

## **Dale Marsh**

Dale is Sales & Marketing Manager at Navicom Dynamics.

Bringing key strengths in international market, business, and product development, his background has includes in excess of three decades in sales, marketing, business strategy and management.

With many years spent trading steel and building materials throughout New Zealand, Australia and the Pacific, and developing trading relationships with clients and suppliers throughout Europe Asia and the Middle East, he has managed both local and global markets overseeing sales teams and partners across the globe.

He specialises in building and delivering effective customer support solutions to enhance the sales function, developing cross functional relationships within our business, and managing production capacity against market requirements. His strong bent for technology and innovation combined with business acumen make him a well-rounded sales professional.

A keen recreational boatie he enjoys the multitude of safe anchorages of Auckland's Waitemata Harbour when our weather complies, and Pacific Island yacht charters when time permits.

His keen interests in building long lasting relationships and delivering an exceptional customer experience, Dale leads Navicom Dynamics' endeavours for the sustainable growth of their global presence.

## **Technology to help pilots – Portable Pilot Units & advancements**

### **Synopsis:**

This presentation describes existing and future technological advancements that ensure safe and efficient pilotage. It covers how PPU's offer more accurate information than the ship's own ECDIS system. When compared to the ship's ECDIS system, the accuracy of these PPU's can be easily evaluated, calibrated and updated, ensuring the validity and the dependability of the information being generated by them.

Also, new features, such as Bluetooth and Wi-Fi, coexist within these PPU's and enables multiple displays for scenarios like pilot training.

Subsequently, it covers a technique that enhances the positional accuracy generated by PPU's to centimetre-level using Networked Transport of RTCM via Internet Protocol (NTRIP). It also explains about Electronic Charting Systems (ECS) that are widely used in the maritime industry and future prospects of such systems.

Also, key comparisons and factors that affect the selection of ECS for different pilotage scenarios are explained.

Finally, the future of navigational software tools and possible future improvements are discussed. Some examples of how accident investigators are emphasizing the importance of using these systems. Conclusion with an overview of the technologies being discussed and a summary of their implications.