App Infra Managed Service

Supported Products and Partners

NTT DATA

Databases and App Servers

Supported Products and Partners

NTT DATA

Supported Technologies

Client Engagement Overview : Our Values

Professional
We have ensured a 24 * 7 availability including public holidays

Safety
Whatever security guidelines have been given to operate in the bank we have ensured we always stick to those

Good Service
Each member of the team have ensured to give the maximum benefit to the bank from the multiple level skill set we have.

Relationship
Interaction with application team to ensure we understand the pain area.

Smart
By taking a proactive approach we had identified problems before they can cause issue for the application availability.

Care
Continuous monitoring and maintenance have ensured we took care of the systems availability

Quality
Ensured onsite availability and every issues raised by bank is actioned upon well before SLA timings

Managed Service : Process

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Cater Customer Needs

- ✓ Understanding pain points of customer.
- ✓ Tailored solutions to meet customer goals

Proactive Approach

- ✓ Proactive monitoring for issue identification
- ✓ Reduction in future downtime possibility

Capacity Planning

- ✓ Efficient storage management
- ✓ Ensuring headroom for future growth.

Rapid Issue Resolution

- ✓ Round the clock availability for rapid resolution of any critical issue

Cost Efficient

- ✓ Our proactive approach can save a lot of cost
- ✓ Through tuning we scale databases to use minimum CPU, memory & IO which reduces hardware cost

Meet Expectations

- ✓ With effective process we have always been able to meet customer expectations
- ✓ We have been able to deliver even with complicated requirements and thin timelines

Managed Service : Methodology

Initial Assessment

Assess and understand the objectives, pain areas and support requirement

Issue Identification

Identify issue troubleshoot and resolution ,help for testing the solutions

Understand SLA

SLA, issue severity ,escalation procedures, knowledge transfer

Continuous Improvements

Continuous improvements with the help of proactive performance optimization & system upgrades

Proactive monitoring

Continuously track database health , performance , availability, alerting mechanism for early issue detection

Regular Reporting

Regular reports to stakeholders about issue trend analysis and opportunities for improvements

Database Support : Oracle

Clients

Leading public sector banks

Leading private sector banks

Leading State Owned Enterprises

High Availability

Expertise on Oracle RAC

Expertise on Oracle data guard

Backup and Recovery Solutions

Exadata Support

Expertise on Exadata management

Expertise on DB Tuning for Exadata

Good understanding on Exadata Hardware

Database Security

Data encryption

Compliance and Audit Standards

Database Vault & Label Security

Data Masking

Upgrades & Migrations

Database version upgrades

Near Zero downtime migrations

Golden Gate

Transportable Tablespace

Performance Tuning

Expertise in Database Performance Tuning for application

Database scalability

Database Support: Postgres

Clients

Leading public sector banks
Leading private sector banks
Fintech

High Availability

Streaming Replication
EDB Failover management (EFM)
Seamless failover Management

Backup and Recovery

Backup and Recovery Tool (BART)
Point in Time recovery
Backup policy management

Database Security

Data encryption
Authentication and Access control
Auditing and Compliance
Data Masking

Upgrades & Migrations

Database version upgrades
Near Zero downtime migrations
Replication and data synchronization

Performance Tuning

Expertise in Database Performance Tuning for application
Database scalability

Database Support : SQL Server

Clients

Multiple Critical banking systems
Digital Banking
Multiple Enterprises

High Availability

Always on Availability Group
Log shipping
Mirroring & Failover Cluster

Backup and Maintenance

Automated maintenance Plan
Point in Time recovery
Backup policy management

Database Security

Data encryption
Authentication and Access control
Auditing and Compliance
Data Masking

Upgrades & Migrations

Database version upgrades
Near Zero downtime migrations
Replication and data synchronization

Performance Tuning

Expertise in Database Performance Tuning for application
Database scalability

Team and Certification

Team Strength:

- A total of 33 Team members
- Exposure to various banking , insurance , manufacturing sector projects
- Diverse Skillset
- Exadata, OCI and Open System Support

