



CSMART Academy

Efficient skill assessment in a highly detailed, comprehensive and objective manner.

CSMART (Center for Simulator Maritime Training) is the maritime training facility for Carnival Corporation & plc group, which operates some of the world's largest cruise line brands (Princess Cruises, Carnival Cruise Line, Holland America, and more). CSMART delivers annual simulation training for over 7,000 Carnival Corporation Deck and Technical Officers with the goal to immerse officers from all its brands in a world-class training experience.

CSMART needed a technology-first approach to support their simulation assessments with a main goal of reducing subjectivity in their assessments and collecting officer skill proficiency data to be analyzed. CSMART also wanted to simplify the assessment process for their instructors. CSMART engaged with Marine Learning Systems (MLS) and human-factors experts to further explore new ways to ensure objectivity and continuous improvement in their assessment process.

Challenges with Managing and Assessing Trainee Skills

- Assessor variance and bias when evaluating officer proficiency
- Tracking, managing and analyzing assessment results for thousands of trainees from across the world
- Defining standards of proficiency
- Dynamic simulation scenarios that give little time for assessors to observe and assess actions, especially in an objective and standardized manner
- Collecting data on officer training and skills to drive efficiencies, improve learning outcomes and to share with parent company (Carnival Group)



Industry Simulation Training Centre

Location The Netherlands

Trainees 7,000+

Product(s) SkillGrader

Results

Efficient, standardized and objective assessment of officers during simulation scenarios.

Integrating the resulting assessment records into a central system to manage training for a global workforce.

Background

CSMART was tasked to create a professional training and assessment program for all of Carnival Corporation's Deck and Technical officers. The program involved annually re-training officers from around the world in CSMART's state-of-the-art simulation centre. The week-long, intensive course culminated with an appraisal of the officer's competency in a simulation environment. The appraisal would help inform continuous improvement courses and play a part in promotions.

CSMART saw an opportunity to use assessment models from safety critical industries, such as the aviation and nuclear power industry, as a benchmark and to improve upon it. Rather than relying on pen-and-paper forms, a 5-point rubric scale and a team of assessors, CSMART wanted to create an assessment tool that could automate the grading of skills and data collection. The tool would reduce administrative overhead and free assessors from having to make subjective judgements, allowing them to focus on observing actions.

Developing the Assessment Tool

MLS had previously implemented a maritime-specific learning management system and a custom scheduling module to manage training and automate course registration workflows for CSMART. Due to the success of the project, CSMART turned to MLS to help create an assessment tool.

Together with human-systems performance experts, MLS developed a prototype application for skills assessment (which eventually became SkillGrader).

The project involved converting existing assessment forms into the application's observation-centered

format, which ensures assessor objectivity. The forms were then digitized and deployed onto the application to be used by the assessors. After an assessment is completed, the application automatically takes the data recorded and uses its underlying algorithm to give a score and a comprehensive report on individual and team skill proficiency.

Results

CSMART has now simplified their officer assessment process. The creation of the company best practice forms has helped define the standards of proficiency. Assessors can quickly, consistently and objectively record officer behaviours during each simulation.

Due to the application's ease-of-use and design, CSMART assessors were able to immediately use the tool without much training. Digitizing the assessment forms has also enabled fast iteration: new assessments and updates to existing forms can be easily made, allowing for continuous improvement. The tool provides objective insights on officer competence; it automatically generates a report on skill proficiency, skill gaps, and more at the conclusion of each assessment.

The new assessment tool gives CSMART the ability to reduce subjectivity in their assessments, streamline their assessors' workload, and collect data for analytics to drive continuous improvement in officer professional development.

Seeing the successful implementation, Carnival Group engaged MLS to further develop the prototype into SkillGrader, and plans to use the application for tracking safety drills and other skill demonstrations across the entire fleet.



Marine Learning Systems provides software that supports the full breadth of training and assessment in skills-based industries, from effective knowledge transfer to live skills assessment.

Learn more at www.skillgrader.com

See how SkillGrader can enhance your organization's skill performance management with a demo today.