



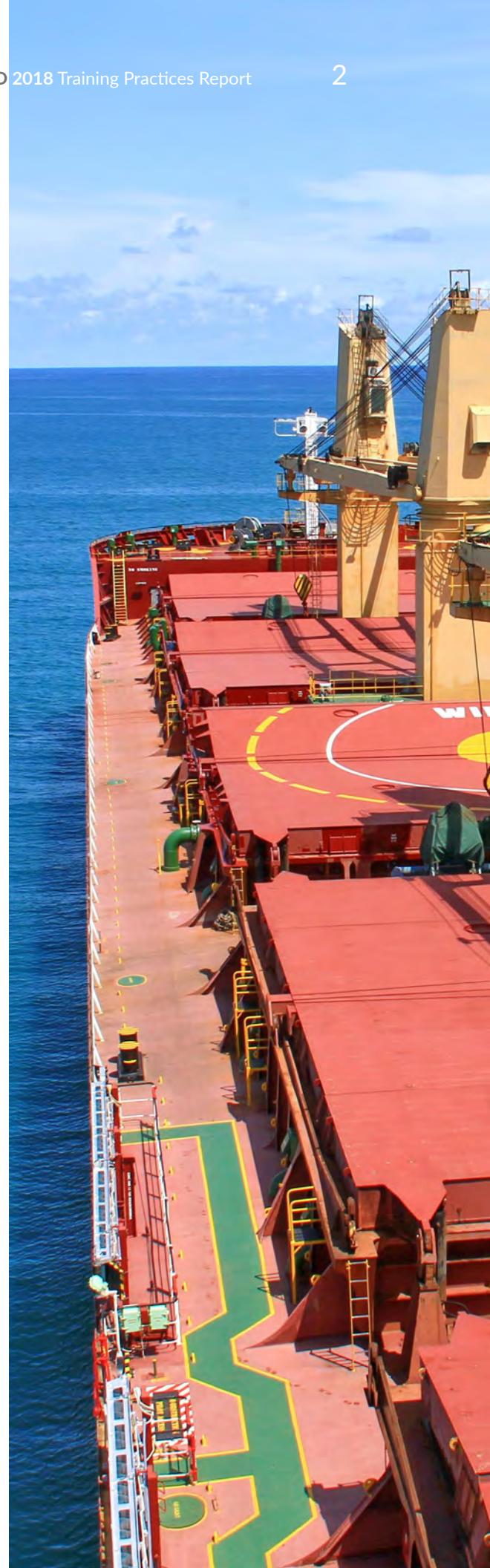
2018 Training Practices Report



Contents

Foreword	3
Welcome	5
Key Findings	6
About the Respondents	8
Crewing	13
Finance and Resources	16
Training Tools and Methods	23
Training Priorities	35
Evaluating Training	40
Training Challenges and Perspectives	42
Methodology	48
Photo Credits	49

Please be considerate of the environment.
Share this document freely, electronically.
Print only when absolutely necessary.



Foreword

Education, training and human resource development in general, is critical for the sustainability of any industry endeavour. This is especially the case in the maritime industry where there is broad agreement that a significant percentage of maritime accidents involve human factor causes. Well trained and competent crews are critical to ship safety and security, as well as to the environmental and commercial sustainability of shipping and by extension of world trade.

For these reasons, maritime stakeholders invest significant resources into creating best practice and innovative training programmes. This is certainly laudable.

To a large degree, however, the industry as a whole, knows very little about the training approaches and successes of vessel operators and training centres outside personal circles. This means that each training leader invents and designs his/her best practice training approach. Such siloed rather than collaborative approach results in stakeholders pursuing their own path and sometimes repeating the mistakes of others. On a global scale, it means that we cannot benchmark our training approaches and learn from the successes of other industry players. It also means that industry training approaches will only advance by isolated individual effort and not by continually improving on the global state of the art. In a sense, this is surprising because as training experts in a relatively high-risk industry, we should be predisposed to learning from the experiences of others. Too often we are failing to do so.

In 2017 Marine Learning Systems, New Wave Media and the World Maritime University, signed a Memorandum of Understanding as partners for a new initiative to help to change this paradigm. MarTID (the Maritime Training Insights Database) is a new non-commercial initiative collaboratively founded by these three organizations. The mission of MarTID is to help ensure safe, efficient and sustainable maritime operations on clean oceans. It will do so by providing the maritime industry with objective and comprehensive data on how it manages and conducts training for shipboard competencies and the effects of drivers, such as technology, on this training. This data, updated annually by means of a global survey, will provide insights that can lead to enhanced policy-setting, decision-making, benchmarking and operational optimization by industry and regulatory authorities at all levels. MarTID's core principles include ethical integrity, objectivity and confidentiality. Each of the partner organizations is donating their time and resources to make this initiative possible. We are doing this because we believe that sharing information benefits the entire industry.

The secure and anonymized MarTID data provides insights into training practices, budgets, priorities, challenges and perspectives as well as a

global picture of maritime training that is not currently available anywhere. As the surveys progress, this global picture will be informed by invaluable data on current and emerging training trends as influenced by changing social, economic, political, legal and technological scenarios. It will be an incredible resource to allow each organization to benchmark their own practices, and for governments and other regulatory agencies to be more informed and effective in their oversight and support of the industry. This makes the industry safer and more efficient, benefiting everyone.

I would like, on behalf of all the partners to welcome you to this inaugural 2018 report.

We take this opportunity to thank all those who responded so well to the survey and look forward to further input from you in subsequent surveys.



Cleopatra Doumbia-Henry
President, World Maritime University,
On behalf of all the Partners

Welcome to the MarTID 2018 Training Practices Report

We, the MarTID steering group, would like to welcome you to the inaugural MarTID Maritime Training Insights Report. The MarTID initiative has been two years in the making, and we could not be more pleased to present our first, of what we hope will be many, annual reports to the maritime industry. This initiative was developed in the spirit of a shared dedication and commitment to safe, efficient and sustainable operations in the maritime industry. We feel that these can be optimally achieved through best practice training, and that such training can only be achieved if we base our training practices on real data. It is that data which we provide to you, here, in this report, and that we will continue to provide annually.

The MarTID project is completely non-commercial and reports are free and distributed widely. It is supported by the generous contributions of the three partnering organizations. Furthermore, just as we recognize that training can be continuously improved given the necessary performance indicators, we also recognize that the MarTID initiative can be continuously improved. As such, we invite you to connect with the steering group at any time to offer your feedback and constructive recommendations for an ever improving database of maritime training insights.

This report provides information on:

- industry spend on training, resources used, and future trends;
- methods, tools and techniques for training;
- the purposes and goals that training serves within organizations;
- how training is tracked and measured within a company;
- new initiatives undertaken by operators;
- and common challenges and anticipated training trends.

This report would not have been possible without the tremendous response and participation from the maritime community. We'd like to thank all respondents and parties who have generously taken the time to contribute to the survey and offered their perspectives. We hope you share in our excitement regarding this important initiative and we look forward to hearing from you.

Sail safely,
The MarTID Steering Group:
Michael Manuel, *World Maritime University*
Greg Trauthwein, *New Wave Media*
Murray Goldberg, *Marine Learning Systems*

info@MarTID.org
www.MarTID.org

Key Findings



A Global Response

Respondents were global in nature with most operating in North America, Europe and Asia-Pacific, and operated a wide range of vessel types. This is positive in that the reported data represents a broad cross-section of operations regions and types of operator.



\$819 per Seafarer

The average respondent organization spent \$819 USD per seafarer for training in 2017. While more than half of respondents spent between 1% and 5% of their total operating budget on training, some respondents spent as much as 20% or more.



Training Budgets Rise

More operators increased their training budget from 2016 to 2017 than decreased it. For those increasing their budget, the typical increase fell in the 5% to 25% range. Increases in 2018 are anticipated to be larger and more common than from 2016 to 2017. Increased regulatory requirements, a greater focus on safety and capital expenditures were the most common reasons cited for changes to the training budget.



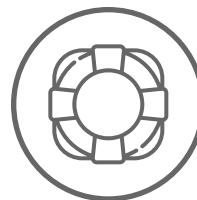
No Training “Silver Bullet”

A broad range of training methods were employed. Face-to-face training, e-learning, videos and simulation were the four methods identified by more than a quarter of the respondents as “high use”. Of all methods identified, e-learning and simulation were identified as the two which operators planned to increase the use of most in the future.



Confidence in Training Practices

Almost 70% of respondents felt that their training practices were better than average. And approximately 77% of respondents felt their training covered operational risks, leaving roughly 13% who felt it did not.



Accident Reduction Drives Training

From most to least important, the training drivers for respondents were listed as follows: reducing accidents, complying with external regulations, increasing commercial efficiency and effectiveness, managing crew competency, and career development for seafarers. Of these, safety training received the largest percentage of the training budget at 32%.



New Tech Drives Training Need

Respondents identified a number of training priorities which need to be addressed in the next 5 years. Among those, technology-related training, safety culture / skills, environmental and competence training registered as the highest priorities.



Mixed Attitudes Towards the Relevancy of STCW

While 15% of the respondents believe the STCW is not aligned to industry needs, an equal percentage believe that the instrument is adequate for international seafarer training, with the caveat of proper implementation.

About the Respondents



Respondent Background

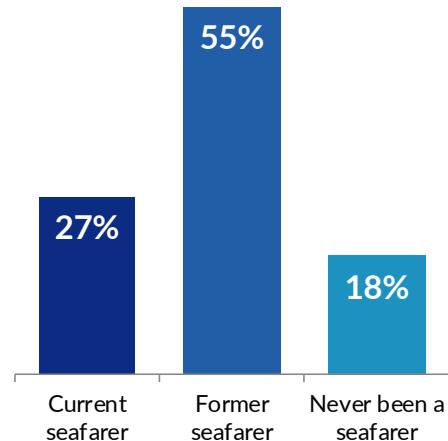
The average age of the respondent was 48 years, with the majority being current or former seafarers. A large majority had acquired a post-secondary degree; while other education backgrounds included achieving Master Mariner and Pilot qualifications.

Nearly a quarter of the respondents currently work as instructors or senior trainers, while the remainder of the respondents were spread out across various management roles. We also had consultants, advisors and retired seafarers participate. The following table illustrates the breakdown in roles:

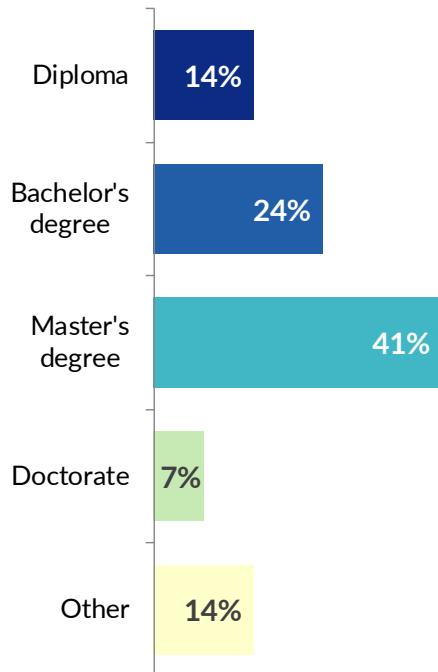
RESPONDENT POSITION	
Instructor / Training	23%
Executive / Director	18%
Manager	15%
Owner / President / CEO	12%
Captain / Master	8%
Deck and Engineering	8%
Other	16%

In terms of experience, the average respondent has worked in a training-related role in their current organization for 8.4 years. Overall, a respondent had an overall 12.7 years of maritime training experience on average.

WHAT IS YOUR BACKGROUND?



WHAT IS THE HIGHEST LEVEL OF EDUCATIONAL QUALIFICATION YOU HAVE RECEIVED?

