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# Application of Design Thinking to Develop a Comprehensive Mechanism to Address Covid-19's Impact on the Performance of Civil Servants<sup>1</sup>

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**Abstract:** The development of design thinking plays a significant role in shaping team effectiveness and enhancing the individual capabilities of leaders, managers, and civil servants. In the context of geopolitical disruptions and new global challenges, including the Covid-19 pandemic, the issue of ensuring the effectiveness of key government agencies and organizations becomes a priority task. It requires thorough research and analysis of potential countermeasures against negative influences. This article aims to analyze the application of design thinking as an effective tool for developing a comprehensive mechanism to address the effects of Covid-19 on the performance of civil servants. An important research direction is the analysis of the concept of design thinking and its structural components following the study's goals. Contemporary practices in design thinking development adhere to stable principles that can facilitate the operational and strategic functioning of teams and create conditions for further growth. The authors analyze the skills of government officials and representatives of authorities within Ukrainian government institutions. They determine their level of competence in specialized skills. The paper also assesses the potential for improving these skills to increase the efficiency of government agencies. The proposal suggests using the concept of design thinking based on the Stanford model. This model has proven to be an effective team development and decision-making tool. The authors outline the key structural elements of design thinking and provide detailed characteristics for each element. The article analyzes the basic principles of the mechanism for addressing the impact of Covid-19 through the introduction of design thinking technology. The study's results can help improve public institutions' efficiency and quality of work. They will create favorable conditions for the team's work and, as a result, ensure the solution to global problems. In addition, the available research results can be used to improve, develop, and modernize the design thinking implementation system to reduce the impact of Covid-19.

**Keywords:** Addressing covid-19, Civil servants, Civil servants' progress, Corporate culture, Design thinking, Hard skills, Soft skills, Staff performance, Staff professional competencies.

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## 1. INTRODUCTION

The modern development of design thinking allows its implementation in the majority of institutions that require a creative and innovative approach to new threats and challenges. Government agencies and structures require effective management of processes that are a crucial part of the country's internal policies. Most of these processes are carried out by people who require advanced skills and abilities and can make decisions aligned with set goals and objectives. Furthermore, the use of design thinking as an innovative approach to training public servants can contribute to the development of both soft and hard skills. A critical aspect is the development of a methodology and implementation program based on foreign or existing models that advocate specific principles and sequential processes, which will improve the corporate culture of civil servants. The outcomes of such models produce tangible results that improve work performance and encourage the search for unconventional, well-considered alternative solutions that significantly impact effectiveness and incorporate value.

In addition, Design Thinking places considerable emphasis on emotional intelligence, empathy, and communication, as these factors serve to cultivate an organization's internal environment. The issues surrounding the spread of the coronavirus pandemic continue to this day. The emergence of Covid-19 in 2019 and 2020 triggered significant waves of change within the government apparatus, leading to destructive processes worldwide. Therefore, to avoid similar risks, it is imperative to use all available opportunities and tools to improve and train human capital, as public officials are responsible for decision-making and the efficiency of their execution.

It is necessary to create a mechanism that will prevent the negative impact of Covid-19 to ensure the quality of work of civil servants and the results of this work. According to this principle, the authors have chosen the topic of the study.

## 2. LITERATURE REVIEW

Scientists have studied the peculiarities of the application of design thinking, as well as directed it to the development of a mechanism to address the impact of Covid-19 on the performance of civil servants in the light of the practice of its implementation and use (Podolchak et al., 2022). Design thinking, according to Blomkamp (2022), is a concept that involves the use of creative and non-standard approaches, the main goal of which is to create practical solutions to new challenges. Bason (2022) sees design thinking as an essential tool in the modern world of management and project management, as a properly planned process with empathy towards the customer can bring real benefits.

The practice of applying design thinking is implemented in the majority of organizations, commercial institutions, government structures, and cultural institutions. According to

Kolko (2018), design thinking can be introduced from an educational institution to a government agency since it develops creative abilities, shapes emotional intelligence, and creates conditions for the development of practical skills, which are prerequisites for effective work (Masyk et al., 2023). The design thinking can become a factor in the development of both collective and person, changing approaches to work, and more. Clarke (2019) believes that design thinking in modern government structures is the most necessary element of additional educational programs, as it provides an opportunity to acquire skills and knowledge that can be directly used by civil servants in practical activities and improve the quality of a particular job (Halkiv et al., 2021).

