Кurnosenko Larysa Volodymyrivna PhD in Economics, Docent, Associate Professor of Institute of Public Service and Management, Odessa Polytechnic National University, 1 Shevchenko Ave., Odesa, 65044, tel.: (068) 104-98-67, https://orcid.org/0000-0003-2309-695X

THE PROCESS APPROACH WITHIN THE FRAMEWORK OF SCIENTIFIC AND PRACTICAL APPROACHES TO CRISIS MANAGEMENT: POTENTIAL FOR INTEGRATION AND SYNERGY

Abstract. This study aims to identify, systematize, and analyze existing scientific and practical approaches to crisis management, with a focus on the process approach as one of the key elements of contemporary crisis management. The author has defined key characteristics for conducting a comparative analysis of the most commonly used scientific-theoretical approaches to crisis management: risk-oriented, systemic, synergetic, socio-constructivist, and process approaches. The article emphasizes that various theoretical and methodological approaches can illuminate different aspects of a crisis situation, providing diverse interpretations of its characteristics. The universal characteristics used for comparison are identified as: concept, objective, object, management structure, outcome, adaptability to crises, advantage factor, scalability of response, interdisciplinarity, integration of information flows, resource requirements, and resilience to crises. Comparing these approaches has revealed that each possesses unique strengths and features, making it effective in certain crisis management contexts. The article examines the current scientific national and international perspective on the characteristics of the process approach in crisis management. It is emphasized that crisis management as a process is a sequence of structured stages and actions aimed at effective detection, analysis, response, recovery, and adaptation in crisis situations. The author proposes an original model for structuring the main stages of crisis development (pre-crisis, signal, crisis, stabilization, post-crisis stages). These stages of crisis are correlated...
with the following stages of crisis management: readiness, response, management, adaptation and recovery, evaluation, and lesson learning. The article highlights that the process approach, as a methodology for organizing and improving activity, can contribute to more effective resource management, increased flexibility, and the ability to quickly adapt in response to crisis situations. It is highlighted that the process approach differs from more static approaches by focusing on the relationships, interactions, and evolution of various system elements.

Keywords: crisis, scientific and practical approaches to crisis management, process approach, stages of the process approach to crisis management.

Курносенко Лариса Володимирівна кандидат економічних наук, доцент, Інститут публічної служби та управління, Національний університет «Одеська політехніка», пр. Шевченка, 1, м. Одеса, 65044, тел.: (068) 104 -98-67, https://orcid.org/0000-0003-2309-695X

ПРОЦЕСНИЙ ПІДХІД В СИСТЕМІ НАУКОВО-ПРАКТИЧНИХ ПІДХОДІВ ДО УПРАВЛІННЯ КРИЗОЮ: ПОТЕНЦІАЛ ДЛЯ ІНТЕГРАЦІЇ ТА СИНЕРГІЇ

Анотація. Це дослідження має на меті виявити, систематизувати та аналізувати існуючі науково-практичні підходи до управління кризами, акцентуючи увагу на процесному підході як одному з ключових елементів сучасного менеджменту криз. Автором визначені ключові характеристики, за якими проведено порівняльний аналіз найбільш вживаних в науці науково-теоретичних підходів управління кризою: ризик-орієнтованого, системного, синергетичного, соціально-конструктивістського та процесного. В статті підкреслено, що різні теоретичні та методологічні підходи можуть висвітлювати різні аспекти кризової ситуації, надаючи різнобічні інтерпретації її характеристик. Універсальними характеристиками, за якими проведено співставлення, визначені: концепція, мета, об`єкт, структура управління, результат, адаптивність до криз, фактор переваги, масштабування реакції, міждисциплінарність, інтеграція інформаційних потоків, вимоги до ресурсів, стійкість до криз. Порівняння цих підходів виявило, що кожен з них має унікальні сильні сторони та особливості, які роблять його ефективним в певних контекстах управління кризою. В статті вивчена сучасна наукова вітчизняна та зарубіжна думка щодо характеристик процесного підходу в управлінні кризами. Наголошено, що кризове управління як процес – це послідовність структурованих етапів та дій, спрямованих на ефективне
виявлення, аналіз, реагування, відновлення та адаптацію в умовах кризових ситуацій. Автором запропоновано оригінальну модель структурування основних етапів розгортання кризи (докризовий, сигнальний, кризовий, стабілізаційний, посткризовий етапи). Цим етапам кризи автор пропонує співвіднести наступні етапи кризового управління: готовність, реагування, управління, адаптація і відновлення, оцінка і винесення уроків. В статті наголошено, що процесний підхід, як методологія організації та вдосконалення діяльності, може сприяти більш ефективному управлінню ресурсами, підвищенню гнучкості та спроможності до швидкої адаптації у відповідь на кризові ситуації. Підкреслено, що процесний підхід відрізняється від більш статичних підходів, орієнтуваних на взаємозв’язки, взаємодію та еволюцію різних елементів системи.

