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PERSPECTIVES FOR THE DEVELOPMENT OF SMALL SEAPORTS, WITH REFERENCE TO THE ADRIATIC SEAPORTS

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ABSTRACT. ***The subject of the paper is to consider some basic perspectives for the development of seaport, i.e., their strategic adaptation to modern technological, economic, commercial, institutional, environmental, and other trends. The aims of the paper are: a) to explore the possibilities of developing small (peripheral) seaports in the process of adapting to the contemporary world trends and finding ways to overcome their backward status and include them in global trade routes, with reference to the three selected Adriatic seaports b) to contribute to the understanding of complex relationships, which affect the evolution of small seaports, and c) to explain ways and means better quality (faster, cheaper and greater) customer satisfaction, i.e. strengthening seaports competence and competitiveness, in the context of globalisation. It starts with the basic hypothesis that the developmental adaptation of small seaports requires a broader proactive and reactive strategic approach, which implies of institutional, functional, operational, economical, ecological, technological, geographical, legal, political, and other frameworks, relations, and determinants. The auxiliary hypothesis is that small seaports must adapt their development to the dominant world trade, maritime, and port trends through the application of various strategies in a complex environment. In terms of methodology, the paper uses common methods of social and economic sciences, among them description, abstraction, concretisation, induction, and deduction, as well as analysis and synthesis.***

In conclusion, it is stated that the basic and auxiliary hypotheses were verified using the mentioned methods. In addition, it is emphasised that competent and sustainable seaport management needs to overcome various constraints and conflicting relationships in the inner and outer environment by applying new knowledge, skills, technologies, investments, strategies, and information.

KEYWORDS: Seaport concept, evolution of seaport, services characteristics, socio-economic changes, Maritime transport development, port development.

JEL classification: L62, L92, O18, R41.

Introduction

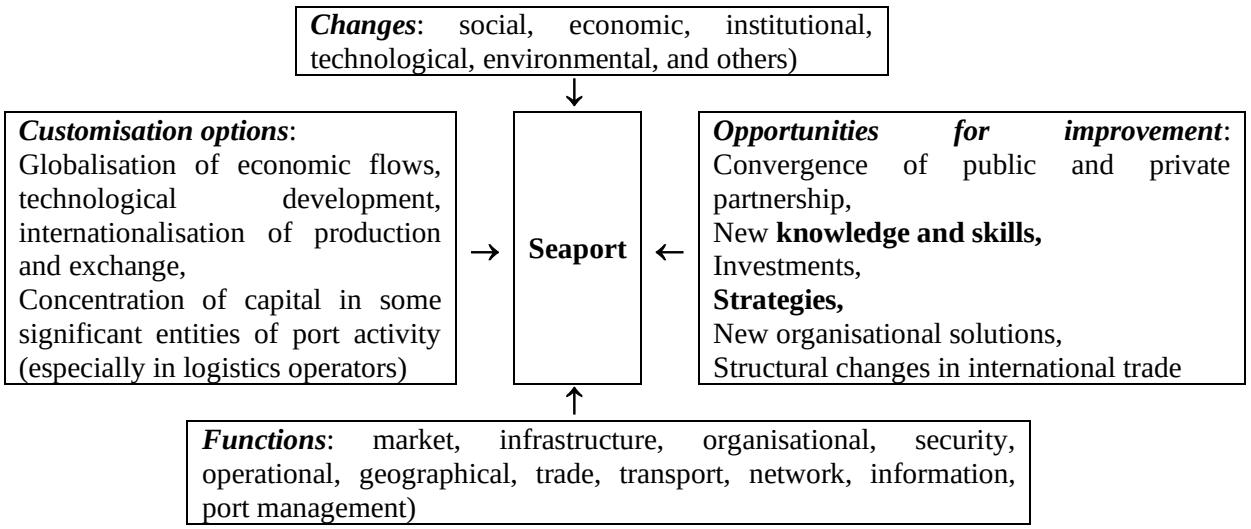
Most seaports are very important for all maritime states and are often the main industrial, commercial and macroeconomic subject of economic and social development. The port sector is under the constant influence of changes (social, economic, institutional, technological, environmental, and others). This is due to the development of needs in domicile countries, as well as due to their commitment to the principles of free trade (in modern contexts of globalisation) and new restrictions and opportunities imposed by maritime transport. In this regard, the development of maritime transport has led to significant changes in the port environment. These changes have led to its complication and the resulting fundamental improvement of the seaport concept (Hlali, Hammami, 2017). The seaport remained a multidimensional system, combined with an economic function, infrastructure system, geographical area, trade, transport technologies, and specific port management. Of course, he was constantly adapting to the complex legal and organisational concept, which is based on and improved along with various forms of convergence of public and private partnerships (Roa *et al*., 2013). All of these factors have been strongly influenced by institutional reforms and government policy decisions, which are often related to special economic zones. (Wang, Slack, 2000).

