

Issue 12. July 2016 | Quarterly

# future nautics

the maritime future



## The New Seaconomics

Why shipping can't right itself in the digital age

## WHITE PAPER : SERVICITIZATION IN THE MARITIME INDUSTRY Danelec



**Download:** <http://www.danelec-marine.com/news/white-paper-on-servitization.aspx>

There's a new Seaconomics, but there's a new paradigm for manufacturers too. Servitization is a transformative process in which manufacturing companies shift from a product-centric orientation to an integrated product-services focus.

The strategy has been widely adopted worldwide, but not so far in maritime. Danelec is one of the first and its white paper outlines how servitization isn't just an initiative, but a digital vision requiring a wholesale transformation of the business.

Read more on this in our article '*Are You Being Served?*' this issue.

**Read for:** An insight into what digital transformation looks like.



**VIDEOS, INFOGRAPHICS etc.** A wheel that makes any bike electric, a surfboard you don't need waves to use, taking photos with a blink of the eye, and luggage with a higher IQ than you.

There are some things you just can't put into a magazine—even a digital one. Those find a home on the maritime future website. This quarter you can follow the links to see BMW's latest take on connected cars, a modular inflatable surfboard which will do 30mph without waves, a camera that takes a photo when you blink at something, and quite possibly the most intelligent luggage that exists in this, or any other, galaxy.

**Find it all at** [www.futurenautics.com](http://www.futurenautics.com)

## BOOKS: TECHNOLOGY VS HUMANITY

**GERD LEONHARD**

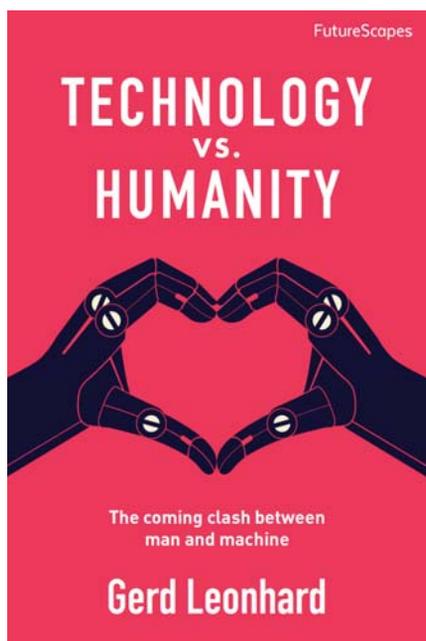
Are you ready for the greatest changes in recent human history? That's the question our Futures Agency colleague Gerd Leonhard is asking in his new book.

Technology vs Humanity discusses the multiple megashifts which are altering not just society and economy but values and biology.

"Wherever you stand on the scale between technomania and nostalgia for a lost world, this is a book to challenge, provoke, warn and inspire," says the publisher, and they're absolutely correct.

If you've not had the chance to read or see Gerd live then get yourself a copy and block out your next flight. You'll land with a different perspective on plenty of things than you had when you boarded. You can pre-order now prior to launch in September.

**Read for:** A humanist take on the science-fiction world we're entering.



**Pre-order from:** <http://fastfuturepublishing.com/main/shop/tech-vs-human/>



**Are you being  
served?**



**There's a new Seaconomics for shipping, but there's a new paradigm for manufacturers too. Servinomics is a response to the tough new global reality, and in maritime one manufacturer is leading the way.**

**W**e're talking about what I call the new Seaconomics this issue. The impact of a range of converging mega trends, generational mindsets and exponential technologies which are conspiring to fundamentally change the economics of just about everything—and ushering in a new paradigm for shipping.

A large part of this centres around the fourth industrial revolution—Industry 4.0 as it's being called. Businesses are on an unstoppable drive to integrate their operations into a near-seamless digital ecosystem. For manufacturers the scale of the change will be immense, ranging from automation to robotics, analytics and artificial intelligence, and because they're shipping's customers the knock-on effect for expectations about the way shipping operates will be equally significant.

