

# Evaluating Oracle Cloud and Microsoft Azure

Customer Experiences with Application Migration to Cloud Infrastructure, Operational Databases, and Data Warehouse Services

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PIQUE SOLUTIONS

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## Contents

<b>Contents</b> .....	ii
<b>Executive Summary</b> .....	1
<b>Research Approach and Key Findings</b> .....	2
Scenario 1: Migration of Enterprise Application Workloads .....	3
Scenario 2: Cloud Operational Databases.....	5
Scenario 3: Cloud Data Warehouse and Analytics .....	9
<b>Conclusion</b> .....	12

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## Executive Summary

Cloud services are evolving and expanding rapidly as more businesses migrate existing applications and databases and deploy new workloads in public and hybrid clouds. The advantages are clear and compelling, including lower operational cost, higher agility, and a shift of the IT burden to the cloud providers.

Oracle and Microsoft have partnered on cross-cloud connectivity to enable their common customers to run their workloads across Oracle Cloud Infrastructure (OCI) and Microsoft Azure and interconnect them. Pique Solutions' primary and secondary research found that, although some of their common customers may consider taking advantage of this multicloud deployment and interconnectivity, others have realized greater value by running their mission-critical business applications, operational databases, data warehouses/data marts, and analytics in OCI.

The key findings of the study were as follows:

- ⊕ Several of our study participants found that migrating business-critical workloads to OCI, as compared to Microsoft Azure, delivers significantly better price/performance, lower ongoing operations cost, stronger security, and an improved ability to innovate. A chief technology officer for a supply chain execution software provider cited OCI's consistent performance as a primary reason to move to OCI. The provider found that even Microsoft workloads can run better in OCI, with the officer sharing, "The 40% performance advantage running our Microsoft applications on Oracle Cloud versus Azure became more like a 50–55% price performance variance, meaning not only was Oracle Cloud more performant but also lower in price."
- ⊕ Oracle makes it very easy to migrate Oracle and non-Oracle workloads running on other vendors' platforms to OCI, manage them efficiently, and even extend, integrate, and innovate with cloud-native services. While some participants conducted the migrations on their own, many felt that Oracle engaged in partnership with them to ensure successful migration.
- ⊕ When evaluating data-intensive workloads, study participants found that Oracle Database cloud services meet key requirements for performance, automation, security, and pricing, while they developed concerns with Azure SQL Database regarding performance and scalability, high cost, and a lack of tools to support diverse use cases. Oracle was also found to meet a diverse set of use cases, including a mix of transactional and analytical workloads and the ability to scale to very high performance via Exadata Cloud Service, which has no equivalent in Azure. A manufacturing performance firm, which is a customer with both Oracle and Microsoft workloads, chose Oracle Autonomous Transaction Processing (ATP) for their operational database needs. As a result of the implementation, they saved 50% of their infrastructure and labor costs and saw performance increase by 600% while using half of the CPUs.

A number of study participants related that, despite improvements with the latest release of Azure Synapse Analytics, Oracle Autonomous Data Warehouse (ADW) continues to provide significant advantages in terms of price/performance, operational cost, and scalability over Azure and, further, provides important capability enhancements from a user perspective as it relates to Oracle Analytics Cloud versus Microsoft Power BI. A managed service provider using Oracle ADW and Oracle Analytics Cloud was able to save nearly a quarter million dollars and run

on 10 times less hardware than with their previous system. At the same time, they have a 10-fold increase in the number of users accessing the system, and all of them are driving value rather than spending time getting data out of the system.

## Research Approach and Key Findings

This study concentrates on complex enterprise workload cloud adoption—including moving enterprise applications from on-premises to the cloud and data-intensive workloads. Within that context, Pique Solutions identified a set of common and complex enterprise workloads to focus our primary and secondary research. We then sourced study participants who had experience with one or more popular cloud providers, including Microsoft Azure and Oracle Cloud. Our profiling prioritized those who had experience with several cloud platforms from enterprise application migration and production database perspectives. The following scenarios were included in our research:

- ⊕ Migration of enterprise applications to cloud infrastructure
- ⊕ Large production cloud operational databases
- ⊕ Cloud data warehouse and analytics

Our research spanned both secondary and primary research including participants from Forbes Global 2000 companies, independent software providers, and large systems integration firms. Topics included the drivers for and their journey to the cloud, experiential feedback on vendor cloud platforms, the business value realized and expected from their cloud strategy, and their future plans related to cloud deployments. The study participants included those listed in **Table 1**.

