Writing what is in essence a book review isn’t something I thought I’d find myself doing at Port Technology. As we’re a publisher of academic, technical content, I was a little unsure of what to make of the idea when presented with a 7,000 prose piece written by Dr Eva Savelsberg and Matthew Wittemeier of INFORM (and that was only part one, I was told!). However, having read plenty of INFORM papers and knowing their propensity for breaking the mould with enterprising papers that synergize contemporary cutting-edge terminal operations with the dystopian visions from high-literature and Sci-Fi classics, I was more than willing to take a look at what they’d created.

What I found was a delight. A piece of writing that took the concept of futuristic port operations and turned the way in which we look at them on its head. In literary terms, 2038: A Smart Port Story is a short story following our protagonist ‘Douglas’, an upper-mid-level INTERPOL employee interrupted on his holiday in the Blue Lagoon geothermal spa of Iceland by a serious incident in the local Port of Reykjavik. Douglas is aware of a growing ‘anti-tech’ movement that he fears could be tipped into revolt by the incident, which is allegedly down to an AI-controlled machine running into a human.

With some slick dialogue between Douglas and his guide of the Port of Reykjavik ‘Emma’, the piece leads us down a meandering rabbit hole of a narrative in which we’re confronted with several pressing questions: “Was the whole thing set-up by the anti-techs?” “Are the anti-techs right?” “What even happened to the victim of the incident? Is he alive? Is he an anti-tech himself?” While such questions make the tale rather gripping, there is of course a subtext, and that is the contextual basis of the piece, which for anyone with an intermediate knowledge of the port industry will find engrossing.

THE FUTURE PORT SECTOR

Some commendation should go to the authors for their boldness in not just creating a prose piece, but offering a concept of what our industry will look like in 20 years. The piece contains references to developments in the global supply chain everywhere. ‘Why is it set in Iceland?’ you may ask. Well, the authors predict that with the melting of Arctic ice a new route has developed for ships to traverse, meaning the Port of Reykjavik has taken on huge significance as a major transhipment hub.

Other major events the authors predict, while simultaneously using their foresights to provide the conceptual foundations for the story, include an all-consuming ‘Data War’ in the 2020s. The outcome of this is that companies within the supply chain surmise that data-sharing is actually more profitable and safer than not doing so – the ramifications of privatized data leading to too much palpable tension along the supply chain.

We also discover from the port guide ‘Emma’ that terminals in 2038 are perfectly capable of redesigning themselves in a responsive manner via the use of predictive analytics, 7G, 3-D printing and AI. Further still, the port itself has its personal AI system known as Athena, the proverbial ‘Goddess of Wisdom’ according to Greek mythology (or perhaps one would focus on the Goddess of Warfare element of her mythology if they were an anti-tech). Athena acts as a built-in responsive TOS system, as well as an ever-ready support system for the members of staff still involved in the day to day functioning of the port.
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THE ROLE OF MAN IN PORT 2038

While people are banned from setting foot in the actual terminal, which is a key point of contention for Douglas in his queries as to why someone was injured in a port in the first instance, human beings still have a role in the future port, and quite an important role at that. In the authors’ view, the Reykjavik Port Authority (RPA) actually employs around 5,000 staff members. However, given the job role of the average port worker has changed so much, port workers may even work at other ports under the auspices of the Port of Reykjavik, and even if they do work at the port, they are rarely there physically, completing their tasks via virtual reality and drones from home.

The people who still actually go to the port to work and oversee operations include a technology support team in a central command centre, and these people are overseen by senior operational staff. Predictably enough, to work in the port sector in 2038, the authors outline the importance of being tech savvy, as the whole terminal operation is founded on a smooth and seamless digital flow of information.

As well as the technology support team, the port also employs a specialist cybersecurity team made up of ‘hackers’ who spend their time trying to break into the Port of Reykjavik network. This provides Douglas ample opportunity to begin his digging into the incident, querying whether a security breach could’ve taken place. While nothing has been discovered in that regard, according to Emma, the authors outline the incredible ease and surreptitiousness a future hacker could break into a system “…as easy as swiping the brim of your VR glasses”.

CONTEMPORARY RELEVANCE

While the world presented in 2038 is rather distinct from our present reality, one can see the seeds of the reality in the universe of the story. We can already see 4G moving to 5G for instance, with Dubai planning to roll it out fully for its Expo 2020, and the notion of traversing through a new Arctic route provided by melting ice also isn’t too alien for a present day reader, with China already mooting such an option.

However, probably the most recognisable microcosm of today presented as fully fledged reality in the story is the core theme of the story; humans and technology. The industry is presently facing issues from labour unions who cry foul at the advancements in technology that have entered the port sector, and this contemporary issue is wrapped up nicely in the story. While we don’t know (in part one at least) who the victim is and the circumstances of the incident, we do know the incident will have political, social and economic ramifications. Is this not the situation we find ourselves in as an industry now?

For the first time in my career working in the maritime sector, the questions that the authors contributing to Port Technology and the news writers I oversee are looking to answer are, in scope, political, economic and social, rather than being purely technological and practical as they may have been five years ago. Such is the new world we face, and I eagerly anticipate the outcome to be revealed in the second instalment to see what insight our authors can envision.