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Article

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Barriers to Sustainable Management of Organizational Intellectual Capital

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Abstract: In the global economy, intellectual capital management is a strategically important resource that affects the market value of organizations. Efficient management of intellectual capital requires the use of new management methods and techniques. One of them is knowledge management, which, in particular, focuses on removing barriers to knowledge sharing. The survey was conducted among employees of the Glogow, Jawor and Trzebnica counties, and the results constitute a pilot study. The conclusions from the collected research results are surprising and imply the need to conduct research on a larger scale in the area of human capital. The collected results provide information to management staff in the field of talent management and knowledge. The results may constitute the basis for developing succession plans, succession plans and employee training. Additionally, the results can help recruiters create profiles of candidates with specific competencies. The main aim of the study was to analyse and evaluate the personnel management process in the Glogow, Jawor and Trzebnica poviats. The use of various research methods made it possible to achieve the intended research goals. The basic research tool used was a survey. Analyses of the literature, research reports, and statistical summaries were treated as a complement to the main research methods. Research and statistical data indicate that among smaller companies in Lower Silesia, there is a need for development programs related to acquiring, collecting, and sharing knowledge. The study identified a number of factors that constitute a significant barrier to the development of employees of the surveyed companies. They allowed us to verify the relationship between the factors that constitute the greatest barrier to the learning process and the impact of the company's size on it. The relationship between the barriers to intellectual development that constitute the greatest threat to the company and the factors that make it difficult for the company to recruit employees with the highest intellectual capital were also verified.

Keywords: human capital; intellectual capital; knowledge management; relational capital; structural capital; sustainable development; talent management.
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1. Introduction. Currently, companies are trying to innovate and gain a competitive advantage through innovative ideas. This pursuit has led to the emergence of new areas and concepts in management. Human capital and the related management of knowledge workers are gaining special importance. In business and in scientific publications, the growing role of knowledge workers, talented people who can influence the fate of the organization, is recognized. This perfectly indicates the direction of changes in modern companies (Sus, 2017). Effective management of a company's structural and organizational capital is a significant challenge in strategic management. However, it has been found that integrating and utilizing the intellectual capital management process within an organization's strategy can lead to achieving exceptional results and establishing a prominent position in the labour market. At the end of the last century, it was believed that material possessions reflected the position or success of a company. These goods included buildings, machinery and financial results (Kucera & Dvorakova, 2023). With increasing globalization, it was noted that not only material resources determine the choice of market or being competitive. Contemplation has shifted towards influences that are inherently invisible and intangible. The coexistence of human experience, IT infrastructure resources, interpersonal relationships and relational capital determines a company's success. The effective management of intellectual capital is used as part of creating knowledge resources. Its components should be developed for practical use. In addition, it promotes a work environment that supports scientific research and greater importance and recognition of employees as the company's key and most valuable resource. Small businesses are an important sector of the Polish economy and account for 43.4% of all actively innovative enterprises that introduced new or improved existing products or business processes in 2018–2020. The rapid development of these enterprises is characterized by flexibility, manifested by quick and effective "adjustment" to the turbulent environment due to the competence of employees (Skowronska, 2023; Czerniak & Stefanski, 2015). Despite the lack of diagnostic models for managing the intellectual capital of organizations in small and medium-sized enterprises, they show selected activities that are characteristic of such models. Despite the lack of full-screen solutions in this area, entrepreneurs implement them in a simplified way and encounter many barriers in this area (Gross-Golacka et al., 2022). The analysis shows that entrepreneurs in the surveyed counties have enormous potential for the development of small businesses. It is therefore necessary to learn about the factors that constitute barriers to the development of human capital in SMEs. Therefore, the following questions were asked in the conducted research:

- What factors constitute a barrier to the implementation of the organization?
- Learning process in SMEs in Lower Silesia?
- What are the barriers to the development of intellectual capital in SMEs in Lower Silesia?
- What are the barriers to recruiting employees with the highest intellectual capital among SMEs in Lower Silesia?