**Table 1. Companies Included in Primary Research**

Company	Title
Global Systems Integrator	Director, Client Services
Healthcare Company	IT Director
Department of Defense Supplier	VP, IT Innovation and Development
Managed Service Provider for Oracle Applications	Chief Executive Officer
IT Services Company	Digital Practice Director
Supply Chain Execution Software Provider	Chief Technology Officer
IT Conglomerate	Group Chief Technology Officer
Marketing and Customer Experience Company	Chief Technology Officer
Security Software Provider	Senior Product Manager
Energy Producer	IT Director
Logistics Software Provider	Chief Technology Officer

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Company	Title
Manufacturing Performance Firm	Director
Managed Service Provider	Chief Technology Officer
Financial Services Application Provider	Director, Cloud Services

Our research finds that there are many organizations that rely on both Oracle and Microsoft in their IT estates. They want to leverage the best of both companies' cloud offerings by running some workloads in OCI and another set of workloads in Azure and interconnecting them. To that end, Oracle and Microsoft announced in 2019 a partnership that enables multicloud deployment and interconnectivity. With this partnership, customers using both Oracle and Microsoft can migrate to the cloud or build new applications leveraging the best of OCI, including Oracle Autonomous Database, and the best of Microsoft Azure with high-speed interconnectivity.

While some common Oracle and Microsoft customers may take advantage of this multicloud deployment and interconnectivity, many others will realize greater values by running their mission-critical business applications, operational databases, data warehouses/data marts, and analytics in OCI, as outlined in the following sections.

### Scenario 1: Migration of Enterprise Application Workloads

Pique Solutions finds that companies are increasingly migrating business-critical workloads to the cloud. These migrations include popular enterprise applications and database workloads, as well as custom and independent software vendor applications.

Study participants cited numerous reasons for driving companies to migrate to the cloud, including cost savings via better price/performance, the ability to easily scale up or down, and the significantly lower operational cost as compared to managing on-premises datacenter infrastructure. Beyond substantial cost-savings opportunities, shifting the burden of service-level agreements (SLAs), business continuity, security, and innovation to the cloud provider are also key factors why companies are migrating to cloud infrastructure. Clearly, there are choices to make when evaluating cloud infrastructure and, when evaluating all the enterprise needs, it is not a commodity choice comparison.

Several of our study participants found that migrating business-critical workloads to OCI, as compared to Microsoft Azure, delivers significantly better price/performance, lower ongoing operations cost, and an improved ability to innovate. They told us that Oracle makes it very easy for customers to migrate Oracle and non-Oracle workloads running on other vendors' platforms to OCI, manage them efficiently, and even extend, integrate, and innovate with cloud-native services rather than just simply lift-and-shift.

For example, a supply chain execution software provider has major components of their application portfolio running on the Microsoft stack developed in .NET and running on SQL Server. They presumed that Azure would be an effective cloud platform upon which to run their Microsoft applications but realized after using it that it did not support their enterprise requirements for performance, SLAs, and security. Specifically, they found the following:

- ⊕ OCI was more suited to their business requirements with more predictable maintenance windows, which enabled them to meet service agreements with their customers.
- ⊕ OCI provided better support from cloud to on-premises applications and, with much of their legacy customer base on-premises, this was an important consideration.
- ⊕ OCI has more built-in security than Microsoft Azure, including built-in protection against firmware attacks, superior customer workload isolation, and robust identity & access management leveraging compartments to enforce strong security boundaries within tenants. They were also looking forward to leveraging additional security capabilities that were recently announced by Oracle, including Oracle Cloud Guard and Oracle Maximum Security Zones, which they believe will further improve their security posture.

Most importantly, they found that OCI provided a significant price/performance advantage, which enabled them to be more competitive in winning customers. When comparing performance for their Microsoft stack applications, they found OCI to provide roughly 40% better performance than Azure. According to the chief technology officer, “So when you compare price with performance and create that price–performance benchmark, what you would find is that the 40% performance advantage running our Microsoft applications on OCI versus Azure became more like a 50–55% price performance variance, meaning not only was it more performant but also lower in price.”

A security software provider found a similar experience running their Java-based application on OCI versus Azure. Their application consisted of holistic workload protection for multicloud datacenters by enabling a zero-trust model using segmentation. As such, security and reliability were of obvious importance to them and their customers as they looked to a foundational provider for their migration to the cloud.