Tourret (Hlali, Hammami, 2017) defined the port, in its traditional conception, as a set of moles, basins, and docks, which prove to treat all kinds of ships and goods. Beyond the terminological meaning, the seaport can be defined according to different approaches such as economic, geographical, legal, and institutional. In economic terms, the port is defined as „*the place where the ships are sheltered, also the place where the goods pass, or even where they are transformed*" (Ibid.). This definition designates the port by its three essential functions. In addition, with these port functions commercial and industrial functions can also be added.

In a geographical sense, the port is the point of contact between land and sea freight and passenger traffic. Also, the port is an integrated logistics centre and multifunctional socio-economic space. Finally, in modern conditions, seaports have become a key part of the supply chain network. As such, seaports are under the constant pressure of the need for their business sustainability, especially in less developed countries (Streimikiene, 2022; Lahane *et al.*, 2021; Warris *et al.*, 2021; Sahora *et al.*, 2020; Chowdhury, Paul Sanjoy, 2020; Borimdesouza *et al.*, 2020).

The development of small seaports involves attaining higher port performance levels. In order to achieve this, it is necessary to repeatedly and continuously adapt seaports to exponential changes in economic (market, competition), institutional, legal, operational

(optimisation of transport, handling, and other processes), organisational (network integration, the growing concentration and consolidation in the liner shipping market, public-private partnerships and port concessions), technological, security, social and environmental environment.



Source: Delibasic, 2021.

Figure 1. **Factors Influencing the Evolution of Small Seaports**

Globalisation has significantly increased the importance of seaports in integrated supply chains. The port business has expanded from cargo handling to the provision of logistics services. Growth in logistics performance has increased the competitiveness of the seaport. She directly depends, among other things, on the amount of logistics costs and the reliability of supply chains. Two and a half decades ago, the world port economy underwent substantial changes, which significantly influenced the evolution of port systems (*Figure 1*). They are shown in *Figure 1* basic changes, customisation options, opportunities for improvement, and seaport functions.

1. Conceptual Model of the Evolution of Seaports

The functional evolution of seaports is essentially always geared towards sustainable business and the creation of new competitive advantages. In a changing international environment, seaports have undergone radical changes over time, especially in terms of their organisation and structure. In spatial and temporal evolution, the expansion of seaports was realised either by the evolution of maritime production technologies or by improving the handling of freight.

Many authors present different periodisations of seaport development. For the ports evolution today the current new five-stage models. Some authors (Bichou, Gray 2005) are more focused on different aspects of the port's evolution, such as services, concerted development of ports and cities, financial activities. Notteboom, Rodrigue (2005) study on the port regionalisation phase and related functional focus. Taafe *et al*. (1963) put forward six phased transportation development. UNCTAD (1991) division (a classification which includes three port generations) has been accepted by many authors, among them Rimmer (1967), Hayuth (1981), Flynn *et al*. (2011), Lee, Lam (2013), Lee *et al*., 2014, Sun *et al*. (2022). Their views and classifications are presented in *Table 1*.

