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Social Capital and the Competitiveness of Logistics Enterprises in the Post-pandemic Era of Society 5.0

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ABSTRACT

Objective: The aim of the article is to identify and determine the importance of social capital markers relevant to logistics companies in the face of ecosystem challenges, as well as to recommend pro-competitive activities of the industry in the context of building a Society 5.0. The authors hypothesised that the identification of a set of social capital markers collected in the

form of a model may become an instrument supporting the management of a logistics enterprise in line with the Society 5.0 trend.

Research Design & Methods: In the research process, a nomothetic approach was used based on the mixed research strategy. The qualitative approach included the method of ethnomethodology with the analysis of available publications, reports and netographic sources. The technique of semantic analysis, the coexistence of terms and the publication suitability of sources were used. On the other hand, the quantitative approach was based on the diagnostic survey method with the CAWI online survey technique.

Findings: The conducted research shows the need to ensure the well-being of employees and the development of their competences, especially digital ones in the context of work technologisation, implementation of innovative technological solutions in the logistics industry. Employees of logistics companies notice that digital competences are the element that affects the efficiency of their work, and this again translates into the company's competitiveness.

Implications/Recommendations: The authors recommend actions by the logistics industry that will be aimed at increasing the share of expenditure on the development of social capital by caring for the well-being of employees, developing their talents, competences and skills. A simplified model of the identification of social capital markers in logistics enterprises may be a helpful management instrument in this respect.

Contribution: Social capital is of significant importance for the competitiveness of logistics companies in the post-pandemic era of Society 5.0. A high level of trust and cooperation among employees, suppliers, and customers can contribute to more efficient functioning of logistics companies. Social capital can be a key factor in enabling logistics companies to quickly adapt to changing market conditions. Building strong relationships with business partners can bring benefits such as better coordination of activities, greater flexibility, and faster responses to market changes. Investing in the development of social capital can contribute to increasing the competitiveness of logistics companies and lead to their success in the post-pandemic era of Society 5.0.

Article type: original article.

Keywords: social capital, logistic enterprises, competitiveness, Society 5.0.

JEL Classification: J24, L90, M12, O33, O34.

1. Introduction

The contemporary business environment in which organisations operate poses a number of challenges for organisations. This, in turn, makes it necessary to search for, diagnose or define tools supporting an effective management system and, consequently, building organisational success. The competitiveness of companies requires modifying models, tools or techniques of management within the organisation so that it can effectively cooperate with the external environment. The increasing awareness of managers, in view of the necessity to use alternative mechanisms supporting the monitoring of organisational processes, led to the appreciation of the

role of social capital. It has become a tool supporting strategic business decisions. The growing importance of social capital for effective management influenced the interest in this subject and contributed to the writing of this article.

The main purpose of the presented material is to describe the importance of social capital in the organisation, to indicate the need to build social capital on the example of companies from the logistics industry and to recommend activities that may determine the competitiveness of logistics companies in the context of building a Society 5.0. The article consists of two parts: theoretical, which was created using a qualitative method in the form of secondary analysis of existing data, and empirical – created using a quantitative method, the tool for which was a questionnaire.

2. Shaping Competitiveness and Social Capital

Growing competition, as well as changes taking place in the operating conditions of modern logistics companies and their dynamics, are the cause of intensification in the processes of searching for factors which contribute to market success. The key to achieving a long-term competitive advantage may be the growing interest in the scientific literature indicating the human factor as its source (Knežević, Naletina & Damić, 2016, pp. 171–187). In addition to the significant role of human capital, i.e. the knowledge and skills of employees, more and more attention is paid to relations between colleagues and their interactions, i.e. social capital. The effect of social capital is the diversification of the level of economic development of both enterprises and economies (Czapiński, 2015, p. 351).