2. Literature Review.

2.1. The essence of intellectual capital management

Sustainable (Brzozowska et al., 2021) intellectual capital management is a fairly new trend in management research (especially in Poland). The intensity of changes in the environment caused practitioners and scientists to pay attention to the potential economic development of enterprises based on the concept of structural and organizational capital. It has been noted that it plays the main role in gaining a competitive advantage. According to Armstrong, human capital is the competence of employees to implement innovative solutions (Radaelli et al., 2011; Armstrong, 2016). In the field of management, intellectual capital is identified as the "hidden assets of the company" (Pobrotyn, 2012; Edvinsson & Malone, 2001; Sokolowska, 2005). In turn, E. Skrzypek defines intellectual capital as the added value that is the sum of employee competences (Balcerzyk, 2021; Kucera & Dvorakova, 2023). The resources available enter the organization's learning process; therefore, they are constantly subject to change (Wu et al., 2004; Perkmann & Walsh, 2007; Skrzypek & Sokol, 2009; Chen & Yang, 2012; He, 2012; Berzkalne & Zelgalve, 2014; Tian et al., 2022). Intellectual capital, also called knowledge capital, is the company's "hidden" resources, including both the competences of the company's employees and what remains in the company even after they leave (Madsen & Leiblein, 2015; Sopinska, 2005). It includes human, organisational and structural capital (Serrano Cinca et al., 2003; Gates & Langevin, 2010; Dumay, 2016; Li et al., 2017; Bayraktaroglu et al., 2019; De Villiers & Sharma, 2020; Dabic et al., 2022). Human capital is a term that is controversial even today. Supporters consider personnel management to be a revolution in the way people are managed, treating them as assets rather than costs, and they willingly take up challenges related to the essence of human capital (Mura & Longo, 2012). Opponents, however, assume that this is a temporary trend in human resources management, feeling discouraged in the face of the influx of tools and techniques supporting human capital management. The

structure of human capital can be examined in two ways. On the one hand, human capital can be approached from an individual perspective. In this case, the structure will be influenced by features such as knowledge, health, psychophysical conditions, ethical values and norms, motivation and goals, attitudes, abilities and skills. On the other hand, human capital from a team perspective is particularly influenced by "competencies of individual capitals with an emphasis on achieving a synergistic effect, which arises as a surplus of the positive difference between the sum of the results of the activities of individual units and the overall effect of the activities of the same people" (Kutzner, 2020). An organization is created mainly by interpersonal relationships (Todericiu & Stanit, 2015; Ardito et al. 2021).

The intellectual capital of an organization consists of two basic elements. It consists of human and structural capital. Human capital includes the competences of a company's employees (Wijaya & Utama, 2023; Kozuch & Kozuch, 2008). Structural capital for owned patents, technologies, databases. (Edvinsson & Malone, 2001). All components of intellectual capital are closely interconnected (Cortes et al., 2013). Its power comes from the combination of all its elements (Beyer, 2013). Human capital is therefore a resource that is a source of future income and services of a specific value (Subramaniam & Youndt, 2005; Longo et al., 2009; Cabello-Medina et al., 2011; Steinmo & Rasmussen, 2018; Kaczmarek, 2005). Its distinguishing feature is the distinct way in which this capital and physical and financial capital function. First, human capital cannot be sold because it is an internal feature (Kozuch & Kozuch, 2008). Similarly, Beyer (2013) believes that “structural capital is the result of employees' actions and, unlike human capital, may constitute the property of the enterprise”. This approach accelerates the exchange of knowledge both inside and outside organizational structures. (Aryanto et al., 2015; Hajro et al., 2017). Customer capital, i.e., relational capital with the external environment, is created by establishing all kinds of relationships with customers and external recipients. Although these assets are not physical, they largely determine the value of the company and its perception by customers and competitors. Structural capital is extremely important when operating in a changing environment. The flexibility of managers and the organization itself creates opportunities to adapt to market needs. Organizational capital is created through investments that improve the knowledge management process, enabling its collection, safe storage and sharing within the organization (Mura et al., 2012). Innovation capital refers to legally protected intellectual property, commercial rights and all talents and competences of employees. Process capital is practical knowledge used to create value in organizations in the form of various types of tools and techniques for efficient functioning. Thanks to them, the organization realizes the company's vision (Bernat & Kulas, 2011). According to this division, intellectual capital has specific features:

- is stable and permanent, including patents, and may be variable;
- it is the starting element for value creation or the end of the knowledge creation process;
- It is created by cause and effect relationships during the knowledge creation process.

Intellectual capital is the "added value" of an organization (Kalkan et al., 2014). Intellectual capital management is based on hard-to-measure assets that are difficult to measure. E. Bombiak lists five types of barriers that influence the intellectual capital management process: mental and cultural barriers. competence, organizational and financial (Bombiak, 2013; Czainska, 2013; 2020; Gross-Golacka et al., 2020). These barriers significantly limit the prospects for building intellectual capital. Among the features of the company's organizational culture that constitute a barrier in the process of organizational learning can include the following:

- creating a vision of the future based solely on the opinion of top management;
- internal competition between parts of the organization;
- accumulating knowledge for personal gain;
- lack of trust in the organization;
- lack of a holistic view of the organization (fragmented thinking),
- treating organizational learning activities as additional work;
- treating unusual events as a threat;
- punishing for mistakes made;
- lack of tolerance towards different opinions;
- living only in past solutions;
- practical management treatment for employees.