Table 1. Seaport evolution

Gene-ration	*Time*	*Location*	*Remark*
1st	Before 1960	Connect to the platform. Ports functioned as commercial centres.	Semi-bulk cargo; conservative, means of transport change point; loading, unloading, storage, navigation services; independent operations within the port, informal connections between the port and its users; cargo flow, simple, single services, no/low added value; deciding factors: work/capital
2st	1960–1980	Centre for transportation and industrial and commercial services Points of ship handling within the bimodal transport system: e.g., maritime transport - rail transport; maritime transport - road transport.	Dry semi-bulk cargo and liquid bulk cargo; expansive, transport, industrial, and commercial centre; cargo processing, industrial and commercial services - territorial expansion; closer ties between the port and its users. No connections between different types of operations within the port, provisional ties between the port and the city; cargo flow, cargo processing. Various services, higher added value; deciding factors: capital
3st	1981-2000	Comprehensive logistics centre. Ports functioned as industrial centres.	Bulk, general, and containerised cargo; commercial, logistics and distribution centre for international trade; cargo and information distribution, logistic operations; unified port community. Port integration with the transport commercial chain. Close connections between the port and the city. Extensive port organisation; cargo and information flow. Cargo and information distribution. Wide package of various services. High added value; deciding factors: technology, know-how
4st	2001-2007	Global resource allocation hub. Port functioned as a logistic centre as a node for handling multimodal transports.	Compliance with regulatory requirements and general standards; limited to customs clearance and tracking the cargoes in the port; limited to compliance with planning procedures and environmental planning procedures; operated under procedures of port area development; examined independently of port functions; development of the logistic function, as an expansion of port functions, as well as creating duty-free zones and logistic parks near the ports; deciding factors: know-how
5st	Since 2007	Co-operated hub-and-spoke network. ports of this generation should combine the following functions: a) wholesale centres which will cut the time of cargo delivery; b) points of joining of water and land passenger streams; c) industrial centres with comprehensive intermodal transport handling; d) logistic centres as connecting points for multimodal cargo transport.	Exceeding the standard of services expected by port stakeholders; focusing on the level of quality of services, security, and increasingly better efficiency. Application of computer technology for the provision of port services and to predict events and measure results; active approach towards stakeholders in order to coordinate planning and the process of mutual decision-making; port services fully integrated with the port's mission and vision. The port authority plays the role of a „cluster leader", contributing to the increase of added value in the port; functionally still outside the port cluster, however, by establishing creative financial incentives, it draws new ship owners and loaders, creating new jobs and added value; logistics is a part of a maritime supply chain, air transport for valuable cargo and cargo requiring fast delivery. Advanced duty-free zones, as well as logistic parks near ports; ports develop strategies of connections with the hinterland by their pricing policy and constructing a system of economic incentives aimed at securing loaders against such a development of the connection network which would harm the customers' interests; deciding factors: know-how

Source: according to UNCTAD, 2017; Flynn *et al.*, 2011; Kaliszewski, 2017; Sun *et al.*, 2022.

The new concept of the seaport is about customer services (providing services at a higher level). It argues that the fifth-generation port has a stronger focus on customer requirement port throughput supply chain logistics and networks (Notteboom, 2011). In doing so, it should be borne in mind that literature on the subject differentiates seaports by their capacity and throughput results as well as other parameters such as the management system, the port's effectiveness as the supply centre for creating added value, and innovativeness.

2. Basic Principles of Small Seaport Evolution

In accordance with the basic factors affecting port performances (infrastructural, network and connectivity, operational, sustainability, and environmental, can be defined basic principles of small seaport evolution. They must start from:

- exemplary world models of seaport development,
- modern development trends, especially logistics and container,
- own needs, limitations, and possibilities,
- opportunities for inclusion in global supply chains (in terms of integration, foreign investment, business cooperation, etc.) and
- application of state-of-the-art information and others technologies, quality work organisation, and application of modern achievements in the field of outsourcing, controlling, and others.

It is considered that smaller, and lesser-known ports have numerous advantages. Often deliver substantial benefits to shippers, letting them bypass congestion while leveraging advanced technology. Less congestion applies not only to berths but to rail and truck access as well. The customs process in smaller ports often moves more smoothly because fewer people are involved. We can give more attention to each shipper and shipment and work closely with the terminal operator. Smaller ports tend to be more entrepreneurial and flexible when solving problems.