The first use of the term “social capital” is attributed to Hanifan, who conducted research on rural communities. “Neighbourly cooperation based on good will, partnership, sympathy and social bonds between individuals and families (social unity), leads to cost reduction, facilitates the production of goods, and generates income” (Hanifan, 1916, p. 130). Social capital is “the set of actual and potential resources associated with having a permanent network of more or less institutionalised relationships based on mutual knowledge and recognition – or in other words, with membership in a group – that provides each of its members with the support in the form of capital appropriate for collective” (Libertowska, 2018, p. 104). The factors of social capital in an enterprise are relations, norms and values, as well as the ability of members of a given company to cooperate. The *sine qua non* condition for building and effective operation of social capital is trust, which determines the development of the above-mentioned structures. In the literature on the subject, trust is most often interpreted as one of the components of social capital, and sometimes as its consequence (Libertowska, 2018, p. 105). Referring to this, one can also distinguish between internal and external social capital, where internal social capital is a set of real and potential resources that come from the network of relations within the company (Ozanne *et al.*, 2022, pp. 116–135). Properly shaped

social capital becomes a source of innovation, entrepreneurship, competitiveness and sustainable development. These features shape Society 5.0. It is “a proposal for the concept of a modern, forward-looking and human-centred society, in which the integration of cyberspace and the real world is to be implemented using the latest technologies, such as artificial intelligence, the Internet of Things, robotics and big data” (du Vall, 2019, p. 22).

Competitive advantage is the aggregation of various positions, which differentiates companies from their competitors and ensures a unique and strong position in the market (Udriyah, Tham & Azam, 2019, pp. 1419–1428). In order to build a competitive advantage, enterprises must have unique competences and strategic resources that create the highest value for the client and the enterprise (Talaja *et al.*, 2017, pp. 583–604; Dyduch *et al.*, 2021; Cao, Lin & Zhou, 2022; Dang & Wang, 2022). To this end, companies must both strengthen internal cooperation and organise integration mechanisms between various entities, pointing to the importance of both internal and external social capital (Ozanne *et al.*, 2022, pp. 116–135).

Creating a competitive advantage in the modern economic reality is an extremely difficult task, because the determinant of competitiveness is not only the services offered by enterprises, but also social capital, defined as unique and difficult to imitate intangible resources (Ozanne *et al.*, 2022, pp. 116–135). Social capital in enterprises should be based not only on trust in external business partners, but also refer to intra-organisational social relations. In addition to material factors, sources of competitive advantage should be sought in intangible factors. The discovery of the impact of phenomena invisible in the account books on the increase of the value of enterprises has resulted in a significant research revival, but so far it has not been possible to develop a single coherent definition of social capital and its evaluation in the enterprise. The growing awareness and knowledge about the components of social capital and its impact on creating a competitive advantage opens up new horizons for managers in asset management, so that they are more attractive to investors and more competitive in the logistics industry.

3. The Logistics Industry in the Light of Social and Technological Changes

The logistics industry provides support for every economy and helps in achieving the economic goals set. Just like the logistics processes that support a company's operations. Due to its nature and the way it affects other economic entities, the logistics industry responds to market demand by performing those tasks that are crucial for other sectors of the economy at a given moment.

Customers of the logistics industry expect a very quick response to the demand for logistics services, and at the same time they require that all processes take place safely in various contexts. It is about security of supplies, availability of goods, their

protection against physical damage during handling, storage and transport, as well as safety from the point of view of the natural environment. Many of these challenges are also related to the changes that have been observed in the economy in recent years.

The trends that the logistics industry should be ready for are, above all, securing the continuity of supply chains and the predictability of delivery times, the ability to react quickly in a crisis, enabling the tracking of goods in real time, and adapted made-to-measure warehouses enabling a flexible approach to the implementation of logistics tasks. In addition, there is more and more talk about demands coming from customers, but also related to political and legal conditions. The growing importance of a sustainable approach to enterprise development should be taken into account, especially the most energy-intensive ones, which certainly include logistics enterprises. A particular challenge is transport and means of transport. It is mainly about reducing the consumption of fossil fuels, in this case crude oil, and thus reducing exhaust gas emissions to the environment. However, care for the natural environment also includes solutions in warehousing and goods handling services, e.g. through the use of appropriate technologies in the construction of warehouses, the use of renewable energy sources, and appropriate management of internal warehouse processes in order to reduce energy consumption (Carli *et al.*, 2020; Kumar *et al.*, 2022). An additional aspect is the use of modern technologies that enable tracking of all movements of goods, means of transport, as well as real-time analysis of process efficiency. Recent years in logistics have, of course, seen the introduction of Logistics 4.0, but more and more often Logistics 5.0 is a natural next step in the development of the logistics industry.

