

The Business Value of Oracle Cloud Infrastructure



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BUSINESS VALUE HIGHLIGHTS

Click any link below, then look for the ▶ symbol to read more. Click the Return to Highlights button below to return here.

\$11.6 million
in annual average benefits

\$491,000
average annual benefit
per 1,000 internal OCI users

393%
five-year ROI

13-month
payback period

48%
lower five-year cost of
operations

45%
more efficient IT
infrastructure teams

17%
more efficient IT migration
project management

35%
more efficient security
teams

53%
more time spent on
innovation

84%
reduction in unplanned
downtime

Executive Summary

Cloud has become the innovation engine for both traditional enterprises and digital-native businesses. The use of cloud services makes it possible to quickly deploy new technologies at scale while simultaneously reducing risk.

In addition to enterprise and cloud-native workloads, today's cloud buyers are looking for solutions that can meet the high-performance needs of AI and other data-intensive workloads with transparent, predictable pricing. They also need the flexibility to deploy in an array of hybrid and multicloud scenarios while maintaining consistency in how they manage these environments.

Oracle Cloud Infrastructure (OCI) is a next-generation cloud services platform designed to cost-effectively run any application or workload faster and more securely. Through a series of in-depth interviews, IDC conducted research that explored the value and benefits for large organizations (those with \$150 million to \$30 billion in annual revenue) using OCI to support their IT and business operations.

Based on this extensive data set and employing a specialized Business Value methodology, IDC calculates that these customers will achieve benefits worth an annual average of \$11.6 million on a per organization basis (\$491,000 per 1,000 organization users of OCI) and a five-year ROI of 393% by:

- Providing a more efficient, scalable, and high-performing cloud services platform
- Improving the overall performance and productivity of IT infrastructure, IT migration, application development, and security teams
- Significantly reducing IT infrastructure costs
- Better managing business risk by reducing the impacts of unplanned downtime and optimizing regulatory compliance, thereby improving overall productivity
- Improving business results by increasing revenue and avoiding labor cost avoidance

Situation Overview

Cloud services have transformed the development, securing, and management of applications. Organizations of every type, size, and industry are using the cloud for a wide variety of use cases to automate operations, deliver rich customer experiences, and bring new products and services to market.

By removing the burden of owning and managing physical infrastructure, cloud computing unlocks several benefits:

- **Agility:** The cloud provides easy access to a broad range of technologies, enabling faster innovation. It is possible to spin up resources as needed — from infrastructure services, such as compute and storage, to databases, ML, data lakes, and advanced analytics.
- **Flexibility and elasticity:** With cloud computing, it is not necessary to overprovision resources up front to handle peak levels of application demand in the future. Instead, organizations can provision the number of resources they currently need with the ability to scale up and down as necessary.
- **Cost savings:** The cloud trades capital expenses (such as datacenters and physical servers) for variable expenses and bases charges on actual consumption. The variable expenses are much lower because of the economies of scale.

- **Distributed cloud:** Expanding to new geographic regions in the public cloud and deploying for on-premises datacenters can happen in minutes. Putting applications in closer proximity to end users improves response times and overall availability.

Given these benefits, cloud adoption continues to grow. IDC expects the worldwide market for infrastructure and platform services to reach \$493 billion in 2026. That number is staggering, but it is reflective of the continued migration of existing enterprise applications to the cloud as well as the creation of new cloud-native applications that take advantage of AI and other transformative technologies.

Oracle Cloud Infrastructure Overview

Oracle Cloud Infrastructure combines the elasticity and utility of the public cloud with the granular control, security, and predictability of on-premises infrastructure. Oracle designed OCI to run critical enterprise applications with high performance, scale, and availability while lowering costs.

OCI brings several unique approaches to delivering cloud services:

- **Performance:** OCI addresses cloud performance challenges by systematically addressing the key bottlenecks. All OCI compute starts with bare metal (not shared compute under hypervisors) and leverages off-box virtualization for maximum performance. OCI also offers scalable graphics processing unit (GPU), cluster, and memory instances. For networking, OCI's uniquely flat network minimizes latency hops, and its dedicated capacity eliminates all noisy neighbor challenges. For the most demanding high-performance computing workloads and direct GPU access, OCI offers RDMA over Converged Ethernet (RoCE) cluster networking.
- **Security and compliance:** Oracle has a security mandate to manage its enterprise customers' most business-critical data and workloads. To meet this standard, OCI automates and simplifies processes to secure data more by default, thereby reducing the risks of human error and malicious attacks across every layer. It also meets the requirements of more than 70 compliance and regulatory programs around the world, giving it the highest security, privacy, industry, and sovereignty compliance in all major countries.

- **Flexibility:** OCI offers flexible resources that allow customers to tailor compute shapes and storage to specific workload requirements. Granular configuration of infrastructure resources minimizes overprovisioning, resulting in lower costs. Some services, such as OCI Block Storage, have options to auto-adjust performance and cost in response to changing workload demands. The pricing is the same in every country for predictable multinational deployments. Oracle Support Rewards provides unlimited discounts for existing on-premises customers' technical support based on OCI consumption.

OCI achieves these accomplishments through a strong set of core infrastructure-as-a-service and platform-as-a-service offerings, which provide better service-level agreements (SLAs) and performance than on-premises services.

Compute with AMD EPYC

OCI provides secure and elastic compute capacity with off-box virtualization, ranging from flexible virtual machines (including native full-fidelity VMware) and high-performance bare metal instances to high-performance computing clusters, GPU clusters, and container orchestration. Available on demand, compute instances provide developers with the choice, scalability, and economics necessary for enterprise workloads ranging from traditional back-office to modern cloud-native applications. Customers can choose from AMD and other compute shapes, which are configurable on demand with granular core counts, memory per core, and storage performance.

For AI infrastructure, OCI Supercluster provides industry-leading bandwidth and scalability for GPU clusters, including those with AMD Instinct MI300X. Its price-performance advantages in AI have led to a significant increase in usage from cloud-native customers that are building large-scale GPU clusters.

Storage

Cloud storage includes high-performance object, file, block, and archive services. Available local non-volatile memory express solid-state drive storage provides low-latency and high-performance flash-based storage, which is ideal for workloads that benefit from high-throughput local storage. OCI has one block volume type that scales for any workload with no downtime during reconfiguration. OCI also offers autotuning in response to changing workload demands and allows customers to set parameters.

Networking

OCI's networking infrastructure is based on a uniquely flat topology that provides both superior, consistent latency performance and isolated networking SLAs with no noisy neighbor risks. Oracle's virtual cloud networks (VCNs) provide a customizable and private network in OCI. Just like a traditional datacenter network, the VCN provides administrators with complete control over the network environment. This control includes assigning private IP address space, creating subnets and route tables, and configuring stateful firewalls.

Other networking services include ultrafast cluster networking through RoCE, FastConnect (for dedicated connections), site-to-site VPN, load balancing, domain name system, and service gateway (for private access between on-premises networks and VCNs).

