

Journal of System Management (JSM) Online ISSN: 2538-1571, Print ISSN: 2322-2301 Doi: <u>10.30495/JSM.2023.1972925.1713</u> **9(2), 2023, pp. 137-151**

RESEARCH ARTICLE

Received: 16/11/2022 Accepted: 25/01/2023

Open Access

Designing a Systemic Model of Competency for Managers of the Iranian Ports and Maritime Organization

Seyed Kazem Hejazi¹, Mehran Mokhtari Baye Kolaei^{2*}, Marzieh Gorjiposhti³, Javad Gilanipour⁴

Abstract

This research has explained the competence components of the managers of ports and maritime organization of the country by using a mixed research design (qualitative and quantitative). To collect data in the qualitative step, interviews with experts and in the quantitative step, a questionnaire from the qualitative step the research was used. The statistical population of the research was the directors of the Ports and Shipping Organization of the country. In order to select research samples, research data was collected using the snowball method and based on 20 in-depth interviews with experts related to the subject. Brown and Clark's (2006) theme and pattern analysis method was used to analyze the data in the qualitative step and the content validity ratio index (CVR & CVI) was used in the quantitative step. Findings of theme analysis about the competencies of the country's Ports and Maritime Organization managers in 4 main themes, 1- Specialized competencies, 2- Personality competencies, 3- Executive competencies, 4-Managerial competencies, and 25 sub-themes, have been introduced In the quantitative step, the percentage of the appropriateness of open codes for 15 experts is 0.49%, according to the CVR statistics, all competency themes had good content validity from the experts' point of view. The results of this research showed that the managers of the Ports and Maritime Organization of the country, by accepting the issue that success in today's conditions of the maritime transport industry is the use of existing human resources competencies, should pay attention to the improvement of the four competencies of the present research. And have intellectual and far-sighted thoughts in the conditions of crisis and challenges ahead.

Keywords: Specialized competencies, Personality competencies, Executive competencies, Managerial competencies, Ports and maritime organization

Introduction

In the last decade, the increasing impact of factors such as globalization, information technology, competition in global trade and limited natural resources have changed people's view of a good organization (Derakhshanmehr, 2018). In the past, financial statistics and figures were considered the most important factor in the goodness of the organization (Rahmdel et al., 2019). In recent years, the competences of managers, the quality of work life and job satisfaction have been identified as newer indicators for the

^{1.} PhD Candidate in Organizational Behavior, Department of Public Administration, Chalous Branch, Islamic Azad University, Chalous, Iran.

^{2*.}Assistant Professor, Department of Public Administration, Chalus Branch, Islamic Azad University, Chalus, Iran (Corresponding author: M_Mokhtari@iauc.ac.ir)

^{3.} Assistant Professor, Department of Public Administration, Chalus Branch, Islamic Azad University, Chalus, Iran.

^{4.}Assistant Professor, Department of Public Administration, Chalus Branch, Islamic Azad University, Chalus, Iran.

functioning and stability of organizations, the increasing complexity of competition in global trade makes the existence of competence components in managers an important strategic factor in preventing the occurrence of Unwanted organizational disasters have become (Larres & Kelly, 2021). Managers must have managerial skills and competencies, so the role of the manager is important, as Drucker says: Managers are the rarest and most valuable assets of the organization. are (Ringsberg & Cole, 2020), the development of managers' competencies enables the development of management skills. Therefore, the competences of managers are the knowledge and skill abilities of a person to perform successfully in the field of strategy and organizational culture (Sarlio-Siintola & Tammilehto, 2020), the competency system by removing inefficient people and in line with customer satisfaction and increasing the quality of service delivery and supporting capable employees. It has meaning, therefore, preserving and maintaining this important resource is considered one of the necessities of every organization. Competencies of managers seem to be vital for business activity (Kozakova et al., 2021), identifying and developing managerial competencies is an important tool human of resource management. Due to the development and dynamic changes of today, a lot of attention is paid to the personality of managers and their competencies, because they are an important source for achieving a competitive advantage (Bahavarnia et al., 2019). Today, the use of the competency approach as a basis for the organization and management of human resources has spread in the western world and has gained a stable position in international human resources practices (Maksymov, 2021). Ports and Maritime Organization, by leaving behind different phases of development at the national level, in recent years, has put the goals and policies of regional and international development at the top of its agenda and in this

field, it has developed new programs. has started in the field of human resources development. The importance and role of the manager as the architect, leader and manager of the organization is not hidden from anyone and the selection, attraction, retention, evaluation and development of effective people has a special place. Improving the quality of scientific, ethical, and professional performance of organizations, especially the Ports and Maritime Organization, depends on the existence of competent and competent managers. Therefore, evaluating the dimensions of competencies is one of the important responsibilities of managers and officials for professional development and maintaining the organization. In order to overcome problems related to international sanctions or challenges in competitive market conditions, as well as internal and organizational issues and problems, this belief must be accepted as an undeniable principle in the minds of managers that it is important- The most important part of any organization is its skilled human resources. It is clear that this important issue has always been the concern of the country's high officials and has had its special place in the plans and visions of the country. The necessity of having the necessary competencies in the administrators caused it to be emphasized in the statement of the second step of the Islamic Revolution issued by the supreme leader of the revolution, and the main way to develop the country and reach a society equal to the holy system of the Islamic Republic is to use the capacity of the worthy and elite. to assign Therefore, in the present research, we intend to answer the following question:

"What are the components and competency indicators of managers in the port and shipping organization of the country?"