In addition, according to Dunne (2018), the use of design thinking promotes the improvement of the quality of collective work, the formation of a favorable business climate in the team, and directs the team's efforts toward specific results. A widespread practice is the use of design thinking to analyze potential solutions to new challenges and threats. Osborne (2018) notes that the use of design thinking is primarily used to create mechanisms and solutions that can cope with the emergence of new threats and challenges, both for commercial organizations and non-financial or governmental organizations. Preparation is an important factor in applying design thinking in these structures. Orlov (2020) believes that the creation of an infrastructure, a detailed improvement, and a training program can be a means of operational training and the application of acquired skills in practice.

In recent years, as mentioned by Storonińska (2020), the issue of Covid-19 remains the most relevant, as it poses a significant threat, and due to the unpreparedness of civil servants, avoiding the threat will be difficult. However, the use of the concept of design thinking and the adjustment of work processes can create an effective environment for decision-making and execution by the set needs. In Ukraine, the practice of design thinking is being developed through training and the formation of seminars, conferences, etc.

Benovska (2020) believes it is necessary to prepare a special infrastructure, create an appropriate program, and be ready for possible internal political and external challenges. The aforementioned is crucial to ensure the use of design thinking to train civil servants. The issue of guaranteeing work efficiency, even in the context of the spread of the Covid-19 pandemic, remains an important question for research and development of a potential mechanism to counter new challenges and threats.

## 3. AIMS

The study aims to analyze the application of design thinking, particularly the Stanford model, to develop a mechanism for addressing Covid-19 by improving the quality of civil servants' performance. The creation of a unified mechanism is an important task of the study. It is aimed at implementing and counteracting the challenges of the pandemic and possible negative consequences. An important research area is to characterize the peculiarities of using design thinking according to the Stanford model principle based on the work quality of civil servants among the proposed Ukrainian public institutions. Achieving this goal will create a rational and

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optimal mechanism to mitigate the risks of the spread of Covid-19 and ensure high performance among employees of government agencies, bodies, authorities, and organizations. The article focuses on the formation and use of design thinking in terms of the skills of civil servants and the possibility of identifying them as separate indicators, which will provide a tangible result for the social environment.

#### 4. MATERIALS AND METHODS

In analyzing the application of design thinking to develop a comprehensive mechanism for countering the effects of Covid-19 on the performance of civil servants, scientific research methods were used. Based on the exploratory method, the characteristics of the formation and use of design thinking as a concept were outlined. This could serve as a factor in improving government officials' quality of work, reducing the environment's negative influence, and preparing for existing challenges.

The authors analyzed a number of scientific materials on the possibilities of implementing design thinking and its potential in unfavorable conditions for government organizations and structures. The Stanford model and the 4W model were analyzed using the comparative method. It led to the selection of the former for the implementation of the Design Thinking concept.

The survey methodology was used to analyze the level of hard and soft skills of civil servants from different organizations and to identify their proficiency levels. By using an analytical approach, the results were examined, and recommendations were made for the further development and impact of the implementation of design thinking.

The use of design thinking is considered as a tool to counteract the influence of Covid-19 on performance, focusing on infrastructure creation, skill development, specialized skills, and enhancing emotional intelligence among civil servants. Through the use of abstraction, key problematic aspects of the functioning of government officials and their negative impact on the quality of work were identified. These aspects reveal potential avenues for improvement through the integration of design thinking technologies based on the Stanford model.

In the article, the authors developed a prototype of a unified mechanism to counteract the negative impact of Covid-19 on work performance and determined the structural elements of its functioning. The applied research methods allowed for a comprehensive study of the current level of readiness of civil servants and their reaction to challenges, as well as the potential for improvement of skills to ensure the functioning of the counteraction mechanism.

The proposed methodology allows us to present the following research results regarding the application of design thinking as a comprehensive mechanism to counter the impact of Covid-19 on the performance of government officials.