Closer integration and closer collaboration is what's going to be needed if we're going to retain the confidence of manufacturers who now increasingly have a range of different options in addition to producing in the east and shipping to the west. Whether that's nextshoring or 3D printing, or—most likely—a combination of the two, shipping has to wake up, because it's never been the easiest, or the most reliable, option. It's been cheap, but in the new world the focus is shifting to value. As supply chains become an ever more crucial source of competitive advantage, cheap can turn into very expensive very quickly. The phrase 'spoiling the ship for a ha'porth of tar' was never so appropriate.

We hear a lot about collaboration these days, and how the collaborative consumption movement or the sharing

economy is going to impact us. On an economic level it will in the longer term, but for shipping right now the business implications of better collaboration are where real gains could be made.

What digital disruption has taught us is the danger of being too removed from your customers. The music industry suffered and publishers the same as digital products and ecosystems wiped aside the traditional middlemen like record shops and booksellers with whom the manufacturer had their relationship. Suddenly producing a product wasn't enough. The curation of content, the minute-to-minute relationship with the end-customer and instant feedback that digital brought not only sold the product but gave rise to all sorts of other opportunities from new product development to cross-selling, and of course a treasure-trove of data.

And that holds true for any customer—whether they're businesses or consumers. In fact the distinction between the two really is becoming questionable when it comes to virtually any product. What every manufacturer is having to face is that no matter how good his product is, it's the relationship with the customer which is becoming the differentiating factor.

There's a new Seaconomics, but there's also a new paradigm for manufacturers too. Servinomics is a response by manufacturers to the increasingly tough global markets they're facing and the digital disruption affecting their traditional models.

At its heart what the business does is to move into selling services as well as products. Anyone who uses Office365 from Microsoft, or the Adobe Creative Cloud will have experienced the shift.

Whereas Microsoft and Adobe previously spent much time, money and effort persuading people to buy, upgrade and patch the software they sent out on disks, or latterly online, the new incarnations of their pay-monthly services change the game completely. From embedded customer relationships and feedback, to recurring revenue and security, there are multiple benefits. Whilst for customers the knowledge that you are always using the most robust and latest release, and have access to support and new features makes using the product simple and hassle-free.

Software and big chunks of machinery are very different businesses, but the model still applies. Xerox has brought in document management, allowing consumers to manage content online, while French train manufacturer Alstom has introduced 'train-life' services offering maintenance and parts supply services to transport companies.

Another well-known example is Rolls-Royce's 'power-by-the-hour' concept, developed for the aerospace industry. Using the data they've gathered over decades Rolls-Royce is now in a position to fix a fee for a maintenance contract on an engine. Whereas in the past if the engine went wrong it was the customer who suffered and Rolls-Royce who benefitted—from expensive repair fees—now the objectives are aligned. It's in everyone's interest that there's as little downtime as possible.

As we reported in the January SmartShips issue of Futureautics, that power-by-the-hour model from Rolls-Royce is now heading to shipping. As condition based maintenance grows in importance these kinds of models are

bound to develop, but Servinomics goes beyond that. For most companies, really benefitting from it will take a wholesale re-organisation of the way the business operates.

Posidonia didn't float a lot of people's boats this year, but there were a couple of really interesting things and people I got to see. In an Athens which had an air of desperation, from the dispossessed in the streets to the talk of bargain basement rates from operators, it was easy to share the sense of helplessness.

But you mustn't, because the industry is not helpless, and if you want to see what reinvention and digital opportunity

looks like, then I suggest you take a look at Danelec.

We've covered Danelec in the past, but if you missed that here's a recap. Based in Denmark the company was one of the first to bring to market VDRs and simplified VDRs to meet the original IMO carriage requirements. Today more than 6,000 vessels carry Danelec equipment including VDRs and ECDIS. The company has service facilities with factory-trained personnel in more than 50 countries, together with Certified Service Centres at strategic locations worldwide.