Database

Oracle offers customers many choices for high-performance, mission-critical, and cost-optimized database services running in OCI. These start with multiple versions of Oracle Database, a converged, multimodel relational database management system for online transaction processing, data warehousing, documents, graphs, and other workloads. Other options include AI Vector Search, Oracle Autonomous Database, Globally Distributed Autonomous Database with Raft replication, and comanaged Exadata Database Service. Oracle also offers HeatWave MySQL database (with in-memory acceleration of transactional, AI, and analytics workloads), NoSQL, PostgreSQL, and OpenSearch databases along with Redis-based caching. Both Autonomous Database and Exadata Database Service are available as cloud services in customer datacenters through the Oracle Exadata Cloud@Customer platform, which allows them to easily address data residency, security, or latency concerns.

Distributed Cloud

OCI's distributed cloud provides customers with the flexibility to customize the delivery of cloud services to meet their regulatory, performance, and other needs. These offerings deliver the full functionality and superior economics of Oracle's public cloud to customer datacenters and edge locations with a range of deployment models and operational controls.

OCI has invested aggressively in a broad range of distributed cloud options for its enterprise customers, including multicloud, public cloud, hybrid cloud, and dedicated cloud. OCI also offers a comprehensive set of multicloud solutions in the form of specialized deployments, database services, extensive monitoring capabilities, and strategic partnerships. These options are available in Oracle Database@Azure and, later in 2024, Oracle Database@Google Cloud.

Oracle's public cloud achieves delivery through networks of globally distributed cloud regions that provide secure, high-performance, local environments organized into separate, secure cloud realms. Organizations can move, build, and run all workloads and cloud applications on OCI while complying with regional data regulations. At the time of publication, OCI offered services in 50 public cloud regions in 24 countries.

As part of its hybrid cloud offerings, Oracle Exadata Cloud@Customer combines the performance of Oracle Exadata with the simplicity, flexibility, and affordability of a managed database service in on-premises datacenters. It supports Autonomous Database and is a simple way to move existing Oracle databases to the cloud because it provides full compatibility with existing Exadata systems and Exadata Database Service.

Its Dedicated Region offering brings Oracle's complete portfolio of public cloud infrastructure, fully managed cloud services, and Oracle Fusion software-as-a-service (SaaS) applications into on-premises datacenters. It enables applications to run faster and lowers costs using the same high-performance capabilities, autonomous operations, and low-cost subscription pricing found in Oracle Cloud Infrastructure. Dedicated Region achieves the latter while maintaining complete control to address data sovereignty, security, and connectivity concerns.

AI, Analytics, and Developer Services

OCI also contains a full range of cloud services, including the following areas:

- **Oracle AI** is a family of accelerated infrastructure, artificial intelligence, and ML services. For AI training and inferencing, Oracle AI Infrastructure offers ultralow latencies for standalone GPUs and clusters with thousands of nodes. Using OCI's Vision, Speech, Language, Document, Forecasting, Anomaly Detection, and Digital Assistant services, developers can add prebuilt models and industry intelligence to applications and operations.
- **OCI Data Science** is a managed, open environment that enables data scientists to build, deploy, and manage ML models using Python and open source libraries.
- **Oracle Analytics Cloud** is a comprehensive analytics platform that incorporates ML into the analytical process.
- **Oracle Fusion Analytics** is a prebuilt data warehouse and analytics solution optimized for Oracle Fusion Cloud applications.
- **Oracle Cloud Native** provides cloud tooling and automation for Kubernetes, Docker, serverless functions, application programming interfaces (APIs), and Kafka as well as development operations (DevOps) tools for the entire software development life cycle.

- **OCI Integration** is a combination of prebuilt connectivity to SaaS and on-premises applications, run-ready process automation templates, and a visual application builder.
- **Oracle Observability and Management** is a comprehensive set of management, diagnostic, and analytics services for managing multicloud and on-premises environments.

Deployed on OCI, Oracle offers a broad portfolio of enterprise SaaS and packaged lift-and-shift applications for business functions, such as enterprise resource planning, enterprise performance management, supply chain management and manufacturing, human capital management, advertising and customer experience, and customer relationship management. SaaS applications include Oracle Fusion Applications, NetSuite, and 70 industry-focused applications. Packaged applications include E-Business Suite, PeopleSoft, JD Edwards, Siebel, and Hyperion.

The Business of Oracle Cloud Infrastructure

Study Firmographics

IDC conducted research that explores the value and benefits of organizations using OCI to support their IT and business operations. The project included eight interviews with organizations that use OCI and have experience with and/or knowledge about the benefits and costs of using the platform. During the interviews, companies responded to a variety of quantitative and qualitative questions about OCI's impact on their IT infrastructure operations, core businesses, and costs.

Table 1 (next page) presents the study firmographics. The organizations that IDC interviewed had an average base of 33,052 employees and total average annual revenues of \$11.4 billion. On average, these companies had IT teams of 2,676 staff members managing 503 business applications on behalf of 27,414 employees using those applications. Three companies had headquarters in the United States with the remainder in Germany (2), Spain, Japan, and Australia. The companies represented a variety of vertical markets — telecommunications, healthcare, security, consumer goods, food and beverage, energy, IT services, and media — thereby ensuring the capture of a broad range of customer experiences and use cases.

TABLE 1
Firmographics of Interviewed Organizations

Firmographics	Average	Median	Range
Number of employees	33,052	16,000	5,000–128,000
Number of IT employees	2,676	800	180–9,000
Number of employees using IT services	27,414	11,000	5,000–102,400
Number of business applications	503	270	15–1,680
Annual revenue	\$11.4B	\$12.0B	\$150.0M–\$30.0B
Countries	United States (3), Germany (2), Spain, Japan, Australia		
Industries	Telecommunications, healthcare, security, consumer goods, food and beverage, energy, IT services, media		

n = 8; Source: IDC Business Value In-Depth Interviews, May 2024

Choice and Use of Oracle Cloud Infrastructure

The organizations that IDC interviewed described the decision criteria they used in selecting OCI to support their IT and business operations. The detailed comments they provided about their decision represent a broad range of initial deployment motivations. Study participants discussed the need for infrastructure modernization and the desire to move to a cloud infrastructure for existing Oracle ERP and Database resources as major drivers. Responders also cited OCI’s built-in agility, security, and scalability capabilities. Security, encryption, identity and access management controls, and compliance certification were other important considerations.

Study participants elaborated on their selection criteria:

Need for cloud infrastructure (security):

“The business driver for my organization in selecting OCI was to move Oracle ERP and a custom billing application that is integrated to Oracle to the cloud. We wanted to start using the cloud for our infrastructure, and OCI made sense.”

Cloud modernization program (telecommunications):

“My organization is an Oracle shop that uses Oracle App Stack and databases. We had one big problem to address over the past couple [of] years — modernization. We partnered with Oracle to kick off a cloud modernization program that involves over 4,000 Oracle databases. The driver in selecting OCI was to protect our revenues and cloudification, for us to avoid doing this repeatedly.”

Agility and innovation (energy):

“We selected OCI because the cost of acquiring and maintaining on-premises infrastructure was too much. We had limited agility and innovation. Traditional infrastructure hinders the agility and innovation of organizations, as deploying new services and applications can be time consuming and complex.”

