ORGANIZATION AND MANAGEMENT SERIES NO. 202

SYSTEMIC DETERMINANTS OF LEARNING IN PUBLIC ADMINISTRATION. A CASE STUDY OF PHYTOSANITARY INSPECTION

Jacek PASIECZNY^{1*}, Agnieszka POSTUŁA², Tomasz ROSIAK³

Purpose: The aim of the article is to depict the systemic nature of the conditions for learning processes in public administration organizations. The research problem undertaken by the authors is encapsulated in the question: What are the key conditions for the learning processes of public administration organizations?

Design/methodology/approach: The text is based on qualitative research. Researchers based on 31 open interviews. The work was grounded in two principal theoretical frameworks: the action research methodology and the concept of the learning organization.

Findings: Research has allowed for the identification of the key determinants of systemic learning within the public administration organization. Specifically, attention should be paid to: employee engagement, employee competencies, staff rotation in the HR area, as well as financial resources, employer branding, technical equipment, IT systems, and incentive systems.

Research limitations/implications: Qualitative research faces limitations such as small sample size and lack of representativeness. Conducting a quantitative verification of the impact on the administrative organization of identified categories such as staff rotation, employee engagement, employee competences, and financial resources would be a natural extension of the conducted research.

Practical implications: The research has identified areas of change that should be introduced in the analyzed organization to dynamize the learning process. The strong sense of mission among employees only partially balances some weaknesses of the organization.

Social implications: The implemented solutions can lead to significant improvement in the learning processes within the analyzed organization. Relatively minor changes, such as in onboarding or motivation, can result in a substantial enhancement of functionality.

Originality/value: The particular value of the text lies in depicting the systemic nature of the conditions influencing learning processes within a public organization. However, some of these conditions are of particular significance. Among such conditions are effective HR enabling the utilization of Public Service Motivation, as well as funding and resources.

Keywords: Public Administration, learning organization, paradox, systemic nature.

Category of the paper: Research paper.

¹ University of Warsaw, Faculty of Management; jpasieczny@wz.uw.edu.pl, ORCID: 0000-0002-9405-3861 ² University of Warsaw, Faculty of Management; apostula@wz.uw.edu.pl, ORCID: 0000-0001-9495-0733

³ University of Warsaw, Faculty of Management; tomasz.rosiak@uw.edu.pl, ORCID: 0000-0001-8599-3862 * Correspondence author

1. Introduction

Public administration organizations are significant employers, but their importance primarily stems from the role they play directly and indirectly in meeting the needs of citizens. The appropriate quality of public administration is one of the key conditions for stable social and economic development. Despite various reforms, administration still relies on a bureaucratic model of functioning and is not subject to competition, which is a natural stimulus for organizational changes. Moreover, administration is subject to many universal influences characteristic of the contemporary environment with features of chaos (Sopińska, Gregorczyk, 2014). For this reason, it becomes crucial to introduce solutions that enable administrative organizations to identify emerging problems and resolve them. The concept of a learning organization provides such possibilities (March, Simon, 1958; Argyris, Schoen, 1978; Levitt, March, 1988; Marsick, Watkins, 2003). Its implementation is primarily associated with the need to identify factors conditioning organizational learning processes.

The aim of the article is to depict the systemic nature of the conditions for learning processes in public administration organizations. The research problem undertaken by the authors is encapsulated in the question: What are the key conditions for the learning processes of public administration organizations? In particular, the authors were interested in the systemic relationships between factors conditioning learning processes, their mutual reinforcement, and the neutralization of influence. The research questions sought answers to:

- 1. What factors condition the learning processes of administration?
- 2. Can their role in the learning processes be unambiguously determined?

The paper aligns with the qualitative research trend in improving administration, with a particular emphasis on the concept of organizational learning. The existence of a specific paradox - societal expectations for high efficiency in the functioning of administration and its constant adaptation to changing conditions, coupled with a reluctance to allocate additional resources for this purpose, further emphasizes the significance of research on the discussed issues.

In the subsequent sections of the text, the adopted research methods, selected theoretical aspects of the organizational learning concept, and the discussed case are elaborated. The final part of the article includes a discussion of the results and conclusions along with a schematic representation of the systemic conditions for the learning processes of public administration organizations.

