**BINARY BOSS** 

## Putting the numbers to work

The corporate position of Chief Digital Officer, or CDO, remains something of a novelty – particularly in shipping, one of the industries where it may be needed the most.

"A company like Google will never have a CDO. Everything they do is already digital," says Klaveness CDO Aleksander Stensby. "But it is much more important for shipping, where digitalisation is only just beginning. The shipping industry needs to flag the importance of digitalisation."

So what is a CDO? Here's a definition from TechTarget:

A chief digital officer is an executive charged with helping a business transform its traditional information technology policies. The CDO focuses less on running infrastructure and more on creating the procedures required to leverage that infrastructure.

"In Klaveness it is more than just an isolated project. We are out to change the company, and even help change the industry," says Stensby. That's a pretty hefty statement coming from someone who joined Klaveness with no background in shipping, having worked instead with software engineering and applied machine learning.

"It's always a challenge when you come in from the outside," Stensby acknowledges. "Some of those who have spent their lives in shipping are naturally sceptical, and not everyone is open for change. To bring about change demands clear vision, and a will to pursue the goal."

The vision he attributes to CEO Lasse Kristoffersen, who years ago stated his intention to convert Klaveness into a digital shipping company. The hiring of a CDO was an important step in that direction. Now it is up to Stensby to apply the will to move.

"It's important to get everybody along on the changes," Stensby underscores. "There will always be some resistance, but we are taking it one step at a time. We need to keep enthusiasm up and build support, and that means delivering tangible results along the way."

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## Innovation inside

One of the first tools for delivering results was established in 2015, the Klaveness innovation lab, or KLAB, the company's incubator for development of new digital solutions and services. "A lot of people thought that KLAB should be established outside the company, as a separate business unit. But we wanted to take advantage of the experience we had in the company," he relates. "We don't want to wait to go forward with new developments. We are looking to see where we can we make a difference, and then make a move."

Shipping is an acknowledged slow mover, but there are other industries to learn from, and other



Aleksander Stensby CDO, Klaveness business models, Stensby says. "Many examples of new business models are from the consumer segment, like the sharing economy, with Airbnb and Uber. Klaveness has been sharing for 50 years, running dry bulk pools, but without the benefit of digital technology. Now we can see how digitalisation can improve on what we already know."

Analysing data from the Automatic Identification System, or AIS, is another key driver. "Transparency and technology have made information on every ship sailing everywhere around the globe accessible. We can look at speed, position, port calls, traffic patterns, anything that can give us a better understanding of how to coordinate the resources that we manage, analyse market trends, and optimise our operations."

Technologies from other industries are also enabling change. Blockchain is one of these, best known to date as the foundation of BitCoin, the virtual currency. Now Maersk and IBM have teamed up to use Blockchain in the first industry-wide, cross-border supply chain solution.

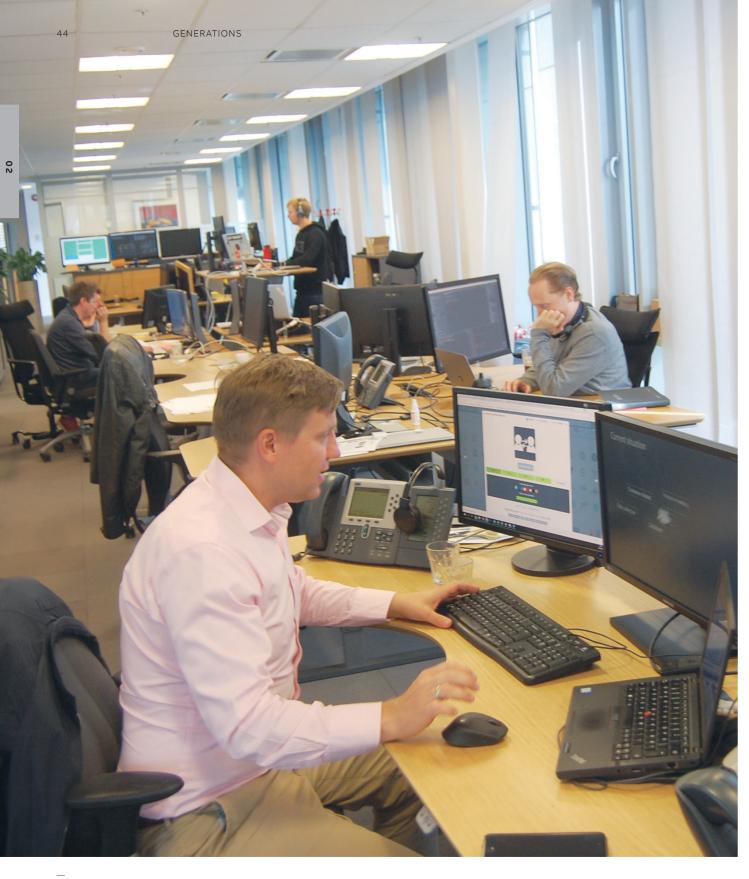
"We have a good relationship with Maersk, and we are following this project closely," Stensby says. "We have several people with backgrounds from Maersk, and we regularly exchange R&D visits with them." Not just Klaveness, but the entire shipping industry has much to learn from the Maersk-IBM collaboration, Stensby believes.

