

CASE STUDY

FRAUNHOFER CENTER FOR MARITIME LOGISTICS AND SERVICES CML



The benefits of specific decision support systems for strategic crew requirement planning and related tasks at E.R. Ship Management

E.R. SHIP MANAGEMENT GMBH &. CIE. KG

Company profile E.R. Schiffahrt

E.R. Schiffahrt is a ship owning and ship management company with activities in container, bulk and multipurpose segments. Currently it controls about 120 vessels in service. The vessels are chartered by leading liner and bulk shipping companies. E.R. Schiffahrt aims to be one of the best ship management companies in the shipping industry. About 4,500 crew members at sea and employees ashore work as a team and are dedicated to secure safety, reliability and performance for the benefit of business partners worldwide. E.R. Schiffahrt is a member of the Blue Star Group. The Blue Star Group of ship owning companies brings together the ship management activities of E.R. Schiffahrt, Komrowski Befrachtungskontor and the Komrowski Group-owned Blue Star to benefit from competitive advantages and economies of scale in marketing, business and financing.



Marc Gunther Schmidt is the managing director of E.R. Ship Management GmbH & Cie. KG which specializes in crewing and sea services and is a subsidiary of E.R. Schiffahrt.



Human Resource in shipping: Effective future solution

Crewing is one of five core tasks of ship management, next to Technical Management, Financial Management, Quality & Safety and Procurement. Ship management as a whole has to face volatile business conditions, escalating

volumes of information, and increasing complexity of company processes. Especially crewing, as one main task with significant fixed operating costs, has to deal with increasing demands imposed by e.g. new regulations.

"Crewing is a key ship management service and field of competency of any ship manager globally and rated as biggest current challenge for a shipmanager."

Source: Study Best Practice Ship Management 2013

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To hire and retain the staff suiting your needs will be the driver for a better and reliable shipping service in future.



E.R. Schiffahrt recognised at an early stage that a reliable mid and long term personnel requirement planning under different objectives is a key success factor in order to manage crew resources effectively as well as to increase the company's competitiveness. As answer to their needs E.R. Schiffahrt sought cooperation with Fraunhofer CML in ordner to develop a specific desicion support system.

Strategic capacity planning enabled by state of the art decision support

Personnel requirement planning deals with the identification of the human resource needs for crews under numerous constraints. Revolving fleet mixes in combination with various client requirements necessitate the continual adaptation of composition of seagoing staff. This is even more challenging if the crewing department has to match the own seafarers with permanent and non-permanent contracts with seagoing personnel provided by various 3rd party crew managers.

Faced with these challenges the attention of E.R. Ship Management was quickly drawn to the implementation of a specific decision support system. "We looked for a tool which provides analytical capacity analyses for our crew requirements for different future scenarios from a quantitative and qualitative point of view", M.G. Schmidt stressed out. Based on a Relational Online Analytical Processing Structure (R-OLAP), Fraunhofer CML developed a mathematical model as well as a specific data mart in order to enable the identification of the future personnel demand in comparison to the development of the own staff composition. "Utilizing the decision support system developed together with Fraunhofer CML allows us in a complex decision environment to determine the necessary personnel demand for our fleet by using different fundamental parameters."

M.G. Schmidt points out and Prof. Jahn, head of CML, adds: "With individual decision support solutions you are able to respond more quickly to market conditions".

"Especially in times of dynamically developing markets a tailored and in time accessible information basis is essential for a reliable decision making."

M.G. Schmidt, Managing Director

Fraunhofer Center for Maritime Logistics and Services CML

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