

A wholesome transformation

by Alexander Buchmann, *Managing Director, Hanseaticsoft*

The global pandemic was highly challenging for many shipping businesses. Still, as the world moves on, it's time for companies to embrace some of the positives and look toward a digital future. Technology, digitalisation, and automation were probably not top of the agenda for many shipowners and operators before the pandemic, especially in an industry more traditional than innovative in its thinking, but things have changed.

Now companies are increasingly recognising that they need new ways of doing things to sustain future growth, and making use of digital technologies to automate processes could be the answer.

Some have already begun this journey. The pandemic saw shipping lines become more agile and adaptable in response to a changing operating environment, with many using digital technology for the first time. Last year's **report by Inmarsat** highlighted that the coronavirus pandemic was a "universal disruptor and catalyst for digital transformation." As such, the adoption of digital technology in the maritime sector will be three years ahead of previous estimates by the end of this year.

Many shipping managers are now willing to let go of old processes and take a leap of faith, employing technology that other industries have used for years to transform how they operate.

Data accessibility

One of these technologies is cloud-based maritime solutions, which some are realising can bring significant benefits to their operations after trialling such systems during the pandemic.

In the past, data synchronisation was a slow process, done three or four times a day. With 5G on board and a better Internet connection, ships can have real-time data

exchange with the office instead of sending out an email and waiting 12 hours for a reply.

Now companies can store data in one central place and make it accessible to everyone on land or sea from any device – computer, laptop, mobile phone, or tablet. This real-time sharing of data and information has been a game-changer. People no longer work in silos and can communicate and collaborate easily with their colleagues, transforming how a business operates no matter where people are. As data is centralised in the cloud, important information such as maritime instructions, crew schedules, and payroll data can be accessed by everyone, which speeds up communications and productivity.

Harvest time

Another core benefit is access to reams of data. Companies increasingly want analytics and insights into their business to inform their decision-making. Having access to data using digital technology enables companies to extrapolate valuable insights that can change how they do business in the future.

The cloud is helping maritime businesses become more efficient at data management and analytics. Real-time access to data across an entire fleet gives immediate visibility of what is going on, allowing for adjustments and addressing issues immediately. The ability to harvest and analyse data efficiently is helping companies be more agile and

dynamic to react quickly to any situation. This, in turn, saves them time and money.

However, it's not just any old data. Companies need to be able to access 'good data' that is consistent, high quality, and can be used for reports to gain insights into areas such as risk management, maintenance, purchasing, or finance. This allows them to make more accurate decisions and future predictions based on what their data already shows them. Tools such as Microsoft's Power BI make this easier when integrated into cloud-based systems and can enable data to be drawn from multiple sources and analysed in a central place.

Data becomes more than just a report and can be used to give the business clarity, uncover areas that need improvement, and highlight growth opportunities. Crew members can also be given greater autonomy and control over their data to manage their schedules, payslips, training, and other essential employment areas. The benefits this can bring along are huge: improving the way companies operate, streamlining processes, and increasing collaboration across the entire organisation.

Forced accuracy

Embracing digital technologies to start automating tasks is only the journey's start. The next step for companies to really take advantage of the benefits this brings is to ensure they have accurate data.

