Challenging the Current Paradigms of Seafarer Training and Careers

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For many years, the traditional Maritime Education and Training (MET) approach has been the vehicle through which seafarers are prepared to serve onboard ships. A key principle governing MET is ensuring all seafarers are trained according to the minimum standards set under the International Convention on Standards of Training, Certification and Watchkeeping (STCW). Although this principle is applied by most MET education providers, there is a general consensus in the literature that quality issues still exist for seafarer training. Apart from the low quality of some of the seafarers trained by some MET providers, other key deficiencies appear to exist for seafarer training in the 21st century.

This paper argues that the current education paradigms being used for the training of seafarers appear deficient in the face of the growing manning crisis among shipping industry employers. Specifically, the crux of the training provided by all MET institutes fails to address the varying career expectations of seafarers. To a large extent, the focus on MET has been on emergency response and technical training. Given the high rate of attrition among ship officers within the global shipping industry, it is important that current paradigms used for the training of seafarers are revised to address the long-term labour needs of shipping industry employers. This may be achievable if the current seafarer training programmes used by MET providers are extended to promote a more sustainable career path for seafarers from leaving school until retirement. From a practical perspective and as per the tenets of staff development and training in general, the changing nature of work and the work place environment requires that employees are trained to enable them to adapt and be flexible in line with future career changes.

The literature provides evidence that the retention of ship officers is a key human resource challenge that needs to be addressed. With limited career options within the shipping industry, seafarers may be compelled to seek jobs in other industries. Considering that the high level of attrition may worsen the prevailing labour crisis in the shipping industry, pragmatic measures are needed at all levels within the industry to improve retention. This paper argues that improving the current paradigms under which seafarers are trained will provide a more sustainable career path for seafarers as well as compensate for the poorer human resource practices among some shipping industry employers; identified as one of the key reasons for the difficulty in retaining ship officers onboard ships. Whereas the ship officer shortage problem could be addressed using a variety of pragmatic human resource policies and strategies, a new approach is being proposed in this paper which advocates the need for MET to be consistent with the career needs of seafarers. Essentially, this means a critical rethink of the current paradigms used in seafarer training is needed to chart a new and more sustainable career path that will ensure their eventual retention within the shipping industry.

Keywords: seafarers, retention, training, paradigm, education, career, shipping.

1. Background

Retaining ship officers at sea has been identified as one of the key human resource challenges for shipping industry employers [1, 2]. With a high attrition rate also reported among cadets [19, 24, 28], the prospects of maintaining a regular pool of seafarers to occupy the vacancies created by departing ship officers is decreasing [33]. Also, working conditions onboard ships at sea has changed tremendously over the last two decades leading to a further negative impact on the ability of shipping companies to retain seafarers. As a result, the current global seafarer labour statistics suggests a shortage of 13, 000 ship officers [16, 26]. This is forecasted to increase in the future as new generation ship officers tend to leave sea within the first ten years to pursue landside careers [1, 2]. Another important issue that helps in understanding why the retention of seafarers is challenging is

the generation gap factor. The two main generations are Generation X (born between 1965 -1977) and Generation Y (born between 1978 -1994) [3, 4]. The generation gap has much influence on the progressive mobility of ship officers to landside jobs due to the differences in the level of expectations between the X and Y Generations in the seafaring industry [5]. Caesar, Cahoon and Fei [1] argues that most shipping industry employers do not appear to have a strategy that addresses the different generational expectations from their seafarers. Consequently, the differences in expectations of the two generations makes it difficult to conveniently reduce the increasing attrition of seafarers to landside jobs [1, 2, 19].

The availability of ship officers is not only necessary for the operation of a growing world fleet, but also plays a contributory role in the maintenance of a viable workforce for allied industries ashore [5, 32]. There is the need for an improvement in retention in order to prolong the number of years that ship officers spend onboard vessels before moving to landside jobs [2]. This is because, the era where people will want to have seafaring as a lifetime career is gradually phasing out. Structural changes in the industry such as advanced handling technology, reduced time in port, and the remote location of ports away from city centres have changed the very fabric of life at sea [16, 26]. Knowing how to address all these challenges are necessary from an industry perspective to attract new talents as well as keep those already working onboard ships.