Security and scalability issues (food and beverage):

“The biggest challenges that my organization was facing were regarding security and compliance. We didn’t have robust built-in security features for encryption, identity and access management controls, and compliance certification. We also had scalability challenges regarding compute, storage, and networking resources. If we wanted to easily scale up or down based on the business needs, which might change, this was difficult. We needed high-performance computing resources and low-latency networking. We selected OCI to solve these problems.”

Reduction in implementation turnaround (healthcare):

“My organization selected OCI because the rolling out and implementing new infrastructure, subnets, or project networks took too long every time. Every time we rolled something out, it would take four to six months. This includes setting up new hardware and everything associated with it. Moving to OCI has reduced a lot of turnaround time for us.”

Oracle upgrade path (consumer goods):

“We have an Oracle point-of-sale (POS) application and some Oracle pieces around it. We created a consumer data platform that ingests all consumer, website, and POS data and creates a 360-degree [view] of customers. This then gets pushed out to CRM and reporting tools and back out to the POS. With all of this, we thought we should migrate to the cloud, and it was optimal to do so with OCI because we were already an extensive Oracle customer. There was an upgrade path.”

Table 2 (next page) provides a quantitative view of the organizational usage of Oracle Cloud Infrastructure across all companies at the time of interviews. On average, there were 361 business applications in use and 163 databases serving 23,636 internal users. In addition, 49% of total annual revenue received support from OCI in the survey base, indicating broad use of the platform. The table presents additional metrics.

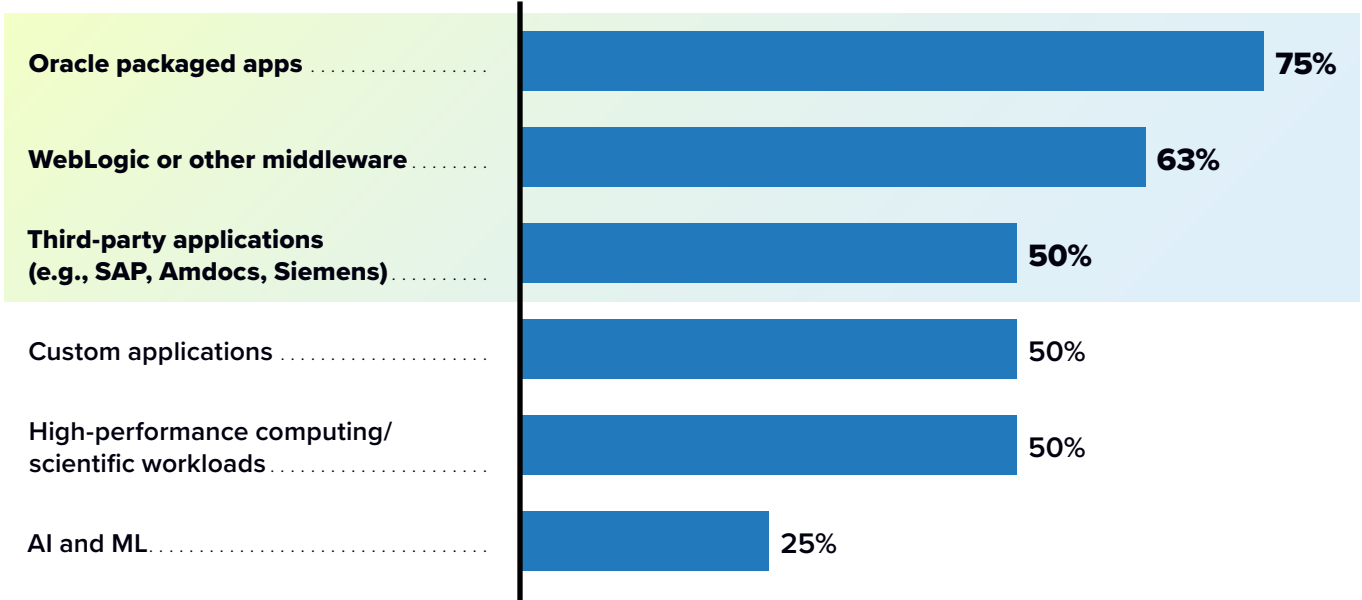
TABLE 2
Organizational Usage of OCI

OCI Usage	Average	Median
Customer sites	498	250
Countries	11	12
Compute instances – VMs	438	55
Business applications	361	108
Databases	163	31
Internal users	23,636	7,900
Storage terabytes	3,784	2,500
Percentage of revenue being supported	49%	45%

n = 8; Source: IDC Business Value In-Depth Interviews, May 2024

Within the survey base, OCI supported a wide range of workloads, as **Figure 1** (next page) shows. Oracle packaged applications had usage in 75% of cases. WebLogic or other middleware followed at 63% usage. Third-party applications, such as SAP or Siemens, registered at 50%.

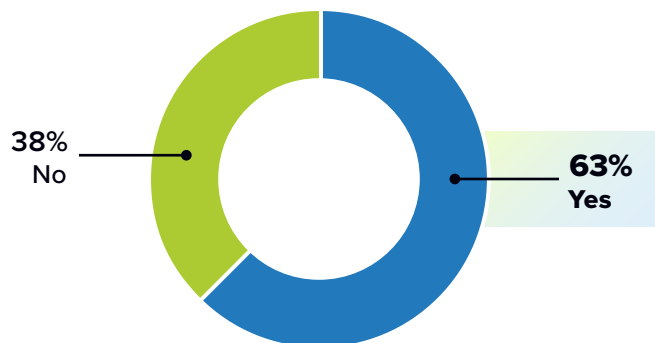
FIGURE 1
Workloads Running/Supported on OCI
(% of organizations)



n = 8; Source: IDC Business Value In-Depth Interviews, May 2024

Continuing with data that characterizes the survey base, **Figure 2** shows the partitioning for organizations running AMD-based compute (63% of the base).

FIGURE 2
Organizations Running AMD-Based Compute on OCI



n = 8; Source: IDC Business Value In-Depth Interviews, May 2024

Business Value and Quantified Benefits

IDC's Business Value model expresses the benefits for organizations using OCI to support their IT and business operations. IDC modeled interview data from Oracle customers to arrive at an array of quantified post-deployment benefits. Using this methodology, IDC found that these Oracle customers had realized significant value and had been able to maximize their ROI in the platform.

OCI provided a more efficient, scalable, cost-effective, and high-performing cloud management platform than previously used approaches. It also improved the overall performance and productivity of IT infrastructure, IT migration, application development, and security teams while significantly reducing IT infrastructure costs. In addition, the platform helped companies better manage business risk by reducing unplanned downtime (which improved overall productivity) and helped meet various regulatory compliance challenges, such as the Sarbanes–Oxley Act (SOX). IDC's quantified data sets show that all of these benefits combined to help these companies improve end-user productivity and ultimately contributed to better business results and reduced labor costs.

Study participants offered these comments on the most significant benefits of OCI:

Improved performance (media):

“OCI is improving our performance while keeping costs manageable and low. My organization's high volume helps give us favorable licensing terms. We also gained the ability to replicate failover, and business continuity is very solid.”

Cost savings (food and beverage):

“A major benefit of OCI is [that] cost savings are significant. The second is business continuity and resiliency. We have minimized the risk of service disruptions or downtime by almost 99%.”

