Hewlett Packard Enterprise

Bolagsverket
Swedish Companies Registration Office

Bolagsverket: innovating for entrepreneurs

Migration from mainframe to open HPE platform simplifies maintenance, cuts costs

Objective
Support businesses in Sweden more efficiently, while reducing risks and costs

Approach
Migrate mission-critical environment from mainframe to open HPE platform with the expertise of HPE Technology Services Consulting and their Mainframe Migration Center of Expertise

IT Matters
- Experience unprecedented stability, without unplanned downtime during and after migration
- Receive responsive expertise from HPE Technology Services Consulting
- Boost ongoing innovation
- Source IT talent with ease

Business Matters
- Avoid business interruption
- Establish long-term support for technical platform
- Decrease risks and provide "future-proof" solution
- Improve platform capability for development and testing projects
- Create convenient new online services

Bolagsverket, the Swedish Companies Registration Office, found that resources and expertise to support their mainframe were becoming scarcer, and costs were escalating. The organization worked with HPE Technology Services Consulting to migrate from a Unisys mainframe to HPE technologies.

Bolagsverket aims to make starting and running a business in Sweden quick, easy, and efficient. The government organization helps entrepreneurs with a variety of processes: registering their companies; filing annual reports, registering corporate mortgages, and accessing information for business startups. Bolagsverket has 300 staff interfacing with entrepreneurs and companies, as well as additional staff supporting internal needs such as HR and finance.

All of these business processes rely on information technology (IT). Previously, Bolagsverket's technology foundation ran a mainframe with several custom-developed COBOL applications. These supported everything from processing online transactions for paying fees for items such as annual reports, to supporting

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— Inga Otmalm, Chief Information Officer, Bolagsverket

business registrations. These mission-critical applications run nearly 100% of Bolagsverket's business, making any downtime an enormous risk.

Aging infrastructure impedes innovation

In 2010, Bolagsverket conducted an IT systems study and found that skilled experts to support the mainframe platform were becoming scarcer. Creating new, innovative solutions was slow due to lack of sophisticated software development tools. In addition, it was difficult to integrate with other external systems such as those used for online transaction processing.

"The development tools were lacking and skills for the mainframe platform were shrinking," says Stefan Ellström, IT business developer for Bolagsverket. "When we looked at the surrounding world and other government organizations, we saw we were falling behind others—something we refused to do. We needed a future-proof alternative for our core business applications."

Rising, unpredictable costs

Costs were also becoming a concern, because the mainframe platform used a pay-per-transaction pricing model. Every time a user, internal or external, transacted with the mainframe, Bolagsverket was charged a certain amount.

Although this "pay per use" model seemed reasonable at first, it became expensive and unpredictable because Bolagsverket found it difficult to foresee how many transactions users would make with the organization. As an example, citizens might request the same business information again and again. With every interaction using the mainframe, it created additional expense for Bolagsverket, and negatively affected the organization because they did not garner additional compensation.

In addition, Bolagsverket wanted to create a parallel computing environment for test and development to improve the quality if its custom-developed applications. This required more use of the mainframe, causing increasing expenses for Bolagsverket as they attempted to provide innovative new services and capabilities for entrepreneurs.

HPE, hands-down

After evaluating several vendors, Bolagsverket unanimously chose Hewlett Packard Enterprise (HPE). The Swedish government has strict supplier-negotiated procurement requirements for new IT systems, and HPE was the only vendor that met every one of them. These requirements include, for example, line items such as zero interruption to business operations, reduced operating costs, and the ability to deliver more cost-effective services.

100% business continuity, during and after migration

HPE Technology Services Consulting moved Bolagsverket's business-critical applications to a new open standards-based, HPE platform using HPE ProLiant DL380 Servers running SUSE Linux® Enterprise Server 11 operating system, Micro Focus Visual COBOL, and an Oracle® database. HPE Technology Services Consulting, utilizing their Mainframe Migration Center of Expertise, carried out the migration using tools and frameworks developed by HPE, with minimal impact on end-users, and no decrease in current mission-critical business operations.

"The HPE Technology Services Consulting team was highly skilled," says Bolagsverket CIO Inga Otmalm. "They had expertise in so many different areas that covered all of our needs, and they worked well, and hand-in-hand with our internal team. One consultant from HPE continues to work with us to make advancements to the infrastructure, and he also has been very savvy and responsive."

Bolagsverket has had zero issues with its environment. Part of the reason is the stability and robust performance of the HPE ProLiant DL380 Servers. The servers also provide unparalleled scale-up expansion to power Bolagsverket's databases and applications.

Rock-solid stability and innovation enabled

The new environment has increased Bolagsverket's business agility. It allows parallel development and testing and enables them to run their core applications, for at least the next decade, without worry. The organization was able to convert from the mainframe to the HPE solution with zero downtime, during and after the migration. "The HPE solution has been exceptionally stable. We have had no incidents related to the migration, or afterward," says Otmalm. "We are very impressed."

The advanced infrastructure has freed Bolagsverket to innovate. A phased migration based on proven methodologies developed by HPE Technology Services Consulting allowed Bolagsverket's software development team to continue working to improve core business applications. Ample development tools and talent were available for the new open HPE platform, giving Bolagsverket the opportunity to revamp its software environment in conjunction with HPE to replace outdated or unnecessary software and deliver innovative new solutions. In addition, the HPE solution enabled the introduction of more cost-effective online services to support Sweden's business entrepreneurs. These services have increased convenience for businesses by providing online processes, reducing fees, and accelerating processing times.

"During the migration project, we were able to put extra effort into software that increased our security and allowed us to eliminate legacy software and old documentation that were no longer necessary and were weighing us down," says Ellström. "Overall we were able to create higher quality, more robust solutions that delivers extra value to our business users."

Customer at a glance

Applications
- Oracle Enterprise Edition database, version 11.2 Oracle Tuxedo

- Oracle Pro*COBOL

- Micro Focus Visual COBOL

- IBM WebSphere MQ

- GNU C/C++/JCC

- Custom-developed applications, primarily created in COBOL

- SUSE Linux Enterprise Server 11 SP2 operating environment

Hardware
- HPE ProLiant DL380 Servers

- F5 Networks BIG-IP 1600 load balancers

HPE Technology Services Consulting
- HPE Technology Services Consulting Sweden

- HPE Mainframe Migration Center of Expertise

Reduced TCO

The move to a modernized infrastructure has reduced costs on several fronts. The HPE open platform offers predictable costs - without the uncertainties of per-transaction pricing. This allows Bolagsverket to reduce costs and more easily balance the books at year-end. The end result is reduced overall operating costs and more competitive IT purchasing in the future due to a wealth of open systems-based options.

The move to open systems, including the SUSE Linux operating environment, allows Bolagsverket to engage with more cost-effective inside and outside development resources to integrate with other systems and ultimately create new applications such as e-services to support businesses in Sweden. Because the software applications maintain the look and feel of the original systems, minimal training was required for users. Cost reductions have also resulted from the introduction of more efficient, self-service online services to support Sweden's business entrepreneurs. As a result of these innovations, Bolagsverket has reduced their total cost of ownership and provided a more "future proof" model that has decreased risks and enhanced development possibilities. As well as quality.

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