Literature Review

- Hatami Ghoushchi et al (2021) concluded in their research intellectual capital can be influenced by the factors of customer capital, social capital, structural and human capital, knowledge capital, foreign capital, domestic capital, spiritual capital, technical capital and communication capital. The components and indicators related to each of the mentioned dimensions have been discussed separately in the previous pages. Based on in-depth semistructured interviews with experts, it can be concluded that: human capital, structural capital and social capital as the first to third priorities are the dimensions of the intellectual capital model of state-owned banks with the competency approach of managers.

Mohammadi et al (2021) in their article showed that Underlying conditions (classification of unfinished construction projects, their economization and assignment of unfinished construction projects), causal conditions (the first step is to control and limit the approval of new projects, the next step is to classify and present a schedule, economic For all incomplete development projects and transfers based on the existing legal instruments of transfers and participation), intervention conditions (lack of proper use of the capacities of existing laws and failure to specify the general policy law of the forty-fourth principle in the transfer of projects, lack of Effective entry of the Privatization Organization due to the difficulties of assigning development projects to companies, lack of accurate information on development projects of state-owned companies and provincial projects, between the systemic nature of the issue and the unclear method of pricing projects), strategies (codification of legal prerequisites, preparation of regulations and systems related to the transfer, preparation of a list of the most probable cases of transferable projects, coordination of responsible bodies due to the inter-institutional nature of the issue and determination of prices through auctions, negotiations, etc. Depending on the application of each method) and the outcome (creating sufficient motivation for managers, operators and current stakeholders of projects and projects by creating a method of returning the saved from resources investment with the participation of the private sector, aggregation

and refinement A set of relevant and effective regulations and the availability of all laws and regulations governing private sector investment in development projects, the dissemination of information on all projects in the electronic system and public access to all investable applications as well as contract terms and all subsequent contract developments. The entire duration of the construction, operation or transfer, full transparency of the transfer process to reduce rent-seeking behaviors and pave the way for private sector activity).

- Dehghanan et al(2021) in their study argued that the competencies of strategy consultants, includes personality competencies, general competencies, management general consultancy competencies, and specialized competences of strategic management and management consulting. These competencies are necessary for consultants to be successful. the lowest level are personality At competencies. These are the competencies that are useful to success in any field of activity, but they are vital for strategy consultants. Managerial and consulting competencies are at the second level of the pyramid that are essential for any managers and consultants. At the highest level of the pyramid, there are two categories of strategic management and consulting competencies. management Strategic management competencies are common to all who are involved in formulating, implementing or controlling organizational strategies. Management consulting competencies are also common in all strategic management consultants who deal with toplevel managers in an organization.
- Bondarenko et al (2021) in their research argued that with the aim of explaining managerial competencies in the framework of global challenges, a set of general managerial competencies (organizational competencies) (hard skills) and specialized and nonspecialized competencies (soft skills) were defined and compared. Communication skills and intercultural skills were defined as new

conceptual skills needed by a modern efficient manager.

- Dzwigol et al (2020) in their reserch conclued that Management competence (knowledge, skills, abilities) is the guarantee of sustainable competitive advantage of the company, through increasing the competitiveness of management and ensuring its professional growth and development in the long term.
- Paarima et al (2020) in their article argued that Nursing managers need the knowledge and ability to apply technical, human, and conceptual skills in performing their managerial duties, and no specific competency is ideal for every situation.
- Khoshnamak et al (2020) in their article conclued that questionnaire was based on the evaluation of competency criteria extracted from the qualitative part. The method of data analysis in the qualitative part was based on the theme analysis approach and in the quantitative part was based on the confirmatory factor analysis method to test the components of the competency model.
- Shum et al (2020) in their research argued that Leadership competencies for staff managers and organizational competencies for line managers and individual competencies for both management levels are important and priority.
- Moazen Jamshidi (2019) in his research argued that effectiveness of establishment of a human resources excellence system, 16 key competencies were identified for managers in five areas of individual, communicationalsocial, management and leadership, strategic, and complementary competencies.
- Moradi et al (2019) in their study cocclued pattern of thought from the supreme Commander in Chief, based on the genuine Islamic principles, has a comprehensive look at the dimensions of human, organizational, spiritual and material excellence, and the foundations of belief, value, revolution, and jihad point are the strength and exceptional attribute of this model is to distinguish it from existing patterns.