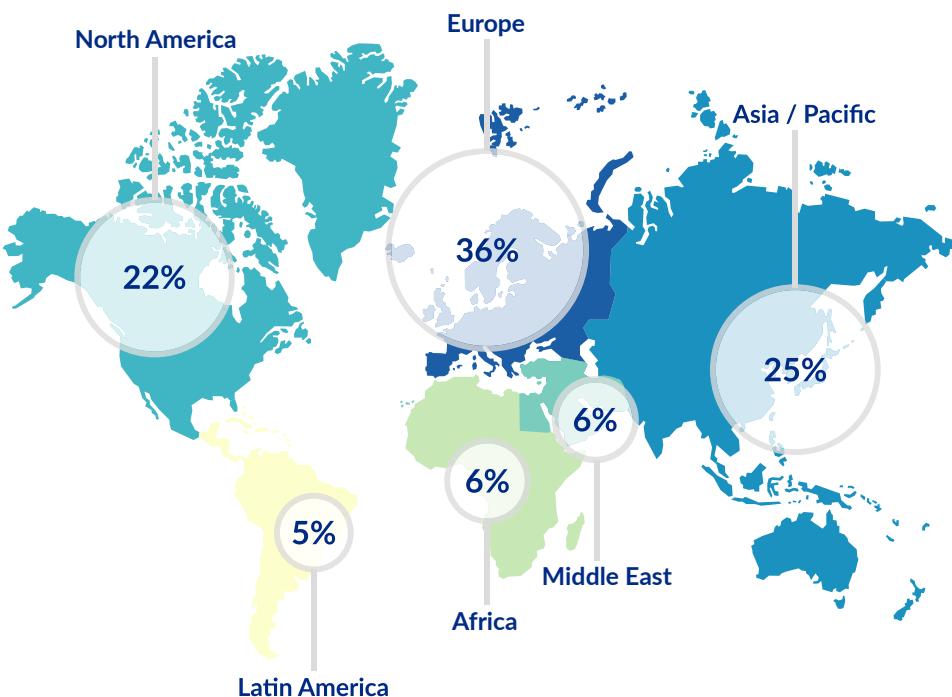
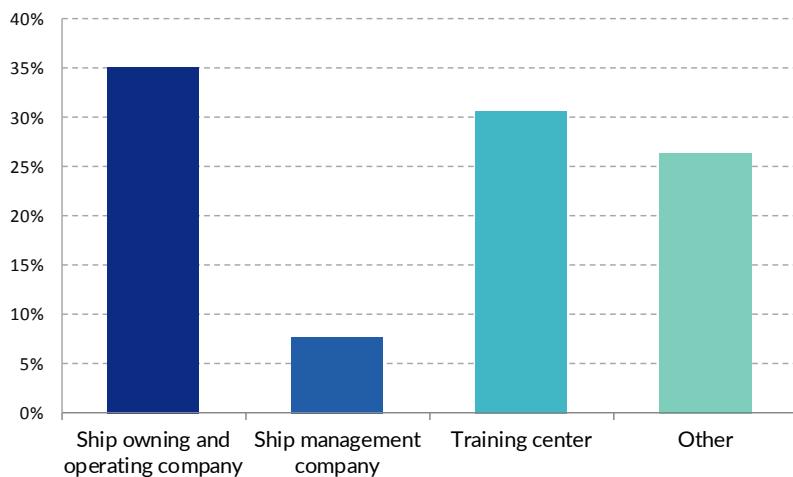


Respondent's Organization

Most respondents either worked within a ship operating company or a training center. Other organizations represented in this report include maritime agencies, consulting firms and manufacturers.

Organizational headquarters were spread out evenly between Europe, Asia-Pacific and North America. A smaller percentage of respondents were headquartered in the Middle East, Africa and Latin America regions.

ORGANIZATIONAL TYPES



HEADQUARTER LOCATIONS

Respondents were spread out globally in terms of their operations. Most operated in North America, Europe and Asia-Pacific, while one-third of the companies had operations in the rest of the world.

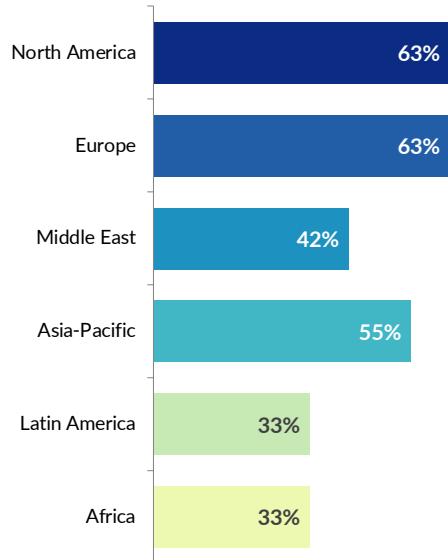
However, the top 3 most common flag of registries reported were Panama, Bahamas and Liberia. The chart below lists a more complete breakdown.

FLAG OF REGISTRIES

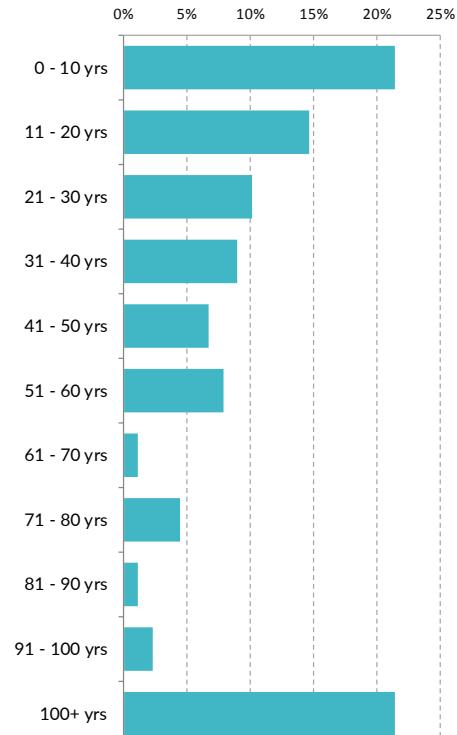
Panama	14%
Bahamas	8%
Liberia	7%
Marshall Islands	7%
Denmark	6%
United States of America	6%
Singapore	4%
United Kingdom	4%
Bermuda	3%
Germany	3%
Japan	3%
Canada	2%
China	2%
Colombia	2%
Cyprus	2%
Italy	2%
Malta	2%
Norway	2%
Vanuatu	2%
Other	19%

Most of the respondents worked in organizations that were either fairly new, or had a long history: nearly half the organizations profiled have operated for either under 20 years or over 100.

PLEASE SELECT ALL OPERATING AREAS OF THE SHIPS YOUR ORGANIZATION OPERATES OR MANAGES:



WHAT IS THE APPROXIMATE AGE OF YOUR ORGANIZATION?



In order to provide more depth of detail on the size and operating segments of our vessel operator respondents, each was asked for the type of vessels they operate, and the number of such vessels. The table below shows the average fleet size of our respondents for each type of vessel.

SHIP TYPES	AVERAGE #
Oil tanker	34.6
Chemical Tanker	18.9
LNG Carrier	11.7
LPG Carrier	15.4
Other Tanker (Asphalt, Bitumen, etc.)	3.2
Ore/Bulk/Oil Carrier (OBO or O/O or B/O)	8.5
Ore Carrier	10
Bulk/Container Carrier	30.6
Other Bulk Carrier	36.7
Container Ship	43.7
Barge Carrier	1
Vehicle Carrier	33.4
Other Specialised Carrier	2.5
Refrigerated Ship (Reefer)	0.3
Ro-Ro Passenger	6.3
Ro-Ro Container	6.9
Other General Cargo (Non-Specialised) Ship	1.2
Cruise	5.5
Other Passenger Vessels (Water Taxi, etc.)	9.5
Fish processing and catching	5.2
Offshore Drilling and Exploration	10
Offshore Support Vessel	5.5
Barge (Lash/Seabee, Deck, Hopper, etc.)	346.8
Tug (Towboat, Pusher, Salvage, etc.)	22.1
Research/Survey Vessel	4.5
Dredger	1
Other Vessel Types	5.3

For respondents who worked for a ship management company, the average number of ships managed was approximately 9 vessels.

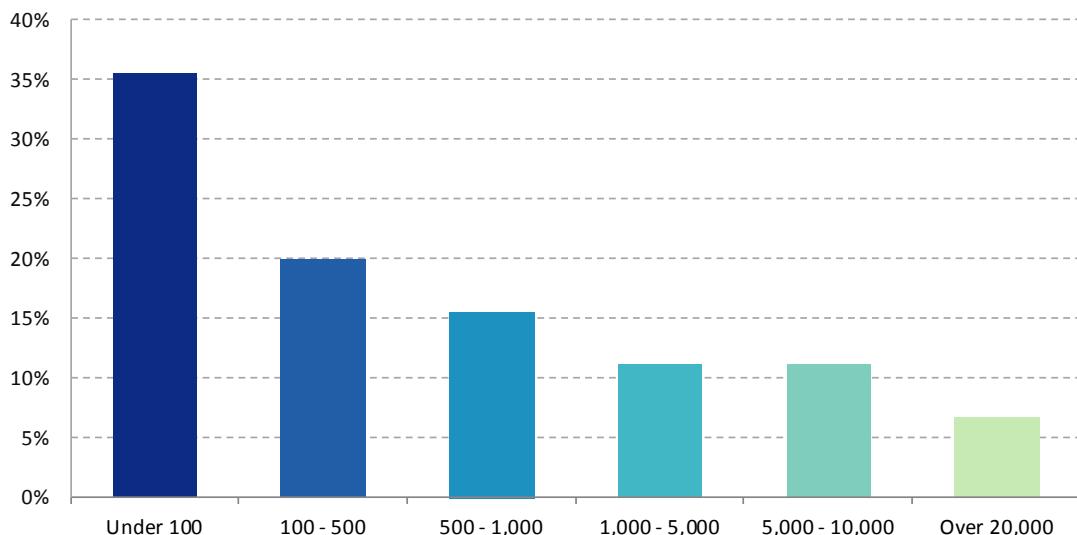
Crewing



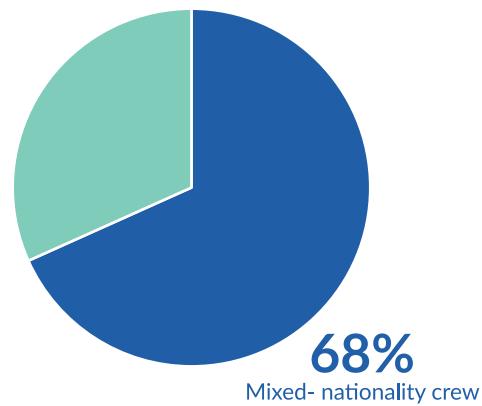
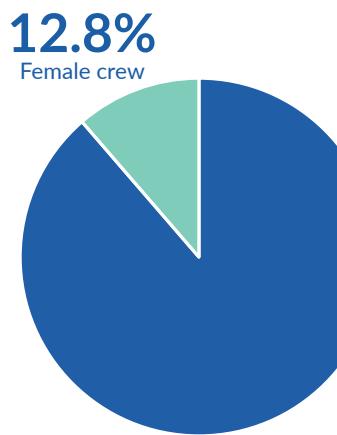
Crew Composition and Size

Most ship operating companies are on the smaller size: around 35% of the respondents employed less than 100 seafarers, while a further 20% employed around 100 to 500 seafarers.

NUMBER OF SEAFARERS EMPLOYED



Most ships employ a mixed-nationality crew, and female seafarers made up an average of 12.8% of the crew, organization-wide. It would be interesting as this database initiative goes on, to see the change in percentage of female seafarers and to see the trend in multinational crews.



Sources of Crew

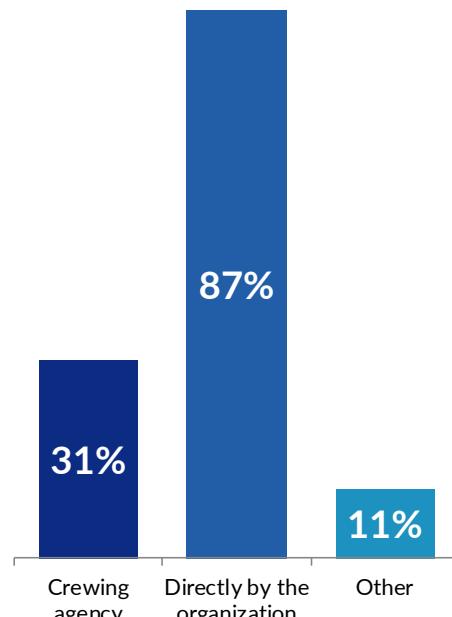
While some organizations hired their crew both through a crewing agency and directly through internal Human Resources, a majority hired directly through their own company.

Most of the industry appears to use permanent crewing. Nearly half of the respondents employed permanent crew, while a third of them employed both permanent and voyage contracts.