✓ Oracle Cloud Infrastructure Certified

✓ Oracle Database Certified Professional

✓ GCP database Certified

✓ AWS Associate Certification

✓ Azure DBA Associate Certified

✓ Microsoft Certified Professional Certified

✓ Azure Data Fundamental Certified

✓ Azure Data Engineer Associate Certified

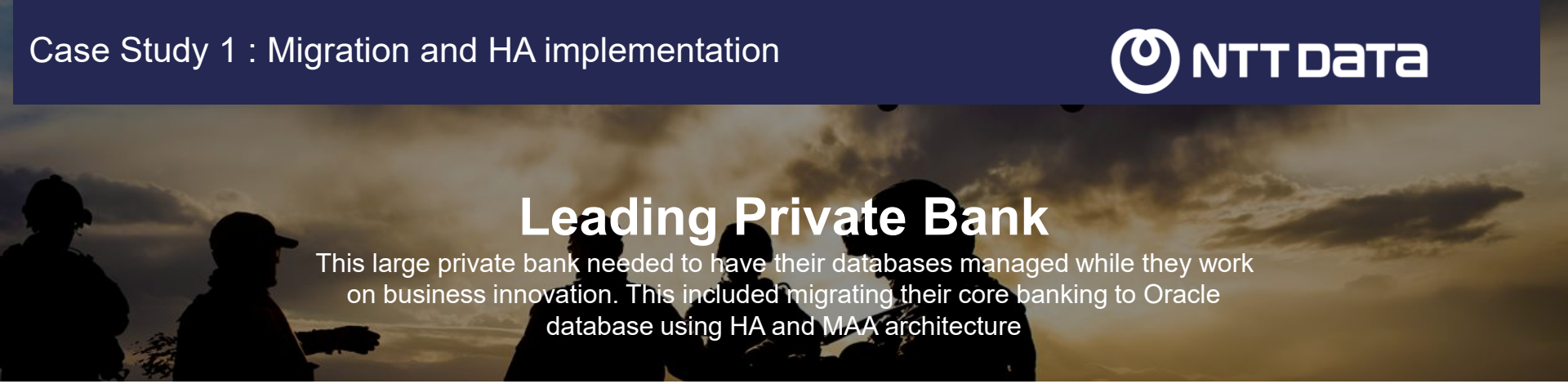
✓ Azure DBA Associate Certified

✓MySQL 5.6 administrator Certified

✓AppD certified

✓ DB2 Certified

Case Study 1 : Migration and HA implementation



Leading Private Bank

This large private bank needed to have their databases managed while they work on business innovation. This included migrating their core banking to Oracle database using HA and MAA architecture

Engagement:

This large Private bank needed partner to manage their database technology stack which included various database technology stack. This included highly skilled workforce to help implement, manage and fine-tune their database and help migrating and stabilizing 1200+ branches.

The Client also needed expertise to migrate the technology stack from Oracle to EDB, expanding their digital footprint using sql server database and managing their ETL and Bigdata implementation using MySQL and postgres technology

End Result

- Successful migration of core banking from mainframe to Oracle Database running on two node RAC with near and far DG configured to achieve MAA architecture
- Batch processes were brought down from 5+ hours to one hour
- Maintained 100%SLA throughout thus ensuring 100% re-newel rate. Helped client in their path to business growth thus stabilizing performance while load increased
- Migrated noncritical applications to .open source technology stack thus reducing the OpEx

Case Study 2: DB upgrade and HA Implementation – Leading Private Bank

High Availability

Data guard setup for core banking with near zero data loss also ensuring bare minimum time for switchover process

Database upgrades

Multiple upgrades to keep the database upgraded to the latest version, currently using 19c on with real application cluster

Offloaded Backups to Standby

Backups offloaded to standby DB thereby freeing up resource from primary and also utilizing idle resources at standby db