When I wrote about Danelec back in 2014 it was in connection with the

launch of their new VDR product, developed to meet the upgraded IMO standard which came into force that same year. But it wasn't just another iteration of the technology. Danelec had taken the new standard as an opportunity to radically redesign the whole VDR product. The redesigned VDR was just one step on a journey though, and part of the engine driving it is Servinomics.

Danelec had embarked on a digital transformation, following an integrated servitization strategy. That transformation is still underway, but when I met their CEO Hans Ottosen in Athens the results were clear to see.

There's a reason I said that Servinomics is only a part of the engine, the other is Danelec's management team and its CEO Hans. I talk a lot about the importance of leadership and mindset in navigating the digital transformation journey every company has to make. Hans is a clear example of what can be achieved if you have the right attitude and a digital vision for the future of your business.

Hans joined Danelec as CEO in September 2011, and having started his career training as a naval officer he's familiar with the domain. But an MBA from IMD in Switzerland and various global senior management positions within the industrial and telecom sectors bring the cognitive diversity I believe is so important if shipping is to grasp the digital opportunity.

His digital vision encompassed everything from designing serviceability into the product, establishing and upgrading quality controls where necessary, to standardising procedures across the service network and using cloud technology to create a fully connected, highly automated global service network.

What Hans and his team have done is to take a pretty mundane piece of fit-and-forget shipboard equipment and redefined its role, from a static product to an integrated product-service system. It's that digital vision for the humble VDR which elevates Danelec from just another manufacturer to a company worth keeping a close eye on.

You can read in detail what the Danelec team have created in their white paper about servitization in the maritime industry—part of our recommended reading this issue and also available on



**"Adopting a servitization strategy for products on commercial ships sailing global routes across 24 time zones presents unique challenges, but we have demonstrated these can be surmounted."**

**Hans Ottosen, CEO, Danelec**

*Image credit © Danelec Marine*

the Danelec website. Give it a google.

"Most manufacturers of shipboard systems today still follow a traditional silo approach in which the product development, engineering, manufacturing, marketing and sales functions are separated from the service department," says Hans. "Adopting a servitization strategy for products on commercial ships sailing global routes across 24 time zones presents unique challenges, but we have demonstrated that these can be surmounted."

The benefits that can accrue from this approach aren't just for the manufacturer. We need to connect a fragmented industry, develop more integrated and strategic relationships using the processes and technology tools which are becoming available and affordable, and servitization drives that.

"Servitization has important benefits for all parties on the sell side and buy

side," agrees Hans. "For the manufacturer it provides competitive differentiation, deeper relationships with customers, enhanced customer satisfaction and loyalty, and a source of recurring revenues. For the customer it provides more value for the money and lower cost of ownership, in addition to faster and better after-sale service and support."

Despite the plethora of companies scrambling to get their solutions onboard ships and data off them, it was Danelec which led the conversation on Big Data last year, pointing out that by pre-qualifying data onboard before transmission its VDRConnect service could deliver Big Data solutions for US\$1 per day. With the launch of its new eService platform, automating and streamlining the whole service process—including rating engineers online—it's still out in front.

