



FORMATION OF HUMAN RESOURCES WITHIN THE FRAMEWORK OF THE GENDER POLICY OF THE MARITIME INDUSTRY

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Abstract. Historically, maritime transport meets almost 80 per cent of humanity's transport needs. Maritime trade by merchant marine is a critical factor for the transport of large volumes of goods and as a consequence for the functioning of the world economy as a whole. Under such circumstances, a sufficient number of seafarers is important to ensure safety at sea and to prevent pollution and keep the environment green. Undoubtedly, the growing shortage of seafarers, especially of commanding officers in recent years has become a serious issue of global concern.

However, women's participation in seafaring remains relatively low compared to male seafarers globally. According to the study, it was estimated that women represent only 1-2 per cent of the world's 1.25 million seafarers, and that most of these women come from developed countries. Thus, the largest number of women (94 per cent) work on cruise ships and ferries.

A gender balanced maritime perspective will lead to a renewed maritime sector and drive competitiveness, innovation and growth, there is evidence that investing in women is a more effective way to improve organisational productivity.

Formation of human resources in the maritime industry is a very specific branch of training and improvement of knowledge, skills and abilities. It is a training that lasts more than one year, and the acquisition of so-called soft skills to work in this industry lasts a lifetime.

Therefore, the issue of formation of human resources within the framework of gender policy of the maritime industry is very relevant and timely.

Keywords: Human Resources; Maritime Industry; Shipping; Gender; Soft Skills; Efficiency.

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1. INTRODUCTION

Approximately 80% of global trade is facilitated through maritime transport, making commercial shipping a cornerstone of the international logistics infrastructure. The movement of vast quantities of goods across oceans is critical not only for economic development but also for maintaining global supply chain resilience. In this context, the availability of qualified seafarers is fundamental to ensuring maritime safety, minimizing environmental risks, and supporting sustainable marine operations.

In recent years, the maritime industry has experienced an increasingly acute shortage of seafarers, particularly in officer positions. This shortage poses a serious challenge for fleet operations worldwide and may compromise both navigational safety and regulatory compliance in the future.

Despite these growing human resource demands, the participation of women in seafaring remains disproportionately low compared to that of men. According to international estimates, women account for only 1–2% of the global seafaring population. Most of these female professionals are employed predominantly in passenger sectors such as cruise lines and ferries, while their representation in cargo shipping remains minimal.

Moreover, forecasts from leading maritime organizations indicate that the current deficit of male officers—estimated at 29,000 as of January 1, 2024—is expected to grow to 50,000 within the next few years. This widening gap highlights the urgency of fostering gender diversity in maritime careers as a strategic solution to human resource challenges.

Addressing gender imbalance at sea is not merely a matter of social equity; it also presents a tangible opportunity to enhance workforce sustainability, innovation, and productivity across the global maritime industry.

2. A MODERN VIEW OF GENDER AND GENDER IDENTITY

The diversity of social characteristics of men and women and the fundamental identity of biological characteristics of people around the world have shown that biological sex cannot explain the differences in their social roles that exist in different societies. Thus, the concept of gender emerged, which means a range of social and cultural norms that society requires people to fulfil in accordance with their biological sex. Gender has become understood as a complex system that is created (built) by society as a social model of behaviour for women and men. It determines their position and role in so-

ciety and its institutions (political structure, economy, education, culture, family, etc.), which includes cultural symbols developed by society in the course of its development, rules and laws governing human and social life, social institutions that implement these rules, and, finally, human self-identification, i.e., an individual's understanding of himself and his place in society, all of which are in close contact with gender. This system of communication has biological, gender, and socio-cultural components: they are inseparable from each other, unchangeable. It is not biological sex and socio-cultural norms that ultimately determine the psychological qualities, behavioural patterns, activities, and professional definition of women and men. Being a man or a woman in society means not only having certain anatomical features, but also fulfilling certain gender roles.

The term "gender" was firstly introduced in the scientific literature by the American researcher of the gap J. Scott in the mid-1980s to distinguish between biological and social understanding of the role of men and women in society (<https://geneva.mfa.gov.ua/en>). Firstly, the term "gender" was opposed to the categories of "sex" and "gender", which were naturally stable, while "gender" was constructed by society, public administration institutions of social control and cultural traditions (World Economic Forum, 2017; Kitada and Harada, 2019). The modern theory of gender does not try to deny the existence of various biological, social, and psychological differences between men and women. It simply argues that biological differences are not as important as their social and cultural significance, assessment and understanding, as well as the construction of a system of power based on these differences.

