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Experiential Learning in Change Management Processes within Public Sector Organisations

Abstract

Research background and purpose: The notion of the learning organisation, especially as conceptualized by Peter Senge, has attracted growing interest in the context of public sector reform. Yet the advancement of organisational learning capabilities within public institutions remains constrained by entrenched structural, cultural, and procedural barriers. The aim of the study was to identify the extent to which the elements of Peter M. Senge's learning organisation model - such as systems thinking, mental models, shared vision, team learning, and personal mastery - are present in change management processes within public sector organisations.

Design/methodology/approach: This study is grounded in empirical data obtained through a quantitative survey administered to 576 employees representing various public sector organisations in Poland. The questionnaire was designed around the core dimensions of the learning organisation framework, with an emphasis on assessing the role of experiential learning in facilitating both strategic and operational change. The collected data were subjected to statistical analysis to uncover prevailing trends and examine possible relationships between learning practices and organisational change dynamics.

Findings: Although public sector organisations are increasingly aware of the significance of experiential learning, its implementation remains fragmented and lacks consistency. Cultural rigidity, bureaucratic inertia, and silo-oriented management structures pose substantial barriers to the dissemination of learning practices. The results emphasise that achieving effective organisational learning and sustainable change requires a fundamental cultural transformation, rather than relying solely on structural reforms.

Value added and limitations: The article advances public management scholarship by providing empirical insights into the application of the learning organisation model within a context characterized by pronounced institutional rigidity. It highlights critical areas in need of development to enhance a culture of reflection and organisational adaptability. A key limitation of the study is its restricted geographical and institutional focus, suggesting that future research would benefit from cross-country comparisons and longitudinal approaches.

Keywords: *learning organisation; public sector; organisational change, bureaucratic structures; systems thinking*

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Classification: H83, M50, M54

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1. Introduction

Modern public organisations operate in an environment marked by increasing complexity, dynamic social and technological changes, and intense pressure to be efficient, transparent, and innovative. In such a context, concepts that enhance institutions' capacity for adaptation, learning, and long-term development are gaining increasing significance. One of the most important and comprehensive among them is Peter M. Senge's theory of the learning organisation, presented in his work *The Fifth Discipline* (Senge, 1990). Although initially developed with a focus on the private sector, the concept has also gained wide recognition within the public sector. The framework of five disciplines - systems thinking, mental models, shared vision, team learning, and personal mastery - has found application in public administration, where it can support, among other things, adaptive leadership, staff development, and improved inter-institutional collaboration (Lowe et al., 2021; DeSeve & Keegan, 2025; Thelen 2023). Team learning in public administration fosters the sharing of knowledge and experiences among team members, leading to collective problem-solving and innovation (Haynes et al., 2020).

Systems thinking is a fundamental discipline of learning organisations, emphasising the interconnections among various organisational elements. It enables public sector organisations to understand complex problems holistically and to develop comprehensive solutions (Serban, 2021). Encouraging personal mastery within public organisations can lead to greater work engagement and employee retention, as it aligns personal development with organisational goals (Saraf et al., 2022). Mental models refer to deeply ingrained assumptions and beliefs that shape how individuals perceive and respond to situations. Challenging and refining these models is essential for fostering a learning culture within public organisations (Feeney, 2022). A shared vision provides a common purpose and direction for public sector organisations, aligning individual and organisational goals (Lowe et al., 2021). Developing a shared vision involves engaging stakeholders in the decision-making process, thereby enhancing organisational learning and performance (Zaki & George, 2021). Team learning emphasises collaboration and collective problem-solving, which are essential for public sector organisations to drive innovation and enhance service delivery (Plimmer et al., 2023).

Public organisations that implement elements of Senge's model are better equipped to respond effectively to changing citizen expectations and to manage transformational processes more consciously (Sung & Kim, 2021). The application of the learning organisation framework has a tangible impact on the effectiveness of human resource management and the development of a knowledge-sharing culture (Taylor, 1999). The rigid and risk-averse nature of public organisations can hinder the adoption of innovative practices, such as design thinking, which require flexibility and openness to new ideas (Brinkman et al., 2023). The literature also highlights the need to overcome barriers

stemming from entrenched mental models and traditional management patterns, which often prevail in public administration (Betts & Holden, 2003). The identified challenges in implementing the learning organisation approach in the public sector simultaneously underscore its transformational potential, provided it is accompanied by adequate reflexivity, effective leadership, and a systemic approach to institutional development. This potential can be realised through thoughtful reflection, competent leadership, and a holistic strategy for institutional growth (Lowe et al., 2021). An analysis of the potential adaptation of Senge's model to the context of public institutions may contribute to a deeper understanding of their capacity for development, innovation, and improved public service delivery

The aim of the study was to identify the extent to which elements of Peter M. Senge's learning organisation model - such as systems thinking, mental models, shared vision, team learning, and personal mastery - are present in change management processes within public organisations. The study also sought to assess the relationship between respondents' characteristics (such as education, length of service, and position) and their perception of change processes, in order to better understand the factors that facilitate or hinder the implementation of a learning culture in the public sector. Based on the stated aim and theoretical framework, this study sought to address the following research question: To what extent are the five disciplines of Peter M. Senge's learning organisation model - systems thinking, mental models, shared vision, team learning, and personal mastery - evident in change management processes within public sector organisations?

2. Literature review

Public organisations operate under conditions of constant social, technological, and economic change (Sopow, 2020; Tsai, 2022). The growing public expectations regarding the quality of services provided, the need for transparency, and the pressure for innovation and organisational efficiency have made the ability to learn from experience a key competency for effective change management (Senge, 1990; DeSeve & Keegan, 2025). The literature emphasises that in the public sector, organisational learning processes enable not only adaptation but also the deliberate shaping of change, leading to an increase in the value of public services (Flood, 1999; Garvin, 1993; Butkus et al., 2023; Dudau et al., 2023).

