In the conditions of full-scale war, it is evident that a significant portion of the country's industrial capacity has been lost due to substantial destruction of production facilities caused by numerous missile attacks. In addition to the systemic destruction, industrial enterprises have experienced significant deterioration in the conditions of conducting economic activities and faced other issues, which led to downsizing, cessation of operations, or transitioning to a state of capacity conservation and relocation. However, a small portion of enterprises not only did not experience significant changes but even increased their business volumes due to effective measures of crisis strategic management, which included continuous support for vitality, aimed at countering negative changes in the external environment and restoring development in the industrial sector. The purpose of the article is to identify the general characteristics of strategic management in the industrial sector, including its inherent features, key aspects, and instruments. The achievement of the stated objective in the article was accomplished through the following research methods: logical generalization and scientific abstraction, comparison, hierarchical and non-hierarchical classification. Within the research, the acceptance of the axiom is proposed concerning the importance of continuous support for the vital functions and preservation of capabilities for the recovery of economic entities operating in the industrial sector during full-scale war conditions. It has been demonstrated that based on the content of conditions and needs that demand orientation towards stabilizing measures from such entities, it is possible to develop local stabilization strategies for crisis management. The practical application of the proposed approach by each individual enterprise will allow establishing a management system that, through a system of influences, ensures a stabilizing nature oriented towards both the overall survival during crises and changes and the preservation of potential for future development. establishing a management system that guarantees active responsiveness to crisis challenges, their anticipation, and prevention.

Keywords: production facilities, stabilization measures, external environment, changes, crisis management.

Problem statement. In the conditions of full-scale war, it is evident that a significant portion of the country's industrial potential has been lost due to substantial damage to production facilities caused by numerous missile attacks. Specifically, the following production facilities suffered considerable damage or destruction: Mariupol Illich Iron and Steel Works (employing over 15,000 employees), Azovstal Iron and Steel Works (employing 10,700 residents of Mariupol and nearby towns), Antonov Plant (working over 9,000 employees), Kremenchuk Oil Refinery (were working over 3,000 employees), Avdiivka Coke Plant (were working over 4,000 employees), and several others. Many of the mentioned facilities experienced heavy shelling, resulting in projectiles hitting administrative buildings, workshops, or communication structures. In addition to the systemic destruction, economic entities operating in the industrial sector of the country through significant losses in production volumes due to effective measures of crisis strategic management, which included continuous support for vitality, aimed at countering negative changes in the external environment and restoring development in the industrial sector. The purpose of the article is to identify the general characteristics of strategic management in the industrial sector, including its inherent features, key aspects, and instruments. The achievement of the stated objective in the article was accomplished through the following research methods: logical generalization and scientific abstraction, comparison, hierarchical and non-hierarchical classification. Within the research, the acceptance of the axiom is proposed concerning the importance of continuous support for the vital functions and preservation of capabilities for the recovery of economic entities operating in the industrial sector during full-scale war conditions. It has been demonstrated that based on the content of conditions and needs that demand orientation towards stabilizing measures from such entities, it is possible to develop local stabilization strategies for crisis management. The practical application of the proposed approach by each individual enterprise will allow establishing a management system that, through a system of influences, ensures a stabilizing nature oriented towards both the overall survival during crises and changes and the preservation of potential for future development. establishing a management system that guarantees active responsiveness to crisis challenges, their anticipation, and prevention.

Keywords: production facilities, stabilization measures, external environment, changes, crisis management.
sector faced significant deterioration in the conditions of conducting business (caused by difficulties in accessing energy resources and marketing finished products) and other problems. These issues, when combined, led to the following outcomes among the 72 surveyed Ukrainian manufacturing enterprises from over 20 industries: 52.8% reduced their operations, 23.6% halted or went into capacity preservation mode, and 2% relocated from regions with active combat actions [2]. However, it is evident that a small portion of enterprises (including SP Anatol LLC, Lan Concern, private joint-stock company Brotep-Eko, Closed Joint-Stock Company Plant of Municipal Transport, and some others) not only did not experience significant changes but even increased their activity levels due to effective crisis management measures. These measures, which included continuous viability preservation aimed at countering negative changes in the external environment and facilitating recovery in the industrial sector, became integral components of their anti-crisis strategic management [2].