2. Research method

The process of designing organizational change, including the development of organizational learning systems, commenced with a comprehensive analysis of the subject organization. This endeavor was meticulously planned in adherence to the tenets of triangulation, as posited by Denzin in 2012. The criteria for triangulation were satisfied by engaging eight researchers in the study, each hailing from diverse organizational units within the Faculty of Management at the University of Warsaw. These researchers brought with them a broad spectrum of knowledge, professional experience, and research interests.

To ensure coordinated efforts, the research team convened regularly, and a certain level of standardization was achieved by establishing measures such as a pre-defined list of interview topics for the interviewers. In the pursuit of methodological triangulation, various data collection techniques were employed, including field research through interviews, scrutiny of pertinent literature, legal analyses, organizational data analytics, quantitative research involving service recipients, and collaborative workshops with the employees of the subject organization.

From a theoretical triangulation perspective, the work was grounded in two principal theoretical frameworks: the action research methodology and the concept of the learning organization. Furthermore, individual analyses were interpreted from multiple theoretical viewpoints.

Notably, scientific consultancy had hitherto been less popular in Poland, primarily due to the protracted and risk-laden nature of research and its application, whereas management boards typically prioritized quick, tangible outcomes (Obłój, 2019). Action research was selected for this project, notwithstanding its misalignment with the interests of large consulting corporations. It predominantly found its place within smaller, independent firms, or those affiliated with universities (Bawden, 2021). However, it was chosen for this project due to its inherent advantages, including its unique ability to facilitate direct and active researcher involvement in the organization's operations, while also permitting the development of theory that holds practical significance. Consequently, this study represents a distinctive and pioneering effort within the context of the Polish landscape

3. Organizational learning systems

Our conceptualization of Organizational Learning [OL] aligns with the classical approach espoused by influential figures like March and Simon (1958), Cangleosi and Dill (1965), Argyris and Schoen (1978). In accordance with this perspective, we define organizations as engaging in learning when they encode the lessons they have acquired into routines that shape

desired behaviors. The term "routines" encompasses a wide array of elements, including forms, rules, procedures, conventions, strategies, and technologies upon which organizations are built and upon which they rely for their functioning. It also encompasses the belief structures, frameworks, paradigms, codes, cultures, and knowledge that underpin, develop, and sometimes challenge formal routines (Levitt, March, 1988). Learning is triggered when discrepancies, inconsistencies, surprises, or challenges prompt a response. These responses can manifest at various levels, be it individuals, teams, or the entire organization, and involve several dimensions, including the climate, culture, systems, and structures that influence individual learning (Marsick, Watkins, 2003).

The concept of Organizational Learning is applicable to organizations of varying maturity, but it is generally more effective when solutions are introduced early rather than later (Sekliuckiene, Baltrunaite, 2020).

In contrast to traditional organizations characterized by hierarchical authority and top-down control, Peter Senge (1990) identified key elements of Organizational Learning. These include systems thinking, personal mastery, mental models, building a shared vision, and team learning. These elements not only contribute to achieving above-average results but also enable organizations to adapt to changing environmental conditions.

Organizational Learning is intricately connected with the acquisition of information, its transformation into knowledge, storage, dissemination, and diffusion (Ginja Antunes, Goncalves Pinheiro 2020; Pasieczny, Rosiak, 2022; Sopińska, Wachowiak, 2006; Stelmaszczyk, Karpacz, 2016). Effective information flow systems within organizations are pivotal, as ineffective channels can lead to speculation that may hinder an organization (Żur, 2013; Bencsik et al., 2019). Additionally, the concept of organizational memory (Antunes, Pinheiro, 2020) plays a significant role.

Key factors influencing Organizational Learning include learning mechanisms such as structural and procedural solutions, organizational values that promote productive learning (e.g., transparency, inquisitiveness, honesty, problem-solving orientation, accountability), contextual determinants like environmental uncertainty, the costs and severity of potential mistakes, professionalism of organizational members, and leadership (Greiling, Halachmi 2013, as cited in Popper, Lipshitz, 2000). Digital tools can support organizational learning, but it's crucial to note that effective use and digital transformation still heavily rely on the human factor (Frankiewicz, Chamorro-Premuzic, 2020).

