The Client
The client is a major global financial services provider engaged in retail and commercial banking, credit cards, investment banking, wealth management and investment management services. The client started consumer banking operations in 2007 in India and also has a separate Non Banking Finance Corporation (NBFC) currently operating across 13 locations in the country. The banking division services the needs of over 400,000 clients and customers across India. Both the Bank and the NBFC are independent identities and are governed by different rules and regulations as per RBI policy guidelines.

Industry
BFSI

Objective
- Optimize and consolidate its IT infrastructure in India
- Virtualize the existing servers to eliminate the huge server sprawl, enhance system availability, reduce costs and maintain a highly available infrastructure
- Partner with a managed IT hosting service provider who could offer end-to-end managed IT hosting services for primary and DR sites including disaster recovery solution & testing services to ensure DR readiness of applications and services and their adherence to global Business Continuity Management (BCM) standard

Business Scenario
When the client started its operations in India it realized that all its applications were scattered across globally with a few hosted in India as well with different service providers chosen by their Global Relationship and Alliance team. With different providers managing their IT infrastructure and operations, challenges soon arose with respect to flexibility and ease of operations, desired service levels and compliance as per their Global Risk & Compliance and BCM stringent guidelines. As these service providers were chosen through their Global Relationship and Alliance team and were universal for every setup it was difficult to replace them with a different service provider. The level of service offered by these vendors was not satisfactory and SLA’s were breached often. The bank also had an in-country setup for managing their in-country IT infrastructure and operations. However, when the bank expanded its operations in India, it realized that its internal IT setup was not geared to manage the increased demand for a reliable and highly available IT infrastructure. The client realized that to optimize operations & cost and adhere to stringent compliance guidelines it needed to consolidate applications and services with a single service provider. Moreover, as per the client’s global Business Continuity Management (BCM) standard, all critical applications and services had to be tested annually. The bank discovered that they had not yet devised a testing strategy for India. Therefore, as a first step they needed to test their applications and services hosted in the country for compliance with the global BCM standard. The bank also faced the challenge of managing planned and unplanned outages that led to a disruption in business operations. Hence, they decided to partner with a managed IT hosting service provider who could provide them high availability for their IT infrastructure, a foolproof disaster recovery (DR) solution as well as testing services for their mission critical applications.

Value Proposition
After evaluating several vendors, the client decided to partner with Netmagic Solutions. Netmagic Solutions provided them the flexibility to specify their expectations and requirements from the engagement along with the advantage of consolidating their IT infrastructure with a single service provider.

Netmagic Solutions approach was flexible not only at operational and tactical level but also at strategic level. Anticipating an expansion in its business post the financial meltdown, the client asked Netmagic to reserve additional space for them in its data center. Being a customer centric organization, Netmagic agreed to do so. Moreover, Netmagic Solutions was more than forthcoming to sit with the client’s Global IT team, Global Risk Compliance team and Enterprise Security management team to resolve the issues concerning security, adherence to BCM & GRC standards, and service level agreement (SLA). Impressed by the flexible approach of Netmagic Solutions, the client decided to move their primary/DR site to Netmagic first followed by its NBFC’s primary/DR site.
Case Study - Disaster Recovery & Virtualization

Challenges

- Being a foreign bank, the client's applications were scattered across the globe while there were as many applications hosted in-country.
- The bank's IT infrastructure was being managed by four separate service providers. As a result, managing four different contracts for Primary and DR sites of both the entities (Bank + NBFC) was a tedious task to handle.
- As the existing service providers were chosen by the client's Global Relationship and Alliance team for all its business establishments around the globe, turn-around time periods were extended resulting in delays.
- The existing service providers failed consistently to meet the SLA's and the Risk & Compliance requirements as specified by the client's global risk and compliance team.
- Adhering to the stringent global risk and compliance regulations for Business Continuity Management (BCM) to ensure Disaster Recovery (DR) readiness of the bank's applications and services was becoming a huge challenge.
- The client had an Security Management team (ESM) whose stringent requirements had to be adhered in India.
- The client wanted to virtualize its existing servers with minimum disruptions to its business operations and applications and without investing in additional inventory, all within a short time frame.

Solution

The client decided to partner with Netmagic Solutions. Netmagic Solutions provided them the advantage of consolidating their IT infrastructure with a single service provider.

Netmagic Solutions provided the following services:

Solution Snapshot

- DR Applications/ Systems
  - 14 Business Applications, 18 Enterprise Systems and Network Devices
- Database Replication Management
- DR Plan review and updating
- DR Drills Management
  - Preparation, Execution, Report submission, Post-drill review, BCM Audit Support, Coordination with 3rd party suppliers & vendors
- Other Managed Services: InfraManage - Domain, DNS, Exchange, Blackberry, Symantec, Oracle and SQL DBs and Network
- Set up a dedicated Network Operations Center (NOC) manned by a 50 member team for monitoring and management of the IT infrastructure 365x24x7
- Virtualization
  - Reduced the inventory from 171 servers to 40 servers

The transition from previous vendors was not smooth. Difficulties arose during the transfer of the entire infrastructure and these were efficiently sorted out by Netmagic Solutions.

The client later posed a new challenge to Netmagic which was a complete paradigm shift for Netmagic. The challenge was to set up a new dedicated Network Operation Center (NOC) for the client outside Netmagic’s facility as per their Global privacy, network management and DR policy. This was a unique development and Netmagic had never done this before for any client. Taking this challenge head on Netmagic agreed to this new engagement; designed and implemented a dedicated NOC for the client after leasing a space of 19000sq ft.