Theoretical Framework The concept of competence

The root of the word competence in the Latin language means competence in judgment and also the right to express an opinion (Wesselink et al., 2015). Competence is defined as the result of good application of knowledge and skills (Balali-Shahwari, 2019). Competence is defined as a combination of knowledge, attitude, behavior and communication skills that have a significant impact on people's work. Competence is related to people's performance, can be measured by acceptable standards and can be improved through training and development (Liikamaa, 2015). Behavior that includes the skills, knowledge, abilities and characteristics of a person that are necessary for successful work and are not considered as assets of the organization. Competence appears in professional performance measures, otherwise it is invisible and difficult to measure and improve (Radovic-Markovic, 2019) It enables the individual to successfully perform the duties or tasks of the job in accordance with the expected standards of the job. (Ghanbari et al., 2020). Competence can be done at general and specific levels. When developing competence through science education, one should avoid being too specific or too general. Decent behavior is the result of various factors such as individual motivation, personality, self-esteem, knowledge and skill, and perhaps it is not surprising that there is a degree and dependence of these words (Zarei Matin, 2014).

Individual competencies

A person's competence is a combination of knowledge, abilities, skills, values, views, philosophical foundations, motivations, attitudes, insights, personality traits, moral traits, job position, personal desires and other characteristics. is A competency that includes areas such as communication and collaboration. These competencies are fully distributed at all levels of the organization. Behavioral competencies are defined as behaviors that are expected to produce results such as teamwork,

communication, leadership, and decision-making (Yasir et al., 2021). Behavioral competencies are generally known as soft skills. Competence is unique for each business unit in the company, but the threshold of competence is the characteristics that each person needs to be effective at work, but does not make them different and superior to ordinary people (Ahmed & Philbin, 2020). In the approach of personality traits, competence is defined as a character or personality trait that provides the reason for the employee's success. In the behavioral approach, competencies are introduced based on behavioral terms, mainly to introduce behavior related to high performance (MacDonald et al., 2020). The beginning of this approach was mentioned in McCland's article in 1973 with the title "ability tests not intelligence tests". Different models of this approach are based on studying the behavior of privileged and superior people. In this approach, competencies are defined in different ways in terms of key characteristics, such individual as habits. traits, knowledge, skills, personality and motivations of a person in work and occupation, which are usually associated with excellent performance (De Asis-Galvez, 2021). Specialized competence is written based on the execution of operations, especially for each job (with a high level of competence), in fact, all the necessary individual skills that the employee has are considered a type of competence. Also, sometimes the employee has qualifications that are outside the ideal model. In many cases, these competencies make a person a more powerful employee, and in some cases, these competencies are unrelated and do not affect his performance or ability to perform (Yasir et al., 2021: 12). In specialized competence, the process of developing knowledge and theoretical information is usually obtained through studying at university levels. The development of knowledge and information is the foundation of the development of skills and attitudes, and by itself, it does not have much effect on the development of management competencies. Also, skill is the ability to implement science in

practice, skill is acquired and developed by repeating the application of knowledge in the real environment. Skill development leads to improvement of performance quality. Without it, in many cases, the information will not be the source of much influence. For example, no manager can acquire teamwork skills by studying without applying and experiencing the principles of teamwork in practice (Wesselink, 2015).

Organizational competencies

The competence of an organization includes the interaction of knowledge, competencies and skills of employees with other organizational resources to achieve organizational goals and strategies. This competency is suitable for organizational characteristics (including mission, organizational structure and systems, goals and strategies), organizational requirements (including organizational nature and type, industry development and strategic position of the organization, job, atmosphere, culture, etc.). and the external environment (including political, social, economic and religious aspects governing the organization) is defined (Steyn & Van, 2018). The key competencies of an organization are related to those organizational characteristics that enable that organization to change quickly in response to environmental changes and create creativity and innovation (Gruden & Stare, 2018). In 1975, Selznick first introduced the concept of core/key/core competence. He uses different competencies to describe the benefits that a company obtains through different value activities. Hummel and Prahald in 1990 proposed a relationship between the core/key/core concept of competence and the competitive advantages of Key companies (Gorenak et al., 2019). competencies are different from generic competencies that are commonly used and managed by all organizations and are developed specifically organization. for an The core/key/core competency concept model can be aligned with the values, mission, and key strategies of the organization, such as customer orientation, in which case the core competencies

change only when the mission or strategies change (Yamazaki et al., 2018). Management competence is specific to very specific people of the organization, such as the senior management and senior consultants of the organization, and it is not necessary that every person of the organization or a specific unit has it. Strategic planning is one of the managerial competencies that only a few should have (Steyn & Van, 20185). Competencies should be tied to the goals of the organization, the individual's job duties and the environment, and employees should have the knowledge and skills needed to achieve goals and efficiency and effectiveness (Hatami Ghoushchi et al., 2021).