The issues of digitalisation and the applicability of sustainable solutions make it necessary to look for employees who will also meet these requirements. It is also possible to develop skills and competences among employees. Certainly, one of the biggest challenges will be the employment of specialists who will be able to respond to the demand for digital skills, IT systems management, as well as engineering skills in the field of maintenance of computer-controlled machines and devices. From the point of view of the concept of Society 5.0, these are certainly skills and competences that will enable further development of the industry and increase the competitiveness of logistics companies.

4. Social Capital and the Competitiveness of Enterprises in the Logistics Industry – Research Methods

In order to obtain a full picture of the importance of social capital as a weapon in the competitive struggle of logistics companies, the material obtained from research into literature, publications and reports was strengthened with the results of primary source research. For this purpose, a study was designed and carried

out on the potential of enterprises that can help create market success in the era of post-pandemic challenges of Society 5.0. The purpose of the research was, among other things, to determine the components of social capital.

The CAWI (Computer Assisted Web Interview) “user centric” Internet survey method was used to obtain the material. The research tool was a questionnaire consisting of 17 closed questions, including 10 based on scaling attitudes according to the Rensis Likert scale. Google’s digital platform was used to propagate the study. The study period covered the months of April and May 2022.

Due to the scope of the research, the study was fragmentary and deterministic. The subjects of the study were employees of logistics companies. The general population of all people working in Poland as at December 31, 2020 was 16,555,000 people. The entire population of all people working in Poland was not surveyed, but only those working in logistics in enterprises operating in Poland at the turn of April and May 2022, which is only a part of the general population. In accordance with the procedure, the characteristics of the sample reflecting the surveyed population were quantified, which were: state of residence in Poland and working age (men aged 15–64 and women aged 15–59) and the fact of working in a logistics company or a department dealing with logistics processes. Then, based on the formula, the minimum sample size was determined:

$$n_{\min} = NP(\alpha^2 \cdot f(1-f)) / NP \cdot e^2 + \alpha^2 \cdot f(1-f),$$

where:

- n_{\min} – the minimum sample size,
- NP – the size of the study population,
- α – the confidence level for the results,
- f – fraction size,
- e – assumed maximum error.

Due to the fact that it was not possible to obtain data on the number of people working in the logistics departments of companies other than those included in the Department of Transport and Warehouse Management according to Central Statistical Office, it was assumed that the size of the fraction for both people potentially working in logistics and those not working in logistics out of all employees in Poland as at December 31, 2020 was 0.5, with a random error of 5% and a confidence level of 0.95.

After substituting the assumed numerical values into the formula, the result was obtained $n_{\min} = 384$, which meant that the minimum number of units that needed to be surveyed was 384 people. To obtain the research material, the method of non-random selection of units typical for the test with the snowball technique was used. To this end, on selected social networking sites on logistics, a request was made to all persons meeting the conditions of the survey participant, defined by the

characteristics of the studied sample, to take part in the survey by clicking on the link that took them to the Google platform, where the questionnaire was placed.

It took about 10 minutes to complete the questionnaire. The collected research material in the form of raw data was coded and statistically analysed using the SPSS programme (Statistical Package for Social Sciences). The process of analysing the collected material consisted of three stages.

In the first stage, the collected material was verified and aggregated. The distribution of the obtained variable values was presented in the form of tables and charts.

Then, in the second stage, where it was possible and made sense in statistical terms, cross-comparisons were made between the independent variables of the community description and the dependent variables. Cross statements of two variables were each time visualised in the form of contingency table. The table consisted of r rows and s columns each time. Each row and column corresponded to particular variants of the feature X and Y . The content of the contingency table consists of the n and j numbers of sample elements that have the i -th variant of the feature X ($i = 1, 2, \dots, R$) and the j -th variant features of Y ($j = 1, 2, \dots, s$). Each time the contingency table was the basis for the verification of the null hypothesis (H_0) about the existence of the potential stochastic independence of random variables X and Y and the alternative hypothesis (H_1), adopted in the case of rejecting the null hypothesis (H_0) according to the formula:

$$H_0: P\{X = x_i \wedge Y = y_j\} = P\{X = x_i\} \cdot P\{Y = y_j\}$$

$$H_1: P\{X = x_i \wedge Y = y_j\} \neq P\{X = x_i\} \cdot P\{Y = y_j\}$$

Each time the assumption about the existence of a relationship between the variables was verified with a statistical test on the independence of the variables. The basis for the verification of the H_0 hypothesis about the stochastic independence of variables was the value of the statistics obtained from the formula:

$$\chi^2 = \sum_i^r \sum_j^s \frac{(n_{ij} - \tilde{n}_{ij})^2}{\tilde{n}_{ij}} : \chi^2(r-1) \cdot (s-1),$$

where:

n_{ij} – conditional empirical numbers resulting from the contingency table,

\tilde{n}_{ij} – theoretical conditional counts that could appear in the table if the features were independent.

