pp. 541-559

Contemporary Purchasing Challenges: Key Competencies in Purchasing

Submitted 08/10/24, 1st revision 20/11/24, 2nd revision 06/12/24, accepted 10/12/24

Zuzanna Sikorska¹, Łukasz Hadaś²

Abstract:

Purpose: The aim of the study is to identify key competencies of purchasing department employees. This is a response to the need to identify crucial so-called soft and hard competencies, divided into employee's management directly performing the purchasing function. Particular attention was paid to answering the research questions: Which competencies are key in the purchasing area for Support and Specialist and Management Staff?

Design/Methodology/Approach: The answers to the research questions were obtained on the basis of the results of surveys conducted using the CAWI method based on the original questionnaire. A statistical method was used; the factor analysis and varimax rotation increased the interpretability of factors by sharpening factor loadings. The study covered a group of respondents with a minimum of 5 years of professional experience in the field of purchasing.

Findings: The considerations and research results presented in the article constitute the basis for the characterization of key competencies, taking into account soft and hard competencies and including aspects of sustainable development in the area of purchasing competences divided into positions held.

Practical Implications: The obtained research results can be used both to assess the competence gap of employees from purchasing departments and to build customized training programs for the development of soft and hard competencies. Future in-depth research may focus on identifying statistically significant relationships in the explored topic.

Originality/Value: The study proves that in the area of purchasing both soft and hard competencies are important, and the results presented in the paper contribute to expanding the current state of research in the context of competencies in the area of purchasing, presenting models taking into account soft and hard competencies in two job groups.

Keywords: Purchasing, key competencies in purchasing, sourcing, competencies of purchasing employees.

JEL Codes: J24.

Paper Type: Research article.

¹Poznan University of Technology, Faculty of Engineering Management, Poland, ORCID: 0000-0003-4667-4193, <u>zuzanna.sikorska@put.poznan.pl</u>;

²Poznan University of Technology, Faculty of Engineering Management, Poland, ORCID: 0000-0001-9271-8738, <u>lukasz.hadas@put.poznan.pl</u>;

1. Introduction

Currently, the competencies of employees in the Purchasing Department are crucial for the effectiveness of the whole organization, because their competencies, both soft and hard, determine not only cost optimization, but also building long-term relationships with suppliers, stakeholders, managing risks in the supply chain and ensuring the quality of purchased goods and/or services. Without a doubt, using the competencies of the employed employees, the organization not only achieves financial goals, but also contributes to increasing innovation and building the organization's competitive advantage.

What is worth adding, taking into account sustainable development in the competencies of employees working in the purchasing department, is an area that requires both specialist knowledge and appropriate competencies. Purchasing employees have a key impact on the implementation of sustainable development goals because they decide and are involved in the selection of suppliers, products/services and processes in the whole supply chain.

The purpose of this paper is a presentation of soft and hard competencies in the area of purchasing and indication of key competencies in two job groups (Group 1 - Support and Specialist Staff and Group 2 - Management Staff).

The problem addressed was discussed from the perspective of employees employed in the Purchasing Department in organizations located in Poland.

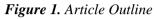
The main research attention was focused on seeking answers to the following research questions:

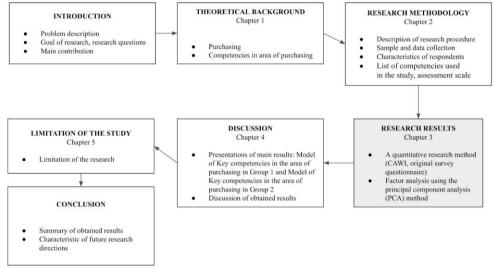
- □ *RQ1*: Which competencies are key in the purchasing area for Support and Specialist Staff?
- □ *RQ2*: Which competencies are key in the purchasing area for Management *Staff*?

The first part of the work focuses on literature review, which has been focusing on the role of purchasing department employees and their competencies and defining the meaning of the current approach to the topic.

In the second key area of work, the focus was on the research process, it was an analysis of the respondents' answers to questions about the current level of their competencies (soft and hard). Detailed research results and their elaboration are discussed in the following chapters of this work. In the research procedure, the research goal was adopted, the research problem was formulated, the research question was asked and then the research tools were adjusted.

