

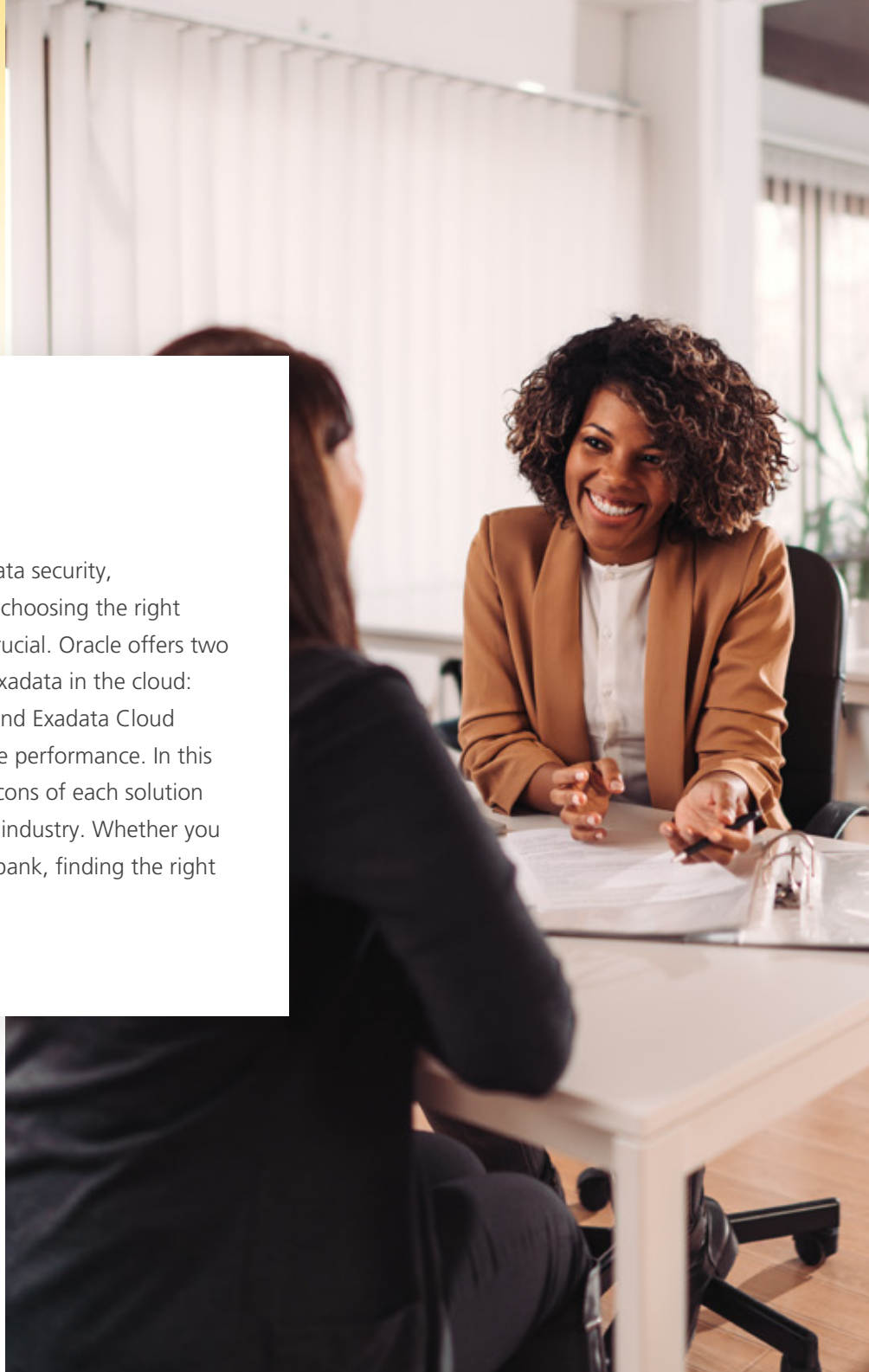
POV



**Choosing the Right
Oracle Exadata Cloud
Solution for the
Banking Sector**

Introduction

In the fast-paced world of banking, where data security, performance, and scalability are paramount, choosing the right cloud solution for your Oracle databases is crucial. Oracle offers two options for leveraging the power of Oracle Exadata in the cloud: Oracle Exadata Cloud @ Customer (ExaCC) and Exadata Cloud Service (ExaCS) along with Oracle DB extreme performance. In this POV, we will explore the features, pros, and cons of each solution and discuss their applications in the banking industry. Whether you are a large financial institution or a regional bank, finding the right fit for your specific needs is essential.



Migration strategies

Migrating to ExaCC/CS or DBCS (Database Cloud Service) extreme performance or non-Oracle DB requires careful planning and execution. Here are the key steps involved in the migration process:

Planning and assessment

Evaluate your existing infrastructure, performance requirements, and data dependencies. Assess the feasibility and benefits of migrating to ExaCC or ExaCS. Develop a migration plan, considering factors such as downtime, data migration strategies, and application compatibility.