Analysis of recent research and publications. Various aspects of strategic management by enterprises have been studied by researchers such as Krapko O., Halkiv L., Karyy O., Kulyniak I., and Ohinok S. However, the issues of identifying general characteristics of strategic management in the industrial sector from the beginning of the full-scale war until now have been explored by scholars such as Voloshyna-Sidei V., Yevsieieva O., Maslyhan O., Syrtseva S., Nesterenko O., and Harkusha S. Despite the considerable amount of research, many specific questions regarding the definition of general features of strategic management in the industrial sector (including its common traits, key aspects, and instruments) remain no coverage.

The purpose of the article is to identify the general characteristics of strategic management in the industrial sector, including its common traits, key aspects, and instruments.

Presentation of the main material. In the conditions of full-scale war, it is crucial to sustain viability and to preserve the potential for the recovery and development of economic entities operating in the industrial sector. Therefore, these circumstances and needs require these enterprises to focus on local strategies of crisis management, which, in essence, should establish [5, p. 132]:

1. How will the economic entity resist negative changes in the external environment?
2. How will the economic entity preserve its viability and achieve the set goals of recovery and development through the measures?

Furthermore, considering the content of negative changes in the external environment experienced by 72 Ukrainian manufacturing enterprises from over 20 industries (Figure 1), which manifested themselves during the full-scale war conditions, and considering their specific nature, it is evident that such crisis strategic management should predominantly have a stabilizing character.

The justification for adopting the stated position regarding the stabilizing nature of crisis strategic management as an axiom is confirmed by the characteristics of modern local strategic management practices in the industrial sector. These characteristics are evident through the analysis of the already established (since February 24, 2022) practices of Anatol Limited Liability Company, Lan Concern, private joint-stock company Brotep-Eko, and Closed Joint-Stock Company Plant of Municipal Transport (Figure 2). During the war, the mentioned entities faced significant changes in the market and economic environment, which led to the application of crisis strategies with a stabilizing nature. These strategies were identified by the following characteristics: responsiveness to unpredictable changes, continuous monitoring, a focus on maximizing short-term viability (as a fundamental priority), risk minimization, and support for the workforce.

Figure 1 – Key negative changes in the external environment of the industrial sector during the full-scale war conditions (observed in 2022)

Note: Compiled based on research from 72 Ukrainian manufacturing enterprises across more than 20 industries.

Source: formed based on [2]
Thanks to the implementation of stabilizing crisis management strategies, all the mentioned entities successfully overcame the crisis challenges and preserved their viability in the short term (each entity efficiently managed its resources, minimized certain risks, and/or maintained its market position). Additionally, the management of the private joint-stock company "Brotep-Eko" minimized all negative changes in the external environment, enabling not only the continuation of operations in the market but also the resumption of development from 2023 (as evidenced by the introduction of new initiatives, launching new products, or increasing production volumes).

It should be noted that the crisis management local strategy, designed to have a stabilizing nature, aims primarily to preserve viability and potential for future development. Therefore, encompassing a set of identified negative change characteristics, it includes stabilizing measures (measures intended to control or stabilize economic processes at the enterprise level).