Hypothetical numbers are determined according to the formula:

$$\tilde{n}_{ij} = \frac{n_i \cdot n_j}{N}.$$

In the verification procedure, it was assumed that the rejection area H_0 is always right-handed with a specific significance level $\alpha \leq 0.05$ with the critical values of the distribution χ^2 of $(r-1) \cdot (s-1)$ degrees of freedom. The estimation area covered

$\chi^{2emp} > \chi^{2\alpha}$, where if it was met, the H_0 hypothesis about the independence between the variables was rejected in favour of the H_1 hypothesis indicating the existence of a relationship between the features.

The limitations of the study were the lack of a sufficient budget to test a larger number of people, the lack of access control and the research method used in the implementation. Due to the fact that there was no sampling frame, the questionnaire could not be sent to specific persons. Such a situation could have meant that the answers were given by people who do not work in logistics. In addition, the study was limited by the fact that it only reached people who are responsible for handling e-mail contacts.

5. Results

The result of the analytical work is the presentation of the profile of the studied sample and the basic data relating to the importance of social capital as a potential that can be a weapon in the competitive struggle of logistics companies. It is worth noting, however, that due to the fact that when selecting the units for the sample, the non-random methodology was used, it is difficult to fully assess the representativeness of the obtained material in a statistical sense due to the failure to meet all the requirements of the randomness of research samples. The advantage of the research, however, is the size of the final sample, which speaks in its favour and proves that there are grounds for inference.

The examined sample consisted of 625 units, thus exceeding the necessary minimum size. The respondents participating in the study included both women and men. The vast majority of respondents indicated that they had little experience in logistics. Nearly half of the respondents had worked in the area of logistics for less than 1 year (48%) or from 1 to 3 years (37%). Respondents are most often employed in positions such as: junior specialist (30.4%), specialist (30.4%) or line worker (24%). Few respondents indicated that they were employed as a manager (10.4%), a senior specialist (4%) or belonged to a group of top management employees (0.8%). And due to the area of specialisation in logistics, the respondents most often have roles in the areas of customer service (33.6%), warehousing (22.4%) and shipping (14.4%). The smallest number of people indicated activities in the area of production logistics (8%) or internal transport (6.4%). Most of the survey participants (42.4%) declared that they were employed in companies employing over 250 people. The respondents predominantly (87.2%) worked for private enterprises compared to people working in public enterprises (12.8%).

The vast majority (53.6%) of the respondents represented enterprises operating on an international scale. Due to the specificity of the subject of the study, it was important to specify the significance of logistics in the enterprises represented

by the respondents. And so, every third participant of the study (32.8%) works in a company where logistics is important, with representation in the form of a logistics department. Nearly every third respondent (28%) declared that the company in which logistics works is crucial due to the fact that it is included in the TSL industry. Only one in five respondents (21.6%) admitted that logistics and logistic processes are a secondary function, and one in five (17.6%) reported that logistics is only an area supporting the operations of a company with representation in the form of a logistics unit.

