Digitized Tugboat

The next generation of Damen tugboats

The best solution does not always answer the original question. We found that a simple update to the user interface used by tugboat captains and chief engineers wasn’t the solution to improve their working days, let alone help them be safe in critical situations.

Damen Shipyards is one of the global leaders in the tug vessel market with proven, reliable, sustainable and safe vessels. Having been asked to update the visual design of the cockpit’s UI, VanBerlo conducted user and field research to understand both the context of use as the alarm monitoring and control system. With the increasing amount of information present, understanding the systems state becomes increasingly hard. Through involving the users in the design process validated the improved design, resulting into an award winning User Interface that helps take immediate action when necessary.

The new UI integrated tailor-made dashboards, with constant access to relevant real-time information, to further improve safety in any situation. Besides the visual design and user interface design VanBerlo initiated and supported the redevelopment of the onboard software architecture, which enables the integration of more systems, over the air updates and drive the autonomy agenda. The “Damen HMI” was developed in close cooperation with Damen. Certified as an onboard system it is already operational in over 200 vessels.

Digitized Tugboat Project completed by VanBerlo, part of Accenture