

Metex Legacy Application Modernization Solution

Customer Solution Brief – Statistics New Zealand



Customer: Statistics New Zealand
Web Site: www.stats.govt.nz
Location: Wellington, NZ
Size: ~1,000 employees
Industry: Government

Organization Profile

Statistics NZ is responsible for collecting and managing statistical information for New Zealand. It has been in operation for nearly 120 years.

The information provided by Statistics NZ is used by all levels of government and business in making decisions that contribute to New Zealand's social and economic development.

StatsNZ has a very complex environment with over 250 separate statistical production systems and over 300 applications.

Statistics New Zealand successfully migrates complex applications from Centura to .NET using Metex's Modernization Solution

"Metex was very flexible in helping us manage our governmental processes to deliver well tested native .NET applications that fully met our needs"

Tony Vanderburg, Program Manager, Statistics NZ

Background

Statistics NZ had over the years evolved a very complex technology environment with over 250 separate production systems with over 300 applications. These systems are frequently interconnected and dependant on one another. The systems were originally migrated in the 1990's from a mainframe environment to Centura/Sybase.

By 2008, Statistics NZ realized that most of their high profile systems relied on legacy technology which created issues like:

- Difficult to source or train skill sets for Centura
- Reliance on 5 staff to support over 30 business critical applications
- Unable to support new standardized models
- Significant functional and technology gaps compared to .NET
- Further delays would expand risk beyond acceptable levels

Statistics NZ dependence on technology and the limitations of the platforms were impacting its ability to evolve to support changing demographic requirements. In 2009, Statistics NZ established a Legacy Mitigation program to migrate to newer supported technology.

Business Challenges

Statistics NZ realized that trying to complete the project as a big bang was almost impossible. Not only would it consume all available IT resources, it would require significant staffing by all areas of the organization which would effectively halt the ability to support existing commitments or undertake new improvement or innovation projects.

Due to the complexity and nature of the statistical applications, testing became a significant issue. The databases required were very large and even a simple restore took significant time. In addition, the test cases were very complex and some of them required over 2 days to complete.

StatsNZ did not have test cases for the existing systems or dedicated test teams to complete them. This issue was resolved when Metex provided support, technology and proven processes to ensure completion of the test cases and ensured that they provided proper coverage.

Business Goals

In addition to addressing the Centura platform issues, StatsNZ identified a number of goals they wanted to realize from this project including:

Functional

- Take advantage of rich UI features in .NET
- Provide current documentation and test cases

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Technical

- Elimination of Centura to avoid vendor support and resource restrictions
- Take advantage of the scalability of .NET

Financial

- Reduce support costs
- Reduce hardware costs through scalable architecture
- Improve productivity through use of common components
- Cheaper and faster than any other option

Organizational

- Eliminate risk from unsupported software and lack of resources
- Leverage the large pool of .NET programmers available

Solution

After an extensive evaluation of potential partners, StatsNZ selected Metex to perform the modernization of their suite of Centura applications.

Metex's Application Modernization Solution allows customers to leverage their investment in existing legacy applications by automatically reverse engineering existing code bases into its component tiers and then forward engineering it into N-Tier architecture using modern languages.

Using a sophisticated set of in-house tools and a proven methodology (developed over numerous years), Metex was able to recycle and transform over hundreds of thousands of lines of Centura code to native .NET code.

Metex also provided re-engineering services to optimize the usability and flexibility of the User Interface.

Benefits

StatsNZ was able to migrate applications at a pace that supported their budget and resources. They were able to manage ongoing business operations while eliminating a material risk to their business. The new systems are now using a common architecture with shared standard components which significantly reduces maintenance.

Their dependency on specific resources has been eliminated and their ability to support future business needs greatly enhanced. The modernized application now leverages all current technologies, architectures and frameworks and complies with both .NET and StatNZ's specific coding and architectural standards.

Advantages

Risk Mitigation:

"The Pilot Project proved to us that Metex could deliver and provided us with the confidence to persist with the larger and longer projects."

Transparency:

"Regular communication through demonstrations, conferences, status reports and the Metex ClearView system allowed us to closely track the progress."

Fixed Price Solution:

"The fixed price together with Metex's proven history of successful migrations significantly reduced our project risk."

Flexibility:

"Metex was able to work with us in coordinating scarce internal resources with protracted testing processes extended time periods to ensure successful completion."

Reduced TCO:

"The following factors reduced our TCO in the long run: shared components and common architecture reduced the complexity of the applications; the native .NET code meant that readily available resources could support the system; complete test cases and documentation reduced the cost of ongoing maintenance."

Improved System Reliability, Availability and Serviceability (RAS):

"The overall complexity of the system is reduced now because all the applications use a common architecture and shared components. The move to an N-Tier architecture greatly improves the scalability and redundancy within the system. In addition, we now use many standard .NET features for system management, security and operation, which are superior in function and reliability."