According to Nonaka & Takeuchi (2000), the optimal model of knowledge conversion is the "middle-top-bottom" model. The "top-down" and "bottom-up" models lead to only partial organizational learning. The first

limits the use of tacit knowledge, and the second limits the creation and use of explicit knowledge. Another barrier to the organizational learning process may be the organizational structure. However, opinions on this subject are divided. Some researchers believe that in highly centralized organizations, the process of organizational learning can occur in a long-term and effective way (Antal et al., 2001). Others claim that a large span of management, extensive formalization, lack of employee participation mechanisms and individualization of work largely limit the proper course of the organizational learning process. Additionally, the following hypotheses were formulated:

- H1: There is a relationship between identifying the factors that constitute the greatest barrier to the implementation of the organizational learning process in the company and the size of the company.
- H2: There is a relationship between the factors that constitute the greatest barrier to the implementation of the organizational learning process in the company and the type of industry.
- H3: There is a relationship between the barriers to intellectual development that constitute the greatest threat to the company and the factors that make it difficult for the company to recruit employees with the highest intellectual capital.
- H4: There is a relationship between the indicated barriers to intellectual development and the barriers to implementing the organizational learning process in the company.
- H5: There is a relationship between factors that make it difficult to recruit employees with the highest intellectual capital and barriers to implementing the organizational learning process in the company.

3. Methodology and research methods.

3.1. Data

The questionnaire was administered to SMEs from September to December 2022. The key to this research was the proper selection of the research sample. The authors of the article did not have the opportunity to use probabilistic techniques when selecting the research sample. Therefore, they used the snowball method to select the sample. After conducting a diagnostic survey, the results were collected, systematized and subjected to statistical analysis. As part of this, correlational research was performed. They involved examining individual variables to determine whether they were statistically related.

3.2. Methodological details

To analyse the collected results, the IBM SPSS Statistics 26 package was used. It was used to perform cross-tabulations with a chi-square test of independence. The level of significance in this chapter was $\alpha = 0.05$. To check the essence of the relationship, a post hoc analysis was performed taking into account the values of the adjusted residuals (Beasley & Schumacker, 1995). The article's literature review was conducted by analysing materials focused on organizational intellectual capital management, knowledge management, and talent management. It encompassed primary sources as well as secondary sources, such as reports from similar research endeavours. Combining research using a survey questionnaire, management literature and research reports on similar topics, the researchers aimed to provide a comprehensive understanding of the subject under scrutiny and to uphold the research's integrity. Employing various methodologies aimed to ensure consistency in the empirical foundation of their conclusions. The primary method chosen was a diagnostic survey supported by other complementary approaches. This survey, conducted through a questionnaire developed from the literature review findings, targeted employees of Lower Silesian companies, with independent variables including gender, age, company size, workplace location, and industry. In the survey, 335 individuals from small and medium-sized enterprises were sampled, and the participants were evenly distributed by gender: 46.87% were women, and 53.13% were men.

The majority of employees belonged to production companies, constituting 45.87% of the respondents. A significant portion also worked in the trade industry (14.43%) and transportation sector (7.16%). The remaining respondents were employed in various sectors, such as finance and construction. The respondents were primarily from SME enterprises with up to 200 employees. Of these, 26.56% worked in small companies (up to 20 employees), while 38.21% worked in companies with 21 to 50 employees. Approximately 35.22% were employed in larger companies with 51 to 200 employees. In terms of age distribution, the majority (65.37%) were young adults aged 19-29 years, followed by 24.78% aged 30-40 years, and the smallest group (9.85%) were over 40 years old. Notably, the respondents were mostly young individuals in the early stages of their professional careers, where career choices and focus are being solidified. Approximately 57.02% of the respondents lived in villages and small towns with populations of up to 5,000 inhabitants. A sizable portion resided in towns with populations ranging from 6,000 to 25,000 inhabitants (34.03%). The remainder primarily lived in towns with populations up to 50,000 (approximately 8.96%).

4. Results and discussion.

In many scientific studies, human capital is treated as a component with various characteristics. He is characterized by the ability to think analytically, creativity in actions, emotional intelligence, honesty, credibility and the ability to cooperate in a team. A company based on intellectual capital is characterized by flexibility, openness and adaptability. Therefore, an attempt was made to identify barriers to its development. The organizational structure of the company and the span of management are important factors determining the development of the company's structural capital. The relationship between identifying the factors that constitute the greatest barrier to implementing the organizational learning process in the company and the size of the company was statistically significant, although weak (Table 1).

