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THE RESEARCH OF CULTURAL ASPECTS INHERENT IN MARITIME COMPANIES, APPLYING MULTI-CRITERIA MODEL OF EMOTIONAL AND SOCIAL INTELLIGENCE FUNCTIONING

Abstract: *Commencing from the already obtained results of the maritime market research, this work aims at defining and development of the innovative model. The research work will clarify a new approach of understanding the context of maritime companies through the processes that influence the purpose, goals and sustainability of port facilities. By using modern scientific methods and approaches, a new multi-criteria model was developed in the work, which was tested in real conditions and with real data, with solutions for ranking the strategic elements created within the general sub-strategy for each port service. The defined new approach is the starting point for managing the maritime system of transport and for the development of the IMS strategy of the sea port, in the field of communication strategy, on a strategic level.*

Keywords: *organizational context, emotional and social intelligence, key performance indicators, business performance management, communication goals*

1. Introduction

Modern study of common and special problems of the maritime market, realistic (and/or abstract) of the world, requires consideration, acceptance, development and use of modern practical and scientific achievements based on the research of special strategies in the functioning of both social and emotional intelligence. The research of cultural aspects at the level of strategic management in maritime companies is not given sufficient scientific and professional attention. Among the significant reasons for this situation is insufficiently good theory analysis and minimal application of advanced system approaches, lack of interpersonal connections in teamwork, indifference as a

consequence of not accepting comprehensive quality management. As a result of such a situation in maritime ports in countries in transition, we have decentralization and shortening of interpersonal interaction of "homogeneous groups" which, due to non-constructed moral values, in their own way "create" elements of efficiency based on satisfaction, productivity and savings (Popovic & Vujovic, 2022).

Based on that, this research as a scientific achievement has multiple goals, and provides the possibility of a more detailed and efficient study not only of its individual parts, but of the entire maritime market as a unique system of a special kind.

From this it follows that the creation of strategic elements is reduced to making relatively short-term decisions with long-

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term implications, without an upgraded communication strategy (Taufovic, 2010).

As every, even strategic, management of maritime companies is based on scientific research and practically accepted procedures for solving its problems, a modern systemic approach was taken for initial research, which includes an unformed strategy as a balance of power between the "deserved authority of the leader" and a manager who takes on the responsibilities that should be managed by a lower organizational level.

2. The process of strategic planning as a leadership concept for choosing strategic goals

The strategic management process must be viewed as a continuous, iterative process that includes: environmental analysis, directing the institution (mission and goals), formulating strategy, implementing strategy and strategic control (Goetsch & Davis, 1997). Figure 1 shows the quality approach, integrated with the business strategy in the strategic planning phase, which according to Goetsch & Davis (1997. pp.75) constitutes the strategic planning process.

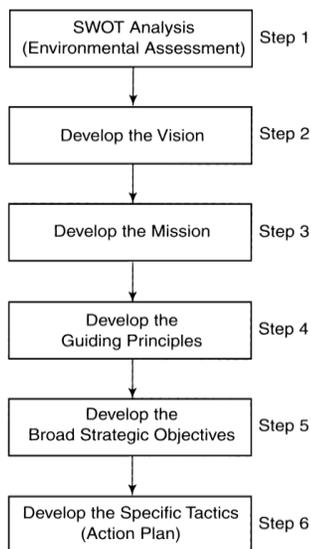


Figure 1. The strategic planning process
(Adapted and modified from Goetsch, 1997.)

The process is shown in six steps.

2.1. External analysis

The aim of the external analysis in the scientific work is to look at all relevant aspects of the impact of the external environment on the selected maritime companies and their performance. The analysis of the external environment is carried out due to the collection of information from the environment, the analysis of factors of the external environment, the identification of opportunities and threats and the formation of a strategy (Milošević, 2012).

2.1.1 Technical tools for analysis and data collection from arcs in the environment

In modern maritime companies, numerous quality tools and techniques are used for the analysis and collection of data from the surroundings. In maritime practice, questionnaires, BREST analysis, BCG matrix, McKinsey/GE matrix, business model analyses, critical success factors and SWOT analysis are most often used (Popović et al., 2016) (Figure 2).