Out-of-the-box tools (telecommunications):

“Previously, my organization developed our own API layer. Now, with the public cloud, that API layer is readily available within our datacenter. It's essentially a built-in commodity that we can leverage. Additionally, we have a wealth of out-of-the-box orchestration tools that we used to create ourselves. Our role is shifting from infrastructure and application management to that of an integrator. The direct benefits include reduced patching workload, increased automation, and efficient utilization of prebuilt tools. Even incident management has improved, with greater stability and faster recovery. As a result, we can focus more on innovation rather than cumbersome operational tasks.”

Swifter updates (consumer goods):

“Our organization has transitioned away from traditional datacenters, eliminating the associated costs of hosting and hardware maintenance, as well as the need for patching. This shift has enabled us to deploy system updates more swiftly. As a business that experiences significant seasonal fluctuations — earning 70% of our annual revenue within a three-month period — we’ve optimized our resource utilization to match this pattern. This has solidified our commitment to a cloud-first approach.”

Process agility and acceleration (IT services):

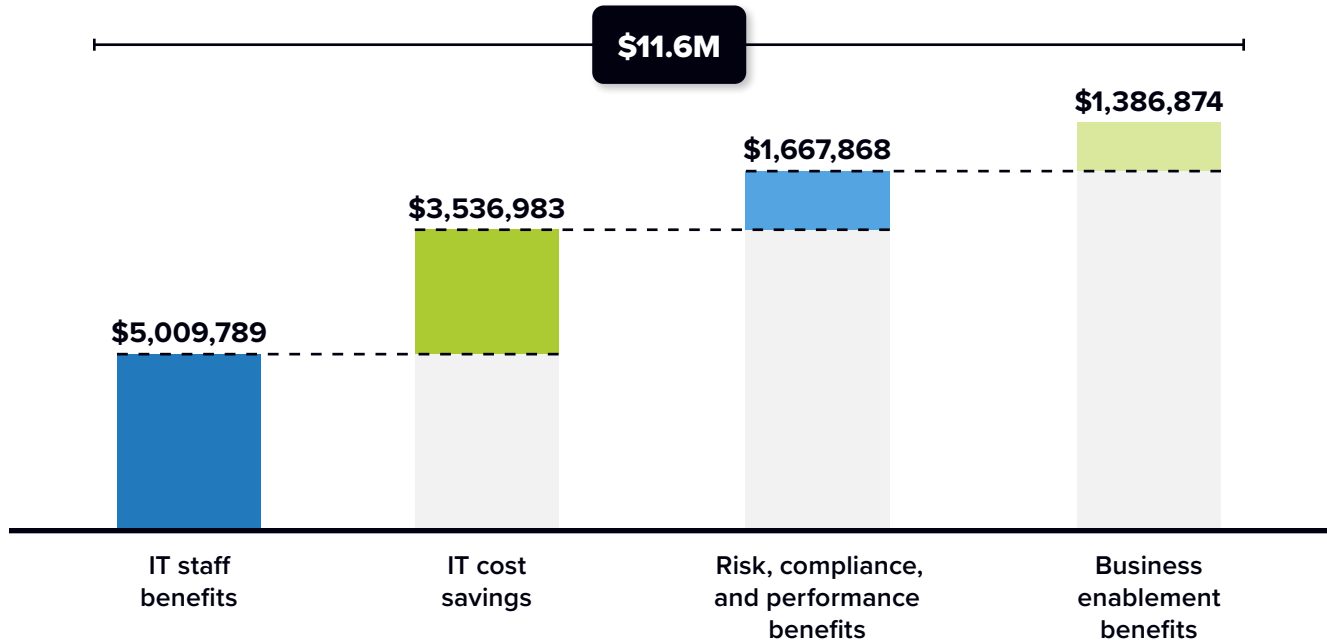
“The primary advantage of OCI for business operations is the enhancement of agility and acceleration of processes. Leveraging OCI, we can significantly lower migration expenses due to our extensive use of Oracle databases. This platform’s robust support for Oracle databases allows us to minimize migration costs. Additionally, this transition facilitates the reallocation of human resources. Maintenance personnel can be redeployed to roles within the digital sphere, optimizing both business and IT efficiencies.”

Figure 3 (next page) presents IDC’s calculations of companies’ cumulative benefits after adopting OCI.

IDC quantified the average annual benefits at \$11.6 million per organization (or \$491,000 per 1,000 internal OCI users), which breaks out as follows:

- IT staff benefits: \$5,009,789
- IT cost savings: \$3,536,983
- Risk, compliance, and performance benefits: \$1,667,868
- Business enablement benefits: \$1,386,874

► **FIGURE 3**
Average Annual Benefits per Organization
 (\$)



n = 8; Source: IDC Business Value In-Depth Interviews, May 2024
 For an accessible version of the data in this figure, see [Figure 3 Supplemental Data](#) in Appendix 2.

IT Staff and Infrastructure Cost Benefits with Oracle Cloud Infrastructure

OCI is a next-generation cloud services platform designed to cost-effectively run any application or workload faster and more securely. The platform accelerates enterprise workload migration while providing better reliability and performance for business-critical (and other) applications. Interviews with study participants broadly confirmed these aspects of OCI’s value proposition.

In their detailed comments to IDC, interviewed companies appreciated the platform’s ability to lower costs while providing higher throughput and lower latency for workloads. They also noted that OCI helped them better utilize the skill sets of their IT teams by enabling them to acquire new skills, focus on higher-level tasks, specialize more in post-cloud migration, and have dedicated teams managing specific services (e.g., database, computing, application). In addition, IT teams were able to transition from a reactive mode to a proactive approach toward IT resource management.

Study participants elaborated on these benefits:

Low-cost, high-performance computing (food and beverage):

“OCI has improved the cost of our IT operations by 50%. We now have high-performance computing resources with a low-latency network. This is enabling our organization to achieve a lot higher throughput, as well as low-latency applications and workloads. As a result of this, we have optimal performance for demanding workloads across the globe.”

IT specialization (food and beverage):

“After implementing OCI, we replaced some outdated IT functions with cloud services. This change has positively impacted our IT team, enabling it to acquire new skills and focus on higher-level tasks. Instead of having generalists handle all tasks, our team has become more specialized in post-cloud migration. We now have dedicated teams managing specific services, such as database, computing, and application services.”

Shift in IT focus to integration (telecommunications):

“Previously, we spent considerable time in the datacenter replacing hardware. However, with the introduction of OCI, this is no longer necessary, as Oracle manages [its] own equipment. Our focus has shifted solely to integration and software stack management. This shift has resulted in a 30%–40% reduction in staff time spent on traditional tasks, allowing us to reallocate those resources to other areas.”

Proactive IT management (consumer goods):

“OCI has enabled my organization’s IT team to transition from a reactive approach to management to a proactive one. We now leverage cloud technology for scalable operations, which has allowed us to become more forward thinking.”

Single point for data normalization (media):

“OCI has changed the way my organization manages our financial application suite. It has allowed us to normalize data [and] integrate our financial applications under one umbrella. It makes integration easy with multiple data integration points because the schema is normalized. It has had a significant impact.”

