Case Study
New Brunswick Department of Public Safety

» Fujitsu has built a solid platform on which we can build. It is the foundation of our modernization program and will help us evolve as an organization so we can continue to keep the roads of New Brunswick safe for everyone «

Robert Cyr, Program Director, New Brunswick Motor Vehicle Branch

The customer
New Brunswick is the largest of Canada’s three Maritime Provinces and was one of the first to join the Dominion of Canada in 1867. It today boasts a varied and increasingly multicultural population with a total population of 729,997.

The Motor Vehicle Branch provides licensing and registration services for motor vehicles and drivers, driver schools and instructors, auto dealers and inspection stations. The Branch is also responsible for the accurate maintenance of all driver records including infractions and suspensions, reinstatements and traffic accidents. The primary objective is to ensure that only safe drivers maintain their driving privileges.

The challenge
New Brunswick’s Motor Vehicle Branch (MVB) relied on a shared legacy mainframe environment to capture and process all transactions relating to vehicle registration and licensing. The problem was that this platform was reaching end-of-life and facing increasing risk to long-term sustainability. It also ran on the COBOL programming language – an outdated code that fewer graduates are fluent in.

“The legacy system had been built up over the years and had become incredibly complex and difficult to run. We needed highly skilled technical staff to help with the simplest of requests and accessing the right data took too long,” explains Robert Cyr, Program Director.

“Combine this with the fact that the platform was reaching end-of-life, it was clear we needed to find a new system that would be fit for purpose, fast and reliable.”

The organization also wanted to modernize its whole architecture and business ethos. Following a series of internal workshops, it found that most employees were so focused on transactional activity, and as a whole lacked the time and information to perform more strategically. It developed a three stage roadmap that would begin with replacing the legacy system and then progress to modernizing the organization as a whole.

“The perception of value within the organization was lacking – our staff have needed to be overly focused on process due to inefficiencies, without having a broader awareness the organization’s positive impact to making our highways safer,” adds Cyr. “For example, we had not been able to analyze operational data easily to determine better where action can be taken to reduce risk. Installing a new platform would be the first step in allowing us to be more proactive.”

THE CUSTOMER
Country: Canada
Industry: Public Sector
Founded: 1867
Website: www.gnb.ca

CHALLENGE
The New Brunswick Motor Vehicle Branch was burdened with an out of date legacy mainframe system that was overly complex and costly to maintain. It wanted to migrate its business critical applications to a more flexible, modern platform to simplify support and lower costs.

APPROACH
Fujitsu used its PROGRESSION suite to automate the conversion of 1.5 million lines of code; 110 database tables; 40 million data records; and 867 business logic programs, migrating away both online and batch programs from the COBOL mainframe to a stable, reliable solution in a .NET environment.
The MVB invited 16 vendors to provide information on how they would address the problem. One of the mandatory requirements was being able to demonstrate two successful examples of a similar project. Only Fujitsu had the necessary experience. Moreover, Fujitsu shared the opinion that this should be the first stage in a wider overarching plan.

The solution
Following a six month planning and design period, Fujitsu spent 18 months migrating nine subsystems one by one. A Fujitsu team drawn from Seattle and Quebec worked closely with the customer project team to form an effective integrated team to complete all aspects of the project including architecture, management, data/code migration, testing, and implementation. The project scope included migrating away both the online and batch programs from the Unisys COBOL mainframe environment and implementing a stable, reliable modernized solution in a .NET environment.

An automated conversion was used for converting the programs to a .NET environment, using the Fujitsu PROGRESSION suite. PROGRESSION is specifically designed to help organizations migrate from legacy mainframes to modern platforms. It leaves business logic unchanged, doesn’t require retraining of employees, it’s free of licensing (recurring fees) and includes no run-time. PROGRESSION converted the programs into C# while data was hosted in a SQL Server environment and batch jobs converted into PowerShell scripts.

“The look and feel of the new environment is virtually identical to the last one so our employees are comfortable with it – what has changed is the engine underneath the hood,” comments Cyr. “The great thing is Fujitsu delivered it on time and under budget with a very clean implementation.”

In total, the Fujitsu team converted 1.5 million lines of code; 110 database tables; 40 million data records; and 867 business logic programs. To go live, the MVB simply took the mainframe offline on a Friday evening, brought all the data into the new system and were back up and running by Saturday afternoon, thus minimizing any disruption to the business. The new system is hosted in a government data center.

THE BENEFIT

- The new system can be managed in-house without the need for expensive external consultants
- The modern platform does not require specialist COBOL knowledge meaning finding new staff with the right skills is much easier
- Its stability ensures maximum uptime and enables it to process 30 million transactions per year
- The interface is identical to the previous mainframe solution so employees are comfortable with using it and no special training is required

The benefits
The MVB now enjoys the same functionality on a robust platform that is future-proof and can handle 30 million transactions per year. The MVB predicts it will help it bring down costs while still delivering an excellent service.

“We used to have to bring in expensive consultants but with the Fujitsu solution, we can handle its maintenance in-house. Even though we have a support contract with Fujitsu, we haven’t yet needed to call them for anything significant,” says Cyr. “This keeps costs low without compromising on performance. We were worried that going from a mainframe to a server platform might degrade performance but so far we’ve had no complaints. Fujitsu remains to be a great partner, post-implementation.”

With the replatformed system in place, the MVB has continued its modernization program. The server-based solution plays a key role in enabling the transformation of the business to become more strategic and proactive, as it has provided the MVB a solid solution to operate its business while it continues to improve.

Conclusion
“Fujitsu has built us a solid platform on which we can build,” concludes Cyr. “It is the foundation of our modernization program and will help us evolve as an organization so we can continue to keep the roads of New Brunswick safe for everyone.”

“Fujitsu goes the extra mile to ensure customer satisfaction – even if that means driving six hours to come and see us. The team was flexible, responsive and gave us great confidence.”

About Fujitsu
Fujitsu is the leading Japanese information and communication technology (ICT) company offering a full range of technology products, solutions and services. Over 170,000 Fujitsu people support customers in more than 100 countries. We use our experience and the power of ICT to shape the future of society with our customers. For more information, please see http://www.fujitsu.com