



The Business Value of Red Hat Certification

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BUSINESS VALUE HIGHLIGHTS



Click on highlights below to navigate to related content within this PDF.

409%
three-year ROI

47% more virtual machines
per IT staff member

24% more productive
development teams

23–51% faster deployment
of IT infrastructure

13% lower cost
of infrastructure

7 weeks faster
to full productivity, new hires

Executive Summary

Red Hat has firmly established itself as a preferred delivery vehicle for modern applications and as a platform for cloud infrastructure. The trust Red Hat has earned has been developed by building ecosystems, rich application portfolios, a reliable environment that offers scale and security, and robust application support that enterprise customers require. These benefits aren't simply built into the tools and applications. These capabilities are enabled by well-skilled developers, administrators, and infrastructure management teams. Previous IDC research found that training impacted IT professionals consistently and increases both individual capability and the ultimate business value of the supported technology. This research extends that exploration into the business value of Red Hat Certification and the impact Red Hat–Certified IT professionals can have on IT operations and on infrastructure costs.

IDC interviewed organizations with IT staff members who earn and keep current with Red Hat Certifications. These Red Hat customers emphasized that certified staff differentiate themselves from other employees in terms of both skills and organizational value. They noted that they have greater confidence that certified staff can handle more challenging and complex tasks. The certified staff's increased capability also translates into higher productivity levels.

Red Hat customers cited important ways in which certified staff stand out, including their ability to:

- ▶ Apply knowledge and best practices of Red Hat solutions and technologies to manage and run Red Hat environments more efficiently.
- ▶ Leverage containers, Kubernetes, and other technologies to support more agile and effective development activities.
- ▶ Put in place more cost-effective and resilient IT architectures to optimize IT costs and ensure the highest levels of business continuity.

The benefits for certification are great: Study participants will realize an average ROI of 409% over three years.

In addition, study participants uniformly noted that certified employees are generally well regarded and highly valued throughout their organizations. They reported that highest-priority projects are often assigned to certified staff members and noted that certified team members become invaluable resources for other noncertified team members. Importantly, there was also agreement that Red Hat Certification is indicative of not only higher skill levels but also commitment, reflected in deeper engagement and enhanced career opportunities.

Situation Overview

Digital transformation enabled by hybrid or multicloud strategies continues to create a new era of digitally enabled customer-facing products, services, and experiences and an environment of rapid change and uncertainty. These trends put developing and deploying technology at the center of business growth for all companies, new and old.

Attempting to meet the new era with traditional tools and approaches is less and less effective for many IT organizations, leading to disjointed and ineffective IT initiatives and limited business value. Successful transformation requires new tools, new practices, and IT professionals with the skills and capabilities to effectively leverage those new tools.

People are the make-or-break element of a high-performing IT organization. There is simply no replacement for people with the right skills, attitudes, and traits. Chief information officers (CIOs) don't have the luxury of hiring a totally new roster of people with "the right stuff"; they must be creative in using a mix of hiring, training, and partnering to create the needed capabilities.

IDC research has found that training impacts IT professional performance and ultimately the business value of the supported technology. We have found that increasing the share of a typical digital transformation budget allocated to training from 5% to 6.5% can increase the chance of a project meeting its business objectives from 50% to more than 80%. While costs and results vary, the impact of skills on the performance of technologies is clear.

IDC's Cloud-Based Enterprise Application Performance Survey of more than 1,000 IT leaders worldwide found that well-trained organizations:

- ▶ Meet nearly 90% of their business and project milestones compared with <50% of milestones met by cloud migration teams with only "average" skill level.
- ▶ Are more satisfied with the business impact of the move to cloud.

Well-crafted certifications help organizations recognize the specific skills and proficiency levels that make a difference. But IT leaders often wonder whether it is worth it. This research should help IT leaders and managers make an informed choice.

Well-crafted certifications help organizations recognize the specific skills and proficiency levels that make a difference.

Red Hat Certification Courses and Exams

The training curriculum of Red Hat is built on the experience of its own support teams, its field personnel, and professionals from around the world. The certification offerings span the breadth of tools offered by Red Hat including Red Hat Enterprise Linux, middleware tools, Gluster and Ceph storage, OpenStack, and virtualization tools. And of course, the certification spans the range of roles that leverage Red Hat, from system administrators to developers to engineers, architects, and security professionals.

Red Hat leverages sophisticated adaptive assessments to help identify the most appropriate curricula or courses to support individual or team development.