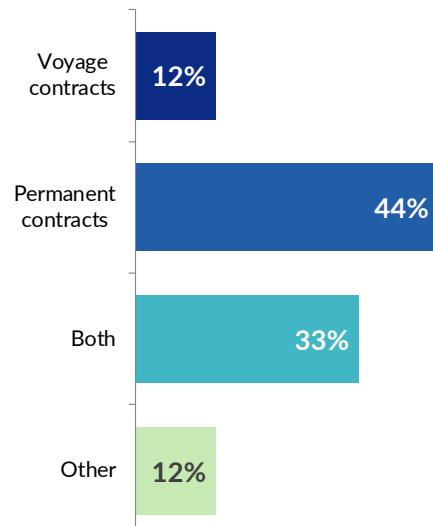
The top sources for crewing (i.e. countries of origin for crew) were the Philippines, India and the U.K. A more detailed breakdown of crewing sources can be found in the following table:

COUNTRY	
Philippines	18%
India	13%
UK	7%
USA	6%
Denmark	5%
Germany	4%
Myanmar	4%
Turkey	4%
Canada	2%
China	2%
Greece	2%
Iran	2%
Myanmar	2%
Russian Federation	2%
Ukraine	2%
Other	22%

HOW ARE SEAFARERS EMPLOYED IN YOUR ORGANIZATION? SELECT ALL THAT APPLY.



WHAT IS THE NATURE OF YOUR CREW EMPLOYMENT CONTRACTS WITH THE ORGANIZATION?



Finance and Resources



Training Budget

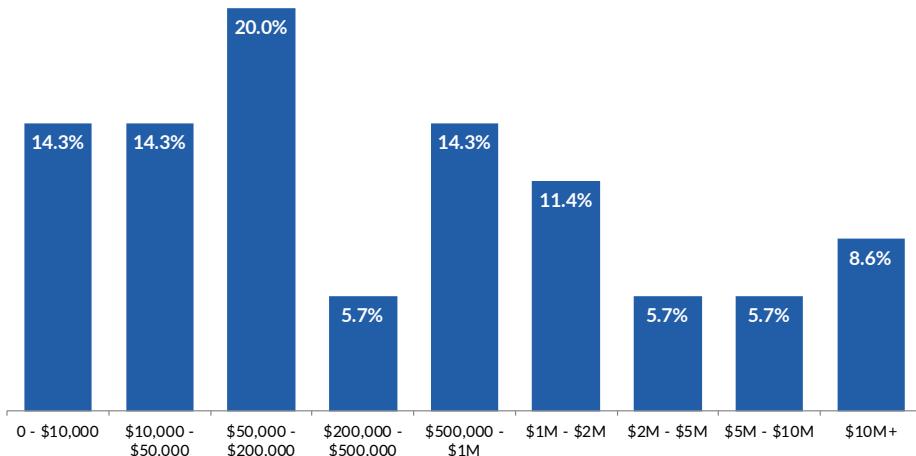
The majority of the respondents had a 2017 training budget under \$1M USD. In addition, most respondent's budget represented 1% - 5% of the company's overall operating budget. A sizable portion of the responding companies spent over 20% of their operating budget on training.

When compared to the number of seafarers an organization employs, the average operator spent

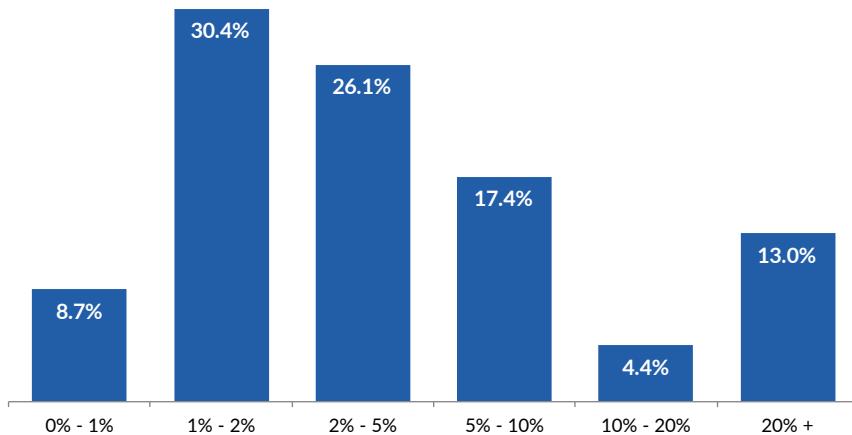
\$819

per seafarer for training in 2017

2017 BUDGET FOR TRAINING (USD)

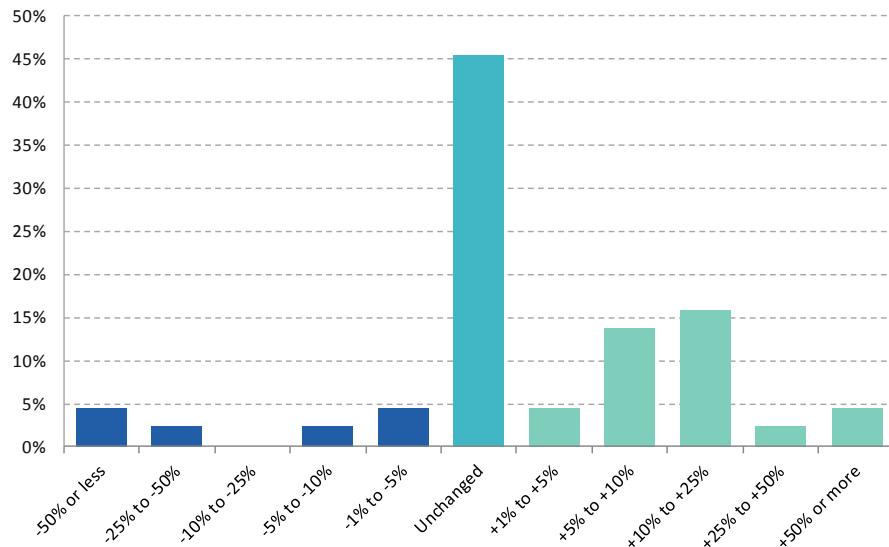


2017 TRAINING BUDGET AS A PERCENTAGE OF OPERATING BUDGET



Survey results show that training seems to be increasing in priority, at least in terms of budget. Compared to the year before, around 40% of the respondents indicated that their training budget had increased. The median budget increase from the previous year was 10% - 25%. Conversely, around 14% of the respondents reported a decrease in training budget from the previous year.

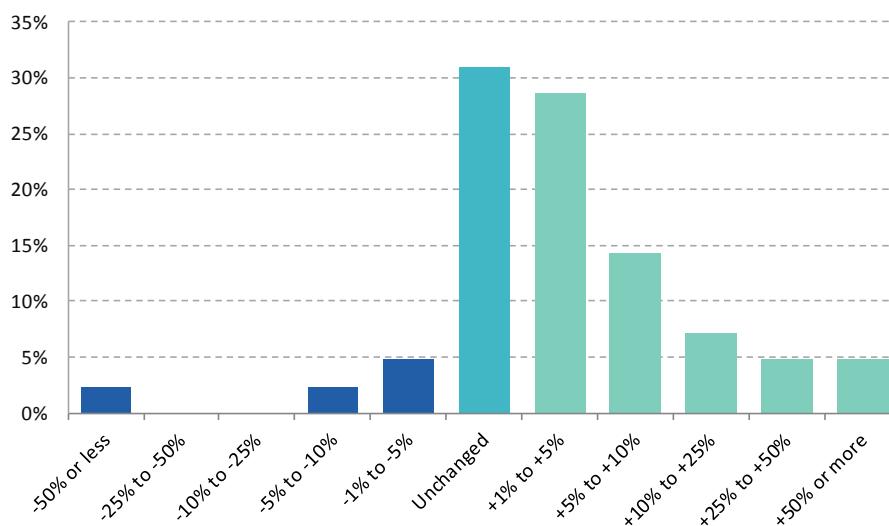
CHANGES IN TRAINING BUDGET FROM 2016



To continue the trend, approximately 60% of the respondents anticipate an increase in training budget for 2018. Note that this is a much higher number compared to the actual increase experienced over the last two years. The majority of those who anticipate a larger budget expect a mild increase of 1% - 5%, while the median anticipated increase is 5% - 10%.

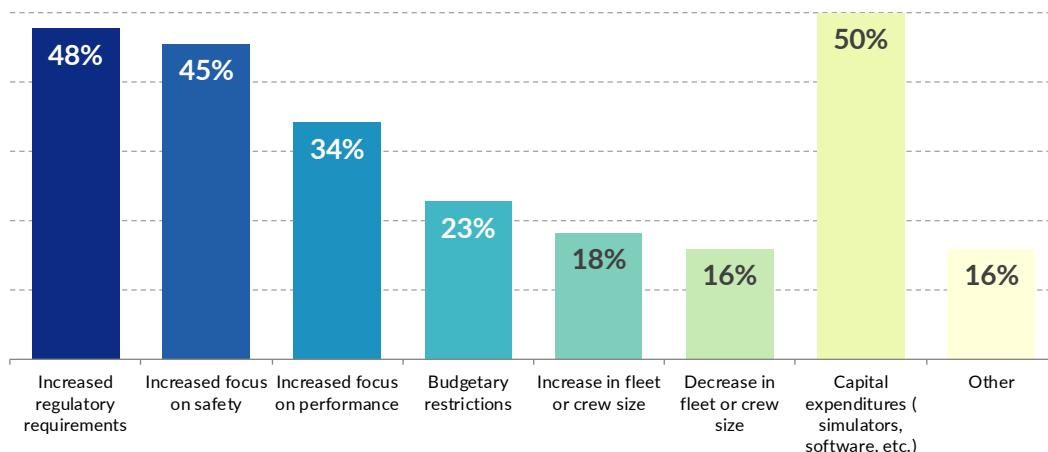
Around 9% of the respondents expect a tightening in their training budget for the next year.

ANTICIPATED CHANGE IN TRAINING BUDGET FOR NEXT YEAR



Increased capital expenditures, regulatory requirements and focus on safety were the primary driver for changes in the training budget. Half of the organizations in particular are investing in capital for training (in-house simulators, e-learning software, etc.).

TOP DRIVERS FOR TRAINING BUDGET CHANGES



When asked to indicate what types of training activities the respondent's training budget went towards, more than 70% of operators used their budget for external courses and trainers. A smaller proportion, 64%, also used their budget for internal training costs.

Over half of the operators use their training budget to develop new courses and to pay for travel costs for trainees.

Both simulator training and e-learning were relatively less common expenditure areas for operators, as only a third of the respondents spent their budget on such tools.

A detailed look at the common training expenditure areas can be found in the neighbouring graph.

WHAT ARE THE EXPENDITURE AREAS FOR YOUR TRAINING BUDGET? PLEASE SELECT ALL THAT APPLY:



Training Staffing Levels

Average number of full-time and part-time staff dedicated to training management and planning:

15

Full-time staff

22

Part-time staff

Average number of full-time and part-time staff dedicated to training delivery (i.e. instructors):

21

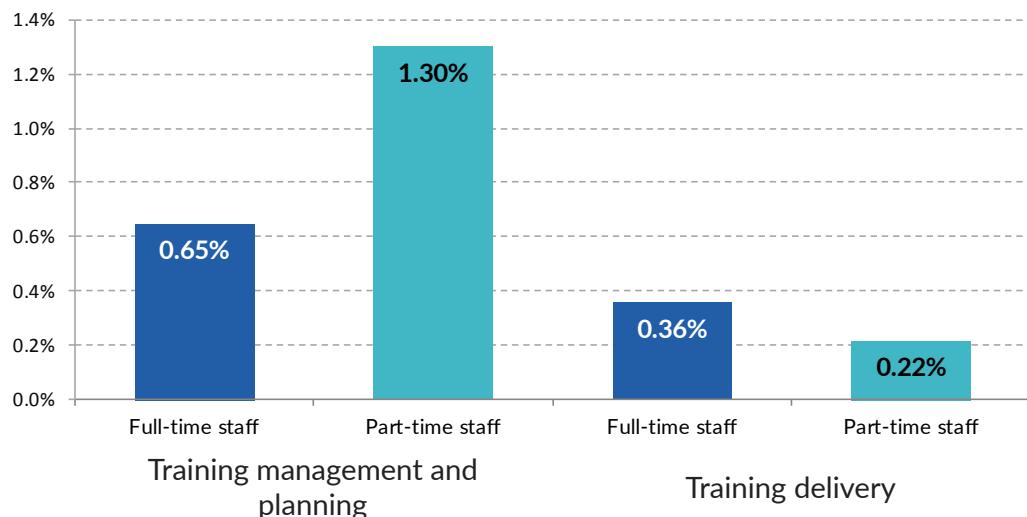
Full-time staff

7

Part-time staff

Furthermore, the average ship-owning and operating company has less than 3 people dedicated to training (both management and delivery) per 100 seafarers in their company. The diagram below illustrates the percentage of training staff compared to the number of seafarers in the organization.