Table 1. The relationship between the factors that constitute the greatest barrier to organizational learning and the size of the enterprise (question: Which factors do you think constitute the greatest barrier to implementing the organizational learning process in your company?)

Answers		Enterprise size			
		Micro	**Small**	**Medium-sized**	**Total**
Creating a vision of the future based only on the opinion of top management	*N*	20	46	40	106
	%	39.2%	27.7%	33.9%	31.6%
	Rest	1.30	-1.50	0.70	
Internal competition between parts of the organization	*N*	3	34	20	57
	%	5.9%	20.5%	16.9%	17.0%
	Rest	**-2.30**	1.70	0.00	
Accumulating knowledge for personal gain	*N*	4	14	7	25
	%	7.8%	8.4%	5.9%	7.5%
	Rest	0.10	0.70	-0.80	
Lack of trust in the organization	*N*	10	14	16	40
	%	19.6%	8.4%	13.6%	11.9%
	Rest	1.80	**-2.00**	0.70	
Treating organizational learning activities as extra work	*N*	0	22	12	34
	%	0.0%	13.3%	10.2%	10.1%
	Rest	**-2.60**	1.90	0.00	
Treating unusual events as a threat	*N*	4	7	9	20
	%	7.8%	4.2%	7.6%	6.0%
	Rest	0.60	-1.30	0.90	
Punishment for mistakes made	*N*	3	17	0	20
	%	5.9%	10.2%	0.0%	6.0%
	Rest	0.00	**3.30**	**-3.40**	
No tolerance for different opinions	*N*	7	12	14	33
	%	13.7%	7.2%	11.9%	9.9%
	Rest	1.00	-1.60	0.90	

Note: $\chi^2(14)$ – 34.87; Mr – 0.002; 5th c – 0.28.

Sources: developed by the authors.

Post hoc analysis showed that microenterprises were less likely to mention internal competition between parts of the organization and to treat organizational learning activities as additional work. In turn, in small enterprises, lack of trust in the organization was less often mentioned, and punishment for mistakes was more often mentioned, while the latter answer was mentioned less often in medium-sized enterprises. The relationship between identifying the factors that constitute the greatest barrier to implementing the organizational learning process in the company and the type of industry was statistically significant and moderately strong (Table 2).

Post hoc analysis revealed that in the construction industry, lack of trust in the organization and punishment for mistakes were more often mentioned. In the manufacturing industry, the accumulation of knowledge for personal gain and lack of tolerance for different opinions were mentioned more often, while the lack of trust in the organization and punishment for mistakes were less often mentioned. In the transport industry, the prevailing trend was to treat organizational learning activities as additional work and to treat unusual events as a threat. Employees of the trade industry were much more likely to indicate a lack of trust in the organization and less likely to create a vision of the future only on the basis of the opinion of the top management and a lack of tolerance towards different opinions.

Table 2. The relationship between factors that constitute the greatest barriers to organizational learning and the type of industry (question: Which factors do you think constitute the greatest barrier to implementing the organizational learning process in your company?)

Answers		Type of activity						
		Construction	**Finance and insurance**	**Production**	**Transport**	**Trade**	**Other**	**Total**
Creating a vision of the future based only on the opinion of top management	*N*	0	6	49	10	6	35	106
	%	0.0%	37.5%	31.8%	41.7%	13.3%	39.8%	31.6%
	Rest	-1.90	0.50	0.10	1.10	**-2.80**	1.90	
Internal competition between parts of the organization	*N*	0	4	28	3	7	15	57
	%	0.0%	25.0%	18.2%	12.5%	15.6%	17.0%	17.0%
	Rest	-1.30	0.90	0.50	-0.60	-0.30	0.00	
Accumulating knowledge for personal gain	*N*	0	3	18	0	4	0	25
	%	0.0%	18.8%	11.7%	0.0%	8.9%	0.0%	7.5%
	Rest	-0.80	1.80	**2.70**	-1.40	0.40	**-3.10**	
Lack of trust in the organization	*N*	4	3	11	0	19	3	40
	%	50.0%	18.8%	7.1%	0.0%	42.2%	3.4%	11.9%
	Rest	**3.40**	0.90	**-2.50**	-1.90	**6.70**	**-2.90**	
Treating organizational learning activities as extra work	*N*	0	0	12	7	3	12	34
	%	0.0%	0.0%	7.8%	29.2%	6.7%	13.6%	10.1%
	Rest	-1.00	-1.40	-1.30	**3.20**	-0.80	1.30	
Treating unusual events as a threat	*N*	0	0	10	4	3	3	20
	%	0.0%	0.0%	6.5%	16.7%	6.7%	3.4%	6.0%
	Rest	-0.70	-1.00	0.40	**2.30**	0.20	-1.20	
Punishment for mistakes made	*N*	4	0	4	0	3	9	20
	%	50.0%	0.0%	2.6%	0.0%	6.7%	10.2%	6.0%
	Rest	**5.30**	-1.00	**-2.40**	-1.30	0.20	**2.00**	
No tolerance for different opinions	*N*	0	0	22	0	0	11	33
	%	0.0%	0.0%	14.3%	0.0%	0.0%	12.5%	9.9%
	Rest	-0.90	-1.40	**2.50**	-1.70	**-2.40**	1.00	