Research Methodology

In order to deeply explain the competence components of managers, a mixed research design was used. The current research is applied research in terms of research orientation. The current research strategy is thematic analysis in the qualitative part and survey in the quantitative part. In terms of the goal, this research is exploratory research in the qualitative step and explanatory research in the quantitative step. The statistical population of the current research is the high, middle and operational managers of the Ports and Maritime Organization of the country. The snowball method was used to select research samples in the qualitative and quantitative part. In the qualitative section, a total of 20 experts were interviewed, and theoretical saturation was achieved from the 17th interview onwards. The selection criteria of the experts included education related to the research topic, having more than 10 years of work experience in the Ports and Maritime Organization of the country, having a managerial position at the high and middle level, and being interested in participating and expressing views and experiences. In order to

collect data and information, the interview method was used in the qualitative part and the questionnaire was used in the quantitative part. The duration of each interview varied between 40 and 60 minutes, and with the consent of the participants, the interviews were recorded using a tape recorder and then verbatim on paper, and the participants were assured of the confidentiality of the information. Data analysis in the qualitative part of this research with a qualitative method based on interviews, thematic analysis with the approach of Braun & Clarke (2006) and with MAXQDA 10 software and in the quantitative part of the content validity ratio index (CVR & CVI) by EXCEL 2016 software was done. For reliability, the reliability method of re-reviewing members was used. Out of a total of 15 experts in the quantitative department, 73% have a master's degree, 14% have a bachelor's degree, and 13%, i.e. 2 people have a doctorate degree. 13% had a history of 10 to 15 years, 20% had a history of 16 to 20 years, 54% had a history of 21 to 25 years, and 13% had a history of 26 years or more. 7% were 30 to 40 years old, 60% were 41 to 50 years old, and 33% were 50 years old or older. 93% were men and 7% were women. Brown and Clark (2006) have provided a six-step guide that is a very useful framework for doing this type of analysis (Figure 2). During the work, researchers move from one step to the next; But the steps are not necessarily linear.

The innovation of the this article can be examined in several ways:

- Designing a paradigmatic model of competency for managers of the Iranian Ports and Maritime Organization;
- ✓ The main themes of competence of managers of the Iranian Ports and Maritime Organization;
- ✓ Challenges facing Iran's shipping industry.

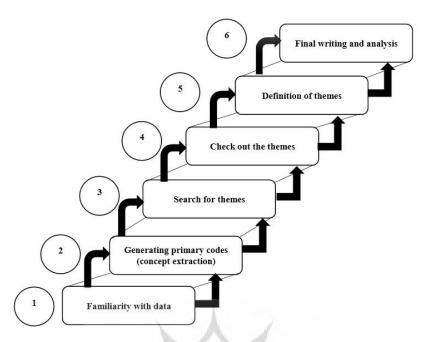


Figure 1. Braun & Clarke's six-step framework for thematic analysis

Research Findings

What are the components and competency indicators of managers in the port and shipping organization of the country?

In this research, the Steps of thematic analysis in the qualitative part of the research, with the approach presented by Brown and Clark (2006), are explained in detail in the following 6 Steps.

The first step: *Familiarity with data*: the first step in any qualitative analysis is reading and re-reading the transcripts; In the present study, after the audio interviews were conducted and converted into writing, they were examined and re-read to gain familiarity with the data. Getting to know the data was achieved by studying and writing the statements obtained from the interviews.

The second step: Generating primary codes (concept extraction): In this Step, the researchers started to organize the data with a meaningful and systematic method and with open coding. At this Step, the text of the interviews typed in the Word software was transferred to the Max Quda software and the interview was coded. At this Step, 218 initial codes were obtained from the interviews. An example of a part of the interview text and its extracted codes is presented below.

Interviewee code 3: "In our work, it is very important that a person prefers national interests to personal interests, in my opinion, this should be an important skill in people that should be paid attention to." Due to the nature of our work and interaction with other countries, appearance is very important in the Ports and Maritime Organization. Of course, not only the appearance of people is important, but faith. science and knowledge, trustworthiness, responsibility and accountability are important for the managers of this department. Well, there are many crises in our work due to the sanctions and mischief of foreigners, and the manager must make the best decision without haste and with complete composure, and of course with courage. »

| | Fi | rst Step coding | | |
|--|---|--|--------------------------------------|--|
| Avoid haste | Insight | Observance of justice | Foresight | Maturity and intellectual independence |
| Knowledge and awareness | Not being arrogant | Acceptance of reciprocal rights | Being responsible | Emphasis on benevolence |
| Hope in crisis | in crisis To have trust Being serious and productive | | Self-control and composure | Peace |
| Respect for people's rights | Hope for divine mercy | Not liking the world | Good words and good manners | Faith |
| Effort and perseverance | Proper use of facilities | Freedom and discretion | Not having ignorant prejudices | Honesty |
| Courtesy and respect | Submission to others and God | Pressure tolerance | Flexibility | Stability |
| Thinking positive | Sobriety of service | Trust | Confidence | Follow up and be practical |
| Committed to duties | Risk taking | Performance oriented | Determination | Criticality |
| Grooming in clothes and appearance | Prioritizing national interests over personal interests | Familiarity with rules and regulations | Faithfulness to covenants | Having certain beliefs and convictions |
| Being responsive | Being brave and courageous | Having administrative discipline | Morality | Being trustworthy |

Table 1.Initial code sample

The third Step: *Search for themes*: In this Step, the researchers removed incomplete or unrelated and repetitive codes in order to identify selective codes. In the following, 85 selective codes were obtained by the researchers.