Depending on the specificity of the measures, each economic entity develops reactive actions shaped by the nature of negative changes in the external environment. These actions include:

1. Supporting employees in remote work mode.
2. Providing support for employees on idle or leave.

Table 2 – Characteristics of measures aimed at addressing the issues and needs of personnel that arose with the onset of military actions

<table>
<thead>
<tr>
<th>Directions for implementing measures</th>
<th>Character and specifics of implementing reactive actions within the framework of measures.</th>
<th>Basis for application of measures</th>
</tr>
</thead>
<tbody>
<tr>
<td>Supporting employees in remote work mode</td>
<td>Providing necessary equipment and software for employees working in remote mode. Establishing effective communication channels to ensure connectivity with employees working remotely.</td>
<td>Continuous monitoring and evaluation of staffing levels to timely adjust plans, identify, and address emerging issues that may arise.</td>
</tr>
<tr>
<td>Supporting employees on idle or leave</td>
<td>Providing social packages and assistance in meeting basic needs. Creating opportunities for retraining or upskilling of employees during idle or leave periods without loss of wages.</td>
<td></td>
</tr>
<tr>
<td>Reorganizing working hours</td>
<td>Development of a flexible work schedule. Task redistribution or implementing additional shifts to effectively utilize available personnel and avoid unnecessary idle time.</td>
<td></td>
</tr>
<tr>
<td>Providing support for employees' psychological well-being</td>
<td>Implementation of a psychological support program, counseling, and training sessions to help employees cope with stress and adverse conditions.</td>
<td></td>
</tr>
<tr>
<td>Investing in training and development of personnel</td>
<td>Development of training and qualification improvement programs aimed at enhancing work efficiency. Development of training programs that promote the adaptability of personnel to changes.</td>
<td></td>
</tr>
<tr>
<td>Establishing partnerships with relevant authorities</td>
<td>Collaboration with government agencies and other social partners that can provide additional support to employees in challenging conditions. Collaboration with government agencies to attract necessary personnel.</td>
<td></td>
</tr>
</tbody>
</table>

Source: Formulated by the author based on data from economic entities
3. Reorganizing working hours.
4. Providing support for employees' psychological well-being.
5. Investing in training and development of personnel.
6. Establishing partnerships with relevant authorities.

In general, the mentioned stabilizing measures should be aimed at preserving and supporting the workforce to ensure the industrial enterprise's viability and sustainable development in uncertain conditions after the war.

2. Measures aimed at changes in product assortment and production processes of enterprises are necessary due to reduced sales (resulting from a large influx of humanitarian aid, destruction of production capacities, plant shutdowns, etc. [3]), just as difficulties with product exports. Indeed, it has been revealed that in view of the challenges with product sales, product export, or the loss of suppliers, it is important to:

- to engage in the production of third-party products, which refers to products manufactured in addition to the main assortment provided by the enterprise. These products may include items with additional options or configurations, accessories, and components for the products, et al. According to research conducted on 72 Ukrainian manufacturing enterprises from over 20 industries, it has been found that such measures are currently being developed or have already been developed for up to 68% of economic entities [2]. Thus, the main stabilization measures in the industrial sector, following the outlined direction, should include the following (Table 4):

1. Diversifying the product range.
2. Utilizing production waste.
3. Attracting new customers.
4. Creating unique project proposals.

Both directions – the production of third-party and complementary products – can help industrial sector enterprises maintain stability and enhance competitiveness amid changes in the external environment and economic challenges. However, their successful implementation requires careful planning, resources, and market analysis.

3. Measures aimed at finding new suppliers and enhancing resource efficiency in resource utilization are being undertaken due to challenges with the supply of raw materials and materials and resource utilization issues (according to research conducted on 72 Ukrainian manufacturing enterprises from over 20 industries, problems with electricity supply, natural gas, wastewater disposal, and other resources have been identified, as indicated in Figure 2).

Therefore, the main stabilization measures in the industrial sector, aimed at enhancing resource efficiency, should include the following (Table 5):