#### 5. RESULTS

The concept of design thinking plays a significant role in the effectiveness of decision-making, the creation of innovative

approaches to problem-solving, and the search for optimal ways to achieve goals. Design thinking involves the use of comprehensive methods and tools aimed at transforming human thinking into a structured, flexible, and adaptive form. In the modern world, the use of design thinking is important for everyone, but it holds the greatest value for organizational representatives, managers, and civil servants who must utilize their managerial abilities to achieve objectives. The idea of design thinking involves configuring one's own thinking according to consistent principles, which entail the development of creativity, the utilization of creative approaches, high motivation, and constant exploration to address various issues (Podolchak et al., 2014). Based on the application of design thinking, it's possible to enhance the quality not only of company or organizational management but also of government structures and institutions, ultimately impacting a country's macroeconomic climate (Dziurakh et al., 2022; Halkiv et al., 2021; Shpak et al., 2022). In this context, the development and formation of design thinking are of utmost importance for modern government officials, and its implementation is a prioritized goal for governmental bodies, structures, and organizations (Shpak et al., 2019; Cwynar et al., 2018).

The most popular methods and design thinking models are the Stanford Design Thinking model and the 4W model. The Stanford Design Thinking model operates on five components that can be interpreted as follows:

- empathy – developing emotional intelligence and direct work with people or issues related to people;
- focus – directing attention to a specific matter, achieving comprehensive understanding;
- idea generation – utilizing creative ideas to find solutions, along with unconventional approaches that ensure quality results;
- prototyping – a crucial step in idea generation involving the creation of an intellectual or physical product to gain feedback and understand the product's quality and potential use;
- testing – evaluating the quality of work, monitoring processes, and seeking avenues for improvement.

Another popular design thinking model is the 4W model, which is based on the following components: "What is?", "What if?", "What WOWs?", "What works?". Each stage involves specifying an issue and its potential resolution paths, creating a prototype, devising an effective mechanism to address the issue, as well as selecting the most optimal solution.

The implementation of design thinking for civil servants can contribute to the improvement and development of soft skills, as well as have a qualitative impact on the effectiveness of using hard skills. Additionally, for analyzing the quality of Covid-19 countermeasures, it's necessary to utilize deep feedback mechanisms, develop emotional intelligence, and apply creativity. These align well with the characteristics of the Stanford Design Thinking model, making it the most suitable choice for research. The main principles and advantages of this model are depicted in Table 1.

**Table 1. Principles of the Stanford Design Thinking Model.**

Principles	Features	Model Advantages
Creative approach	A non-standard approach to solving administrative and operational service issues	The model emphasizes the use of non-standard and effective solutions
Ability to ask questions	Searching for an effective solution and the ability to define an issue, as well as the ability to rationally assess it	The model encourages a holistic look at the problem and the search for the most optimal solutions
Teamwork	Ensuring a favorable environment for teamwork	The model involves a teamwork, with a high-quality system of delegation and distribution of responsibilities
Optimism	Introducing a positive mindset and focus on results	The model encourages positive thinking and effective functioning of the organization
Focus on people	An activity's product should be helpful to people	The model reminds about the final goal of the activity and helps to improve people's lives

Source: compiled by the author.

The following analysis of the current state of quality in three public services of Ukraine, namely the State Audit Service of Ukraine, the Ministry of Economy of Ukraine, and the Ministry of Energy, is proposed to improve the quality of counteracting the impact of Covid-19 on the performance of civil servants. By conducting surveys among representatives of the authority, senior management, and officials, the level of development of hard skills and soft skills will be determined, and the potential effects of implementing design thinking based on the Stanford model will be predicted. The application of this model can help to improve the quality of communication, leadership, motivation, and positive thinking, as well as to find ways to strengthen this process.

For the analytical survey, the following parameters are proposed for the evaluation of hard skills: level of education, strategic planning, operational planning, evaluation, execution, control, regulation, design thinking, knowledge of the Ukrainian language, and knowledge of foreign languages. These indicators can comprehensively and in detail reflect

the quality of practical skills formation of civil servants, which are used in their daily activities. Moreover, strategic and operational planning are among the most essential skills for civil servants. They allow for rational conduct of activities, formation of state processes, and consideration of the circulation system of these processes and support of their functioning. Such skills as knowledge of Ukrainian and foreign languages and educational level act as educational factors that directly influence the quality of work of government officials and play a significant role in supporting their efficiency. Control, regulation, assessment, and execution are operational skills of civil servants that characterize their ability to make decisions, correctly assess situations, and effectively solve existing problems.