The fourth Step: *Check out the themes*: in this Step, the selective codes that were identified in Step 3 are reviewed, modified and

developed. which was extracted from 85 selective codes in the third Step of 25 competency-based themes. This Step includes two Steps of refining and shaping sub-themes. The first Step includes a review at the level of coded summaries. In the second Step, the validity of the sub-themes in relation to the data set is considered.

Table 2.

| Base | teams | extracted |
|------|----------|-----------|
| | 10001105 | 0.0000000 |

| | | Basic themes | | |
|------------------------|-------------------|--------------|----------------------------|------------------|
| Knowledge | Skill | Decision | Communication and | Informational |
| | | making | negotiation | |
| Familiarity with rules | Being trustworthy | Continence | Tolerance at the same time | Moderation |
| and regulations | | | determination | |
| Humility | Avoid flattery | Adaptability | Accompanying the policies | Compliance with |
| | | | of the organization | hierarchy |
| Adapting to changes | Empowerment | Legalism | Group management | The ability to |
| | | | process | guide people |
| Resource | Innovation | Problem | Monitoring and control | Follow up and be |
| management | | solving | | practical |

÷

The fifth step: *Definition of themes*: naming the main themes is done based on the content of the theme and the discretion of the researcher. At this Step, after going back and

forth among the sub-themes, 4 main themes were identified which can be explained in the field of the research. Table 3 presents the results of this step.

Table 3

Creation of main and sub-themes of competence of managers

| Main themes | Sub-themes | | |
|--------------------------|---|--|--|
| | Knowledge | | |
| | Skill | | |
| | Communication and negotiation | | |
| Specialized competencies | Decision making | | |
| | Informational | | |
| | Familiarity with rules and regulations | | |
| | Being trustworthy | | |
| | Continence | | |
| | Tolerance at the same time determinatio | | |
| | Moderation | | |
| Personal competencies | Humility | | |
| | Avoid flattery | | |
| | Adaptability | | |
| | Follow up and be practical | | |
| | Accompanying the policies of the | | |
| | organization | | |
| Executive competencies | Compliance with hierarchy | | |
| ~~~~ | Adapting to changes | | |
| | Empowerment | | |
| | Legalism | | |
| | Organizing | | |
| | Leadership and leading | | |
| | Proper use of resources | | |
| Management skills | Innovation | | |
| . 11. | Problem solving power | | |
| 694111 | Monitoring and control | | |
| عالقات تراكي | 76 20 m - 1 M C - 2 | | |
| T' 1 '.' 1 1 | | | |

The sixth Step: *Final writing and analysis*: The sixth Step begins when the researcher has a set of main themes that are completely abstract and in accordance with the basic structures of the research. This Step includes the final analysis and report writing, which will be presented at the end of the research. The main themes extracted, the dimensions of ethical principles in 4 themes, 1- specialized competencies, 2- personality competencies, 3executive competencies, 4- managerial competencies, and 25 sub-themes have been determined and introduced. Finally, after completing the above steps, the output of the MaxQDA software can be seen in Figure 1.

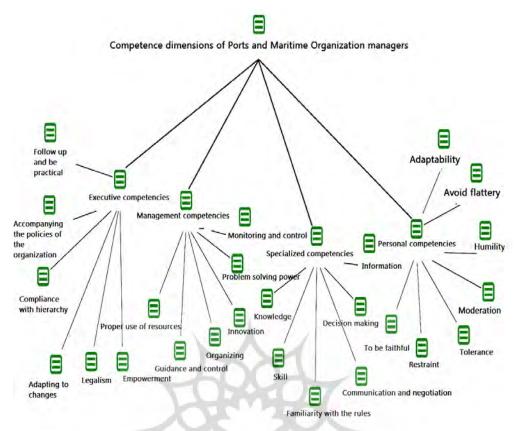


Figure 2. Competency components of Ports and Shipping Organization managers

The validity of the research was achieved with the continuous and long-term engagement strategies of the researcher with the process of collecting and analyzing the research data, reviewing and confirming the participation of

the participants by calculating the Cohen's Kappa index and using SPSS software, and the results are presented in Table 4. The results show the validity of the model.

Table 4

| Statistical results (Cohen's kappa agreement coefficient) | | The numerical value of the Kappa index | Agreement status | |
|---|--------|---|------------------|--|
| Value | 0.961 | Less than 0 | Weak | |
| Index number | 25 | 0-0.2 | Unimportant | |
| Significance | 0.0001 | 0.21-0.4 | Medium | |
| - | | 0.41-0.6 | Suitable | |
| | | 0.61-0.8 | Valid | |
| | | 0.81-100 | Excellent | |

کادعلوم انشانی د مطالعات فرسجی از از دو او که دو معالیات C . .

