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BUILDING AWARENESS OF THE ROLE OF KNOWLEDGE: RISKS OF KNOWLEDGE FOR PUBLIC SECURITY AND ORGANISATIONS*

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Abstract. Knowledge leads to wisdom and creates the 'intellectual excellence of organisation'. Building awareness of the role of knowledge is key in the effort to protect knowledge. It includes being aware of the benefits of knowledge and the risks that threaten and devalue it. The paper proposes a simple model of building knowledge awareness in organisations and presents a new classification of security knowledge risks. The empirical part presents a survey's results on a sample of N = 900 Czech and Polish respondents. With the use of Pearson's correlation coefficient, both of the formulated hypotheses were confirmed: (H1) The perception of knowledge benefits for employees as well as organisations and knowledge risks of Czech versus Polish respondents is correlated; (H2) The benefits of appropriate knowledge management, provided to the employees and the organisation, correlate mutually. The conclusion presents the measures for better use and protect knowledge.

Keywords: knowledge management; risks and threats; awareness; model; public security; security of organizations

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1. Introduction

In the third decade of the 3rd millennium, the amount and complexity of all knowledge generated by individuals and teams worldwide is growing at an incredible rate. Knowledge-based societies are being established, and the number of knowledge-based organisations is increasing (Nicolaescu et al., 2020; Ngah and Wong, 2020; Wang et

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al. 2021; Sart, 2023; Schenk, 2023; etc.). Knowledge takes on new forms, and new layers and ways of connecting them arise.

Often, knowledge in organisations is threatened and devalued by natural means and/or organisational processes, e.g., by the departure of key experts from the organisation (Bratianu, Nestian and Guta, 2022), knowledge gaps (Federico et al., 2023), knowledge obsolescence (Ramírez-Montoya, 2021); hiding (Bai, 2020), concealing (Wu et al., 2022) or non-sharing of knowledge with others (Xu, Huang and Huang 2023); forgetting or losing key senses and contents (Sumbal et al., 2018); and many others. In addition, knowledge risk is associated with any knowledge activity under the pressure of uncertainty (Bratianu, 2018). The unpleasant fact is that organisations also become the target of hackers and other attacks, with the primary goal of extracting, damaging or stealing important subjects (expert) and management knowledge (Čáp, Breu and Prošek, 2022; Carayannis and Grigoroudis, 2023). For this reason, protecting knowledge in knowledge-based organisations becomes a priority.

In addition to knowledge management in private organisations, which the literature deals with in abundance (e.g., do Céu Morais Cláudio and Santos 2023; Zhang et al. 2023; etc.), the literature pays relatively little attention to the study of knowledge in state and public security organisations. On the one hand, public administration and security organisations have generated a lot of unique knowledge and procedures by which they effectively fight against illegal activity and protect values, lives, key principles of safety and critical infrastructure (Dempsey et al. 2019). On the other hand, they also build managerial knowledge over the years, i.e., how to effectively manage the public and security sector (Hess et al. 2022; Bolade, 2023). This management knowledge, together with performance-active knowledge, represents the knowledge foundation of state security and, indirectly, of the management security and know-how of other organisations throughout the state.

Therefore, the paper's *first scientific aim* is to focus on knowledge and knowledge risk in organisations of various sectors and compare organisations of the public security sector with standard sectors. The *second aim* is to search for the benefits of knowledge and proper knowledge management from the individuals' and the organisation's point of view. The *third aim* is to conduct research in two European countries so that the results will gain an inter-sectoral and international perspective.

By fulfilling all partial aims and establishing two hypotheses, the *comprehensive intention of the paper* is to eliminate the existing gap in the literature and to enrich the current scientific base of management, knowledge management, and security management. An original contribution will be the proposal of a new classification of security/law knowledge risks, a simple model of building awareness of the knowledge's role in the organisation, results of international surveys, and ways to prevent knowledge risks and increase awareness of knowledge and its securitisation.

2. Theoretical background, own premises and hypotheses

In the knowledge-based economy, knowledge is an absolute wealth for organisations to efficiently meet their tasks and direct their activities to achieve their goals. Knowledge is a source of excellence for organisations and the basis for their advancement and success (Abusweilem and Abualoush, 2019; Di Vaio et al., 2021; Grondys, Slusarczyk, and Androniceanu, 2021).

Knowledge is manageable (Bloem and Salimi, 2022) with rich connotations and extensive content (Lin, 2019). Regardless of the differences, both scientists and practitioners generally agree that knowledge is one of the most essential building blocks of organisational success (Arsawan et al. 2020; Islam and Abd Wahab, 2021; Idrees et al. 2023), the main engine of economic growth, the catalyst for technological progress and productivity as well as one of the most effective and influential elements in managerial processes (Abusweilem and Abualoush, 2019)

and the most critical determinant of the competitiveness of people, organisations and countries (Ge and Liu, 2022).

Appreciation of the importance of knowledge as a strategic resource means the need to manage it properly. In this view, knowledge management is the process by which an organisation gathers, organises, shares and analyses its knowledge in a way that is easily accessible to employees (Amsler, 2021), identifies, transfers and utilises information and skills (Ammirato et al., 2021; Idrees et al., 2023), improves the problem solving and strategic planning and increases the intellectual value of the organisation, constructs individual and collective concepts (Bem Machado et al., 2022), helps organisations to survive in crisis or pandemic situations (Schiuma et al., 2021; Bloem and Salimi, 2022).