Therefore, the selected categories best describe the level of proficiency in hard skills, and for the assessment, it is suggested to use a scale: high, medium, and low. The obtained results regarding the quality of the hard skills mastery are shown in Table 2.

**Table 2. Description of hard skills of civil servants of A and B categories in three institutions\*.**

Skill	Assessment of the level of skills mastery					
	Civil servants of the State Audit Service of Ukraine		Civil servants of the Ministry of Economy of Ukraine		Civil servants of the Ministry of Energy of Ukraine	
	Government representatives	Officials	Government representatives	Officials	Government representatives	Officials
Education level	3	3	3	3	3	3
Strategic planning	3	1	2	2	3	2
Operational planning	2	2	2	2	2	2
Assessment	2	1	2	2	2	1
Execution	3	2	3	1	2	3

Control	2	1	2	3	3	2
Regulation	2	1	3	2	1	2
Design thinking	2	3	2	2	2	2
Ukrainian language proficiency	3	2	3	3	3	2
Foreign language proficiency	3	2	3	2	2	2
Overall level	25	18	25	22	23	21
The total score	43		47		44	

Source: compiled by the author.

\*3 – high level, 2 – medium, 1 – low.

Based on the conducted research on the level of hard skills in the surveyed organizations, the following values were obtained:

- State Audit Service of Ukraine – 43 points;
- Ministry of Economy of Ukraine – 47;
- Ministry of Energy of Ukraine – 43 points.

The obtained indicators show a high level of professionalism and quality of practical skills mastery, as well as the ability of managers to use their own professional skills effectively. In addition, all three organizations show a high value of the "performance" parameter and an average level of "design thinking", which is characteristic of operational work and direct workload.

Practicing these skills in the fight against the pandemic can serve as a means of addressing current issues related to the spread of the pandemic and finding effective measures to contain it. Finding efficient solutions to continue working even under quarantine conditions is crucial for the development of quality performance of public servants. From the analysis conducted, it can be affirmed that government organizations have a robust system for working under the conditions of Covid-19 spread and can establish a competitive model for other government structures. However, despite the high level, it is not the maximum, even taking into account positive results. Therefore, there is a need for development and search for practical solutions to improve the quality of productivity and assessment of hard skills among public servants.

After analyzing the level of development of hard skills among civil servants in organizations, attention should be paid to soft skills. Because in the conditions of the pandemic and adverse political circumstances in which Ukraine finds itself, along with the potential threat of further spread of Covid-19, this category of skills is the most vulnerable. The issue of the quality of soft skills in remote work is particularly affected by the inefficient use of management resources and requires a system of creative approaches and solutions to maintain its current state. The following parameters are proposed to assess the quality of soft skills: emotional intelligence, non-confrontational behavior, leadership, time man-

agement, communication, adaptability, creativity, critical thinking, self-motivation, and stress resilience.

Emotional intelligence, leadership, and communication are key soft skills that are fundamental to the development of hard skills, as they have the greatest influence on the potential for their formation and play a crucial role in effective and optimal management. The rapid spread of the pandemic necessitates the use of these skills as tools for effective business communication and timely resolution of work-related issues. Motivation, stress resilience, and adaptability reflect a person's psychological state and ability to make decisions, take advantage of opportunities to continue working, and provide a framework for assessing one's potential capabilities.

The Covid-19 pandemic poses a global challenge to the entire world, making the ability to adapt to new conditions and challenges an essential factor in continuing work of value to the state and its population. Therefore, these parameters were included in the survey. Time management and critical thinking are essential from the point of view of making quality decisions and finding the best ways to deal with such predicaments in the face of increased stress situations. In addition, a high level of soft skills development impacts hard skills. The results of the survey of civil servants are presented in Table 3.

The conducted analysis shows that the level of soft skills development in the State Audit Service of Ukraine is 43, in the Ministry of Economy of Ukraine – 43, and in the Ministry of Energy of Ukraine – 30. The obtained result means that soft skills are less important than hard skills due to the unstable working conditions caused by the war and the gradual transformation of most work processes. Therefore, in the event of a recurrence of the Covid-19 pandemic, it is necessary to use practical tools for mitigation, in particular, to implement the practice of design thinking. This can influence the quality of development of most soft skills and, consequently, stimulate improvements in the quality of hard skills.

