

# Streamlining operations through software integration

**Integration of the variety of software systems used to drive different business processes is a key element of IT infrastructure development. In maritime this can prove to be a complicated process, given the remote nature of many of a company's 'offices' – Valerie Cordemans, Fednav, told *Digital Ship* about how her company merged its shipping software with ERP**

Integration and automation of business processes are two of the most important drivers behind the introduction of ICT systems into any organisation.

Reducing the need for manual manipulation of data and creating greater efficiencies can help companies to reduce costs and increase competitiveness – operational goals that have grown in importance in recent times with the effects of a global economic downturn putting pressure on businesses in every corner of the world.

In the maritime industry, achieving a fully integrated system is complicated by the remote nature of the offices involved.

Enterprise Resource Planning (ERP) software systems by companies like SAP, Sage and Oracle are designed to work in a terrestrial environment and require special attention to operate with data being generated at sea and transmitted via satellite – a process that will require investments of time and money to achieve.

However, US maritime software company Veson Nautical has recently completed a comprehensive integration project with Canadian shipping company Fednav, which was willing to take on this challenge – *Digital Ship* spoke to Fednav and Veson Nautical about their experiences managing the software integration process in the maritime industry.

## Integration at Fednav

Fednav Limited of Montreal, Canada's largest ocean-going, dry-bulk shipowning, operating and chartering group, began 2010 by going live on Veson Nautical's Integrated Maritime Operations System (IMOS).

This installation was the culmination of a full-scale, carefully planned software integration project that started with the implementation of Oracle Financials in 2001.

Fednav's earliest steps on this road started in the late 90s, as the company came to the conclusion that the standalone systems that had served it well in the past were too limited to cope with the changes in the modern maritime industry.

Valerie Cordemans, project manager at Fednav, explains further: "We had an in-house developed software system that was showing signs of age. We knew it wouldn't be able to keep pace with our continued growth and expansion plans."

"Originally we had separate chartering, operations, laytime and accounting systems, as well as numerous Excel spreadsheets. None of the systems were linked, so in order to pass information from one business unit to another, the data had to be re-entered."

"This manual data entry was prone to error, and although it was the way people had worked for a long time, it was not the way we wanted to continue."

In early 2000, Fednav began researching a number of commercial maritime software offerings.

"However, we felt that none of the existing offerings met our needs, so we decided to begin with the accounting package first," said Ms Cordemans.



*Automating communication with the ships will be the final part of the integration project, requiring near-perfect accuracy*

"We implemented Oracle Financials in 2001. The plan was to wait until our staff was fully comfortable with that system before we would start another big project."

## Implementation and training

Fednav completed a successful implementation of Oracle Financials, and had reached a level where the company felt comfortable with the idea of moving to the next step – which was to go back to the software market to add the next piece in the puzzle, that could help the company to manage its maritime-specific functions while also interfacing with its accounting infrastructure.

"I went back to look at the software providers we had originally reviewed," said Ms Cordemans.

"Knowing how they had evolved over the years was a good indicator of how they might evolve in the future. We wanted to implement an overall solution for chartering and operations; linking it to Oracle was key."

"Two system providers were shortlist-

ed; after extensive demos we came to the conclusion that both of them had their pluses and minuses. However, what was very important to us was how well they understood our philosophy of working. Fednav is a very stable company and the partner would have to fit into our methodology."

Following that review, Fednav signed an agreement with Veson Nautical in July of 2008.

training 150 people for one month before going live. We have about 120 users but we also conducted demos for people who were not using the software directly. We wanted it to be a company-wide system."

"IMOS is very intuitive to use, but process changes are the biggest challenge with such an implementation. Clear explanations and having an 'open door policy' for end user concerns is crucial. In addition, being flexible and willing to review and possibly change traditional processes is a must."

"In our company there was a visible change in process for the chartering department. With an integrated system, everything originates from there; we wanted to make sure it proceeded smoothly from the beginning."

The project has continued to expand and develop since the 'go-live'. Veson updates the software on a regular basis with new features and functions, and staff have to be trained to take full advantage of them.