PERCENTAGE OF TRAINING STAFF VS. TOTAL SEAFARERS (WITHIN SHIP OWNING AND OPERATING COMPANIES)

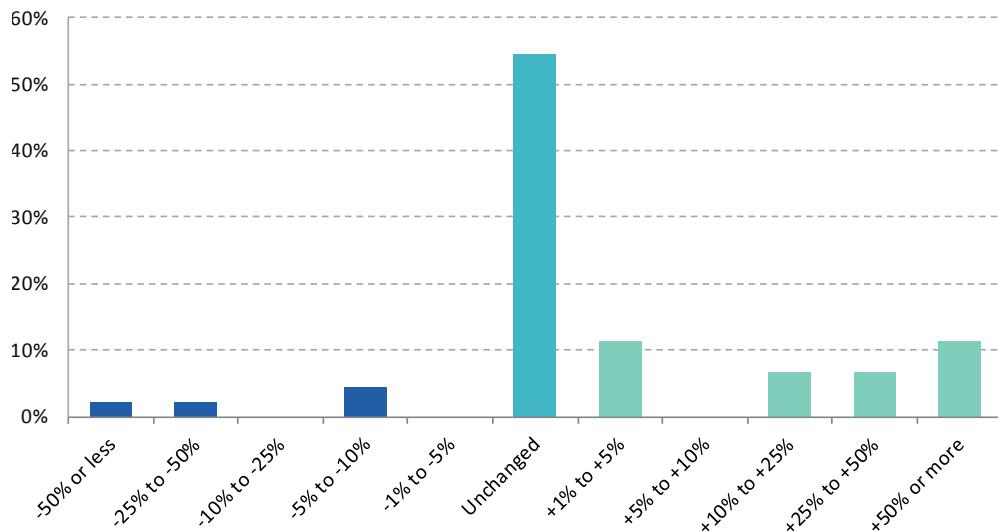


The vast majority of respondents reported that staffing levels have either remained constant or increased from the previous year. The trend continues as the majority anticipate either no change or an increase in training staff for the next year.

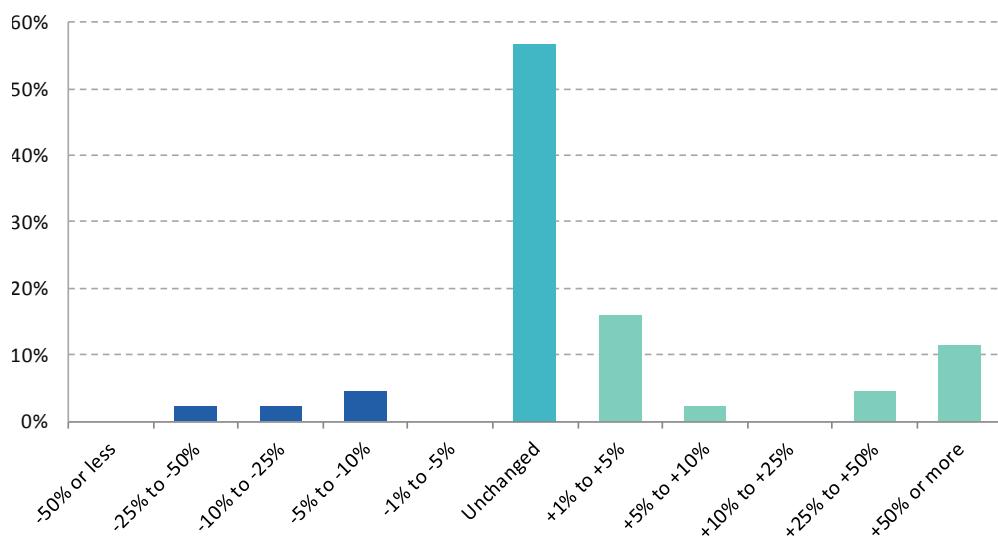
This aligns well with the previous budget finding where a majority of respondents predicted an increase in training budget for 2018 - 2019.

The following four diagrams illustrate the breakdown in how staffing levels have changed from the previous year, and how respondents anticipate they will change in the coming year.

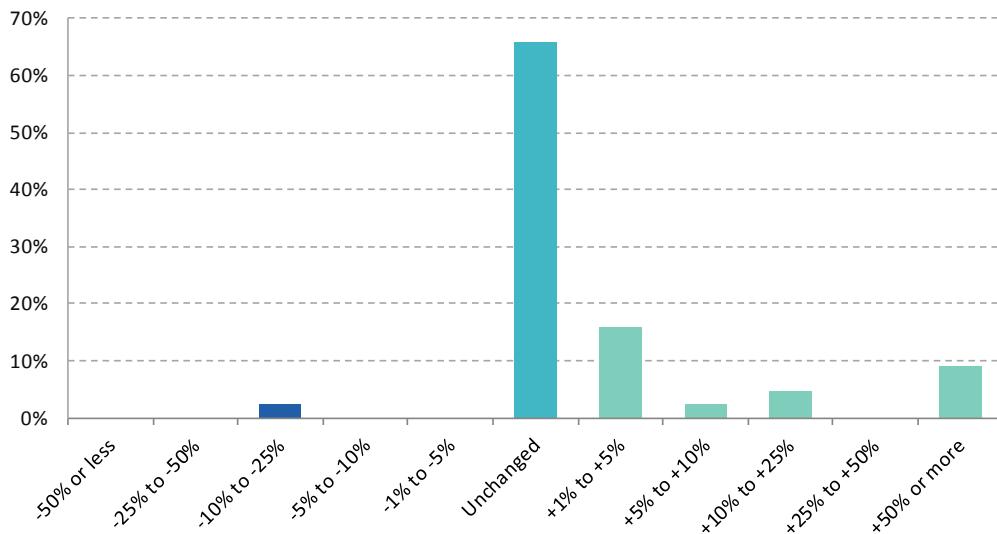
CHANGE IN TRAINING MANAGEMENT/PLANNING STAFF FROM PREVIOUS YEAR



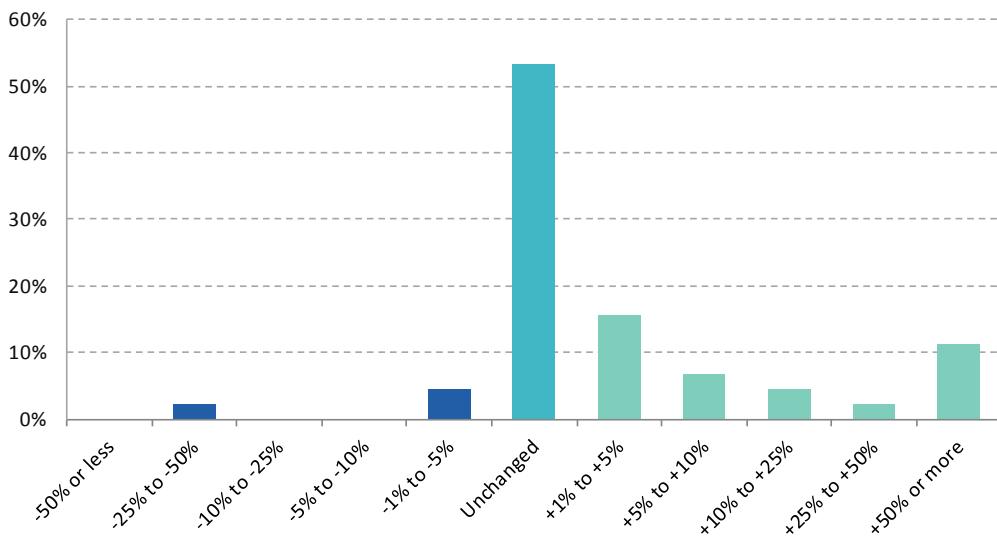
CHANGE IN TRAINING DELIVERY STAFF FROM PREVIOUS YEAR



ANTICIPATED CHANGE IN TRAINING MANAGEMENT STAFF FOR THE UPCOMING YEAR



ANTICIPATED CHANGE IN TRAINING DELIVERY STAFF FOR THE UPCOMING YEAR



Training Tools and Methods

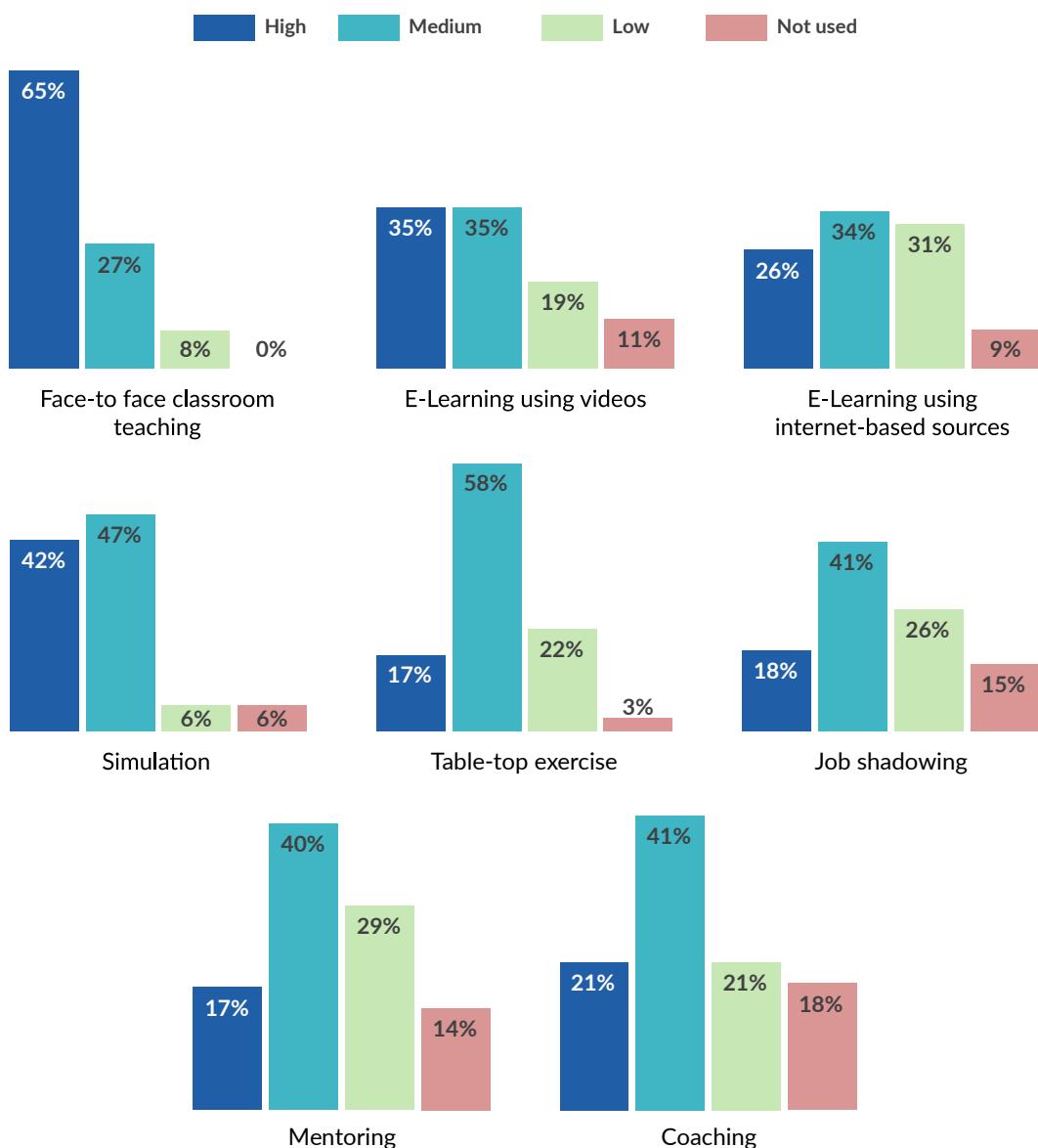


Training Methods

Traditional classroom teaching, and to a certain extent, simulation training is the most popular training tool for operators, with both methods reporting a high usage among respondents. Video training is also highly used among a third of the organizations.