Research on public administration units in the state of Texas has indicated that fostering discussion forums and information exchange platforms can provide more substantial benefits to a public organization than merely investing in information systems (Moynihan, Landuyt, 2009). Therefore, the construction of Organizational Learning necessitates excellent human resources management, with recruitment processes, onboarding, and incentive systems geared toward enhancing individual qualifications and knowledge sharing playing a pivotal role (Marsick, Watkins, 2003).

5. Case study of phytosanitary inspection

The subject of the study was The State Plant Health and Seed Inspection Service (PIORiN), responsible for overseeing plant production in Poland. PIORiN consists of a coordinating headquarters and 16 regional inspectorates, as well as a central laboratory. The institution's primary goal is to ensure the safety of plant production through conducted inspections and issuing necessary export documents to producers and sellers of plant products. Employment at PIORiN requires employees to have high qualifications confirmed by a state exam. The diversity and delicate nature of the tasks performed (inspections carried out at producers and sellers often culminating in severe penalties) also demand extensive experience and interpersonal skills from PIORiN employees.

The research indicates that the training organized by the institution is perceived as theoryfocused and less oriented toward solving practical problems.

Often, in the Inspection, there is a perception of being under-informed, there is a lack of it. There is a lack of such training. Well, I had the opportunity recently to conduct training for the Inspection. Our provincial Inspection asked if they could come to us, so I could show them something interesting or tell them something. Generally, my response was positive, I willingly engage in such activities because, for me, it is a way of gaining experiences and listening to problems. I can say that after this meeting, I heard a lot of positive words about how it went, what they learned because I try to show interesting things, simple things that, well, for some may seem obvious, but they wouldn't have thought of before, which are meant to facilitate their work [USL16].

Employees recognize the benefits of working in a stable position in a state institution. This is particularly noticeable in units located outside major metropolitan areas.

[T]here are not many jobs like this in our market here. I live close to work, in the [city name], so it's not much, twelve kilometers to commute to work, it's not far. We have a good team at work, and we really manage to solve these problems because they are not simple matters. As the name of our work implies, Inspection, these are inspection matters. It's hard to say that you can fully love this job because the beginnings of our work were more advisory, more like... People would come, ask something, but now we are a purely inspection unit, so it's hard to say... [WIO Lublin 01.docx].

Significant value for the employees lies in the diversity of tasks performed. Despite the fact that the analyzed organization is a bureaucratic institution associated with the monotony of work, in this case, the work is usually varied, and a substantial part of it is carried out outside the office.

For me, the best thing about this job is the diversity because if I had a job where I had to sit only in one of the departments, mainly in the office, and field trips were sporadic, I think... At this moment, I've been working for five years, I think I wouldn't last that long because it

would simply tire me out mentally and physically. I am tired, but to a different extent, and that's the good thing about this job – there is contact with the client, sometimes it's challenging, but generally, it's quite positive. Also, spending time outdoors is a plus, as we often walk through fields or nurseries. Sometimes we inspect forests, and it's just a pleasure to walk through the woods for work, as we have to. Admittedly, looking at trees and so on, but it's just enjoyable, and it provides this diversity, which, in my opinion, is a great asset of this job [WIO Poznan 03].

Another motivating factor is the awareness of the significance of the work performed for the country.

The export service is really important so that... So that we do as much export as possible, but also that there are no notifications, that we are perceived as a country with excellent goods because we really do. But going for such export, we also make the producer and the exporter aware of what to pay attention to. In Sieradz, there are groups of producers at the companies, and we go to them when they invite us, sometimes we initiate such meetings to inform them about these requirements [WIO Lodz 05].

A significant challenge for the organization is the low level of its funding. The Inspection faces continuous financial problems, which impact, among other things, its equipment.

For example, we have one laptop for two departments, right? We can manage. In one department, there is one colleague, we've been working for years, so, well, everyone can somehow manage. But the equipment upgrade, no? Like the cars [WIO Lodz 06].

Ensuring the appropriate quality of information technology equipment. Essentially, to stay up to date with the appropriate technical level, we should replace at least about 40 units annually. We cannot afford this, and we don't do it. We have about 30 cars, because with this number of units in the field, this amount is necessary. We can replace 1 to 3 cars annually at most. This immediately shows the condition of our fleet. It's outdated and prone to breakdowns because of this. In this area, quite a lot has changed, though there is still much to do. These are the barriers that still exist, making it difficult for us to provide an appropriate level of workplace readiness for our employees [WIO Lodz 03].