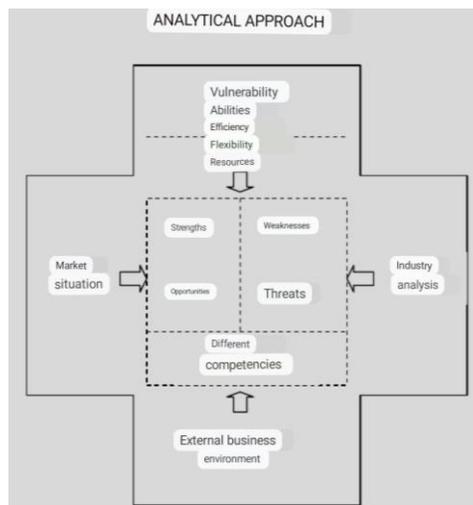


Figure 2. SWOT analysis
(Adapted and modified from Popović et al., 2016)

2.1.2 Diagnosing the condition

In practice, according to research (Popović, 2018), in the analytical approach of the SWOT analysis, we have selected four areas that should be considered (Figure 3).

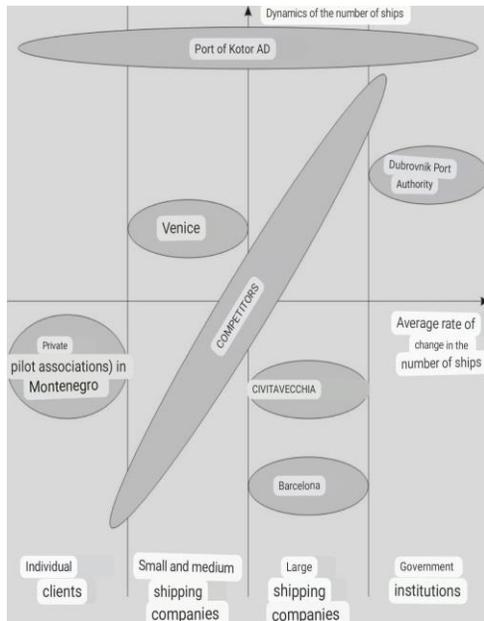


Figure 3. SWOT matrix based on the example of the Port of Kotor (Popović et al., 2016)

In this scientific research, we chose a SWOT analysis to diagnose the state of the port system in the surroundings that implied it:

- *Identification of the strengths* of the Port of Kotor and the Port of Dubrovnik in relation to good reputation on the maritime market, strategic approach to the maritime market, new technologies and
- *The identification of external dangers* in relation to the appearance of competitors with lower costs, the appearance of competitors with a higher level of quality of port services, the introduction of new international regulations and state local laws that increase the cost of port operations

and the emphasis on the weak relations of the port management with stakeholders, i.e. users of port services.

2.1.3 SWOT analysis of the Port of Kotor and the Port of Dubrovnik

According to the analytical approach a detailed strategic examination of each part of the Company was carried out in the Port of Kotor (Popović, 2018). The real capabilities of the Port of Kotor company, the areas of vulnerability caused by the COVID-19 pandemic (eg: the dependence of the Port of Kotor on the users of port services), the effectiveness and the degree of flexibility that the company has in "facing" sudden changes in the maritime market, i.e., in the passenger transport market, were established.

The SWOT matrix related to the Port of Kotor and the developed ports of the Mediterranean is shown in (Figure 3). For the analysis and forecast of the dynamics of the number of passengers from cruise ships, comparisons were made between the Port of Kotor and characteristic ports in the Mediterranean (Figure 4). According to the author's research (Popović et al., 2016, Mart), financial and strategic goals were defined, according to the examination of functional systems, the examined competences and capabilities of processes and technologies in the Port of Kotor and the developed ports of the Mediterranean. The transition from area A to area B requires increasing competitiveness, permanent training of port staff, improved quality of port services and innovation of port infrastructure. (Figure 5) shows the SWOT matrix and analysis of the Port of Kotor and port in Croatia. The research serves to understand the current situation in the Port of Kotor and Croatian ports while defining the strategy that should be applied in order to achieve the desired outcome and achieve business goals (Popović et al., 2016, Mart).

