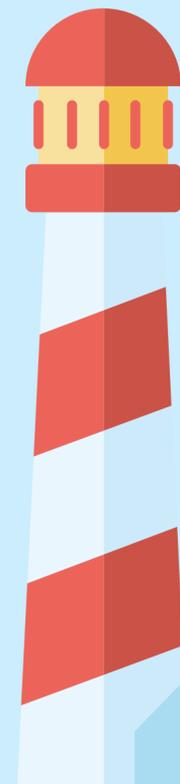


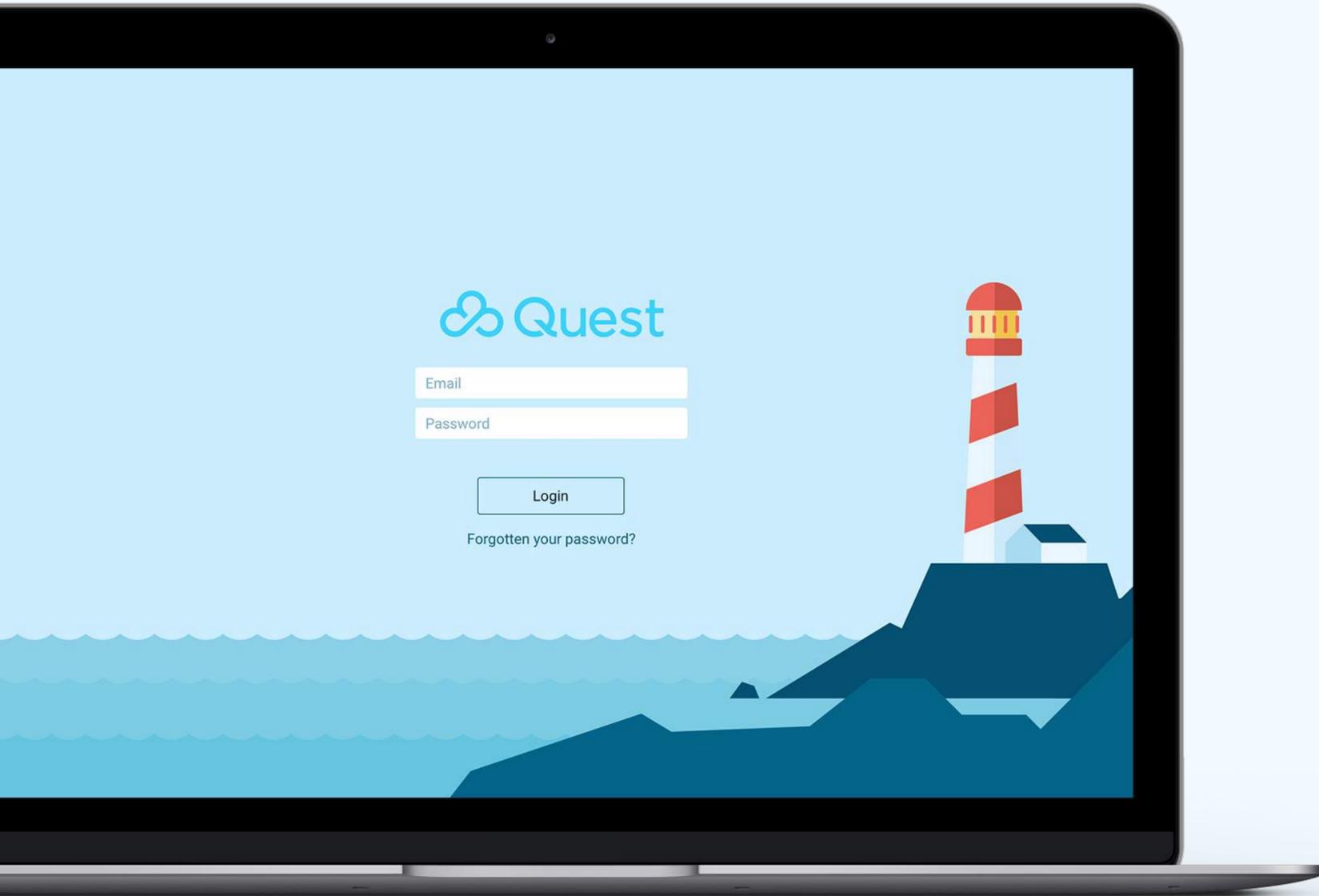


# Quest Marine

Leading insurer uncovers opportunities to improve loss ratio by 7% using Concirrus' Quest Marine software.