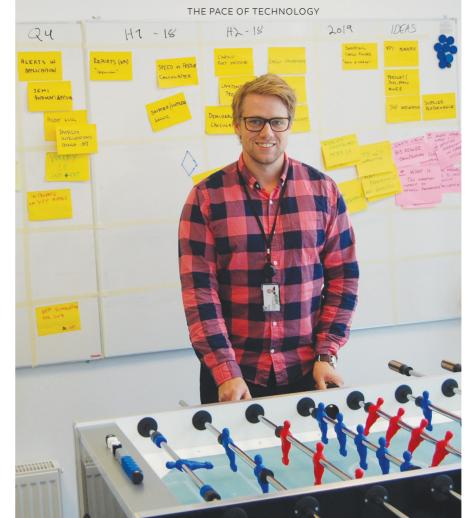
## Make the most of what you have

"Sensor technology will be an increasingly bigger part of the changes that are coming," Stensby says, reflecting the three new Klaveness vessels that will employ ABB's OCTOPUS software, collecting data from onboard sensors and providing insight into key performance parameters. "But right now most ships are not digital, so we have to figure out how to include them in our digital plans." The key, he says, is to find out which new opportunities are present in the data that they do have access to.

"Vessel and fleet performance is a priority project in Klaveness. Now we are looking at how to use existing information, such as the noon report, to analyse performance. Often it is not so much about new data, and more about finding new ways to use it."

They look at commercial and other sailing-related data as well, but an ongoing challenge is to clean up the data they do have access to: "The quality is not always good enough," says Stensby. "But we have found that improving data quality is almost always a good investment."





The KLAB meeting room

As for those who believe that digitalisation is better achieved in the business units, rather than being the domain of a digital director, Stensby couldn't agree more: "We have achieved our goal when my position is no longer needed," he says.

Along with data scientists, the specialists who sift through mountains of data looking for the gold nuggets, the CDO's days may indeed be numbered as digital fluency makes its way into the entire organisation.

Until then, CDO Aleksander Stensby will help Klaveness to follow CEO Lasse Kristofferen's motto of 'Try a little – learn a lot', continuing on the road from analogue to digital, until they become what Stensby calls 'digital inside': "It could well be true what they say, that someday we will all be data scientists."

## CARGO in real time:

Klaveness have themselves spun off digital products and services, the latest being CARGO in 2017. Aleksander Stensby tells the story of CARGO by Klaveness:

"The overall ambition of CARGO is to enable all cargo owners to reduce the costs and risks of their logistics by making better-informed decisions.

"The inspiration for CARGO came from our longterm CABU service being an integral part of the supply chain of our customers. Apart from competitive freight, the success of CABU is largely due to us working closely with our customers and the continuous effort of assisting them in monitoring and improving their logistics.

"Today, our customers rely heavily on manual collection of information and data entry in spreadsheets to stay updated. Providing our customers with real time, updated and complete information pertaining to their inventory and cargo flow, gives them complete visibility and allows them to take early preventive action to reduce total logistics costs from fuel, freight, demurrage and storage. Also, manual exchange of operational information such as cargo and vessel nominations, notices of ETAs, etc. can be automated and provided in 'real time'."