Overall application Scalability

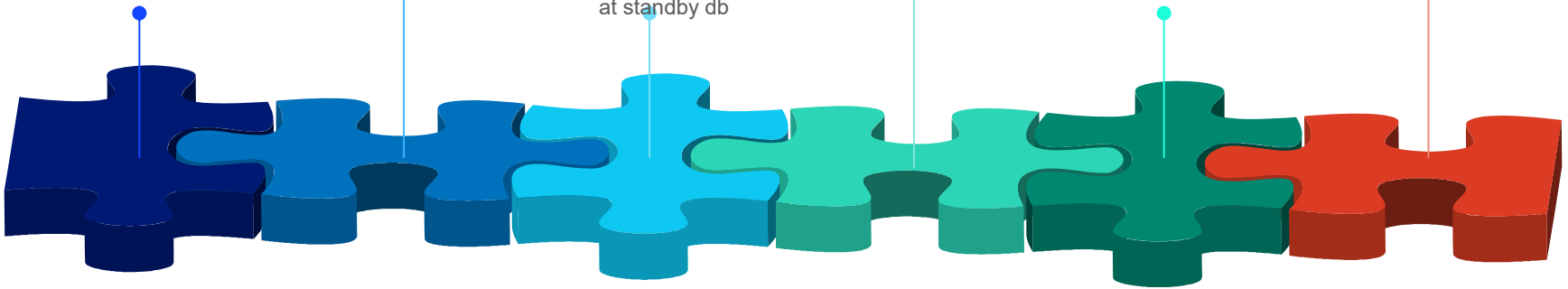
Overall performance tuning for batch and OLTP workload over the period of time have helped the application to be scalable thereby saving resource cost

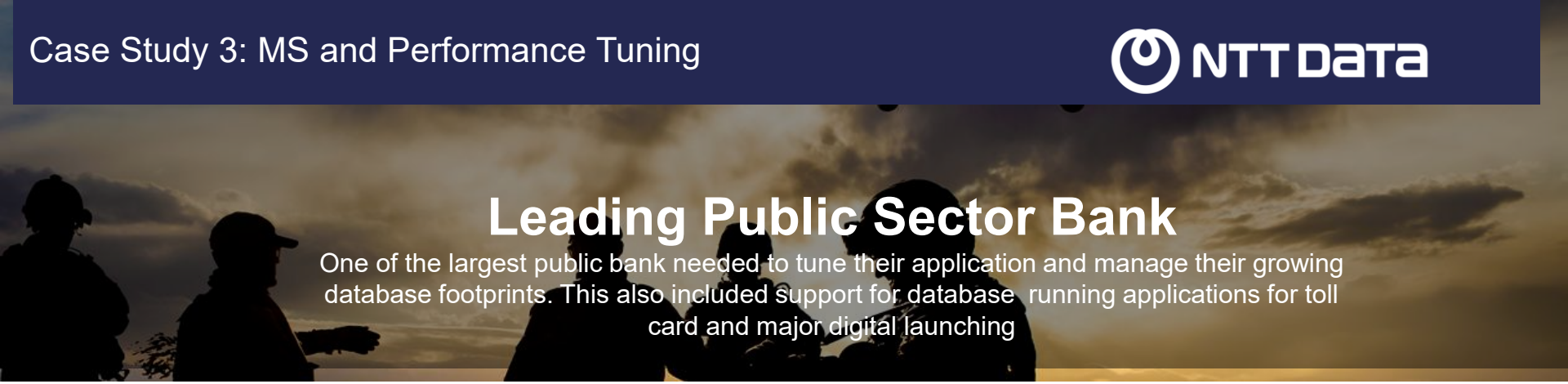
Identified design issues

Identified issues with storage replication design causing critical waits on the database

Overall stability of the system

Ensured overall stability for a very critical application with continuous upgrades ,tuning etc





Leading Public Sector Bank

One of the largest public bank needed to tune their application and manage their growing database footprints. This also included support for database running applications for toll card and major digital launching