Organisational learning plays a key role in the effective management of change in public organisations (Lowe et al., 2021). Contemporary change management theories emphasise that an organisation's capacity for adaptation and innovation is directly linked to its competencies in learning from experience (Argyris & Schön, 1978; Garvin, 1993; Haynes et al., 2020). Research highlights that deliberate learning (DL) has a significant impact on the productivity of public organisations, enabling them to adapt and consciously shape

change (Bjerke-Busch & Thorp, 2023). Particularly in the public sector, where change often stems from political decisions, regulatory shifts, or societal expectations, the ability to rapidly process feedback and draw conclusions becomes an essential condition for success (Hesselgreaves et al., 2021). Organisational learning encompasses both formal processes, such as training and competency development programmes, and informal mechanisms, such as reflection on experiences, knowledge sharing within teams, and learning through experimentation and mistakes (Kim, 1993; Serban, 2021; Easterby-Smith & Lyles, 2003). In the context of change management, this implies the need not only to plan and implement changes, but also to continuously monitor their outcomes, analyse deviations, and adapt strategies based on the experiences gained. One of the main obstacles to implementing organisational learning in public administration is the dominance of traditional mental models, grounded in stability, formal procedures, and hierarchical decision-making structures (Betts & Holden, 2003; Ashok et al., 2021). These models hinder the adoption of new perspectives and the implementation of innovation, as well as limit openness to critical evaluation of one's own actions.

Effective change management requires the creation of an organisational culture that rewards reflexivity, experimentation, and knowledge sharing (Callens et al., 2022). Peter Senge's concept of the learning organisation (1990) provides a framework within which learning processes can be systematically developed (Lowe et al., 2021). The implementation of elements such as systems thinking, team learning, and personal mastery supports not only the more effective execution of change processes, but also strengthens the organisation's overall capacity to adapt in a dynamic environment (Senge, 1990; Bui & Baruch, 2010). Importantly, research shows that organisational learning can serve as a buffer against failure - organisations that systematically draw lessons from unsuccessful initiatives are quicker to regain operational capacity and implement more effective changes in the future (Moynihan & Landuyt, 2009). It is therefore equally important that leaders in the public sector not only manage change projects, but also actively promote a learning-oriented mindset, create space for the analysis of mistakes, and encourage open knowledge sharing across their organisations (Higgs et al., 2022; Zhang et al., 2020).

Peter M. Senge's learning organisation model comprises five interrelated disciplines (Senge, 1990):

1. Systems Thinking - Senge identifies this discipline as the most crucial - the so-called "fifth discipline" - as it integrates the remaining four. It is based on an understanding of the organisation as a holistic system, in which individual elements are interconnected and mutually influential. Systems thinking requires organisational members to recognise cause-and-effect relationships, identify feedback loops, and anticipate the long-term consequences of decisions (Sterman, 2000; Flood, 1999). This discipline promotes the avoidance of fragmentation and linear thinking. By viewing the public sector as part of a broader landscape,

governments can utilise public finances to address climate change and support initiatives led by non-governmental actors, thereby fostering a more sustainable future (Harris & Lawson, 2022).

2. **Mental Models** - these are deeply ingrained assumptions, beliefs, and thought patterns that influence how individuals understand the world and make decisions. Senge emphasises that learning organisations require a culture in which members are willing to question their assumptions and learn to recognise and revise them. Only under such conditions can genuine learning and innovation occur (Argyris & Schön, 1978; Kim, 1993). In turbulent times, such as the Covid-19 pandemic, public sector organisations co-created with stakeholders by employing robust management strategies, demonstrating the importance of flexible and adaptive mental models (Scognamiglio et al., 2022).
3. **Team Learning** - this refers to the ability of teams to think together, engage in dialogue, and reflect collectively. Learning organisations foster environments in which team members learn from one another, draw lessons from their actions, and make joint decisions. This discipline is closely linked to organisational learning theory (Easterby-Smith & Lyles, 2003) and practices of collaborative problem-solving (Edmondson, 1999). Team learning, which emphasises collective problem-solving and knowledge sharing, is evident in the use of network interventions within public administration. By leveraging network data, public sector entities can enhance outcomes and promote the diffusion of effective policies, thereby strengthening team learning and collaboration across jurisdictions (Siciliano & Whetsell, 2023).
4. **Shared Vision** - this discipline holds that an effective organisation develops a common image of the future that unites its members and gives meaning to their actions. Vision creation is not solely the leader's domain but a participatory process that fosters engagement and alignment with organisational goals. As developed in the literature by authors such as Kouzes and Posner (2002), a shared vision cultivates emotional commitment rather than mere formal compliance. In the public sector, where accountability and transparency are paramount, a shared vision can align efforts across various levels and departments, ensuring that all actors work towards common objectives (Springmier et al., 2024; Schutte & Barkhuizen, 2014).
5. **Personal Mastery** - this refers to individual motivation and the pursuit of continuous development, both professional and personal. Individuals who achieve personal mastery are characterised by proactivity, intrinsic motivation, and deep reflectiveness. Senge (1990) emphasises that mastery is not merely about possessing knowledge, but about the ongoing willingness to seek it. In this view, the individual becomes a driving force behind the organisation's learning. By encouraging employees to take responsibility for their own learning, public sector organisations

can enhance individual capabilities, which in turn contributes to organisational effectiveness (Senge, 1990; Khasawneh, 2011).

The literature highlights that the development of systems thinking is of particular importance for public organisations, as it enables the recognition of interconnections between decisions, their consequences, and the organisational context (Stermann, 2000). Mental models, which comprise sets of implicit assumptions and beliefs, must be consciously identified and revised in the change management process, as the persistence of outdated cognitive frameworks leads to organisational stagnation (Laksono, 2023; Santos et al., 2022; Argyris & Schön, 1978). Learning organisations promote a culture of openness to change and the courage to question entrenched beliefs (Laksono, 2023). Studies conducted in various public administration contexts indicate a positive correlation between the implementation of learning organisation disciplines and the effectiveness of change management (Tönurist et al., 2020). A case study of the Sonoma State University Library demonstrated that the implementation of the five disciplines supported the development of a sustainable diversity management system and improved organisational practices (Springmeyer et al., 2024). Similarly, research by Listiani et al. (2022) in local government units in Indonesia showed that the effective application of organisational learning principles is possible even under conditions of limited decision-making autonomy, provided there is leadership that fosters communication and reflection.