Given that the underlying reasons for the shortage of ship officers in the global shipping industry are human resource oriented, employers have used many strategies to address the problem. On the recruitment side, the use of employer branding strategies to attract more people into seafaring has been advocated [5, 6]. Since the ship officer shortage is more of a retention issue, using a succession planning strategy to ensure a steady supply of seafarers and improving working conditions to avoid the breaking of the psychological contract is regarded as a more reliable approach [1, 2]. Many shipping industry employers have also been engaged in poor human resource (HR) practices such as crew poaching to sustain the supply of ship officers for the safe operation of their vessels. Crew poaching reflects the inadequacy of the current HR practices among shipping industry employers and highlights the pressing need to introduce innovative strategies to effectively address the complex range of retention issues aggravating the ship officer shortage problem in the global shipping industry [2, 27].

This paper proposes an unorthodox method to improve retention among ship officers. Specifically, a review of the current paradigms being used in the provision of MET for seafarers is advocated. The aim of such an approach is to ensure that seafarers become more career-oriented after their MET. Despite the many challenges confronting effective seafarer training [see for example, 7] the current framework under which MET institutes educate seafarers is at an all-time high in terms of the standards and revisions given under the 2010 Manila Amendments. However, improvements are needed. Firstly, authentic assessment methods are needed for seafarer training [8]. Also, current MET curriculums do not appear align with labour market needs as they primarily focus on emergency response and technical training without accommodating the career ambitions of trainees. Given the different career orientations of people who enter MET institutes to be trained as seafarers [9], training manuals should be updated to reflect and address their career needs. The design and implementation of a MET curriculum that incorporates the mapping of potential career paths could offer yet another opportunity for shipping industry employers to better understand and manage the pool of maritime labour at their disposal.