<table>
<thead>
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<th>Basis for application of measures</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mastering new technologies and knowledge</td>
<td>Adopting new technologies and skills that may be required to produce third-party products. This may involve training the staff, implementing new equipment, and upgrading production processes.</td>
<td>Analysis of the current state of production output, product sales, and product export.</td>
</tr>
<tr>
<td>Searching for new suppliers and partners</td>
<td>The production of third-party products may require collaboration with new suppliers and partners who can provide necessary materials and resources. This might entail establishing new business relationships and negotiations.</td>
<td></td>
</tr>
<tr>
<td>Adherence to quality and safety standards.</td>
<td>Determining the quality and safety requirements set by customers or clients. This may involve implementing additional quality control processes and certifications.</td>
<td></td>
</tr>
<tr>
<td>Adaptation of production processes.</td>
<td>The enterprise needs to modify or adapt its production processes to manufacture new products or components.</td>
<td></td>
</tr>
<tr>
<td>3. Measures aimed at finding new suppliers and enhancing resource efficiency in resource utilization are being undertaken due to challenges with the supply of raw materials and materials and resource utilization issues (according to research conducted on 72 Ukrainian manufacturing enterprises from over 20 industries, problems with electricity supply, natural gas, wastewater disposal, and other resources have been identified, as indicated in Figure 2).</td>
<td></td>
<td></td>
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<tr>
<td>4. Creating unique project proposals.</td>
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</table>

Table 3 – Description of possible measures for the adoption of third-party production in the conditions of full-scale war

<table>
<thead>
<tr>
<th>Directions for implementing measures</th>
<th>Character and specifics of implementing reactive actions within the framework of measures.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Increasing product assortment</td>
<td>Expanding the range of products related to the main products already manufactured allows satisfying diverse customer needs and increasing sales volume.</td>
</tr>
<tr>
<td>Utilizing production waste</td>
<td>By producing supplementary goods from the waste generated during the main production process, the company can reduce costs and utilize previously unused production capacity.</td>
</tr>
<tr>
<td>Attracting new clients</td>
<td>Attracting new clients or exploring new markets that were previously inaccessible.</td>
</tr>
<tr>
<td>Creating projects with unique offers</td>
<td>Developing complementary products that can create additional value for customers and differentiate the company in the market.</td>
</tr>
</tbody>
</table>

Table 4 – Characteristics of possible measures for the adoption of complementary production in the conditions of full-scale war

Source: formed based on [1; 3–5]
1. Energy efficiency.
2. Water conservation.
4. Logistics optimization.

The implementation of measures to enhance resource efficiency can bring positive results not only for the enterprise itself but also for the environment, employees, and consumers. It can ensure economic effectiveness, production stability, and the company's image improvement.

The primary stabilization measures in the industrial sector, focused on seeking new suppliers, should include the following (Table 6):
1. Conducting marketing research.
2. Participation in exhibitions and business events.
3. Utilizing the Internet to find potential suppliers.
4. Expanding the geographical scope of the search.
5. Conducting negotiations and assessing qualifications.
6. Implementing trial orders.

Table 5 – Characteristics of potential stabilization measures to enhance resource efficiency in the context of a full-scale war

<table>
<thead>
<tr>
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</tr>
</thead>
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<tr>
<td>Energy efficiency</td>
<td>Implementation of new technologies and methods that allow reducing energy consumption (installation of energy-efficient equipment, building insulation, optimization of operating modes).</td>
<td>Implementation of monitoring and analysis systems for continuous improvement of resource efficiency measures. Seeking initiatives and supporting the staff in enhancing processes and measures for efficient resource utilization.</td>
</tr>
<tr>
<td>Water conservation</td>
<td>Utilization of new technologies for efficient water usage, reducing losses, utilizing recycled water, and implementing rainwater harvesting systems.</td>
<td></td>
</tr>
<tr>
<td>Waste utilization and recycling</td>
<td>Development of waste processing and recycling systems to reduce the negative impact on the environment and utilize secondary raw materials.</td>
<td></td>
</tr>
<tr>
<td>Logistics optimization</td>
<td>Minimization of unnecessary transportation, optimization of delivery routes, and increased cargo turnover.</td>
<td></td>
</tr>
<tr>
<td>Technological process improvement</td>
<td>Enhancing the efficiency of technological processes, reducing production losses, and improving quality control methods.</td>
<td></td>
</tr>
<tr>
<td>Implementation of &quot;green&quot; initiatives</td>
<td>Commitment to environmentally responsible business practices, implementation of ecological standards, and certification.</td>
<td></td>
</tr>
</tbody>
</table>

Figure 2 – Problems with the supply of raw materials and resource utilization
Source: formed based on [2]

7. Supplier audits.
8. Developing long-term partnerships.

When developing the above measures, it is important to conduct a detailed analysis and assessment of potential suppliers, their terms of cooperation, and reputation to ensure successful and sustainable collaboration. A thorough approach to finding new suppliers can be a crucial factor in revitalizing the development and viability of the enterprise.