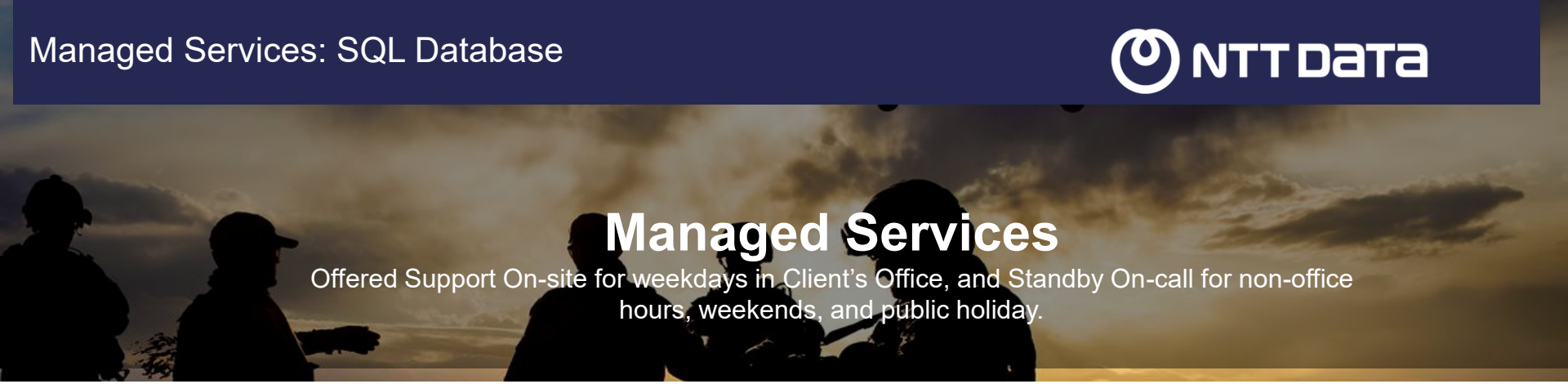
Engagement:

This large public bank needed partner to improve their online baking application running on Exadata machine. We helped client optimize their Exadata machine thus the overall user experience.

With the expertise and competence shown, we were trusted with uplifted managed service contract thus enabling us support high number of production databases across technologies, most of them critical. We also helped client implement their key digital initiative and helped ensuring the databases stability during holidays period when transactions reaches 10’s of millions

End Result

- Best practices implementation for applications running on Exadata thus more productive Exadata machine
- Best practices implementation for critical digital banking application used by million of users
- Maintenance of multiple database technologies in 24 X 7 model
- Response time analysis and performance tuning of various applications thus bringing down the overall system utilization significantly
- More stable systems which can now handle increased load.



Managed Services

Offered Support On-site for weekdays in Client's Office, and Standby On-call for non-office hours, weekends, and public holiday.

Clients:

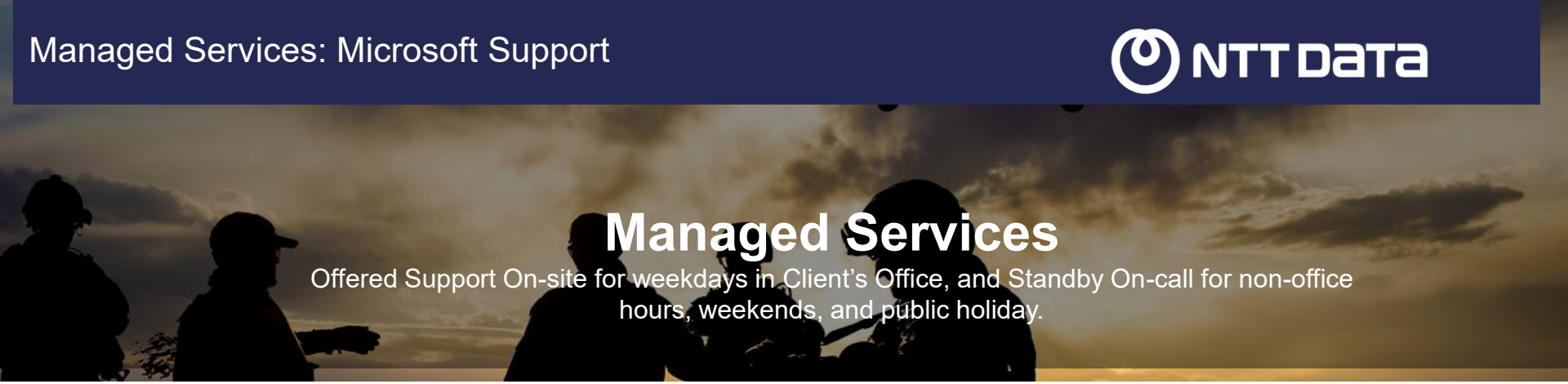
1. **Private FSI Insurance Company**
2. **Leading Private FSI Insurance Company**
3. **The Biggest State Own Bank (L1 MS)**

