Transit New Zealand Reroutes Information to Avoid Traffic Jams

New Zealand's state highway network takes drivers through 11,000 kilometres of some of the most beautiful scenery in the world. Transit New Zealand (TNZ) manages those highways, which carry half the country's traffic, to make sure that drivers have smooth and efficient routes to their destinations. Unfortunately, until recently, the flow of information within TNZ was anything but smooth and efficient. TNZ was in dire need of an upgrade to its management information systems. The public face of TNZ provides drivers with information about the condition and safety of its roads. Its main mission, however, is to work with external contractors and government bodies that decide on highway building and maintenance projects. TNZ needed to freely exchange information with all these constituencies but lacked the integrated information systems to do so. "Our content was stored in several siloed systems", says Geoff eats, TNZ's chief information officer.

"This made it difficult for our employees to find the information they needed to do their jobs. For example, to initiate a road repair project using the same contractor that had worked on the road previously, we had to consult a number of disparate systems to find contractor information, spec sheets for the old job and the new repairs, and the government road construction standards that were current at the time. It took a lot of time". A siloed system is one that stands alone, disconnected from surrounding systems. Such systems typically stand in the way of establishing one true integrated enterprise information system. TNZ realized that what they needed was an enterprise-wide information management solution so they could centrally manage information from all departments and save it economically for easy and timely retrieval. Because the information would be viewed by different groups of users for different purposes, the system would need to present information in multiple ways. If TNZ accessed organization-wide data from one central interface, the walls dividing its siloed systems would have to come down. TNZ worked with an information system provider to develop a document, records and content management system within one repository. The new system provided a consistent and customizable framework that allowed users access information through scheduled, demand and drill-down reports. The new MIS could also provide an interface to the corporate applications and services that TNZ developed over time as needed. The first phase of the system provides access to documents of all types as well as contact data from its customer relationship management and information held in its road asset maintenance management database. This database is one of TNZ's largest repositories of information, containing millions of items of data relating to everything from the technical condition of various stretches of roads and maintenance records to details on traffic lights and signage. "You can go into this database and find out what sort of gravel has been used to build a road and even what the road surface characteristics are like", says Yeats.

The new system also provides many other benefits. TNZ is better able to control costs and manage the growth of its information while ensuring the currency and accuracy of that information. Searches made across multiple systems are completed with sub-second response times. Because the new system uses commonly recognized standards, TNZ road information can be published through third parties simply by giving the vendor access to the information system. The new system provides solid business value by integrating, analyzing, and optimizing heterogeneous types and sources of information throughout its lifecycle to manage risk and create new business insights. It is designed to get the right information to the right people or process at the right time to take advantage of opportunities. "By responding to opportunities and threats with information on demand, we can lower our costs, optimize our infrastructure, gain control of our master data and manage information complexity", says Yeats.

Future initiatives include electronic collaboration, browser-based content creation, and a link with TNZ's geographical information system. Because the system is designed to comply with Java Specification Request (JSR) 170, an emerging standard for accessing content repositories, it will be easy for TNZ to continue to realize benefits from the system.

Questions

1. How were ‘siloed systems’ affecting the flow of information throughout TNZ?
2. What business value does the new system provide for TNZ?
3. Provide two reasons that TNZ wanted to use commonly recognized standards such as JSP 170 in the design of its new system.
4. Why does TNZ find it beneficial to allow third parties to publish information stored in its systems?

SOURCES: Staff, ‘Transit New Zealand Drives Business Transformation with IBM Enterprise Content Management Solution’, *IBM Case Study,* www-306.ibm.com/software/success/cssdb.nsf/CS/HSAZ-6J728L?OpenDocument& Site=cmportal, January 13, 2006; ‘Transit NZ Picks IBM for Enterprise Content Management’, *iStart,* www.istart.co.nz, September 2005; Transit New Zealand (website), www.transit.govt.nz.