2.1. Knowledge risks, threats and criminal law protection

Organisations face various risks due to a lack of knowledge, its disappearance, incorrect application, or other consequences of knowledge-related use (El Khatib, Ali and Mostapha, 2021; Möller, 2023). Knowledge risk denotes the risk of causing disturbances in the organisational knowledge field (Bratianu and Bejinaru, 2020). It could be understood as the measure of the probability and severity of adverse effects of any activities engaging or related somehow to the knowledge that can affect the organisation's functioning on any level (Zieba and Durst 2018). Knowledge and overall probabilities lose predictive power in new or surprising situations (Thekdi and Aven, 2023).

There are several classifications or taxonomies of risks of knowledge in the literature. For example, Zieba and Durst (2018) developed their classification, which divided knowledge risks into three categories: operational, technological, and human knowledge. El Khatib, AlaaEldine and Mostapha (2021) proposed such a knowledge risk taxonomy: (1) human; (2) technological; (3) strategic; and (4) operational (p. 7).

Based on the inspiration that knowledge is an energy metaphor (Bratianu, 2018) applies the holistic approach to knowledge risk, comprising the three knowledge fields: rational, emotional and spiritual, while risk is associated with each knowledge field such that the whole phenomenon of knowledge risk becomes more complex. Bratianu, Nestian and Guta (2022) later developed a new ontology of risks based on knowledge dynamics: risk of non-creation, wrong timing, wrong acquisition, the retirement of people, knowledge spillover, forgetting, hiding, hoarding, waste, emotional risk of change, spiritual knowledge risk, etc.

All the listed classifications, including the results of other studies, confirm many risks associated with knowledge (e.g., Ilbiz, 2020; Gao et al., 2022; Thekdi and Aven, 2023; etc.). From the viewpoint of the scientific focus of the paper, it is therefore desirable to shift attention to another perspective: the viewpoint of the legal seriousness of knowledge disruptions and damages. It is appropriate to search the ethical and criminal-legal aspects of the causes, outbreaks and methods of emergence and impacts of knowledge risks and threats:

(a) Threats often arise inside organisations (Giblin, 2017). It is possible to think about the natural internal-organisational vulnerability of knowledge, which can be caused by insufficient responsibility, life cycle (Hess et al., 2022), awareness of the danger of work performed (Hägström and Edlund, 2023) or impaired employee loyalty (Zieba, 2020). An internal danger can also be the excessive sophistication of unique knowledge – its creator has such extraordinary intelligence that other individuals with ordinary intellectual abilities cannot understand his/her solutions, they can only be contained by another extraordinary 'knowledge master'. In this case, the threat is the very uniqueness of the knowledge.

Despite the mentioned quasi-logical forms of intra-organizational impairment of knowledge, they can cause immense damage to the organisation (Harkiolakis and Komodromos, 2023) and the fulfilment of its social role, especially in public security. In such cases, legal penalties for knowledge damage are mostly rare. Knowledge

disruptions usually arise as a reaction to the imperfection of the organisation's management system and knowledge wealth (Dempsey et al., 2019) or by incivility, negative emotions, feelings of humiliation and shame (Wu et al., 2022). It is essential to identify and appropriately retain the critical knowledge of departing employees (Sumbal et al., 2018).

(b) Risks and threats of knowledge can arise from contact with the external environment of the organisation (Gao et al., 2022) and the penetration of unwanted facts inside or outside the organisation. Risks are often associated with cybercrime (El Khatib, AlaaEldine and Mostapha 2021). In such cases, legal sanctions depend on the specific form of damage and the intention of the perpetrator (Godart, 2005). If the damage was caused by risky cybersecurity behaviour of employees (Ifinedo, 2023) or an imperfect access protection system, the solution is to tighten protocols and higher quality ICT. However, suppose the damage was caused by an employee or manager's intentional theft of sensitive information or secrets. In that case, there is room for civil litigation or even criminal prosecution (e.g., U.S. Code § 1832). The identity of the intruder is often discoverable.

If the threat was carried out by a hacker or a group of hackers, it again depends on the circumstances. It is often hard to decide what to consider dangerous and what to ignore (Möller, 2023). The attack could only have been intended as a joke or a test of the (mostly) young attacker's skill. However, the attack could also be carried out with the explicit intention of stealing the desired knowledge and enriching oneself at the organisation's expense. It can be a theft of knowledge, e.g., by competitors (Zieba 2020). Identifying such attackers is not easy, and even the organisation sometimes does not even detect the exact time and extent of the threat (Čáp et al. 2022) or even erroneous accusations of persons appear. Criminal prosecution is, therefore, very complicated.

(c) The most societally dangerous is the violation or theft of knowledge, registers, protocols, security procedures and know-how about direct actions and reactions in the event of a threat to the state's security, which is applied by the central state authorities and the public security organisations. In this regard, police corruption is hazardous (Čáp, Breu and Prošek, 2022). Of course, the criminal penalties for disrupting the safe functioning of the state are considerable.