Currently, the NOC is manned by a 50 member dedicated team and utilizes 10000sq ft of space at a separate facility outside Netmagic datacenter. The additional space of 9000sq ft has been kept vacant for future expansion of operations. The facility is secure with CCTV cameras, physical security and fire alarms. The security measures are so stringent that even Netmagic personnel have to seek permission from the client to enter the facility. And all this was done by Netmagic in 15 days flat which is quite a unique feat in itself.

Other challenges that were posed by the client to Netmagic were:

- The SLAs were determined by the client, reporting had to be done as per their format. Everything had to be customized as per the guidelines of their Global IT team.
- Other than ITIL Framework, the client’s Global Services team had outlined three processes for reporting – IT Management, Security Management and Risk and Compliance Management. The entire arrangement was reviewed by a separate team specially created for this purpose.
- The client detailed each process to the minutest level and defined the Service level Agreement (SLAs) for the engagement.

Netmagic's highly experienced team comprising of domain experts overcame all challenges to provide the client with an infallible IT infrastructure as per their specific requirements. A similar arrangement was also made for the NBFC. Loop holes were identified and rectified which led to the successful migration of Primary/DR site of NBFC. The client’s stringent demand (as per its global norms) for a separate resource pool for managing the NBFC’s IT infrastructure was duly met by Netmagic Solutions. Netmagic migrated a total of 350 devices (250 devices for the bank and 100 for NBFC) to the specially constructed facility for the client. As a result of this engagement, the client was able to optimize costs and consolidate its IT infrastructure and operations.

Virtualization

As a part of its ongoing consolidation plan, the client wanted to virtualize its existing servers to optimize costs and space. In most cases when enterprises venture into virtualization, they buy new servers and retire old inventory. The challenge here was that Netmagic had to virtualize existing physical servers (171 servers) without investing in additional inventory. Moreover, Netmagic had to virtualize existing servers based on technology that was chosen by the client’s Global Architectural Team.
Case Study - Disaster Recovery & Virtualization

Key Benefits
Netmagic Solutions highly skilled and competent team enabled the client to operate as per their Global Standards providing cost as well as strategic benefits.

- Testing of all critical applications for Disaster Recovery (DR) readiness as per the client’s global BCM and GRC standards
- Compliance with RBI guidelines and global BCM audit requirements
- Virtualization of existing servers led to significant reduction in costs and high availability of applications resulting in a more resilient, dynamic infrastructure
- Complete site level testing so the client can focus on their core business – banking
- Consolidation of IT infrastructure with a single service provider has resulted in greater transparency and efficiency in operations
- Dedicated Network Operating Center (NOC) in India manned by a 50 member team for round the clock monitoring and management enabled timely resolution of issues
- Engineering service SLA's were successfully met
- Indian business units operating as per their global risk and compliance standards
- Primary and DR sites passed Global Audits, first successful site level DR tested and validated by Global Team

As the virtualization startup kit was zero, Netmagic had to juggle among the existing physical servers, evaluate which machines could be used for virtualization and which applications could be virtualized. Every application could not be virtualized hence Netmagic had to check for the compatibility of the applications suitable for virtualization.

There were challenges beyond technology that Netmagic managed, coordinating with the global team for change approvals, coordinate with the physical server vendors and get the client’s applications tested on the Virtual Architecture. After rigorous evaluation, out of the 171 servers that needed to be virtualized, 131 were considered apt for virtualization. Netmagic successfully virtualized 131 physical servers to 40 physical servers. A special 10 member team was constituted by Netmagic that overlooked the entire project of virtualization.

Key Takeaways
By partnering with Netmagic Solutions, the client was able to consolidate and virtualize its entire IT infrastructure including successful migration/transition of the entire DR set up from previous service providers. The client was able to effortlessly test all their critical applications for DR readiness as per their global norms. The client also conducted a complete site-level DR testing successfully. Moreover, the client’s applications and systems are now compliant as per RBI regulatory requirement as well as their global BCM audit requirement.

The engineering service defined SLA’s were successfully met. Virtualization of existing servers reduced physical server footprint to 40 from 131, providing the client with the advantage of optimally utilizing the available resources and that too without investing in new high configuration physical servers. In Netmagic Solutions, the client found a trusted partner who can support the expansion of their business and deliver accordingly. This has helped the client take firmer, surer steps towards business growth without having to worry about IT infrastructure hassles.

In a nutshell:

- Netmagic Solutions now supports Primary and DR Datacenter of both the Bank and NBFC therefore providing the client with the advantage of vendor consolidation
- Dedicated Network Operating Center (NOC) setup for the bank and NBFC as per the client’s stringent Global Security and access control policies
- Netmagic Solutions strictly followed ITIL Framework and successfully met the client’s defined SLA’s
- The client defined reporting processes for IT Management, security management and risk and compliance management were followed by Netmagic Solutions
- Site Level Disaster Recovery Solution was implemented and tested successfully
- Datacenters of both the bank and the NBFC successfully passed the Global Audits
- DR drills were successfully conducted for both the bank and NBFC
- Physical Server foot print was reduced to 40 from 131 by virtualizing the existing physical servers leading to cost and space optimization