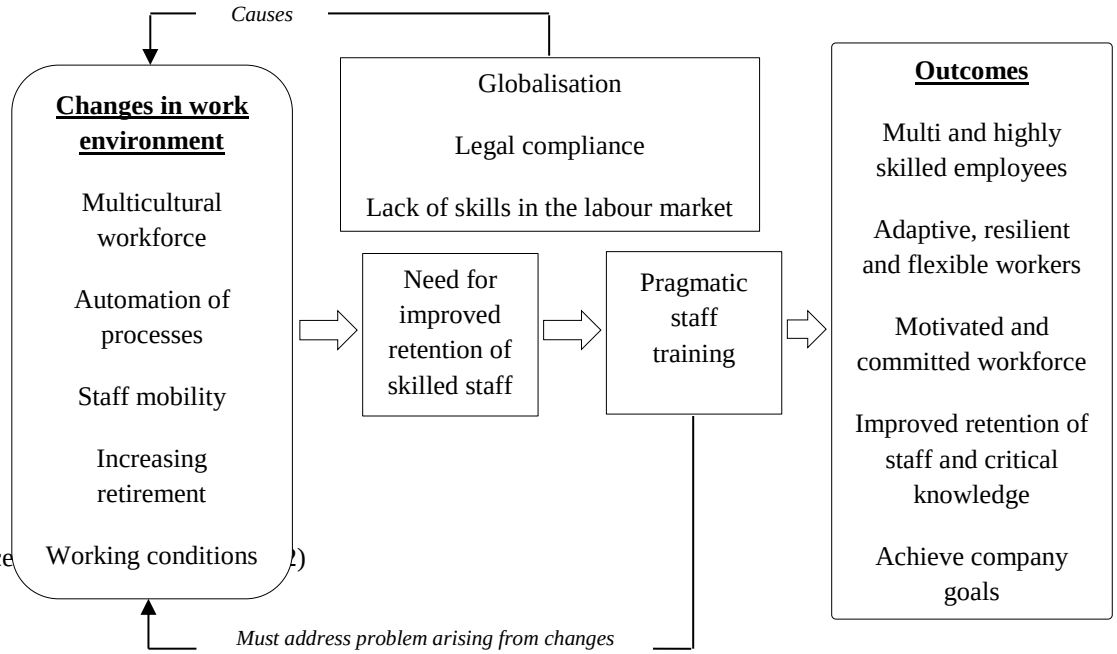
2. Human Resource Framework

2.1 Staff Training, Development and Careers

Staff training was not traditionally regarded as an organisational activity to help companies stay competitive but such a view has given way to a new approach where training and development is relied upon as a tool to improve organisational performance and manage the respective career ambition of employees. The general human resource literature suggests that it is important for

employee training and development to be undertaken that creates a workforce that is adaptive, resilient, flexible and abreast with trends in the labour market [10]. This is quite an important element of effective training as the environment within which employees work is increasingly dynamic. Changes (such as increasing cultural differences in the workforce, automation of processes and increased staff mobility) are occurring within organisations and the environment in which they operate due to globalisation [11-14]. One notable change is how working conditions are varying, which places more reliance on the skills, knowledge and patience of workers. As working conditions change, employees may respond by leaving their organisation for more job-friendly markets.
It is necessary for organisations to understand the reasons for high staff turnover [15] and to develop corresponding pragmatic measures to address the problem. This also highlights the need for the better management of tacit knowledge in organisations to alleviate the side effects of voluntary turnover [16, 32].

In addition, employees may leave an organisation as the limited access to opportunities for training and development leads to curtailing of their career ambitions [17]. This prompts a need for organisations to actively make staff training and development a key aspect of their human resource policies to influence turnover decisions in their favour. For example, where an employee is unable to adapt to changes within a job or organisation due to limited knowledge, the natural response may be to leave but an organisation that provides relevant training and development for its employees is more likely to retain them under changing conditions. Figure 1 suggests that since employees may respond to changes in their work environment by leaving, a need to improve retention under such circumstance emerges. To address the arising need, organisations may rely on the provision of pragmatic training to staff to make them better suited for new roles or be adequately prepared to move into higher positions with the retirement of upper-level managers. This can be achieved through succession planning as it provides a process for employees to be identified early for potential career advancement [10]. Career certainty may reduce the potential for voluntary turnover for some employees. The process of relying on training as a tool for improving retention means that an organisation may use skill-based systems to compensate workers alongside an effective career management scheme in which efforts are made to maximise the career motivation of employees.



Source 2)

Figure 1 Elements of pragmatic staff training

Given that employees may leave their job as a result of unmet expectations, lack of opportunities for training and career advancement and the feeling of being unrecognised, pragmatic training could help managers to adequately engage their workers and achieve both corporate objectives and individual career goals. Consequently, by providing employees with opportunities for advancement through career-oriented and change-resilient training regimes, organisations may be able to retain them for longer periods.

2.2 Shipping Industry: The Training and Career of Seafarers

Finding quality labour to operate the ships involved in global maritime trade should be a central aspect of recruitment efforts aimed at attracting seafarers to the shipping industry. To achieve the needed quality, seafarers must be given appropriate training. In the shipping industry, the training of seafarers is done through the traditional cadet system where trainees are expected to undergo classroom training at an accredited MET institute after which an arrangement is made for a shipboard practical experience. Although, the core reason for the existence of MET facilities is to supply quality manpower for the shipping industry through the provision of requisite maritime training [18, 19], there are many challenges and shortcomings that need to be addressed. Specifically, the literature [see for example, 19, 20, 21] discusses the following issues. First, most shipowners have partially neglected the responsibility of seafarer training; largely due to the unavailability of adequate berths and the high costs of developing seafarers into ship officers. This lack of training berths and apparently limited commitment among shipowners has led to a stiff competition for training berths among cadets. Second, there are also problems related to high wastage among cadets due to poor onboard mentorship and the lack of collaboration between MET institutes and the shipowners who employ their products (cadets). The aforementioned challenges not only constitute an obstacle to the recruitment and training of seafarers but equally endanger the future supply of seafarers to the growing shipping industry. As a result, shipping industry employers and other stakeholders need to appropriately respond to the inadequacies of MET in providing a more definite and resilient career path for seafarers.