Scope of Work

- Monitoring SQL Servers
- Installing SQL Servers
- Upgrading SQL Servers
- Performance Tuning
- Configuring / Managing SQL HA (Logshipping / Mirroring / AlwaysOn)
- Troubleshooting
- EOM Support

Scope of Work (L1 MS)

- Monitoring SQL Server
- Send capture and report if any alert triggered and / or as requested by Mandiri L2 DBA
- Escalate to Mandiri L2 DBA if incident occurred



Managed Services

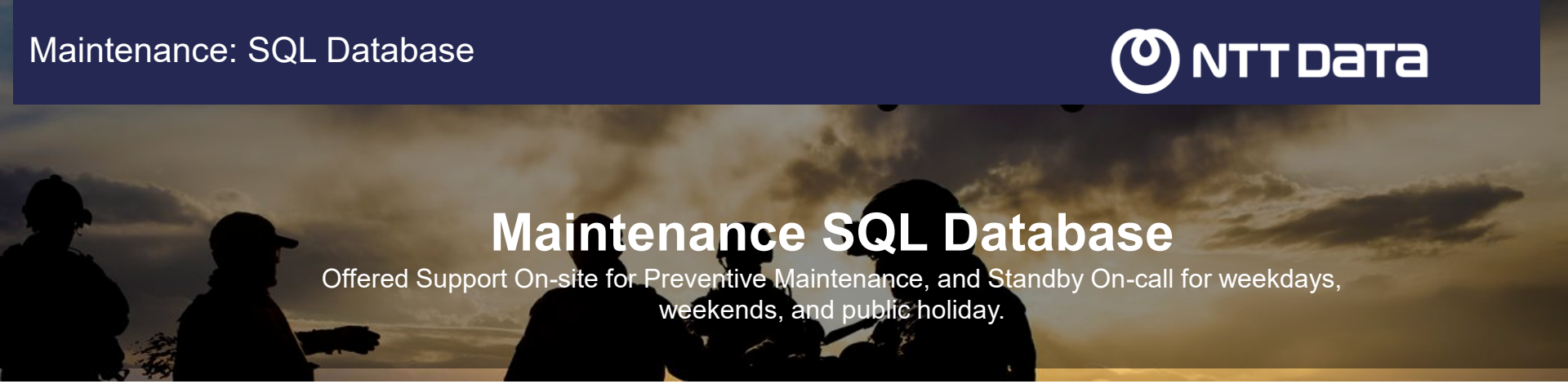
Offered Support On-site for weekdays in Client's Office, and Standby On-call for non-office hours, weekends, and public holiday.

Clients:

1. **State-Owned Bank**
2. **State-Owned Sharia Bank**

Scope of Work

- Support Microsoft Products, including:
    1. Active Directory Servers
    2. CA Server
    3. Exchange Servers
    4. Microsoft Windows Servers
    5. ADFS
- On-site Support 8 x 5
- On-call Support 24 x 7



