Client Case Study

Fujitsu’s Legacy Modernization Methodology Helps an Agency of the Alberta Government Develop its Mainframe Retirement Strategy

Profile
The client is an independent agency of the Government of Alberta, Canada. As part of its role, the agency collects and disseminates information regarding resource development within the province.

Business Need
The agency’s IT business goals are focused on efficient processes to gather and distribute information internally and with external clients. The key is to enable their processes for e-business over the Internet and to ensure that accurate, comprehensive and current information is readily available.

The agency had a long-term investment in mainframe applications dating back to 1982. Many of these applications were developed using the IDMS database management system. Beginning in the mid-1990’s, new applications had been developed using Microsoft's client/server and web-based technology. Although there had been some mainframe application retirements, change was hindered by the complex relationships between the mainframe applications and the data. That complexity was further compounded with daily data flows between the environments and a lack of real-time access to all information assets across the multiple information environments.

In 2001, the client undertook an assessment of the total effort and cost to replace all remaining mainframe business applications. The agency recognized that the increased complexity of retaining multiple information environments lengthened the time required to respond to business change. Since 1997, the agency's direction had been to retire mainframe applications as new applications were developed in support of key business initiatives.

The agency was increasingly impacted by a shortage of experienced staff with the skills to maintain the applications that were developed using mainframe technologies. In addition, the need to maintain and enhance these older applications had limited the opportunities for staff to develop new skills with more advanced technologies such as the Microsoft .NET Framework and SQL Server.

Furthermore, the mainframe platform was shared with another department of the Alberta Government, which was also investigating a retirement strategy. The agency did not want to become the only remaining user of the mainframe environment and was interested in developing a coordinated exit strategy with the other remaining department. For these reasons, the agency intended to retire its mainframe applications and migrate to Intel-based hardware using Microsoft Windows Server and .NET Framework technology.
Approach and Scope

In order to resolve the problem, the agency required a retirement strategy based on an assessment of its mainframe applications portfolio. The assessment covered the applications used by a single department, representing over 50% of the application portfolio and containing interfaces to most of the remaining applications. It also focused on valuating the different mainframe migration options and resulted in a migration plan that was more detailed and contained a more accurate assessment of the costs of migration.

Fujitsu Consulting tailored an approach that fit the specific needs of the client. Using the proven Macroscope® Legacy Modernization Methodology to guide the strategy development, Fujitsu Consulting also leveraged its models for Extended Enterprise Architectures in order to surface the application architecture needs of the current mainframe applications. The need to implement new Web technology standards that would enable e-business functionality within the applications was identified during this process.

Using this approach, Fujitsu Consulting built potential retirement scenarios as a basis for analyzing various options. With Fujitsu Consulting's experience and in collaboration with key client staff, various scenario options to retire the mainframe were analyzed.

The first scenario looked at retiring the mainframe by taking the existing applications and migrating them based on their current functionality and scope. The second scenario involved assessment of the overall data workflow of the information processed by the selected applications. The third scenario grouped the applications into pre-defined business areas and the fourth scenario approached the migration by examining the functions of data collection, processing and reporting for the agency. The recommended approach was a hybrid that leveraged the strengths and managed the risks of each of the four individual scenarios.

Having achieved consensus on the retirement approach, Fujitsu Consulting built and validated sequencing criteria for retirement of the applications selected for analysis. They then used the criteria to develop a high-level release plan to provide a clear way to launch the retirement process.

Results Achieved

The key outcome was the development of a multi-year plan for the retirement of the mainframe applications. The retirement plan also detailed the activities required to complete enterprise standards in selected areas.

The key client stakeholders for the selected application areas now support a single retirement strategy. Using this strategy, the agency is now developing a plan to secure the funding and other resources to support the multi-year mainframe retirement program.

With the mainframe application retirements, they are confident that their new information environment will:

- Reduce the complexity of the overall application portfolio
- Increase the ability to be more responsive to business demands
- Eliminate mainframe operating and application support costs
- Eliminate the need for specialized mainframe skills within the departmental IT staff
- Improve real-time access to the data stores by reducing the delays imposed by data movement

About Fujitsu Consulting

A trusted provider of management and technology consulting to business and government, Fujitsu Consulting is the North American consulting and services arm of the $43.2-billion Fujitsu group. Fujitsu Consulting integrates the core expertise of the Fujitsu companies and its partners to deliver complete solutions in the areas of enterprise information management, packaged application implementation, legacy systems modernization, IT governance, managed services and business process services. Through its full range of IT consulting, implementation and management services and its industry-recognized strategic approach, Macroscope®, Fujitsu Consulting enables clients to build more value into their IT investments and drive their leadership in the marketplace.

We work with you to create solutions and produce results that drive your business.