With use of various classifications mentioned in the literature and suggested by the authors above, hypothesis H1 is stated:

H1: The perception of knowledge benefits for employees and organisations and knowledge risks between Czech and Polish respondents is highly correlated.

2.2. Awareness of the role of knowledge and strategic security of knowledge

Knowledge is an abstract concept without any reference to the tangible world (Bolisani and Bratianu, 2018). Recognition of the strategic importance of knowledge for organisations (Figurska, 2016) entails the need to take actions aimed at removing all the potential risks and building the security of knowledge by all employees. The involvement of employees in activities aimed at increasing the security of strategically important knowledge cannot be expected without making them aware of why such actions are important. In other words, care for knowledge security should start with building awareness of the role of knowledge among employees.

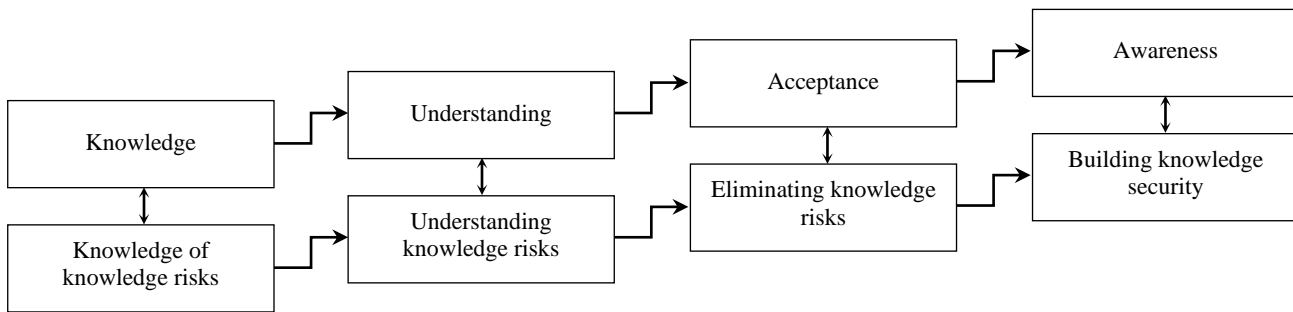
It is challenging to define awareness unequivocally as, in practice, the term is used in many different meanings and contexts. Most philosophers of mind describe human awareness as the ability to experience one's own 'internal states' as intentional states, i.e., internal states that are 'about' some external objects (Kotchoubey, 2018). Awareness is also perceived as an active process of association, reflection, and volitional evaluation of emerging possibilities, which is necessary to coordinate information from various sources, both memory of past events and current perception (Baddeley, 1995). Through perception, people orient themselves in the environment, adapting their actions to the meaning of events. On the other hand, becoming aware refers to how new mental content emerges in the mind, and this process takes place through either direct perception, apperception, or restructuring thinking Myllylä and Saariluoma (2022).

When analysing the abovementioned definitions, attention should be paid to the recurring concepts, such as knowledge and understanding. Acquiring awareness of an issue requires knowledge and understanding of its essence. Therefore, it was assumed that knowledge is the starting point in raising awareness of the role of knowledge in the organisation. This includes, among others, types of knowledge of strategic importance for the organisation, ways in which it determines the level of competitiveness, potential threats resulting from the lack of sufficient care for knowledge security, ways to protect strategic knowledge, processes of knowledge management and conditions of their practical realisation, etc. In other words, employees need knowledge that will enable them to answer the questions: what, how and why should be done in relation to knowledge.

In line with the purposes of the paper, the process of building awareness of the role of knowledge and securing the knowledge in the organisation is shown in Figure 1.

Knowing a subject does not necessarily mean capturing the sense of it. The presented model assumes that understanding something (concept, situation, problem, etc.) requires prior knowledge. Possessing knowledge about the role of knowledge in the organisation and its understanding may either lead to its acceptance or its rejection; acceptance means acknowledgement, approval, and support for the idea and results in gaining awareness of the role of knowledge.

Figure 1. Building awareness of the role of knowledge and securing knowledge in the organisation



Source: the authors' work

It should be emphasised that awareness is gradable, meaning subjectively experiencing the degree of awareness of a given content by people can have a different level (Wierzchoń, 2021).

The above considerations lead to the conclusion that employees' awareness of the role of knowledge in the organisation can be influenced. Increasing awareness can be achieved by raising knowledge, understanding and acceptance of the concept to a higher level (Figurska, 2016). For this to happen, several thoughtful, purposeful actions should be taken. Educating employees on the nature, use, and importance of knowledge and its management and fully involving them in designing knowledge frameworks are also significant challenges managers face in building employees' awareness of the knowledge role in organisations.

However, raising awareness of the role of knowledge faces some barriers. The most difficult ones to overcome include comfort with the status quo, fear of the unknown, lack of (or insufficient) credibility of the source or sender of the message, denial that the reasons for change are real, rumours or misinformation, lack of information on potential benefits related to the change (Prosci ADKAR Model).