Detailed conclusions and recommendations are included in the summary of the article. It presents the most important findings and considerations shown in the article, which can serve to improve the quality of work in the purchasing department (more complete implementation of the purchasing function) by employing appropriately selected employees who demonstrate the required competencies. The structure of the article is presented in Figure 1.





Source: Authors owns study.

Authors decided to combine the literature and comparative studies, as well as a quantitative research method (CAWI, original survey questionnaire) and factor analysis using the principal component analysis (PCA) method.

Thus, the work can be a starting point for further in-depth research on contemporary purchasing challenges including competencies of staff employed in purchasing departments. The hope is that this research approach will result in a more holistic view of a well-selected employee from the purchasing area and the desired direction of development of his competencies.

2. Literature Review

Nowadays, purchasing competencies are a key element of management in organizations, especially in the context of contemporary global challenges such as globalization, digitalization of purchasing process and growing requirements related to sustainable development (Monczka *et al.*, 2016) and purchasing maturity concepts (Ocicka, 2019).

Despite the long history of purchasing, as it has existed almost since the beginning of

humanity, the form in which it functions today has evolved over the centuries. Currently, purchasing and supply management has come into the spotlight as an important (Van Weele and Van Raaij, 2014), strategic (Cousins *et al.*, 2008), and critical business activity (Wynstra *et al.*, 2019) in dealing with multiple stakeholders in multi-level supply networks (Choi and Krause, 2006).

What is more, though such a crucial role of purchasing in current organizations, a research gap can be observed in the connection between purchasing competence and the position held by employees in the purchasing area. Only employees who have appropriate purchasing competencies allow organizations to optimize costs, increase process efficiency, and minimize supply chain risks in the whole company (Van Weele, 2018).

In the literature there are statements that giving purchasing a strategic character is achieved by defining the most important responsibilities of purchasing management, three areas were very often visible or even leading: savings (Baily *et al.*, 2015; Ocicka, 2019; Van Weele, 2014), innovations (Castaldi *et al.*, 2011; Poissonnier, 2017; Schiele, 2019; Van Weele, 2014) and risk management (Poissonnier, 2017; Ocicka, 2019; Budzyński, 2016; Lysons and Farrington, 2016).

Generally, basic purchasing competencies include knowledge of purchasing processes, the ability to manage relationships, both inside organisation and with suppliers, market and trend analysis, and negotiation skills (Kraljic, 1983). Developing purchasing competencies also allows for the introduction of innovations and the creation of value by creating long-term relationships with key suppliers. The ability to assess and manage risk, as well as a proactive approach to problems, are the foundation of effective procurement management (Handfield *et al.*, 2020).

The contemporary approach to purchasing also requires advanced technological skills, such as data analysis and knowledge of for example ERP systems, which enable more effective information management in purchasing processes (Lysons, Farrington, 2020). Prahalad and Hamel (1990) claimed that core competencies are a combination of skills, knowledge and technology, and are characterized by a key contribution to the most important values for the recipient.

Purchasing managers are responsible for both the economic terms of transactions and contracts, as well as for the strategies and practices of managing the supplier base and the social and environmental impacts of relationships with suppliers in the supply chain, which makes purchasing management aimed at and serving the goals of sustainable development (Ocicka, 2024).

Contemporary purchasing challenges include changing market conditions and global challenges, such as the COVID-19 pandemic, have forced purchasing departments to increase flexibility and adaptability in purchasing strategies. The ability to quickly adapt to new conditions and knowledge of crisis management procedures are now

essential competencies. Thanks to them, purchasing specialists can efficiently respond to supply chain disruptions and minimize their impact on the organization's operational activities (Monczka *et al.*, 2016; Kraljic, 1983). The COVID-19 pandemic has also shown how important it is to manage and shape the digital competencies of employees, not only in operating computer programs, but also in building social relationships based on digital platforms.

This is a new challenge in the problem of social contacts between employees, resulting from the lack of informal meetings, which very often encouraged internal innovations in enterprises. The pandemic period significantly weakened the previously naturally created employee bonds and additionally had an impact on the employees' satisfaction with their work (Łuzniak-Piecha and Bobrowska, 2020). With these competencies, purchasing employees can better adapt to the dynamically changing market environment and support the strategic goals of the organization (Cousins *et al.*, 2008).

In summary, in a changing economic environment caused by numerous changes with a disruptive impact (Sikorska and Hadaś, 2024), the role of purchasing and purchasing employees is very important.