In all this, seaports must adhere to some basic principles, among which they stand out:

- the principle of balance of technological, economic, and environmental requirements,
- the business networking and cluster organisation of port resources principle,
- the principle of logistics efficiency (smart shipping, big data and analytics, advanced materials, robotics, communications and sensors),
- the principle of institutional adjustment,
- the principle of competitiveness,
- the principle of adjusting to the dominant trends of container shipping concentration,
- the principle of an attractive environment for investors, and
- the principle of sustainability.

Small seaports need to adapt and approach access to new technologies (advances in shipbuilding, propulsion, smart shipping, advanced materials, big data and analytics, robotics, sensors, autonomous drones, self-driving trucks and communications). Modern technologies increase the security and efficiency of operations in seaports.

A seaport is increasingly becoming a cluster in which all port resources are combined: the environment of the port industrial-logistics zone, port terminals, transport-logistics and distribution centres, and cargo handling complex, with numerous service complexes, specialised storage facilities, and intermediary agencies. The port clusters are formed in order to increase the competitiveness of all transport nodes. It is based on volume effects, stimulating innovation in the environment of transshipment and terminal port complexes and creating synergies between clusters. The various clusters are interconnected by information, material and financial flows, transport and storage infrastructure, and various steward terminal functions (loading and unloading operations). The cluster is networking customs, freight forwarding, service, brokerage, overhaul, production, inspection, and other port functions. No matter how many new principles and criteria emerge, economies of scale remain dominant. As

a result, seaports no longer compete with each other individually, but supply chains do. Notteboom, Rodruque (2004) conclude the following: „*Observed logistics integration and network orientation in the port and maritime industry have redefined the functional role of ports in value chains and have generated new patterns of freight distribution and new approaches to port hierarchy*".

In maritime logistics participate three types of actors in cargo handling: port authorities, shipping lines with terminal operations, and independent container terminal management companies. Their activities depend on global supply chains (Heaver, 2006). One of the major tasks of supply chain management is the coordination of relations within it. This implies assessing the position of each supplier in the chain and assessing its importance, ie. contributions to the overall success of the cooperation. Each organisational link in that chain strives to maximise its own performance and profit. Seaports are actively involved in supply chains through various adaptation strategies, depending on their own capabilities, conditions, and constraints. Transport and logistics centres are being formed on the seaport territory, while industrial and logistics zones are being formed in the hinterland. These are realistic conditions for the realisation of new logistics port functions, which enable seaports to be included in logistics supply chains.

Practice shows that logistics networks represent the most reliable and effective methods for maximising cargo value, both for the supplier and for the user. Ways of integration can be various. They must be based on the specifics and actual goals of the seaport. It depends on the geographical, location, infrastructural, supra-structural, and logistical characteristics of the port, the economic development of the port hinterland and the home country, its political relations, and integrations in the region. All those factors are necessarily networked, as well as local port operation management with a global manufacturing supply chain in various fields such as service, organisation, value-adding, and flow (information, material, and financial). Above all, it is necessary to valorise and harmonise different institutional levels and relations (Draskovic *et al*., 2020; Nguen, Nguen, 2021; Tran, 2022).

In the institutional adaptation and evolution of seaports, the main change was the involvement of private operators as intermediaries between seaports, freight forwarders, and shipping companies. In addition to state bodies and port authorities, the institutional structure was supplemented by private operators, who are responsible for the development of superstructure, management strategies, and procurement of modern technological equipment. A strong institutional framework is a prerequisite for any major investment.

The transition from the transport functions to the logistics functions essentially means a change in the character of the seaport's functional purpose. That is why the seaport goals are increasingly identified with the basic goals of logistics. In principle, it means optimal utilisation of bandwidth, high flexibility in the production industry, rapid response to customer requirements, willingness to provide complex services in the package, security in the execution of services, short deadlines for service delivery, cost reduction, continuous and comprehensive customer support, etc. The realisation of these goals leads to an increase in the competitiveness of seaports.