"Then we have re-training as we go forward," said Ms Cordemans.

"We have people asking themselves now 'how can I extract more added value from this system?' which is a great question. Additional, more extensive training will help the users to obtain additional value. It empowers our staff and ensures the software will keep working for us."

## Connected systems

At this stage, Fednav has now successfully integrated the vast majority of its on-shore software systems, across numerous sites in various countries.

"As of January 2010, IMOS and Oracle Financials were fully integrated, and we also began linking the DA-Desk port management software as IMOS offers that integration itself," said Ms Cordemans.

"I'd say we're about 90 per cent there with the DA Desk integration, and it functions very well, saves a lot of time and improves accuracy."

Fednav also has another custom-built system (Fildocs) for the company's FALLINE liner business, which is managed out of Antwerp.

Fildocs has two parts: it manages the quotations and bookings on one side and collects all the information for the bills of lading and manifests electronically from the various ports in Europe on the other side. It also handles all the freight invoicing within that system.

Fildocs is now linked with IMOS so that all of the invoicing data downloads into IMOS automatically.

## Next steps

Automating communication with the ships through Veson's Veslink application, and getting them fully integrated into the system, will be the next step in this project, with Fednav planning to migrate away from its current system where information is manually entered based on messages sent from the vessels.

The company has purposely left this part of the integration project until last, as it is deemed critical that if such a system is introduced, it should be done with near-perfect accuracy.

"We have to make sure that it's 100 per cent correct - if you have to check a message before it goes through, it is not real automation, so I really want to make sure that it is fully functional first," Ms Cordemans told us.



*"We wanted to implement an overall solution for chartering and operations, and linking it to Oracle was key" - Valerie Cordemans, Fednav*

"In effect, it is a separate, individual project on its own. One quarter of our fleet is owned and the rest is time chartered, so we want to find the best, most flexible solution. By the (Autumn) we should have it up and running on our own ships; by the end of the year we hope to have our entire fleet on automatic reporting."

Fednav would also like agents to send all 'Statements of facts' electronically via Veslink, so that no retyping is needed in laytime calculations.

Further down the line, once all of the integration work has been successfully completed, Fednav may introduce an even wider range of information into the overall system, particularly in relation to vessel routing.

"We're possibly looking at having weather routing information pulled into this," said Ms Cordemans.

"We have a Fleet Map [within IMOS], and it would be great to have the weather charts on top of that."

## Continued improvement

Fednav has enjoyed a number of benefits from the integration of IMOS, including an increased level of operational efficiency, less duplication of effort, and improved speed in getting information to the people who need it.

The ability to make better, more informed decisions as a result of this improved access to data has probably

been the area providing the greatest return on the company's software investment, Ms Cordemans notes.

For example, contracts, performance data, voyage information and other key data are all housed in the IMOS database; there is no need to open multiple windows or multiple programs to locate information.

Port disbursements are uploaded from DA-Desk to IMOS and finally into Oracle Financials, without having to re-enter data.

"It's very useful to have all of the information at your fingertips, in one system," Ms Cordemans said.

Fednav is now looking forward to completing full integration of all of its business

processes into the system over the course of this year.

The company sees working with vendors and the installation of software systems as a continuum rather than a finite process. New information is constantly being introduced, requiring different technology and processes to allow the organisation to exploit it to the fullest.

"It's a new system, which for some can be initially difficult to understand, but the staff realises the centralised, integrated approach is working, and there are some very good ideas coming out of it," said Ms Cordemans.

"It's going to take time, and we know

that, we don't want to rush anything - the business comes first, but we have this system in place now to support the business. We will continue to expand; if we need to re-engineer our systems along the way, we feel confident we can work with Veson to develop the ideas and create the systems."

In conclusion, Ms Cordemans comments: "I really liked how it turned out. Of course it's still an ongoing process, and it's a big change from how we operated in the past for everyone in the company."

"My work is never finished, but that's good. We are a forward-looking organisation and now we feel we have the systems in place to keep up with our pace."

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