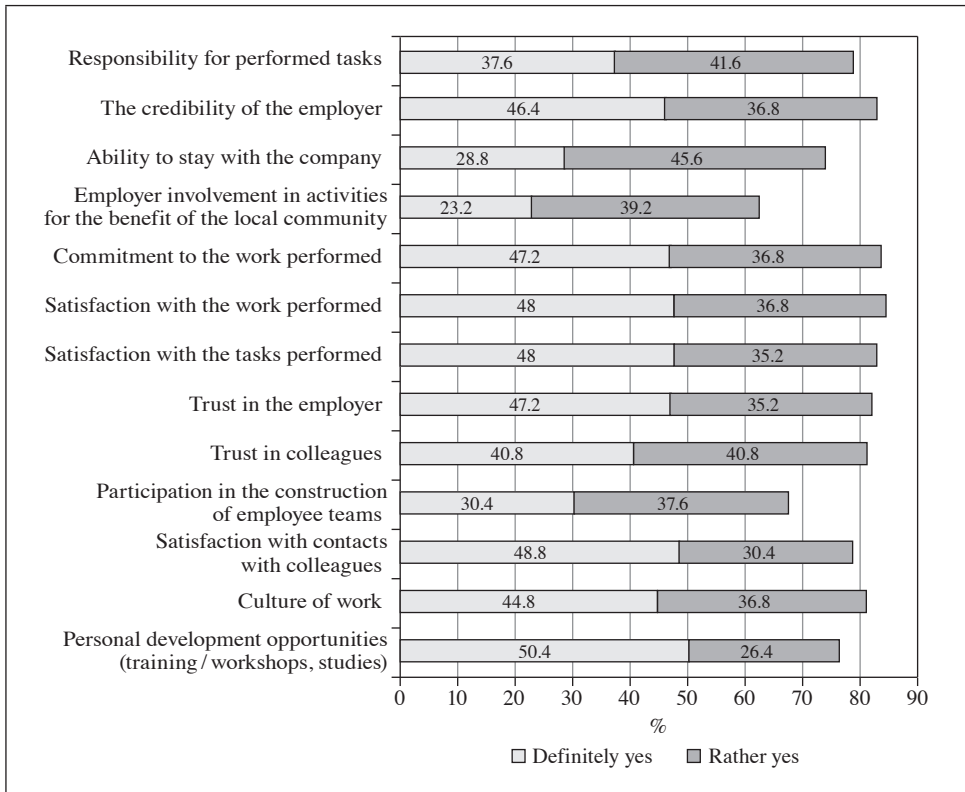


Fig. 1. Significant Components of the Social Capital of Logistics Enterprises in the Era of the Digital Economy

Source: the authors.

In accordance with the mainstream analysis, social capital for logistics enterprises means the possibility of achieving the established goals, which they would not achieve if it were missing, therefore employees of logistics companies appearing in the study as respondents were asked about the components of social capital

that, in their opinion, are important for their enterprises in the era of the digital economy. The selection of the components of social capital (Fine, 2001; Collier, 2002; Molyneux, 2004) for the analysis was dictated by the need to indicate the necessity to combine individual issues important for the individual, i.e. offering self-improvement opportunities by the employer and team opportunities related to the synergy resulting from the functioning of the group, which meant indicating the importance of the quality of interpersonal relations created by the logistics community, including the role and importance of bonds between people working in teams and their commitment to work. Equally important factors of social capital are the credibility and trust of employees in the employer and the ability to stay with the company, which together constitute the preconditions of the individual's involvement in the functioning of the company. The indicated components, both in individual and team terms, as well as in the employee–employer relationship, may intrinsically affect the effectiveness and efficiency of the company's operation, which is why, according to the researchers, it was worth examining these components of social capital.

According to the indications, it can be stated that, for the respondents who are employees of logistics companies, the following are definitely and rather important (Fig. 1): satisfaction with the work performed by employees of these companies (84.80%), their commitment to the work performed (84%) and their job satisfaction (83.20%). Equally important, according to the respondents, is the credibility of the employer. Definitely yes and rather yes, this is confirmed by the majority of respondents (83.20%). In their opinion, trust in the employer (82.40%) and trust in co-workers (81.60%) are also important. Organisational culture plays a special role in this process. This is the opinion of the vast majority of respondents (81.60%). In their opinion, a slightly smaller role is played by responsibility for the tasks performed (79.20%), satisfaction with contacts with colleagues (79.20%) and the possibility of personal development (76.80%).

According to the respondents, the least important components of social capital in logistics companies are the ability to stay with a given company (74.40%), participation in building employee teams (68%) and the employer's involvement in activities for the local community (62.40%).

After analysing the distribution of values of variables that are components of social capital in accordance with the adopted research procedure, the obtained results were compared in terms of experience, position and area of logistics specialisation of the employee in the form of contingency tables. The effect of this action was to indicate the existence of potential relationships between the selected variables, which was verified using the χ^2 test of independence, taking into account V-Cramer (Table 1).