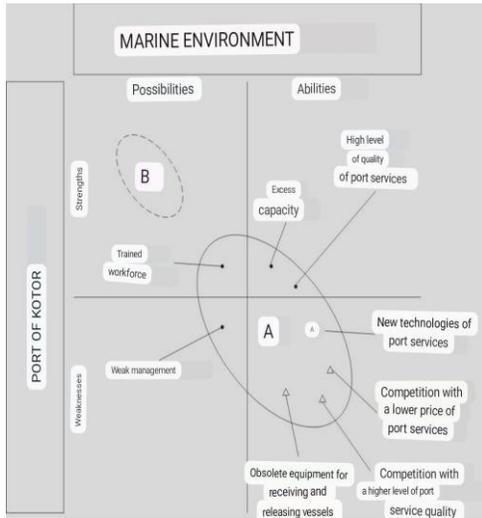


Figure 4. Analysis of the competition comparing the rate of the number of ships (Popović et al., 2016)

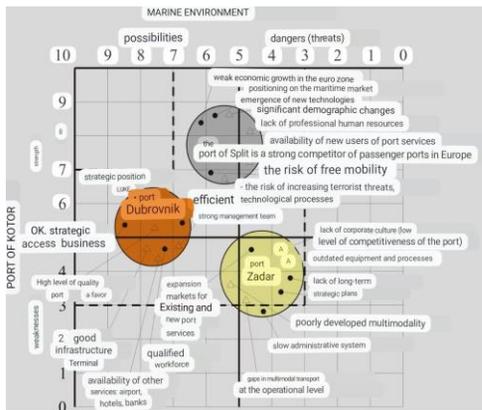


Figure 5. SWOT matrix on the example of maritime ports in Croatia – research (Popović et al., 2016)

In this thesis, *SWOT* analysis helped us in studying, forecasting and researching the maritime market in the surroundings, i.e. in the study of marine forecasting. In order to avoid confusion with such research, a general and clear distinction should be made between maritime market forecasting and maritime market research. The prediction of the maritime market is related to the prediction of its future events as a whole, or as its tightly interconnected parts -

(passenger transport), our research case (Tauzovic, 2010).

2.1.4 Analysis of the competition of the Port of Kotor from the aspect of comparing the average rate of change in the number of ships and passengers

Research in the paper included:

1. The collection of data on the needs and expectations of interested parties was achieved through the media (articles, brochures) and on the basis of information obtained from surveys distributed to users of port services (other sources of information, such as publications, flyers, etc.).
2. Identifying, analyzing, diagnosing and predicting the development of the situation in the maritime environment.
3. Monitoring, analysis and interpretation of external indicators.

External indicators were monitored through official data sources, such as the website of the Port of Kotor, websites of other professional maritime companies, websites of stakeholders from the surrounding area, media, etc. Sources or input data were extracted into indicator values. The analysis and interpretation of the indicators was carried out by the quality service of the Port of Kotor through the system management of the process "Review of the Company's IMS"

Port of Kotor - Port of Dubrovnik

We chose the Port of Dubrovnik, the tenth world port and the third Mediterranean port in terms of the number of passengers on one-day cruises (7).

The analysis of the dynamics of the number of vessels in the port of Dubrovnik is presented in (Figure 6). A slight constant decrease in the number of ships in the Port of Dubrovnik compared to the Port of Kotor for

the year 2022 is noticeable. In 2022, the presence of a greater number of larger ships will arrive.

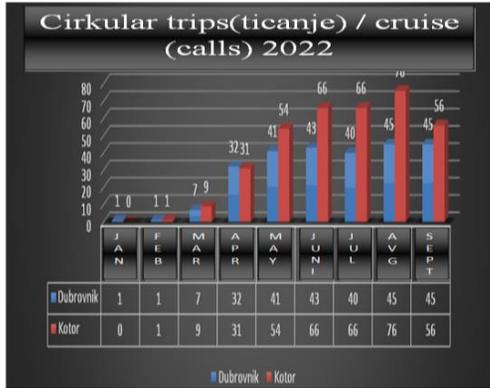


Figure 6. Average annual rate of change in the number of ships, Port of Kotor and Port of Dubrovnik for the period Jan. - Sep. 2022 (Form – Lko 12)

An analysis of the dynamics of the number of passengers in the port of Dubrovnik is presented (figure 7), which shows a slight constant decrease compared to the port of Kotor for the year 2022.