May 2018





## The challenge

Commercial marine insurance is highly competitive and operating costs are at an all-time high.

As a result, a large commercial marine insurer approached Concirrus to understand whether behavioural and situational analysis of their portfolio could help them to operate more efficiently.

## The solution

Our team of data scientists and underwriting specialists recommended that the insurer provide five years of claims and exposure data which could then be combined with Quest Marine's existing data sets and analysed for insights.

Whereas commercial risk is currently assessed based on a set of industry-wide demographic factors e.g. ship class and age, Quest Marine analyses the behaviour of a vessel, as well as other risk determining factors for example weather, port safety and operator history, to determine the underlying risk of the asset.

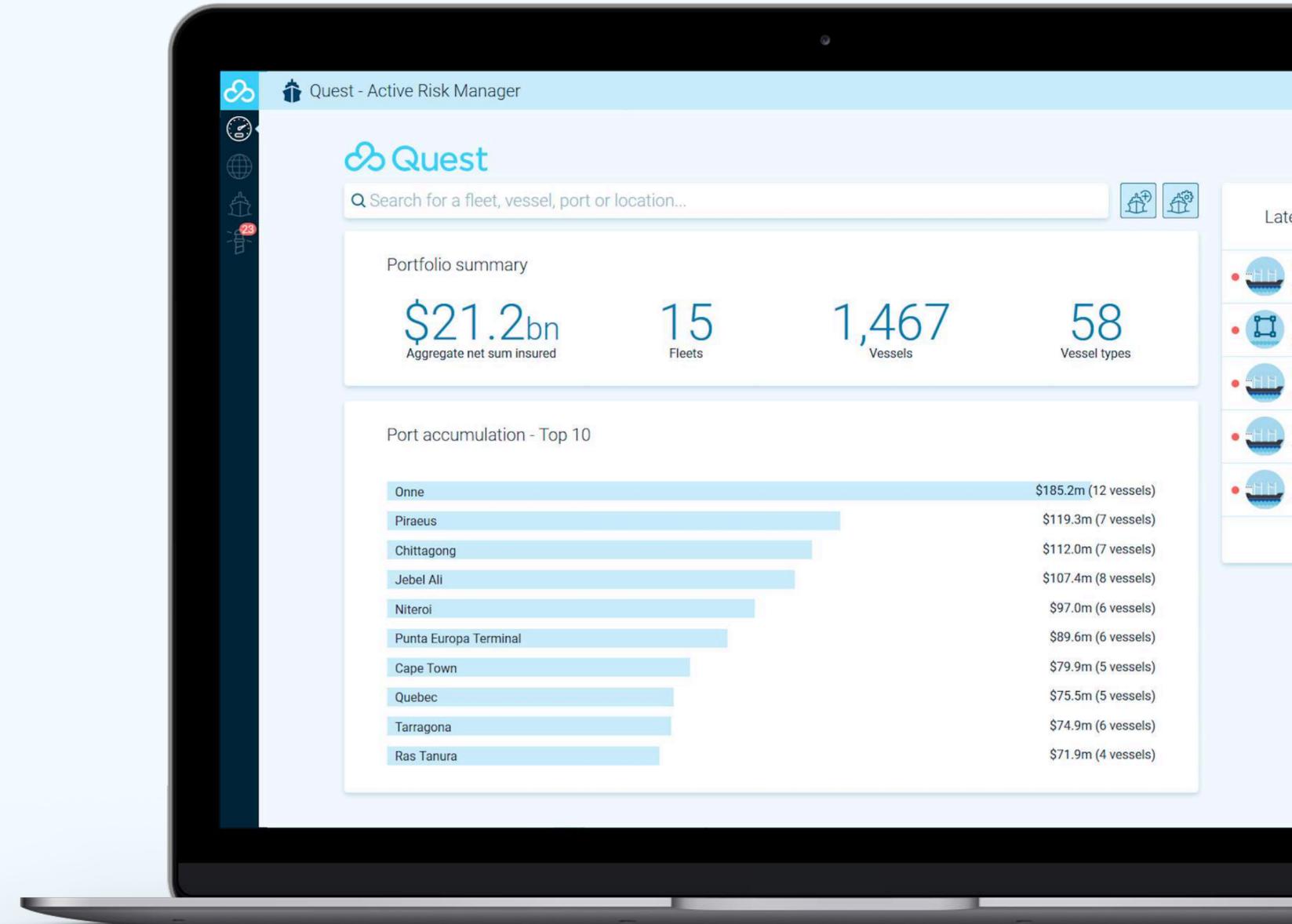
# The methodology

We took this customer's five-year dataset and analysed the first four years to produce an alternative risk assessment methodology for the final year of underwriting.