Table 1. Components of Social Capital of Logistics Enterprises in Relation to Experience, Position and Area of Specialisation – χ^2 Test of Independence with the Strength of the Relationship Determined by V-Cramer

Specification	Experience			Position			Area of Specialisation		
	χ^2	<i>p</i>	V	χ^2	<i>p</i>	V	χ^2	<i>p</i>	V
Personal development opportunities (training/ workshops, studies)	78.435	0.001	0.177	299.253	0.001	0.346	250.743	0.001	0.317
Culture of work	72.824	0.001	0.171	221.252	0.001	0.297	180.268	0.001	0.269
Satisfaction with contacts with colleagues	100.663	0.001	0.201	241.414	0.001	0.311	268.490	0.001	0.328
Participation in the construction of employee teams	51.839	0.001	0.144	188.666	0.001	0.275	234.030	0.001	0.306
Trust in colleagues	53.928	0.001	0.147	249.843	0.001	0.316	291.027	0.001	0.341
Trust in the employer	60.698	0.001	0.156	246.737	0.001	0.314	192.664	0.001	0.278
Satisfaction with the tasks performed	58.981	0.001	0.154	202.833	0.001	0.285	289.992	0.001	0.341
Satisfaction with the work performed	89.129	0.001	0.189	176.612	0.001	0.266	170.979	0.001	0.262
Commitment to the work performed	88.049	0.001	0.188	207.390	0.001	0.288	322.042	0.001	0.359
Employer involvement in activities for the benefit of the local community	89.604	0.001	0.189	148.023	0.001	0.243	161.172	0.001	0.254
Ability to stay with the company	78.085	0.001	0.177	181.081	0.001	0.269	168.164	0.001	0.259
The credibility of the employer	66.373	0.001	0.163	127.045	0.001	0.225	135.346	0.001	0.233
Responsibility for performed tasks	101.950	0.001	0.202	186.712	0.001	0.273	210.033	0.001	0.290

Notes: χ^2 – test value, *p* – asymptotic significance, V – relationship strength calculated using V-Cramer. Source: the authors.

The analysis shows that the individual components of social capital indicate connections between them and the characteristics of people working in logistics in terms of experience, position and area of specialisation. The analysis shows that the existing relationships between the individual components of social capital due to their importance in the era of digital economy in relation to selected characteristics of the surveyed community, although they are mostly weak, are significant in a few cases.

The possibility of personal development as a component of social capital is the most important for respondents employed in specific positions and performing tasks in specific areas of specialisation. Organisational culture as a component of social capital is perceived similarly. Satisfaction with contacts with colleagues and trust in colleagues are most strongly related to the degree of specialisation of the work performed. In turn, trust in the employer and job satisfaction are strongly related to the position. On the other hand, satisfaction with the tasks performed, commitment to the work performed and responsibility for the activities performed are most strongly associated with the area of specialisation. The weakest links are visible for such components of social capital as the employer's involvement in activities for the benefit of the local community, the ability to stay with a given company and the employer's credibility. Here, the significance of these factors is independent of the experience, position and area of specialisation of logistics activities carried out by the respondent – an employee of a logistics company.

Similarly, when analysing the relationships between the components of social capital and the characteristics of enterprises, such as the size of the enterprise, the scope of its activities and the place that logistics occupy in its structures, certain relationships can be observed (Table 2). As with the experience, position, and specialisation juxtapositions, they are mostly weak, but in a few cases they are significant.

Therefore, it can be concluded that the possibility of personal development as a component of social capital is the most important for respondents employed in large enterprises, operating on an international scale, operating in the TSL industry or having a logistics department. Organisational culture as a component of social capital is important regardless of the size of the enterprise and its scale of operation. A slightly greater dependence is visible due to the place of logistics in the company's structure. Employees working in companies from the TSL industry or having a logistics department indicate the importance of culture as a more important aspect of an organisation.