3. Research Methodology

3.1 Sample and Data Collection

In order to diagnose what soft and hard competencies purchasing employees have in companies located in Poland and at what is the current level, authors conducted an online survey among employees of the Purchasing Department. Employees were divided into two main groups: Group 1 - Support Staff (Assistant, Administrators) and Specialist Staff (Junior Purchasing Specialists, Purchasing Specialists, Senior Purchasing Specialists) and Group 2 - Management Staff (Team Leaders, Managers, Directors).

It was decided to use a purposive sampling, for purposive sampling, a researcher has something in mind and participants that suit the purpose of the study are included (Etikan *et al.*, 2016), it is an effective approach when researchers aim to explore particular cases or unique scenarios and a detailed examination of the research subjects is necessary (Patton, 2002).

Moreover, authors defined the following requirements for selecting the research sample and to the group of respondents includes only people who met all of the following compulsory criteria:

- 1. The respondent is employed in the Purchasing Department of an enterprise located in Poland.
- 2. The respondent has at least 5 years of professional experience in the purchasing area.

3. The respondent has worked for at least 2 years in the current enterprise.

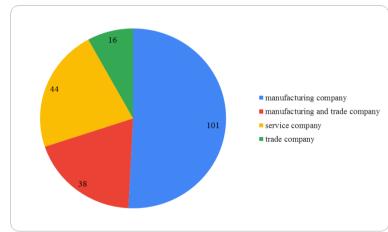
This is a confirmation that the respondents have a set of features directly related to the topic of the study and it is also evidence that the authors have selected an appropriate group. The invitation to participate in the study was sent to the respondents directly by the authors. In order to examine the respondents as efficiently as possible, the survey method was used (an original questionnaire form in Google was prepared). The survey was conducted in an anonymous form on the LinkedIn platform.

The research was conducted until February 2024 and 199 correctly completed forms were obtained from responders who met all (3 mentioned above) requirements. According to the respondents taking part in the study, the topic is important from a business point of view and worth exploring, which was confirmed by the respondents after receiving an invitation to participate in the study.

3.2 Characteristics of Respondents

All respondents confirmed that they were employed in the Purchasing Department of an enterprise located in Poland. The majority of the group surveyed was represented by employees employed in a manufacturing company (50,8%). The type of business activity of companies is shown in Figure 2.

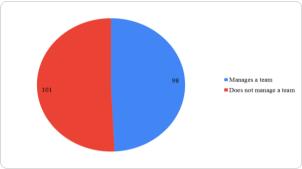
Figure 2. Type of Business Activity of Companies, Where Respondents Currently Work



Source: Authors owns study (N = 199).

Based on the answers to the questions: "Do you manage a team in the organization where you currently work?" and "Please indicate your job position.", the authors of the article divided the respondents into the two job groups mentioned above, Group 1 - Support and Specialist Staff and Group 2 - Management Staff. Almost half (49.2%) of the surveyed respondents manage a team (Figure 3).

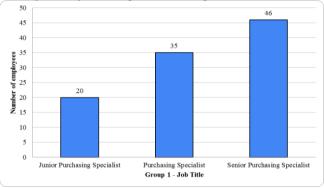
Figure 3. Team Management According to Respondents - Structure of Survey Participants



Source: Authors owns study (N = 199).

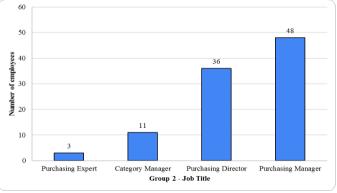
Figures 4 and 5 present the structure of job positions held by the respondents taking part in the study, divided into Group 1 and Group 2. In Group 1, the majority were Senior Purchasing Specialists (46 people), while in Group 2, the majority were Purchasing Managers (48 people) (Figure 4 and 5).

Figure 4. Structure of Survey Participants - Group 1 - Job Title



Source: Authors owns study (N = 101).

Figure 5. Structure of Survey Participants - Group 2 - Job Title



Source: Authors owns study (N = 98).

The respondents were also asked to provide the length of their professional experience in purchasing (as a whole and in the organisation they currently work for). As can be seen on Figure 6, employees with many years of experience in working with purchasing participated in the survey, the most numerous groups were those with experience of 2-4 years in current organisation (118 persons) and 5-10 years (75 persons) with total experience in purchasing.