A special role in the development of gender theories is played by the theory of sexual development of psychoanalysis by Z. Freud's theory of sexual development, which had a strong influence on the understanding of the socialisation process. At the same time, it caused serious objections and opposition from feminists, because of the natural male superiority in the process of socialisation. Another direction of psychoanalysis is associated with the name of Eric Berne, who pays serious attention to the influence of society and social relations on the behaviour of men and women (Kitada and Langaker, 2017).

The understanding of gender as a cultural symbol is related to the fact that gender has not only a social but also a cultural and symbolic interpretation. In other words, biological sexual differentiation is represented and embodied in culture through the symbolism of male or female. This is reflected in the fact that many gender-independent concepts and phenomena (nature, culture, colour, the divine or



Figure 1. Components of gender identity.

Source: Developed by the author based on World Economic Forum (2017) and Bem (1983).

beyond, good, evil, and more) are associated with “masculine/male” or “feminine/feminine”. Thus, the symbolic meaning of “female” and “male” is created (Shevchenko, 2016; IMO, n.d.).

In this study, the following terms are used:

- Masculinity is a trait characteristic of men, traditionally including independence, self-confidence, dominance, aggressiveness, risk-taking, independence, self-esteem, and others. Special studies have shown that generalised spontaneous aggression and sexual aggression correlate with the level of androgens (male sex hormones) in the blood serum. Another study shows that masculine individuals have a higher level of self-esteem in general, as well as higher self-esteem in the areas of academic achievement and appearance (Tkalych, 2015; Tkalych and Karamushka, 2018).
- Femininity is the trait inherent in the female half of society, traditionally seen as flexibility, softness, sensitivity, shyness, tenderness, warmth, ability to sympathize, empathy, and others. Social stereotypes of femininity are less concerned with the social side of a personality and a successful business career, but also pay serious attention to emotional aspects (Kitada and Harada, 2019; Organisational psychology. Economic psychology, 2015).
- Gender refers to the social expectations and roles assigned to individuals based on their perceived sex, shaped by cultural norms and evolving across time and societies. In contrast to biological

sex—which is rooted in anatomy and physiology—gender is socially constructed and varies depending on historical and cultural context. Thus, gender is a product of socialisation, whereas sex is biologically determined (World Economic Forum, 2017).

Gender identity is one of the basic human qualities. It is formed as a result of the psychological property of internalisation of male or female gender, in the process of interaction between the self and others, during the period of socialisation (Fig. 1).

Thus, there are several scientific approaches that interpret the phenomenon of gender relations in different ways. Each approach has both positive aspects and some drawbacks in explaining gender and gender issues. None of the scientific approaches presented above is, and cannot be, a comprehensive explanation of the nature of gender relations, but the accumulated knowledge, competent application of scientific concepts and approaches will help to understand the complex processes that take place within both the social system and the gender system existing in society

Gender identity is one of the constituent elements of self-awareness. It is the consciousness by which a person is specifically aware of himself/herself in his/her own mental actions and states. At different ages, a person’s attitude to fundamental things in life, such as moral norms, social and personal values, and attitudes, can change radically, and the individual’s self-awareness also changes (forms).

3. THE MARITIME INDUSTRY, AS AN EXAMPLE OF GLOBALISED WORKFORCE INTERACTION, PROVIDES US WITH AN OPPORTUNITY TO LOOK MORE CLOSELY AT GENDER ISSUES.

Gender discrimination can be divided into two main groups. One will be called “hidden discrimination” and the other “open discrimination”. The situation in society was created thousands of years ago as a result of traditional and cultural practices, a combination of deeply rooted psychological, sexual and cultural beliefs. In some societies, women are considered inferior to men. Social discrimination has a detrimental effect on the mentality of women, so that some women in this 21st century refer to certain professions as “ex-husbands”.

At sea, the first challenge for women is to prove themselves physically and technically competent to earn the respect of their male colleagues. Thus, women work harder than their male counterparts to succeed because men are the ones at the decision-making level. For this reason, almost all women working in the maritime sector at the managerial level are professionals worthy of their position and authority.

Another important but “secret” problem on board is sexual harassment. This has been brought to the attention of the International Transport Federation (ITF), which attributes it to the conditions on board. When a limited number of people are together for

long periods of time without contact with the outside world, the most vulnerable “women” suffer the most.