Through the use of previously unknown behavioural insights, we were able to demonstrate significant savings opportunities to the customer.

The steps involved were:

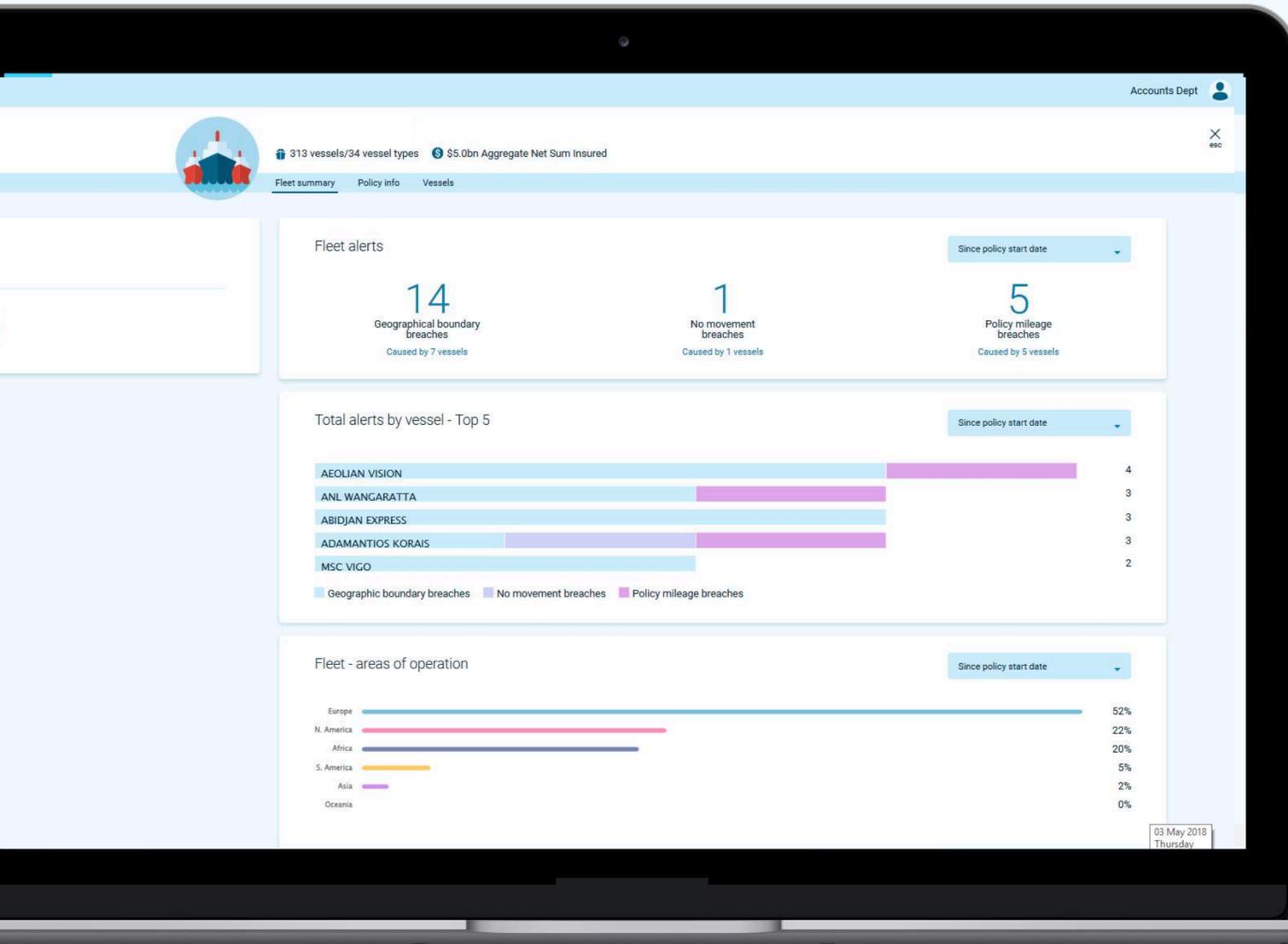
- 1. Data cleansing and ingestion** - Concirrus has created and compiled numerous algorithms to cleanse raw third-party data. This was applied to the clients' data to quickly produce clean usable outputs that could then be applied in our Quest Marine software.
- 2. Analytics** - the client's data was analysed alongside multiple third-party datasets, such as global vessel movements and port data. The sophistication of Concirrus' infrastructure environment allows over two billion rows of data to be processed in seconds. This is an automated process that works in the background of Quest Marine to provide the user with a seamless experience.
- 3. Feature creation** - our Data Science team created aggregated behavioural features from the global dataset, for example vessels that enter war zones. These were automatically fed into Quest Marine to produce concise, intuitive results that could be easily applied in decision making.
- 4. Report production** - Quest Marine produced a bespoke, automated insights report.