The assessments cover more than 20 skills and tools such as:

- ▶ Red Hat Enterprise Linux System Administration
- ▶ Advanced Automation: Ansible Best Practices
- ▶ Red Hat OpenStack Platform Administration
- ▶ Red Hat OpenShift
- ▶ Container-Native Application Development

IT professionals and teams can find approaches, topics, and courses to help them better leverage Red Hat within their organizations.

The Business Value of Red Hat Certification

Study Demographics

IDC interviewed eight Red Hat customers about the benefits and costs of having IT team members earn and maintain their Red Hat Certifications. Interviews were in-depth in nature and designed to understand how certification affects staff skills and technological know-how, overall IT team capabilities and productivity levels, and prospects and opportunities for certified staff.

Interviewed Red Hat customers were diverse in terms of size, geographical location, and industry. Study participants had an enterprise profile as measured by average number of employees (30,961) and annual revenue (\$25.08 billion), although median employee counts (1,450) and revenue (\$1.0 billion) were lower. The study sample had good diversity by geography, with representation from North America, Latin America, Europe/Middle East/Africa (EMEA), and Asia Pacific (APAC), and industry verticals, including the IT services (3), financial services (2), government, oil and gas, and retail verticals (see **Table 1**, next page).

TABLE 1
Demographics of Interviewed Organizations

	Average	Median
Number of employees	30,961	1,450
Number of IT staff	665	300
Number of business applications	136	100
Number of physical servers	387	73
Annual revenue	\$25.08B	\$1.0B
Countries	United States (3), Argentina, Brazil, Germany, India, and Italy	
Industries	IT services (3), financial services (2), government, oil and gas, and retail	

n = 8, Source: IDC In-depth Interviews, February 2021

Drivers of Investment in Red Hat Certification

Interviewed organizations each had their own mix of certification types and numbers of certified staff. However, they all described common motivations in encouraging or even requiring staff to complete Red Hat Certification courses and exams. Most prominently, they explained that certified staff are more likely to have the skills and technological know-how required to run IT operations and use new technologies effectively and efficiently. Further, they described a multiplying effect of certification; they described certified staff as more likely to become resources for other employees and ultimately to contribute more to their organizations' success.

“If [our consultants] are certified, we know they’ve done hands-on work with the scenarios we need them to know.”

Study participants emphasized the importance of practical knowledge gained through Red Hat Certification programs as well as certified employees' ability to pass on knowledge and skills gained to noncertified staff:

▶ **Ability to apply certification to solve more challenging issues/scenarios:**

“There is a lot of value in having staff complete Red Hat Certification courses ... We need our staff to have the hands-on experience because we deal with problems other consultants are not able to solve ... That is the reason why we require 100% certification among our employees. If they are certified, we know they’ve done hands-on work with the scenarios we need them to know.”

▶ **Value of real-world requirements to pass exam:**

“I’ve learned that certification is important because of how the courses are structured and what is tested at the end. Knowing that people have to build the environment themselves as part of the exam ensures that they know how to do it. This is very valuable.”

► **Development of “in-house” experts:**

“We see the benefit of attaining Red Hat Certification in people’s performance reviews ... One notable aspect of completing certification is that staff studying and taking certifications can work with other departments and work with other groups — they become in-house experts, which is a measurable value to the organization.”

Red Hat Certifications at Interviewed Organizations

Interviewed Red Hat customers reported having important but targeted IT staff members earn and maintain certification. On average, interviewed organizations had 21 IT team members who are certified by Red Hat. These organizations report that their staff take 29 Red Hat Certification tests per year. Most of these Red Hat–Certified IT staff achieved certification with their current organizations, although several study participants reported hiring already certified candidates. In terms of Red Hat Certification types, there was a relatively even split between system administrator and more development-focused Red Hat Certifications, with an average of 11 Red Hat–Certified System Administrators, 5 Red Hat–Certified Engineers, and 4 Red Hat–Certified Specialists in OpenShift Administration (see **Table 2**).

TABLE 2
Red Hat Certification at Interviewed Organizations

	Average	Median
Total number of employees with certification	21	10
Number of employees who earned certification while at current organization	16	8
Total number of certification courses/exams completed per year	29	10
Total number of certification courses/exams completed per year while at current organization	23	9
Employees with certification by Red Hat Certification type:		
Red Hat–Certified System Administrator	11	4
Red Hat–Certified Engineer	5	1
Red Hat–Certified Specialist in OpenShift Administration	4	1

n = 8, Source: IDC In-depth Interviews, February 2021

The Business Value of Red Hat Certification

Interviewed organizations reported that staff who earn and maintain Red Hat Certification have greater skills and stronger technological know-how than noncertified employees. Study participants described certification staff responsible for running their IT infrastructures and developing software as having higher efficiency and greater capabilities.