The combination of the stabilization measures mentioned above is a fundamental component determines the areas where a company needs to focus its attention to sustain viability and successfully overcome crises. The content outlines:
– Key aspects (or the essence and main directions [3]) of implementing the crisis management strategy of an economic entity.
– Tools (or various methods, approaches, and practices) applied by the company to ensure stability and successful resolution of crises.
The main directions for selecting key aspects and management tools for an economic entity are provided in Figure 3. According to the data in the figure, it is evident that the stabilization nature of the anti-crisis strategic management in the industrial sector involves an active response to crisis challenges, prediction, and prevention. Accordingly, key aspects and fundamental instruments are formed to aid economic entities operating in the industrial sector in

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<tr>
<td>Conducting marketing research</td>
<td>Market analysis and research of production capabilities are aimed at identifying potential suppliers who can meet the needs of the enterprise.</td>
<td>Detailed analysis of the current state of raw material and material supplies.</td>
</tr>
<tr>
<td>Participation in exhibitions and business events</td>
<td>Participation in exhibitions, conferences, and business forums, which are important platforms for networking with new suppliers and establishing business contacts.</td>
<td>Evaluation of potential suppliers, their cooperation terms, and reputation.</td>
</tr>
<tr>
<td>Utilizing the Internet to find potential suppliers</td>
<td>Utilizing the Internet to find potential suppliers, researching their reputation, evaluating their services, and exploring collaboration opportunities.</td>
<td></td>
</tr>
<tr>
<td>Expanding the geographical scope of the search</td>
<td>Considering possibilities for collaboration with suppliers from other regions or countries, which can offer new opportunities and advantages.</td>
<td></td>
</tr>
<tr>
<td>Conducting negotiations and evaluating qualifications</td>
<td>Conducting negotiations with potential suppliers to discuss collaboration terms, assess their qualifications, and their ability to provide necessary materials and resources.</td>
<td></td>
</tr>
<tr>
<td>Implementing trial orders</td>
<td>Placing small orders to test the quality and capacity of the supplier to meet the company's needs.</td>
<td></td>
</tr>
<tr>
<td>Supplier auditing</td>
<td>Evaluating existing suppliers in terms of their productivity, reliability, cost, and compliance with standards.</td>
<td></td>
</tr>
<tr>
<td>Developing long-term partnerships</td>
<td>Establishing long-term partnerships with potential suppliers to promote stability and mutual development.</td>
<td></td>
</tr>
</tbody>
</table>

Source: formed based on [1; 3; 5]

The focus of the strategy is on sustaining viability during the war and ensuring sustainable development in the future.

The key aspects and management tools are selected based on the collective content of stabilization measures.

Figure 3 – Key Aspects and Instruments of the Stabilization Anti-crisis Management Strategy in the Industrial Sector

Note: (1) Detailed analysis of the current state of the industrial sector, including the assessment of losses, damages, and changes in market conditions, regular reporting, and analysis of results; (2) Defining the primary goal and objectives of the economic entity’s existence; (3) Formulating a vision of how the enterprise should look in the future; (4) Developing a strategic stabilization plan that outlines the main goals, tasks, and stabilization measures for the recovery period (taking into account the current market conditions, the state of raw material and material supplies, and opportunities for innovation, among other factors); (5) Algorithms for optimizing production processes, inventory management, and cost rationalization; (6) Collaboration with enterprises, government bodies, and international organizations; (7) Projects for new technologies and innovations that enhance productivity and product quality; (8) Customer relationship management systems, mathematical methods such as optimization, modeling, and simulation, used to find optimal solutions and forecast outcomes in supply chain activities; (9) Establishing effective communication, training, and personnel development will contribute to building a strong team capable of handling post-war challenges.