The most significant barriers to the development of learning organisations in the public sector remain strong bureaucratic structures, a lack of time resources, and an institutional culture resistant to the critical analysis of failure (Pasiczny & Rosiak, 2023). Rigid bureaucratic structures foster a pervasive 'silo' culture that undermines cross-functional collaboration and organisational learning. As demonstrated in the case of a Next Steps agency, addressing this challenge necessitates cultural transformation as a foundation for structural change towards more flexible, team-based arrangements (McHugh et al., 2001).

This culture fosters attitudes and values that hinder critical analysis and learning from failure. However, the literature also highlights growing opportunities linked to the development of participatory innovation and inter-institutional collaboration (Lindsay et al., 2018; Sørensen & Torfing, 2011). Public sector organisations frequently face budget constraints and limited resources, which reduce the time available for employees to engage in learning activities. This lack of time resources constitutes a significant barrier to the development of a learning culture (Elliott, 2020). Furthermore, the absence of incentives for innovation and learning discourages employees from participating in activities that could improve the organisation. This lack of motivation represents a critical obstacle to fostering a learning culture (Hafit et al., 2022).

Practices such as mentoring, reflective sessions, managerial competency development programmes, and the promotion of systems thinking enhance public organisations'

capacity to learn from experience and manage change effectively. Mentoring is a powerful tool for professional development, enabling the transfer of knowledge and skills from experienced professionals to newcomers. It fosters a culture of continuous learning and improvement, which is essential for organisational change (Essex, 2022). Developing managerial competencies is crucial for aligning organisational goals with professional standards, thereby increasing employee performance in public organisations. This alignment facilitates a shared understanding of professional quality and supports the achievement of organisational objectives (Anvari, 2022). Change management involves the implementation of new strategies, structures, and processes to achieve long-term organisational goals. It requires active employee support and a focus on both organisational and individual needs (Helmold, 2023). Public organisations benefit from change management practices that emphasise leadership, communication, and learning. These practices help overcome resistance to change and ensure that employees are prepared to adapt to new roles and responsibilities (Hernández, 2023; Onyekwere & Ololube, 2023).

Peter Senge's learning organisation model, articulated primarily in his book *The Fifth Discipline*, has had a significant impact on organisational theory and practice. However, it has also attracted criticism. Critics argue that Senge does not adequately define the social practices necessary to realise the ideals of a learning organisation. This gap creates a disconnect between systems theory and practical application, raising questions about the model's viability in real-world contexts (Caldwell, 2012). The model's emphasis on the 'primacy of the whole' and the 'communal nature of the self' is seen as underdeveloped, necessitating further philosophical exploration to construct a more emancipatory notion of community within organisations (Fielding, 2001). Although Senge's model has been applied in various contexts, such as education, its implementation often encounters cultural and structural constraints. For instance, while it promoted a learning culture in Singaporean schools, existing academic structures and cultural inhibitions limited the development of critical and creative thinking (Retna, 2008). Practical application of the model demands sustained effort and adaptation to specific organisational contexts, which can be challenging given the diverse and dynamic nature of contemporary organisations (Fillion et al., 2015).

Learning from experience in change management has become one of the key challenges facing the public sector today. The theoretical foundations of the learning organisation model, particularly Senge's five disciplines, offer a framework for fostering an organisational culture rooted in reflection, collaboration, and continuous improvement. However, implementing these concepts requires overcoming numerous structural and cultural barriers, as well as the consistent development of leadership that promotes learning and adaptation to changing environmental conditions. Building on the theoretical framework and the gaps identified in the literature, the present study addressed the following research questions:

RQ1: How do employees perceive the role of experiential learning in shaping change management practices within their organisations?

RQ2: Do demographic and professional characteristics of respondents (education, tenure, position) significantly influence their perceptions of change and learning processes?

3. Methodology

For the purposes of the empirical analysis, Peter Senge's theoretical framework, comprising the five disciplines of the learning organisation, was adopted. Table 1 presents the allocation of 15 diagnostic statements to the corresponding disciplines, allowing for the identification of dominant and underrepresented learning areas within the organisations studied. The questionnaire was based on the five disciplines of Senge's model but represents an original adaptation tailored to the specific context of the public sector. It is not a fully validated instrument endorsed by the author of the concept, but rather a research tool inspired by his theory. This specificity was taken into account in the interpretation of the results and discussed as a potential limitation of the study.

Table 1. Allocation of Statements to the Five Disciplines of the Learning Organisation According to Peter Senge

Discipline	Description	Statements
Systems Thinking	The ability to perceive complexity and interconnections between elements of the organisation, viewing entire processes and the consequences of actions as a whole.	8. Change creates a demand for knowledge and skills beyond standard managerial competencies. 10. The changes being introduced are complex and rapidly implemented. 11. We design changes systematically as a tool for management development.
Mental Models	Becoming aware of and challenging hidden assumptions, routines, and beliefs that influence organisational decisions and actions.	2. We do not learn from changes because evaluation is considered too risky. 6. Managers are selected based on availability rather than competence. 7. An intuitive approach to change management is preferred. 14. We do not have time to reflect on the changes introduced.
Shared Vision	Creating a shared purpose that motivates employees and gives meaning to collective action, particularly in the context of change.	3. Change encouraged us to develop more precise learning procedures. 5. We perceive ourselves as a learning organisation that uses experience to inform decision-making.

Team Learning	The ability to learn collectively, share knowledge, draw lessons from experience, and act jointly.	<p>9. We repeat mistakes because there was no time to learn from the past.</p> <p>13. We lost valuable knowledge with departing employees.</p> <p>15. The changes enabled us to create a pool of knowledge for the future.</p>
Personal Mastery	Continuous individual improvement, commitment to skills development, and responsibility for learning.	<p>1. No one is in control of changes within the organisation.</p> <p>4. Responsibility for change is a valuable managerial experience.</p> <p>12. Knowledge and skills in change management are important at all levels.</p>

Source: Authors' own elaboration

Respondents assessed a series of statements which, in their opinion, are relevant to the implementation of change within public organisations. The survey questionnaire was directed at employees working in public sector institutions. The research sample comprised 576 individuals and included staff from various types of public organisations, including central government, local government, government agencies, the education sector, healthcare services, and higher education institutions. The sample was diverse in terms of gender, length of service, education level, and job position, which enabled comparative analyses incorporating these variables as potential differentiating factors in the perception of change.

