Established in 1999, DNA delivers a diverse range of telecommunication services to consumers and businesses. DNA Oy has more than 3.7 million mobile communications and fixed network customer subscriptions, and in 2015 it recorded an operating profit of approximately USD 78.4 million.

**Business challenge**

In Finland, demand for telecoms services is huge, with more active mobile device subscriptions than people living in the country. How could DNA ensure that it was the first choice for consumers?

**Transformation**

To help understand its customers in super-fine detail, DNA accelerated daily reports by migrating its Oracle Database to IBM® Power® System S822 servers and implementing IBM FlashSystem® 900 storage.

**DNA**

**Accelerating reporting to deliver the best customer experience in the telecoms industry**

Through the combined capabilities of the Oracle solutions and IBM systems, we’ve been able to reinvent our B2B processes to support online ordering.”

Janne Hankaankorpi
Director, Corporate Services
DNA

**Business benefits:**

- **Cuts 3 hours** from overnight reporting processes
- **66% saving** in software license costs
- **80% reduced** footprint for the data warehouse, minimizing power and cooling costs
Meeting the expectations of ultra-connected customers

Finland leads the world in internet connections and mobile devices per capita, and there are already more mobile subscriptions than there are people living in the country. The mobile trend is only growing, with customers consuming more and more data and expecting ever-greater bandwidth. This exceptionally high demand for connectivity has sparked fierce competition between Finland’s three leading telecommunications providers.

Janne Hankaankorpi, Director of Corporate Services at DNA, explains: “Finland isn’t a huge country, but it is almost uniquely well-connected. For example, it isn’t unusual for an individual to have three or more internet-connected devices. Since there is a relatively modest number of people contributing a considerable amount of business, it is absolutely paramount to deliver the best possible customer experience – losing one customer doesn’t mean simply losing one mobile subscription, it could mean losing four, plus cable and broadband.

“At DNA our strategy is to place special emphasis on improved customer experience, and our vision is to have the most satisfied private and corporate customers in the country. A large part of this strategy is based on delivering effective customer communications. No-one likes to receive marketing that’s irrelevant or uninteresting, so we use daily reports on campaign success rates and customer preferences to continuously refine and target our marketing efforts.”

To make this happen, DNA’s CRM and retail teams rely on having reports available at 8 am each morning. Yet with aging servers supporting the organization’s mission-critical Oracle Database, there were considerable delays in overnight report processing.

“Reports would sometimes not be ready until 11 am, three hours later than they should have been,” comments Janne Hankaankorpi. “Obviously, this kind of delay was having a significant negative impact on our ability to make agile business decisions.”

The root of the problem was DNA’s five-year-old database solution; the company had grown substantially over the past five years, and the needs of the business had evolved as the industry advanced. DNA had reached the point where the old technology could simply no longer deliver the performance necessary to support the organization.

Additionally, DNA was operating numerous datacenters, resulting in a large IT footprint and substantial energy costs. The data warehouse, for example, spanned two non-standard 19 inch racks at two separate locations.

DNA realized that it was missing out on opportunities to minimize costs through datacenter consolidation and process automation.

Janne Hankaankorpi says: “We knew that accelerating our reporting and streamlining our operations would enable us to deliver an even better experience to both our B2C and B2B customers.”
Reinventing digital reach to customers

DNA set its sights on modernizing its core IT environment to achieve the performance it needed to support rapid reporting. The company chose to start afresh and consolidate to two new datacenters, and selected IBM Power System S822 servers and IBM FlashSystem 900 storage to provide the platform for its growing Oracle Database and Oracle applications environment.

Janne Hankaankorpi explains, “Over the years we have developed a very strong relationship with IBM, and past experience has given us immense confidence in IBM Power Systems. The price was also highly compelling: if we had gone with another solution, license costs would have been triple what they were with POWER8® processor-based systems.

“The project went smoothly, just as we expected. Working with IBM is always a positive experience.”

DNA runs its Oracle Database in one main datacenter supported by a secondary datacenter. The two sites operate in active-active and active-passive set-ups, depending on the applications in use. In addition, existing IBM Storwize® V7000 storage capacity has been extended with new IBM FlashSystem 900 storage solutions.

Arto Pelkonen, Specialist at DNA, says: “By using FlashSystem storage for our most critical applications, for example our billing system and our customer-facing services, we can improve response times and ensure processing is always complete.”

DNA virtualizes its storage with IBM Spectrum Virtualize™, and manages the virtual storage using IBM Virtual Storage Center, which includes IBM Spectrum Control™.

Arto Pelkonen comments: “Whenever we renew our storage hardware, we have to move very large quantities of data onto the new systems, and we have to achieve this without disrupting ongoing processes. We’ve found IBM Virtual Storage Center to be the best data migration tool on the market. It provides a single point of control for all storage resources, making it easy to move massive volumes of data.”

To compress the Oracle Database onto fewer physical disks, DNA takes advantage of IBM Real-time Compression™. Designed from the ground up to compress active primary data, IBM Real-time Compression supports workloads that are often not candidates for traditional compression solutions, enabling storage administrators to free up disk space without having to clean up or archive data.

“IBM Real-time Compression is hugely cost-effective – delivering the greatest savings in the entire project. The solution enabled us to shrink our Oracle data by 70 percent, dramatically reducing our storage space requirements and operational expenses.”
Connecting to satisfied customers

With the new IBM solutions in place, DNA has successfully modernized its IT infrastructure and is realizing its vision of having the most satisfied telecoms customers in Finland.

Janne Hankaankorpi takes up the story: “We have completely eliminated reporting delays,” says. “We’ve cut load time for our overnight batch processing by approximately 30 percent. Daily reports are ready by 8 am every morning without fail, so decision-makers can get to work straight away, without having to hang around waiting for reports. This enhances our agility and enables us to react to new opportunities as soon as they arise, capitalizing on successful campaigns more effectively than ever. Reporting has improved across the board, not just for marketing – all internal stakeholders are very happy.”

Arto Pelkonen adds: “DNA is capturing significant cost savings as a result of the project. We’ve already reduced our data center footprint considerably. This has resulted in great savings in terms of energy costs. We’ve cut the footprint of our data warehouse to a single, standard 19-inch rack – roughly an 80 percent reduction. We’re still in the process of consolidating our various data centers, and the more we consolidate the more we will save.”

Looking to the future, the flexibility of the Power System servers will enable DNA to incorporate new applications, and scale up to support increasing data volumes as the business grows.

Janne Hankaankorpi concludes: “Now that we have Oracle Database running on state-of-the-art IBM Power Systems servers, we’re better positioned than ever to deliver outstanding levels of service to all of our customers.”

Solution components

- Oracle Database
- IBM® FlashSystem® 900
- IBM Power® System S822
- IBM Real-time Compression™
- IBM Spectrum Control™
- IBM Spectrum Virtualize™
- IBM Virtual Storage Center

Take the next step

To learn more about IBM Power Systems, please contact your IBM representative or IBM Business Partner, or visit the following website: ibm.com/systems/power/

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