Data migration

Migrate your Oracle databases to ExaCC/ExaCS/DBCS using appropriate migration tools and techniques. Ensure data integrity, minimize downtime, and perform thorough testing to validate the migrated data.

Testing and validation

Test your applications on the new Oracle Exadata cloud or DBCS infrastructure to ensure compatibility and performance. Validate the migrated data, conduct performance tests, and address any issues before going live. Real application testing (RAT) is a frequently used tool to evaluate the new system's performance.

These are the key principles that drive the decision-making process. Additionally, an important factor to be investigated while migrating from the Oracle Exadata platform is the impact on performance and data sovereignty.

Factors to be considered in the banking domain

When evaluating ExaCC and ExaCS for banking applications, several factors must be considered:

Security and compliance

Banks handle sensitive customer data and must comply with strict security and regulatory standards. Both ExaCC and ExaCS offer robust security features, including encryption, access controls, and audit trails. However, ExaCC allows for data to be stored on-premises, addressing specific compliance requirements.

Performance and scalability

In the banking industry, real-time transaction processing and analytics are critical. Exadata's high-performance architecture and ExaCS's scalable nature ensure optimal performance for banking applications, enabling faster transaction processing, risk analysis, and customer insights.

Cost efficiency

Banks must optimize their IT spending while delivering high-quality services. ExaCC's subscription-based pricing model and ExaCS's pay-per-use model provide cost flexibility. As a result, banks can avoid upfront hardware investments and scale resources based on demand, reducing unnecessary expenses.

Database migration options

LTIMindtree possesses a robust Oracle practice, delivering services across the entire spectrum. We leverage our expertise to solve various challenges, which in turn help utility companies optimize operations, improve customer satisfaction, and deliver reliable and sustainable services. We do this by embracing the limitless possibilities of technology with a range of comprehensive IT services and solutions that help empower business to thrive in the digital age.

LTIM POV for Exadata migration for Banking Domain

On-Premise Exadata

Performance	● ● ● ● ● ● ● ●
High Availability	● ● ● ● ● ● ● ●
DB Security	● ● ● ● ● ● ● ●
AMC	● ● ● ● ● ● ● ●
SME expertise to support	● ● ● ● ● ● ● ●

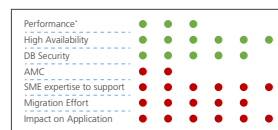
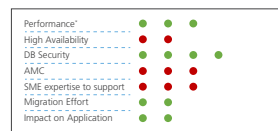
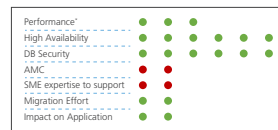
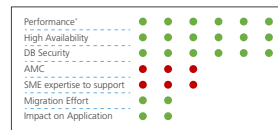
● Positive score ● Negative score

Option 1:
OCI ExaCC-DB
or ExaCS- DB

Option 2:
OCI DB Extreme
performance

Option 3:
Oracle Database
on Azure / AWS

Option 4:
Migrate to
Non-Oracle DB



LTIM Observation for Banking Domain

60-70%

10-20%

5-10%

Less than 2%

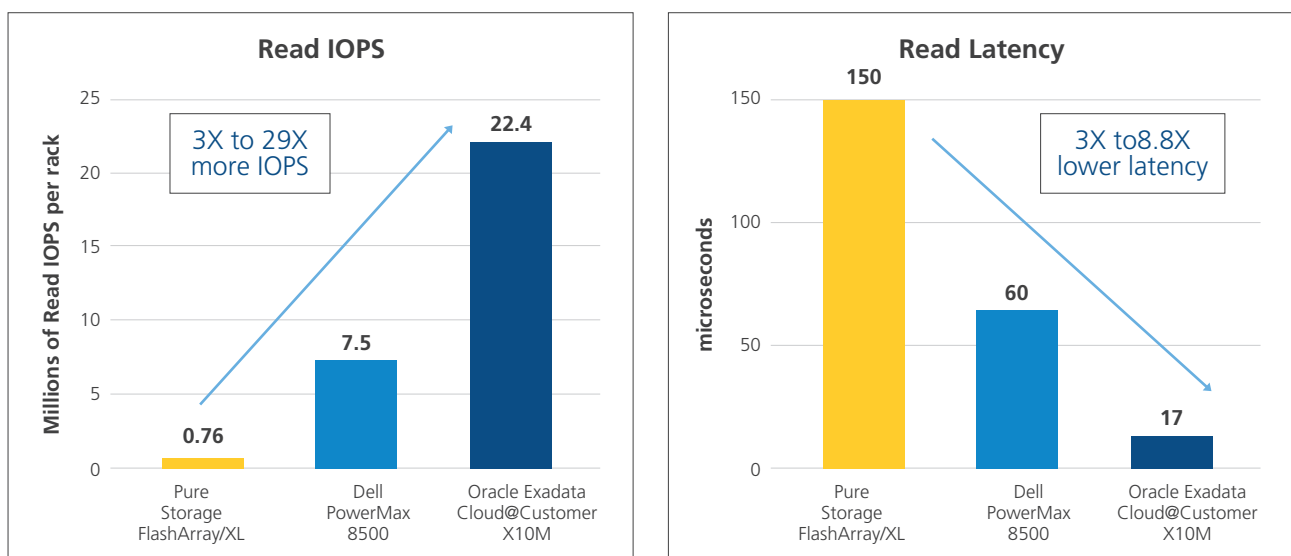
Based on the migration work that we have done with our banking customers in running the old Exadata or Oracle Exadata Platform (ExaCC-DB) version 1 platform, we have seen that there are four available paths. Most customers tend to stay with the Exa platform either on-premises or on OCI, as it provides improved performance and reduced support requirements. It also helps in improving operational productivity by migrating to an autonomous database.