To meet the study's objectives, a purposive sampling method was applied. The respondents were public sector employees with experience in participating in organisational change processes within their institutions. The qualification criterion for inclusion in the study was therefore not only employment in the public sector, but also actual involvement in initiatives that altered organisational structures, processes, or culture. The sampling process also followed the principle of ensuring that respondents possessed an appropriate level of subject-matter knowledge, in order to minimise the risk of misinterpreting the concepts used in the questionnaire. To improve the reliability of the data obtained, the survey was designed to focus on current experiences rather than retrospective recollections.

A Likert scale was used to evaluate the factors, with the following response options:

1 - strongly disagree, 2 - rather disagree, 3 - neutral, 4 - rather agree, 5 - strongly agree.

Within the surveyed sample, the majority of employees (73.61%) indicated that implementing change was not a central component of their work. The perception of important factors in change implementation may be influenced by whether

respondents hold formal qualifications in change management. Among the surveyed employees, the majority (75.17%) did not possess such qualifications. Only 24.83% of respondents declared that they held qualifications at the level of a course (confirmed by relevant training or postgraduate studies) in the field of change management. However, the findings show that all respondents had participated in change initiatives within their organisations. Furthermore, 26.39% of respondents indicated that change implementation constituted a key component of the functions they performed within their organisation.

Among the respondents, individuals with higher education predominated, with the largest group holding a technical degree (41.67%). Only 14.41% of the surveyed individuals occupied managerial positions. The largest proportion of employees had a work experience of up to five years (29.17%) (Table 2).

Table 2. Characteristics of the research sample (in %)

Education	%	Position	%	Work Experience (years)		Gender	%	Type of Organisation	%
Secondary	9,55	Managerial	14,41	Less than 5	29,17	Male	36,81	Government administration	3,65
Higher technical	41,67			6 to 10	9,55			Local government administration	40,97
Higher humanities	28,82	Non-managerial	85,59	11 to 20	24,27	Female	63,19	Government agencies	7,47
Higher social sciences	19,97			More than 20	17,01			Education	4,86
								Higher Education	35,07
								Healthcare	7,99

N=576

Source: Authors' own elaboration

Taking into account the systematic error known as common method bias (CMB), the questionnaire was designed using the split sample method proposed by Brewer (Brewer, 2006). This approach aimed to eliminate CMB by employing one group of respondents to assess the independent variable and another group to assess the dependent variable. In the present study, the independent variable—i.e. the type of public organisation—was based on administrative data (Podsakoff et al., 2012; Jakobsen & Jensen, 2015). The survey was addressed to multiple individuals involved in change management processes within the organisation, which further reduced the risk of bias (MacKenzie

& Podsakoff, 2012). To minimise error, respondents with sufficient expertise were selected, ensuring that the responses did not refer to ambiguous concepts. Moreover, the questions referred to the current situation, which should also reduce the potential for bias. Prior to conducting factor analysis, the quality and consistency of the measurement instrument were assessed (Table 3). It is worth clarifying that elements of Brewer's approach were applied—namely, the use of different data sources for independent and dependent variables—although a full random division of the sample into groups evaluating different variables was not carried out. This approach was adaptive in nature and served to reduce, though not entirely eliminate, the risk of common method bias.

Table 3. **Measurement Properties of the Instrument**

Indicator	Value
Cronbach's Alpha	0,580
Kaiser-Meyer-Olkin (KMO) Test	0,790
Bartlett's Test of Sphericity:	
Approx. Chi-Square	1877,419
Degrees of Freedom (df)	105
Significance Level	< 0,01

Source: Authors' own elaboration

The value of Cronbach's alpha was 0.580, which suggests moderate internal consistency of the scale, albeit one that requires further refinement. Given the exploratory nature of the study and the relatively novel analytical context (public organisations viewed through the lens of the learning organisation model), an acceptable threshold for internal consistency was set at 0.5 or above (Nunnally, 1978). The obtained alpha coefficient partially reflects the limited number of items assigned to individual dimensions, which constrains the potential to achieve higher internal reliability (Cortina, 1993).

The level of Cronbach's alpha may also result from the high heterogeneity of the sample—respondents represented various types of public institutions—which naturally introduced differences in the perception of the phenomena under investigation and likely contributed to the lower internal consistency coefficient. Furthermore, the multidimensional nature of the learning organisation model inherently limits the potential for response homogeneity, which is reflected in the measurement results.

The authors acknowledge that moderate internal consistency increases the interpretative risk; therefore, the results should be viewed as indicative of general trends rather than as a basis for drawing strong causal conclusions.

The Kaiser-Meyer-Olkin (KMO) measure of sampling adequacy was 0.790, indicating a satisfactory level for conducting factor analysis. Bartlett's test of sphericity reached statistical significance ($\chi^2(105) = 1877.419$; $p < 0.01$), allowing for the rejection of the null hypothesis of homogeneity of the correlation matrix and justifying the continuation of further analyses. However, the primary aim of the study was not to determine the relationships among variables, but rather to identify their presence and assess them in the context of characteristics describing the respondents. This stems from the fact that the variables pertain to a single phenomenon. To evaluate the associations between the identified opinions and the descriptive characteristics of the surveyed group, an analysis of stochastic independence was performed. Two non-parametric tests for independent samples were employed, namely the Mann-Whitney U test and the Kruskal-Wallis test. A minimum significance level of $\alpha = 0.05$ was adopted for the analyses. Statistical computations were performed using IBM SPSS.

4. Results

The table presents a statistical summary of the responses to 15 statements concerning the process of implementing change in public organisations (Table 4). Four measures are included: the median, mode, and minimum and maximum values for each statement. The use of the Likert scale enables an assessment of the overall level of agreement among respondents based on the median and mode values.