Among the stakeholders of the shipping industry, there are also issues with the quality of training given to seafarers [7]. Problems such as the low quality of instruction and competency of the professional instructors in MET institutes from developing economies (a relatively debatable assertion) is considered as below industry criteria set under the International Convention on Standards of Training, Certification and Watchkeeping (STCW). Concerns have also been raised in relation to the assessment methods used by MET institutes for the training of seafarers [8]. These issues are however beyond the agenda of the current paper. It appears a new challenge has been opened in relation to the training and career of seafarers given the emerging trend of increased mobility to landside jobs among the ship officer cohorts – deck officers, deck engineers and junior officers. The need to address the effects of structural changes to working conditions at sea is becoming more evident. Essentially, the shipping industry needs a training regime which is not only pragmatic but equally produces multi-skilled seafarers in a globally competitive labour market. This may improve the overall retention of seafarers within the general maritime industry.

One of the elements of pragmatic training, as explained within the general human resource literature, is that it must lead to the realisation of a more committed and adequately motivated workforce. This requirement is lacking for the training of seafarers in the global shipping industry. For instance, during the shipboard aspect of MET, the seafarer's experience may erode their motivation to continue in the career of seafaring [22, 23]. Gould [21, p.280] describes the experiences of trainee seafarers with phrases such as, *"Physical confinement, restricted diet, distanced from family, unsupportive attitudes and hostility from mentors onboard".* Both MET institutes and their training partners could introduce measures into their training methods to alleviate the impact of the negative experiences of trainee seafarers since it adversely influences their career decisions and eventual retention at sea. Also, these collections of experiences largely contribute to cadet attrition [19, 24] as it is in direct opposition to their expectations – leading to a breaking of the psychological contract. Thus, the

inability of the current MET system in addressing the pertinent career concerns of seafarers warrants a rethink to align current career trends in the global shipping industry.

The deficiency in the current approach for training seafarers is summarised in the word 'reactive'. The shipping industry has always been reactive in its approach towards many issues including the management of human resources – recruitment, training and retention of seafarers [25]. A careful scrutiny of STCW 95 and its subsequent revisions reveals that shipping industry stakeholders only made changes when a particular disaster or problem occurred [7, 26]. From the perspective of acquiring and retaining skilled labour, a question needs to be asked of how shipping industry employers can become sustainable organisations for the future? This is because the current training regimes used by MET institutes and other stakeholders to train seafarers need refocusing. A long-term approach is needed for the recruitment and training of seafarers in order to ensure sustainability of supply [27]. Any MET process attempting to achieve sustainability of supply must have a career development programme for new entrants and existing employees as its foundation.

3. Current MET Education: Need for Paradigm Shift

The discussions in the previous sections explain some challenges confronting MET institutes in their training of seafarers. More importantly, it is necessary that MET institutes provide a pragmatic type of training to seafarers by taking their career ambitions and varying expectations into consideration. To achieve this, a couple of issues need to be addressed. First, there is a need for collaboration between MET institutes and shipping industry employers and with other relevant stakeholders. As Baylon and Santos [7, p.34] suggest "the role of MET institutions is vital for the success of the maritime industry. But in essence, a strengthened and amplified cooperation amongst the different maritime industry sectors – government, MET institutions, and shipping companies is crucial for the benefit of the seafarers and their family and ultimately for the success of the industry". It is important to understand that the lack of collaboration between MET institutes and other parties connected to the training of seafarers creates dissatisfaction among cadets and eventually culminates in high attrition – disturbingly at the 'sunrise' stage of the cadetship [28, 29]. The difference in interests of major stakeholders connected to the cadetship was found to be responsible for the lack of collaboration among them [19]. Thus, both the employers and trainers of seafarers will need to realign their objectives in relation to training strategies towards a more workable model for the hiring and recruitment of seafarers.

