Cloud-based IT system for medical service innovation
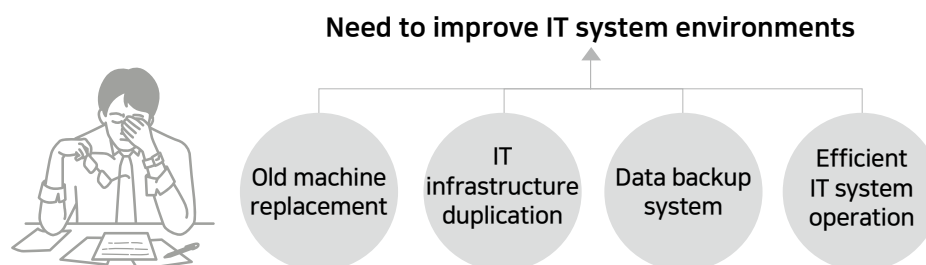
Case of improving availability and reliability of IT infrastructure

Challenge

Established in 1990, this medical institution provides over 4,000 examination services such as diagnostic medical examination, molecular diagnostic examination and pathological examination to hospitals nationwide.

The foundation had built an integrated information system based on IBM mainframe, but it needed to scale up its system for business expansion. However, it was not easy to update the system to include new medical IT technologies while ensuring reliable operation in the case of failure. An interruption in the examination causes critical loss to the business and therefore the service has to be provided rapidly and reliably 24/7.

The institution wanted to improve its overall IT system by replacing old machines, duplicating IT infrastructure, constructing data backup system and creating large enough architecture to accommodate future business expansion.

Need to improve IT system environments

- Old machine replacement
- IT infrastructure duplication
- Data backup system
- Efficient IT system operation

SDS Cloud Service

SDS Cloud Infrastructure

Samsung SDS provides highly available and secure private cloud service optimized for enterprises.

- High-performance cloud: dedicated resources customized for the consumers
- Strong security system: Maximum reliability by 24X7 security control and real-time monitoring
- Classified operation service for the customer business: Gold, Silver, Bronze+, Bronze
- Operation service differentiated from global CSPs
  : integrated failure management, dedicated technical support, IT infrastructure management, etc.

※ Main Services
- **Compute**: Virtual Server, Container, Bare Metal Server, GPU Server
- **Storage**: Block Storage, File Storage, Object Storage, Backup
- **Network**: CDN, Load Balancer, WAN
- **Security**: Anti-DDoS Monitoring, IDS Monitoring, WAF, Firewall

Solution

Improve reliability and availability by duplicated architecture
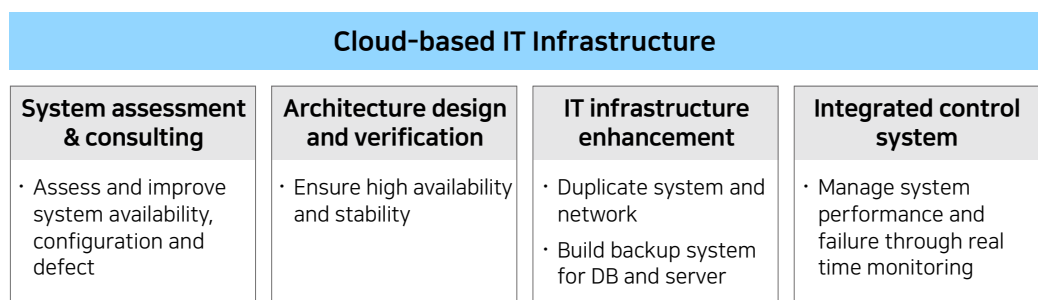- Supply uninterrupted services even in case of failure through duplicating server, network, and storage
- Distribute traffic through duplicating network and lines during peak times

Improve data stability by building backup system
- Securely protect patients' medical records with backup system for database and server
- Ensure flexibility of IT infrastructure management through cloud-based virtualization

Reliable and efficient operations by integrated control system
- Enable quick failure detection and response by monitoring network and IT system in real time
- Easily manage performance and failure for various servers and network devices in a single view

Cloud-based IT Infrastructure			
System assessment & consulting	**Architecture design and verification**	**IT infrastructure enhancement**	**Integrated control system**
· Assess and improve system availability, configuration and defect	· Ensure high availability and stability	· Duplicate system and network · Build backup system for DB and server	· Manage system performance and failure through real time monitoring

Benefit

Improve system stability	**Improve operational efficiency**	**Ensure business scalability**
· System/DB duplication · Backup & Disaster Recovery	· Integrated control system · Integrated operation platform	· Expandable within days · SDS Cloud service

Contact Us

To learn more about Samsung SDS Cloud service, please send us an email at cloud.sds@samsung.com or visit website www.samsungsds.com.

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