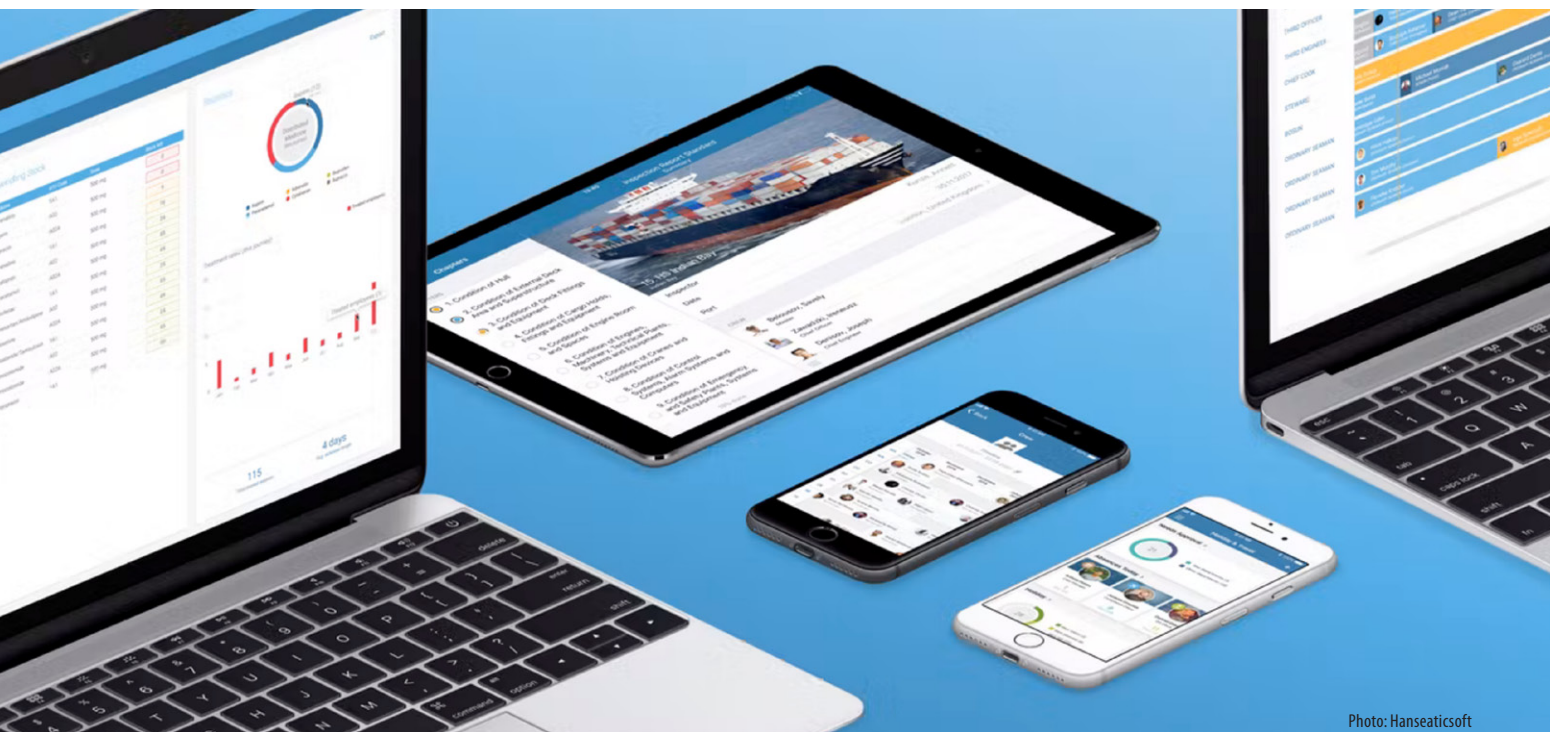


Photo: Hanseaticsoft

This is where companies can start to make real inroads to saving time and money and using their data to inform future actions. However, this is proving challenging for some organisations that believe they can get instant insights by “simply” implementing technology. Many shipping managers think that just because they have a great deal of data, it’s a straightforward process to make sense of this. Unfortunately, this is usually not the case, and we find that most data sets are neither consistent nor accurate.

It is, therefore, necessary to look at how data is captured and ensure it’s done in a way that produces consistent, complete, and quality data that can be used for reporting. It is critical that employees putting information into systems are doing it in the correct format; otherwise, mistakes can be made. For example, look at a simple request from a vessel to purchase essential items for the crew. A crew member might request the items in a digital order form correctly using a standardised catalogue, but at the last minute, someone adds, say, washing powder to the list as a free text. Instead of following the same process, they write the words “washing powder” on the form, skewing the digital process and making the data unreliable. A way around this is to use ship management software that guides and forces data to be inputted accurately and consistently; software that is rule-driven and demands that rules are followed every time so that the data set is precise and can be trusted to give a realistic picture.

This can often take longer to do, but the end result is managers have data they can use. The stricter the processes for entering data, the better the resulting insights, analytics, and calculations will be. The true benefits from automation then become apparent.

Process automation

A key area where companies see automation benefits is in purchasing. Companies using our cloud-based management software can use a standardised digital form sent to suppliers, who use the same form to offer their products. The system then uses this data to show the best prices automatically. It helps companies overhaul purchasing by automating the entire process and gaining real-time visibility into their budgets and operating expenditures. Having this reliable data also offers the option for more automation, e.g., linking purchasing and scheduling information to automate the delivery of goods to the vessel’s next destination.

Another area is maintenance. This can be automated so that maintenance managers have real-time visibility over the entire fleet and know where they are at scheduling jobs.

Keeping track of work centrally, precisely, and according to requirements and priorities is essential to ensure the fleet operates safely as well as for budget and labour planning.

Another example is our crew management software. Once a seafarer’s personal data is entered correctly, they can go into the system to add their hours and expenses. This automates payroll, and the money goes straight into their banks.

By automating these processes, companies save significant time and money on administration. It also provides trusted and reliable data that can be easily compiled into reports or analytics to help managers make predictions about future expenditure and take action where needed.

Gaining traction

Many shipping companies are now at the start of their digital automation journey. As they witness first-hand how digital solutions can help the business drive down costs, become more efficient, and stay competitive, we expect the industry to see a wholesome transformation as automation gains traction. ■



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