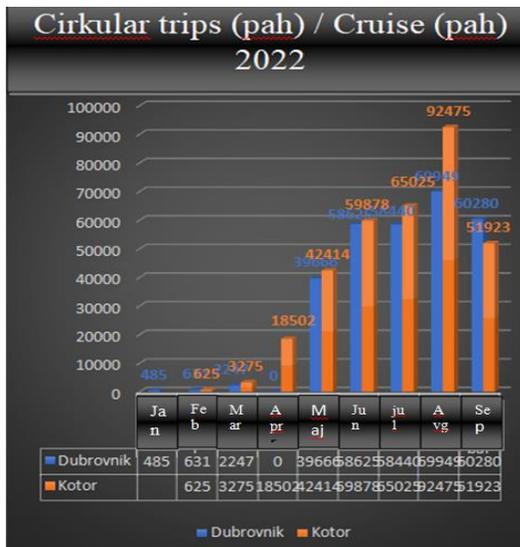


Figure 7. Average annual rate of change in the number of passengers, Port of Kotor and Port of Dubrovnik for the period Jan. - Sep. 2022 (Form – Lko 12)

Port of Kotor - Port of Venice

The analysis of the dynamics of the number of passengers in the port of Venice is presented in (table 1), which shows a slight constant decrease compared to the Port of Kotor (first quarter Jan-March - 12.59% for the year 2022) and (second quarter Jan-June

Table 1. Average quarterly annual rate of change in the number of passengers

Cirkular trips (putnici) / Cruise (pax) 2022			
	First quarter Q1 (Jan.-Mar.)	Second quarter Q2 (Jan.-Jun.)	Total:
Venecija	3464	77944	81408
Kotor	3900	124694	128594
The rate of change	12,59%	59,98%	



Figure 8. Average annual rate of change in the number of passengers, Port of Kotor and Port of Venice by quarters Jan- June. 2022 (Form – Lko 12)

In the next phase, the research related to improving the work of strategic managers in maritime practice, whose work is usually opposed to operational managers. Operational management is basically short-term and detailed, taking place in the context of immediate or near future events. Strategic management includes ideas and actions, which are focused on the long-term future of

all maritime companies, conducted in conditions of considerable uncertainty.

3. The influence of emotional and social intelligence in maritime practices

Digital transformation has brought numerous changes in the business world, one of the most important being the need to develop emotional intelligence in maritime companies employees.

Emotional and social intelligence (ESI competence) are connected with motivation, self-consciousness, managing oneself and the relations which make it possible to understand the interaction between one self and other people's emotions (Djurović, 2023).

3.1. ESI as a fundament of successful leadership

The World Economic Forum has ranked emotional intelligence as one out of ten most important skills required for success in a workplace. It has recently been viewed as a key segment of successful leadership.

Social intelligence at work is about understanding and managing the relations with other people in business environment. That includes the ability to communicate, collaborate, solve problems, motivate others, understand differences and adapt oneself to a situation.

Social intelligence helps the maritime companies' leaders to better understand and adapt to different styles of communication and work within a team, which enables more effective collaboration and increases the agility and satisfaction of the employees, port services users and other stakeholders. All of these directly influence successful management, which is a key factor in modern maritime companies' productivity and income increasing.

3.2. Formation of communication strategy in maritime ports

Strategic management represents a modern approach to maritime ports management, which implies a continuous process of constant adaptation of maritime companies to the changing environment, in which the environment exerts a permanent influence on maritime companies. Strategic management of maritime companies includes establishing and defining goals, determining the strategy, the process of implementing the defined strategy and control of realization and obtained results (Tuzovic, 2010). The importance of skills is not equal at all management levels (Figure 9). Thus, technical skills that include knowledge of methods, techniques and tools characteristic for specific tasks (sales tasks, port service, procurement and others) are especially important at the lowest levels of the organization. Although other skills are important for managers at the lowest level of an organization, technical skill is not as valuable as other skills at the top of the hierarchy.

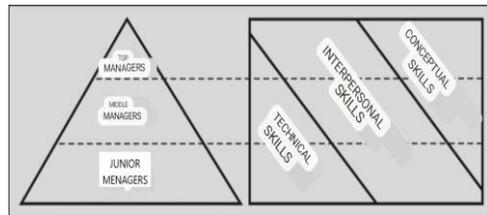


Figure 9. Organizational hierarchy-skills and function of managers

4. Creation of vision-operational activity of improving the communication strategy

According to the author's research (Ansoff, 1995). Hoshin, management is connected with strategic planning and the BSC method - (Business Scorecards). This method is used for so-called policy management, which means that strategic elements (vision, mission, etc.) are transformed into tactical

and operational quality improvement projects, which is shown in Figure 10.