For most of the statements, the median and mode values were either 3 or 4, indicating a general tendency towards neutrality or moderate agreement among respondents. The most frequently occurring mode was 4, which suggests that while respondents generally agree with many of the proposed statements, they do not express strong agreement.

Statements that received both a median and a mode of 4 include: 'Responsibility for implementing change can be an invaluable management experience'; 'We think of ourselves as a learning organisation'; 'Change creates a demand for knowledge and skills'; 'We tend to repeat mistakes'; 'The changes are complex and rapidly implemented'; 'Knowledge and skills in change management are important at all levels'; 'The loss of employees means a loss of knowledge'; and 'We do not have time to reflect.' This indicates that these issues are perceived by most respondents as relevant and aligned with their experiences. The need for competencies, the presence of time pressure, and the risk of knowledge loss are particularly emphasised.

Table 4. Descriptive Statistics of Statements on Change Implementation in Public Organisations

Statement	Median	Mode	Minimum	Maximum
No one controls changes in the organisation.	3	3	1	5
We do not learn from changes because evaluation is considered too risky.	3	3	1	5
Change encouraged us to develop more precisely defined procedures for learning from our experiences.	3	3	1	5
Responsibility for implementing change can be an invaluable management experience.	4	4	1	5
We think of ourselves as a learning organisation that draws conclusions from change to inform future decisions and actions.	4	4	1	5
Managers are assigned to lead change initiatives based on availability rather than expertise.	3	3	1	5
Leadership in my organisation prefers an intuitive approach to change management.	3	4	1	5
Change creates a demand for knowledge and skills beyond what is usually required in a general managerial role.	4	4	1	5
We tend to repeat mistakes during change implementation because there was no time to learn from past events.	4	4	1	5
The changes being introduced are complex and rapidly implemented.	4	4	1	5
We design changes systematically as a tool for management development.	3	3	1	5
Knowledge and skills in change management are important for people at all levels of the organisation.	4	4	1	5
People lost due to organisational changes took with them highly valuable knowledge and experience.	4	4	1	5
We do not have time to reflect on the changes being implemented.	4	4	1	5
Our recent experiences with organisational change enabled us to create a pool of valuable managerial knowledge for future change.	3	4	1	5

N=576

Source: Authors' own elaboration

Attention should also be paid to statements with both a median and a mode of 3, which were rated as neutral or difficult to assess clearly by respondents. These include statements such as: ‘No one controls changes in the organisation’; ‘We do not learn from changes because evaluation is too risky’; ‘Change encouraged the development of more precise procedures’; ‘Managers are selected based on availability rather than expertise’; and ‘We design changes systematically.’ Such results may suggest significant variability in respondents’ experiences—certain phenomena may be strongly present in some organisations, while entirely absent in others. It is also possible that respondents lack sufficient knowledge to take a position, or their views are ambivalent.

The variation in responses—from a minimum of 1 to a maximum of 5 for each item—confirms that the full spectrum of attitudes is present in the sample, ranging from strong disagreement to full agreement. This further confirms the diversity of respondents’ experiences, likely reflecting differences in the types of public organisations they work in, as well as in their roles and areas of responsibility

The Likert scale used in the study comprised five response levels, ranging from ‘strongly disagree’ (1), through ‘rather disagree’ (2), ‘neutral’ (3), and ‘rather agree’ (4), to ‘strongly agree’ (5) (Table 5). This arrangement enables not only the identification of the direction of opinions but also their intensity, allowing for a more in-depth interpretation.

The results indicate that the highest levels of agreement—above 60% of responses at levels 4 and 5—were recorded for the statements: ‘Knowledge and skills in change management are important for people at all levels of the organisation’ (69.62%), ‘Responsibility for implementing change can be an invaluable management experience’ (65.80%), and ‘People lost due to organisational change took with them highly valuable knowledge and experience’ (62.50%). These responses reflect a high awareness of the importance of knowledge, responsibility, and human capital in the process of organisational change.

Table 5. Assessment of Individual Statements on Change in Public Organisations (in %)

Statement	Percentage of Responses (%)		
	Disagreement (1 & 2)	Neutral (3)	Agreement (4 & 5)
No one controls changes in the organisation	43.06%	30.03%	26.91%
We do not learn from changes because evaluation is considered too risky	36.98%	33.33%	29.69%

Change encouraged us to develop more precisely defined procedures for learning from our experiences	20.14%	38.54%	41.32%
Responsibility for implementing change can be an invaluable management experience	7.12%	27.08%	65.80%
We think of ourselves as a learning organisation that draws conclusions from change to inform future decisions and actions	18.75%	30.03%	51.22%
Managers are selected to lead change initiatives based on availability rather than expertise	36.28%	27.95%	35.76%
Leadership in my organisation prefers an intuitive approach to change management	22.22%	34.03%	43.75%
Change creates a demand for knowledge and skills beyond what is usually required in a general managerial role	12.67%	32.29%	55.03%
We tend to repeat mistakes during change implementation because there was no time to learn from past events	22.92%	24.13%	52.95%
The changes being introduced are complex and rapidly implemented	22.22%	27.26%	50.52%
We design changes systematically as a tool for management development	28.82%	36.46%	34.72%
Knowledge and skills in change management are important for people at all levels of the organisation	10.76%	19.62%	69.62%
People lost due to organisational change took with them highly valuable knowledge and experience	12.50%	25.00%	62.50%
We do not have time to reflect on the changes being implemented	21.53%	24.31%	54.17%
Our recent experiences with organisational change enabled us to create a pool of valuable managerial knowledge for future change	21.88%	33.33%	44.79%

Source: Authors' own elaboration

A slightly lower, yet still substantial level of agreement (between 50% and 59%) was noted for statements such as: 'We repeat mistakes because there was no time to learn from the past' (52.95%), 'The changes are complex and rapidly implemented' (50.52%), and 'We do not have time to reflect on the changes being implemented' (54.17%). This suggests that, despite an awareness of the value of knowledge and learning, public organisations often lack the time and space for organisational learning, reflection, and the analysis of implemented changes.