In their journey to the cloud, they started to evaluate OCI, Azure, and Amazon Web Services (AWS) about 18 months ago. They were initially looking for a bare metal type of offering so that they could control the virtualization, as well as the placement of the virtual machines (VMs) and how they “move things across.” They also found that Oracle’s bare metal offering was by far superior to that of Microsoft.

In their piloting exercise with Azure, they also experienced serious performance reliability issues using VM extensions, mainly due to disruptions that occur on shared cloud resources, or the noisy neighbor phenomenon. As a result, they were not able to guarantee necessary business

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*CTO for Supply Chain Execution  
Software Provider*

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terms to their customers. Being a security product, performance and reliability are obviously paramount, and hence they concluded the Azure approach was unsustainable.

According to the senior product manager, “Now we are able to offer our customers predictability, as well as guarantee the performance. If they make a change to their security policy, we can guarantee that the policy changes will be rolled out through their workloads in that fixed time. It gives more predictability from a customer standpoint, and it also gives them a better overall experience, both from a product usage perspective, as well as from a performance point of view.”

It has been widely reported that some large Azure customers, such as Adobe Systems, Chevron, and Walmart, have also experienced performance and access issues with Azure services in the past year. Most of these problems were related to performance degradation instead of full-blown outages, but nonetheless these issues have impacted the businesses of these customers. Moreover, Microsoft offers SLAs only for service availability, not for performance and manageability, which OCI does cover. Pique Solutions found that Oracle is the only cloud provider to offer guaranteed availability, performance, and manageability SLAs, with targets and penalties associated with the diminishment of any of these with its cloud services.

Another company, a software provider to the logistics industry, migrated their on-premises flagship applications to the cloud. They evaluated both Microsoft Azure and AWS but found OCI provided the best performance and reliability for their application suite. From a business perspective, choosing OCI assisted adoption of cloud services by guaranteeing speed of performance and reliability in logistics contracts, giving customers the confidence that they can deliver services to their clients according to agreed business terms. According to the chief technology officer, “We evaluated Microsoft Azure and Amazon Web Services but chose Oracle because of the strength of its cloud infrastructure solutions and future roadmap. In our proof of concept, we saw a 30% IOPS performance improvement over AWS and Azure. Plus, we use numerous other Oracle products and services. It may sound like a cliché, but Oracle works perfectly on Oracle.”

## Scenario 2: Cloud Operational Databases

In addition to compute, storage, and networking infrastructure, databases are a key component in enterprise workloads. In early cloud adoption, companies often leveraged the cloud to deploy databases primarily for development and testing workloads. The market is seeing an evolution of cloud database adoption, but many organizations maintain their largest and most mission-critical databases on-premises.

However, the maturity of the cloud provider market, and particularly data-tier offerings, is leading to increased adoption of large- and even massive-scale databases in the cloud for a variety of mission-critical transaction workloads. As IT organizations revisit their broader strategy and look more holistically across their enterprise, they find themselves in need of a platform that can handle the breadth of requirements to support small development and testing environments, as well as scale up to massive production loads quickly and cost effectively. Sophisticated customers often require a combination of workloads with operational database, data warehouse/data mart, and analytical capabilities. They also need to evaluate price/performance and the difference between peak performance and truly consistent performance. Compliance, governance, and security are also extremely important requirements in trusting the most critical enterprise data in the cloud. Finally, companies have a real need to

reduce the ongoing operational effort and cost associated with database administration and management through automation, self-service, and machine learning.

Given Oracle's rich history as a database company and their aggressive move to the cloud, it is not surprising that both industry research and participants in our study found the Oracle portfolio of data-tier services in the cloud more compelling relative to Microsoft Azure SQL Database. The key data management services for Oracle used by customers in our study were the following:

- ⊕ Oracle Database Cloud Service
- ⊕ Oracle Database Exadata Cloud Service
- ⊕ Oracle Autonomous Transaction Processing, or ATP

The advantages in Oracle's cloud services cited by customers included the breadth of service and performance options, the ability to easily scale up or down, granular security, and enterprise capabilities such as Real Application Cluster (RAC) and pluggable databases.

Independent analyst research ranks Oracle Database services ahead of Microsoft in recent reporting. One study concludes that Oracle Database Cloud Service customers value the performance, automation, security, and pricing while finding Azure SQL Database customers concerned with performance and scalability, high cost, and a lack of tools to support specific use cases.