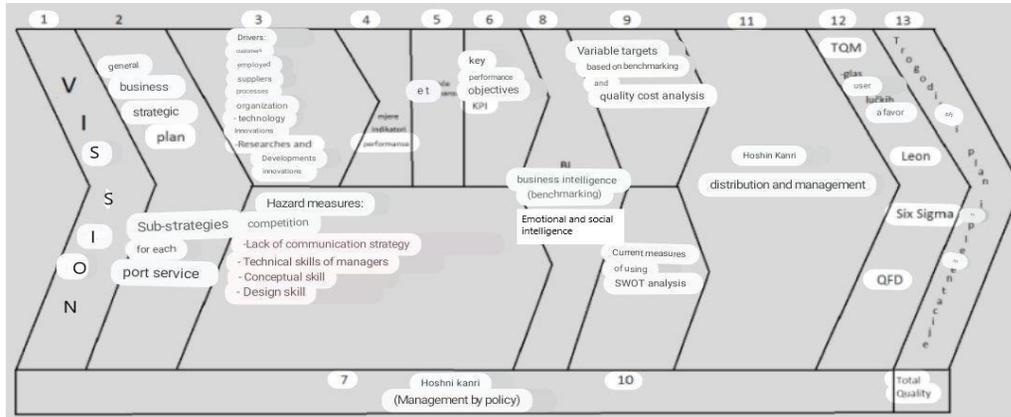


Figure 10. Organizational hierarchy-skills and function of managers

In Figure 10, all phases (from 1 to 13) are shown. (1- Strategy- 2-Vision) - it contains strategic elements within the general business strategic plan and separate sub-strategies for each port service. Phase (3 – Drivers, eng. drivers) as phases (4, 5, 6) were described in the previous thesis (Popović et al., 2016, Mart).

In phase (7), the management of seaports is observed through the double function of research. The first phase of the research was related to management, which was observed through the management processes of certain port systems. The aim of the research was to achieve a more efficient degree of fulfillment of common goals under the influence of disloyal communication. The second phase of the research was related to management through a special group of people whose job it is to manage the execution of port operations and tasks performed by other people. The aim of the research was related to the skills of managers, identifying, analyzing, diagnosing and predicting the development of the situation in the conditions of an undefined communication strategy at all levels of management.

Phase (8) refers to the application and recognizes the emotional and social intelligence of the leader as the basic link of effective leadership in the creation of strategic elements of improving the quality of the port system.

In phase (9), the new value of the objectives analysis is performed, according to ISO 31000 recommendations, which refer to the responsibility of the process owner for each port service. Phase (11) is a key phase and approach in which the Hoshin policy is strategically developed through its extension to port processes with the aim of later control and verification.

Phase (12) is described in detail in the previous paper (Popović et al., 2016, Mart), while phase (13) refers to the application of project management methods based on project risk.

4.1. A systematic approach to managing the quality of knowledge

The processes of globalization of pre - modern maritime companies in Montenegro essentially mean the defining of new requests and concepts of functioning with knowledge quality.

A systemic approach to strategic change management forms the basis for creating a quality strategy and makes a strategic response in real time through management. The superstructure of phase (7) of figure (10) forms the basis for the creation of a quality strategy. A recognized systemic approach constitutes a quality tool for internal analysis of corporate culture and organizational hierarchy-skills - functions of a maritime company manager (Popovic, Kovac, & Vuksic, 2022).

5. CONCLUSION

Modern overseas maritime companies create more and more opportunities for global partnership in port services, which increases the number and structure of participants and stakeholders. Maritime practices have had the examples of complicating the understanding processes, as well as those of defining the business goals and strategies.

The goal of this research is that managers in maritime companies must think strategically with the formulation of a clear plan that should define:

- effective achievement of business and strategic goals;
- the way and means of communication of managers, which is reflected in simple and meaningful messages placed in an adequate context;
- realistically achievable and relevant goals for communication;
- the levels of ability to recognize, understand and manage their own

emotions within the business environment .

- the management of relations with other people in the business environment.
- The mapping of knowledge as a tool for forming expert teams.

The management of knowledge quality is especially needed in the situations when neither the management theory with all its models, tools and techniques, nor the management practice with all its standards and instructions, can provide effective answers to the requests of the stakeholders (Popović, 2018).

The system of management of knowledge quality depends on the engagement of competent personnel within the maritime companies and their understanding the standards. (ISO 10018). To effectively manage the quality within the maritime companies, we need a systematical approach of recognizing, understanding and managing our own emotions in the relations with stakeholders in the maritime business environment.

The permanent improvement implies the upgrade of convenience, adequacy and effectiveness of the quality management system. The analysis and evaluation results mentioned above, as well as the output elements of the review done by the management, should define the need for including and upgrading emotional and social intelligence in permanent improvement, explicitly identifying the opportunities for companies' performance improvement.

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