Note: $\chi^2(30)$ – 151.48; Mr – <0.001; 5th c – 0.30

Sources: developed by the authors.

Then, we checked whether there was a relationship between two survey questions, i.e., indicating the barriers to intellectual development that constitute the greatest threat to the company and factors that make it difficult for the company to recruit employees with the highest intellectual capital (Table 3).

Table 3. The relationship between barriers to intellectual development and factors making it difficult for the company to recruit employees with the highest intellectual capital (question: Which potential barriers to the development of your company's intellectual capital pose the greatest threat to the company?)

Answers		Which factors make it difficult for your company to recruit employees with the highest intellectual capital?							
		AND	**B**	**C**	**D**	**E**	**F**	**G**	**Total**
Obtaining financial resources for employee development	*N*	6	11	3	14	8	6	0	48
	%	12.0%	20.4%	15.8%	12.8%	14.5%	21.4%	0.0%	14.3%
	Rest	-0.50	1.40	0.20	-0.50	0.10	1.10	-1.90	
Acquiring employees with appropriate qualifications	*N*	10	7	0	15	4	10	0	46
	%	20.0%	13.0%	0.0%	13.8%	7.3%	35.7%	0.0%	13.7%
	Rest	1.40	-0.20	-1.80	0.00	-1.50	**3.50**	-1.80	
Staff turnover	*N*	15	22	10	31	10	9	7	104
	%	30.0%	40.7%	52.6%	28.4%	18.2%	32.1%	35.0%	31.0%
	Rest	-0.20	1.70	**2.10**	-0.70	**-2.30**	0.10	0.40	
Lack of leadership skills among management staff	*N*	13	3	6	27	13	3	3	68
	%	26.0%	5.6%	31.6%	24.8%	23.6%	10.7%	15.0%	20.3%
	Rest	1.10	**-2.90**	1.30	1.40	0.70	-1.30	-0.60	
Disorganization of work (lack of managerial skills among management staff)	*N*	6	11	0	22	20	0	10	69
	%	12.0%	20.4%	0.0%	20.2%	36.4%	0.0%	50.0%	20.6%
	Rest	-1.60	0.00	**-2.30**	-0.10	**3.20**	**-2.80**	**3.40**	

Note: A – Changes in employees' life priorities; B – Shrinking talent resources and limited sources; C – Cultural differences; D – Narrow range of employment options; E – Deficiencies in modernizing the work environment; F – Fear of having to conform to corporate culture; G – Access to the global labour market; $\chi^2(30)$ – 68.95; Mr – <0.001; 5th c – 0.23.

Sources: developed by the authors.

The analysed relationships were statistically significant and weak. Post hoc analysis showed that in companies indicating that shrinking talent resources and their limited sources were factors hindering the recruitment of employees, there was a lack of leadership skills among the management staff. In the case of cultural differences as a hindering factor, staff turnover was more often indicated as a barrier, and work disorganization (lack of managerial skills among the management staff) was less often indicated. In turn, in companies that indicated the lack of modernization of the environment as a hindering factor, the opposite was true—they more often indicated work disorganization (lack of managerial skills among the management staff) as a barrier, and staff turnover less often. In the case of fear of having to comply with corporate culture, the barrier was more likely to be the recruitment of employees with appropriate qualifications and less likely to be disorganized work (lack of managerial skills among the management staff). In the case of the last factor—access to the global labour market—work disorganization (lack of managerial skills among the management staff) was more frequently mentioned.

Then, we checked whether there was a relationship between the indicated barriers to intellectual development that constitute the greatest threat to the company and the barriers to implementing the organizational learning process in the company (Table 4).