“Certification gives us confidence in managing complex infrastructure and automating complex processes.”

As a result, they report high levels of confidence in certified staff members and view them as foundational team members responsible for the highest value and most important responsibilities:

▶ **Instilling confidence in capabilities:**

“Certification gives us confidence. We compete with the largest systems integrators in the world with a young team. Certification gives us confidence in managing complex infrastructure and automating complex processes.”

▶ **Higher value because of skills:**

“Systems change and get updated. Somebody who has certification can be counted on to have the latest knowledge ... A staff member with Red Hat Certification has more value than somebody who does not ... certification gives us the assurance that they have the skills we are looking for.”

In addition to higher levels of capabilities and efficiency, study participants reported that certified staff are often given more responsibilities, better meet performance expectations, and have deeper levels of engagement and commitment to their organizations.

Efficiencies in Management and Administration of IT Environments

In many respects, study participants described the value of having certified staff in terms of their enhanced ability to deploy, manage, and run their Red Hat and IT environments. Interviewed organizations face common IT challenges, including limited budgets, rapid data growth, and organizational directives to use new technologies, even as they try to find and maintain IT teams with sufficient experience and skill. They reported that having staff with Red Hat Certification is essential to their efforts to address and meet these challenges.

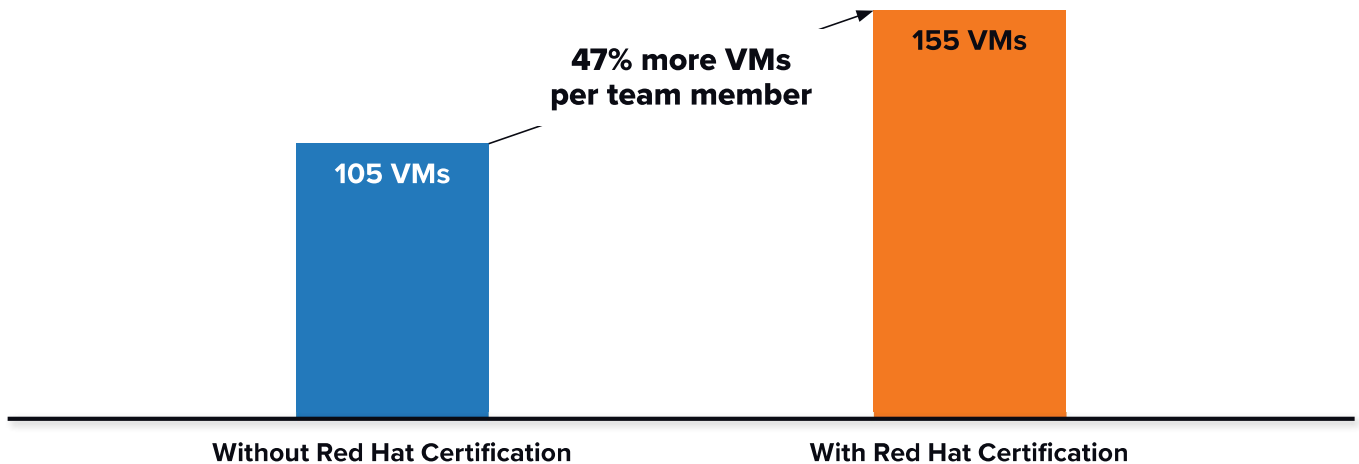
Interviewed Red Hat customers reported that their certified staff are essential to their ability to operating their Red Hat and IT environments as efficiently as possible. They described how certified staff have already gained crucial knowledge and practical experience that they can apply to real-world situations: *“Staff with Red Hat Certification have an easier start on new projects because they know how to configure automation, what the features are, and what can be done. The main thing is that it is much more efficient with that knowledge because they know how to build up their own configuration without having to go online and search for information.”* Another interviewed organization linked Red Hat Certification to confidence in staff’s ability to work efficiently and successfully: *“If somebody is managing infrastructure, it is important that they have the knowledge to do these things, and Red Hat Certification gives us the certainty that they have this. We look at certification as the closing of a circle. It’s an assurance that there is a certain amount of knowledge that we can count on.”*

Study participants also drew a connection between having certain team members with Red Hat Certification and broader increases in team capabilities. They linked these performance gains to having staff who have sufficient expertise, confidence, and know-how to serve as a resource for other noncertified employees. One study participant commented: *“Red Hat Certification is essential for the open systems group to build its expertise, which allows staff to become a resource for other groups. Having people certified with Red Hat allows us to move toward open systems with in-house expertise and not be dependent on others.”*

“Having people certified with Red Hat allows us to move toward open systems with in-house expertise and not be dependent on others.”