IDC used its Business Value methodology to validate anecdotal reporting by quantifying benefits in a variety of key areas, starting with IT staff. Interviewed companies reported that their IT infrastructure teams benefited from OCI’s ability to automate maintenance and administration tasks, such as patching, scaling, and configuration. This enabled teams to

- ▶ spend 53% more time on work related to innovation and supporting business operations.

OCI also enabled them to be 48% more efficient in deploying additional compute resources and 30% more efficient in deploying storage resources.

Table 3 quantifies additional benefits. After OCI adoption, interviewed companies recognized a 45% efficiency gain. This means that their IT infrastructure teams needed 18 fewer full-time employees (FTEs) to manage an environment equivalent to previous staffing levels, thereby allowing them to easily scale with organizational growth. IDC calculated that this efficiency provided a substantial annual business value of \$1,820,510 for each organization.

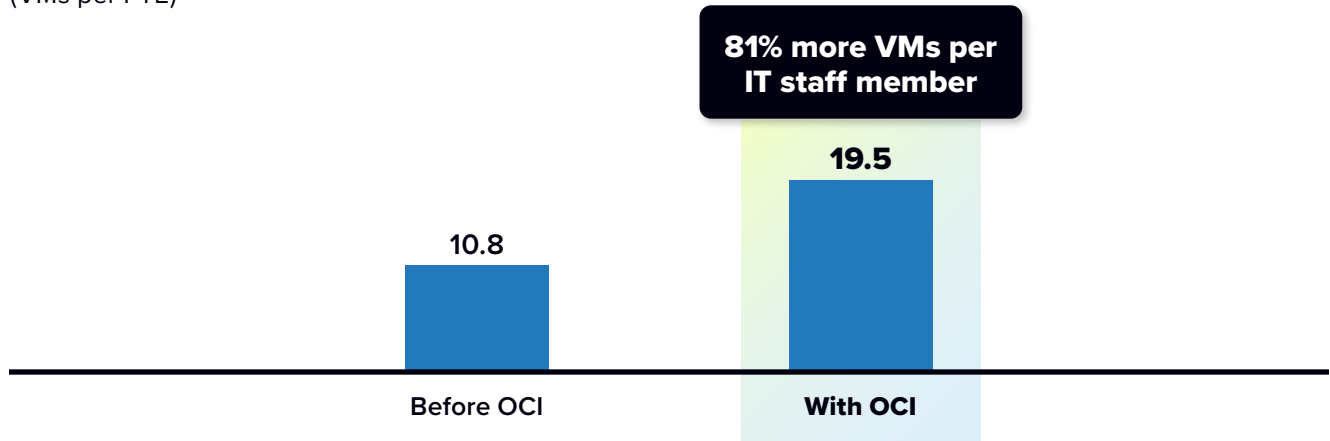
TABLE 3
IT Infrastructure Team — Administration and Management Efficiency Gain

	Before OCI	With OCI	Difference	Benefit
Total FTE count	40.7	22.5	18.2	45%
Value of staff time per year	\$4,071,429	\$2,250,918	\$1,820,510	45%

n = 8; Source: IDC Business Value In-Depth Interviews, May 2024

Drilling down further, study participants reported that these new staff efficiencies meant that IT teams could manage and oversee greater numbers of virtual machines than before. IDC evaluated changes in the number of VMs that each IT infrastructure staff member managed. As **Figure 4** shows, after OCI adoption, companies were able to manage and support 81% more VMs.

FIGURE 4
VMs per IT Staff Member
 (VMs per FTE)



n = 8; Source: IDC Business Value In-Depth Interviews, May 2024

A core value proposition of OCI is its ability to accelerate migrations of existing enterprise workloads. Study participants reported that teams managing the migration to OCI benefited from the deep level of support and automation provided, making the migration process more efficient than before. **Table 4** quantifies these benefits. After adoption, interviewed companies saw a 17% efficiency boost, resulting in an annual business value of \$1,683,853 for each organization.

► **TABLE 4**
IT Migration Project Management Efficiency Gain

	Before OCI	With OCI	Difference	Benefit
Total FTE count	98.1	81.3	16.8	17%
Value of staff time per year	\$9,808,853	\$8,125,000	\$1,683,853	17%

n = 8; Source: IDC Business Value In-Depth Interviews, May 2024

IDC then shifted the focus to efficiency improvements for security teams. Interviewed organizations noted that OCI provided out-of-the-box security functionality and automated patching capabilities that helped drive the efficiency of their security teams. After adoption, interviewed companies saw a 35% efficiency boost, which is equivalent to adding 7.6 FTEs to staff. This improvement resulted in an annual business value of \$762,219 for each organization (**Table 5**).

► **TABLE 5**
Security Team Efficiency Gains

	Before OCI	With OCI	Difference	Benefit
Total FTE count	22.0	14.4	7.6	35%
Value of staff time per year	\$2,197,500	\$1,435,281	\$762,219	35%

n = 8; Source: IDC Business Value In-Depth Interviews, May 2024

IDC also reported robust productivity gains for application development tasks and operations. Study participants noted that OCI enabled their application developers and DevOps teams to be more agile and fulfill more applications and features, thereby streamlining operations and processes. Interviewed companies saw a 35% boost in developer productivity (Table 6), which translated into a substantial annual productivity-based business value of \$2,741,667 for each organization.

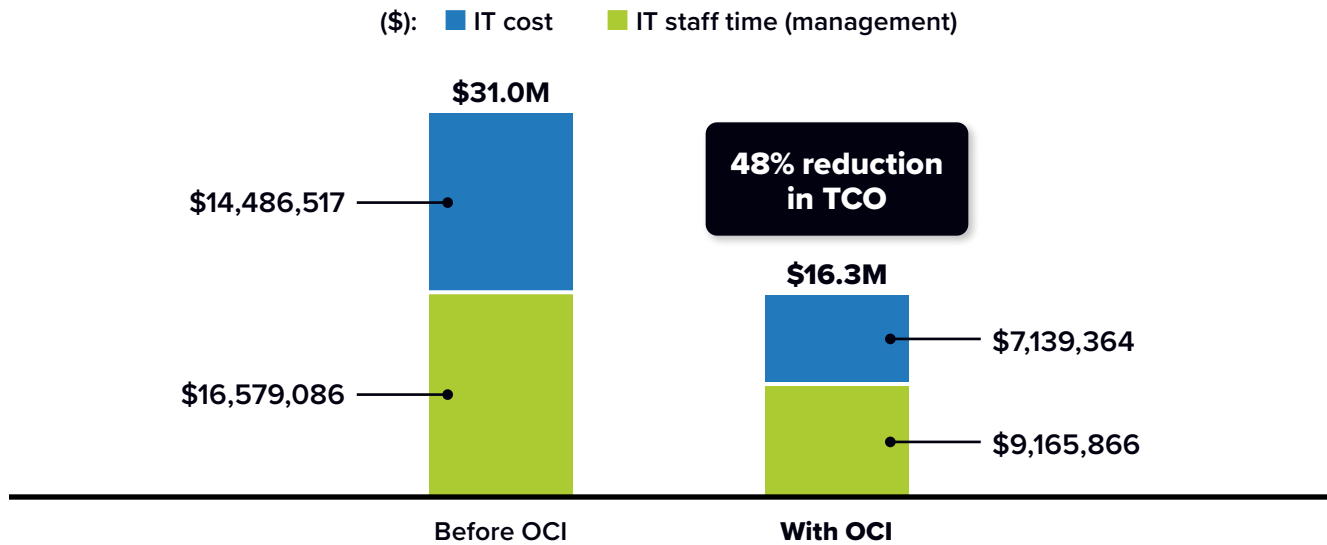
TABLE 6
Development Team Productivity Gains