Seconomics and Servinomics are different facets of the same disrupt-

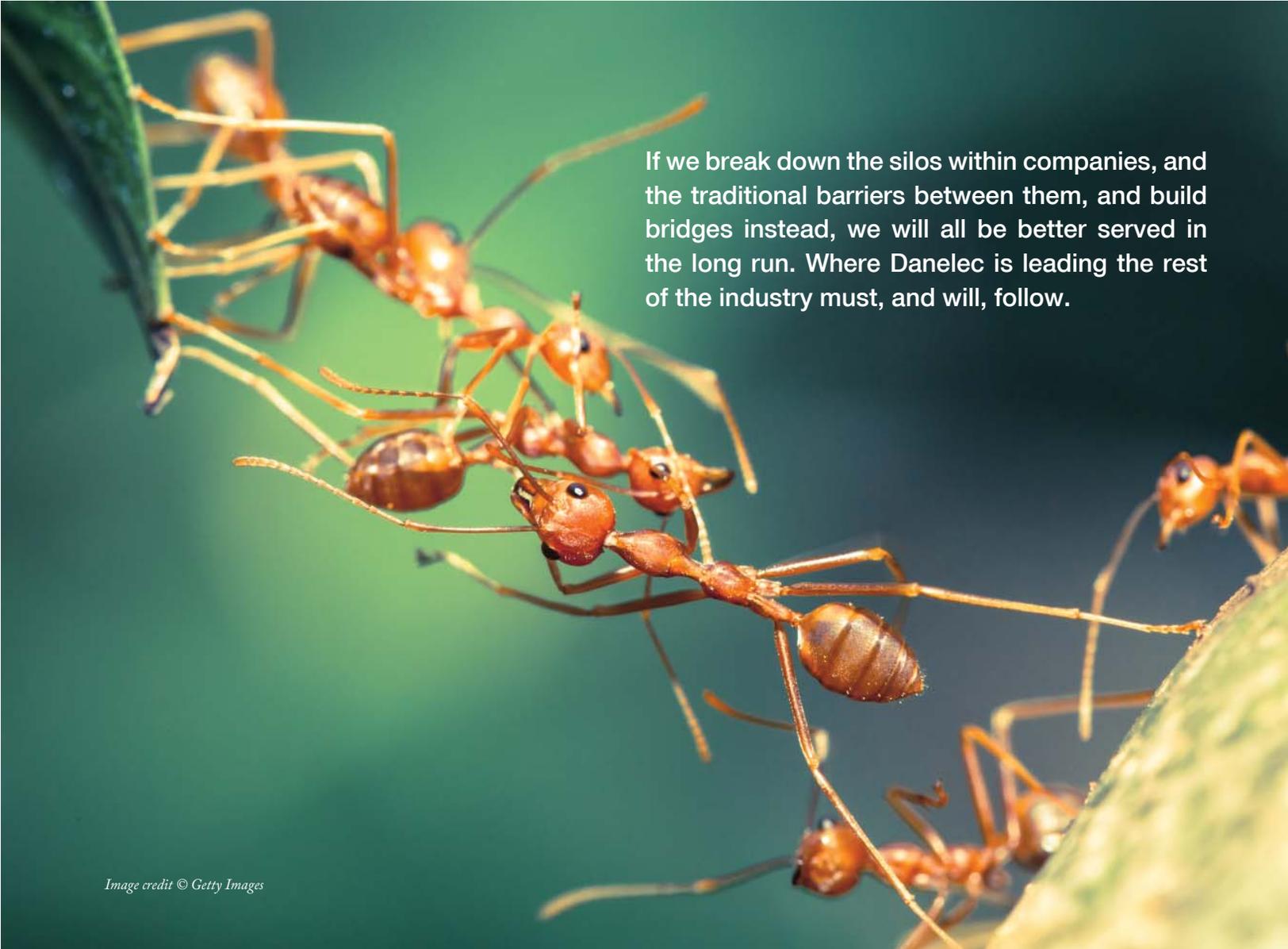
tive change, and it's important that we understand both. Because the manufacturers supplying shipping are very often also its customers. The reality is that the old relationships—that adversarial seller versus buyer stuff we're so good at in maritime—aren't delivering any longer.

Suppliers have always claimed to understand their customers, and delivered the best service possible, but the reality is that they've frequently failed to do either. Shipping can't afford for that to be the case in the future, for its customers or the suppliers it relies upon.

If we break down the silos within companies, and the traditional barriers between them, and build bridges instead, we will all be better served in the long run.

Where Danelec is leading the rest of the industry must, and will, follow.

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