A considerable problem is the integration of IT equipment. Purchases are made at different times and by different parts of the inspection. As a result, the equipment is highly diverse and sometimes even incompatible.

Yes, because it's not a matter of what I received from the headquarters, but a matter of me sending it to the branches, and they open it in different programs, and it all kind of falls apart for us [WIO Warsaw 03].

Simultaneously, improving the equipment yields positive results not only in terms of technical work capabilities but also in the motivation area.

Now, it's getting better because, as I said, when the risk analysis was introduced, the director implemented a motivation and justified rewards system. When there's a risk analysis, the implementation of plans, quantitative and qualitative, if someone works well, they get

a bigger reward or in another form. For example, I'm happy when I get a new computer. When they told me I would get a new computer, and I have a very poor one, for me, that's motivation, new equipment too. But here, our department was actually... Maybe I shouldn't say it, but I'll say it. Our department was a pioneer in these e-services, and in fact, if we were pioneers in e-services, thirteen electronic services were introduced in the entire WIORIN-e, and I have five people, of which we introduced seven. Seven, and it turned out that there are a lot of these services, and as a reward, because it is under the patronage of the voivode, the voivode awarded thirteen good computers for thirteen good services [WIO Warsaw 01].

Financial problems are also reflected in the unsatisfactory level of salaries. One consequence of low salaries is, among other things, a high turnover of personnel and the "capturing" of inspection employees by businesses.

To encourage a bit, to make the recruitments a bit higher, to attract young people who come, who are really enthusiastic about work, they should be given a little more money because they will come, work, learn many things, and either be bought by companies or exporting companies, or seed companies, which is not a problem here to buy someone with a minimum salary [WIO Lodz 04].

The current situation results in the emergence of "irreplaceable" employees, which can pose a significant threat to the organization's continuity.

Researcher: Okay. Do you have employees who, if you were to lose them, it would be difficult?

I mean, at the moment, because I have such a young team, if Julia were to leave, it would be difficult for me to work because the people who are there don't have such long-term experience. In the department, I say that she is the one with continuity and already knows how... They can leave her, and I know that tasks will be carried out without a problem; she can replace me [WIO Warsaw 05.docx].

If administration is to be effective, it should also be respected and endowed with a certain social status. However, financial problems compromise the prestige of the institution and the work performed by inspectors.

It lowers prestige. [...] the image, so to speak, of an inspector who goes to the field in an unmarked car, without a uniform, and also, so to speak, cleans the office – that's not what an inspector is. A true inspector is a person who can do everything [WIO Lodz 04].

6. Discussion and Conclusions

The learning theory focuses on the transformation of implicit knowledge into explicit knowledge. In the analyzed organization, this issue was noticeable, but equally pressing is the accumulation, consolidation, and transmission of explicit knowledge. Problems arise from the

bureaucratic philosophy of operation, territorially dispersed organizational structures, but also from chronic underinvestment. The bureaucratic model of operation petrifies the organization and promotes concentration on a narrowly defined scope of duties at every level. On the other hand, employees consider the diversity of their work as one of its strengths, typical of bureaucracy is also the externalization of duties. In this case, it manifests as an expectation that knowledge will be acquired by the coordinating unit and transmitted "top-down". Additionally, each of the decentralized and territorially dispersed units collaborates to a limited extent with the other units. This collaboration is not facilitated by the diverse, although generally low level of funding for the institution and its individual units. This last factor emphasizes the systemic nature and complexity of the conditions for the organization's learning processes. The diverse funding levels result in a wide variety of equipment and software being used. There is also a systemic phenomenon of suboptimization - different rates and levels of investment result in the incompatibility of systems used in different parts of the organization, noticeably hindering information transfer and internal communication. There are also no formal instruments for consolidating or sharing knowledge. On the other hand, this can be viewed as a simple reserve that can be utilized to facilitate the flow of knowledge and support learning processes. Creating simple solutions to unlock information flow, such as joint projects involving employees from all parts of the organization or simple IT solutions allowing the consolidation and cataloging of best practices, could be the beginning of dynamizing the entire organizational system. High qualifications and interest in the work performed are factors that can strengthen this process. However, the condition for its success is the recognition of the interdependence of all organizational subsystems and the consideration of the systemic nature of internal and external conditions for the learning process (Figure 1).

