CALIBRATE 2024 PARTICIPANTS WORKSHOP

BLUE ECONOMY COOPERATIVE RESEARCH CENTRE

Australian Government Department of Industry, Science and Resources AusIndustry Cooperative Research Centres Program

Human Factors in Autonomous Shipping

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This PhD with Blue Economy CRC will emphasise human operators as an integral element in the era of maritime autonomy.

With increased understanding of human-machine interactions, future employment in HR or Maritime Training and Development will align with my passion for enhanced human safety and competence in evolving maritime industries.

Capturing the Complexity of Human Factors Through Qualitative Research

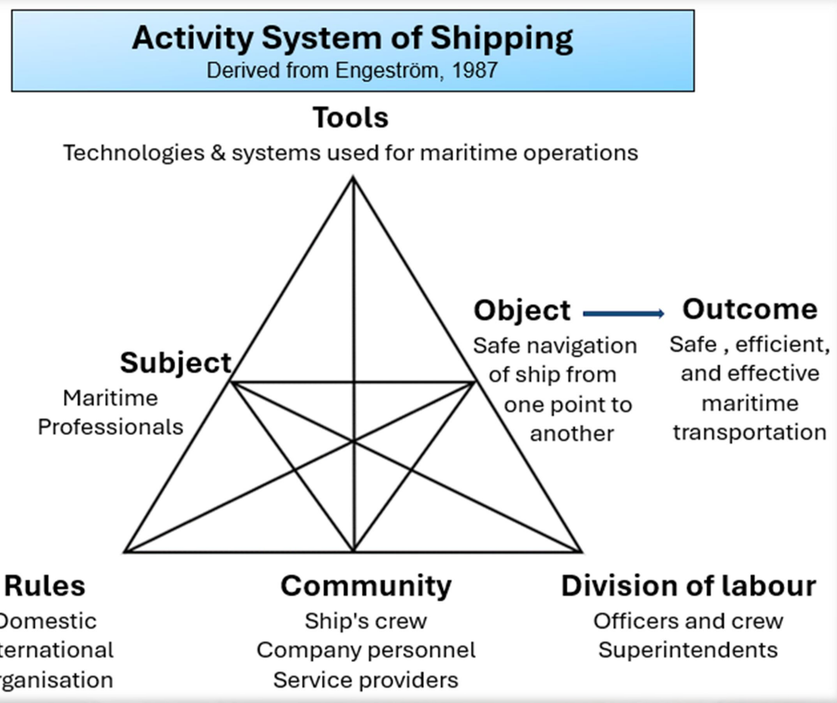
- Human Agency
- Trust and Acceptance of Autonomy
- Decision-making
- Competency Development

Sociotechnical System of Maritime Transport

Human – Technology - Organisation

Socio-Cultural Cultural-Historical

Activity Theory Distributed Cognition



Contemporary, Integrated, Inclusive Framework For The Future Blue Economy

- Efficiency
- Effectiveness
- Improved Livelihoods
- Job Creation
- Maritime Safety
- Economic Growth

- **MASS 1** — **Ship with automated processes and decision support** : Some operations automated and at times unsupervised with seafarers ready to take control. FULL CREW - SEAFARERS ONBOARD
- **MASS 2** — **Remotely controlled ship with seafarers onboard**: Ship is controlled and operated from another location, crew available onboard to take control and operate. SEAFARERS ONBOARD
- **MASS 3** — **Remotely controlled ship without seafarers onboard**: Ship is controlled from another location. NO SEAFARERS ONBOARD
- **MASS 4** — **Fully Autonomous Ship**: The operating system of MASS is able to make decisions and determine actions by itself, with human oversight. NO SEAFARERS ONBOARD