Based on the ideas presented above, awareness of the significance and all potential benefits and losses, risks, and threats of knowledge directly lead to the need to manage knowledge responsibly, precisely and with the highest degree of sophistication in organisations of all types and sectors. Hypothesis H2 is formulated:

H2: The benefits of appropriate knowledge management, provided to the employees and provided to the organisation, correlate mutually.

3. Materials and methods

Knowledge consists of many various elements, procedures, and mental-behavioural habits. It leads to wisdom and mastery, and by that, it creates the 'intellectual excellence of organisation'. However, it can also be viewed as the source of conflict: knowledge as an instrument versus a discourse and knowledge construction based on trust versus suspicion (Hayagreeva and Pasmore 1989).

3.1. Survey purpose and sample

The basic idea of both formulated hypotheses is the assumption that knowledge is endangered in all sectors, but in public security too. For this reason, the authors considered it necessary to conduct a theoretical and empirical analysis of the most valued knowledge and the most significant knowledge risks in various state sectors. However, despite the effort to analyse scientific studies on knowledge in public security, it was impossible because such studies are absent in the literature. This further underlines the importance of the paper and the survey conducted.

The authors built their own analytical tool for the sociological survey – a structured questionnaire. It was developed based on the authors' experience and the results of their scientific activities to date and supplemented with the inspirations of essential authors (e.g., Durst and Zieba, 2017).

The questionnaire was distributed to employees and managers in two countries, the Czech Republic and Poland, in two forms: in writing or online. The purpose was to identify knowledge that is the most threatened in the organisation (11 items) and determine the extent of benefits of knowledge and its proper management for employees (16 items) and for organisations (18 items). Calculated sample is 385 respondents, with error of estimate 5%. As there were $n = 511$ respondents in the Czech Republic and $n = 389$ in Poland, the survey results could be considered statistically relevant.

The group of Czech respondents consisted of public security and public administration staff. 346 (67.71%) of them were male and 165 female (32.29%); 399 (78.08%) with a higher education and 112 (21.91%) with a secondary one. 421 (82.39%) were employees and 90 (17.61%) managers. In Poland, respondents worked in various sectors: 24.42% in trade; 17.74% in hotel and gastronomy; 12.08% in production; 7.71% in culture; etc. There were 161 (41.39%) male and 228 (58.61%) female; 118 (30.33%) with a higher education and 271 (39.67%) with a secondary; 319 (82.01%) employees and 70 (17.99%) managers.

3.2. Data and results

The main goal of knowledge management is to improve an organisation's efficiency and save knowledge within (Harrison, 2021), while detailed goals can be related to all elements of knowledge management and internal environment (Figurska 2016, 2019).

In this view, the respondents in the first question identified the most endangered knowledge in the organisation, i.e., the question investigated the extent to which various types of knowledge should be protected. The task of the

respondents was to assign a value of 1 – 5 to each of the listed knowledge, where 1 = knowledge does not require protection; 5 = knowledge requires full protection. Table 1 shows protection urgency for various knowledge in the Czech Republic and Poland. In the prioritised sector, i.e., public security and public administration (Czech Republic), innovative knowledge is the most threatened ($\bar{x} = 3.92$). In the other sectors (Poland), the most significant protection urgency in the three most represented sectors were the following: trade – advanced knowledge ($\bar{x} = 4.18$); hotel and gastronomy – innovative knowledge ($\bar{x} = 4.23$); production – advanced knowledge ($\bar{x} = 4.32$).

Table 1. Protection urgency for various knowledge in the Czech Republic and Poland (Lower quartile x_l , median x_m , upper quartile x_u , mode \hat{x} , mean \bar{x} , standard deviation s)

Type of knowledge	Czech Republic						Poland					
	x_l	x_m	x_u	\hat{x}	\bar{x}	s	x_l	x_m	x_u	\hat{x}	\bar{x}	s
1. The type of know-what (knowledge – to know) regarding facts.	3	4	5	5	3.66	0.05	2	3	4	3	3.10	0.06
2. Type of know-how (operational knowledge).	3	4	5	5	3.81	0.05	3	4	4	4	3.47	0.06
3. The type of know-why (justifying knowledge).	2	3	4	3	3.17	0.05	2	3	4	3	3.17	0.06
4. The type of know-who (personal knowledge).	3	4	5	4	3.61	0.05	3	4	5	4	3.50	0.06
5. Basic knowledge (core knowledge) necessary to perform the activity.	2	3	4	3	3.24	0.06	2	3	4	3	3.25	0.06
6. Advanced knowledge, which differentiates an organisation.	3	4	5	5	3.82	0.05	3	4	5	5	4.12	0.05
7. Innovative knowledge that gives the organisation an innovative position.	3	4	5	5	3.92	0.05	4	4	5	5	4.17	0.05
8. Knowledge of products and services from the customer’s point of view.	2	3	4	3	3.03	0.06	3	4	4	4	3.50	0.06
9. Knowledge of processes explaining how to perform specific tasks.	3	4	4	3	3.49	0.05	3	4	5	4	3.72	0.05
10. Knowledge of customers and suppliers regarding contacts and relationships.	3	4	5	3	3.61	0.05	3	4	5	4	3.91	0.05
11. Knowledge of projects related to organisational memory and learning.	3	3	4	3	3.38	0.05	3	4	5	4	3.87	0.05

Source: the authors' work

It flows from the above that risks are perceived approximately the same in both countries, in the first two places are advanced knowledge and innovative knowledge.

