

# KTF's Highly Available Data Warehouse Improves Marketing Campaigns



KTF  
Seoul, Korea  
www.ktf.com

**Industry:**  
Communications

**Annual Revenue:**  
US\$5.6 billion

**Employees:**  
2,583

**Oracle Products & Services:**  
Oracle Database  
Oracle Real Application Clusters  
Oracle OLAP

## Key Benefits:

- Improved data warehouse performance with Oracle clustering technology, which distributes workload across multiple servers
- Reduced system downtime to less than five minutes
- Enhanced business efficiency through better system reliability

*“To optimize the performance of our data warehouse, we used Oracle Real Application Clusters to boost system availability and stability. More efficient workload distribution has cut system downtime to less than five minutes.” – Tae-Jae Lee, Head of IT Infrastructure Team, Information System Division, KTF*

Established in 1997, KTF is a leading player in Korea's mobile communications industry. The company set a record by securing more than 9 million subscribers within its first three years of operation. It now boasts 12 million subscribers in Korea.

KTF has implemented a powerful wireless network and advanced mobile application technologies, allowing it to offer a range of innovative services. This includes portable mobile phone numbers, handsets with special functions and designs, services tailored to customers' different needs and lifestyles, and competitive pricing models.

In the mobile telecommunications industry, proper data analysis is critical to customer relationship management (CRM) and business operations. KTF maintains a custom data warehousing solution called Infobank for in-depth data analysis. The system is popular with KTF staff because it allows them to perform detailed data mining with ease.

The system is used to analyze customer profiles, revenue, and call pattern tracking, among other functions. The information extracted from the data warehouse assists in decision-making in critical business areas such as strategy planning and service development. The information also helps KTF develop one-to-one marketing campaigns that differentiate the company from its competitors.

## System Downtime Reduced to Five Minutes

Because data analysis is a critical function within KTF, the company began searching for a solution that would make the best use of available technology to maximize the performance, reliability, and availability of its data warehousing system.

KTF believed that clustering its data warehouse environment would be key to improving system performance and flexibility.

After deploying Oracle Real Application Clusters, the availability of KTF Infobank was significantly enhanced. The average system downtime was reduced from 30 minutes to less than five minutes. Downtime for enterprise application integration (EAI) was reduced to less than five minutes, while extraction, transformation, and transport (ETT) dropped to less than one minute. In some cases, online analytic processing (OLAP) was reduced to within 30 seconds.

In addition, the load balancing features of Oracle Real Application Clusters allow resources to be managed more efficiently and system usage to be optimized. In OLAP, distributing the workload over multiple servers improved performance by 9%, while an average 12% improvement in performance was achieved in ETT batching.

### **Future Plans**

KTF is now considering deploying a business intelligence (BI) portal. The portal would allow the existing database and OLAP tools to be customized according to the user's needs. The enhanced system would also provide managers and staff with real-time access to data, including customer feedback. Quicker response to customers will result in higher satisfaction rates.

### **Why Oracle?**

Oracle Real Application Clusters was chosen for its ability to prevent errors by spreading the database workload across multiple servers. If one server in the cluster were to fail, the workload is automatically shifted to another server. Other points of selection included the technology's security, performance, and scalability.

*Established in 1997, KTF has grown to be a leading mobile telecommunications service provider with 12 million subscribers in Korea. KTF was ranked first among mobile telecommunication service providers in Business Week's top 100 global IT companies in 2002.*