Finally, it is important to determine whether the theoretical explanation of the research has meaning and is reasonable for the participants in this research and is an accurate translation of the events and their sequence in the process. Therefore, for this purpose, the index of content validity ratio has been used. In order to calculate this index, the opinions of 15 experts were used and they were asked to rate each of the questions in the questionnaire based on a three-part Likert scale (the item is necessary, the item is useful but not necessary, the item is

not necessary). to bind Then, based on the following formula, the content validity ratio was calculated.

Total number of specialists

The number of experts who chose the necessary option-

CVR = -

Total number of specialists

2

Based on the number of experts who evaluated the questions, the minimum acceptable CVR value for 15 people is 0.49. The questions for which the calculated CVR value is lower than the desired value according to the number of experts evaluating the question, will be excluded from the test. The values of the Laushe index for the data of the qualitative section are shown in Table (5).

2

Table 5

Laushe index values for the data of the qualitative section

| Code | CVR | Code | CVR | Code | CVR |
|------|------|------|------|------|------|
| 1 | 73% | 11 | 86% | 21 | 86% |
| 2 | 100% | 12 | 100% | 22 | 100% |
| 3 | 100% | 13 | 100% | 23 | 100% |
| 4 | 100% | 14 | 100% | 24 | 100% |
| 5 | 100% | 15 | 100% | 25 | 100% |
| 6 | 86% | 16 | 86% | | |
| 7 | 100% | 17 | 100% | | |
| 8 | 100% | 18 | 86% | | |
| 9 | 86% | 19 | 100% | | |
| 10 | 100% | 20 | 100% | | |

According to the Lawshe table, the appropriateness percentage of open codes for 15 experts is 0.49%, and according to the above table and the CVR statistics, all competency themes have good content validity according to the experts. The value of CVR for the entire questionnaire is 0.94, which is greater than 0.49. The higher the final content validity, the cvi value tends to 99% and the

opposite is also true. A content validity index score higher than 79% is considered appropriate. The value of CVI for the present research data in the qualitative section is 0.94, which confirms the acceptability of the data. Therefore, the following model is presented in this research based on the results of the previous section.

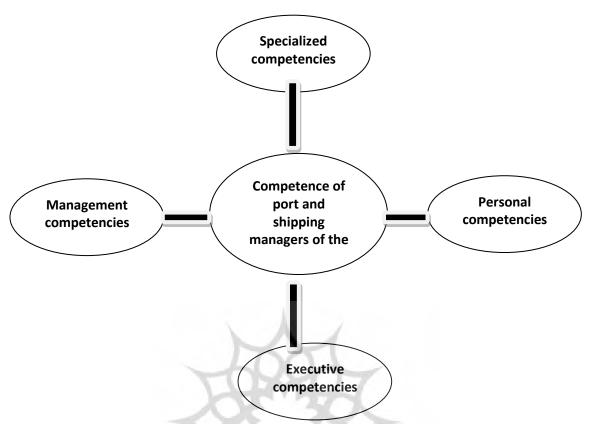


Figure 3. The final competency model of Ports and Shipping Organization managers

Conclusion

Shipping as an industry plays an important role in the global economy. In such a way that currently maritime activities are the income share of many developed or developing countries. The shipping industry plays a significant role in connecting human societies and sustainable and balanced development based on maritime trade and is considered one of the most central factors for economic growth, expansion of world trade and absorption in the process of globalization, which is one of the important sources. In the present research, after analyzing the data using the theme and pattern analysis method of Brown and Clark (2006) and interviewing the experts of the competency components of port and maritime managers in the country in specialized competencies, personality competencies, competency Executive skills and managerial competencies were extracted. In the organization, a group of competencies are factors related to the

specialized competencies of individuals, such as knowledge. skills. communication and negotiation, decision-making, information and familiarity with laws and regulations, and other categories are factors related to personality competencies. Like trustworthiness, self-control, tolerance while decisiveness, moderation and moderation, humility, avoiding flattery and adaptability, the reason for the importance of managers' competencies is that one of the indicators for selecting a manager in a comprehensive system. Appointments emphasize the individual competencies of the manager. Competence-orientation of managers is also important from another point of view, and that is the impact of their decision-making in the organization. Since any activity in the organization requires the support of its management in order to attract resources and remove possible obstacles, this indicates the importance of the dimensions and components of

individual competency of managers. The personal competence of managers is a set of very important characteristics in the behavior of managers of any organization, and this issue also applies to the professional and personal competence of managers in the organization's environment. Interviewee code 7 admitted that "if the managers selected in the Ports and Shipping Organization have the necessary competencies, they can be trained on work-related matters while working." Also, interviewee code 3 stated that "having specialized skills and education should be obtained before entering the organization, but learning the rules and regulations of the organization is obtained while working." The findings of this part of the research on the component of specialized competencies are aligned and consistent with parts of the research of Dehghanan et al. (2019), Bondarenko et al. (2021) and Paarima et al (2020). And in the component of personality competencies, it is consistent with the researches of Dehghanan et al. (2019), Khosh Namak et al (2020).