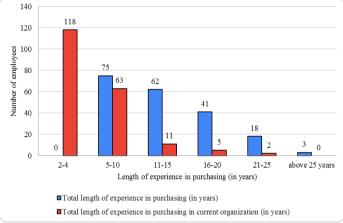


Figure 6. Length of Experience in Purchasing (in Years) of Survey Participants

Source: Authors owns study (N = 199).

The results presented in point 3.2. mean that the research assumption regarding the selection of the sample has been met and this also confirms that the people taking part in the study are professionally active in the area of purchasing.

3.3 List of Competencies Used in the Study, Assessment Scale

As a result of the analysis of the literature, available business materials and the responses provided by 15 experts, the authors of the article proposed a final list of competencies (soft and hard) in the area of purchasing. First, the list of competencies proposed by Stek and Schiele, Tassabehji and Moorhouse and the list of competencies developed by the headhunter company Big Fish were analysed. The number of competencies broken down by job group (Group 1 and Group 2) is presented in Table 1.

Table 1. Numbers of competencies in Group 1 and Group 2 used in the study (before expert assessment)

Competencies	Group 1	Group 2
Soft	20	20
Hard	19	19
Total	39	39

Source: Authors owns study.

Then, in order to reduce the list of competencies proposed by the authors of the study, 15 different experts were invited to assess the importance of the competencies indicated by the authors in the purchasing area. People who met all of the following criteria were included in the group of experts:

- 1. The expert has at least 10 years of professional experience in the purchasing area.
- 2. The expert has worked for at least 4 years in the current organization.
- 3. The level of the current position of the expert is Purchasing Manager or Purchasing Director.
- 4. The expert participates in the recruitment process of purchasing employees and manages a team.

As a result, the assumption of reducing the list of competencies was achieved, the final numbers of competencies after taking into account the expert opinions are presented in Table 2.

Table 2. Numbers of competencies in Group 1 and Group 2 used in the study (after expert assessment)

Competencies	Group 1	Group 2
Soft	16	20
Hard	8	15
Total	24	35

Source: Authors owns study.

The list of competencies selected for the study is presented in Table 3.

The table is divided into two main categories: Soft and Hard competencies. Both categories specify a number of competencies for the two job groups discussed in the work: Group 1 - Support and Specialist Staff and Group 2 - Management Staff. In the table, competencies from the Soft category include a set of interpersonal and work organization traits and skills. The Hard section lists more technical and specialized competencies. The section on Soft competencies includes traits such as flexibility in thinking and acting, creativity, focus on achieving goals, responsibility, openness to others and changes, independence, conscientiousness, communication skills, active listening, and building and maintaining relationships with others. Organizational skills, quick acquisition of knowledge, work under time pressure, teamwork skills, perseverance, commitment, and a proactive approach to problems are also important. Additionally, presentation skills, initiative, and coping with stress and uncertainty are included. In turn, Hard competencies include negotiations, analytical thinking, supplier evaluation, information acquisition, supplier relationship management, business knowledge, product category management, purchasing projects, contracts and risk. The table also includes competencies in the field of sustainable development and specialist purchasing activities.

Competencia	Competencies	Competencies
Competencies	Group 1	Group 2
	Flexibility in thinking and acting	Assertiveness
	Creativity, e.g. purchasing services instead of products ("Product-as-a-Service" model)	Flexibility in thinking and acting
	Focus on achieving the task/goal	Creativity, e.g. purchasing services instead of products ("Product-as-a-Service" model)
	Responsibility	Focus on achieving the task/goal
	Openness (to others, to changes)	Responsibility
	Independence	Openness (to others, to changes)
	Conscientiousness	Independence
	Communication skills	Conscientiousness
	Ability to actively listen to others	Communication skills
Soft	Ability to build and maintain relationships with others (e.g., with colleagues, suppliers, Management)	Ability to actively listen to others
	Ability to organize own work well	Ability to build and maintain relationships with others (e.g., with colleagues, suppliers, Management)
	Ability to learn easily and quickly	Ability to organize own work well
	Ability to work under time pressure	Ability to learn easily and quickly
	Ability to work in a team	Ability to work under time pressure
	Perseverance in action	Ability to work in a team
	Commitment and proactive approach to problems	Ability to conduct and moderate presentations
		Ability to take the initiative
		Ability to deal with uncertainty, stress
		Perseverance in action
		Commitment and proactive approach to problems
Hard	Negotiation skills	Business awareness, i.e., knowledge and ability to analyze the market, suppliers (Supplier Market Knowledge), competition, etc.
	Analytical thinking skills (data analysis, including monitoring and reporting of sustainability indicators in purchasing)	Negotiation skills
	Ability to evaluate suppliers	Analytical thinking skills (data analysis, including monitoring and reporting of sustainability indicators in purchasing)