In this situation, it is essential to use effective creative methods and establish high-quality communication among civil servants. Creating a unified system for sharing experiences and implementing the Stanford Design Thinking model is

**Table 3. Description of soft skills of civil servants of A and B categories in three institutions.**

Skill	Assessment of the level of skills mastery					
	Civil servants of the State Audit Service of Ukraine		Civil servants of the Ministry of Economy of Ukraine		Civil servants of the Ministry of Energy of Ukraine	
	Government representatives	Officials	Government representatives	Officials	Government representatives	Officials
Emotional intelligence	3	2	3	2	2	2
Non-conflictuality	2	2	2	2	2	2
Leadership qualities	2	2	3	2	2	1
Time management	2	2	2	2	2	1
Communication	2	2	2	2	2	1
Adaptability	2	2	2	2	1	1
Creativity	1	3	2	2	2	1
Critical thinking	2	2	2	2	1	1
Self-motivation	3	3	2	2	1	1
Stress resistance	3	1	3	2	2	2
Overall level	22	21	23	20	17	13
The total score	43		43		30	

Source: compiled by the author.

\*3 – high level, 2 – medium, 1 – low.

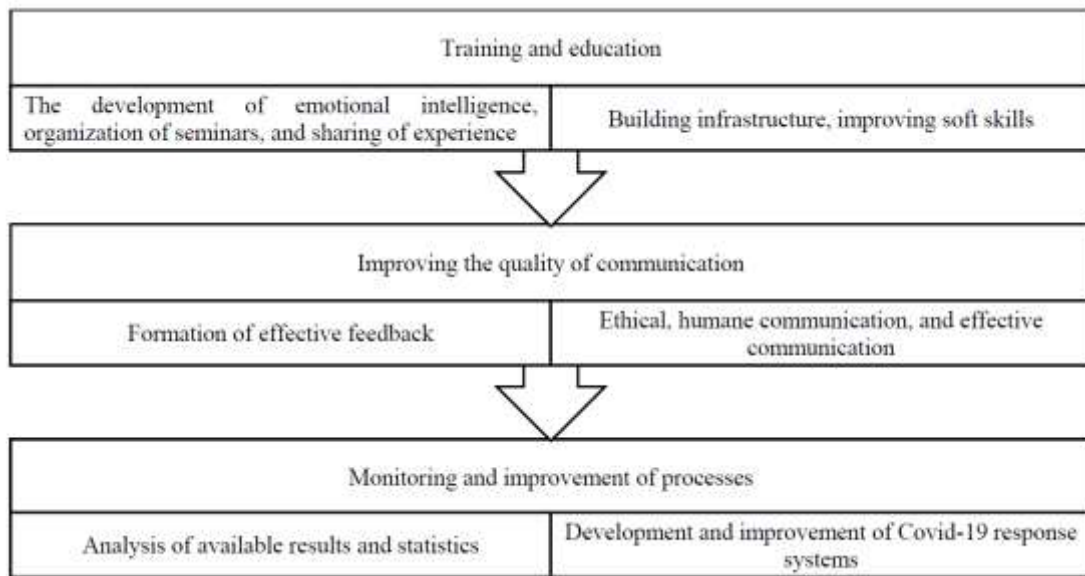
crucial, as it can produce positive results in the performance of government officials in the long run. The maximum score for two categories of civil servants is 60, and implementing this model for more than a quarter can improve performance. It is possible to achieve 50-60 points through regular training preparation, surveys, and dissemination of the model among Ukrainian civil servants.

It is necessary to conduct a preparatory, operational, and monitoring process based on creative methods and an effective, well-established system to build a mechanism to counter Covid-19 using the Stanford Thinking Model. These processes should be based on the use of creative methods and an effective established system. The development of such a mechanism can significantly increase the effectiveness of the activities of Ukrainian civil servants and create conditions for their continued work during the pandemic. Based on this principle, the following system is proposed and illustrated in Fig. (1).