# The results

The report produced by Quest Marine provided our customer with brand new insights into their accounts, and small changes they could make to **reduce their loss ratio by 7%**.

Here are the specific insights and recommended actions:



Quest Reports Insight	Action
Specific vessels that sailed into a war or piracy zone but had not reported doing so.	Collect missing premiums.
Behavioural characteristics that make up a good quality account, as well as types of accounts that are a good fit to their portfolio.	Target new opportunities to increase annual net earned premium.
Accounts with poor behavioural characteristics who had not yet incurred a loss.	Mitigate exposure against these high-risk accounts.
True indication of the underlying risk of portfolio.	Restructure outwards reinsurance and identify vessels that require facultative insurance.

## Next steps

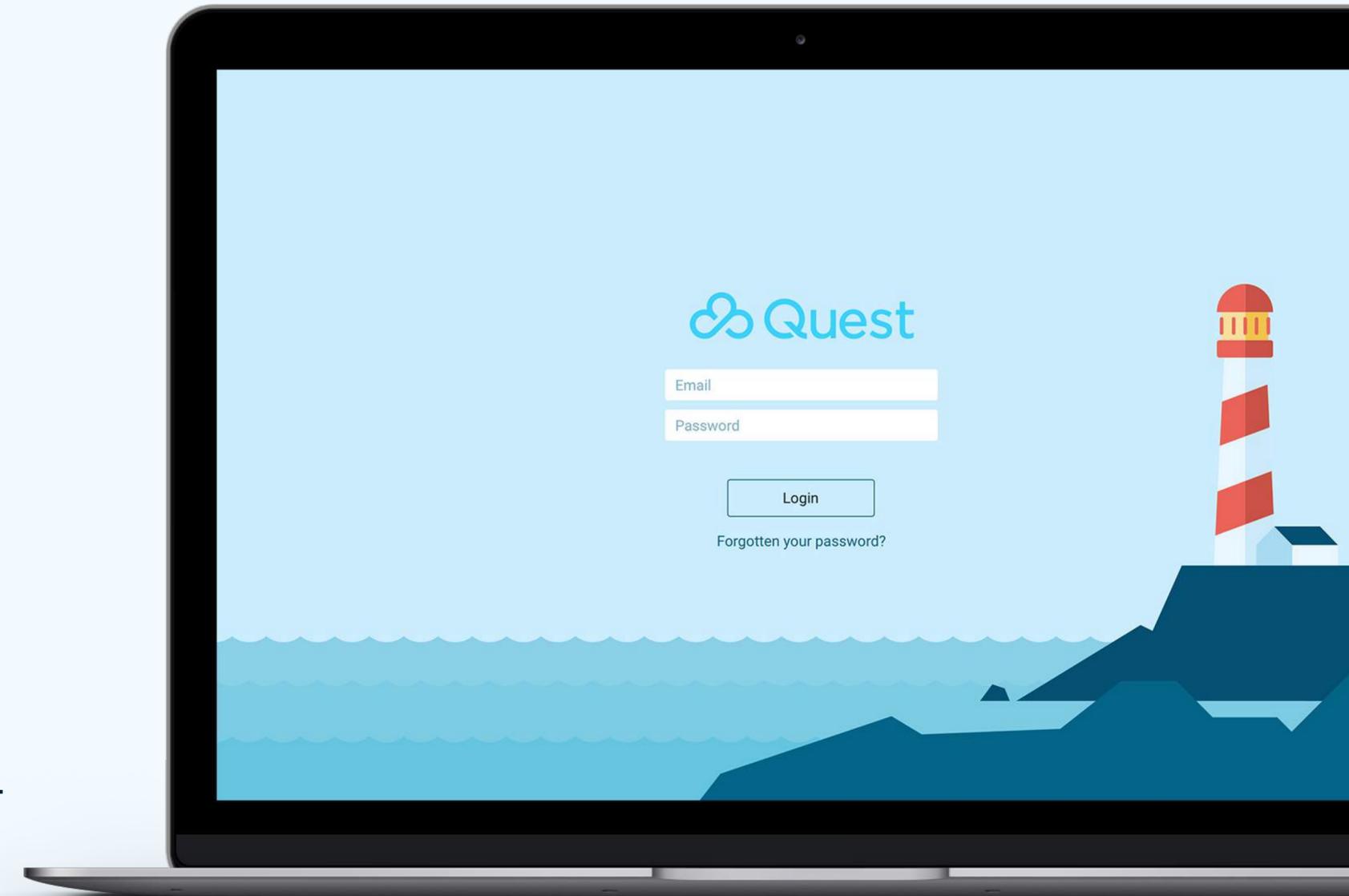
This insurer can now quickly take action from these one-off insights to reduce their loss ratio by 7%.

To access ongoing insights and continue to optimise their portfolio, they can deploy Quest Marine software within their organisation. Quest Marine's user-friendliness and cloud infrastructure minimises training and implementation.

When this customer deploys Quest Marine in their organisation, the features from this initial engagement can be deployed within the licensed software for ongoing insights.

## Find out more

To understand how Quest Marine could benefit your portfolio, please contact our team for a free consultation via our website - [www.concirrus.com/contact](http://www.concirrus.com/contact).



# Your delivery team



**Tim Bird**  
Product Director

Tim leads our Product team, ensuring our product development is aligned with our customer needs.