Interviewed Red Hat customers connected certification to increased efficiency and higher productivity levels. They noted several ways in which certification-related efficiencies provide demonstrable value. For example, they explained that certified staff can handle higher workload volumes relative to noncertified staff. We confirmed this and found that certified staff can handle 47% more virtual machines (VMs) (see **Figure 1**). These efficiencies can also be extrapolated to a broader impact, with study participants reporting that certified staff members are an average of 32% more efficient, which means that their Red Hat–Certified teams of an average of 10.7 employees can handle the work volume of 15.7 noncertified employees.

FIGURE 1
Efficiency of IT Staff Members
 (Number of VMs per IT staff member)



n = 8, Source: IDC In-depth Interviews, February 2021

Supporting Agile IT Environments, Including Development

Study participants also linked having Red Hat–Certified staff members to maintaining agile IT environments as well as more effective development teams. They reported achieving these benefits because staff responsible for infrastructure and development can make better use of technologies and functionalities embedded in their Red Hat and IT environment, including containers, Kubernetes, and automation.

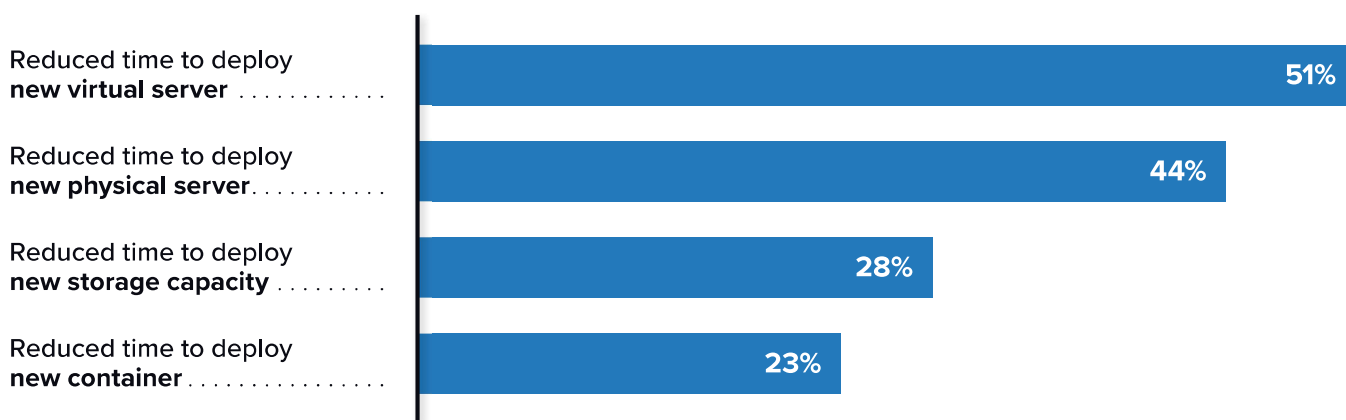
Infrastructure agility is increasingly a cornerstone of successful IT operations. Business operations and development activities require that IT resources, including compute, storage, and networking capacity, be made readily available. Technologies such as containers and functionalities such as automation support deeper IT agility, but they require skilled IT teams to put into practice. Study participants reported that Red Hat–Certified staff have the know-how and ability to leverage these technologies in support of greater agility, resulting in being able to deploy new IT resources 23–51% faster than noncertified employees (see **Figure 2**).

“Having Red Hat Certification ... allows us to implement solutions both quickly and with high quality. This helps us save money in how we run our business.”

Interviewed Red Hat customers described the benefits of having certified staff:

- ▶ **Improved use of automation:**
“Someone with Red Hat Certification in Ansible can more easily automate processes; that is why we estimate a 20% improvement in time for deploying new IT resources.”
- ▶ **Skills in deployment and certainty of quality:**
“Red Hat–Certified staff know how to use the correct functions to deploy applications ... Having Red Hat Certification also allows us to implement solutions both quickly and with high quality. This helps us save money in how we run our business.”