The proposed stages in Fig. (1) can become a tool for the development of most government agencies and organizations in Ukraine. These stages can also become a key factor in

improving the performance of civil servants in the context of the spread and impact of Covid-19. Based on the analytical study, these activities can improve the quality of soft skills and, consequently, affect the level of hard skills. The issue of skills proficiency is a fundamental factor for effective work, which needs to be constantly developed and improved with the help of this mechanism based on Stanford Thinking.

Thus, based on the analysis, the implementation of the Stanford model of model design based on key rules, which can enhance the formation of soft skills, will be the most effective mechanism that will affect performance. At each stage, the basic principles of this model's design thinking should be used, and preparatory work should be carried out. The effectiveness of civil servants will increase, first of all, through the development of emotional intelligence and the improvement of soft skills, which ultimately creates a powerful potential for further growth of hard skills. The study shows that it is possible to increase the actual degree of mastery of hard and soft skills to the maximum degree when initializing the Stanford Model of Thinking among Ukrainian government agencies, which is aimed at counteracting the negative impact of Covid-19.



**Fig. (1).** A description of the Covid-19 response mechanism based on the Stanford Thinking Model.  
Source: compiled by the author.

## 6. DISCUSSION

The research conducted indicates that the development of a comprehensive mechanism to counter the effects of Covid-19 on the performance of civil servants requires a high-quality approach to shaping the use of design thinking principles, which can be implemented at each stage of this process. The use of design thinking is a key tool for finding unconventional solutions, as well as opportunities for the effective use of tools and their distribution across directions of improvement. They include applied skills of government officials, emotional intelligence development, motivation, and communication. Another research direction could be the development of a system for implementing design thinking into the operations of government organizations and structures, as in today's dynamic world with constant challenges, a robust system for developing skills and responding to threats is essential.

A promising direction could be the analysis of foreign practices related to the preparation of seminars, specialized consulting events, conferences, etc. The primary goal of this preparatory stage is to convey to civil servants and top management the importance of such practices and the potential for using the most effective solutions in an unstable environment. The analysis could be based on methods used by commercial organizations engaged in executive and management training, as well as practices related to the organization of such events. An important factor is the use of effective learning and the creation of optimal conditions for material absorption. Furthermore, the implementation should include the gradual application of the acquired experience in practical contexts. Conducting research in this context can significantly improve the quality of work within government institutions and improve the personal skills of each civil servant (Nazar et al., 2022).

An important tool for analyzing the performance of civil servants is to draw on the experience of 2019 and 2020, when the Covid-19 pandemic accelerated the transformation

of most administrative processes into digital formats. Using the experience of these years and making decisions on the transfer of operational work to digital platforms and the mass digitization of business processes are important decisions to ensure the productivity of such training. In particular, questions remain about the preparation of specialized infrastructure for the functioning of government services and support for the work of civil servants, regarding the improvement of corporate culture, etc.

Thus, analyzing the quality of digital systems, methods, and communication channels will be crucial for introducing design thinking practices in the dynamic digital environment.

The research in this area will also influence the development of digital literacy among government officials and the use of various services and tools to improve their work and project management. Therefore, further study should focus on improving existing processes and potential applications of digital technologies, the Stanford model's principles for developing civil servants' skills, and approaches to strategic decision-making.

This model should also inform further research, as it has several deeper parameters that consider each person's skills, abilities, and personal characteristics.

## 7. CONCLUSION

The research conducted suggests that design thinking is a tool for developing a creative systemic process to address threats and challenges. Typically, design thinking is used in collaborative work to shape individual characteristics. The primary means of cultivating design thinking include the use of unconventional approaches, effective business communication, seeking optimal solutions, and having a well-developed emotional intelligence that influences a person's activity performance.

Applying design thinking to the development of a comprehensive mechanism to counter Covid-19 can improve the

quality of life of the country's population and create conditions for the rational functioning of government agencies, organizations, and structures. In such cases, the most qualitative and advantageous method is the Stanford model. This model includes the following elements: empathy, focus, ideation, prototyping, and testing. The advantages of this model lie in its wide range of parameters concerning the skills of civil servants, their adaptability to new challenges, and their ability to make rational decisions in the face of global challenges and threats.

In addition, this model can be a factor in creating a mechanism that ensures the quality of the results of the work of government officials and motivates them to seek creative, unconventional, and practical solutions. An important advantage of such a model is the possibility of feedback through increased emotional intelligence since the main result of the work is directed to people.