With the aggravation of global environmental problems (climate change, energy consumption, etc. - Streimikiene, 2021) and the growing institutional pressure of regulatory authorities, the involvement of seaports in solving environmental problems has grown. The main environmental issues of seaports relate to the handling of ships and cargo, port extensions, and accessibility to the hinterland. The concept of seaport sustainability includes three main aspects:

– economic, which refers to the return on investment, the efficiency of the use of the port area, and the provision of facilities for companies to maximise their performance,
– social, which refers to the direct contribution to employment in port companies and activities related to the port (the relationship between the port and the city, the contribution to the development of knowledge and education, and the vitality of the area around the port),
– environmental, which implies solving the problems of pollution, noise, air quality, various port operations, and waste disposal.

3. Possibilities for the Development of Small Seaports with Reference to Adriatic Ports

There are few types of research in the literature whose subject is the Adriatic's seaports. Nevertheless, some authors have explored certain aspects of this research question. In this sense, Draskovic (2019) showed that Adriatic seaports must accept and apply the integration strategy as a key business and logistic competence, which can be the basis for their expansion and development. He verified in the quoted article hypothesis that a partner business performance and cooperation between the Adriatic seaports of Koper, Rijeka, and Bar is a crucial condition for easier finding of large foreign investors and global logistics providers.

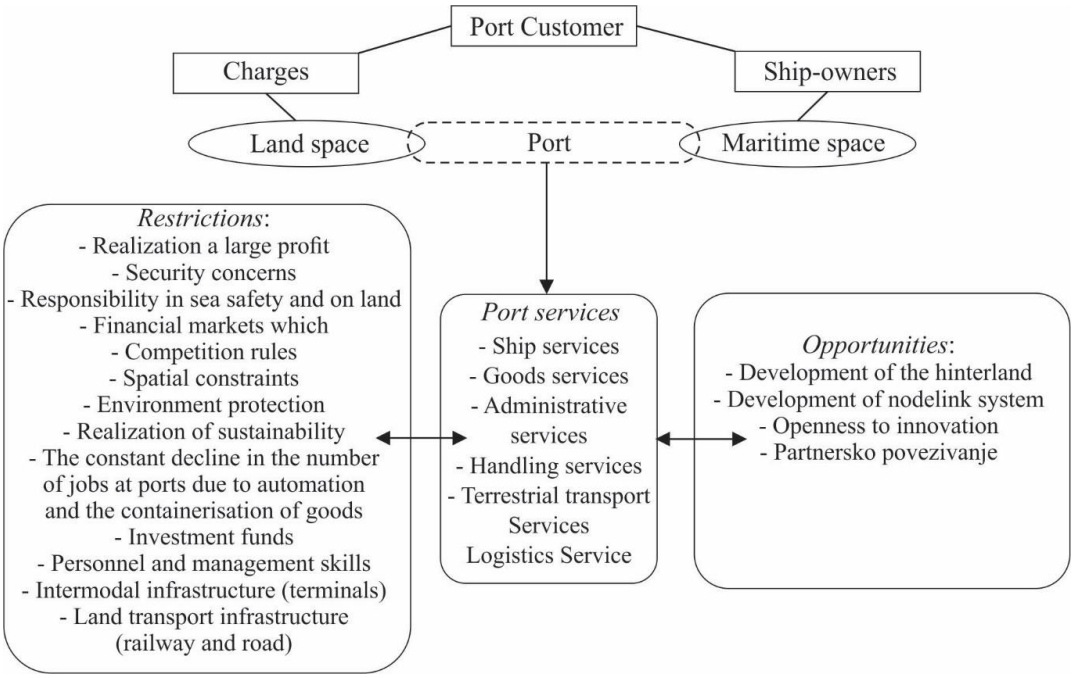
Draskovic *et al.* (2020) have identified three important factors, which dominantly negatively affect the establishment of business cooperation between the Adriatic seaports of Bar, Koper, and Rijeka. They are: a) negative impact of institutional, infrastructural, suprastructural, and corporate factors, b) applied level of logistics services, and c) political and economic barriers. They concluded that the greatest limitations in terms of the level of possible business-partnership cooperation characterise the seaport of Bar and that in all mentioned seaports it is necessary to invest large investment, organisational, institutional, and other efforts to improve certain development factors.