Table 3. List of competencies in Group 1 and Group 2 used in the study

	Ability to obtain information including participation in training, workshops and certifications related to sustainable purchasing (e.g. CIPS certificates, CSR in purchasing)	Ability to obtain information including participation in training, workshops and certifications related to sustainable purchasing (e.g. CIPS certificates, CSR in purchasing)
	Ability to manage relationships with suppliers	Category management skills
	Knowledge of MS Office	Contract management skills
	Knowledge of English	Ability to manage purchasing projects
		Ability to manage relationships with suppliers
		Ability to manage risk
		Knowledge of an additional foreign language
		Knowledge of English
Knowledge of the purchasing process	Knowledge of the value analysis methodology for cost rationalization (value engineering)	
	Knowledge of the methodology for integrating corporate social responsibility (CSR) principles into the purchasing process and decisions (sustainable sourcing)	
	Knowledge of the strategic management methodology (strategic sourcing)	
	Knowledge of the purchasing process	

Source: Authors owns study.

199 respondents assessed the competencies presented in Table 3 using the scale proposed by Filipowicz. He suggests the following scale of employee competency at five levels:

A (1) - Failure to acquire a given competency. Lack of behaviors indicating its mastery and use in undertaken activities.

B (2) - Basic acquisition of competencies. It is used irregularly. Active support and supervision from more experienced people are required.

C(3) - Competence acquired to a good degree, allowing for independent, practical use in the performance of professional tasks.

D (4) - Competence acquired to a very good degree, allowing for very good performance of tasks in a given scope and sharing one's own experiences with others. E (5) - Competence acquired to an excellent degree. The ability to creatively use and develop knowledge, skills and attitudes appropriate to a given scope of activities (Filipowicz, 2002).

The scale, together with the explanation, was presented to the respondents in the study, and its use allowed them to assess their current level of the indicated competencies.

4. Research Results

The obtained results were subjected to statistical analysis. It was decided to use factor analysis using the principal component analysis (PCA) method with simple oblimin rotation, because it was assumed that there are correlations between variables. The use of varimax rotation increased the interpretability of factors by sharpening factor loadings. After rotation, each factor better reflected a specific set of variables, which facilitated their interpretation. The results of factor analysis are presented in Table 4 i 5. The values of factor loadings used for further analyses are marked in red.

Table 4. Values of factor loadings of soft and hard competencies in Group 1Source: Authors owns study (N = 101) using Statistica Soft 13.1.VariableFactor (1)Factor (1)

Variable	Factor (1)	Factor (2)
Flexibility in thinking and acting	0.716959	0.005207
Creativity, e.g. purchasing services instead of products ("Product-as-a- Service" model)	0.635888	-0.162845
Focus on achieving the task/goal	0.734276	0.062877
Responsibility	0.697672	0.0081
Openness (to others, to changes)	0.692836	-0.099958
Independence	0.738878	0.072632
Conscientiousness	0.605458	-0.000295
Communication skills	0.61238	0.013581
Ability to actively listen to others	0.684158	-0.060704
Ability to build and maintain relationships with others (e.g., with colleagues, suppliers, Management)	0.67182	-0.076813
Ability to organize own work well	0.693551	-0.066537
Ability to learn easily and quickly	0.718269	0.055223
Ability to work under time pressure	0.763451	-0.005997
Ability to work in a team	0.625562	-0.124151
Perseverance in action	0.789406	0.05422
Commitment and proactive approach to problems	0.73253	0.165716
Negotiation skills	0.134818	0.625644
Analytical thinking skills (data analysis, including monitoring and reporting of sustainability indicators in purchasing)	-0.050622	0.656735
Ability to evaluate suppliers	0.064042	0.720245
Ability to obtain information including participation in training, workshops and certifications related to sustainable purchasing (e.g. CIPS certificates, CSR in purchasing)	-0.123215	0.60685
Ability to manage relationships with suppliers	0.017744	0.646639
Knowledge of MS Office	-0.019	0.657789
Knowledge of English	-0.039638	0.445922
Knowledge of the purchasing process	-0.045842	0.775998
Variance	7.806495	3.470527
Participation	0.325271	0.144605

Source: Authors owns study (N = 98) using Statistica Soft 13.1.