The second question consisted of marking the importance of each of the listed advantages of knowledge and proper knowledge management for the employees on a scale of 1 – 5 (1 = benefit is not important for me; 5 = for me is essential). Table 2 shows the most important benefits in both countries are similar. The greatest positives expressed by Czech respondents mean simultaneously the greatest positives in the public security and public administration sector: proper knowledge management enables the right decisions and solves problems faster (mean $\bar{x} = 4.03$). In the other sectors (Poland), the biggest knowledge benefits in the three most represented sectors were the following: trade – it enables self-actualisation ($\bar{x} = 4.23$); hotel and gastronomy – enables right decisions and solve problems faster ($\bar{x} = 4.38$); production – enables right decisions and solve problems faster ($\bar{x} = 4.21$)

Practically in all sectors, benefit No. 12 – knowledge enables employees to make the right decisions and solve problems faster is in the first place, with an average value higher than 4, which in relative terms represents a benefit of more than 80%.

Table 2. Benefits of knowledge management for employees in Czechia and Poland (Lower quartile x_l , median x_m , upper quartile x_u , mode \hat{x} , mean \bar{x} , standard deviation s)

Properly managed knowledge brings these benefits to employees...	Czech Republic						Poland					
	x_l	x_m	x_u	\hat{x}	\bar{x}	s	x_l	x_m	x_u	\hat{x}	\bar{x}	s
1. It enables employees to constantly develop and increase their competencies.	3	4	5	5	4.01	0.04	3	4	5	5	3.99	0.05
2. It makes it easier to bond with the organisation and build belonging.	3	4	4	4	3.60	0.04	3	4	5	4	3.95	0.05
3. It facilitates access to knowledge sources and increases efficiency.	3	4	5	4	3.97	0.04	3	4	5	4	4.04	0.04
4. It allows employees to save time-related to acquiring knowledge.	3	4	5	4	3.78	0.04	3	4	5	4	4.04	0.05
5. It contributes to increasing the work commitment of employees.	3	4	5	3	3.73	0.04	3	4	5	4	3.99	0.04
6. It allows for an increase in the creativity of employees.	3	4	4	4	3.62	0.04	4	4	5	4	4.05	0.05
7. It contributes to increasing self-confidence thanks to the knowledge.	3	4	5	4	3.88	0.04	4	4	5	4	4.03	0.04
8. It enables employees to fulfil their need for self-actualisation.	3	4	4	4	3.69	0.05	3.5	4	5	4	4.04	0.04
9. It influences the increase in competitiveness in the labour market.	3	4	4	4	3.53	0.05	3	4	5	4	4.03	0.04
10. It makes it easier to collaborate and network more effectively.	3	4	4	3	3.52	0.04	4	4	5	4	4.06	0.04
11. It helps employees do their jobs.	3	4	5	4	3.95	0.04	4	4	5	4	4.17	0.04
12. It enables employees to make the right decisions and solve problems faster.	3	4	5	4	4.03	0.04	4	4	5	4	4.19	0.04
13. It helps employees 'stay in the loop'.	3	4	4	4	3.70	0.04	4	4	5	4	4.13	0.04
14. It provides employees with challenges in contributing to the organisation.	3	4	4	4	3.52	0.05	3	4	5	4	3.98	0.05
15. It develops a professional code of ethics to be followed.	3	3	4	3	3.47	0.05	3	4	5	4	3.80	0.05
16. It develops a common language.	3	3	4	3	3.32	0.05	3	4	5	4	3.94	0.05

Source: the authors' work

The third important question of the survey consisted of marking the importance of each of the eighteen listed positives of knowledge and proper knowledge management, but this time not for the employees but for the organisation. According to Table 3, the most important benefits in the countries are again very similar, with only small discrepancies. In public security and public administration (Czech Republic), the biggest advantage of proper knowledge management is that it enables making the right decisions and actions (mean $\bar{x} = 4.03$). In the other sectors (Poland), the most important advantages were as follows: trade – it increases the efficiency of activities ($\bar{x} = 4.17$); hotel and gastronomy – increases the efficiency of activities ($\bar{x} = 4.29$); production – saves the organisation's resources ($\bar{x} = 4.23$). In every sector, efficiency was at the forefront, i.e., benefit No. 8 – knowledge management increases efficiency; the perception of benefits for the organisation differs slightly.