The common characteristics of the development barrier of Adriatic ports imply the need for their wider business cooperation. These are:

– relatively low level of quality of port and logistics services, which reduce port competitiveness,
– poor development of logistics infrastructure and port superstructure, which is associated with the long-standing economic crisis, failed privatisation, and economic erosion,
– chronic deficit of investment funds, which negatively affects the introduction of new technologies, business models and meeting customer expectations, and
– insufficient use of port capacities, especially logistics outsourcing.

Only the largest seaports in the world located at the junction of key navigation routes and belonging to developed economic systems are able to function as part of the most advanced global logistic platforms which concentrate a large part of the unit cargo streams.

The development of small seaports is it depends on the possibility of overcoming numerous limitations and affirmation of certain possibilities (*Figure 2*). Of course, the development of seaports is a result of their multifunctionality and multimodality focused on the widening of the range of services. Ports servicing the trade of developing countries, especially, relatively smaller and secondary ports, will need to adjust to remain competitive and continue to attract business, whether through direct connections or feedering services (UNCTAD, 2017, p.78).



Source: adapted to Hlali, Hammami, 2017; Delibasic 2021.

Figure 2. **Conditional Concept of Small Seaport Development**

Without wishing to precisely determine the current level of development of selected Adriatic seaports (Koper, Rijeka, and Bar), we believe that they can be characterised as generationally obsolete (backward) in terms of their level of modernity and openness to innovation. They belong to the countries in transition, which are at different levels of socio-economic development, though have their specificities and specific development problems and priorities. Observed objectively and in general, the Port of Bar is probably at the level of the second generation of seaports (Bar), while Koper and Rijeka are at the crossroads between the second and third generation.

Pelevic (2021) researched the development of logistics routes of intermodal transport in the Eastern Adriatic. He came to a conclusion that the seaport of Bar is noticeably behind the seaports of Rijeka and Koper, because of the low level of infrastructural, superstructural, and logistical development, high costs and bad logistics services, deteriorating political relations between Montenegro and Serbia, the poor infrastructural transport connections of the development investment deficit, high percentage of idling of engaged containers in the return direction, etc. Based on the conducted analysis, he found that the prevailing influence on achieved levels of development of logistics routes of intermodal transport in Adriatic ports is the next factors: low Liner Shipping Connectivity Index LSCI (Liner Shipping Connectivity Index), weak seaport development, and week seaport connectivity. He pointed out that the ports with the higher level of listed factors have achieved greater levels of development of logistics routes of intermodal transport.

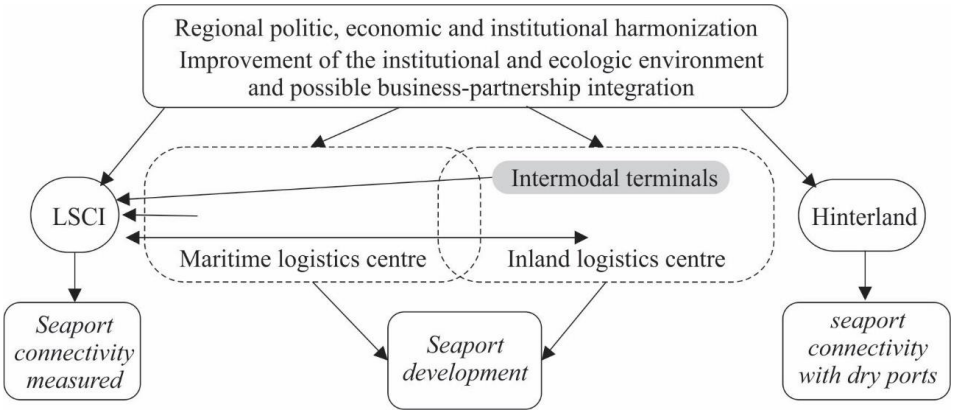
The port of Bar belongs to the second-generation ports because, according to UNCTAD, it integrates with its surroundings via its transport, industrial, and commercial function. This is evidenced by the realisation Container throughput 2020 (53591/TEU) and LSCI 2020 (5.25). Within the port areas, industrial parks are created which receive imported raw materials delivered by sea. The development of the industrial function is connected with access to land, efficient land transport, as well as worker, and utility (power and water) availability. From the operational perspective, the efficient functioning of the port centre led

to a larger degree of coordination of activities with the port city and region. The importance of cooperation between the various service providers within the seaport in order to handle cargo efficiently also increases.