The conducted research indicates that officials of the State Audit Service of Ukraine have a general level of 43 in hard and soft skills equally, the Ministry of Economy of Ukraine – 47 and 43, the Ministry of Energy of Ukraine – 44 and 30, respectively. The proposed mechanism for implementing design thinking based on the Stanford model can contribute to the qualitative improvement of civil servants' operational and strategic work. It can also catalyze the creation of a Covid-19 resistance system.

The article provides an example of the possible application of this model, which can be further refined and built based on shaping the concept of the Stanford Design Thinking model. The application of design thinking to create such a mechanism is a global challenge. However, it can maintain the stability of government processes and support the well-being of the social environment.

## REFERENCES

- Bason, C., Austin, R. D. (2022). Design in the Public Sector: Toward a Human Centred Model of Public Governance. *Public Management Review* 24 (11): 1727–1757. doi:10.1080/14719037.2021.1919186.
- Blomkamp, E. (2018). The promise of co-design for public policy. *Australian Journal of Public Administration*, 4(77), 729–743. doi: 10.1111/1467-8500.12310.
- Blomkamp, E. (2022). Systemic Design Practice for Participatory Policy-making. *Policy Design and Practice* 5 (1): 12–31. doi:10.1080/25741292.2021.1887576.
- Camacho M. (2016). David Kelley: From Design to Design Thinking at Stanford and IDEO. *The Journal of Design Economics and Innovation*, no. 2(1), pp. 88–101. DOI: <https://doi.org/10.1016/j.sheji.2016.01.009>.
- Clarke, A., Craft, J. (2019). The Twin Faces of Public Sector Design. *Governance* 32 (1): 5–21. doi:10.1111/gove.12342.
- Cwynar, W., Cwynar, A., Ostrowska-Dankiewicz, A., ... Martynyuk, V., Stancheva, V. (2018). Comparative analysis of state economic protectionism in regulating consumer credit price: Poland against other CEE countries. *Proceedings of the 31st International Business Information Management Association Conference, IBIMA 2018: Innovation Management and Education Excellence through Vision 2020*, , pp. 762–769.
- Dunne, D. (2018). Implementing Design Thinking in Organizations: An Exploratory Study. *Journal of Organization Design* 7 (1): 1–16. doi:10.1186/s41469-018-0040-7.
- Dziurakh, Y., Halanets, V., Kulakovska, T., Pugachov, M., & Pugachov, V. (2022). Economic assessment and state regulation of the agri-industrial sector in Ukraine: Solutions for ensuring food security (modeling and analysis). *Economic Affairs (New Delhi)*, 67(4), 777–786. doi:10.46852/0424-2513.4s.2022.11.
- Elsbach, K. D., Stigliani, I. (2018). Design Thinking and Organizational Culture: A Review and Framework for Future Research. *Journal of Management* 44 (6): 2274–2306. doi:10.1177/0149206317744252.
- Halkiv, L., Karyy, O., Kulyniak, I., Kis, Y., & Tsapulych, A. (2021). The national system of higher education and government procurement for its services as activators of the development of IT entrepreneurship. In: *CEUR Workshop Proceedings, 5th International Conference on Computational Linguistics and Intelligent Systems, CO-LINS, Volume 2870*, pp. 1338–1349.
- Halkiv, L., Kulyniak, I., Shevchuk, N., Kucher, L., Horbenko, T. (2021). Information Support of Enterprise Management: Diagnostics of Crisis Situations. In: *Proceedings of the 11th International Conference on Advanced Computer Information Technologies, ACIT*, pp. 309–312. DOI: 10.1109/ACIT52158.2021.9548354.
- Howlett, M. (2020). Challenges in Applying Design Thinking to Public Policy: Dealing with the Varieties of Policy Formulation and Their Vicissitudes. *Policy & Politics* 48 (1): 49–65. doi: 10.1332/030557319X15613699681219.
- Kolko, J. (2018). The divisiveness of design thinking. *Interactions*. 25(3), 28–34. doi: 10.1145/3194313.