Satisfaction with contacts with co-workers is most strongly related to the scope of the company's activities and the size of the company. Especially in local and national enterprises and those employing up to 50 people, this relationship is strong. So is trust in co-workers. In turn, trust in the employer is strongly related to the

Table 2. Significant Components of the Social Capital of Logistics Enterprises in the Era of the Digital Economy in Relation to the Size of the Enterprise, the Scope of Operation of the Enterprise and the Place of Logistics in the Structure of the Enterprise – the χ^2 Independence Test with the Strength of the Relationship Determined by V-Cramer

Specification	Size			Scope of Activity			Place of Logistics		
	χ^2	<i>p</i>	V	χ^2	<i>p</i>	V	χ^2	<i>p</i>	V
Personal development opportunities (training/ workshops, studies)	95.502	0.001	0.276	83.453	0.001	0.258	111.413	0.001	0.244
Culture of work	44.880	0.001	0.189	38.365	0.001	0.175	74.013	0.001	0.199
Satisfaction with contacts with colleagues	47.371	0.001	0.195	72.444	0.001	0.241	46.945	0.001	0.158
Participation in the construction of employee teams	22.616	0.004	0.135	29,044	0.001	0.152	24.937	0.001	0.115
Trust in colleagues	37.267	0.001	0.173	53.361	0.001	0.207	38.586	0.001	0.143
Trust in the employer	59.664	0.001	0.218	44.057	0.001	0.188	59.023	0.001	0.177
Satisfaction with the tasks performed	36.568	0.001	0.171	94.929	0.001	0.276	77.542	0.001	0.203
Satisfaction with the work performed	44.048	0.001	0.188	64.737	0.001	0.228	75.408	0.001	0.201
Commitment to the work performed	91.417	0.001	0.270	84.283	0.001	0.260	42.939	0.001	0.151
Employer involvement in activities for the benefit of the local community	47.486	0.001	0.195	34.146	0.001	0.165	61.035	0.001	0.180
Ability to stay with the company	59.091	0.001	0.217	58.760	0.001	0.217	37.011	0.001	0.243
The credibility of the employer	49.395	0.001	0.199	55.209	0.001	0.210	79.779	0.001	0.206
Responsibility for performed tasks	33.855	0.001	0.165	59.951	0.001	0.219	141.026	0.001	0.274

Notes: χ^2 – test value, *p* – asymptotic significance, V – relationship strength calculated using V-Cramer. Source: the authors.

size of the enterprise and the scope of its operations. The larger the company and whether it operates on an international scale, the more often the indication of the importance of the factor of trust in the employer as an important variable of social capital is visible. The smallest dependence is visible in relation to the place of logistics in the company structure and to job satisfaction. On the other hand, satisfaction with the tasks performed and satisfaction with the work performed is strongly related to the scope of activity and the place of logistics in the structure of the enterprise. The smaller the company (employing up to 50 people), the more important is the level of job satisfaction as a component of the social capital of logistics companies in the era of the digital economy. On the other hand, commitment to work as a component of social capital is related to the size of the enterprise and the scope of its activity. The larger the company (employing over 250 people) and if it operates on an international scale, the greater the commitment to the work performed. Noticeably weaker links are visible for such components of social capital as the employer's involvement in activities for the benefit of the local community, the ability to stay with a given company and the trust in the employer. Here, the importance of these components of social capital is independent of the size of the enterprise, the scope of its operations and the place logistics occupies in its structure.

6. Discussion and Conclusions

Analysing the collected research material, it can be seen that social capital is an important component of shaping relationships on three basic levels: organisation, employees, and society. The collected material, as well as other studies (Al-Omouh, Simón-Moya & Sendra-García, 2020), indicate that this capital becomes a so-called "bridge factor" that affects the building of bonds that are important both inside and outside the organisation, connects people, promotes the exchange of information, stimulates creativity and innovation. It should be emphasised that its accumulation in the organisation allows both the use of existing resources and the establishment of such combinations that create a new dimension of these resources, a new value. This is important in the functioning of modern organisations, especially in highly variable environmental conditions. Social capital is an extension of human capital. Its scope covers human resources and the entire network of connections between them. It points to the positive aspects of interpersonal relations, while highlighting intangible capital as a potential source of strength.

Building social capital as a tool supporting the competitiveness and success of the company requires experienced, committed staff with both appropriate substantive competences constituting a mix of e.g. knowledge, experience, as well as soft ones determining, for example, the level of commitment, cooperation in a team or the ability to reactively adapt to changes. Properly implemented systems dedicated to employees will shape the human potential in the organisation. In turn, its

quality will determine the ability of a holistic organisation to adequately respond to changes, complex working conditions and making key decisions (Zhang-Zhang, Rohlfer & Varma, 2022) that build the organisation's success.