The research of Dzwigol et al (2020) showed that managerial competence is the guarantee of a stable competitive advantage of company, through increasing the the competitiveness of management and ensuring its professional growth and development in the long term. Interviewee code 1 believed that "a series of competencies such as being aligned with the goals of the organization and legalism are indicators that every manager should have because the work in the port and maritime organization is very sensitive and important". Interviewee code 5 stated that "the ability to solve problems that arise at work and initiative in doing things in the port and shipping organization is very important". The findings of this part of the research in the component of executive competencies are aligned and consistent with parts of the research of Buter et al. (2018). And in the component of managerial competencies with the researches of Mohammadi et al (2021), Bondarenko et al. (2021), Paarima et al (2020) and Shum et al.

(2018) is consistent. The results of this research showed that important factors such as specialized competencies, personality competencies, executive competencies and managerial competencies are effective in the Ports and Maritime Organization of the country. Today's conditions of the sea transportation industry is the use of human resources based on competence, they should pay attention to the improvement of the four competencies presented in this research and have intellectual and far-sighted thoughts in the conditions of the crisis and challenges ahead.

Research suggestions and limitations

- 1. It is suggested to the port and shipping managers of the country, after evaluating and determining the competencies presented in the present research in the evaluation center of the organization, to use its results as a predictive factor, and in cases of noncompliance of their competencies, Reevaluations and more in-depth investigations should be carried out;
- 2. It is suggested to the country's ports and shipping managers to determine the educational needs of the organization in the field of managers' competencies from the comparison between the current situation and the desired situation. To determine the existing situation, i.e. the amount of personality specialized skills, skills. executive skills and managerial skills, and to determine the optimal situation, managers should consider the views of managers as people who are aware of organizational conditions in order to provide practical components;
- 3. It is suggested to the port and shipping managers of the country, if they want to create special competencies in the managers and employees, they should first start with the personal and organizational development necessary to accept and do it correctly, and

then gradually, the attitude Change them and finally affect the performance as an output;

4. It is suggested that in order to overcome the problems related to sanctions or challenges in competitive market conditions as well as internal and organizational issues and problems, this belief should be accepted as an undeniable principle in the minds of managers that the most important part of any The organization is the skilled human force of that organization;

The weak cooperation of some online and face-to-face respondents in answering the questions of the questionnaire and other than the factors that were examined as the dimensions extracted in the used research model, there are many other factors that explain the competencies of the managers that the interviewees In this research, they did not mention it due to the time limit or lack of presence of mind, it was one of the limitations of the research. Based on the findings of the current research, the following can be presented as suggestions for conducting future research related to the topic of the current research:

- ✓ Investigating the effect of each of the competence components of the managers of the Ports and Maritime Organization of the country on the performance of the organization.
- Investigating the impact of the Covid-19 crisis on the competencies of managers and employees of the country's Ports and Maritime Organization.

References

- Ahmed, R., Philbin, P. (2021).Systematic literature review of project manager's leadership competencies. Engineering, Construction and Architectural Management, 28(1), 1-30. Doi:10.1108/ECAM-05-2019-0276
- Bondarenko, V., Diugowanets, O., & Kurei, O. (2021). Transformation of Managerial Competencies within the Context of Global Challenges, In SHS Web of Conferences, 90 (57), 1-8. doi:10.1051/shsconf/20219002002

- Braun, V. & Clarke, V. (2006). Using thematic analysis in psychology. Qualitative Research in Psychology, 3(2), 77-101. Doi: 10.1191/1478088706qp063oa
- Czainska, K. (2020). Competencies of Managers of Deep Organizational Changes. European Research Studies, 23(3), 466-485. Doi: 10.35808/ersj/1938
- De Asis-Galvez, A. (2021). Entrepreneurial Competencies Of Managers In The Food Industry In Northern Samar, Philippines. Psychology and Education Journal, 58(2), 5642-5652. Doi:10.17762/pae.v58i2.2985
- Dehghanan, H., Rahmanseresht, H., Khashei, V., & Vakili, M. (2021). Exploring the competencies of an organization's strategy consultant. Journal of rganizational Resources Management Researchs, 10 (3) :47-66. URL: http://ormr.modares.ac.ir/article-28-42964en.html
- Dzwigol, H., Dzwigol-Barosz, M., Miskiewicz, R., & Kwilinski, A. (2020). Manager competency assessment model in the conditions of industry 4.0. Entrepreneurship and Sustainability Issues, 7(4), 2630-2644. Doi: 10.9770/jesi.2020.7.4(5)
- Khoshnamak, B., Iranzadeh, S., khadivi, A., & Tagizadeh, H. (2020). Presenting a competency model in appointing managers in service organizations by identifying and cultivating managers' competencies from the sociological perspective of organizations (Case study: Social Security Organization). Sociological studies, 13(47), 71-87. Doi: 10.30495/jss.2020.1905514.1224
- Gorenak, M., Spindler, T., & Brumen, B. (2019). The Influence of Competencies of Managers on Job Satisfaction of Employees in the Hotel Industry. Organizacija, 52(2), 81-94. Doi:10.2478/orga-2019-0006
- Gruden, N., & Stare, A. (2018). The influence of behavioral competencies on project performance. Project Management Journal, 49(3), 98-109.
 Dei:10.1177/8756072818770841