A re-insurance, exposure management and catastrophe risk expert, Tim has almost 20 years experience in catastrophe modelling, DFA software, pricing and underwriting.



**Tom Checkiewicz**  
Head of Data Science

Tom leads our team of data science experts. Tom has more than 18 years of cross-industry experience in Data Science, big data product design and machine learning.

He and his team lead the analysis for our project engagements and feature design for Quest Marine.



**Gareth Maddock**  
Business Analyst

Gareth works alongside our product managers, developers and other business analysts. He'll help ensure that your requirements become a reality.

Gareth's background is as an Underwriting Analyst at XL Catlin and Marine and Energy claims at QBE. He's passionate about helping the insurance industry unlock value from new technology.

# Concirrus

Concirrus is the creator of Quest, real-time behavioural insights software for commercial marine and motor insurers.

Quest helps commercial marine and motor insurers understand the behaviour of the insured asset or individual and actively manage their risks in real-time.

Quest, accesses and interprets large sets of data, such as vessel statistics, movements, machinery information and driver behaviour, and combines this with an insurer's own information to reveal the behaviours that correlate to claims.

This new way of working presents exciting opportunities for all those in the marine and motor insurance market, to manage the loss ratios of their risk pools, and accurately price new business with or without claims history.

As a result, insurers can offer enhanced customer-centric products, reduce losses and operating costs, increase profit margins and build more collaborative relationships with their brokers and customers.

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