Table 4. The relationship between barriers to intellectual development and barriers to implementing the organizational learning process in the company (question: Which potential barriers to the development of your company's intellectual capital pose the greatest threat to the company?)

Answers		**Which factors do you think constitute the greatest barrier to implementing the organizational learning process in your company?**								
		AND	**B**	**C**	**D**	**E**	**F**	**G**	**H**	**Total**
Obtaining financial resources for employee development	*N*	21	4	0	4	6	6	3	4	48
	%	19.8%	7.0%	0.0%	10.0%	17.6%	30.0%	15.0%	12.1%	14.3%
	Rest	1.90	-1.70	**-2.10**	-0.80	0.60	**2.10**	0.10	-0.40	
Acquiring employees with appropriate qualifications	*N*	17	0	7	4	11	0	0	7	46
	%	16.0%	0.0%	28.0%	10.0%	32.4%	0.0%	0.0%	21.2%	13.7%
	Rest	0.80	**-3.30**	**2.20**	-0.70	**3.30**	-1.80	-1.80	1.30	
Staff turnover	*N*	thirty	31	8	12	10	0	6	7	104
	%	28.3%	54.4%	32.0%	30.0%	29.4%	0.0%	30.0%	21.2%	31.0%
	Rest	-0.70	**4.20**	0.10	-0.20	-0.20	**-3.10**	-0.10	-1.30	
Lack of leadership skills among management staff	*N*	15	16	7	6	3	10	3	8	68
	%	14.2%	28.1%	28.0%	15.0%	8.8%	50.0%	15.0%	24.2%	20.3%
	Rest	-1.90	1.60	1.00	-0.90	-1.80	**3.40**	-0.60	0.60	
Disorganization of work (lack of managerial skills among management staff)	*N*	23	6	3	14	4	4	8	7	69
	%	21.7%	10.5%	12.0%	35.0%	11.8%	20.0%	40.0%	21.2%	20.6%
	Rest	0.30	**-2.10**	-1.10	**2.40**	-1.30	-0.10	**2.20**	0.10	

Note: A – Creating a vision of the future based solely on the opinion of top management; B – Internal competition between parts of the organization; C– Accumulating knowledge for personal gain; D – Lack of trust in the organization; E – Treating organizational learning activities as additional work; F – Treating unusual events as a threat; G – Punishment for mistakes made; H – No tolerance towards different opinions; $\chi^2(30)$ – 86.72; Mr – <0.001; 5th c – 0.25.

Sources: developed by the authors.

The analysed relationships were statistically significant and weak. Post hoc analysis showed that in companies indicating internal competition between individual elements of the organization constituting a barrier in the process of organizational learning, staff turnover was more often mentioned, and the recruitment of employees with appropriate qualifications and work disorganization (lack of managerial skills among the management staff) were less often mentioned as barriers to human capital development. In turn, in companies where the indicated barrier to learning was the accumulation of knowledge for personal benefits, the most frequently mentioned barrier was acquiring employees with appropriate qualifications and, less often, the need to obtain financial resources for employee development. Among companies where the indicated barrier to learning was lack of trust in the organization, work disorganization (lack of managerial skills among the management staff) was mentioned more often. In turn, in the case of companies where the indicated barrier to learning was treating organizational learning activities as additional work, acquiring employees with appropriate qualifications was mentioned more often. In a situation where the indicated barrier to learning was treating unusual events as a threat, the lack of leadership skills among management staff and obtaining financial resources for employee development were mentioned more often, and staff turnover was less common. In the case of punishment for mistakes as a barrier to learning, disorganization of work (lack of managerial skills among management staff) was much more often indicated as a barrier to the development

of human capital. Then, we checked whether there was a relationship between factors hindering the recruitment of employees with the highest intellectual capital and barriers to the implementation of the organizational learning process in the company (Table 5).

Table 5. The relationship between factors making it difficult to recruit employees with the highest intellectual capital and barriers to implementing the organizational learning process in the company (question: Which factors make it difficult for your company to recruit employees with the highest intellectual capital?)