A second study validates Oracle Database for its ability to support converged Online Transaction Processing and Analytical (Translytical) workloads using Database In-Memory, Exadata, and Oracle's extensive multimodel capabilities. A few factors contributed to this result, such as the industry's first dual-format in-memory architecture, in-memory columnar format on Exadata flash, support for many data models and formats (including relational, JSON, XML, text, graph, and spatial, among others), and proven scale-out technologies.

Both industry research and our study participants note the benefit of Oracle Database cloud services providing the same level of features and capabilities as proven in on-premises datacenters. This results in both predictable performance and leverage of valuable IT skillsets for cloud services.

Specifically, participants noted that the availability and reliability enabled by Oracle RAC and Oracle Data Guard in OCI are unrivaled as compared to either Azure SQL Database or running Oracle Database on Azure. At the highest end of performance requirements, our secondary and primary research found that Oracle Exadata Cloud Service has no direct equivalent in Azure. This high comfort level in knowing they could scale to enormous data loads was important to our study participants.



One study participant was a financial services application provider with a traditional on-premises offering but in transition from a hosted application to a software-as-a-service (SaaS) application on OCI. They have a growing customer base for their complex backend transaction and reconciliation services. Their customers include extremely large financial institutions with the most demanding data integrity and security requirements. While they have demanding requirements for compliance and security, they also have the need to move to the cloud and

externalize applications because they found it too costly for their own IT department to maintain.

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“Exadata Cloud Service is huge for us. When we ran some benchmarking for our application, we realized that Exadata was running our applications five times faster than the standard Oracle DB server. Even if you deploy Oracle VMs on Azure, you can’t touch the same level of performance. It’s just not possible.”

*Director of Cloud Services for  
Financial Services Application  
Provider*

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The final element of their experience relates to their ability to scale their business and guarantee performance as they grow. They found Oracle Exadata Cloud Service as key to their plans. “Exadata Cloud Service is huge for us. When we ran some benchmarking for our application, we realized that Exadata was running our applications five times faster than the standard Oracle DB server. Even if you deploy Oracle VMs on Azure, you can’t touch the same level of performance. It’s just not possible.”

A North American energy producer evaluated both Azure and Oracle cloud services to move key applications and databases to the cloud. After careful analysis, they selected Oracle due to a variety of technical and business considerations, including these Oracle advantages:

- ⊕ Lowest risk for application and Oracle database workloads.
- ⊕ Higher uptime and better SLAs, plus better Recovery Time Objective (RTO) and Recovery Point Objective (RPO) for Primavera-on-OCI vs. SaaS option.
- ⊕ OCI bare metal support for Citrix XenApp.
- ⊕ Exadata Cloud Service elasticity, scalability, and elastic disaster recovery capability with Data Guard.

After deployment via a solution comprised of OCI bare metal, OCI VMs, FastConnect, Database Cloud Service, and Exadata Cloud Service, they found that Oracle provided better price/performance as compared to Azure, and they were able to reduce costs via a shift to a license-included model and a shift from capital to operating expenditures.

Another study participant, a large healthcare company who selected Azure to move to the cloud for their database services, spoke to the issues relating to differences in the on-premises and cloud services. Their choice was driven primarily by their experience with Microsoft SQL Server on-premises and a desire to realize cost savings from not having to procure infrastructure for times when they experienced peak loads. In short, they wanted to be able to respond to cyclical

changes in capacity requirements by scaling up or down easily. They anticipated value in Microsoft's hybrid cloud and the ability to leverage existing skillsets from on-premises to the cloud.

Their experience with Azure and Azure SQL Database was successful in terms of the scaling objectives, but they encountered issues along the way. According to the IT director, the on-premises SQL Server and Azure SQL have some differences: "The learning curve was steep with respect to automation and leveraging PowerShell based on templates. This took a lot more effort than anticipated." They also found that Azure's rapidly changing practices and processes forced them to maintain their own high-availability capability to augment Azure. He went on to say, "You need to have your own high availability (HA) implementation to make sure that your application does not get impacted by their schedule."