Table 3. Benefits of knowledge management for organisations in Czechia and Poland (Lower quartile x_l , median x_m , upper quartile x_u , mode \hat{x} , mean \bar{x} , standard deviation s)

Properly managed knowledge brings these benefits to organisation...	Czech Republic						Poland					
	x_l	x_m	x_u	\hat{x}	\bar{x}	s	x_l	x_m	x_u	\hat{x}	\bar{x}	s
1. It helps the organisation implement its organisational strategy.	3	4	5	4	3.78	0.04	3	4	5	4	3.86	0.04
2. It makes it easier for the organisation to compete in the market.	3	4	5	4	3.64	0.05	3	4	5	4	3.97	0.05
3. It makes it possible to make the right decisions and actions.	3	4	5	5	4.03	0.04	4	4	5	4	4.08	0.04
4. It accelerates the resolution of organisational problems.	3	4	5	4	3.82	0.04	4	4	5	4	4.02	0.05
5. It reduces the risk of business activity.	2	3	4	3	3.08	0.05	3	4	5	4	3.80	0.05
6. It facilitates and accelerates the introduction of innovations from outside.	3	3	4	3	3.43	0.05	4	4	5	4	4.08	0.04
7. It facilitates the creation of innovative solutions in the organisation.	3	4	4	4	3.57	0.05	3	4	5	4	3.99	0.05
8. It increases the efficiency of the organisation's activities.	3	4	5	4	3.93	0.04	4	4	5	4	4.15	0.04
9. It speeds up reactions to changes taking place in a broad environment.	3	3	4	3	3.48	0.05	3	4	5	4	4.02	0.04
10. It allows saving the organisation's resources.	3	4	5	4	3.66	0.05	4	4	5	4	4.07	0.04
11. It facilitates the appropriate relations with customers, suppliers and partners.	3	4	4	4	3.46	0.05	4	4	5	4	4.12	0.04
12. It allows access to various sources of financing and their better use.	3	4	4	4	3.48	0.05	4	4	5	4	4.08	0.04
13. It determines an increase in the quality of the products and services.	3	4	4	4	3.56	0.05	4	4	5	4	4.12	0.04
14. Influences the improvement of processes, procedures and structures.	3	4	4	4	3.62	0.05	4	4	5	4	4.11	0.04
15. It supports the integration of business processes in the organisation.	3	3	4	3	3.22	0.05	4	4	5	4	4.08	0.04
16. It builds organisational memory.	3	3	4	3	3.26	0.04	3	4	5	4	3.93	0.05
17. It facilitates the dissemination of best practices within the organisation.	3	4	4	4	3.66	0.05	4	4	5	4	4.00	0.05
18. It enables the reduction of management costs.	3	4	4	4	3.66	0.05	4	4	5	4	4.10	0.04

Source: the authors' work

3.3. Testing hypotheses

Regarding testing the validity of hypothesis H1, the study's task was to determine whether the benefits of knowledge and knowledge management for employees correlate with the ones for organisations. The strength of statistical dependence between individual samples x and y was measured using Pearson's correlation coefficient $r = \frac{\overline{xy} - \bar{x} \cdot \bar{y}}{s_x \cdot s_y}$ (Pearson's product moment). If a positive coefficient $r > 0$ is considered, then for $r \in \langle 0.7; 0.9 \rangle$, the correlation is very high and almost perfect for $r \in \langle 0.9; 1.0 \rangle$.

The results in Table 4 show a strong correlation between Czech and Polish respondents, although ones were in the security sector and the others were not. For all questions, there was a very high correlation (≥ 0.7), of which, in more than half of the cases, the correlation was almost perfect. Even the smallest correlation value was 0.88, which indicates that the opinions in different sectors of the economy and both countries on the mentioned questions are almost identical. It follows from the above that hypothesis H1 can be considered fully confirmed.

Table 4. Correlations in knowledge protection and knowledge benefits in Czech Republic and Poland

Question 1 – protection of knowledge		Question 2 – benefits of knowledge for employees		Question 3 – benefits of knowledge for organisation	
Items	Pearson	Items	Pearson	Items	Pearson
Know-what	0.92	Develops competences	0.96	Implements strategy	0.96
Know-how	0.92	Builds belonging	0.88	Makes easier to compete	0.91
Know-why	0.97	Increases work efficiency	0.97	Helps right decisions	0.95
Know-who	0.96	Saves time for knowledge	0.90	Improves problem solving	0.92
Basic/core knowledge	0.97	Increases work commitment	0.89	Reduces business risk	0.91
Advanced knowledge	0.92	Increases the creativity	0.87	Innovates from outside	0.88
Innovative knowledge	0.93	Increases self-confidence	0.93	Innovates from inside	0.88
Knowledge of products	0.92	Fulfills self-actualisation	0.89	Increases efficiency	0.91
Knowledge of processes	0.93	Increases competitiveness	0.89	Speeds up reactions	0.88
Knowledge of customers	0.92	Makes easier networks	0.86	Saves resources	0.90
Knowledge of projects	0.89	Helps do jobs	0.91	Improves external relations	0.89
		Improves decisions	0.92	Allows access to finance	0.92
		Helps 'staying in the loop'	0.86	Increases quality	0.89
		Contributes to organisation	0.87	Improves processes	0.88
		Develops ethics code	0.90	Integrates business	0.92
		Builds common language	0.88	Builds memory	0.89
				Shares best practice	0.88
				Reduces expert costs	0.89

Source: the authors' work

Since the samples of respondents were not identical (511 from the Czech Republic – CZ versus 389 from Poland – PL), individual samples had to be normalised for further statistical analysis. The abundance vectors of the most important values x (CZ) and y (PL) were first transformed using percentage abundances into vectors of the same dimensions. Individual frequencies expressed in tenths of a per cent were considered. Therefore, they were multiplied by 10, and the samples expanded to 1,000 values. Simultaneously, the number of items in the questions was reduced, and the contents were connected. In the first question, 10 items were reduced to 7; in the second question, 16 items to 10; and in the third question, 18 items to 10. The data thus reduced were then evaluated among each other and within both countries.

