

ILCo delivers superior reporting with QlikView and saves millions through improved forecasting and decision-making

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Mario Chetcuti General Manager, ILCo

ILCo, the Integrated Logistics Company, integrates the Dalrymple Bay Coal Chain, a major coal supply chain made up of 14 stakeholders, including mining companies, rail and terminal operators, rail network manager and government agencies in the northern Bowen Basin part of central Queensland, Australia.



The industry is responsible for millions of tonnes through coal exports and the smallest process improvements can lead to millions of dollars in savings. To find those savings ILCo knew they needed to measure what was happening, share the information and then act on what they learned. However, during ILCo's first two years of operation it became apparent that there was a lack of transparency and understanding in how the 14 participants, who all rely on each other, work together.

Lack of transparency

ILCo's General Manager Mario Chetcuti explains, "During the first six months of operating it became very clear to our board that there was a lack of transparency in information flow across the chain. We discovered that through issues like trying to get a coal chain forecast together, there was disparity of information across all the service providers and a lack of information across certain coal chain performance indicators."

Each of the companies was collecting its own data and measuring what they believed was important. However, this didn't take into account what was important to the other participants. For example, rail operators were reporting on train cancellations whereas punctuality was important to their supply chain partners.

In order for the coal chain to work as efficiently as possible a new, holistic approach was needed – one where the information collected and shared could be used for mutual benefit and profit.

Following that revelation, ILCo engaged a consultant to define common performance indicators across the coal chain. They ended up with a list of 79 key performance indicators that were

Solution Overview

ILCo

ILCo is the independent operator of the Dalrymple Bay Coal Chain, a major coal supply chain made up of 14 mining companies, train line operators, logistics companies and government agencies in the northern Bowen Basin part of central Queensland, Australia.

Industry

Logistics and Mining

Function

Forecasting, Planning and Operational Management

Geography

Central Queensland, Australia

Solution

Through careful negotiation, 79 performance measures were agreed across all 14 participants. Each participant in the coal chain then provided ILCo with their part of the data to support the measurement of the performance indicators. This was loaded in the SIBA PMF QlikView data repository and made accessible to all the participants, creating a single, agreed version of the truth.

Benefits

By having a single version of the truth all of the participants in the Dalrymple Bay Coal Chain are able to focus on improving the performance of the coal chain rather than wasting time arguing over which data is correct. This has led to improved operational forecasting and smarter decisions when it comes to infrastructure investment.

Data Source Systems

Participant systems

QlikTech Partner

SIBA Solutions Pty Ltd



negotiated and agreed by all 14 participants.

The ILCo board then approved the development of a solution to bring together all the information required to measure and report on these performance indicators and create a Performance Management Framework (PMF). ILCo was designated as the

custodian and manager of the solution. “The challenge for us was that the 14 participants had already established their own internal reporting systems and structures. There were data streams going everywhere. The problem was that everyone would bring their own information to forums. That created a lot of angst as none of the data matched,” Chetcuti elaborated. For example, different parties had different definitions for common terms - there was no single agreed common version of the measure.

A remarkable solution

Working with the solution designer, SIBA Solutions, who created the performance management framework, ILCo used QlikView as the analytics tool. ILCo implemented the SIBA PMF QlikView solution as a way of tracking the 79 performance measures. By having ILCo and the 14 participants look at a common data set it is now possible to work cooperatively and find ways to deliver improvement value right through the entire coal supply chain. While Chetcuti was initially skeptical of the QlikView “data in memory” concept he was impressed by the speed and accessibility.

The data is collected by each of the participants in their different systems and exported as comma delimited CSV files. This is then aggregated in the SIBA PMF QlikView application. While the data loading process could be considered low tech it enabled ILCo and the participants to accelerate the deployment of the PMF application so that the benefits could be realised as soon as possible.

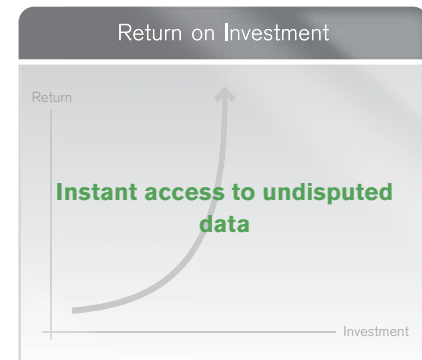
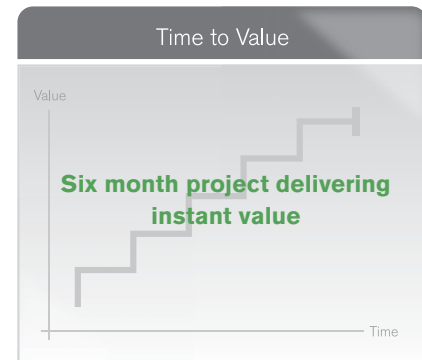
“The outcome for us has really been remarkable,” says Chetcuti. “At the different coal chain forums we have each month, from board to operational levels, we now have a common reporting system. We generate monthly reports for each forum and there’s one common set of data. The behaviour of participants has changed. The QlikView reports are now accepted as the truth, with reports coming from other sources questioned as soon as they’re produced and tabled”.

Originally, ILCo was looking at a traditional query and database style data warehouse. However, QlikView’s file-based data in memory delivers lightning fast performance. Unlike the traditional approach, QlikView works with data that is stored in a single file that’s loaded in memory. This is far faster than executing queries on data read from hard drives.

“We get almost instant access to the coal chain data,” Chetcuti says. “The first thing that hit me was speed - the ability to change the dynamics and see specific measures quickly. Being able to instantly see current performance and compare it to last week or last month is brilliant. Being able to instantly drill down from the high level to low level detail makes it easy to look at specific issues in the coal chain.”

Instant value

The payback on ILCo’s investment in the SIBA QlikView PMF was realised almost instantly. The availability of accurate and agreed data through the entire coal chain has led to smarter investment decisions. “The data is



being fed upstream into our planning areas to aid with master planning and forecasting, therefore providing aligned investment decisions based upon coal chain operations and improved levels of forecasting on what our coal chain assets are capable of doing collectively.”

“We have also utilised the information to drive improvement initiatives with the Board approving several operational projects to improve tonnage throughput across the chain,” said Chetcuti.

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