Table 5. Values of factor loadings of soft and hard compete Variable	Factor (1)	Factor (2)
Assertiveness	0.51437	0.053679
Flexibility in thinking and acting	0.74816	0.079439
Creativity, e.g. purchasing services instead of products ("Product-as-a-	0.72443	0.128215
Service" model)		
Focus on achieving the task/goal	0.64708	0.211346
Responsibility	0.86551	-0.117926
Openness (to others, to changes)	0.77918	-0.268467
Independence	0.83288	0.178597
Conscientiousness	0.65043	0.229843
Communication skills	0.73022	0.313778
Ability to actively listen to others	0.71677	0.018875
Ability to build and maintain relationships with others (e.g., with colleagues, suppliers, Management)	0.72428	0.130591
Ability to organize own work well	0.68209	0.276563
Ability to learn easily and quickly	0.7954	0.212824
Ability to work under time pressure	0.83029	0.198288
Ability to work in a team	0.70579	0.226913
Ability to conduct and moderate presentations	0.63555	0.335969
Ability to take the initiative	0.77335	0.251147
Ability to deal with uncertainty, stress	0.66208	0.242553
Perseverance in action	0.64496	0.18842
Commitment and proactive approach to problems	0.84186	0.114245
Business awareness, i.e., knowledge and ability to analyze the market, suppliers (Supplier Market Knowledge), competition, etc.	0.13697	0.642701
Negotiation skills	-0.00583	0.735607
Analytical thinking skills (data analysis, including monitoring and reporting of sustainability indicators in purchasing)	0.32967	0.606881
Ability to obtain information including participation in training, workshops and certifications related to sustainable purchasing (e.g. CIPS certificates, CSR in purchasing)	0.12663	0.413817
Category management skills	0.16512	0.751349
Contract management skills	0.08721	0.774102
Ability to manage purchasing projects	0.08587	0.740195
Ability to manage relationships with suppliers	0.06472	0.618579
Ability to manage risk	0.02333	0.720594
Knowledge of an additional foreign language	0.21078	0.476491
Knowledge of English	0.16044	0.553556
Knowledge of the value analysis methodology for cost rationalization (value engineering)	0.10942	0.724598
Knowledge of the methodology for integrating corporate social responsibility (CSR) principles into the purchasing process and decisions (sustainable sourcing)	0.13601	0.529932
Knowledge of the strategic management methodology (strategic sourcing)	0.14817	0.716589
Knowledge of the purchasing process	0.09078	0.455072
Variance	10.98418	7.019999
Participation	0.31383	0.200571

Table 5. Values of factor loadings of soft and hard competencies in Group 2

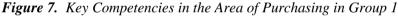
Source: Authors owns study (N = 98) using Statistica Soft 13.1.

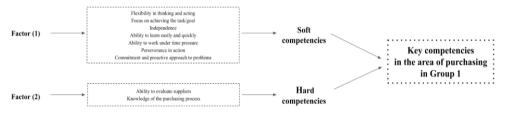
The Table 4 presents factor loading values (Factor 1 and Factor 2) for various soft and hard competencies in Group 1. In Factor 1, the highest values are for competencies such as: "Perseverance in action" (0.789406) and "Ability to work under time pressure" (0.763451). This indicates the strong importance of these competencies in this factor. In turn, Factor 2 is characterized by high values for competencies such as: "Knowledge of the purchasing process" (0.775998) and "Ability to evaluate suppliers" (0.720245), which suggests that these factors relate more to hard competencies, especially those related to analysis and business relations. Negative values or values close to zero indicate a lower correlation of a given competency with a specific factor. This division helps in identifying priority competencies.

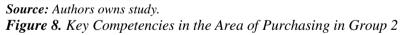
The Table 5 presents factor loading values (Factor 1 and Factor 2) for various soft and hard competencies in Group 2. Most variables had high factor loadings (above 0,7) on at least one identified factor. Thus, the analysis indicates strong relationships between variables and factors. Variables with low loadings were excluded from further analysis.