Doi:10.1177/8756972818770841

Hatami Ghoushchi, A., Daneshfard, K., Toloui Ashlaghi, A., & Rahnamay Roodposhti, F. (2021). Prioritizing the Dimensions, Components and Indicators of the Intellectual Capital Model in State Banks with the Competency Approach of Managers. Journal of System Management, 7(3), 53-65. Doi:10.30495/jsm.2021.1942510.1536

- Kozakova, J., Urbanova, M., & Savov, R. (2021). Factors Influencing the Extent of the Ethical Codes: Evidence from Slovakia. Journal of Risk and Financial Management, 14(1), 40-59. Doi:10.3390/jrfm14010040
- Larres, P., & Kelly, M. (2021). A Framework for Authentic Ethical Decision Making in the Face of Grand Challenges: A Lonerganian Gradation. Journal of Business Ethics,51, 1-13. Doi:10.1007/s10551-021-04974-2
- Liikamaa, K. (2015). Developing a project manager's competencies: A collective view of the most important competencies. Procedia Manufacturing, 14(3), 681-687. Doi:10.1016/j.promfg.2015.07.305
- MacDonald, A., Clarke, A., Ordonez-Ponce, E., Chai, Z., & Andreasen, J. (2020). Sustainability Managers: The Job Roles and Competencies of Building Sustainable Cities and Communities. Public Performance & Management Review, 43(6), 1413-1444. Doi:10.1080/15309576.2020.1803091
- Maksymov, M. (2021). Auditor Evaluation of Manager's Competence After a Failure in Internal Control. AUDITING: A Journal of Practice & Theory, 40(3), 105-125. Doi:10.2308/AJPT-18-036
- Moazen Jamshidi, M. H. (2019). Identifying and Ranking Key Competencies of Managers for Realization of Human Resources Excellence at Home Appliances Manufacturing Companies. Journal of Human Resource Management, 9(1), 1-24. Doi: 10.22034/jhrs.2019.95936
- Mohammadi, H. A., Ghasemi, M., Khalili Damghani, K., & Hashemzadeh, G. (2021). A Comprehensive Model for the Assignment of Unfinished Development Projects with their Economic Approach: Qualitative Study. Journal of System Management, 6(4), 139-175. Doi: 10.30495/jsm.2021.680460
- Moradi, S., Kheir andish, M., Hassan Qolipour, T., & Seyed javadin, S. R. (2019). The Competency Model of the Commanders of the Army of the Islamic Republic of Iran based on the Idea of the Supreme Commander-in-Chief. Strategic Management Studies of National Defence Studies, 9(35), 264-239. Doi: 20.1001.1.24234621.1398.9.35.10.7
- Paarima, Y., Ofei, A., & Kwashie, A. (2020).

Managerial competencies of nurse managers in Ghana. Africa Journal of Nursing and Midwifery, 22(2), 20- 38. Doi:10.25159/2520-5293/6969

- Radovic-Markovic, M., Tomas-Miskin, S., & Markovic, D. (2019). Digitalization and agility of enterprises and banks: IT competencies of managers and virtual team members. International Journal of Entrepreneurship, 23(4), 1-9. http://ebooks.ien.bg.ac.rs/1373/
- Ringsberg, H., & Cole, S. (2020). Maritime security guidelines: a study of Swedish ports' perceived barriers to compliance. Maritime Policy & Management, 47(3), 388-401. Doi:10.1080/03088839.2020.1711977
- Sarlio-Siintola, S., & Tammilehto, T. (2020). An ethical framework for maritime surveillance technology projects. Ethics as a resource. Examples of RDI projects and educational development. https://urn.fi/URN:NBN:fi:amk-2020110222113
- Shum, C., Gatling, A., & Shoemaker, S. (2018). A model of hospitality leadership competency for frontline and director-level managers: Which competencies matter more?. International Journal of Hospitality Management, 74, 57-66. Doi:10.1016/j.ijhm.2018.03.002
- Steyn, Z., & Van J. (2018). Investigating selected self-management competencies of managers. Acta Commercii, 18(1), 1-10. Doi:10.4102/ac.v18i1.530
- Wesselink, R., Blok, V., Van Leur, S., Lans, T., & Dentoni, D. (2015). Individual competencies for managers engaged in corporate sustainable management practices. Journal of Cleaner Production, (106), 497-506. Doi:10.1177/0007650316676270
- Yamazaki, Y., Toyama, M., & Putranto, A. J. (2018). Comparing managers' and nonmanagers' learning and competencies. Journal of Workplace Learning, (44), 274-290. Doi:10.1108/JWL-08-2017-0074
- Yasir, M., Majid, A., Yasir, M., Qudratullah, H., Ullah, R., & Khattak, A. (2021). Participation of hotel managers in CSR activities in developing countries: A defining role of CSR orientation, CSR competencies, and CSR commitment. Corporate Social Responsibility and Environmental Management, 28(1), 239-250. Doi:10.1002/csr.20