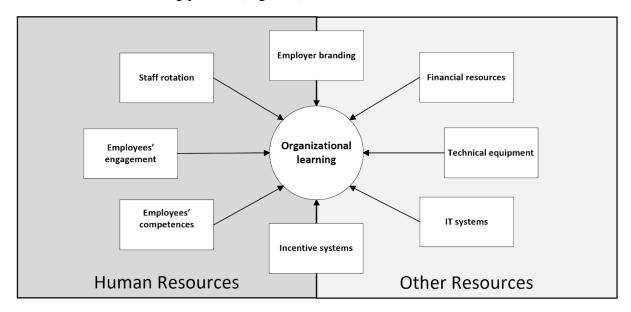


Figure 1. Diagram of systemic determinants of learning derived from the field.

Source: own elaboration.

The identified organizational conditions are connected by multifaceted and dynamic relationships, and the entire model has a systemic nature. This was indicated by statements from both participants of the researched organization and external stakeholders. However, due to the limited possibilities of investigating the impact with the applied research methodology, we decided not to include them. The impact of each diagnosed field can be both positive and negative. The deficits of selected categories hinder organizational learning, while their high level supports this process.

Moving on to the analysis of specific variables, funding was mentioned by employees as one of the key factors in the context of engagement in work (adequacy of compensation for the work performed and qualifications held), technical equipment of inspectors, organizational prestige, and the effectiveness of recruitment campaigns. Thus, it is crucial for organizational learning processes, as deficits in the areas mentioned above have a negative impact on organizational learning. Low wages reduce the level of employee engagement, in which the employer does not invest enough in development. Hence, there is high employee turnover and recruitment problems. At the same time, the diverse nature and mode of work are factors that increase its attractiveness and to some extent mitigate the negative effect of financial constraints.

From the perspective of public administration management, a paradox can be observed. Wanting to manage public funds as efficiently as possible, resources are saved on the activities of state authorities. However, these savings have the opposite effect to what is intended. As a result, institutions operate below their potential, and consequently, public interest suffers.

Reference

- 1. Antunes, H. de J.G., Pinheiro, P.G. (2020). Linking knowledge management, organizational learning and memory. *Journal of Innovation & Knowledge*, 5(2), 140-149. https://doi.org/10.1016/j.jik.2019.04.002
- 2. Argyris, C., Schon, D. (1978). *Organizational learning: A theory of action perspective*. Reading, MA: Addison-Wesley.
- 3. Bawden, R. (2021). Towards action research systems. In: *Action Research for Change and Development* (pp. 10-35). Routledge. https://doi.org/10.4324/9781003248491-3
- 4. Bencsik, A., Juhász, T., Mura, L., Csanádi, Á. (2019). Formal and Informal Knowledge Sharing in Organisations from Slovakia and Hungary. *Entrepreneurial Business and Economics Review*, 7(3), 25-42. https://doi.org/10.15678/EBER.2019.070302
- 5. Cangelosi, V.E., Dill, W.R. (1965). Organizational Learning: Observations Toward a Theory. *Administrative Science Quarterly*, *10*(2), 175. https://doi.org/10.2307/2391412