Hypothesis H2 was focused on the existence or non-existence of a correlation between questions 2 and 3, i.e., between the benefits of proper knowledge management for employees versus the benefits for the organisation. When examining the validity of the hypothesis, Pearson's product moment was again used, and a reduced number of items in both questions was considered. As can be seen from Table 5, in most cases, a medium correlation was demonstrated or a small correlation but close in value to the medium correlation. The comparison of countries corresponds to the previous results.

It can therefore be stated that the validity of hypothesis H2 was also confirmed.

Table 5. Correlations of knowledge management benefits for employees and organisation in the Czech Republic and Poland

Benefits for organisation	1. Develops competences		2. Builds belonging		3. Increases work efficiency		5. Increases work commitment		6. Increases the creativity		8. Fulfills self-actualisation		9. Increases competitiveness		11. Helps do jobs		12. Improves decisions		15. Develops code of ethics	
	CZ	PL	CZ	PL	CZ	PL	CZ	PL	CZ	PL	CZ	PL	CZ	PL	CZ	PL	CZ	PL	CZ	PL
1. Implem. strategy	0.42	0.33	0.34	0.35	0.36	0.30	0.32	0.31	0.27	0.25	0.31	0.33	0.31	0.28	0.40	0.36	0.40	0.43	0.33	0.20
2. Enables compete	0.26	0.41	0.29	0.24	0.28	0.36	0.22	0.25	0.26	0.25	0.24	0.33	0.50	0.28	0.27	0.33	0.27	0.43	0.21	0.12
3. Helps decisions	0.37	0.40	0.30	0.34	0.40	0.41	0.34	0.33	0.26	0.29	0.34	0.28	0.30	0.33	0.47	0.35	0.49	0.42	0.33	0.22
4. Improves resolutions	0.36	0.24	0.33	0.27	0.33	0.27	0.32	0.25	0.29	0.29	0.31	0.35	0.23	0.29	0.44	0.35	0.45	0.40	0.35	0.24
5. Reduces risk	0.16	0.05	0.23	0.18	0.16	0.13	0.20	0.21	0.27	0.22	0.17	0.19	0.33	0.22	0.13	0.23	0.12	0.19	0.23	0.33
8. Increases efficiency	0.35	0.22	0.31	0.21	0.39	0.23	0.36	0.24	0.25	0.25	0.37	0.33	0.26	0.36	0.39	0.29	0.44	0.37	0.29	0.22
9. Speeds up reactions	0.28	0.24	0.25	0.24	0.29	0.31	0.34	0.34	0.31	0.24	0.29	0.33	0.28	0.31	0.33	0.33	0.32	0.40	0.32	0.35
10. Saves resources	0.32	0.16	0.33	0.33	0.31	0.31	0.38	0.32	0.28	0.24	0.32	0.33	0.27	0.29	0.30	0.28	0.34	0.32	0.35	0.28
13. Increases quality	0.33	0.21	0.26	0.16	0.26	0.31	0.32	0.25	0.29	0.28	0.30	0.26	0.33	0.20	0.32	0.26	0.32	0.28	0.28	0.19
16. Builds memory	0.30	0.11	0.36	0.18	0.33	0.18	0.38	0.34	0.35	0.32	0.33	0.25	0.33	0.35	0.30	0.29	0.31	0.21	0.45	0.38

Source: the authors' own work

4. Discussion and implications

Being knowledgeable offers many advantages, and it is because knowledge has many forms, contents and senses, and first of all, it contains the very intelligence of the organisation. In this view, Lin (2019) understood knowledge as a capability, or as an object, or as a process. However, and especially on the basis of the confirmed and realised importance of knowledge, knowledge becomes a threatened and endangered organisational resource. Many risks and threats are characteristic of knowledge. Table 1 presents the following knowledge that deserves the greatest protection in an organisation: advanced knowledge and innovative knowledge.

In line with this, knowledge risk implies knowing the probability of those events, which leads to negative consequences in knowledge management (Bratianu, 2018). It is, therefore, important to understand the difference between risk and safety and how that difference is critical for managing the risk while respecting the role of psychological factors when managing the risk (Thekdi and Aven, 2023). In this view, risk (knowledge) management is the means for an organisation to define a security strategy that addresses the threats the organisation is exposed (Labunets et al., 2023).

Zieba (2020) attributes the following to significant risks of knowledge in knowledge-intensive business: the departure of an employee, problems in communication and knowledge flow, lack of codified/documented knowledge, possession of false knowledge or inability to properly use true knowledge, the contradiction of knowledge obtained from various sources, etc.

Results in Tables 2 and 3 confirm that the knowledge and appropriately performed knowledge management in the organisation have considerable benefits. Positives of/from knowledge flow to employees, managers, and the organisation. The most beneficial for employees is proper knowledge management, which enables employees to make the right decisions and solve problems faster. For organisations, the most helpful is an increase in the efficiency of the organisation's activities. This is in accordance with the works of many authors, e.g., Di Vaio et al. 2021; Ge and Liu 2022; etc.

