reviewed and provided feedback to Forrester. Forrester maintains editorial control over the study and its findings and does not accept changes to the study that contradict Forrester's findings or obscure the meaning.
- Red Hat provided the customer names for the interviews but did not participate in the interviews.

ABOUT TEI

Total Economic Impact[™] (TEI) is a methodology developed by Forrester Research that enhances a company's technology decision-making processes and assists vendors in communicating the value proposition of their products and services to clients. The TEI methodology helps companies demonstrate, justify, and realize the tangible value of IT initiatives to both senior management and other key business stakeholders. The TEI methodology consists of four components to evaluate investment value: benefits, costs, risks, and flexibility.

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