The need to redefine processes is also felt in the logistics industry. It was one of the first areas in which one could observe a very fast pace of change and the necessity of introducing new services, making difficult decisions in a turbulent business environment. This is evidenced by, for example, the transition to logistics management in the traditional sense of logistics processes and supply chain management, by making the solutions offered to customers more flexible (Shoja, Molla-Alizadeh-Zavardehi & Niroomand, 2019), accelerating flexible deliveries through the agility of supply chains (Shashi *et al.*, 2020), and providing resilient supply chains resistant to environmental turbulence (Mu, van Asselt & van der Fels-Klerx, 2021).

The presented research shows that nowadays it is necessary to diagnose the variables affecting social capital and to raise awareness of their importance in management systems both at the micro and macro organisational level. The quality of the social structure, built on the basis of human capital, determines the quality of the tasks performed, and these, in turn, are an important component of building a long-term competitive advantage. This has a big impact on situations inside and outside the organisation. It enables the effectiveness and efficiency of people's actions, cooperation and learning, which leads to the effective use of the competences of employees and managers. Social capital, apart from organisational and business issues, is primarily a social and cultural issue. For this reason, the ability to build a sense of organisational stability and employee involvement requires support from managers in such areas as e.g. trust, a sense of building common moral and ethical principles (Kidron & Vinarski-Peretz, 2024), credibility, transparency of information (Raharisoa & Pezzillo Iacono, 2022), fulfillment of commitments and duties between: employee-organisation-society. It can therefore be said that social capital in relation to human resource management processes is an important category resulting from active participation in organisational relationships that build organisational networks, corporate roles, which, based on the previously indicated variables, enable the staff to access organisational resources, including knowledge and competences.

The described research shows that social capital can be treated as a source of effective social relations in an organisation and can effectively support the functions of human resource management, e.g. in the field of: optimal matching of staff to the current needs of the company, development of employee competences, shaping development paths or effective motivation.

Of course, it should be remembered that incompetent shaping of social capital can also become a source of negative consequences. Distrust, hostility, xenophobia can become the basis for e.g. discrimination, nepotism, cliques, corruption, the

formation of negative connections, or a decrease in efficiency and effectiveness in the process of frequently used business organisation and management systems. They can lower the employee's sense of value, which causes a decrease in commitment, and in willingness to innovate (Adıgüzel & Küçüköğlü, 2021).

It is also worth emphasising that the factors indicated in the research can also be classified as key tools for building an ethical image of an organisation, and this is of fundamental importance for modern business entities (Chinaza Adaobi & Owusuaa-Konadu Snr, 2022).

It can be safely assumed that in the processes of human resources management, effective achievement of desired effects and goals of work and building an authentic community of employees consolidated around the prevailing organisational principles is less and less realistic with a low level of social capital.

The study of social capital in an organisation in the 5.0 economy, in the context of shaping its competitiveness, becomes a necessity. When companies reach a certain threshold of wealth, they start looking for alternative ways to influence their development, and here social capital, which is mainly based on trust, gains key importance. This is of particular importance for industries where creativity in action counts (Ozgun *et al.*, 2022) and care for the environment (Mugoni, Nyagadza & Kuziva Hove, 2023), because the image and contacts with customers depend on it. For this reason, managers should diagnose the variables that build this type of capital, because thanks to this they can choose more effective tools for managing the organisation or develop appropriate models to support them in making strategic business decisions. It should also be emphasised that the analysis of intellectual and relational capital without taking into account social capital is tantamount to placing limitations on the creation of innovation and effective adaptation to changes in the environment.

In the future, the research should be repeated, taking into account the aspects of the impact of social capital on the structure of organisational structures, economic and financial impacts, and the effectiveness of shaping the competitive position of enterprises in the logistics industry. Certainly, such a study of the links between non-financial aspects related to social capital and financial ones in logistics in the era of technology and globalisation can become an important source of information for both practitioners and theoreticians.

Authors' Contribution

The authors' individual contribution is as follows: Each contributed a fourth.

Conflict of Interest

The authors declare no conflict of interest.

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