Maintenance SQL Database

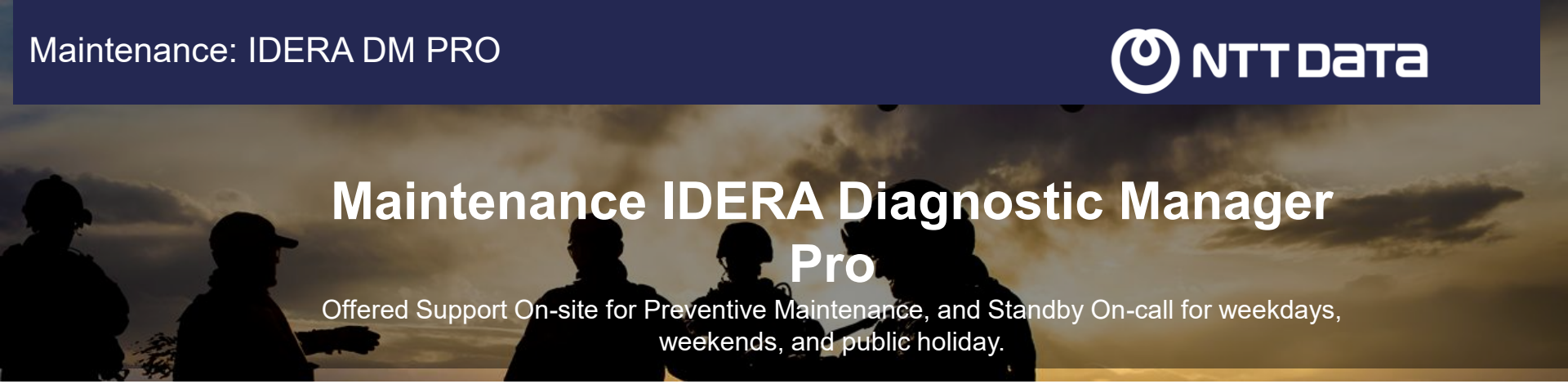
Offered Support On-site for Preventive Maintenance, and Standby On-call for weekdays, weekends, and public holiday.

Clients:

1. **Leading Automotive Manufacturer and Distribution Company**
2. **State-owned Stock Exchange Regulator**

Scope of Work

- 1. Quarterly Preventive Maintenance
- 2. Corrective Maintenance
- 3. Escalation to Principal



Maintenance IDERA Diagnostic Manager Pro

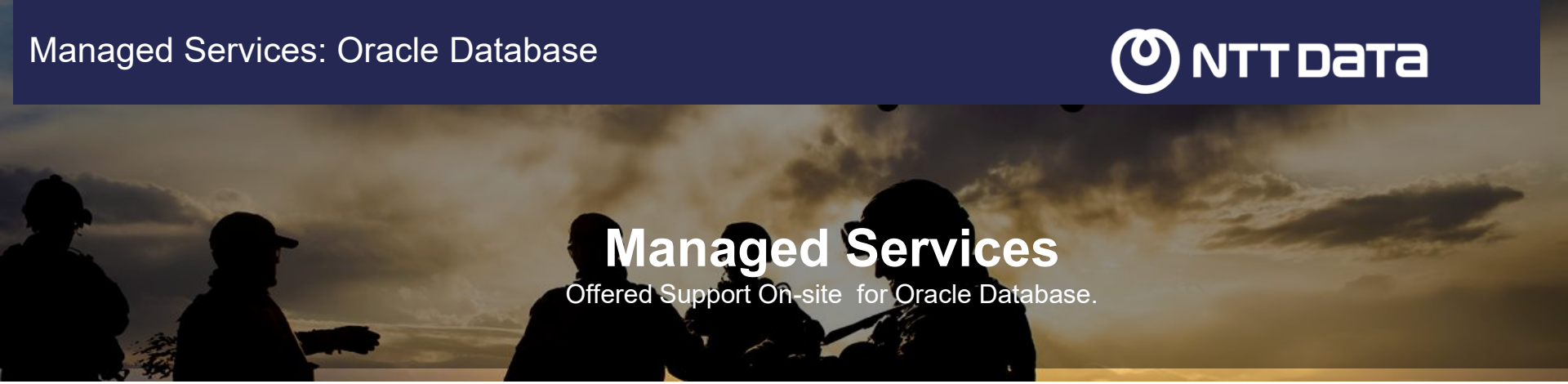
Offered Support On-site for Preventive Maintenance, and Standby On-call for weekdays, weekends, and public holiday.

Clients:

1. **Largest Bank in Indonesia**
2. **Leading Private Insurance Company**

Scope of Work

- 1. Quarterly Preventive Maintenance
- 2. Corrective Maintenance
- 3. Escalation to Principal



Managed Services

Offered Support On-site for Oracle Database.

