

HUMAN-CENTRED DESIGN OF SHIPS

Margareta Lutzhoft

Australian Maritime College, University of Tasmania, Australia

Throughout the history of shipbuilding, naval architects have mainly been looking at ships from technical and economical points of view. Generations of ship designers have made seagoing vessels more seaworthy, travel faster, having an increased transport capacity and a lower fuel consumption. Great effort has also been made in improving maritime safety. However, reports indicate that human errors are blamed for most maritime accidents, which raises the question: why do humans still perform errors despite countless numbers of improvement in design and technology to assist them? The design of technology can have a big impact on how people perform. Most engineers are trained to design with a firm technical perspective, and sometimes create designs which may not match the needs of users. Fortunately, the influence of design on safety has been acknowledged, and relevant parties have started taking steps in developing a crew-centred approach to design or in simpler words, to “Design the problem out”.