5. Implications

The classification of knowledge risk proposed by this paper's authors and the presented survey results confirmed the need for the protection of knowledge, i.e., the existence of various knowledge risks, both in the Czech Republic and Poland. Through this, the literature acquires a new cultivation contribution and strong emphasis. This directly leads to the necessity of applying an uncompromising systemic and multidisciplinary approach to knowledge, and knowledge risks are even more severe than before. Knowledge from an ever-increasing number of managerial-behavioural and organisational sciences must be brought together and graded, not only those that have been established for a long time but also those that are emerging or acquiring new content and philosophy. To them can be assigned (in addition to the traditional theory of organisation, management, organisation behaviour, strategic management, knowledge management, social psychology, etc.) primarily newer sciences, such as science on motivation, human potential and talent development, security management, law management, knowledge risk management, etc. Above all, to view all new scientific knowledge through the prism of safety versus threats within organisations, as well as threats originating in the surrounding environment and affecting the very essence of the social meaning of science, knowledge, and progress.

Therefore, capturing and packaging security risk analysis of knowledge bases requires careful consideration and is not trivial (Labunets et al., 2023). This idea fully underlines the validity of hypothesis H1, but above all, hypothesis H2 and the complex premise of this paper: knowledge has great importance and requires increased safety.

6. Conclusion

Summarising the above considerations, building awareness of the role of knowledge and exploiting the full potential of all knowledge in an organisation or society consists of creating and consolidating the importance of organisational knowledge in the minds of employees and managers. This is because excellent ideas, unusual patterns, and inventive solutions are the most valuable and, simultaneously, the most endangered in an organisation. Systemic and systematic removal of all risks and threats to knowledge in the organisation is critical.

The theoretical and empirical analysis and synthesis confirmed that despite specific sectoral differences, knowledge must be protected in public security and public administration and other organisations. By confirming this assumption, the first scientific aim of the paper was fulfilled. The survey confirmed strong correlations between the need for knowledge protection and the benefits of knowledge and knowledge management in both the participating countries (Czech Republic and Poland) and thus enabled the second and third aims of the paper to be fulfilled. With this, the survey acquired not only an intersectoral but also an international scope.

The paper's original contribution consists further in the proposal of new classification of security/law knowledge risks: (a) natural internal-organisational vulnerability of knowledge, where legal sanctions are rather rare; (b) the imperfection of the protection system or the deliberate theft of sensitive information, where a civil-law dispute or criminal prosecution arise; (c) damage or theft of knowledge, registers, protocols of public security organisations and know-how in the security of the state, where criminal penalties are significant. On the one hand, it organises

the proposed classification of risks that organisations face today, and on the other hand, it indicates areas in which knowledge should be protected.

A final contribution to the development of knowledge and security theory is the model design of building awareness of the role of knowledge and its security in organisationan. The knowledge protective process must be consistent, and the actions taken must be tailored to the needs and expectations of organisations' employees, managers, partners and stakeholders, especially society and all inhabitants and their safety. The greater awareness of the role of knowledge in the cognitive capabilities of all participants, the easier it is for them to accept the necessary actions to be taken on knowledge and on the basis of knowledge.

Regarding the proposed model, suitable actions can include, e.g., talks, meetings, workshops, training and coaching. It is also essential to present both the positive effects of taking action and the negative consequences of not taking such action in organisations. In turn, the presentation of the benefits that the actions mentioned above bring to all significantly increases the acceptance of the concept.

Managers and/or state executives should play a unique role in this. If they don't possess knowledge of the role of knowledge, don't know and understand the essence of the majority of existing knowledge risks, don't show understanding and acceptance of the concept and don't engage themselves in its realisation. They cannot expect employees and inhabitants to appreciate the role of knowledge and its securitisation in the organisation and society.

To it, organisations should better use and protect their knowledge so that it continues to be a source of sustainable progress, security and benefit to society. With the above in mind, the authors plan further research on knowledge security.

Despite the authors' efforts to process the article at the highest possible quality level, it is necessary to mention some basic limitations. First, it is a geographical limitation. The article draws on empirical data from a survey conducted in two Central European countries. It is, therefore, possible that surveys in other countries would either yield different results, which would draw attention to the differences in various geographical areas in the perception of the importance of knowledge and the necessity of its protection or would yield similar results, which would more strongly confirm common aspects, without regardless of the diversity of historical and cultural roots.

The second limitation concerns the survey method. The survey obtained data through a questionnaire. Although the advantages of this quantitative method are apparent, in the future, it would be advisable to supplement the battery of techniques with one of the qualitative methods, for example, interviews, narratives, analysis of the work diaries of knowledge and/or safety managers, etc.

The third limitation is the one-time nature of the conducted study. It would also be appropriate to continue with further meta-analytical efforts and to conduct comparative research, examining time relations and logic perspectives of awareness of knowledge benefits and threats, namely by meta-analyses of research of other author teams from a longer time perspective. The comparison and resulting synthesising can significantly shift the limits of research knowledge.

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