Clients:

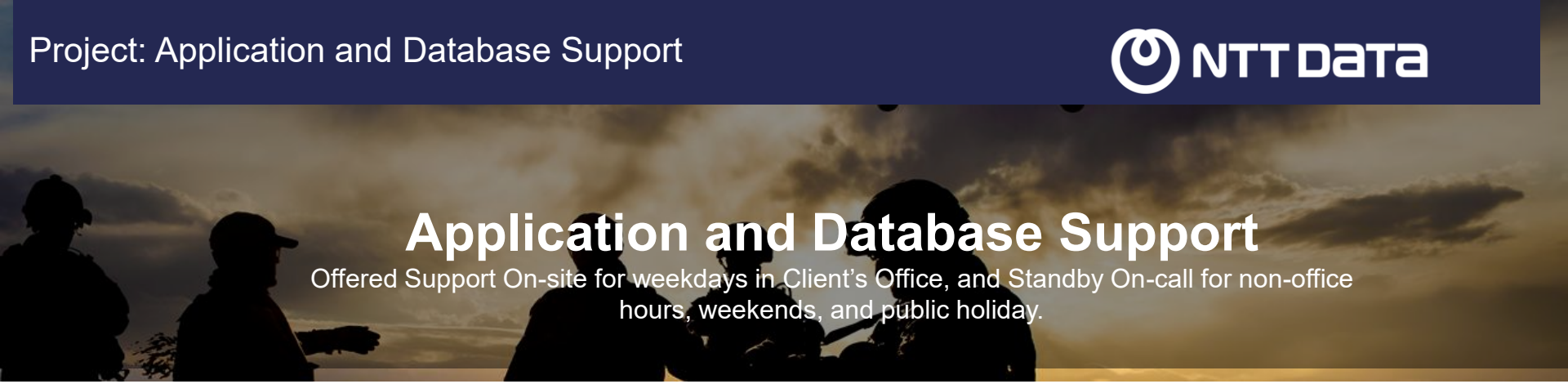
1. **Largest State-owned Bank in Indonesia**
2. **Leading Private Bank in Indonesia**

Scope of Work (L2)

- Level 2 support for daily database operations like managing high availability, performance tuning & dealing with principal vendor to get the issue resolved
- Managing critical issues during nonbusiness hours when bank team not available

Scope of Work (L1)

- First level monitoring for early issue detection through alerts
- Escalation of alerts to L2 and L3 team for immediate problem resolution



Application and Database Support

Offered Support On-site for weekdays in Client's Office, and Standby On-call for non-office hours, weekends, and public holiday.

Clients:

1. **Private Bank in Indonesia**

Scope of Work

- Installing , managing, upgrading WebSphere application server, Oracle DB & IBM HTTP server
- Installing , managing, upgrading IBM MQ server
- Installing , manage, upgrade MongoDB setup for Junius application
- Handling critical issues faced by the client on demand basis

Upgrade Microsoft Exchange 2013 into 2019

Provide Upgrade Implementation and Maintenance Support after Go-Live.

Clients:

1. **Private Bank in Indonesia**

Scope of Work

- Definition - Design & Architecture Assessment
- Build - Implementation, Installation and Migration from Exchange 2013 to 2019
- Deployment - Users Migration
- Transition - Sharing Knowledge
- Maintenance Support Preventive & Corrective