Second, for MET institutes to design and offer pragmatic training to the next generation of seafarers, it is important to know who they are in terms of the level of intelligence, career expectations, and so on [31]. This may help in the designing of pedagogies that could help improve their retention. To achieve this, the psychological testing of seafarers during recruitment is needed. It seems the call to test and know the stress level and expectations of new recruits before admitting them to training and subsequently working onboard ships was made several decades ago. This is evident in the work of Kline and Rogers [30 , p.173] when they indicated that, "one of the most essential elements in recruiting as well as retaining a vigorous and vital merchant marine is understanding the merchant seaman himself – knowing where he is recruited, what his future plans are, what type of individual he actually is". In this vein, the study manuals used for training at the MET institutes should be designed to cater for this important issue. Figure 2 illustrates how better management of the hiring process for seafarers can be achieved to improve recruitment numbers and effectively manage the varying expectations with which people enter into the seafaring career. The figure essentially suggests that people entering into the shipping industry are multi-generational which translates into different expectations and career ambitions. Pragmatic MET can be used to address these expectations with the conducting of appropriate psychological testing of entrants in the early stage of their training. When the career expectations can be addressed through requisite MET, they are more likely to continue working within the larger maritime industry as they will become multi-skilled, resilient and amore adaptive to the continuing changes in the shipping industry working environment.