Statements linked to the institutionalisation of the learning process were met with moderate agreement (40–49% of responses at levels 4 and 5). For example, 44.79% of

respondents agreed that 'Recent experiences enabled us to create a pool of managerial knowledge for future changes,' and 41.32% agreed that 'Change encouraged the development of more precise learning procedures.' Additionally, 43.75% agreed that 'Leadership prefers an intuitive approach to change management,' which may indicate a lack of systematisation in these processes.

The results also highlight significant divergences in opinion among respondents. As many as 43.06% disagreed (responses 1 and 2) with the statement 'No one controls changes in the organisation,' suggesting that in many cases control is present, though perhaps not effective. Similarly, 36.98% disagreed with the statement 'We do not learn from changes because evaluation is too risky,' indicating that while the risk of evaluation exists, it does not dominate across all organisations. In the case of the statement 'Managers are assigned based on availability rather than expertise,' 36.28% disagreed, suggesting that better practices exist in some of the surveyed organisations.

In summary, public sector respondents demonstrate a high level of awareness regarding the importance of knowledge, responsibility, and the need for organisational learning. At the same time, they point to significant practical constraints: lack of time for reflection, pressure for rapid change implementation, an intuitive rather than systematic approach to management, and gaps in documenting experiences. Based on the Likert scale results, it is evident that respondents largely agree on the desired direction of change and organisational values, yet the realisation of these goals faces numerous structural and cultural barriers.

A further question was posed as to whether the differentiating characteristics of the research sample influenced respondents' assessments of the individual statements in public organisations (Table 6). As the differentiating variables were measured on different scales, two non-parametric tests for independent samples were applied: the Mann-Whitney U test (for the following variables: change implementation is a key element of my role within the organisation (C1); I have completed a course-level qualification in change management (C2); position (C4); gender (C6)), and the Kruskal-Wallis test (for the variables: education (C3); length of service (C5); type of institution (C7)) (Table 6). The following hypotheses were adopted:

H_0 : The distribution of responses to the given change-related statement is the same across the differentiating variable - C1 to C7.

H_1 : The distribution of responses to the given change-related statement differs across the differentiating variable - C1 to C7.

Significant differences in the assessment of statements concerning change implementation in public organisations were observed depending on selected respondent characteristics. Among the seven differentiating variables analysed

(C1–C7), education (C3) emerged as the most influential. This characteristic accounted for the largest number of statistically significant differences in responses. These included statements related to lack of control over change, difficulties in learning from experience, self-identification as a learning organisation, and issues surrounding the systematic design of change. These findings suggest that individuals with different levels or fields of education may interpret the complexity and formality of change processes differently, and vary in how they perceive the importance of organisational learning. Additional analysis revealed that although the majority of respondents (75.17%) did not hold formal qualifications in change management, this factor did to some extent differentiate responses to specific statements. Participants with formal training more frequently emphasised the need for systematic change design and rated the importance of competencies more highly. While these differences were not always statistically significant, they suggest that this factor may be of relevance in future research.

Table 6. Independence Tests for the Assessment of Statements in the Process of Change Implementation in Public Organisations

No.	Statement	C1	C2	C3	C4	C5	C6	C7
1	No one controls changes in the organisation.	0,972	0,645	0,013*	0,277	0,793	0,396	0,857
2	We do not learn from changes because evaluation is considered too risky.	0,939	0,418	0,002*	0,270	0,293	0,812	0,582
3	Change encouraged us to develop more precisely defined procedures for learning from our experiences.	0,711	0,876	0,121	0,820	0,804	0,614	0,596
4	Responsibility for implementing change can be an invaluable management experience.	0,825	0,173	0,057	0,772	0,382	0,443	0,853
5	We think of ourselves as a learning organisation that draws conclusions from change to inform future decisions and actions.	0,798	0,290	0,011*	0,943	0,998	0,392	0,443
6	Managers are selected to lead change initiatives based on availability rather than on experience and expertise.	0,788	0,608	0,072	0,012*	0,532	0,600	0,850
7	Leadership in my organisation prefers an intuitive approach to change management.	0,727	0,766	0,098	0,452	0,401	0,722	0,814

8	Change creates a demand for knowledge and skills beyond what is usually required in a general managerial role.	0,163	0,106	0,803	0,311	0,029*	0,218	0,382
9	We tend to repeat mistakes during change implementation because there was no time to learn from past events.	0,952	0,749	0,161	0,942	0,287	0,195	0,315
10	The changes being introduced are complex and rapidly implemented.	0,439	0,273	0,182	0,844	0,042*	0,390	0,044*
11	We design changes systematically as a tool for management development.	0,636	0,915	0,001*	0,886	0,474	0,732	0,450
12	Knowledge and skills in change management are important for people at all levels of the organisation.	0,933	0,109	0,048*	0,099	0,920	0,784	0,195
13	People lost due to organisational change took with them highly valuable knowledge and experience.	0,847	0,224	0,000*	0,340	0,027*	0,591	0,964
14	We do not have time to reflect on the changes being implemented.	0,969	0,209	0,070	0,429	0,229	0,903	0,396
15	Our recent experiences with organisational change enabled us to create a pool of valuable managerial knowledge for future change.	0,742	0,524	0,076	0,221	0,069	0,746	0,835

* Significant at the level of ≤ 0.05 (two-tailed)

Source: Authors' own elaboration

The second most statistically significant variable was length of service (C5). Respondents with varying professional experience differed in their views on the complexity and pace of change implementation, the need for skill development in this context, and workforce-related consequences such as the loss of knowledge due to staff turnover. This may indicate that longer tenure encourages a more critical and multidimensional perspective on change and its impact on institutional functioning.

The remaining variables—whether change implementation is a key element of one's role (C1), having change management qualifications (C2), job position (C4), gender (C6), and type of organisation (C7)—generally did not significantly affect how respondents assessed the analysed statements. An exception was the variable 'position' (C4), which showed statistical significance for one statement regarding the criteria used to select managers for change-related tasks. This may point to a perceptual gap between those in leadership roles and other staff when it comes to personnel decision-making.