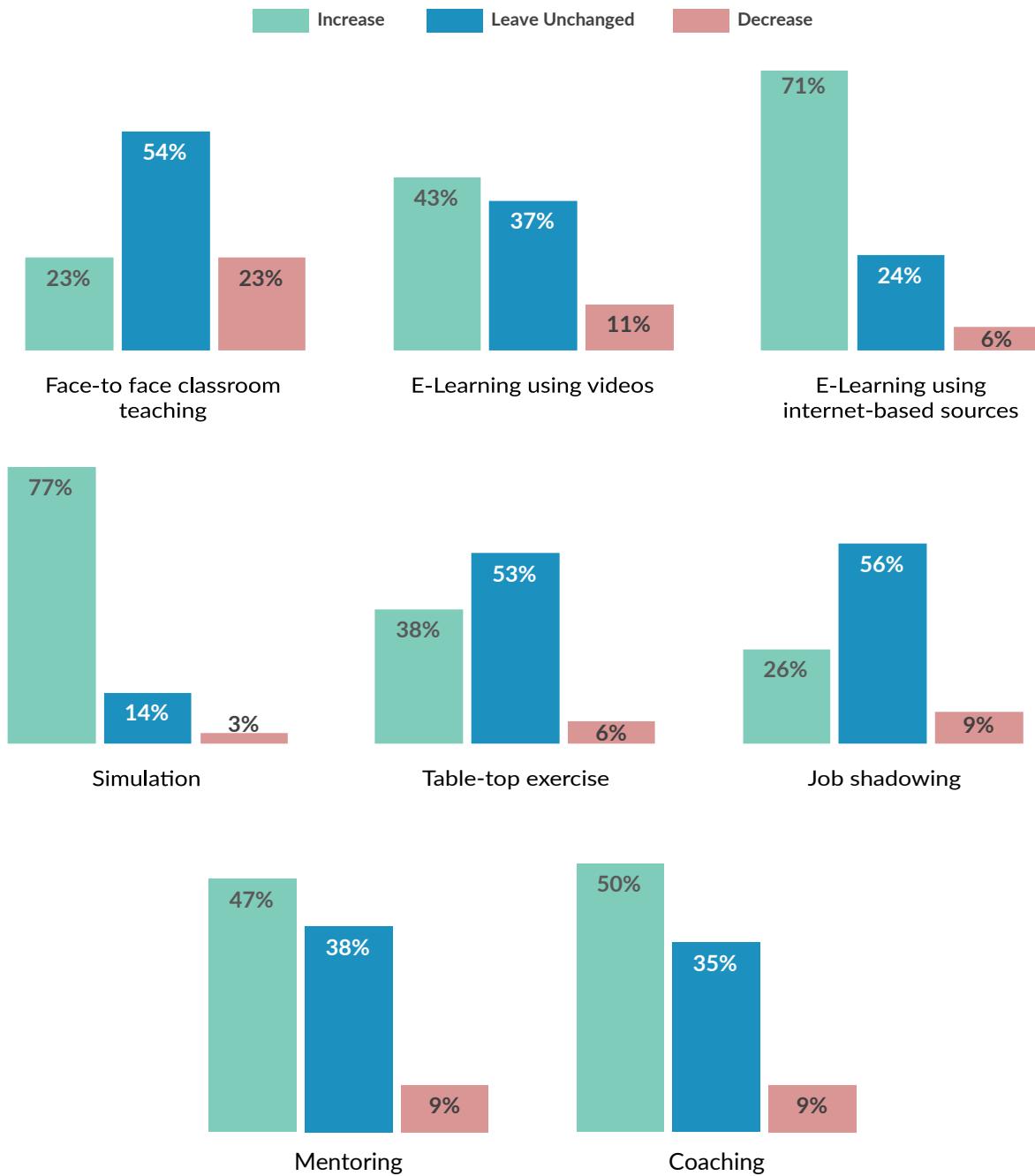
Roughly 60% of the respondents indicated use of online e-learning in high or medium use. 70% used videos and over 80% said the same for simulators. At least 14% of respondents indicated that they do not employ the use of mentoring or coaching in their organization for training purposes.

PLEASE INDICATE BELOW, WHICH TRAINING METHOD(S) YOUR ORGANIZATION USES



Many companies, over 70%, anticipate an increase in using simulators and e-learning in the coming years. Almost half of the companies also anticipate increasing their usage of mentoring and coaching to help support training. It is interesting to note that an equal proportion of respondents (roughly 23%) plan to increase classroom teaching as well as decrease classroom teaching.

ANTICIPATED CHANGE IN TRAINING METHODS USED FOR THE UPCOMING YEAR

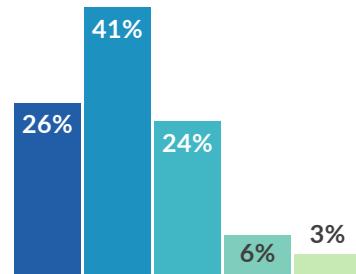


**PLEASE INDICATE YOUR AGREEMENT OR DISAGREEMENT
WITH THE FOLLOWING STATEMENTS:**

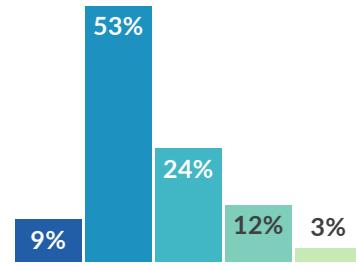
■ Strongly agree ■ Agree ■ Neutral ■ Disagree ■ Strongly disagree

Crew training is delivered by dedicated fleet trainers.

A majority, over 65%, of companies generally agree that they have dedicated employees who deliver crew training.

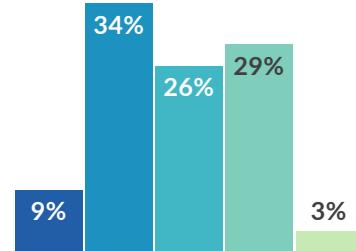


Crew training is done part-time by ship crew. Over 60% of companies also use ship crew to conduct training, outside of normal duties.



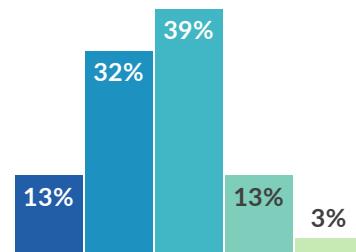
Crew training is primarily shore (classroom) based

Both shore-based and on-board training appear to be equally popular. 43% agreed that their training is primarily shore-based, while nearly a third disagreed.



We outsource training.

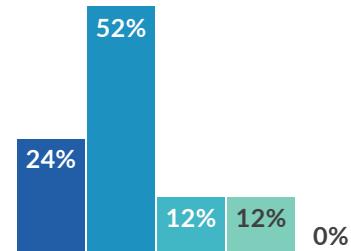
While the majority of the operators outsource their training, nearly 40% remained neutral on this statement.



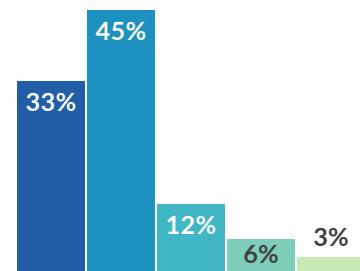
**PLEASE INDICATE YOUR AGREEMENT OR DISAGREEMENT
WITH THE FOLLOWING STATEMENTS:**

■ Strongly agree ■ Agree ■ Neutral ■ Disagree ■ Strongly disagree

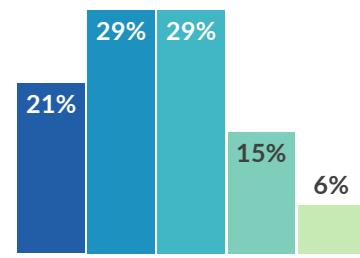
We pay to transport crew to training events. Nearly all companies pay to transport their crew for training events.



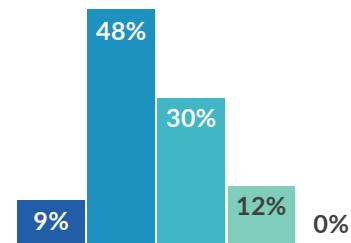
We pay to transport trainers to training events. Similarly, most companies pay to transport their trainers to events.



We use online training tools developed in house. Around half of the companies develop online training and courses in-house.



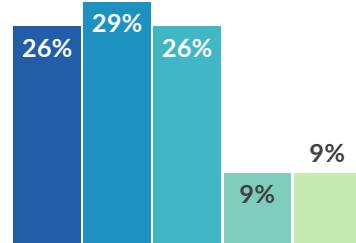
We use online training tools purchased elsewhere. A higher proportion, nearly 60% of the respondents, use 3rd-party online training tools.



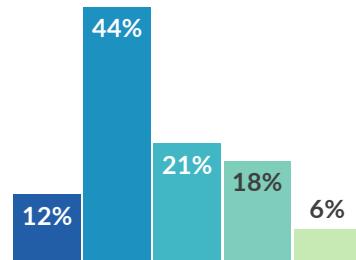
**PLEASE INDICATE YOUR AGREEMENT OR DISAGREEMENT
WITH THE FOLLOWING STATEMENTS:**

■ Strongly agree ■ Agree ■ Neutral ■ Disagree ■ Strongly disagree

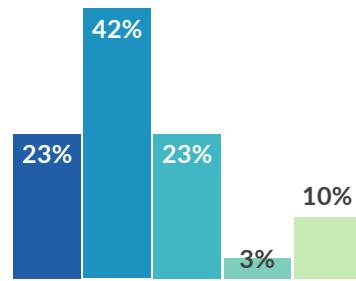
We use a learning management system (LMS) to deliver and track online training. Around 57% companies use an LMS to manage their training.



We have a structured blended (combined online and face-to-face) learning program in place. Following from the previous finding, a similar percentage of companies use a blended learning program for their crew training.

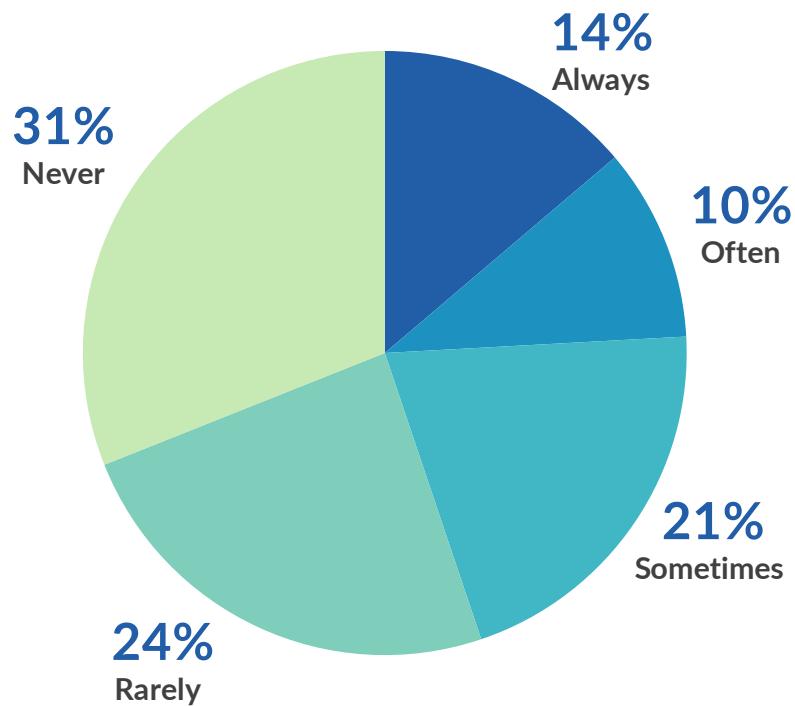


We have a significant formal training agreement with a shore-based maritime education and training institution (maritime academy, college, university). Almost 65% of companies have a formal agreement with a 3rd party training institute.



Most operators rarely, if ever, plan for crew training during non-working time. Only a quarter plan for any training during non-paid hours in any significant capacity.

ORGANIZATIONS THAT PLAN TRAINING FOR CREW DURING NON-PAID TIME

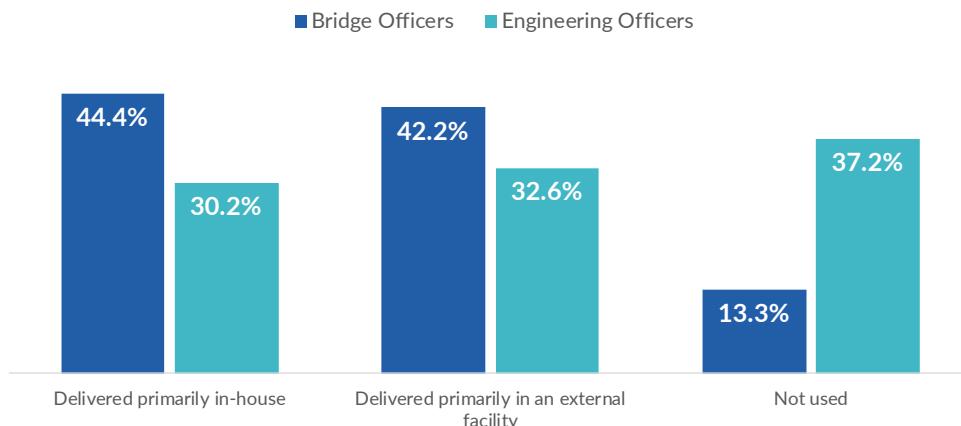


Simulator Training

Simulator training is the standard when it comes to training bridge officers with over 86% of companies using simulators to train them. A smaller proportion, around 60% total, use simulators when it comes to training their engineering officers.