Although the third-generation seaports first appeared in the 1980s in the period of accelerated development of containerised cargo volumes, the creation of an intermodal connections network, and increasing requirements resulting from the development of international transport, the Slovenian Port of Koper and the Croatian Port of Rijeka (according to our estimates) do not yet fall into this category. This is evidenced by the realisation Container throughput 2020 (Koper 945007/TEU and Rijeka 303626/TEU) and LSCI 2020 (Koper 35.32 and Rijeka 33.35). They are characterised by higher and more modern activity than the port previous generation (Bar), especially in view creation of integrated logistics centres and even logistics platforms supporting international trade. They do a much larger scope of services (stevedoring, storage, and navigation services with the use of modern technologies, organisation, and management). They have better skills (know-how), electronic data processing and exchange, as well as higher quality environmental functions. In addition, they are more efficient in terms of administrative-commercial handling of cargo information, the necessary bank, insurance, and legal services for the port. These ports have better quality road and rail connections with facilities, modern warehouses, and distribution parks, as well as a bigger symbiosis between the port and the city. Finally, they are more advanced in terms of new logistic-distribution function which results from including seaports in the integrated concept of the land-sea transport chain.

The idea elaborated by Drašković (2019) is significant for our topic. Namely, he believes, being with a good political will, economic logic, and institutional elaboration (harmonisation) in the future, can increase the level of development of intermodal transport logistics routes in Adriatic seaports. It is about the implementation of partial business integration, with a certain redistribution of transport, port, and logistics services in the region, which would strengthen the key competencies of the considered seaports. The implementation of this idea also considers a significant degree of partnership and the associated long-term forms of partial business integration (Pelevic, 2021).

In addition, we believe that this topic can also be successfully considered over the theoretical model (*Figure 3*), proposed by Montwiłł (2014, p.260) in accordance with UNCTAD recommendations (2004). We note that *Figure 3* contains an adaptation by Pelevic (Ibid.), as well as our supplement, which refers to the improvement of the institutional and ecologic environment and possible business-partnership integration.



Source: supplemented by UNCTAD, 2004; Montwiłł, 2014; Pelevic, 2021.

Figure 3. **Possibilities of Developing Adriatic Ports**

Between the 1960s and early 2000s, seaports went through four generations in their development (according to the UNCTAD model). Due to the evolutionary (and not abrupt) process of development, the WORKPORT model assumes the co-existence of ports and terminals of varying generations. **Politicians, investors and the general public often challenge and hinder investment in improving the quality of port infrastructure. This contradicts the proven fact that maritime and urban development enable the economic progress of many countries.** In doing so, one must start with the fact that small seaports access global trade via large hub ports. Also, small feeder vessels connect small and medium ports. The modern trend is yes shipping lines and major port terminal operators consolidate and integrate their portfolios, to enable they have enabled the provision of seamless intermodal transport services from port to port, strengthen port competition, and occupy as much hinterland as possible. In addition, seaports are expanding their institutional capacities in various ways (privatisation, strengthening the competencies of the port authority, and restructuring business models).