It is important to note that even in cases where statistical significance was not observed, opinion differences may stem from the operational context of specific organisations or the subjective experiences of employees. The earlier analysis of medians and modes had already indicated a wide variety of experiences and assessments. Table 6 deepens this observation, showing that certain occupational or educational groups perceive change processes quite differently from others.

Overall, the findings presented in Table 6 confirm that effective change management in the public sector should not be based on uniform assumptions about all employees. Perceptions of change differ meaningfully due to specific personal and professional conditions. This implies that developmental, educational, and communication processes should be more individualised and account for the internal diversity within organisations.

5. Discussion

The analysis of the results reveals a clear awareness of the importance of change management competencies among public sector employees. As many as 69.62% of respondents agreed that ‘knowledge and skills in change management are important for people at all levels of the organisation,’ and 65.80% agreed that ‘responsibility for implementing change can be an invaluable management experience.’ These findings support Senge’s (1990) thesis on the need to develop ‘personal mastery’ as a key discipline of the learning organisation, whereby individuals take responsibility for their own development and share it within the organisation. At the same time, Garvin (1993) highlights that the systematic development of managerial competencies facilitates more effective implementation of change—reflected in the high level of agreement with these statements among respondents. It is important to emphasise that the observed findings—such as the high self-reported awareness of the importance of competencies alongside a perceived lack of control over change—may appear contradictory. However, they reflect the diversity of the sample (which included different types of organisations and positions) as well as the tension between stated intentions and actual practices within public sector organisations. This discrepancy constitutes a significant conclusion, pointing to the need for further qualitative research to explore the underlying causes of such perceptual paradoxes. It should also be noted that the results relate to respondents’ self-reported perceptions rather than verified levels of competence or observed behaviours. The study focused on perception and self-assessment, which limits the extent to which conclusions can be drawn about employees’ actual preparedness for managing change.

However, practical limitations hinder the real-time transfer of knowledge. More than half of the respondents (52.95%) agreed that ‘we repeat mistakes because there was no time to learn from the past,’ and 54.17% agreed that ‘we do not have time to reflect on the changes being implemented.’ This aligns with observations

made by Elliott (2020) and Hafit et al. (2022), who emphasise that time constraints and the absence of cultural incentives are key barriers to organisational learning in public administration. Introducing greater flexibility into the timing of change implementation could create space for reflection and deviation analysis, which are fundamental to 'team learning' (Edmondson, 1999; Plimmer et al., 2023). A lack of space for reflection hampers the practice of 'team learning' and 'systems thinking' (Senge, 1990; Sterman, 2000), leading to a fragmented, intuitive approach to change management.

Respondents also clearly recognise the risk of knowledge loss: 62.50% agreed that 'people lost due to organisational change took with them highly valuable knowledge and experience.' This phenomenon can be related to the concept of 'mental models' proposed by Argyris and Schön (1996)—when experienced employees leave, embedded, informal knowledge often departs with them, particularly as it is difficult to separate from individual cognitive frameworks. Moynihan and Landuyt (2009) demonstrate that organisations that systematically learn from failure are quicker to rebuild their knowledge capital, highlighting the need for mechanisms such as documentation and mentoring (Essex, 2022).

The independence tests (Table 6) revealed that the most significant differentiating factor in respondents' assessments was education (C3), followed by length of service (C5). Individuals with higher levels of education perceived, among other things, control over change, difficulties in learning, and the need for systematic design of processes differently—likely due to their greater familiarity with learning organisation theory (Flood, 1999; Bui & Baruch, 2010). Meanwhile, employees with longer tenure more frequently recognised the complexity and pace of change, as well as staffing consequences, aligning with Kim's (1993) findings on the role of tacit knowledge accumulated through professional experience.

The research findings highlight the need to strengthen mentoring and reflective sessions in order to reduce the loss of tacit knowledge and support the transfer of competencies (Essex, 2022). Public sector organisations also require integrated training based on systems thinking, which enables employees to recognise the interconnections between actions and their long-term consequences (Sterman, 2000; Harris & Lawson, 2022). Building a shared vision through participatory change planning processes should enhance engagement and coherence of action within public organisations (Kouzes & Posner, 2002; Zaki & George, 2021). Based on the literature cited in this article and current research on public sector management, several key trends in change management within public organisations can be identified (Huang & Villadsen, 2023). In public sector organisations, there is an increasing emphasis on continuous learning from experience, reflection on mistakes, and the accumulation of knowledge throughout the change process (Koppl, 2021; Stark, 2020; Gieske et al., 2020). Change is increasingly designed in a participatory manner, involving both

internal and external stakeholders, which enhances acceptance, reduces resistance, and builds trust (Meneses et al., 2024; Meng & Li, 2025). System analysis tools and the mapping of interconnections between administrative processes are also gaining prominence (Giacomini & Palumbo, 2023; Schultes et al., 2022). The public sector is recognising the problem of knowledge loss due to employee turnover (Leider et al., 2022). A growing trend is the development of knowledge transfer mechanisms—such as mentoring, knowledge bases, and the systematic documentation of experience (Hur & Abner, 2024). Change implementation is increasingly linked to the development of leadership and managerial competencies, including the capacity for reflection, communication, and emotional management within teams (Martínez-Díaz et al., 2021). Change leadership development programmes are becoming a component of HR strategies in public administration (Brunetto & Beattie, 2020). A noticeable trend in public organisations is the shift away from hierarchical management models towards more flexible and adaptive structures, which respond more effectively to unpredictable political, technological, and social changes (Hall, 2023; Mergel et al., 2021). The digitalisation of administrative processes and data analysis are becoming tools that accelerate change and enable better monitoring and evaluation of its outcomes (Vogl et al., 2020). There is a growing emphasis on evidence-based decision-making and the advancement of e-government (Cheng et al., 2025).

In conclusion, the findings confirm that while Peter Senge's theory of the learning organisation provides a valuable framework, its practical implementation in the public sector requires, above all, the removal of cultural and structural barriers and an individualised approach tailored to different employee groups. Only then will it be possible to fully realise the potential of experiential learning and effectively manage organisational change.