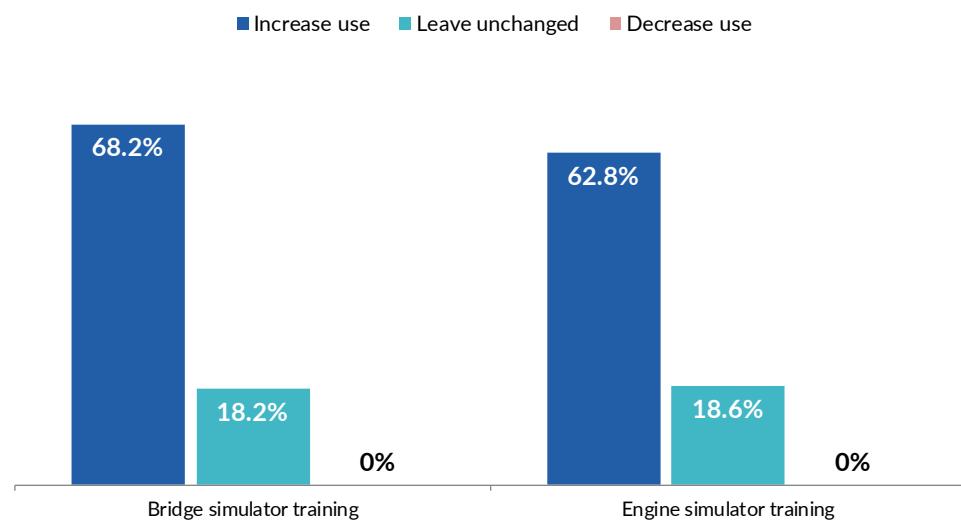
The graph below shows the breakdown of companies that use either an in-house simulator, external simulator, or none at all when it comes to training their officers.

USING SIMULATORS TO TRAIN OFFICERS



Investment into simulation training is increasing. Of the companies that currently make use of simulation training, the majority, over 60%, plan to increase the use of simulation for training officers in the next 5 years. None anticipate a decrease in use of simulation for officer training.

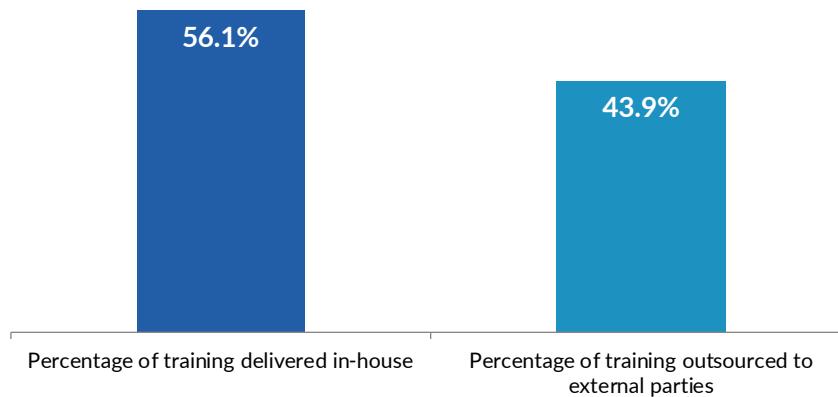
USAGE OF SIMULATION TRAINING IN THE NEXT 5 YEARS



In-house and External Training

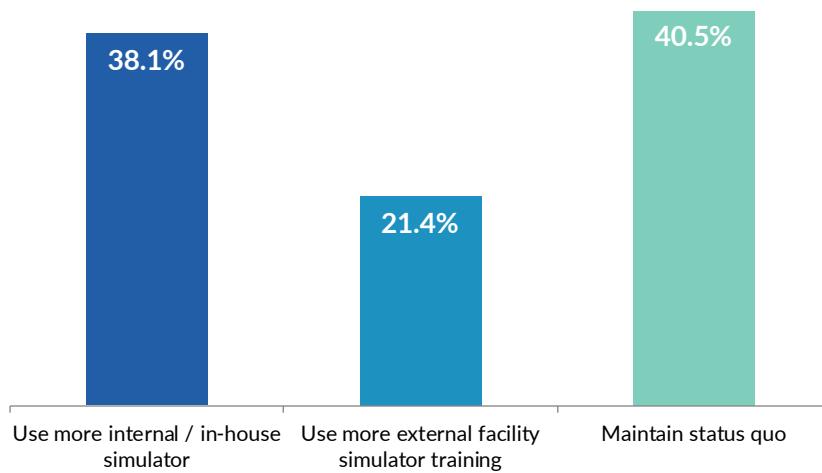
Many operators use 3rd parties to supplement their training. Around 84% of respondents outsource their training to external providers in some capacity. Among the 84% of respondents who do use external training providers, there is a nearly even split in regards to training that is delivered in-house versus training that is outsourced. An average of 56% of training is delivered within the company, while the remainder is delivered by an external training provider.

**PROPORTION OF TRAINING DELIVERED IN-HOUSE
VS. OUTSOURCED**



In terms of in-house and external simulator training, it seems that there will be a slight shift towards internal simulation facilities. Nearly 40% of the surveyed companies plan to use more in-house simulators compared to the 21% that plan to use more external simulators over the next 5 years. The remainder plan to leave the proportion of training unchanged.

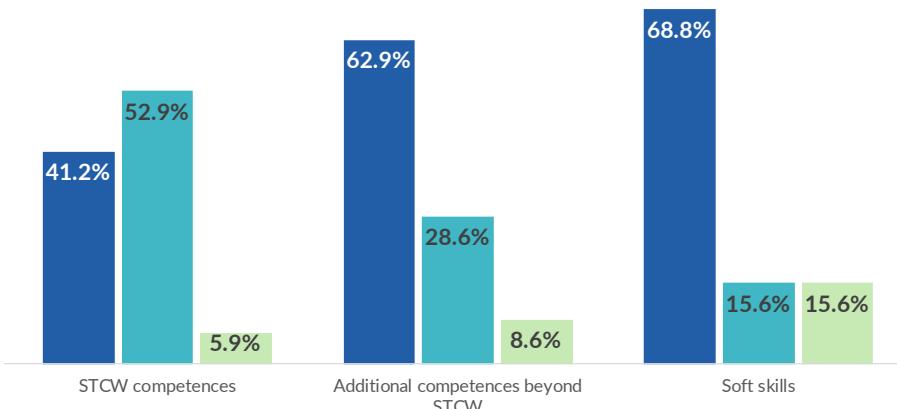
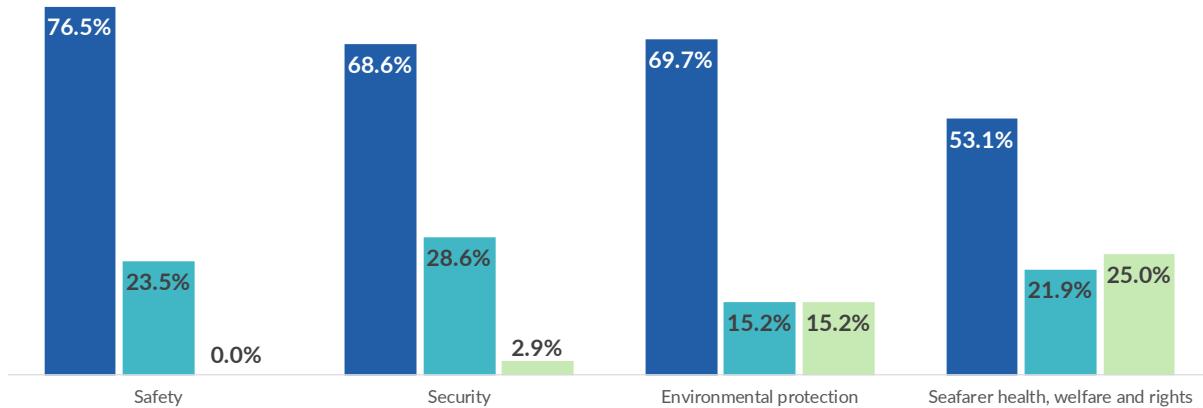
**ANTICIPATED CHANGE IN INTERNAL VS. EXTERNAL
SIMULATOR TRAINING IN THE NEXT 5 YEARS**



Companies typically use a higher percentage of in-house training for all areas of training except STCW competencies. A little over half of the companies will outsource their STCW-related training.

USAGE OF INTERNAL VS. OUT-SOURCED TRAINING ACCORDING TO TRAINING TOPIC/AREA

■ In-house ■ Out-sourced ■ Not done



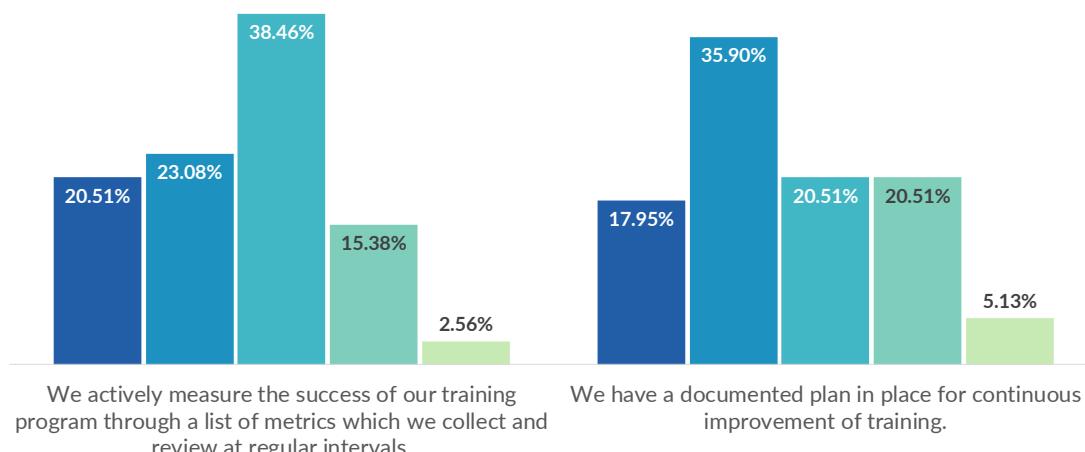
Training Opinions

In general, most respondents are positive towards their organization's training programs and methods. Over 70% believe that their existing training methods and training program quality adequately covers operational risks and helps their crew perform at a high level. However, a lower percentage strongly agree that they actively use metrics to measure the success of their training programs and only half of the respondents have a continuous improvement plan in place for training.

The graphs below shows a more complete picture of each response:

PLEASE INDICATE YOUR AGREEMENT OR DISAGREEMENT WITH THE FOLLOWING STATEMENTS:

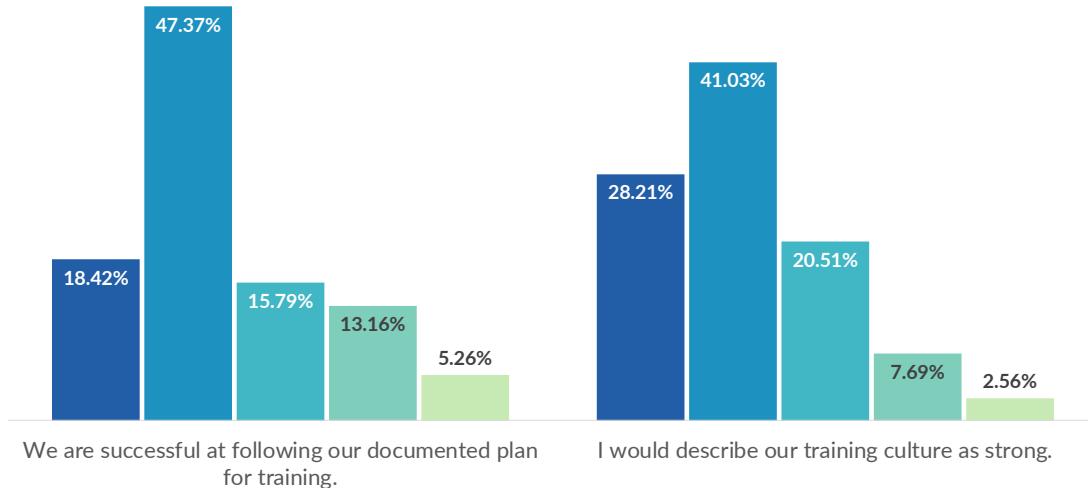
■ Strongly agree ■ Agree ■ Neutral ■ Disagree ■ Strongly disagree



More than half of the respondents believe they are successful at carrying out their training plans, and more than 65% of respondents have a strong training culture. The positive sentiments continue as nearly 70% of companies believe that their training practices are above industry average. However, only around half the companies surveyed involve all crew levels in planning and managing training.