Source: formed based on [1; 6–7]
producing such responses that help sustain viability during the war and foster the potential for future development. Among them are:

Current State Analysis. Within this key aspect, tools of detailed analysis of the current state of the industrial sector are utilized to comprehend the actual potential for recovery and viability preservation (including assessments of losses, damages, and changes in market conditions) [1].

Monitoring and Evaluation of Strategic Plans. Within this key aspect, tools of regular reporting and analysis of the results of stabilization measures’ implementation are applied to enable timely responses to negative changes (by revising the strategy, optimizing processes, mobilizing additional resources, or rescaling activities [1]).

Mission and Vision Development/Revision. Within this key aspect, tools are applied to formulate a clear mission and vision for industrial sector enterprises, including defining the primary goal and objectives of their existence (during strategic sessions and brainstorming, mission statements [1]): creating a vision of how the enterprise should look in the future (through vision statements).

Strategic Planning. Within this key aspect, tools are employed to facilitate the development of a strategic stabilization plan that defines the main goals, tasks, and stabilization measures for the recovery period (considering the current market conditions, state of raw material and material supplies, and opportunities for innovation, etc. [1; 3]).

Resource Planning. Within this key aspect, tools are utilized to ensure efficient resource utilization during the post-war period (including algorithms for optimizing production processes, inventory management, and cost rationalization [1]).

Innovation and Technology. Within this key aspect, tools are employed to enable the realization of new product development and market opportunities, including projects for new technologies and innovations that enhance productivity and product quality.

Supply Chain Management. Within this key aspect, tools are utilized to implement relationship management with customers, mathematical methods such as optimization, modeling, and simulation, and instruments for finding optimal solutions and forecasting the results of supply chain operations.

Employee Engagement and Development. Within this key aspect, tools are employed to facilitate effective communication, training, and personnel development, fostering the creation of a strong team capable of handling post-war challenges.

Partnership and Collaboration. Within this key aspect, tools are utilized to establish cooperation with businesses, government entities, and international organizations (including effective communication, training, and personnel development, which contribute to the formation of a strong team capable of handling post-war challenges [3]). The main requirement is to select partnerships that help provide the most favorable conditions for development.

Under such a format, strategic stabilizing crisis management provides maximum opportunities to forecast, plan, and act to achieve success in uncertain conditions.

Conclusions. Within the scope of the research, it proposed to adopt as an axiom the importance of continuous support of viability and preservation of opportunities for the recovery and development of entities engaged in economic activities within the industrial sector in the context of full-scale warfare. Furthermore, it has been demonstrated that based on the nature of conditions and needs demanding orientation towards stabilizing measures, it is possible to formulate local stabilizing strategies for crisis management. The practical implementation of the proposed approach by each individual enterprise will allow:

1. To build a management system that, through a comprehensive set of measures, ensures a stabilizing character, focused on maintaining viability during crises and changes and preserving the potential for future development. However, the primary strategy priority is the preservation of viability, aiming to enable the industrial sector enterprise to effectively manage its resources, minimize risks, and strengthen its market position during unfavorable conditions.

2. To establish a management system that ensures proactive responsiveness to crisis challenges, their anticipation, and prevention. This may involve various tools such as analysis of the current state, monitoring and evaluation of strategic plans (to enable strategy review, process optimization, additional resource mobilization, or activity rescaling), development/revision of mission and vision, strategic planning, resource planning, innovation and technology adoption, supply chain management, staff engagement and development, as well as fostering partnerships and collaborations.

The prospects for further research in this direction involve conducting empirical studies on real enterprises to verify the effectiveness of the proposed strategies and identify potential issues and obstacles. This will validate theoretical conclusions and provide practical recommendations for businesses in military conflicts.

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