Ключові слова: криза, науково-практичні підходи до управління кризою, процесний підхід, етапи процесного підходу управління кризою.

Problem Statement. The investigation of scientific and practical approaches to crisis management, particularly the role of the process approach in this context, is motivated by the dynamic nature of the contemporary globalized world, where organizations and societies encounter a wide spectrum of potential crisis situations, including wars, economic fluctuations, natural disasters, technological accidents. In conditions of increasing uncertainty and complexity of challenges, the ability of systems of various management scales to effectively manage crises not only allows minimizing potential losses but also enhances their resilience and adaptability to changes in the external environment.

The relevance of the defined topic is also determined by the necessity to develop integrated management strategies that combine various approaches and techniques with the aim of forming a comprehensive and multi-level response to crises. Studying the process approach in this context opens new perspectives for creating more flexible, responsive, and effective crisis management systems that can adapt to changing conditions and challenges of the external environment.

The process approach in crisis management provides an opportunity to systematize and optimize working processes, ensuring clear coordination of actions and rational use of resources during a crisis. However, to realize its potential, it is essential to deeply understand which parameters affect the effectiveness of the process approach and how these parameters can be adapted and optimized for different types of crises and organizational contexts. Systematizing the key parameters of the process approach’s effectiveness involves analyzing aspects such as process flexibility, response speed to changes, scalability of response capabilities,
integration of information flows. Studying these parameters will allow identifying the most effective crisis management strategies that can be applied in various conditions and environments.

The relevance of identifying the stages of crisis development and management within the process approach is conditioned by the need to increase readiness for crises, optimize management processes during their development, and enhance the effectiveness of recovery measures. Distinguishing stages within the process approach allows organizations to structure their activities during a crisis, which contributes to more efficient resource use, clear coordination of actions, and increasing the chances of successfully overcoming crisis situations.

**Aim.** The aim of the article is to research and systematize existing scientific and practical methodologies of crisis management, with an emphasis on identifying the role and importance of the process approach as a critical tool in the arsenal of modern crisis management, defining it as a central element in creating resilient and adaptive management systems.

**Analysis of recent research and publications.** The study of theoretical and scientific-practical aspects of crisis management in public administration has attracted considerable attention from Ukrainian scholars such as Kostina T., Likarchuk N., Karpenko O., Sushiy O., Tkachyshyna O., and others. Researchers highlight and separately consider approaches to crisis management such as risk-oriented [4], systemic [10], synergetic [7], socio-constructivist [16], and process approaches [12]. Despite the large number of publications, the comparison of different approaches to crisis management based on universal characteristics remains under-researched, opening the path to understanding and integration of these approaches. This ensures a comprehensive view of crisis management, promotes the development of more flexible strategies, which ultimately leads to resilience and progress in conditions of uncertainty and challenges.

**Presentation of the main material.** Scientific approaches to the study of crisis reveal many aspects that contribute to a deep understanding and analysis of this complex phenomenon. Various theoretical and methodological perspectives can reflect different qualities of the crisis situation and provide diverse views on its interpretation.