Despite various initiatives introduced by the International Maritime Organization (IMO) and other global institutions over the past decade, many shipping companies – particularly in developing regions – continue to show limited openness toward employing women. While a number of operators responded positively to the United Nations’ call for gender inclusion at the First World Conference on Women in Mexico City in 1975 (IMO, n.d.), in some cases this support was largely symbolic or reputational rather than structural. Conversely, Scandinavian countries and other developed nations have demonstrated greater inclusiveness by maintaining more open and supportive policies for women in maritime roles.

Nevertheless, the overall proportion of women actively employed in maritime shipping remains very low. In some cases, the working and living conditions aboard vessels are still perceived as unsuitable or unsafe for women, thereby discouraging broader participation. However, international regulatory frameworks—such as the ISM Code and ILO conventions – have contributed significantly to improving working standards for all seafarers, irrespective of gender (Permanent Mission of Ukraine, n.d.).

Discrimination against women has become so widely publicised, discrimination against women is seriously practised in the maritime sector: in recruitment to

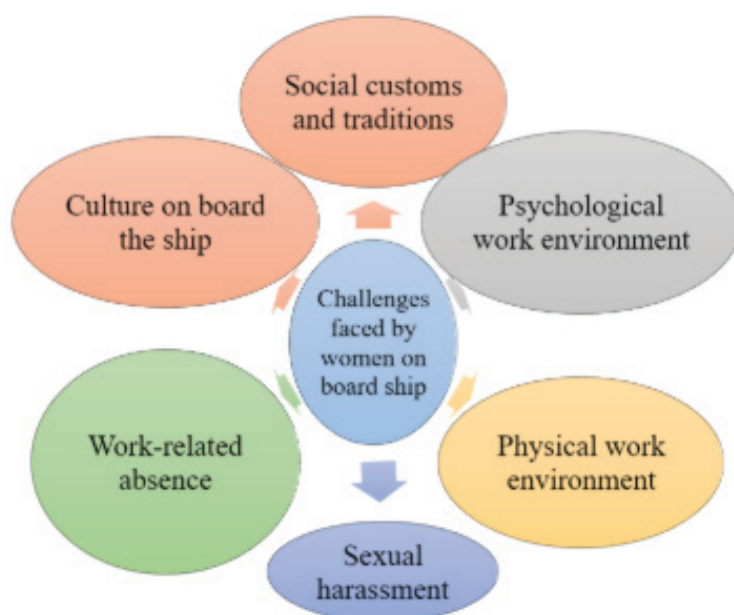


Figure 2. Problems of women on board.

Source: Developed by the author based on IMO (2015).

maritime institutions, training, funding, job offers, promotion and salaries. Then there is sexual harassment. Society needs to change its attitude towards women and help promote them by offering equal opportunities for all, as it is believed that without women, men cannot exist since creation. Today, however, some men are willingly accepting the new situation.

3.1. Critical approach to women's activities in the maritime industry, challenges and opportunities. Why do women choose a career in maritime education?

Interest. Analysis of the interviews showed that respondents had an early interest and/or experience with the ocean and marine life. Some had parents or relatives who shared this interest. It was common among the students to spend most of their free time with their families at sea. "Yes, my parents are long-distance seafarers, so I spent most of my childhood growing up on a sailing ship, so I always felt like I was running to the sea, I felt safe and calm at sea." (Jo, 2010).

The nature of the work. Women who had no previous experience or had not previously been involved in the maritime industry or other maritime-related activities were attracted to descriptions of education or the nature of the work. Differences in the profession or extensive knowledge required. You had the opportunity to work internationally or the ability to settle anywhere in the world you like. In addition to the negative effects of the overwhelming psychosocial environment and the perceived bad reputation of the maritime industry, women cited family situations as a complicating factor and a reason why there are so few women on board. Balancing a stable family situation with life at sea is not an easy task and many share this concern, with 9 out of 10 women stating that they would go ashore if they had a child (Kitada and Harada, 2019).

In addition, in Latvia, Australia and New Zealand, the share of female in the total number of seafarers was: 5%, 2.6-3% and 0.03% respectively (Table 1).

In 2024, women accounted for just 1 % of seafarers at sea, showing no improvement since 2021 (~2,223 women among ~211,750 seafarers).

Women represented 19 % of the overall maritime workforce, up from 26 % in the 2021 sample—but this decline stems from broader data coverage, not a loss of female employment.

Within national maritime authorities, women's representation averaged 19 %, while in private-sector roles it was slightly lower at 16 % (Table 2).