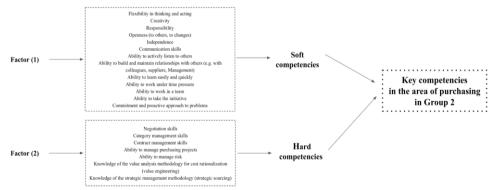
5. Discussion

As a result of the analysis, the following results obtained the two main groups of factors for each group of job positions proposed by the authors. It is shown in Figure 7 for Group 1 and Figure 8 for Group 2.









Source: Authors owns study.

As a result, two application models of key soft and hard competencies in the area of purchasing for each job position group (Group 1 and Group 2) were obtained, which will allow the organization to define key competencies and assess the current level and current job position.

The developed models of key competencies of employees in the purchasing area have a broad application character and are used in various areas of business activity. Their main goal is to support organizations in making better decisions about the recruitment of new employees and to support and develop current employees, taking into account combining business goals with social and environmental requirements (sustainable development). Thanks to their implementation, organizations can achieve e.g. better financial results, reduce the negative impact on the environment, build a positive image and contribute to the implementation of global sustainable development goals.

Firstly, as can be seen, the competence "Knowledge of the methodology for integrating corporate social responsibility (CSR) principles into the purchasing process and decisions (sustainable sourcing)" in Group 2 proposed by the authors did not qualify as a key competence. Although the issues of CSR and sustainable development are current in the light of research directions in the discipline of management and quality sciences and in terms of application values, it should be noted that this topic is still insufficiently used in the area of purchases and that the competencies have not been assessed at a high level.

Secondly, in both Group 1 and Group 2, the competence "Ability to obtain information including participation in training, workshops and certifications related to sustainable purchasing (e.g. CIPS certificates, CSR in purchasing)" is also not highly rated by the respondents and does not fit into the developed model. This may indicate a low purchasing maturity in terms of using sustainable development principles of the organizations represented by the respondents.

Last, but not least, the competency "Creativity, e.g. purchasing services instead of products ("Product-as-a-Service" model)" achieved high factor loadings in the factor analysis in Group 2. It should be recognized that this competency fits the topic of sustainable development, because the search for new solutions and more environmentally friendly products by employees in the purchasing area is an important value.

Certainly, among the future research directions, this aspect and the challenges facing purchasing departments should be taken into account, such as: sustainable development management in purchasing, as well as emerging concepts of purchasing management, which include circular purchasing (circular sourcing) in a closed-loop economy (Ocicka, 2024).

6. Limitation of the Study

It is also worth noting that there are some limitations in the study due to the fact that the research only took into account soft and hard competencies in the area of purchasing, and omits, for example, managerial skills, which are also very important in Group 2. Classifying work in the area of "supply" would definitely expand the research field, as supply is a broader concept than purchasing.

However, it was decided to narrow the area of work to the area of purchasing, due to previous scientific research conducted so far. In the authors' opinion, purchasing can offer a more diverse, strategic and dynamic work environment compared to supply, which is more operational and routine - it focuses on the current supply of materials, which directly affects the competencies required from employees.

Employees dealing with purchasing are responsible for negotiating contracts, selecting and contacting suppliers, as well as developing long-term purchasing strategies, which has a key impact on the competitiveness of the company and requires specific skills from employees. In addition, the research was conducted in large enterprises (i.e. employing 250 people or more), where the specificity of the purchasing area means that a separate organizational unit for the purchasing area operates in them. In small and medium-sized enterprises, purchasing tasks are usually performed by employees of other departments (e.g. production, logistics, administration) as additional duties.

7. Conclusions

In conclusion, the role of purchasing departments has been changing in recent years, which means that employees in this area must have specific competencies, both soft and hard, to keep up with the changing economic environment and the requirements set by the organization.

It should be noted that due to the changing business environment, interest in the topic of sustainable development in the competences of the purchasing department will certainly increase, as the implementation of knowledge and skills in this area allows for making decisions that minimize the negative impact on the environment, supporting ethical practices, which is crucial for achieving success in a modern, responsible business.

The conducted study allowed for the achievement of the objective set in the work by presenting two models of key competencies in the area of purchasing for two job groups discussed in this article. In attempting to answer the research question (RQ1), it should be confirmed that competencies such as:

- 1. Flexibility in thinking and acting,
- 2. Focus on achieving the task/goal,
- 3. Independence,

- 4. Ability to learn easily and quickly,
- 5. Ability to work under time pressure,
- 6. Perseverance in action,
- 7. Commitment and proactive approach to problems,
- 8. Ability to evaluate suppliers,
- 9. Knowledge of the purchasing process

are key in the purchasing area for Support and Specialist Staff (Group 1).