6. Limitations of the Research Process

The research process encountered several notable limitations that should be considered when interpreting the results. One of the primary limitations was the moderate internal consistency of the questionnaire used, as indicated by a Cronbach's alpha value of 0.580. While this allowed for the analysis to proceed, it also pointed to the need for further refinement of the instrument to enhance its reliability. Another limitation was the subjective nature of the data, as the study relied on respondents' self-assessments. This approach carries the risk of individual bias, limited awareness of the broader organisational context, and a tendency to respond in ways aligned with social desirability or personal perceptions of one's organisational role. Despite the application of Brewer's sample-splitting method to mitigate systematic bias, the potential for common method variance in responses cannot be entirely ruled out. It should also be noted that the study did not include objective indicators of the

effectiveness of implemented changes (e.g., measures of the sustainability of outcomes, impact on organisational performance, or stakeholder satisfaction). The aim was to identify perceptions of elements of Senge's model within change processes, rather than to evaluate the effectiveness of those processes. This represents a limitation that should be taken into account when interpreting the findings and planning further complementary research.

The sample structure was also characterised by a significant predominance of non-managerial staff over those in managerial positions. Only 14.41% of respondents held managerial roles, which limited access to information on decision-making processes and the strategic dimensions of change management—key aspects from the perspective of the learning organisation model. Additionally, the majority of respondents (75.17%) did not possess formal qualifications in change management, which may have influenced their understanding and assessment of organisational change processes.

The organisational diversity of the sample—comprising central and local government units, government agencies, higher education institutions, the education sector, and healthcare services—presented another challenge. While this enhanced the diversity of the data, it also made it more difficult to draw clear conclusions, as each sector differs significantly in terms of organisational structure, culture, and the dynamics of change.

Furthermore, the cross-sectional nature of the study limited the ability to analyse causality. Although certain associations and co-occurrences between opinions and respondent characteristics were identified, it was not possible to determine definitive cause-and-effect relationships between the variables analysed. In addition, contextual factors such as the current phase of change implementation, staff turnover, or the institutional situation at the time of the study may have influenced the responses, and these variables were not fully controlled.

In summary, although the study provided insights into experiential learning in change management within public organisations, its limitations highlight the need for caution in generalising the findings and indicate directions for improvement in future research.

7. Summary and Conclusions

This article examined experiential learning in the process of change management within public sector organisations. The research was grounded in both theoretical and empirical aspects of implementing Peter Senge's learning organisation model in the administrative sector. Contemporary public organisations operate under conditions of dynamic social, technological, and economic change, which necessitates adaptability, reflexivity, and innovation. Senge's concept of the five disciplines—systems thinking, mental models, shared vision, team learning, and personal mastery—provides a framework for more

effective change management. However, its implementation encounters significant barriers, including bureaucratic structures, time constraints, and an organisational culture resistant to critical reflection.

The empirical study employed a diagnostic questionnaire aligned with the five disciplines, yielding 576 completed responses. The analysis revealed a high level of awareness regarding the importance of change management competencies and the need for systematic learning. At the same time, it highlighted significant practical limitations, such as a lack of time for reflection and the risk of organisational knowledge loss. Differences in the assessment of specific aspects of change were significantly associated with respondents' levels of education and length of service, suggesting the need for more individualised development and communication strategies within public organisations. Based on the conducted analysis, the following conclusions can be drawn:

- high awareness of the importance of change management competencies: 69.62% of respondents recognised that knowledge and skills related to change management are important at all organisational levels, while 65.80% indicated that taking responsibility for implementing change constitutes a valuable managerial experience;
- lack of space for reflection: 54.17% of respondents stated that their organisations do not allocate time for reflection on implemented changes, limiting the potential for organisational learning and experience-based analysis;
- repetition of organisational mistakes: 52.95% of respondents agreed that the absence of time for analysing past experiences leads to repeated errors in subsequent change processes;
- loss of organisational knowledge: 62.50% of respondents confirmed that employee departures resulting from organisational changes led to the loss of valuable knowledge and experience, underscoring the need for improved knowledge management and transfer;
- perception of changes as fast and complex processes: 50.52% of respondents indicated that changes in their organisations are implemented rapidly and are highly complex, which further hinders effective implementation;
- lack of a systematic approach to change design: Only 34.72% of respondents believed that changes are designed in a systematic manner, suggesting a prevalence of intuitive over planned approaches.
- importance of education in perceiving change: Statistical analysis revealed that both the level and field of education significantly influenced assessments of control over change, the ability to learn from experience, and the manner in which changes are designed;
- impact of length of service on change perception: Employees with longer tenure more frequently recognised the complexity of changes, the need for competencies, and the negative staffing consequences, such as knowledge loss;

- limited impact of gender, position, and organisation type: These variables had little significant influence on the evaluation of change processes, although specific instances (e.g. assessment of manager selection criteria) showed statistical differences;
- need to implement practices that support learning: The findings point to a need for developing mentoring programmes, reflective sessions, and shared vision initiatives to overcome time and structural barriers limiting organisational learning.

In summary, the article demonstrates that implementing the principles of a learning organisation in the public sector holds significant transformational potential. However, it requires the consistent overcoming of structural and cultural barriers, the development of leadership that fosters learning, and the creation of space for reflection and the systematic transfer of knowledge within the organisation. The recommendations concerning mentoring, reflective sessions, and the development of a shared vision should be understood as practical implications based on the analysis of the literature and the interpretation of trends observed in the data. They do not stem directly from hypothesis testing but rather represent potential courses of action for public sector organisations interested in implementing the principles of a learning organisation.

Authors' contribution

K.K.: article conception, research methods applied, conducting the research, data collection, analysis and interpretation of results, draft manuscript preparation. **M.O.:** article conception, theoretical content of the article, research methods applied, analysis and interpretation of results, draft manuscript preparation.

Declaration of Generative AI and AI-assisted technologies in the writing process

While preparing this work, the authors did not use any tool/service.

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