FIGURE 2
Impact on IT Agility
 (% faster with Red Hat Certification)



n = 8, Source: IDC In-depth Interviews, February 2021

Study participants reported that Red Hat Certification has enabled their development activities through greater agility as described previously as well as direct know-how and practical knowledge gained through certification courses that developers can apply. One interviewed organization explained: *“Red Hat Certification is part of the development goal for employees to enhance their technical skill sets. One of the ways of doing that is by studying and taking certification exams.”* Another study participant linked Red Hat Certification to better ability to use technologies important to development: *“Depending*

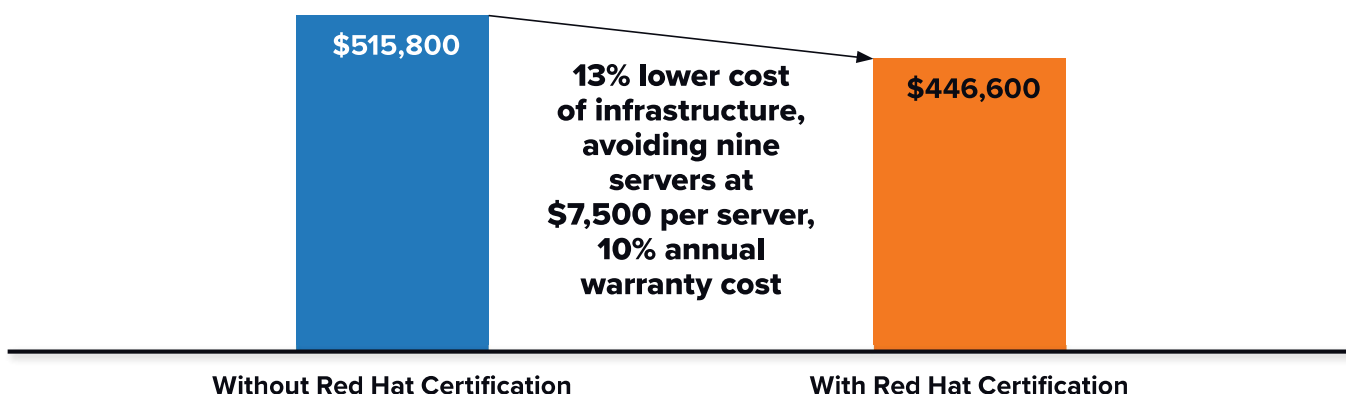
on the type of certificate, it will be easier for someone who is certified with Red Hat to get a grasp on various technologies, including containers and Kubernetes. This helps them better perform their job.” Overall, while study participants generally did not describe extensive development activities related to Red Hat–Certified staff, they linked having certification to an important 24% higher productivity level for developers who have earned and maintain Red Hat Certification.

Establishing High-Quality and Cost-Effective IT Infrastructures

Study participants also reported that having staff who earn and maintain Red Hat Certification help them establish more cost-effective and resilient IT infrastructures. These benefits trace back to Red Hat–Certified staff’s ability to implement best practices and leverage technology to gain efficiencies and higher performance. One study participant commented: “Red Hat–Certified staff know how to configure our complex infrastructure environment for high availability. For this, you definitely need certification because it’s so complex.” From a cost perspective, interviewed Red Hat customers reported that having staff with certification has enabled them to run equivalent workloads at a 13% lower cost of infrastructure, allowing them to avoid or repurpose nine servers on average (see Figure 3).

FIGURE 3
IT Infrastructure Costs

(Three-year total cost, average per interviewed organization)



n = 8, Source: IDC In-depth Interviews, February 2021

Higher-Value Employees

Importantly, interviewed organizations with Red Hat–Certified staff view achieving and maintaining certification as beneficial not only to their organizations but also to the certified employees themselves. They reported that staff with Red Hat Certification perform better, work on more complex and important projects, serve as a broader team resource, are better regarded, and tend to stay at least as long, if not longer, than noncertified staff.