To detail the comparison of different approaches to crisis management, we will create a systematized table (tab. 1).
<table>
<thead>
<tr>
<th>Characteristic</th>
<th>Process approach</th>
<th>System Approach</th>
<th>Risk-based approach</th>
<th>Synergistic approach</th>
<th>Social-constructivist approach</th>
</tr>
</thead>
<tbody>
<tr>
<td>Concept</td>
<td>Crisis management through pre-defined processes and procedures</td>
<td>Considering the crisis as a systemic disorder that requires a comprehensive analysis</td>
<td>Preventive crisis management through risk identification and analysis</td>
<td>Leveraging synergies between different actors and resources for crisis management</td>
<td>Crisis management through understanding and modifying the perceptions, beliefs and values that make up social reality</td>
</tr>
<tr>
<td>Goal</td>
<td>Effective crisis response by following established processes</td>
<td>Restoring the functioning of the system by taking into account the interrelationships of its components</td>
<td>Minimizing the potential negative impact of crises through risk management</td>
<td>Creating greater value and efficiency in the crisis management process through interaction and cooperation</td>
<td>Changing the perception of the crisis and its consequences among the parties involved for more effective management</td>
</tr>
<tr>
<td>Object</td>
<td>Internal processes of the organization</td>
<td>The whole organization as a single system</td>
<td>Risks that can lead to a crisis</td>
<td>Interaction between process participants (organizations, groups, individuals)</td>
<td>Social interactions, perception, communication</td>
</tr>
<tr>
<td>Management structure</td>
<td>Clearly defined, hierarchical</td>
<td>Flexible, focused on system analysis and integration of elements</td>
<td>Focused on risk analysis and their minimization</td>
<td>Flexible, focused on cooperation and interaction</td>
<td>Non-linear, focused on interaction between social actors</td>
</tr>
<tr>
<td>Result</td>
<td>Implementation of planned procedures and minimization of the impact of the crisis</td>
<td>Restoration of system balance and functionality</td>
<td>Reducing the probability of a crisis and its consequences</td>
<td>Increasing the effectiveness of crisis management due to synergy</td>
<td>Improving crisis response through altered perceptions and social construction of reality</td>
</tr>
<tr>
<td>Adaptability to crises</td>
<td>Requires review and update of processes to accommodate</td>
<td>Ability to quickly adapt due to system analysis</td>
<td>Requires constant updating of risk assessment</td>
<td>Thanks to the flexibility of interactions, it is possible to quickly redistribute resources</td>
<td>The approach is based on the ability to rethink and adapt the perception of the crisis</td>
</tr>
<tr>
<td>Preference factor</td>
<td>Highly structured and predictable actions</td>
<td>Versatility in taking into account the complexity of organizational structures</td>
<td>Proactivity in management and the ability to identify potential threats early</td>
<td>Ability to mobilize a wide range of resources and knowledge to respond to a crisis</td>
<td>Deep involvement of the social component and cultural aspects in the crisis management process</td>
</tr>
</tbody>
</table>
Additional characteristics for comparing existing approaches to crisis management include:

1. Scalability of response within the mentioned approaches means the ability of an organizational system to quickly increase or decrease the volume of resource expenditure in response to crisis situations, ensuring the preservation of control and management efficiency. In the context of the process approach, this can also mean increasing or decreasing the volume of processes and operations, organizing work and management structure in such a way that it is possible to easily add or detach system elements in response to changes in task volume.

2. Integration of information flows plays a key role in ensuring the timeliness and accuracy of decision-making and involves creating a unified information base accessible to all stakeholders, ensuring the relevance and consistency of information.

3. Challenges and limitations. Each approach has its specific challenges. For example, the process approach may be insufficiently flexible for unforeseen changes, while the socio-constructivist requires a deep understanding of cultural and social contexts.

4. Resource requirements. Some approaches, like the systemic or synergetic, may require more resources, particularly time and coordination, compared to more structured ones, like the process approach.

5. Interdisciplinarity. Approaches vary in the degree of need for interdisciplinary knowledge and skills. Systemic and synergetic approaches can benefit from the integration of various fields of knowledge.

6. Resilience to crises. Depending on the approach, organizations can achieve different levels of resilience to future crises, with the ability not only to recover from them but also to adapt in such a way as to become more resilient in the future.

Comparing these approaches reveals that each has unique strengths and features that make it effective in certain crisis management contexts. The choice of approach depends on the specifics of the crisis, organizational needs, available resources, and the organization's ability to adapt to changes. In some cases, integrating elements of different approaches can provide the most effective crisis management. For example, a systemic approach can be complemented by a risk-oriented one for better preparation for potential risks, while a synergetic approach can enhance cooperation and interaction among various stakeholders.

The process approach to crisis research represents an important methodological concept aimed at studying crises as dynamic, constantly changing phenomena. It differs from more static approaches by focusing on the relationships, interactions, and evolution of various system elements. Using the process approach in management involves systematic identification of processes, managing them, and their sequential interaction [12].
This approach focuses on understanding the processes within the system at different stages of crisis development, including its onset, development, climax, and resolution, those processes that, according to N.Stepanyuk, «could not have arisen in the system during equilibrium, which are activated during a crisis and accompanied by the destruction of the usual connections of the system, rules, principles, established orders» [14, p.103].

The application of the process approach allows us to explore the crisis as a recurring sequence of system transformation phases, occurring and changing each other over time. This process of qualitative and quantitative changes of the system, according to M.Savchenko and O.Shkurenko, is objective and conditioned by «the influence of external or internal determinants that lead to deviation from the system's equilibrium state» [15, p.44].