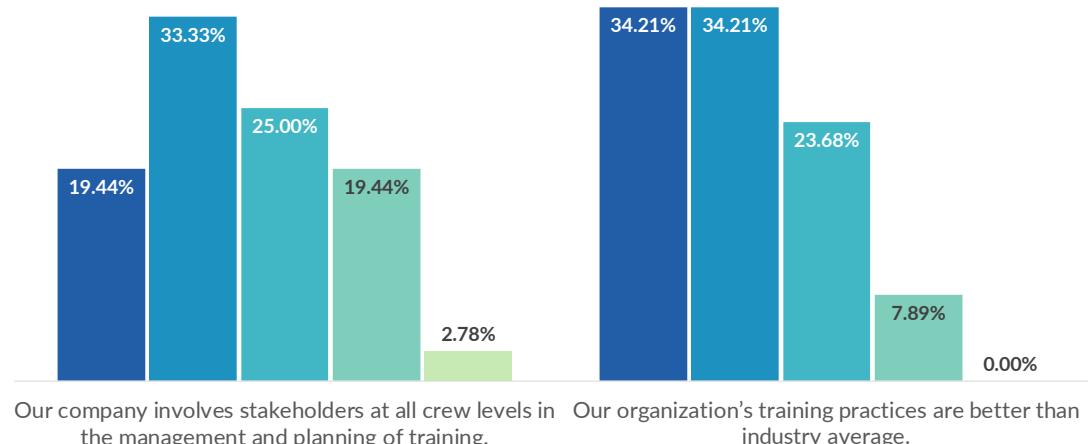
PLEASE INDICATE YOUR AGREEMENT OR DISAGREEMENT WITH THE FOLLOWING STATEMENTS:

■ Strongly agree ■ Agree ■ Neutral ■ Disagree ■ Strongly disagree



We are successful at following our documented plan for training.

I would describe our training culture as strong.



Our company involves stakeholders at all crew levels in the management and planning of training.

Our organization's training practices are better than industry average.

Training Priorities



Training Drivers

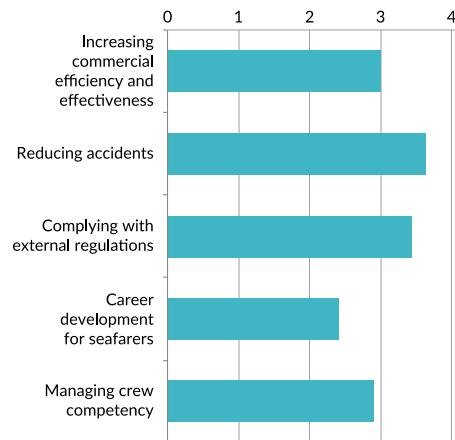
The most important driver of training, or reason for training, is to reduce accidents (i.e. ensuring safety). The second most important training driver for companies is to comply with external regulations. The adjacent graph shows the weighted score of each training driver as the respondent was asked to rank their drivers for training from most important to least (a higher number represents a higher priority assigned).

DRIVERS FOR TRAINING (FROM MOST IMPORTANT TO LEAST):

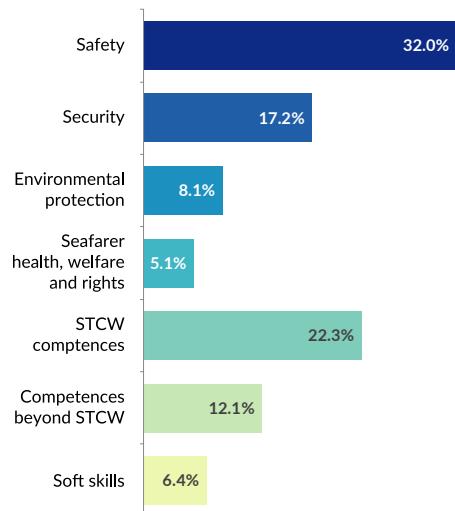
1. Reducing Accidents
2. Complying with external regulations
3. Increasing commercial efficiency and effectiveness
4. Managing crew competency
5. Career development for seafarers

This priority ranking aligns well with what companies actually spend for training. Safety training and training for STCW competences make up the majority of the average training budget. Less budget is allocated to developing soft skills and educating seafarers on how to improve their health and welfare. The adjacent graph shows the average break down in a company's training budget according to topics.

PLEASE RANK THE FOLLOWING DRIVERS FOR TRAINING IN ORDER OF IMPORTANCE



WHAT IS THE BUDGETARY ALLOCATION THAT YOUR ORGANIZATION SPENDS ON THE FOLLOWING AREAS?



Training Priorities

In response to the anticipated challenges, crew competence training, safety-related training, training for evolving technology and training related to environmental sustainability are listed as high training priorities for the next 5 years.

HIGHEST TRAINING PRIORITIES THAT THE COMPANIES DEEM NECESSARY TO ADDRESS IN THE NEXT 5 YEARS



Other priorities mentioned include:

- Career progression development
- Cultural awareness training
- E-learning training delivery
- Identification of and training for new skills for future job roles
- Interactive training
- Keeping training content relevant
- Security training
- Simulation training for rare but demanding scenarios
- Training crew in how to train

Training Initiatives

We asked respondents to list some of their most important training initiatives, and the year of launch to gain a sense of what current projects are trending towards. Below is a sampling of their responses.

TRAINING INITIATIVES CURRENTLY UNDERWAY

2015 and before:

- Training on behaviour-based safety
- Rt Flex Engine course
- Practical and theoretical towage courses
- E-learning implementation
- Improving ratings safety culture

2016:

- Full mission bridge simulator
- Online HR classes
- Training for PLCs in engine room
- Mariner Assessment Program
- W20 engine
- Basic electro-technology courses

2017:

- Advanced English training
- Custom BRM training
- Installation of High Voltage simulators
- Chemical tanker training for ratings
- SCI e-learning
- Wheel Simulator
- Ship crane simulator for AB-deck
- Port State Control Training
- SMS software training
- Liquid Cargo Handling Simulator
- Updating CBT training
- DFDE Simulator Training
- Ship Crane Simulator
- Liquid Cargo handling simulator
- Competency Management
- Control & Automation Training
- Implementing a Ratings Competency Assessment Program
- Training for Harbor Pilots
- Gender Sensitivity Training for Seafarers
- WMU cooperation
- Training for Surveyors, Superintendents
- Modular e-learning training for instructors and assessors
- New Application based e-learning

Similar to the previous list, we also asked respondents to list training initiatives they expect to start in the near future.

TRAINING INITIATIVES PLANNED

2018:

- Custom BRM training
- Advanced diploma programmes
- High end escort and ice-breaking simulations
- Smaller crew workshops
- Polar Code Training
- Leadership and Teamwork
- WMT training manual
- Bridge Team Enhancement program
- Marine Terminal Operator Competency Program
- SMS software training
- Navigational Assessor
- Leadership and Managerial Skills
- Safety Behaviour Workshop Version 2
- Simulated Electronic Navigation - Operational
- Simulated Electronic Navigation - Management
- Building of a training center
- Improve Safety Training & Learning Facilitation on-board
- Creation of a personal training log for each seafarer
- Refreshment of MCRM (BRM) training
- MLC time & attendance software training

2019:

- Engine simulator training
- Career Navigator: employee development and progressions management system
- Leadership Development-Phase 2
- ECDIS Type Specific refresher Assessment
- Safe Operations 2.0
- CRM 2.0
- New e-learning modules on Data Protection, Software training
- Specific class of ship training
- Dynamic Position Training

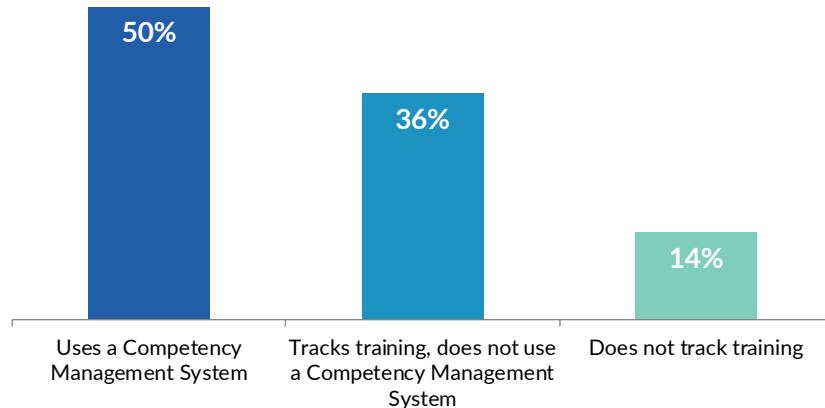
Evaluating Training



Metrics and tracking

Over 86% of companies track training in some form or another, and of that group, approximately 58% use a competency management system to do so.

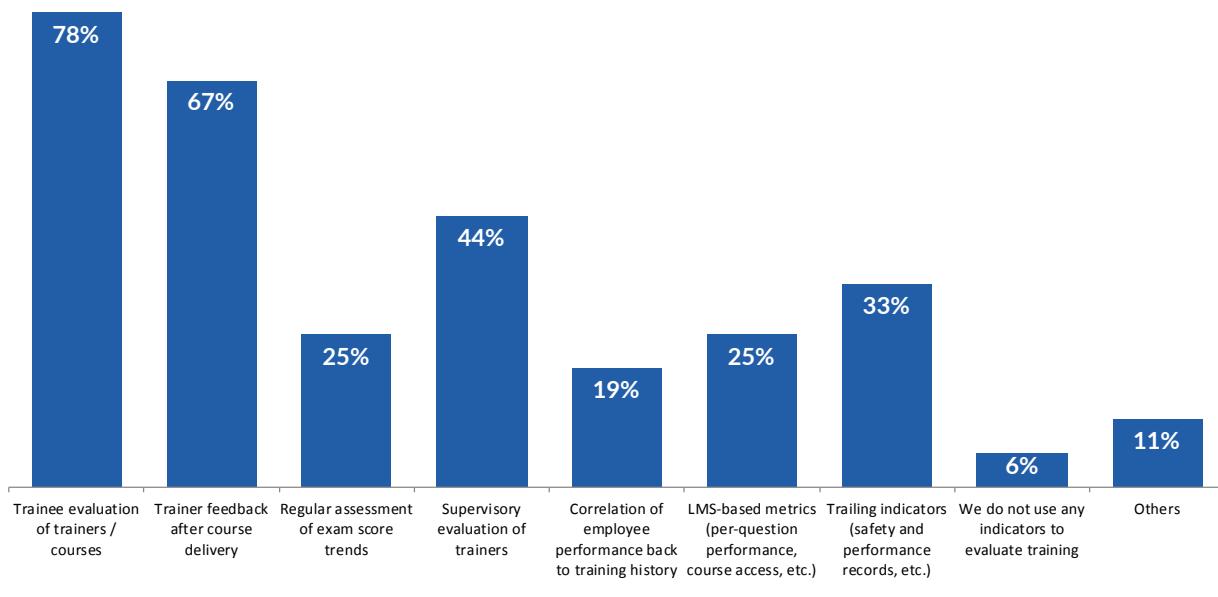
ORGANIZATIONS THAT TRACK AND MONITOR TRAINING



The main mechanism for monitoring training programs is through the use of evaluations - both trainees evaluating the course and trainers giving feedback after course delivery. Many also assess trainers themselves. The use of deeper insights and metrics, such as assessing exam score trends and correlating performance with trainee history, is not as widespread.

The following chart shows the metrics that companies use to evaluate their training programs.

INDICATORS USED TO EVALUATE TRAINING



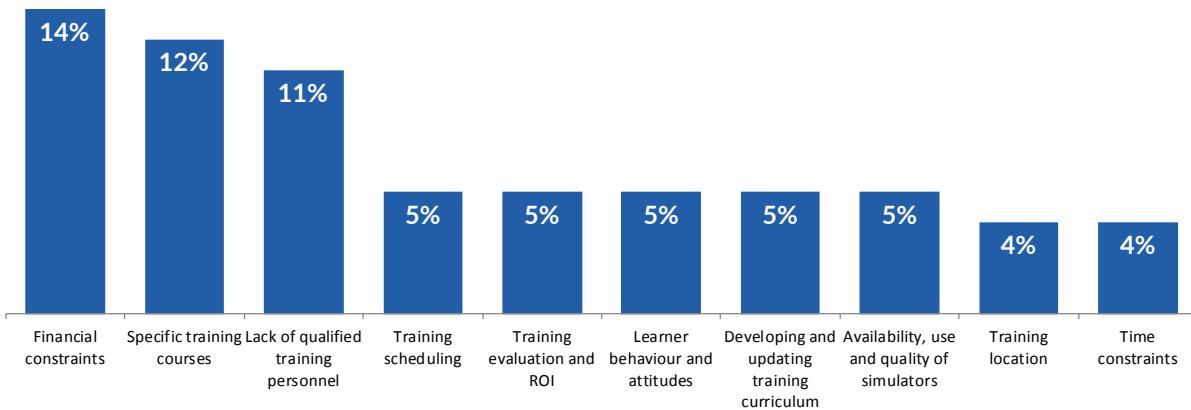
Training Challenges and Perspectives



Current Training Challenges

Overwhelmingly, the top training challenges for organizations is a lack of financial resources. There also seems to be a lack of competent and dedicated training personnel for training and assessment. Many have budget restrictions and financial constraints while some methods of training (such as simulator equipment) are particularly capital intensive. Another common challenge was the procurement and availability of specific training courses.