Table 1. Distribution of female seafarers in selected parts of Europe

Country	Percentage (%)
Belgium	4.4
Denmark	15.1
Finland	5.6
Germany	5.3
Italy	1.2
Sweden	23.3
Great Britain	4.7
Total	7.6%

Source: Compiled by the author based on IMO (2015).

Table 2. Distribution of Female Seafarers in Selected Regions (2024)

Region / Group	Female Seafarers (%)
National maritime authorities	19 %
Private-sector maritime workforce	16 %
Seafaring workforce (at sea)	1 %
Overall maritime workforce (land & sea)	19 %

Source: IMO–WISTA Women in Maritime Survey 2024

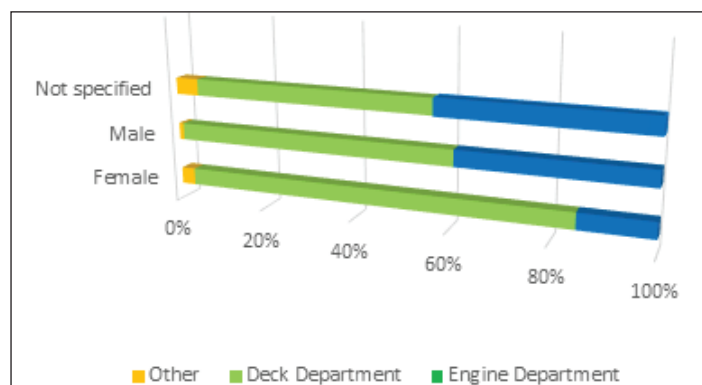


Figure 3. Male and female on deck and in the engine room.

Source: Kitada and Langaker (2017).

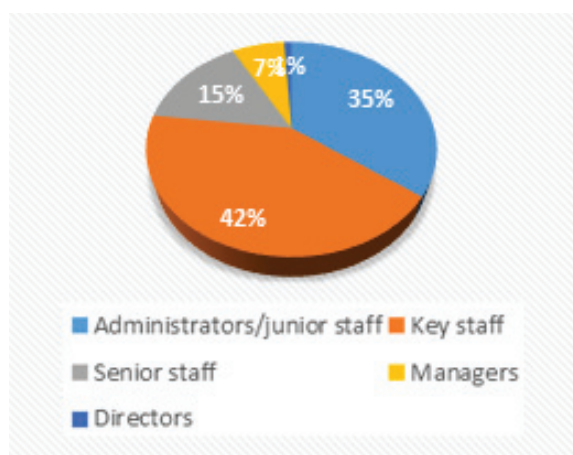


Figure 4. Women in maritime activities (globally).

Source: Kitada and Harada (2019).

Although it may be challenging to collect data from all countries with registered female seafarers, this data will clearly be a crucial cornerstone for determining the number of female in the total number of seafarers, and for improving and ensuring appropriate support and policies from industry and the community (Jo, 2010).

Increasing women's representation, participation and leadership in politics, the public and private sectors and the development sector, including the maritime sector, is key to achieving gender equality goals. Greater participation of women in maritime communities can lead to economic benefits from marine resources for the region, as well as open up opportunities in ship ownership, manufacturing, shipbuilding and natural resource extraction.

Increasing women's participation in decision-making has a positive impact on business performance. Research shows that diversity helps solve complex problems and foster innovation. Women's decision-making broadens the perspective of the workplace, strengthens team dynamics and offers more robust problem solving. Diverse perspectives also help to foster innovation. If an organisation fails to embrace diversity, it risks limiting its creativity and losing its competitive edge.

Education is vital to promoting the integration of women in the maritime sector. Capacity building for women includes mentoring, coaching, sponsorship, secondments, and networking opportunities. Between 2015 and 2022, the number of women employed on board ships, mainly cruise ships, increased by 2%, and women are becoming an increasingly large proportion of coastal workers in the global maritime sector. It is important that this increase is sustained as part of the overall objective of ensuring the sustainable development of the maritime com-

munity (IMO, 2015). Globally, it has been reported that the number of maritime officers increased by 34% between 2010 and 2015, and is now estimated to have increased by 24% in the last ten years.

There have been few attempts to estimate the total number of female seafarers, despite the increasing focus on attracting women to careers in shipping. The 2020 report is the first to collect information on female seafarers, with questions on the gender of seafarers included in the Company Questionnaire, Seafarer Survey and Maritime Training Institution Survey. The Company Questionnaire provided substantial quantitative data on 164,550 seafarers, including their rank/role, age, nationality and gender.