Certified Staff Are Known to Have Required Skills and Expertise

Study participants reported with near uniformity that they view having Red Hat Certification as a confirmation that staff have higher levels of skills and expertise. They know that Red Hat Certification courses and exams not only cover new technologies and approaches but also require staff to apply practical knowledge to complete certification. In addition, they have seen the differentiation in the performance of Red Hat–Certified employees over time in real-world situations. One interviewed Red Hat customer explained: *“A person with one year of experience and Red Hat Certification is the same to me as somebody else with three years of experience ... The fact that passing the certification exams requires them to solve these scenarios is what gives them and me confidence.”*

“A person with one year of experience and Red Hat Certification is the same to me as somebody else with three years of experience.”

Certified Staff Are Given Higher-Value Work

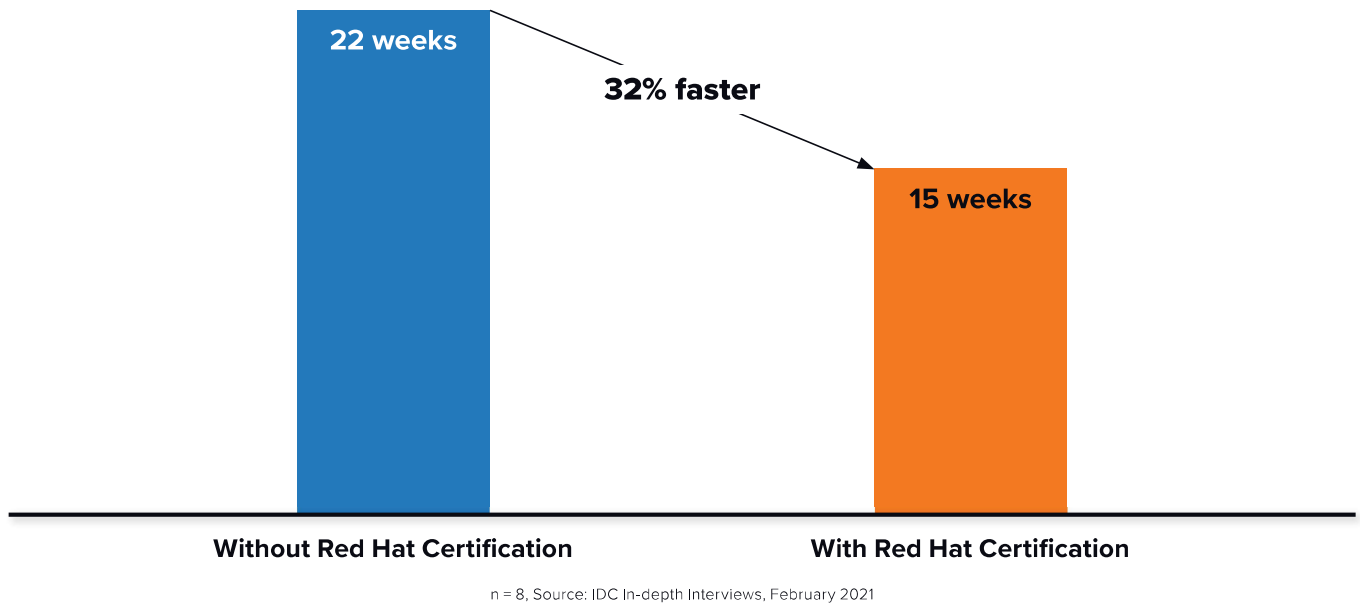
A number of study participants emphasized that they assign their most important projects and work to certified staff. This links back to the theme of confidence in Red Hat–Certified employees mentioned by most interviewees; they know that certified team members have the practical experience and know-how required to successfully execute the most challenging and complex assignments. One interviewed Red Hat customer commented: *“We reserve people with Red Hat Certification for our most important projects and customers. For less important work, we use junior employees who do not have certification.”* For Red Hat–Certified employees, being charged with these types of assignments not only means having more opportunities to work on business- or innovation-driven projects but also means working on the types of assignments that are most likely to garner attention from executives and other influential stakeholders at their organizations.

Certified Staff Perform Better

Study participants reported that Red Hat–Certified staff perform better in both tangible and intangible ways. As one organization noted, higher performance is directly connected to better ability to understand and put technology to practical use in day-to-day situations: *“We take Red Hat Certification into consideration for promotions, especially if the certification is determined to be a factor in the performance of the individual ... It is about support for the technology, not just knowledge of how the technology works—which is vital—but the ability to support and manage the infrastructure.”* Higher performance levels for certified staff members are confirmed by two data points from the research, specifically: study participants reported being 23% more likely to rehire staff with Red Hat Certification (i.e., would rehire 95% of staff with Red Hat Certification versus 78% of staff without Red Hat Certification); and study participants reported that staff with Red Hat Certification require seven weeks fewer on average to reach full productivity (32% faster to full productivity on average). These metrics reflect the extent to which interviewed organizations understand and value the additional effectiveness of certified staff (see **Figure 4**, next page).