AppDynamics Implementation and Support

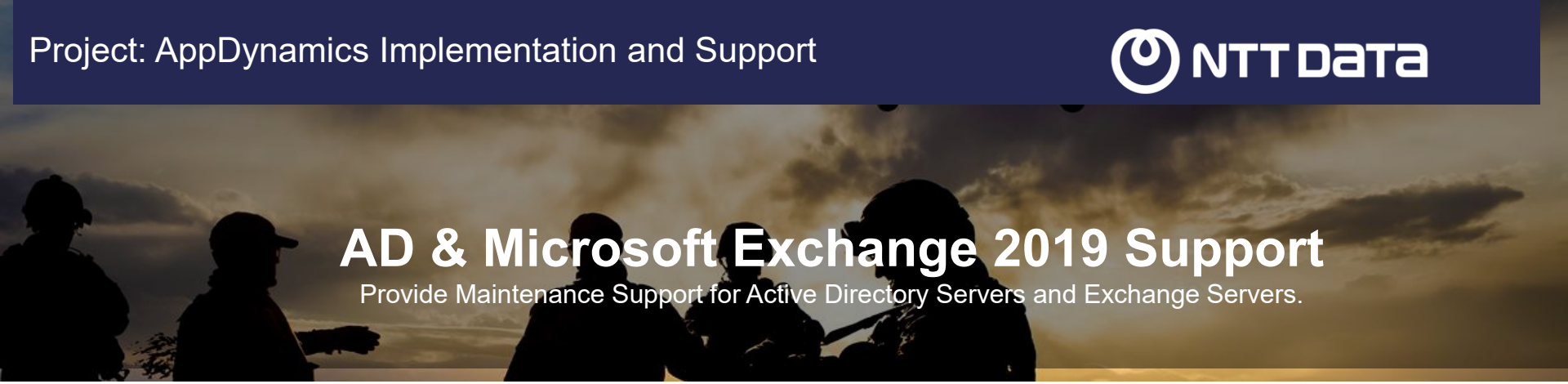
Provide AppD Implementation and Maintenance Support after Go-Live.

Clients:

1. **Government Institution of Monitoring Finance and Development**

Scope of Work

- Definition - Design & Architecture Assessment
- Build - Implementation, AppDynamics Installation
- Deployment – Application, Database & Machine Agent Installation
- Transition - Sharing Knowledge, Training
- Go-Live
- Maintenance Support Preventive & Corrective



AD & Microsoft Exchange 2019 Support

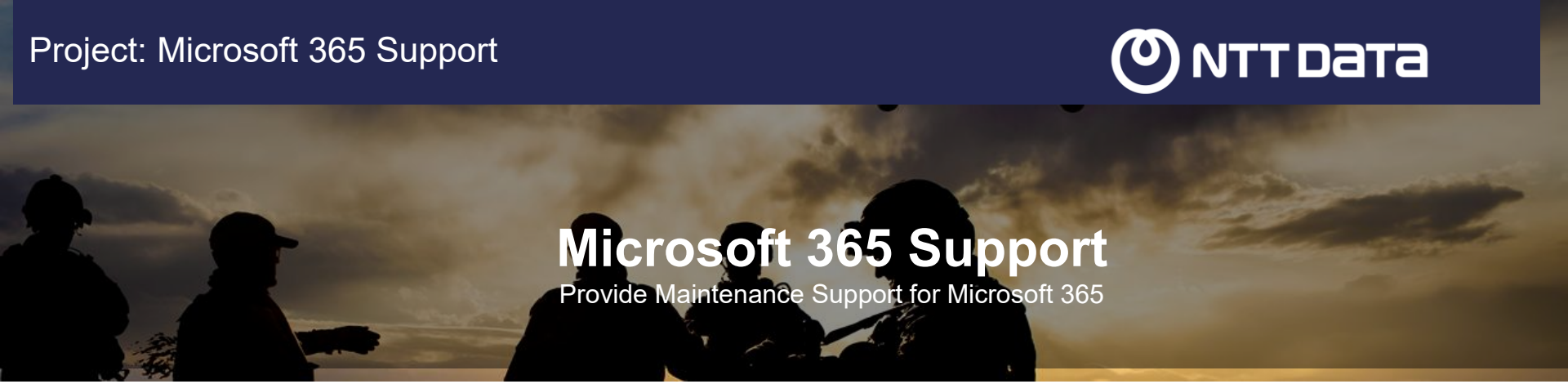
Provide Maintenance Support for Active Directory Servers and Exchange Servers.

Clients:

1. **Private Insurance Company**

Scope of Work

- Bi-annual Preventive Maintenance
- Corrective Maintenance
- Escalation to Principal



Microsoft 365 Support

Provide Maintenance Support for Microsoft 365

Clients:

1. **Private Insurance Company**

Scope of Work

- Monthly Preventive Maintenance
- Corrective Maintenance
- Escalation to Principal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