3.2. International maritime and other organisations in the framework of gender programmes

Considering the current social attitude towards achieving gender equality and gender parity in all sectors of civil society, life and governance, there are several international organisations and international programmes that deal with gender inequality, gender bias and similar issues. This paper presents some of the most important institutions and international programmes.

The International Maritime Organization (IMO) is considered the "mother and father" of the maritime industry. The IMO is the United Nations' specialised agency responsible for maritime affairs, with a mission statement of capacity building for safer shipping and cleaner oceans.

In 1988, the International Maritime Organization (IMO) launched its strategy to integrate women into the maritime sector. The IMO Women in Development Programme was initiated in 1989, significantly expanding women's access to the maritime world (IMO, n.d.). The United Nations (UN) Sustainable Development Goals, otherwise known as the Global Goals, represent a universal call to fight poverty, protect the planet and ensure peace and prosperity for all people. In the UN Economic and Social Council's report on progress towards the Sustainable Development Goals (SDGs), referring to the goals that promote gender equality, currently "gender inequality persists around the world, depriving women and girls of their basic rights and opportunities. Achieving gender equality and the empowerment of women and girls will require more vigorous efforts, including legislative frameworks, to address deep-rooted gender discrimination, which often results from patriarchal attitudes and related social norms." Women are still underrepresented in leadership positions.

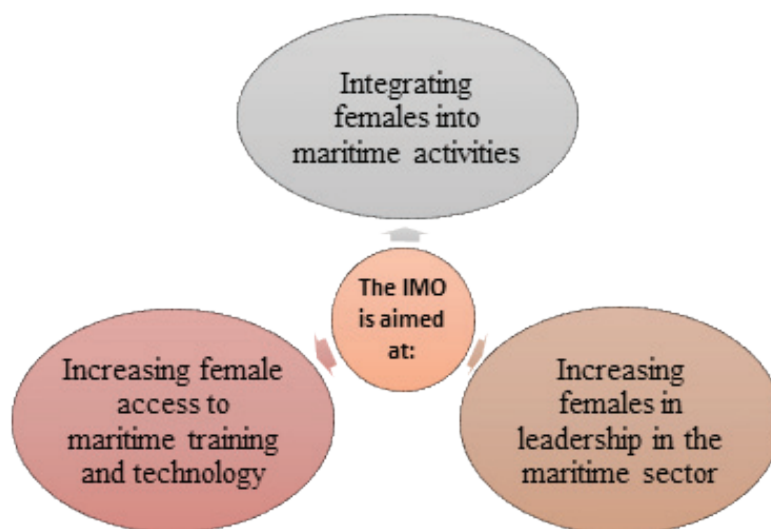


Figure 5. IMO's objectives.
Source: IMO (2015).

This paucity of women in the maritime sector is noted by the International Maritime Organization (IMO), and they are actively working to attract more women to the industry. The IMO Maritime Women's Integration Programme is an initiative aimed at achieving the third millennium development goal of "Promoting gender equality and empowering women" (IMO, n.d.). Gender equality is defined as "equal rights, responsibilities and opportunities for women and men, as well as girls and boys. Equality does not mean that women and men will be the same, but that the rights, responsibilities and opportunities of women and men will not depend on whether they are born male or female." The United Nations took this a step further by declaring the decade from 1976 to 1985 the Decade of Women at a conference of the International Women's Organisation held in Mexico City in 1975. In 1979, the Convention on the Elimination of Discrimination against Women came into force, with the adoption of guidelines and laws to improve the status of women.

The United Nations continued a series of conferences: Copenhagen in 1980, Nairobi in 1985 and the most popular conference in 1995 – the Fourth World Conference on Women in Beijing. This was a truly special conference, during which the Commission issued a form of warning to all concerned. It stated:

"...The inability of society to achieve true gender equality will lead to slow economic and slow social and political development, misuse of human resources and slower progress of society..." (Kitada, 2013).

The result was a turning point for women and the world at large, a revolutionary campaign that made

people realise that "women's rights are human rights". Currently, the International Maritime Organization (IMO) employs 30.6% of women professionals, making it a leader among United Nations members. The IMO specifically aims to: integrate women into mainstream maritime activities, increase women's access to maritime training and technology, and increase the proportion of women at senior management level in the maritime sector through the Women in Development technical cooperation programme (Figure 5).