- 6. Denzin, N.K. (2012). Triangulation 2.0. *Journal of Mixed Methods Research*, 6(2), 80-88. https://doi.org/10.1177/1558689812437186
- 7. Dziurski, P., Mierzejewska, W., Sopińska, A., Wachowiak, P. (2021). Case Studies on Innovative Firms. In: *Critical Perspectives on Innovation Management* (pp. 115-136). Routledge. https://doi.org/10.4324/9781003203841-9
- 8. Dziurski, P., Wachowiak, P. (2021). Dark Sides of Innovation. In: *Critical Perspectives on Innovation Management* (pp. 101-114). Routledge. https://doi.org/10.4324/9781003203841-8
- 9. Elias, A.A., Davis, D. (2018). Analysing public sector continuous improvement: a systems approach. *International Journal of Public Sector Management*, 31(1), 2-13. https://doi.org/10.1108/IJPSM-08-2016-0135
- 10. Frankiewicz, B., Chamorro-Premuzic, T. (2020), Digital Transformation Is About Talent, Not Technology. *Harvard Business Review, May 6*.
- 11. Joldersma, C., Winter, V. (2002). Strategic Management in Hybrid Organizations. *Public Management Review*, 4(1), 83-99. https://doi.org/10.1080/14616670110101708
- 12. Keely, L., Walters, H., Pikkel, R., Quinn, B. (2013). *Ten types of innovation. The discipline of building breakthroughs.* Hoboken, New Jersey: John Wiley & Sons Inc.
- 13. Kessler, E.H. (ed.) (2013). *Encyclopedia of management theory*. Los Angeles: Sage Publications.
- 14. Kingston, J. (2012). Choosing a Knowledge Dissemination Approach. *Knowledge and Process Management*, 19(3), 160-170. https://doi.org/10.1002/kpm.1391
- 15. Levitt, B., March, J.G. (1988). Organizational learning. *Annual Review of Sociology*, 14, 319-340.
- 16. March, J.G., Simon, H.A. (1958). Organizations. New York: John Wiley and Sons Inc.
- 17. Marsick, V.J., Watkins, K.E. (2003). Demonstrating the Value of an Organization's Learning Culture: The Dimensions of the Learning Organization Questionnaire. *Advances in Developing Human Resources*, *5*(2), 132-151. https://doi.org/10.1177/1523422303005002002.
- 18. Moynihan, D.P., Landuyt, N. (2009). How Do Public Organizations Learn? Bridging Cultural and Structural Perspectives. *SSRN Electronic Journal*. https://doi.org/10.2139/ssrn.3492431
- 19. Obloj, K. (2019). Footnotes to organizational competitiveness. *Economics and Business Review*, 5(3), 35-49. https://doi.org/10.18559/ebr.2019.3.3
- 20. Pasieczny, J., Rosiak, T. (2023). Barriers to Implementing the Concept of Learning Organization in Public Administration the Example of PIORiN. *Annales Universitatis Mariae Curie-Skłodowska, Sectio H Oeconomia*, 56(5), 171-184. https://doi.org/10.17951/h.2022.56.5.171-184
- 21. Popper, M., Lipshitz, R. (2000). Organizational Learning. *Management Learning*, *31*(2), 181-196. https://doi.org/10.1177/1350507600312003

- 22. Sabir, B.Y., Othman, B.J., Gardi, B., Ismael, N.B., Hamza, P.A., Sorguli, S., Aziz, H.M., Ahmed, S.A., Ali, B.J., Anwar, G. (2021). Administrative Decentralization: The Transfer of Competency from The Ministry of Education to General Directorates. *International Journal of Rural Development, Environment and Health Research*, *5*(3), 1-13. https://doi.org/10.22161/ijreh.5.3.1
- 23. Senge, P. (1990). *The Fifth Discipline: The Age and Practice of the Learning Organization*. London: Century Business
- 24. Sopińska, A., Gregorczyk, S. (2014). *Granice strukturalnej złożoności organizacji*. Warszawa: Oficyna Wydawnicza Szkoła Główna Handlowa.
- 25. Sopińska, A., Wachowiak, P. (2006), Modele zarządzania wiedzą w przedsiębiorstwie. *E-mentor*, *I*(14). https://www.e-mentor.edu.pl/artykul/index/numer/14/id/275
- 26. Stelmaszczyk, M., Karpacz, J. (2016). Związek między dzieleniem się wiedzą a innowacjami mediowany zaufaniem poziom indywidualny. *Prace Naukowe Uniwersytetu Ekonomicznego we Wrocławiu*, 422, 95-105.
- 27. Stroińska, E. (2020). New public management as a tool for changes in public administration. *Journal of Intercultural Management*, *12*(4), 1-28.
- 28. Sveiby, K.E. (2005). Dziesięć sposobów oddziaływania wiedzy na tworzenie wartości. *E-mentor*, 2(9). https://www.e-mentor.edu.pl/artykul/index/numer/9/id/140
- 29. Żur, A. (2013). Otwarta komunikacja wewnętrzna imperatyw współczesnych organizacji. *Organizacja i Kierowanie, 3*(156), 173-184.