These experiences should respect the Adriatic ports. In the future, they should invest great efforts and resources to improve the attractiveness of their size, location, infrastructure, logistics, or management. Their transformation implies integration into the network delivery transport system and the creation of modern logistics centres (platforms). Such a development strategy must be based on the greater application of containerisation, the use of advanced automation and information technology, and full integration in the transport forwarder & logistics sector, intermodalism, and standardisation of information. In particular, the considered Adriatic seaports must:

– significantly change, improve, and push the boundaries of its complex relationships with the city and hinterland,
– create an ever more complicated system of connections between the participants in the port services market both from the supply and the demand side,
– develop seaports' capacity to handle various ship types and the cargo transported thereby (including unitised),
– develop the computer link networks and the automation of the processes executed therein,
– increase the depth of their water areas,
– cooperate with all entities and factors within the intermodal chain, which refers to the ports of the Eastern Adriatic (Beskovnik, 2010),
– offer better conditions to foreign investment in order to significantly increase it (Pelevic, 2021),
– harmonise institutional conditions with exemplary world models,
– strengthen its infrastructure container capacity (Pupavac *et al*., 2019),
– accompany proportional increase flow of goods by the development of dry ports,
– expand and modernise railway and road infrastructure (Vlahinic-Lenz *et al*., 2018)
– raise to a higher level its multimodal connectivity and involvement in global supply chains (Baran, Górecka, 2019),
– constantly strengthen your organisational and management skills, and
– accept favorable private-public partnership arrangements.

Empirical research to date significantly confirms these statements. The research of Pelevic (2021) showed that the seaport of Bar is noticeably behind the seaports of Rijeka and Koper in terms of the development of logistics routes for intermodal transport. The basic reasons are numerous, and they are dominated by the low level of port infrastructural,

superstructural and logistical development, high costs of its port and logistics services, deteriorating political relations in the region, the poor infrastructural transport connections, development investment deficit, orientation of Serbia to other seaports, a percentage of idling of engaged containers in the return direction, etc. Based on the conducted analysis, it was found that the prevailing influence on achieved levels of development of logistics routes of intermodal transport in Adriatic ports has a low level of the following factors: Liner Shipping Connectivity Index LSCI, seaport development, and seaport connectivity. Ports with a higher level of these factors have achieved greater levels of development of logistics routes of intermodal transport.

Conclusion

The social and economic development of all maritime states very much depends on the development and efficiency of seaports. This also applies to small seaports, due to their flexibility and the possibility of relatively rapid strategic adjustment.

Sustainable, competent, and modern seaport management must overcome various constraints and conflicting relationships in the inner and outer institutional and operational environment. To succeed in this, small seaports must force push by applying new knowledge, skills, technologies, investments, strategies, information, business networking, and private-public partnership.

They are generally analysed, explained, and researched in the article on the possibilities of developing small (peripheral) seaports in the process of adapting to the contemporary world trends and finding ways to overcome their backward status and include them in global trade routes, with reference to the three selected small Adriatic seaports. Complex relationships, which affect the evolution of small seaports, are also explained. Various author's suggestions are also listed for improving and developing strategies for the development of small seaports, as well as concrete ways to implement them.

The listed methods, and especially the method of description and analysis, have verified the basic and auxiliary hypotheses.

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MAŽŲ JŪRŲ UOSTŲ PLĖTROS PERSPEKTYVOS. ADRIJOS JŪROS UOSTŲ ATVEJAI

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SANTRAUKA

Šio tyrimo siekis – apsvarstyti keletą paprastų jūrų uostų plėtros perspektyvų, t. y. išsiaiškinti jų strateginį pritaikomumą šiuolaikinėms technologijoms, ekonominėms, komercinėms, institucinėms, aplinkosaugos ir kitoms tendencijoms. Straipsnyje tikrinama tokia pagrindinė hipotezė: mažųjų jūrų uostų plėtrai pritaikyti reikia platesnio aktyvaus ir veiksmingo strateginio požiūrio, kuris suponuoja institucines, funkcines, veiklos, ekonomines, ekologines, technologines, geografines, teisines, politines ir kitas sistemas, ryšius ir determinantus. Be to, pabrėžiama, kad kompetentingam ir darniam jūrų uostų valdymui reikia įveikti įvairius vidinės ir išorinės aplinkos suvaržymus ir prieštaringus santykius taikant naujas žinias, įgūdžius, technologijas, investicijas, strategijas ir informaciją.

REIKŠMINIAI ŽODŽIAI: jūrų uostų sąvoka, jūrų uostų raida, socialiniai ir ekonominiai pokyčiai, jūrų transporto plėtra, uostų plėtra.