At the heart of the process approach are the mechanisms and structures that shape a crisis, as well as the factors that facilitate its development or resolution. This means that the process approach requires a deep understanding of causes and consequences, as well as how they interact in space and time. The process approach also emphasizes that crises are not monolithic phenomena that can be studied in isolation from their context. It recognizes that crises arise from the interaction of various factors, which may include economic, social, political, and environmental aspects. Furthermore, it allows for the consideration of different types of crises in their interrelation and within the context of broader systemic processes, revealing the impact of a crisis on various aspects of society, including the economy, politics, social structures, technology, and culture. It enables the identification of potential vulnerabilities in the system, as well as opportunities for innovation and improvement.

To study crises using the process approach, it is important to conduct continuous monitoring and analysis of changes. This helps to detect shifts in the dynamics of a crisis and to understand how to effectively respond to them. The dynamic nature of crises requires a flexible management approach that can quickly adapt to new circumstances.

The process approach also allows for the understanding that crises can have both negative and positive consequences. They can serve as catalysts for change, forcing the system to adapt and improve, or, conversely, lead to destabilization and collapse.

We agree with O. Oleshko, who, in exploring the relationship between crises and the development cycles of socio-economic systems, proved that crises are not one-time events but are part of a continuous cycle of changes in the system and its adaptation to them. Therefore, studying this cycle can help understand how crises can be mitigated or how to respond more effectively when they occur [11, p.242].

Ultimately, the process approach serves not only as a means for analyzing and understanding crises as such but also as a tool for developing strategies for their
prevention, management, and resolution. Through its capacity for adaptation and dynamic analysis, it facilitates the development of effective solutions that take into account the complexity and multifaceted nature of the crisis phenomenon.

In science, there is no single established vision of the crisis development algorithm, just as there is no life cycle of a system. W.R. Crandall, considering the life cycle of a crisis, examines the following stages [2, p.53]:

1) Preconditions of a crisis – events that precede the beginning of the crisis development and have a minor impact;
2) Trigger event – the point of reference, after which the crisis "explodes" and disrupts the normal functioning state of the system;
3) The crisis itself – the development of the crisis that causes the most significant destruction of the system;
4) Post-crisis period – the final stage that occurs after the end of the most severe crisis period and includes the learning of lessons.

According to O. Drobysheva, crises go through several stages – «the hidden accumulation of preconditions for a crisis situation, collapse, depression, revival, which ends with reaching a pre-crisis state on a new basis» [3, p.43].

A generalized review of the crisis process phases in the scientific literature is provided by A. Kasianova, who concluded that these phases are described differently by researchers, based on objective or subjective factors affecting the system's life activity, or generalized views on the behavior algorithm of the system before and after the onset of crisis events, and all of them correlate with the goals of crisis management [6].

Describing a crisis in state management through the phenomenon of social conflict, V. Gerasenko identifies the following stages of its development: 1) the emergence of numerous conflict centers in various spheres of social life; 2) deepening of conflict situations in society to a degree where their resolution cannot be achieved on the basis of compromises; 3) development and intensification of the crisis, which includes the disintegration of existing social structures. [5, p.32].

J.Riley proposed the following crisis development algorithm:

1) Pre-crisis – a stage preceding the onset of a crisis; from the point of view of events, this stage looks like a suspicion regarding the crisis, and from the point of view of crisis management - it is preparedness for a crisis;
2) Warning – the presence of signs or signals that the company is prone to events that could potentially lead to disruption of its normal functioning;
3) Crisis point – crisis phenomena that can irreparably harm the activity of the enterprise;
4) Recovery – the waning of the crisis and the opportunity for the enterprise to focus on pre-crisis activities;
5) Post-crisis – evaluating the effect of the crisis and attempting to restore the status quo [13].
D. Alexander distinguishes the following phases of crisis development as «mitigation, preparedness, response, and recovery» [1, p.26].

E. Lettieri suggests supplementing the phases of crises and disasters with «incubation, dynamics around trigger events, and lessons learned during recovery» [9].

Therefore, crisis management as a process is a sequence of structured stages and actions aimed at effective detection, analysis, response, recovery, and adaptation in crisis situations.

Summarizing the approaches of scholars, in our opinion, the processes of crisis management can be divided into five main stages, each of which plays a significant role in preparing, responding, and recovering the system after crisis situations.

A detailed understanding of each of these stages allows for more effective management of potential and actual crises.

1. **Pre-crisis: preparedness for crisis.**
   
   At this stage, efforts are focused on preparing for potential crisis situations. Preparedness includes identifying potential risks, developing crisis response plans, training staff, and establishing communication systems [8].

   Key components include:
   - Risk analysis: Identifying and assessing potential threats to the organization.