Study participants would rehire 95% of staff with Red Hat Certification... and study participants reported that staff with Red Hat Certification reach full productivity 32% than non-certified employees.

FIGURE 4
Impact on Staff Onboarding
 (Time to full productivity, weeks)



Certified Staff Are More Satisfied and Valued

Study participants linked achieving and maintaining certification to higher levels of employee engagement and satisfaction. One study participant connected certification to skills of employees and ultimately their ability to contribute in a meaningful way to their organizations' success: *"Certified staff understand the technology and have a greater level of satisfaction. I can say that certified staff are happier with their jobs and their contribution to the organization. That reflects on their job performance and overall enthusiasm."* Importantly, interviewed Red Hat customers stressed that certification often establishes deeper connections for employees at their organizations. Thus, while certified employees are generally regarded as being of higher value, which could raise concerns about losing them to other organizations, study participants actually reported that their experience is that certified team members stay somewhat longer than noncertified team members (10% longer on average, 8.3 years versus 7.5 years).

ROI Summary

Table 3 (next page) provides IDC's analysis of the benefits and costs for interviewed organizations of having employees earn and maintain Red Hat Certifications. IDC calculates that study participants will realize value in higher staff productivity levels and IT infrastructure cost savings worth a discounted average of \$1.66 million per organization over three years. These benefits compare with average three-year discounted investment costs of \$0.33 million per organization.

On a per-certified employee basis, these results mean that study participants:

- ▶ Invest a discounted total average of \$15,600 per certified employee over three years on certification course costs and time spent by the employee preparing for and maintaining certification.
- ▶ Achieve a discounted total average of \$79,400 per certified employee over three years in benefits through higher productivity levels and the ability to optimize their IT infrastructure requirements.

These levels of benefits and investment costs would result in an average three-year return on investment (ROI) of 409% for study participants, reflecting the important incremental value that certified staff provide compared with noncertified employees.

TABLE 3
Three-Year ROI Analysis

	Per Organization	Per Employee Certified
Three-year benefit (discounted)	\$1.66M	\$79,400
Three-year investment (discounted)	\$0.33M	\$15,600
Three-year net present value (NPV)	\$1.33M	\$63,800
Three-year return on investment (ROI)	409%	409%
Discount rate	12%	12%

n = 8, Source: IDC In-depth Interviews, February 2021

Challenges/Opportunities

Cloud and IT transformation generally are fundamentally changing business operations and, in some ways, the culture within the IT organization. Without the right skills, employees will be unable to identify and execute the changes essential to business success.

To ensure the effective development of new skills in this environment, companies need to create comprehensive skill development programs that help employees achieve the skills that will drive their IT organizations forward and leverage certifications to help establish the right level of proficiency in the most important skills.

Skill development programs will help:

- ▶ IT managers prepare IT professionals for critical projects
- ▶ IT supervisors ramp up new hires to reach full productivity as fast as possible
- ▶ Hiring managers identify employees with skills to make them more successful in their current and future roles

While developing a comprehensive skills development program can seem daunting, training vendors are leveraging the tools and content that can help make these programs predictably successful. Comprehensive skill development is the essence of employee transformation: an employee improvement initiative requiring continuous skill and performance improvement at every level of an organization.

A comprehensive skill development program will help employees at all stages of their professional life cycle, including onboarding new employees to rapidly reach effective productivity, upskilling to prepare for enhanced responsibilities, “deep skilling” to gain expert knowledge in an area, and even reskilling to support internal mobility and organizational flexibility.

By providing a consistent, recognizable benchmark for the skills that the organization needs, IT staff will be able to embrace the high performance standard and help create a culture that embraces change, growth, and innovation. Organizations that can leverage the dynamic and expansive capabilities of their employees are in the best position to transform and succeed in a rapidly changing world.

Conclusion

Because technology advancement continues at a frantic pace, IT professionals must grow their skills. IT managers should leverage the training and certifications offered by companies such as Red Hat to ensure their staff can effectively leverage new technologies and drive real business change.

Establishing a clear and consistent standard of capability, like achieving specific certifications, can help improve an IT professional’s productivity and career motivation. In addition, training

can help new hires become contributing members of the team more quickly and help ensure more engaged and satisfied employees.

