

Data Visualisation Takes RightShip's Big Data Analytics to New Markets

Case Study

RightShip is an Australian organisation that has been making waves in the global maritime industry since its inception in 2001. The developer of the world's most comprehensive maritime risk management system,

RIGHTSHIP



The Right Software

RightShip's internet-accessible software enables charterers and shippers to avoid preventable accidents by evaluating and comparing risk factors such as incident history, vessel age and terminal performance feedback across individual ships and groups of vessels. It's invaluable information for any organisation keen to manage maritime risk by identifying and eliminating substandard ships from their supply chain.

The software's importance to the industry has been evident in its adoption. RightShip's tools are used by more than 2,800 people in over 250 organisations across more than 40 countries. Within the last few years the company has received numerous accolades including the Australian Prime Minister's Exporter of the Year award, the Business Services Exporter of the Year award and runner-up in the Environmental Solutions category at the Governor of Victoria Export Awards.

Analysing a sea of data

Wayne Blumenthal, Commercial and Strategic Manager, RightShip, says, "Customers typically use our software to understand things such as the likelihood of a particular ship travelling from Port A to Port B safely."

While the question may seem simple, the answer is derived through a complex series of algorithms. At the heart of the system is a large data warehouse that contains up-to-date data on all of the world's 76,000 commercial vessels over 500 tonnes in size.

In RightShip's early days, the results of the analysis were presented to clients in easily recognisable but static formats such as Excel or PDF files. However, over time, enhancements have seen the software become much more sophisticated, far more interactive and ultimately, far more valuable. Some of the most significant changes have occurred in 2015, with the reconstruction of the data warehouse system and the creation of a next-generation platform, known as RightShip Qi, which is capable of harnessing big data, predictive analytics and real-time risk assessments to better target substandard maritime performance.

Case Study

Visualisation the key to success

The project has been carried out with advice, guidance and on-the-ground technical assistance from Altis Consulting, one of Australia's leading business intelligence and data warehousing consultancies.

"The aim was to upgrade the data warehouse so it could be used more effectively, and also so it could be used in real time", Blumenthal says.

As part of the upgrade, Altis Consulting recommended the introduction of Tableau, an analytics software solution specialising in clarity of information and data visualisation. The visualisation tools would take data from Qi, and provide the results in easy-to-read reports that helps users to make sense of the mass of data.

In the past months, Altis has guided the RightShip team through the Tableau deployment, organising training in the software and facilitating the attendance of RightShip staff at best practice visualisation training with Stephen Few, a globally-acknowledged expert in the practice.

Blumenthal believes this has been a key contribution in the latest evolution of the risk management system. "We had all the data we needed in the data warehouse but we were struggling with how to present it in a way that was useful and interactive," he admits. "Altis gave our team the knowledge to utilise the product and maximise its use to benefit our customers".

Kris Fumberger, RightShip's Sustainability Manager, adds, "We needed to take the results from a static Excel or PDF format and make them more dynamic as well as user-friendly, so that users could interact with it."

"Altis Consulting opened our eyes to Tableau and to how data could be visualised," Blumenthal adds.

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Wayne Blumenthal, Commercial and Strategic Manager, RightShip

Making a mark on the global stage

Today RightShip's Tableau data set contains 76,000 data points. No longer solely focusing on risk, the data set has been expanded to include an environmental aspect which allows users to measure carbon emissions per tonne of cargo, per tonne nautical mile. This Greenhouse Gas (GHG) Emissions Rating also compares shipping performance, presenting vessel ratings according to the standard (and industry-familiar) European A-G energy efficiency scale, and as part of RightShip's 'giving back to industry' policy is freely available through www.shippingefficiency.org

RightShip's platform has also been used to provide detailed insights and support for the Australian delegation to the 2015 discussions recently held at the United Nations' International Maritime Organisation's (IMO) Marine Environment Protection Committee. Here, the degree of detail, the precision and clarity of information provided by the upgraded platform, the interactivity and real time nature of the data are directly influencing the global shipping industry's position on vessel emissions and are feeding into international climate change talks.

"The platform takes data and turns it into information: it makes it useful," Blumenthal states. "It provides a framework for users to choose between the relative efficiency of ships, and it achieves this on a factually correct basis."

Future considerations

Blumenthal and Fumberger are now exploring additional ways to leverage the power of Tableau within RightShip's business. They have already identified new subject areas ripe for reporting, including Port State Control Inspection, Incident, Rating and Vessel History. This information is particularly important in providing Qi users with detailed vessel changes which can then be utilised in the risk assessment process. To lay the groundwork for these projects, Altis has provided a framework in which further subject areas can be readily added enabling powerful cross-subject area analysis.

Case Study

"We're keen to develop the product, and to keep on using Tableau to come up with new ideas on how we can improve the customer view," Fumberger says.

Blumenthal adds, "There's not going to be less data in the future. So we're looking at ways to make our unstructured and structured data more meaningful. Our visualisations at present focus on sustainability, but that same information is recyclable across all the different work streams of the organisation.

"What we have with this platform is an enabling mechanism that allows us to integrate new information day-to-day. Using the Tableau graphs that Altis Consulting has helped us with, we have the capacity to innovate and provide customers with more information. This keeps us a step ahead of our customer needs as well as those of the industry. It is allowing us to redefine what we are capable of doing," Blumenthal concludes.

About Altis

Altis is the most experienced, vendor-independent information management consultancy in Australia and New Zealand.



Providing Business Intelligence solutions to a wide range of industries since 1998:

- Altis has a unique approach to providing clients with efficient access to their information and maximizing the usefulness and profitability of that information. This approach has been proven in numerous countries and across business, government and Not for Profit sectors.
- Altis partners with acknowledged world experts that provide training and direct access to thought leadership in: Data Warehousing, Data Management, Business Intelligence and Analytics.
- Through their exceptional training and people management practices Altis attracts and retains the very best people in the industry, as evidenced by back to back wins in the BRW best places to work survey.

Established in 1998, Altis Consulting is a 90-person privately-held Australian company offering specialist consulting expertise in all aspects of Business Analytics, Business Intelligence, Data Management and Data Warehousing. The company's services include strategy, planning and architecture, solution delivery, and managed services.

While the company has experience in almost every industry sector, Altis Consulting has particular expertise in telecommunications, government, logistics, Insurance, health services and utilities. Clients include, Allens Arthur Robinson, Sydney Airport, Department of Health and Aging, Department of Defence, Department of Human Services, Lend Lease, Macquarie Bank, Reece, Independent Liquor Group, Suncorp Metway, IAG, Qantas, and Telecom New Zealand.

Altis is also the Australian New Zealand partner for Kimball University and Stephen Few - the foremost authorities on data warehousing and data visualization. Altis Consulting has offices in Sydney, Melbourne, Canberra, Auckland and London.

Call Altis today to find out how we can help maximise your business performance.
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