- Lewis, J. M. (2021). The Limits of Policy Labs: characteristics, Opportunities and Constraints. *Policy Design and Practice* 4 (2): 242–251. doi:10.1080/25741292.2020.1859077.
- Meenakshi Kaushik, Neha Guleria. (2020). The Impact of Pandemic COVID-19 in Workplace. *European Journal of Business and Management*, Vol. 12, No. 15, pp. 9–18.
- Masyk, M., Buryk, Z., Radchenko, O., Saienko, V., Dziurakh, Y. (2023). Criteria for governance institutional effectiveness and quality in the context of sustainable development tasks. *International Journal for Quality Research*. 17(2), pp. 501–514.
- Mintrom, M., Luetjens, J. (2016). Design thinking in policymaking processes: opportunities and challenges. *Australian Journal of Public Administration*, 75(3), 391–402. doi: 10.1111/1467-8500.12211.
- Muratovski G. (2015). Paradigm Shift: Report on the New Role of Design in Business and Society. *She Ji: The Journal of Design, Economics, and Innovation*, no. 1(2), pp. 118–139. DOI: <https://doi.org/10.1016/j.sheji.2015.11.002>.
- Nazar, P., Volodymyr, M., Natalia, T., Yurii, D. (2022). Improving the Assessment of Personnel Security Level and its Control Using Human Intellectual Activity Simulation Model. *12th International Conference on Advanced Computer Information Technologies, ACIT 2022*, pp. 194–197.
- Nusem, E., Matthews, J., Wrigley, C. (2019). Toward Design Orientation and Integration: Driving Design from Awareness to Action. *Design Issues* 35 (3): 35–49. doi:10.1162/desi\_a\_00548.
- Orliv M. (2020). Rozvytok liudskykh resursiv ta orhanizatsiinoi kultury v derzhavnykh orhanakh: vykorystannia tekhnolohii dyzain-myshlennia. Development of human resources and organizational culture in public bodies: the use of design thinking technology. *Public management and administration in Ukraine*, Issue 19, pp. 76–81.
- Osborne, S. P. (2018). From Public Service-Dominant Logic to Public Service Logic: Are Public Service Organizations Capable of Co-Production and Value Co-Creation? *Public Management Review* 20 (2): 225–231. doi:10.1080/14719037.2017.1350461.
- Podolchak, N. Y., Prokopyshyn-Rashkevych, L. M., & Karkovska, V. J. (2014). Coaching as the art of increasing effective implementation of enterprise's managerial potential. *Actual Problems of Economics*, 158(8), 147–153.
- Podolchak, N., Martyniuk, V., Tsygulyk, N., Skowron, S., & Wolowiec, T. (2022). Mitigating risks for effective personnel management in the organization of the energy sector due to the COVID-19 pandemic. *Sustainability (Switzerland)*, 14(16) doi:10.3390/su141610055.
- Shpak, N., Podolchak, N., Karkovska, V., & Sroka, W. (2019). The influence of age factors on the reform of the public service of Ukraine. *Central European Journal of Public Policy*, 13(2), 40–52. doi:10.2478/cejpp-2019-0006.
- Shpak, N., Vytvytska, O., Martynyuk, O., Kylaec, M., Sroka, W. (2022). Formation of management and technological maturity levels of enterprises for their dynamic development *Engineering Management in Production and Services*, 14(3), pp. 1–12.



Storonianska I., Benovska L. (2020). Ekonomika rehioniv Ukrainy pid diieiu vyklykiv pandemii Covid-19. Economy of the regions of Ukraine influenced by the challenges of the COVID-19 pandemic. Scientific and practical journal «Regional Economy,» No. 2 (96), Institute of Regional Research of NAS of Ukraine. pp. 5–16.

Villa Alvarez, D. P., Auricchio, V., Mortati, M. (2022). Mapping Design Activities and Methods of Public Sector Innovation Units through

the Policy Cycle Model. *Policy Sciences* 55 (1): 89–136. doi:10.1007/s11077-022-09448-4.

Vink, J., Koskela-Huotari, K., Tronvoll, B., Edvardsson, B., Wetter-Edman, K. (2021). Service Ecosystem Design: Propositions, Process Model, and Future Research Agenda. *Journal of Service Research* 24 (2): 168–186. doi:10.1177/1094670520952537.

Yin, R. K. (2017). *Case Study Research and Applications: Design and Methods*. Thousand Oaks, CA: Sage Publications Inc.

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