IDC's research demonstrates the substantial value for organizations when they promote achieving high-quality, relevant certifications such as Red Hat. To maximize their ability to work competently and efficiently with both well-established and new technologies, staff need access to expertise and best practices, which Red Hat Certifications provide. As a result, staff who earn and maintain Red Hat Certifications are more capable of using new technologies, work more productively, and better meet performance expectations than their uncertified colleagues.

According to this research, certified IT staff can manage more virtual machines and enable development teams to be more productive, infrastructure teams to deploy services more quickly, and even new hires to reach productivity more quickly. These benefits generate strong value for study participants compared with the cost of achieving the certification, with IDC calculating that study participants will realize an average ROI of 409% over three years.

Appendix: Methodology

IDC used the following three-step method for conducting the ROI and Business Value analysis, informing this study's results and conclusions:

- 1. Gathered quantitative benefit information during the interviews using a before-and-after assessment for interviewed organizations of having IT staff earn and maintain Red Hat Certification.** In this study, the benefits of having staff complete Red Hat training courses include staff time savings and efficiencies, productivity gains for other employees, and IT infrastructure-related cost savings.
- 2. Created a complete investment (three-year total cost analysis) profile based on the interviews.** Investment costs include the actual cost of taking Red Hat Certification courses and exams as well as staff time required to do so.
- 3. Calculated the ROI and payback period.** IDC conducted a depreciated cash flow analysis of the benefits and investments for earning Red Hat Certification over three years. ROI is the ratio of the net present value (NPV) and the discounted investment. The payback period is the point at which cumulative benefits equal the initial investment.

IDC bases the payback period and ROI calculations on assumptions that include the following:

- ▶ Time values are multiplied by burdened salary (salary + 28% for benefits and overhead) to quantify efficiency and productivity savings. IDC assumes a fully burdened salary of \$100,000 per year for IT staff, including developers, and \$70,000 for other employees, with an assumption of 1,880 hours worked per year.

Table 4 provides IDC analysis of the benefits gained by study participants that are included in the return on investment analysis.

TABLE 4
Average Annual Benefits (\$)

	Per Organization Per Year
IT infrastructure team efficiencies	498,400
IT security team efficiencies	37,100
Application development team productivity gains	124,800
IT infrastructure cost savings	29,900
Total benefits per year	690,200

n = 8, Source: IDC In-depth Interviews, February 2021

Note: All numbers in this document may not be exact due to rounding.

About the Analysts



Cushing Anderson

Program Vice President, IT Education and Certification, IDC

Cushing is responsible for managing the research agenda, field research, and custom research projects for IDC's IT Education and Certification research program. Cushing's research coverage ranges from the value certification provides to IT professionals to the selection criteria used when selecting transformation training for the IT organization. He conducts regular research on the views and experiences of IT professionals and IT education buyers. And he frequently evaluates the impact of various types of training and certification on IT organizational performance.

[More about Cushing Anderson](#)



Matthew Marden

Research Director, Business Value Strategy Practice, IDC

Matthew is responsible for carrying out custom business value research engagements and consulting projects for clients in a number of technology areas with a focus on determining the return on investment (ROI) of their use of enterprise technologies. Matthew's research often analyzes how organizations are leveraging investment in digital technology solutions and initiatives to create value through efficiencies and business enablement.

[More about Matthew Marden](#)

Message from the Sponsor

Red Hat Training and Certification

Red Hat is the world's leading provider of enterprise open source software solutions, using a community-powered approach to deliver reliable and high-performing Linux, hybrid cloud, container, and Kubernetes technologies. Red Hat helps customers integrate new and existing IT applications, develop cloud-native applications, standardize on our industry-leading operating system, and automate, secure, and manage complex environments. Award-winning support, training, and consulting services make Red Hat a trusted adviser to the Fortune 500. As a strategic partner to cloud providers, system integrators, application vendors, customers, and open source communities, we can help organizations prepare for the digital future.

This white paper demonstrates how Red Hat Training and Certification builds the skills and culture needed to optimize and modernize your IT infrastructure. Red Hat combines outcome-driven courses, hands-on labs, and performance-based exams to **assess**, **train** and **validate** skills with Red Hat technologies. With a curriculum that covers topics from platform to application development to automation, Red Hat has flexible training options to achieve your goals for accelerated development, delivery and return on investment.

**Start your Red Hat training
and certification journey**

About IDC

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