	Before OCI	With OCI	Difference	Benefit
Equivalent productivity level, FTEs	78.3	105.8	27.4	35%
Value of staff time per year	\$7,833,333	\$10,575,000	\$2,741,667	35%

n = 8; Source: IDC Business Value In-Depth Interviews, May 2024

IDC then calculated the change in the cumulative cost of operations for surveyed organizations after OCI adoption. This factored in IT staff management and infrastructure costs for categories such as storage and compute. As one study participant working in healthcare noted: *“In terms of IT maintenance, OCI has enabled us to cut after-hours staff costs by 10%–15% per month per engineer. This has significantly reduced operational costs.”* As shown in Figure 5 (next page), IDC calculated that the total annual five-year cost of operations was 48% lower overall after adoption.

► **FIGURE 5**
Total Five-Year Cost of Operations



n = 8; Source: IDC Business Value In-Depth Interviews, May 2024

For an accessible version of the data in this figure, see [Figure 5 Supplemental Data](#) in Appendix 2.

Risk, Compliance, and Performance Benefits from Oracle Cloud Infrastructure

A major challenge for companies in the current IT environment relates to risk management, which encompasses a variety of factors, such as security, regulatory compliance, and avoidance of unplanned downtime. Interviewed companies appreciated that OCI improved SOX compliance as well as compliance with the General Data Protection Regulation (GDPR), the California Consumer Privacy Act (CCPA), and other privacy protections associated with the use of consumer data.

Study participants explained these benefits in greater detail below.

Easier to manage compliance (media):

“OCI has made SOX compliance and other inventory issues easier to manage. Oracle assists us with GDPR, privacy, and CCPA protections, which is important because we have a lot of consumer data with OCI.”

System performance is a critical dependency for avoiding productivity disruption from unplanned downtime events.

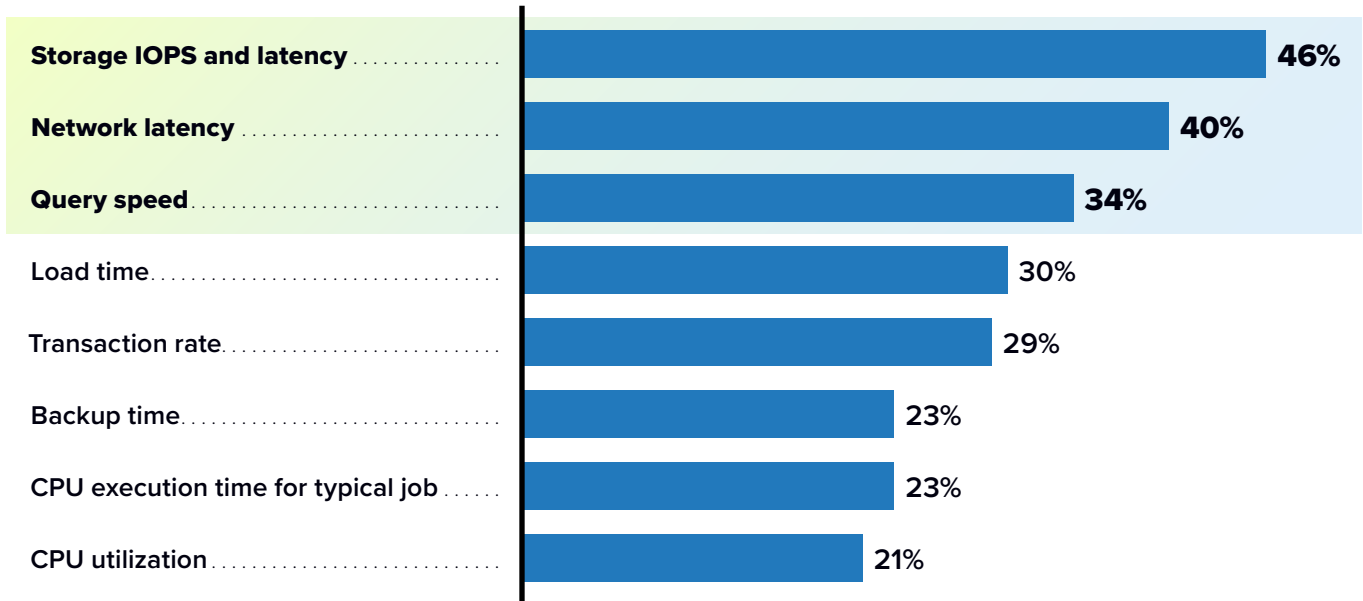
In their detailed conversations with IDC, study participants discussed how their organizations benefited from greater application and workload performance with OCI with attendant impacts on downtime, backups, and recovery processes:

Improved application/workload performance (security):

“There is a 25% improvement in our application/workload performance overall from the movement to OCI from on premises. This is because OCI takes care of downtime, backups, and recovery. As long as there are no major outages on the Oracle side, we are able to check the box from a reliability perspective.”

IDC then drilled down on performance impacts by identifying and measuring a series of key performance indicators (KPIs) associated with typical operations, as shown in **Figure 6**. After adopting Oracle Cloud infrastructure, the greatest improvements occurred in storage input/output operations per second (IOPS) and latency (46% improvement), network latency (40% less), and query speed (34% faster). Combined, these performance enhancements had positive downstream impact benefits for business operations in general, as this report will discuss later.

FIGURE 6
OCI Performance KPIs
(% improvement)



n = 8; Source: IDC Business Value In-Depth Interviews, May 2024

IDC then shifted the focus to post-adoption impacts on unplanned downtime. Interviewed organizations noted that OCI was easier to manage, patch, and update than their previous platforms. As a result, OCI was able to reduce the frequency of unplanned downtime outages while improving the time it took to resolve them and enabling greater levels of end-user productivity.

Table 7 provides metrics on these impacts. In terms of methodology, IDC specifically asked study participants to state the numerical impact of OCI on outages before and after the deployment. As a result of this line of questioning, there was a substantial reduction in the annual frequency of downtime events, declining from 12.1 to 2, which represents an 84% improvement. In addition, the time required to resolve downtime events decreased by 66%. This downtime impacted 1,304 end users with a 48% productivity loss. Taking these benefits into account and using the assumption that full-time employees work a total of 1,880 hours per year, the annual number of FTEs impacted by downtime decreased by 94%. In the aggregate, these unplanned downtime improvements resulted in an end-user productivity loss avoidance worth \$1,007,384 annually. **Table 7** presents additional granular metrics.