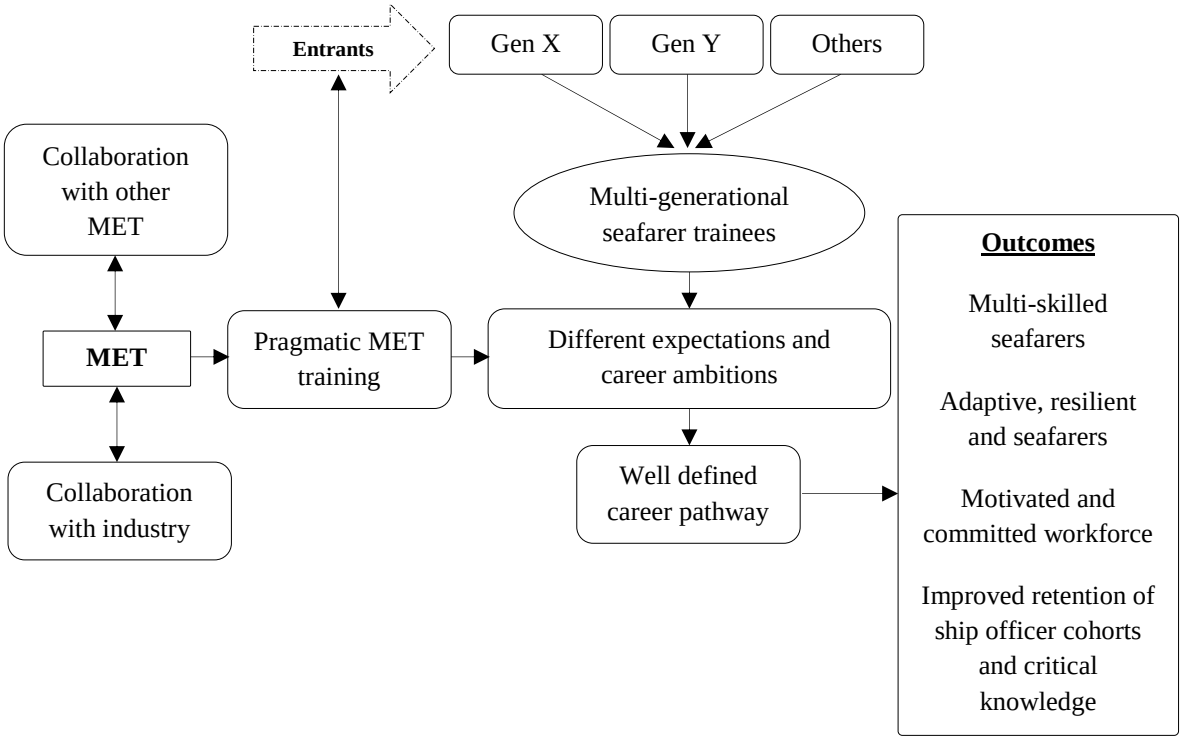


Figure 2 Pragmatic MET model

4. Conclusion and Future Directions

In this paper, the shortcomings of the current paradigms used by MET institutes in the training of seafarers are discussed by highlighting the need for a rethink of existing pedagogies to cater for the career ambitions of trainees in a highly dynamic workplace. The approach being proposed by this paper is to address the complex range of expectations of seafarers in the shipping industry to alleviate the ship officer shortage through pragmatic MET. A critical question has emerged as a result – Where does MET lead seafarers in terms of their career ambitions? This concerns the collective questioning of what is currently happening with seafarer training and then proposing a better approach. Unfortunately, the current paradigms focus on technical and emergency response to the detriment of the career needs of seafarers in the prevailing global labour market.

The foregoing discussion in this paper suggests the need for current seafarer training paradigms to be consistent with their career ambitions. Further work, collaboration and research are needed to arrive at an all-inclusive MET system where the career ambition of seafarers is taken into consideration. From the perspective of MET institutes, shipping industry employers and the International Association of Maritime Universities (IAMU), the following suggestions for future research directions are provided to develop a more pragmatic training regime and better management of the global pool of seafarers.

- An important area of research is to identify the skills and competencies needed by seafarers during the next 20 years and importantly align this to career paths as it is becoming more likely that being a seafarer for life as a career is becoming less attractive. More research is thus needed to highlight the details of the current training curriculums used by MET institutes and extrapolate their future value.

- Among shipping industry stakeholders an appropriate career path needs to be defined for seafarers where there is an integration of both sea and land office positions. This may help to keep highly skilled seafarers such as those within the officer categories from entirely leaving the shipping industry. This calls for vertical integration among the employers of seafarers and other industries where their multi-skills in operations and management may be needed. Specifically, a multi-stakeholder approach is needed to harness innovative MET schemes that could represent a practical alternative to the measures being adopted singularly by shipping industry employers to address the career aspirations of seafarers for their eventual retention at sea. As Teo and Short [30] suggest, collaboration is needed among stakeholders such as shipowners, vessel operators, ship managers, MET institutes, Flag State Administrations (FSAs), the International Transport Federation (ITF), International Chamber of Shipping (ICS), National Labour Authorities, etc. for the achievement of a reliable education and training regime towards effective global supply and retention of seafarers.

- One of the reasons for high attrition may be that companies are not aware of the diversity of people they recruit into the industry. MET institutes have a significant role to play in identifying the type and length of career of their students and whether they intend on remaining in the shipping industry at sea and on land [31]. Since it is difficult to get people into seafarer training and even more problematic retaining them at sea, a range of different career paths should be clearly articulated when recruiting cadets.

- A critical look at the outlined objectives of the IAMU on its websites reveals the following: "need to preserve highly qualified human resources in the maritime industries through effective education and training by virtue of scientific and academic rigour" and "develop a comprehensive Maritime Education System". This objective provides an opportunity for increased collaboration among IAMU members through Working Groups and joint research projects to further consider MET for 21st century seafarers to create a sustainable industry whilst also addressing seafarers' career aspirations.

As can be seen from the above points, what is clearly lacking for the global shipping labour market are distinct career pathways for seafarers both at sea and on land, but within the same industry due to the increasing likelihood that seafarers will not remain at sea until retirement. Defining career paths for seafarers is necessary as they will supplement other efforts aimed at improving the recruitment and retention of seafarers among shipping industry employers.

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