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**"Using Oracle ATP is saving us half the infrastructure and labor cost, and we are seeing a 600% improvement in performance with half of the CPUs."**

*Director for Manufacturing Performance Firm*

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Another use case in our study involved more intensive transactional processing workloads. One study participant highlighting this was a manufacturing performance firm leveraging both Oracle and Microsoft cloud services as part of their multivendor cloud strategy scenario (discussed earlier in this paper). The choice of Oracle ATP for the mission-critical portion of their solution was a very easy one for them to make. The director with whom we spoke explained the benefits of the automation capabilities of Oracle ATP in combination with Microsoft Azure. He shared, "Using Oracle ATP is saving us half

the infrastructure and labor cost, and we are seeing a 600% improvement in performance with half of the CPUs as compared to our existing platform. I think manufacturing customers should be embracing autonomous technologies now because the future is happening now."

The final aspect related to the cloud database involves application development specially related to database applications. Our research finds Oracle Application Express (APEX)<sup>1</sup> to be an effective tool for companies, particularly line-of-business users, seeking low-code development leveraging Oracle Database. While Microsoft provides Power Apps for rapid application development, it is not as focused on database scenarios and is an additional purchase that customers must pay for.

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<sup>1</sup> See our [Developing Applications Using Oracle APEX](#) white paper for more information

### Scenario 3: Cloud Data Warehouse and Analytics

Any company that depends on data to better serve its customers, streamline operations, and innovate will benefit from a cloud data warehouse/data mart. Data warehouses, though, are an important undertaking, because companies take on the responsibility to store and secure data as the data warehouse becomes the system of record. Unlike large and monolithic traditional data warehouses, the cloud means businesses large and small can size their data warehouse to meet their needs and their budget and to grow and scale back dynamically as things inevitably change over time. To be effective as compared to traditional approaches, cloud data warehouses must limit the deployment and operational effort and cost associated with implementation, ongoing management, and support. As a result, cloud data warehouse/ data mart is an increasingly attractive workload that many companies are evaluating based on the cost-effectiveness and ability to scale as compared to a traditional on-premises environment.

Both Oracle and Microsoft provide commercial cloud-based offerings for data warehousing—Oracle ADW and Microsoft Azure Synapse Analytics (formerly Azure SQL Data Warehouse). While both solutions offer considerable benefits as compared to traditional data warehousing, Pique Solutions finds Oracle ADW substantially more compelling than Azure Synapse Analytics based on the experience shared by customers.

First, from an **operational cost perspective**, the level of automation in Oracle ADW means there is little to no effort required for setting up, tuning, optimizing, and managing the database for disaster recovery. Oracle automatically configures it for high performance, scalability, availability, and security. In contrast, we found that Azure Synapse is a Massively Parallel Processing (MPP)-based system that required a good deal of table design, planning, and testing.

According to a data warehousing expert, “It is essential for Azure developers to deeply understand data load patterns and query patterns to maximize parallelization, avoid data skew, and minimize data movement operations and shuffling within the MPP platform.”

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*Data Warehousing Expert*

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“With Oracle ADW, we initially saved nearly a quarter million dollars, and we’re running on 10 times less hardware than we did previously. We also have 10 times the number of users accessing the system, and all of them are driving value rather than spending time getting data out of the system.”

*CTO of Managed  
Service Provider*

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Second, from a **scaling perspective**, which is very important for data warehousing, our research found that Azure Synapse required a lot of manual work because scaling out requires redistributions of data and checking the data warehouse state through various endpoints. With ADW, customers told us they could size the data warehouse to the exact number of CPUs and terabytes required, and compute and storage resources can be scaled independently. Resizing occurs instantly and without manual effort.

A managed service provider specializing in helping customers with their journey to the cloud deployed Oracle ADW to solve their problems around financial reporting. Previously, the finance team spent 60% of their time just getting data out of their systems, leaving only 40% to gather insights

and deliver value for the business. They chose ADW based on the ease of implementation, flexibility to scale up and down as needed for financial reporting periods, and the fact that it required no administration on their side. The chief technology officer told us he appreciated the ability to scale up massively during peak periods such as the end of the quarter and then scale down during times of low usage, which optimized the operation cost. He explained the benefits they achieved after implementation: “We initially saved nearly a quarter million dollars, and we’re running on 10 times less hardware than we did previously. We also have 10 times the number of users accessing the system, and all of them are driving value rather than spending time getting data out of the system.”

Third, from a **performance perspective**, we found that ADW is built on Oracle’s Exadata infrastructure optimized for high query performance. Unique Exadata features enable ADW to have high query performance, which enables concurrency and lowers cost. Azure Synapse runs on generic cloud infrastructure and therefore does not offer SQL offloading to hardware and other advanced capabilities that provide such high performance.