Answers		Which factors do you think constitute the greatest barrier to implementing the organizational learning process in your company?								
		AND	**B**	**C**	**D**	**E**	**F**	**G**	**H**	**Total**
Changes in employees' life priorities	*N*	26	10	3	0	4	4	0	3	50
	%	24.5%	17.5%	12.0%	0.0%	11.8%	20.0%	0.0%	9.1%	14.9%
	Rest	**3.40**	0.60	-0.40	**-2.80**	-0.50	0.70	-1.90	-1.00	
Shrinking talent pools and limited sources	*N*	0	13	0	17	6	3	4	11	54
	%	0.0%	22.8%	0.0%	42.5%	17.6%	15.0%	20.0%	33.3%	16.1%
	Rest	**-5.50**	1.50	**-2.30**	**4.80**	0.30	-0.10	0.50	**2.80**	
Cultural differences	*N*	9	0	4	0	3	3	0	0	19
	%	8.5%	0.0%	16.0%	0.0%	8.8%	15.0%	0.0%	0.0%	5.7%
	Rest	1.50	**-2.00**	**2.30**	-1.70	0.80	1.90	-1.10	-1.50	
Narrow range of employment options	*N*	38	20	11	12	10	0	3	15	109
	%	35.8%	35.1%	44.0%	30.0%	29.4%	0.0%	15.0%	45.5%	32.5%
	Rest	0.90	0.50	1.30	-0.40	-0.40	**-3.20**	-1.70	1.70	
Lack of modernization of the work environment	*N*	14	4	7	8	11	3	4	4	55
	%	13.2%	7.0%	28.0%	20.0%	32.4%	15.0%	20.0%	12.1%	16.4%
	Rest	-1.10	**-2.10**	1.60	0.70	**2.60**	-0.20	0.40	-0.70	
Fear of having to conform to corporate culture	*N*	10	6	0	0	0	3	9	0	28
	%	9.4%	10.5%	0.0%	0.0%	0.0%	15.0%	45.0%	0.0%	8.4%
	Rest	0.50	0.60	-1.60	**-2.00**	-1.90	1.10	**6.10**	-1.80	
Access to the global labour market	*N*	9	4	0	3	0	4	0	0	20
	%	8.5%	7.0%	0.0%	7.5%	0.0%	20.0%	0.0%	0.0%	6.0%
	Rest	1.30	0.40	-1.30	0.40	-1.60	**2.70**	-1.20	-1.50	

Note: A – Creating a vision of the future based solely on the opinion of top management; B – Internal competition between parts of the organization; C – Accumulating knowledge for personal gain; D – Lack of trust in the organization; E – Treating organizational learning activities as additional work; F – Treating unusual events as a threat; G – Punishment for mistakes made; H – No tolerance towards different opinions; $\chi^2(30)$ – 164.88; Mr – <0.001; 5th c – 0.29.

Sources: developed by the authors.

The analysed relationships were statistically significant and weak. Post hoc analysis showed that in companies that indicated creating a vision of the future based only on the opinion of top management as a barrier to the implementation of the organizational learning process, changes in employees' life priorities were much more likely to be indicated, and shrinking talent resources and their limited sources were less frequently indicated as factors hindering recruiting employees. In companies that indicated internal competition between parts of the organization as a barrier, cultural differences and deficiencies in modernizing the work environment were less frequently mentioned. On the other hand, in companies where the main barrier to learning was the accumulation of knowledge for personal benefits, cultural differences were more often noted, and less often, the shrinking talent resources and their limited sources. Among companies where the lack of trust in the organization was a barrier to learning, shrinking talent resources and limited sources were more often mentioned, and changes in employees' life priorities and the fear of having to conform to the corporate culture were less frequently mentioned. In the case of companies where the main barrier to learning was treating organizational learning activities as additional work, deficiencies in modernizing the work environment were more often mentioned as difficulties. In a situation where the indicated barrier to learning was treating unusual events as a threat, access to the global labour market was mentioned more often, and a narrow range of employment options was mentioned less often. In the case of punishment for mistakes as a barrier to learning, the fear of having to conform to the corporate culture is much more often indicated. In the latter case, when the main barrier to learning was the lack of tolerance towards different opinions, shrinking talent pools and their limited sources were more often indicated as hindering factors.

5. Conclusions. Research shows that surveyed employees attach great importance to the intellectual capital of the organization. This capital is their knowledge and capabilities. Intellectual capital is perceived primarily as the intellectual clarity of employees, their creative potential and their ability to innovate. For this reason, it is often referred to as "organizational wealth" or "organizational treasure" in the literature. It is