![Fig. 1 Stages of Crisis Development and Crisis Management within the Process Approach](image-url)
- Development of response plans: Creating detailed actions for responding to different types of crises.
- Training and education: Conducting regular training and drills to prepare staff for effective crisis response.
- Communication strategies: Developing communication plans for all stakeholders, including employees, clients, partners, and the public.

2. **Warning: responding to the crisis.**

The crisis response phase is activated when warning signals of a possible crisis appear. This includes identifying crisis signals, activating response plans, and mobilizing resources. Key actions at this stage include:
- Prompt detection: Early recognition of crisis signals to minimize its impact.
- Communication: Effective dissemination of information among stakeholders.
- Mobilization of resources: Engaging necessary resources and teams to respond to the situation.

3. **Crisis: crisis management.**

This phase occurs when the crisis unfolds. The focus shifts to minimizing damage and implementing response plans. Important aspects are:
- Effective leadership: Leaders must take decisive action, providing clear instructions and moral support to staff and stakeholders.
- Application of response plans: Using developed strategies to address specific aspects of the crisis, including logistics, communications, and operational management.

4. **Crisis stabilization: adapting to the crisis and system recovery.**

- Adaptability: Readiness to adapt plans according to changing conditions and new information about the crisis.
- Damage assessment: Determining the extent of damage caused by the crisis and the need for resources for recovery.
- Recovery plan: Developing and implementing recovery plans to return to normal activity levels.
- Support for stakeholders: Providing necessary support to employees, clients, and other key parties.

5. **Post-crisis: assessing the effects and learning lessons.**

At the final stage, the organization analyzes the nature, quality, and effectiveness of crisis management and studies the lessons learned during it. This includes:
- Action evaluation: Analyzing the effectiveness of the crisis response measures taken and their impact on the organization.
- Lessons learned: Identifying successes and shortcomings in crisis management approaches to improve future preparedness.
- Updating plans and strategies: Adjusting readiness and response plans based on the experience gained and new knowledge.
Database formation: Creating and updating databases on crises that can serve as a resource for training and preparation for future crisis situations.

Effective crisis management requires not only the presence of well-developed plans and procedures but also a culture of preparedness that permeates the entire organization, including leadership, staff, processes, and technologies. The key to success lies in continuous improvement and adaptation, based on experience and new knowledge acquired in the process of crisis management.

Conclusion. The process approach analyzes the different stages of a crisis. Summarizing the approaches of scholars, the following generalized stages of crisis development can be presented: pre-crisis stage focuses on preventive measures and preparation, establishing a strong foundation for effective crisis response; warning stage allows for a quick response to crisis warning signals, minimizing potential damages; active crisis stage requires decisive actions and the use of developed response plans for effective crisis situation management; crisis stabilization stage aims at restoring normal activity levels and supporting stakeholders in the recovery process; post-crisis stage provides a crucial opportunity for evaluation, learning, and preparation for future crises, strengthening the organization's readiness to overcome new challenges [17].

Each of these stages contributes significantly to the overall resilience of the organization in the face of potential threats. Studying the interconnections between the different stages of the crisis process, including cause-and-effect relationships, actor interactions, changes in the external environment, allows for the exploration of the system's adaptation mechanisms to the crisis, finding crisis management mechanisms that can be activated during the development of a crisis, developing models for predicting the future development of the crisis and its possible impact on various aspects of the system, and finding scenarios for system recovery in the post-crisis period.

References:


15. Savchenko M.V. & Shkurenko O.V. (2018). Determinanty finansovo-ekonomichnoi kryzy v umovahh globalizatsii. [Determinants of the financial and economic crisis in the conditions of globalization]. Ekonomika i orhanizatsiya upravlinnia - Economics and management organization. №3 (31). p.p.37-47. URL: https://r.donnu.edu.ua/bitstream/123456789/544/1/1_%D0%A1%D0%B0%D0%B2%D1%87%D0%B5%D0%BD%D0%BA%D0%BE_eiou_2018_3_6%20%281%29.pdf. [in Ukrainian].


Література:
8. Курносенко Л.В. (2023) Готовність до управління в кризових ситуаціях в сфері публічного управління. Публічне управління та регіональний розвиток. №22, С.1001-1018. URL: https://doi.org/10.34132/pard2023.22.05
15. Савченко М.В. & Шкуренко О.В. (2018). Детермінанти фінансово-економічної кризи в умовах глобалізації. Економіка і організація управління. №3 (31). С.37-47. URL: https://r.donnu.edu.ua/bitstream/123456789/544/1/1_%D0%A1%D0%B0%D0%B1%D1%87%D0%B5%D0%BD%D0%BA%D0%BE_eiou_2018_3_6%20%281%29.pdf