Option 2: This is normally the option for customers looking to reduce their Opex costs but need high availability through real application clusters and performance.

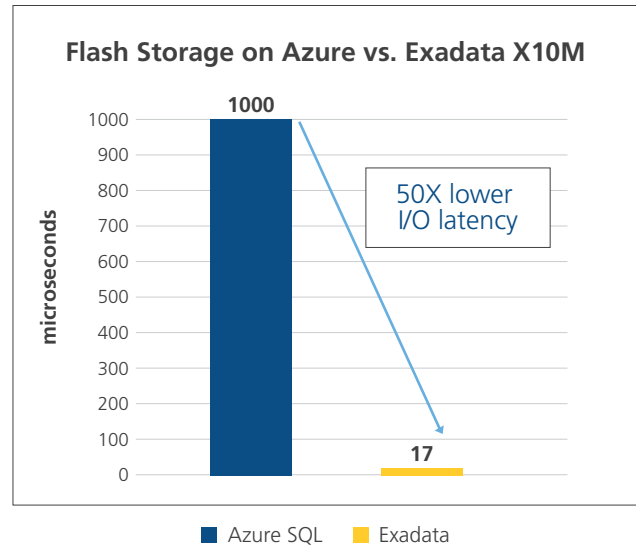
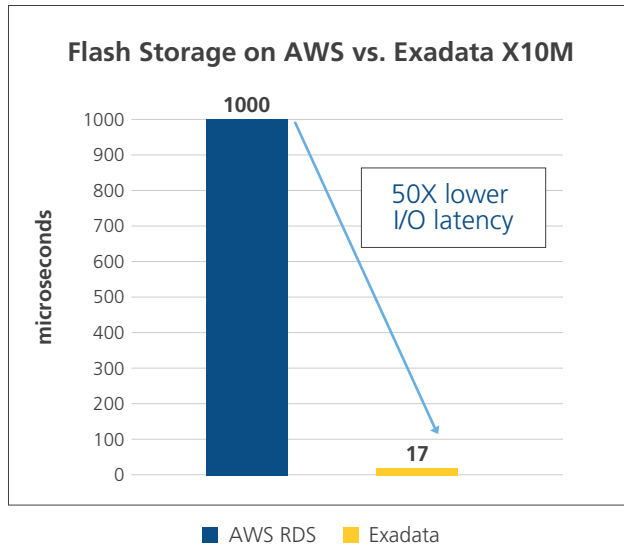
Option 3: In this scenario, non-critical databases, or applications to be sunset, can be migrated to a non-oracle database platform. However, there is a significant change – applications need to be made more compatible with new database platforms like MySQL or PostgreSQL.

Performance edge of ExaCC/ExaCS

High OLTP IOPS and lower latency compared to traditional on-premises platforms



Single-rack capabilities – PowerMax scales to 2 racks, Exadata Cloud@Customer X10M scales to 5+ racks



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Reference: <https://blogs.oracle.com/exadata/post/exadata-x10m>

The Exa platform provides industry-leading IOPS at minimal latency and can meet critical database performance requirements. These performance levers also provide an opportunity to further consolidate the database and improve the Opex.

Conclusion

Choosing the right Oracle Exadata Cloud solution is critical for banks to meet their data security, performance, and scalability requirements. Exadata Cloud @ Customer (ExaCC) offers the benefits of Oracle Exadata platform on-premises, while Oracle Exadata Cloud Service (ExaCS) provides scalability and cost efficiency. It is important to consider factors such as security, compliance, performance, and cost when making a decision. It is crucial to plan the migration carefully and leverage the expertise of professionals to ensure a successful transition. By selecting the appropriate Exadata Cloud solution, banks can optimize their operations, enhance customer experiences, and stay ahead in the competitive banking landscape.

Author



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Guru has 20+ years of experience in Oracle technologies. At LTIMindtree, he is responsible for driving OCI growth, defining go-to-market strategies and pre-sales, building solutions and accelerators, and ensuring all cloud delivery expectations are met. He leads strategic programs and is responsible for OCI solutions across industries for Oracle and non-Oracle workloads. Besides OCI, he also has experience with AWS, Azure, and GCP, and likes to build hybrid cloud platforms to meet customer needs.

Reference

<https://blogs.oracle.com/exadata/post/exadata-x10m>

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