One study participant, a global systems integrator, analyzed Oracle ADW and reported, “With Oracle Autonomous Data Warehouse, Oracle has developed a very compelling and performant solution that provides options that allow companies to reduce operating costs and complexity while improving the performance of workloads in a flexible pricing model.”

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“With Oracle Autonomous Data Warehouse, Oracle has developed a very compelling and performant solution that provides options that allow companies to reduce operating costs and complexity while improving the performance of workloads in a flexible pricing model.”

*Director, Client Services  
Global Systems Integrator*

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Finally, from an **advanced analytics perspective**, we found several companies requiring additional capabilities to draw meaningful insights from data stored in their data warehouses. This means using machine learning for data discovery and analysis and empowering company teams with across-the-board business analytics, enterprise-class reporting, and compelling self-service data visualization capabilities.

Study participants indicated that ADW provides extensive advanced analytics and machine learning capabilities for users to automate their discovery of new insights, generate predictions, and add Artificial Intelligence (AI) to data.

While both Oracle and Microsoft provide solutions around self-service analytics, Pique

Solutions found in our study the Oracle Analytics Cloud offering to be more robust than that of Microsoft. Critical gaps in the Microsoft Power BI offering lie around augmented analytics with noted deficiencies in data enrichment, natural language generation, and predictive analytics. Furthermore, it was found lacking in governance with limited support for data virtualization and high-volume production reporting. That said, as part of the cross-cloud partnership discussed earlier, there are scenarios where Power BI could be used as the front end to analyze data in Oracle ADW, providing customers with the flexibility to leverage common or company-specific tools.

A marketing and customer experience company shared their journey using a combination of Oracle ADW and Oracle Analytics Cloud to enable their nontechnical users to build self-service reports and visualization of their business performance quickly. The primary benefit for them was the ease of use and the seamless experience with Oracle Analytics Cloud. The chief technology officer explained, “Using Oracle Advanced Analytics with Autonomous Data Warehouse means that everything runs in the database. There’s no external system pulling data down and processing and putting it back, which alleviates any network latency.”

## Conclusion

Cloud services have proven to improve organizational agility and reduce the burden of IT and cost. Moving to the cloud is no longer a question of “if” but “how” and “when.” Most enterprises we interviewed are moving to the cloud in phases over time and matching workloads to their perceptions of a vendor’s cloud capabilities that will best support their objectives. Many will require the ability and flexibility to support multivendor cloud and multiple deployment choices (i.e., public cloud, private cloud, and hybrid cloud).

Based on in-depth interviews with users of both Oracle and Microsoft Azure, combined with Pique Solutions analysis of industry analyst reports, vendor information, and public case studies, we find many customer experiences for distinct application migration and data-intensive workloads where OCI and Oracle Database cloud services were found to provide a more compelling path to the cloud as compared to Microsoft Azure. This is based on several factors, including performance, operational cost, availability, and the ability to innovate. Specifically, Oracle automation capabilities were found critical to eliminating manual effort and human errors by removing the traditional fine-tuning required for complex data-driven workloads.

Study participants cited benefits realized in three common scenarios:

- ⊕ **Cloud Infrastructure:** A supply chain execution software provider shared that they achieved a 50–55% price/performance advantage running their Microsoft applications on OCI versus Azure.
- ⊕ **Cloud Operational Databases:** Oracle ATP is saving a manufacturing performance firm half the infrastructure and labor cost while seeing a 600% improvement in performance with half of the CPUs as compared to their existing platform.
- ⊕ **Cloud Data Warehouses and Analytics:** A managed service provider specializing in helping customers with their journey to the cloud improved performance by 10 times using half the CPUs while increasing user access by 10-fold using Oracle ADW versus Microsoft Azure Synapse Analytics.

In summary, the differences we find in cloud platforms are not incremental, as the experience of customers shows major deltas in key metrics for performance, cost, and the IT resource effort to support enterprise cloud services. Oracle uniquely offers customers the flexibility to execute their IT strategy at their own pace and maintain a high degree of confidence in their ability to scale and maintain consistently high performance with predictable cost of ownership. In the words of a director for a manufacturing performance firm, uniquely focused on factory automation, “I think manufacturing customers should be embracing autonomous technologies now because the future is happening now.”