► **TABLE 7**
Unplanned Downtime Impact — End-User Productivity Impact

	Before OCI	With OCI	Difference	Benefit
Number of outages per year	12.1	2.0	10.1	84%
MTTR, hours	3.7	1.3	2.5	66%
Number of FTEs impacted per year	15.2	0.85	14.4	94%
Value of lost productive time per year	\$1,066,876	\$59,492	\$1,007,384	94%

n = 8; Source: IDC Business Value In-Depth Interviews, May 2024

Additionally, as shown in **Table 8** (next page), IDC noted that this unplanned downtime impact enabled interviewed organizations to lower their annual unplanned downtime revenue loss value. As shown, revenue loss per outage was \$1.7 million. In lowering the number of outages annually, participants found that they avoided a total net annual revenue loss of \$6,420,398.

TABLE 8

Unplanned Downtime — Revenue Impact

	Before OCI	With OCI	Difference	Benefit
Number of outages per year	12.1	2.0	10.1	84%
Percent of outages impacting revenue	37%	37%	n/a	n/a
Revenue loss per outage	\$1,734,375	\$1,734,375	n/a	n/a
Total revenue loss value per organization	\$7,675,693	\$1,255,296	\$6,420,398	84%
Value of net lost revenue	\$1,151,354	\$188,294	\$963,060	84%

n = 8; Source: IDC Business Value In-Depth Interviews, May 2024

Additionally, interviewed companies appreciated that OCI improved SOX compliance as well as GDPR, privacy, and CCPA protections associated with the use of consumer data. As a media organization noted: *“OCI has made SOX compliance and other inventory issues easier to manage. Oracle assists us with GDPR, privacy, and CCPA protections, which is important because we have a lot of consumer data with OCI.”*

Interviewed organizations also reported that they were able to minimize the impact of compliance-related fines by using OCI modules and tools that address privacy, SOX, and risk management issues and concerns. IDC calculated annual fine/penalty avoidance via OCI at \$77,500 (Table 9, next page). As one study participant working in the telecommunications sector noted: *“Oracle secures their part from a SOX compliance perspective. OCI enables us to guarantee compliance to our customers that reside in Germany. We have our own compliance on top, but OCI’s processes really strengthen what we do.”*

TABLE 9

Compliance Benefit — Annual Fine/Penalty Avoidance

	With OCI
Fine/penalty avoidance	\$77,500

n = 8; Source: IDC Business Value In-Depth Interviews, May 2024

Business Enablement Benefits with Oracle Cloud Infrastructure

Study participants reported that, over time, the benefits they experienced from OCI adoption fostered better business operations and resulted in the enhanced system performance and staff benefits described in previous sections. Interviewed companies realized higher revenue by better addressing business opportunities and significantly lowering labor costs. Companies cited specific benefits to their organizations, including faster time to market, improved customer experience, and better global reach via Oracle's extensive global network of datacenters. They pointed out that, with OCI, they could swiftly deploy and scale resources and cut the time needed to provision infrastructure and launch applications, thereby providing a competitive edge. Additionally, they appreciated that OCI supports a wide range of workflows, including financial workflows, licenses, royalties, and distribution rights to benefit sales, marketing, finance, and accounting operations.

Study participants elaborated:

Competitive edge (food and beverage):

"We have a competitive advantage with OCI. It is giving us faster time to market, better customer experiences, and global reach."

Agility and innovation (food and beverage):

"OCI promotes agility and innovation. We can swiftly deploy and scale resources, thereby reducing the time required to provision infrastructure and launch applications. This agility significantly speeds up our time to market, providing us with a competitive edge. OCI enables our organization to stand out and achieve business success. Additionally, OCI's extensive global network of datacenters and regions allows us to deploy and run applications in closer proximity to the end user."

Real-time data (consumer goods):

"The data we input into OCI is processed in real time, not in batches. This allows us to utilize consumer data more intelligently. Our inventory accuracy has improved, providing quicker and more precise updates on stock levels, both in store and online. In the past, customers would visit a store for a product listed as available online only to find it out of stock. This issue has been significantly reduced, enhancing customer satisfaction."

Workflow support (media):

"OCI supports a wide range of workflows, including all financial workflows, licenses, royalties, and distribution rights. This comprehensive support benefits all aspects of our business, from sales and marketing to finance and accounting. OCI also provides robust reporting and analytics capabilities, enabling us to conduct a lot of self-service reporting. It serves as a central repository for our financial data, simplifying our requests and custom integrations. Our growth through acquisitions often brings system and integration challenges, but the financial aspects are usually smooth, thanks to OCI's financial integration workflows."

IDC then validated these anecdotal observations by quantifying increases in revenue and decreases in labor costs. These two improvements were possible because OCI provided a competitive edge by enabling real-time access to data, the ability to go to market faster — 36% faster — and better customer support capabilities.

IDC quantified these revenue gains (Table 10). On a per organization basis, IDC’s calculations for additional revenue recognized from OCI enabling their business amounted to \$2,575,000 annually for each organization. Additionally, IDC’s financial model applies a 15% operating margin assumption, resulting in net revenue gains of an average of \$386,250 per interviewed organization.

TABLE 10
Business Enablement — Higher Revenue

	Per Organization	Per 1,000 Internal OCI Users
Total additional gross revenue per year	\$2,575,000	\$108,945
Assumed operating margin	15%	15%
Total additional net revenue, IDC model	\$386,250	\$16,342

n = 8; Source: IDC Business Value In-Depth Interviews, May 2024

Finally, by streamlining processes and providing automated workflows, OCI enabled interviewed organizations to significantly reduce their labor costs. Table 11 shows business enablement calculations for annual hiring avoidance with a savings of \$1,316,667.

TABLE 11
Business Enablement — Annual Hiring Avoidance

	Number of FTEs	Benefit
FTE avoidance	13	\$1,316,667

n = 8; Source: IDC Business Value In-Depth Interviews, May 2024

ROI Summary

Summing up the financial and business-related benefits presented for study participants’ use of OCI, IDC calculated the average ROI. As shown in **Table 12**, IDC projects that these companies will achieve five-year discounted benefits worth an average of \$40,098,300 per organization through better IT management, enhanced staff efficiencies, and improved business results. These benefits compare with total five-year discounted costs of \$8,133,700 per organization. IDC projects that these levels of benefits and investment costs will result in an average five-year ROI of 393% with a payback period of 13 months.

► **TABLE 12**
Five-Year ROI Analysis

	Per Organization	Per 1,000 Internal OCI Users
Discounted benefits	\$40,098,300	\$1,696,511
Discounted investment	\$8,133,700	\$344,127
Net present value	\$31,964,600	\$1,352,384
ROI	393%	393%
Payback	13 months	13 months
Discount factor	12%	12%

n = 8; Source: IDC Business Value In-Depth Interviews, May 2024

Challenges/Opportunities

Cloud infrastructure is a highly competitive market — one that a few hyperscalers have historically dominated. As a newer entrant, Oracle needed to prove it could provide a portfolio of cloud services that go beyond a sole focus on Oracle databases and enterprise applications.

Knowing that it would be difficult to compete head-to-head with more entrenched providers, Oracle decided to take a different approach to designing the underlying infrastructure of OCI and its go-to-market strategy. These differences have allowed the company to solve customer needs in a unique way.