PLEASE LIST THE TOP 3 TRAINING CHALLENGES YOUR ORGANIZATION CURRENTLY FACES



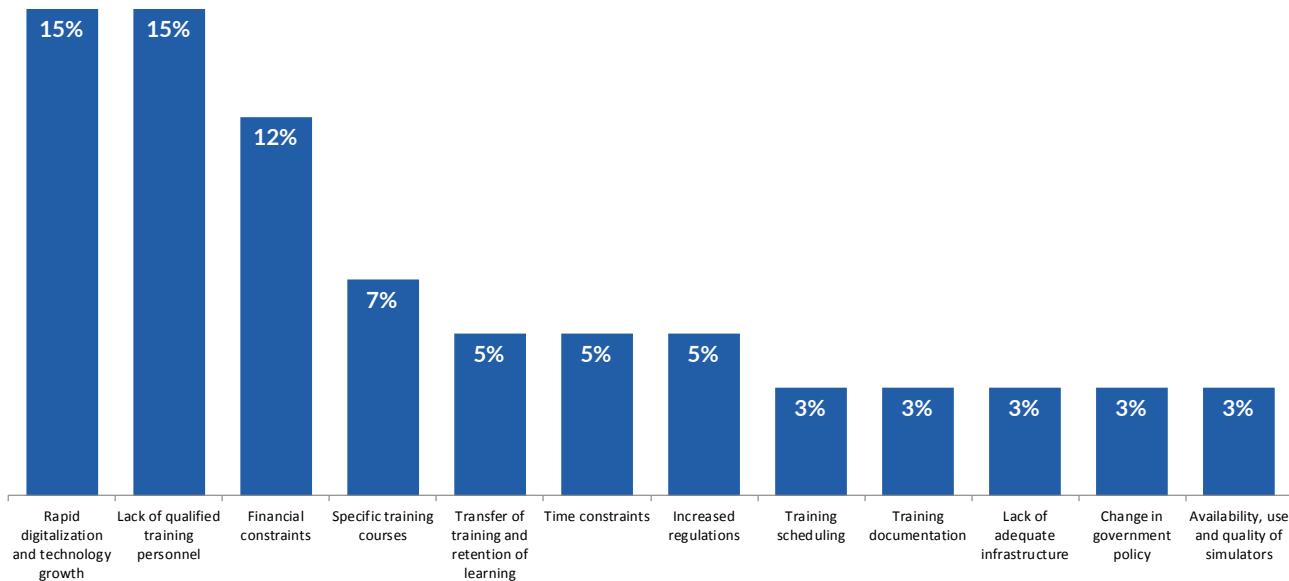
Other challenges mentioned include:

- Consistency of training quality
- Improvement planning
- Job security for instructors
- Legal requirements
- On the job training
- Political changes
- Seafarer attraction
- Training approach
- Training delivery
- Training provider competition
- Transfer of training and retention of learning
- Meeting stakeholder expectations
- Lack of adequate infrastructure
- Lack of tools and methods for tracking and managing training
- Language difficulties
- Training volumes

Anticipated Training Challenges

The respondents viewed the rapid digitalization and technological advancement in the maritime industry and the lack of appropriately qualified training personnel as the greatest challenges for training in the future. Financial constraints remain high on the list of anticipated challenges.

PLEASE LIST THE TOP 3 FUTURE TRAINING CHALLENGES YOUR ORGANIZATION IS ANTICIPATING

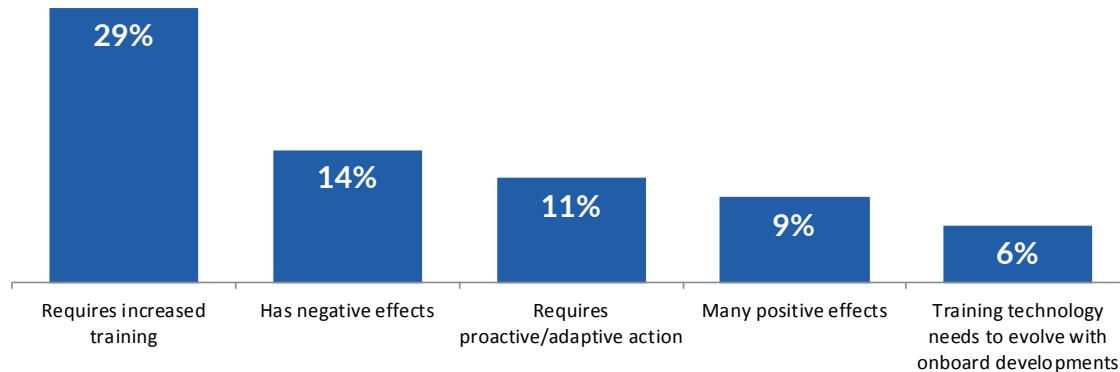


Other challenges mentioned include:

- Berths for cadets
- Demographic changes
- Developing and updating training curriculum
- Economic and market crises
- Lack of tools and methods for tracking and managing training
- Meeting stakeholder expectations
- Training approach
- Training certification
- Training evaluation and ROI
- Training provider competition
- Training volumes

Perspectives on Technology in Maritime Operations

Perspectives on new technology and its relationship with maritime operations is dominated by the view that more training to address new technology is needed.



Other opinions mentioned include:

- There are benefits and disadvantages of increasing technology
- Different learning curves and adoption rates by individuals and organizations
- Technology helpful in decision-making but not decision-maker
- Requires identification of and training for new skills for future job roles
- Industry not even meeting STCW requirements; technology is a much bigger challenge
- More case-by-case (specific) training needed
- Need for uniformity of interfaces on board ship
- Benefits of on-board e-learning linked to trainee motivation
- Requires ICT competencies
- Requires regulating
- Will not make conventional ships redundant

The following are opinions expressed on the survey:

"The increase in technology is a good thing for our vessels. However this must be regulated to ensure that varying providers of equipment provide systems with familiarity across interfaces. Too many options and changes mean that our seafarers have to learn to operate varying systems each time they change vessel!"

"We are not prepared for new ship technology. [Even] the STCW minimum requirements are not [being] well adopted."

Perspectives on Best Training Practices

The top sentiment, with around 11% of respondents, on what constitutes best training practices for the industry is combining the use of shore-based training and on-board e-Learning with a competency management system. A further 9% of the respondents believe that using well-trained and competent maritime instructors is the key to training.

The following are opinions expressed on the survey:

“Start with understanding ‘work as done’ versus ‘work as imagined’, then involve front-line employees in developing their training with them. Leverage the best employees as trainers, and keep those trainers current with their assets as well as supporting them with professional development to become even better trainers. Layer over this with executive support (in fact insistence) in terms of Learning and Development. And remember to measure the outcomes, celebrate the results, improve and repeat.”

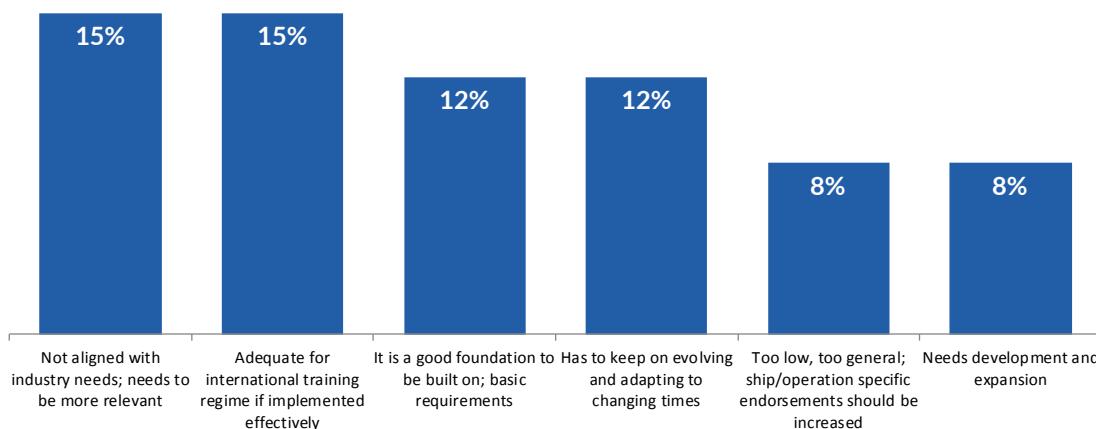
“A commitment to the learning & development of an organization’s seafarers, providing relevant, focused, needs based blended learning using state of the art simulators and well qualified effective instructors, supported by an organization that has the interests of the sea staff at heart.”

“A mindset of ‘learning as an investment’ instead of “training as an expense’ needs to be implemented. Organizations need to accept that with the deficit of seafarers and continued global demand for shipping, [the] experience gap needs to be filled by new methodologies at the school, followed up on-board and [supplemented by] company-specific training. Continued evolving of programs with close check and balance of knowledge and behaviour maturity needs to be the norm. Accreditations and approvals have value; however, their limitations need to be accepted and gaps identified and closed by new learning strategy designs.”

Perspectives on STCW

The top view shared by over a tenth of the respondents is that the STCW is not aligned with industry needs and that it needs to be updated to become more relevant. Conversely, a similar proportion of respondents believe that the current STCW Convention and Code are adequate for international training as is, with the caveat that it is implemented effectively.

WHAT ARE YOUR VIEWS ABOUT THE STCW CONVENTION AND CODE, AS AMENDED?



The following is a selected opinion expressed on the survey:

"The STCW Convention and Code needs to be developed for future skills 5 years from now. Implementation has to be practical and not business focused for training institutes. The amendments of 2010 are a good example where requirements were vague, changes were unclear even to administrations and were not developed/implemented in time. Patch solutions were implemented 'to be in compliance'. I believe IMO should track the impact of the new additions and make incremental changes rather than a major amendment. Also for approval of training centres a more stringent approach should be taken to include delivery of training and performance of the professionals trained in the real world. Evaluation criteria in the STCW could be met through a varying quality standards. Stringent standards should also be set for proficiency of the trainers. Merely being a mariner and having long sailing experience does not necessarily result in being a good trainer. Teaching approaches are still related to how things were in the past; there is no connection with how the job roles will look like in the future."

Methodology

The 2018 MarTID survey was conducted through an online survey instrument that was made available globally to the maritime industry. The survey was hosted through SurveyMonkey.com and data stored in a secure database for analysis.

The survey ran from November 6, 2017 through to January 31, 2018. During this period, the link to complete the survey and information on how to access the survey was distributed via multiple media channels (MarineLink.com, Maritime Reporter, email newsletter) and via press releases from the World Maritime University and Marine Learning Systems.

Photo Credits

- p1 © kalyakan / Adobe Stock
- p2 © norinut / Adobe Stock
- p8 © Idanupong / Adobe Stock
- p13 © wanfahmy / Adobe Stock
- p16 © Image'in / Adobe Stock
- p23 © mayende / Adobe Stock
- p34 © manyasha / Adobe Stock
- p39 © momentscatcher/ Adobe Stock
- p41 © tsuguliev / Adobe Stock

www.martid.org

Disclaimer

No representation or warranty is provided as to the accuracy or completeness of the information and data contained in this report. Such information and data is considered current as of the date of this report; however, there is no obligation or intention to update the information and data at any time after the date of this report. This report may contain information or data obtained from third parties, and while it is believed that any third party information or data is accurate, all such third party information and data has not necessarily been independently verified.

Copyright MarTID, 2018

Distribution of this report, unaltered and in its entirety, is permitted. Distribution of portions of this report is also permitted, provided the following attribution statement is prominently displayed in conjunction with the portions of or data from the report:

Source: *MarTID 2018 Training Practices Report*

Authors: *The MarTID Working Group: World Maritime University,
New Wave Media and Marine Learning Systems.*

Full Report: *MarTID.org*