perceived as a driving force for economic advancement and a pathway to achieving success. In today's business world, people are becoming increasingly important resources. Companies that want to develop as learning organizations must invest in their employees, supporting their continuous development, expanding skills, sharing knowledge and promoting self-learning. Effective management of human and organizational capital also plays a key role in achieving success. A modern company is characterized by flexibility and openness to change, and cooperation between various departments is crucial. Information flows freely, and people cooperate, support and give advice to each other. It is characterized by ease of adaptation to a changing environment, efficient response to changes, and often anticipating changes in the business environment. Nevertheless, research shows that planning for the future is mainly based on the vision of top management. The effectiveness of a modern organization is determined by employees' willingness to constantly improve, share knowledge and gain new experiences. The respondents agreed that effective intellectual capital management brings real benefits to the company. These benefits include increasing the value of intellectual capital, its development, collecting and processing knowledge resources and sharing them, as well as promoting creativity. However, research shows that companies face significant difficulties in recruiting talented employees. Additionally, the lack of leadership competencies among management staff makes it difficult to effectively manage intellectual capital, which often leads to employee turnover in the surveyed companies. In today's business, people are of key importance—they are the foundation for creating human capital. It is from his ideas, motivation and needs that knowledge is born, which is then processed, shared and disseminated thanks to interpersonal relationships within the company. Knowledge therefore becomes a strategic resource for an organization that strives for continuous development and learning. Initially, they hindered the development of the organization's intellectual learning, especially regarding issue management. The greatest problems in this regard are star employees with many years of experience. Medical management should also include medical evaluation. It is difficult to assess, to any extent, an employee's knowledge after training and practical application of this knowledge. On the other hand, excessive formalization and a rigid hierarchical structure hinder development.

Therefore, it is important to minimize formalization and encourage cross-departmental cooperation, promoting comprehensive accountability for company termination. Effective communication between employees and their supervisors is crucial for facilitating knowledge transfer within an organization. When communication channels are open and transparent, the exchange of information and knowledge occurs more swiftly and effectively. This fosters trust among employees towards their supervisors, as they perceive them as competent and reliable in their roles. As a result, the overall process of work and knowledge transfer becomes smoother and more efficient. Research has shown that organizing team meetings and conferences is an effective way of organizing collected information. These types of events build a sense of common identity, facilitate the establishment of good cooperative relationships and promote the sharing of knowledge. Sharing knowledge leads to an increase in speed and efficiency of action. In the conducted research, the relationship between identifying the factors that constitute the greatest barrier to the implementation of the organizational learning process in the company and the type of industry was statistically significant and moderately strong. Employees treated activities related to organizational learning as additional work. In the face of increasing competition in the global market, companies are forced to maximize profits by increasing operational efficiency. Knowledge is an extraordinary source of information for organizations in the 21st century, developing with the frequency of its access. Modern forms of organization favour the management of intellectual capital. Such organizations consider intangible assets to be of key importance when entering them into a central account in their operations. Therefore, their strategies and sources are used to increase the scientific intellectual value of the organization.

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Бар’єри в управлінні інтелектуальним капіталом організації відповідно до цілей сталого розвитку

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У глобальному економічному контексті управління інтелектуальним капіталом виступає як стратегічно значущий ресурс, що істотно впливає на ринкову вартість організацій. Ефективне управління цим капіталом передбачає впровадження інноваційних методів і технік. Серед таких методів особливе місце займає управління знаннями, спрямоване переважно на подолання бар'єрів їх обміну. У рамках статті проведено опитування серед працівників польських повітів Глогув, Явор і Тшебніца. Головною метою дослідження було проаналізувати та оцінити процес управління персоналом у зазначених повітах, використовуючи різноманітні методи дослідження для досягнення поставлених цілей. Опитування слугувало основним інструментом дослідження, доповненим аналізом наукового ландшафту з даної проблематики, дослідницьких та аналітичних звітів. Результати дослідження та статистичні дані свідчать про існування в компаніях Нижньої Сілезії потреби у програмах розвитку персоналу, пов'язаних з придбанням, зберіганням та розповсюдженням знань. У ході дослідження авторами ідентифіковано низку факторів, які ускладнюють розвиток компетенцій співробітників опитаних компаній, та встановлено зв'язок між цими бар'єрами до навчання та впливом розміру компанії на них. У статті перевірено взаємозв'язок між бар'єрами інтелектуального розвитку, що становлять найбільшу загрозу для компанії, та факторами, що ускладнюють прийняття співробітників з високим рівнем інтелектуального капіталу. Отримані дані свідчать, що забезпечення управлінський персонал цінною інформацією в аспектах управління талантами та знаннями, можуть слугувати основою для формування стратегій розвитку співробітників та програм їх навчання. Додатково, ці результати можуть бути використана рекрутерам під час створення профілів кандидатів з затребуваними компетенціями.

Ключові слова: людський капітал; інтелектуальний капітал; управління знаннями; відносний капітал; структурний капітал; сталий розвиток; управління талантами.