Investments in high-performance scale-up architectures that were necessary to replicate on-premises Oracle environments in the cloud have given Oracle an advantage in AI. Oracle has also demonstrated a willingness to partner with Amazon Web Services, Google, and Microsoft to create multicloud offerings that extend the capabilities of OCI into those clouds as well as the availability of low-latency, cost-efficient interconnects.

Conclusion

As the cloud has become the de facto platform for innovation, organizations must take a strategic look at both the technical aspects and the commercial aspects of cloud provider services that can provide agility, flexibility, cost savings, and global scale.

In addition to understanding a cloud provider's portfolio of services, it is important to compare the underlying architectures. Complex workloads have traditionally been difficult to move to cloud due to the amount of refactoring needed to replicate on-premises performance. The flexibility (or lack thereof) of cloud resource configurations can have a significant impact on long-term costs.

Oracle has challenged the status quo by creating cloud services that can serve the largest of enterprise applications while maximizing the efficient use of resources. This facilitates the migration to cloud services while also providing access to the latest cloud-native and AI technologies. The ability for OCI to deploy on premises with full-service parity and integrate with other clouds is unique in the industry.

The study highlights that organizations using OCI have achieved their strategic business goals and growth more effectively, and it showcases OCI's significant business value and operational efficiencies. IDC's research further supports this by revealing that organizations can expect an average five-year ROI of 393% with OCI, positioning it as a leading next-generation cloud services platform with capabilities for managing hybrid and multicloud environments.

Appendix 1: Methodology

Table 13 presents a summary of IDC's Business Value calculations.

TABLE 13

Specific Calculations: Benefits from the Use of OCI

Category of Value	Average Quantitative Benefit	15% Margin Applied	Calculated Average Annual Value*
Annual IT cost savings	\$4,342,994 in annual cost reductions	No	\$3,536,983
IT infrastructure team — admin and management efficiency gains	45% more efficient, worth 18.2 FTEs (\$100,000 salary)	No	\$1,482,644
IT migration project management efficiency gains	17% more efficient, worth 16.8 FTEs (\$100,000 salary) over two years	No	\$1,683,853
Security team efficiency gains	35% more efficient, worth 7.6 FTEs (\$100,000 salary)	No	\$620,759
Development team productivity gains	35% higher productivity, worth 27.4 FTEs (\$1000,000 salary)	Yes	\$2,232,844
Unplanned downtime, end-user benefits	94% productivity loss avoidance, worth 14.4 FTEs (\$700,000 salary)	No	\$820,425
Unplanned downtime, revenue benefit	84% revenue loss avoidance, worth \$9630,000	Yes	\$784,327

[Continued on the next page](#) ►

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Category of Value	Average Quantitative Benefit	15% Margin Applied	Calculated Average Annual Value*
Fine avoidance	\$77,500 annual compliance-related fine avoidance	No	\$63,117
Business enablement — operational cost savings	Hiring avoidance of 13 FTEs (\$1000,000 salary)	No	\$1,072,308
Business enablement — higher revenue	\$386,250 in additional net revenue	Yes	\$314,566
Total average annual benefits	\$11.6M per organization per year		

n = 8; Source: IDC Business Value In-Depth Interviews, May 2024

IDC utilized its standard ROI methodology for this project. This methodology involves gathering data from current OCI users as the foundation for the model.

Based on interviews with organizations using OCI, IDC performed a three-step process to calculate the ROI and payback period:

- 1. Gathered quantitative benefit information during the interviews, using a before-and-after assessment of the impact of OCI.** In this study, the benefits included IT cost reductions and avoidances, staff time savings and productivity benefits, and revenue gains.
- 2. Created a complete investment (five-year total cost analysis) profile based on the interviews.** Investments go beyond the initial and annual costs of using OCI and can include additional costs related to migrations, planning, consulting, and staff or user training.
- 3. Calculated the ROI and payback period.** IDC conducted a depreciated cash flow analysis of the benefits and investments for the organizations’ use of OCI over a five-year period. ROI is the ratio of the net present value and the discounted investment. The payback period is the point at which the cumulative benefits equal the initial investment.

IDC bases the payback period and ROI calculations on a number of assumptions, which are summarized as follows:

- Time values are multiplied by burdened salary (salary + 28% for benefits and overhead) to quantify efficiency and productivity savings. For the purposes of this analysis, IDC has used assumptions of an average fully loaded \$100,000 per year salary for IT staff members and an average fully loaded salary of \$70,000 for non-IT staff members. IDC assumes that employees work 1,880 hours per year (47 weeks x 40 hours).
- The net present value of the five-year savings is calculated by subtracting the amount that would have been realized by investing the original sum in an instrument yielding a 12% return to allow for the missed opportunity cost. This accounts for both the assumed cost of the money and the assumed rate of return.
- Further, because OCI requires a deployment period, the full benefits of the solution are not available during deployment. To capture this reality, IDC prorates the benefits on a monthly basis and then subtracts the deployment time from the first-year savings.

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

Appendix 2: Supplemental Data

This appendix provides an accessible version of the data for the complex figures in this document. Click “Return to original figure” below each table to get back to the original data figure.

FIGURE 3 SUPPLEMENTAL DATA

Average Annual Benefits per Organization

	Per Organization
IT staff benefits	\$5,009,789
IT cost savings	\$3,536,983
Risk, compliance, and performance benefits	\$1,667,868
Business enablement benefits	\$1,386,874
Total	\$11.6M

n = 8; Source: IDC Business Value In-Depth Interviews, May 2024

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FIGURE 5 SUPPLEMENTAL DATA

Total Five-Year Cost of Operations

	Before OCI	With OCI
IT cost	\$14,486,517	\$7,139,364
IT staff time (management)	\$16,579,086	\$9,165,866
Total	\$31.0M	\$16.3M
Difference	48% reduction in TCO	

n = 8; Source: IDC Business Value In-Depth Interviews, May 2024

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About the IDC Analysts



Megan Szurley

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Megan Szurley is manager for the Business Value Strategy Practice, responsible for creating custom business value research that determines the ROI and cost savings for enterprise technology products. Megan's research focuses on the financial and operational impact of these products for organizations once deployed and in production. Prior to joining the Business Value Strategy Practice, Megan was a consulting manager within IDC's Custom Solutions division, delivering consultative support across every stage of the business life cycle: business planning and budgeting, sales and marketing, and performance measurement. In her position, Megan partners with IDC analyst teams to support deliverables that focus on thought leadership, business value, custom analytics, buyer behavior, and content marketing. These customized deliverables are often derived from primary research and yield content marketing, market models, and customer insights.

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Dave McCarthy is Research Vice President within IDC's worldwide infrastructure research organization and global research lead for the cloud and edge services practice. Dave leads a team of analysts covering research on shared (public) cloud, dedicated (private) cloud, edge deployments, services, adoption trends, vendor strategies, and market dynamics. Benefiting both technology suppliers and IT decision-makers, Dave's insights delve into ways hybrid and distributed cloud platforms provide the foundation for next-generation workloads, enabling organizations to innovate faster, automate operations, and achieve digital resiliency.

[More about Dave McCarthy](#)

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