3.3. Determining the level of gender factor influence on crew performance

An organisation's human resources are becoming an important source of competitive advantage, as competitors can more easily imitate non-human resources such as technology and engineering. Increasing gender diversity in the workforce has attracted the attention of both researchers and practitioners. In particular, the question arises whether the gender composition of an organisation's workforce will affect performance at the individual, group or organisational level. In the early 1990s, researchers were generally optimistic about the impact of workforce diversity on performance. For example, Cox and Blake argued that diversity could be a source of competitive advantage. According to the resource-based view, a firm can gain a sustainable competitive advantage if it takes advantage of its valuable, rare, unique and irreplaceable resources. Gender diversity in the workforce is linked to resources that can provide a firm with a sustainable competitive advantage. These resources include market insight, creativity and innovation, and advanced problem solving. The dif-

ferent experiences of men and women can provide insight into the different needs of men and women. In addition, men and women may have different cognitive abilities, such as men's knowledge of mathematics and women's mastery of verbal and interpersonal skills, with women adding more emphasis on soft skills. The combination of cognitive abilities in a gender-diverse team can increase the team's overall creativity and innovation. Moreover, a diverse team can make better decisions.

Empirical research supports the argument that a diverse gender workforce is positively related to organisational performance.

3.4. Increasing the efficiency and competitiveness of human resources at maritime transport enterprises through the use of the principle of gender balance

The study of the role of personnel in enhancing competitiveness has recently become increasingly important, given that an innovative approach to enterprise development involves the formation of an intellectual worker who possesses the knowledge, skills and abilities that allow an organisation to compete, which is particularly important in the maritime industry. Information and the ability to apply it in the maritime industry are becoming significant factors of competitiveness. Assessing the competitiveness of an organisation and its resource potential is now not limited to analysing the efficiency of the use of fixed and working capital but also includes the state of information and intellectual resources. Knowledge has become a key economic resource, a dominant and perhaps even the only source of competitive advantage. The main means of maintaining the high intellectual potential of a maritime transport company is to invest in personnel and increase the motivation of the seafarer's personality. Such concepts as the moral climate in the crew, job satisfaction, and the degree of staff motivation are of great importance for the competitiveness of an employee. In this case, the maritime organisation can count on the return and high results of financial and economic activities in the long term. It is the highly professional employees of the organisation that lead to an increase in tangible and intangible assets, to the creation of a favourable image of the organisation and to the enhancement of its competitiveness in the maritime transport market.

In a comprehensive assessment of human resources in the maritime industry, two areas of seafarers' business skills are considered. The first area describes the employee as a carrier of knowledge, abilities and skills, and his/her level of qualification is called Hard skills. The second area includes the performance of

work and functions, assessed by results, according to specific regulatory indicators, i.e. the performance of employees is assessed taking into account the level of complexity of their functions.

An employee's performance is assessed by combining two individual assessments based on a comprehensive (integral) indicator.

Comprehensive assessment (CA) is determined by the formula:

$$CA = PQ + WR \quad (1)$$

where:

- PQ represents the personal qualities and characteristics of the employee;
- WR denotes the result of the employee's work, taking into account the level of complexity of the functions performed.

Each element of the comprehensive assessment is characterised by its own set of features and has an appropriate scale for their quantitative measurement. A comprehensive assessment is based on all the assessment indicators discussed above – professional and personal qualities, qualification level, complexity of work and seafarer's performance. The assessment of personal qualities of employees, despite its apparent simplicity, is associated with the lack of an objective approach to the manifestation of personality traits in the process of achieving goals and overcoming risk reduction problems. Personnel assessment in the maritime business using individual performance indicators is one of the most effective methods of assessing a seafarer's performance over a certain period of time.

Another aspect of personnel assessment in the maritime industry is soft skills. This is a set of communication skills, emotional intelligence, and leadership qualities. All of these definitely affect the success of work at sea, but cannot be measured in real physical terms. The belief system helps staff to form value orientations for achieving goals, the diagnostic control system determines the correctness of actions to achieve them, the interactive control system creates favourable opportunities for learning and creative initiatives, and the restriction system sets the boundaries of permitted actions, which is especially important in the maritime industry. Today, there are almost 100,000 seafarers in Ukraine, of course, a significant number of them are outside the country, but the share of women is about 0.1%. Given that all those who want to work at sea have already got a job, the IMO's gender programme will help to increase the number of women, and as a result, the number of people in the industry.