Moreover, referring to the research questions (RQ2), competencies such as:

- 1. Flexibility in thinking and acting,
- 2. Creativity, e.g. purchasing services instead of products ("Product-as-
- 3. Service" model)
- 4. Responsibility,
- 5. Openness (to others, to changes),
- 6. Independence,
- 7. Communication skills,
- 8. Ability to actively listen to others,
- 9. Ability to build and maintain relationships with others (e.g. with colleagues, suppliers, Management),
- 10. Ability to learn easily and quickly,
- 11. Ability to work under time pressure,
- 12. Ability to work in a team,
- 13. Ability to take the initiative,
- 14. Commitment and proactive approach to problems,
- 15. Negotiation skills,
- 16. Category management skills,
- 17. Contract management skills,
- 18. Ability to manage purchasing projects,
- 19. Ability to manage risk,
- 20. Knowledge of the value analysis methodology for cost rationalization (value engineering),
- 21. Knowledge of the strategic management methodology (strategic sourcing)

are key in the purchasing area for Management Staff (Group 2).

Generally, the above presented competencies received the highest values in the factor analysis conducted, which indicates their importance in the purchasing area.

Moreover, as can be seen, competencies models (Figure 7 and Figure 8) are a combination of both soft and hard competencies. It can therefore be concluded that a properly selected employee responsible for purchasing in an organization must be characterized by a set of both types of competencies in order to best perform the tasks and responsibilities assigned to him.

To sum up, the two main application value for organizations resulting from the use of the presented models may be during:

- 1. new employee recruitment: the models help identify candidates with the right key soft and hard competencies. Based on the received research results, the person conducting the assessment gets a matrix in which the recruiter, when assessing a candidate, could verify expectations vs. possessed competencies;
- 2. professional development and employee training: employees can develop specific areas to increase their effectiveness. Organisations can build customized training programs for the development taking into account areas requiring improvement.

Among other practical application values, implementation of the models proposed at paper allows for effective purchasing management in the context of sustainability, optimization of purchasing processes, building a purchasing strategy and assessment of the effectiveness of purchasing teams. In this approach, employee competencies are an integral part of the activities of companies that want to minimise their impact on the environment, support ethical practices and build long-term value for stakeholders, and this requires appropriately selected employees with specific competencies. Moreover, this approach not only contributes to environmental protection, but also strengthens the company's competitive position on the market.

References:

- Baily, P.J.H., Farmer, D., Crocker, B., Jessop, D., Jones, D. 2015. Procurement principles and management (11th ed.). Pearson Education.
- Budzyński, W. 2016. Zakupy w przedsiębiorstwie: Negocjacje, procedury i umowy z dostawcami. Wydawnictwo Poltext.
- Castaldi, C., Kate, C., den Braber, R. 2011. Strategic purchasing and innovation: A relational view. Technology Analysis and Strategic Management, 23(9), 983-1000. https://doi.org/10.1080/09537325.2011.616699.
- Choi, T.Y., Krause, D.R. 2006. The supply base and its complexity: Implications for transaction costs, risks, responsiveness, and innovation. Journal of Operations Management, 24(5), 637-652.
- Cousins, P.D., Lamming, R.C., Lawson, B., Squire, B. 2008. Strategic supply management: Principles, theories and practice. Prentice Hall.
- Etikan, I., Musa, S.A., Alkassim, R.S. 2016. Comparison of convenience sampling and purposive sampling. American Journal of Theoretical and Applied Statistics, 5(1), 1-4. https://doi.org/10.11648/j.ajtas.20160501.11.
- Filipowicz, G. 2002. Pracownik wyskalowany czyli metody i narzędzia pomiaru kompetencji. Personel, 1-31 lipca.
- Handfield, R., Monczka, R.M., Giunipero, L.C., Patterson, J.L. 2020. Purchasing and supply chain management. Cengage Learning.
- Kraljic, P. 1983. Purchasing must become supply management. Harvard Business Review, 61(5), 109-117.
- Lysons, K., Farrington, B. 2020. Procurement and supply chain management (10th ed.). Pearson.
- Łużniak-Piecha, M., Bobrowska, J. 2020. Efektywne zarządzanie innowacyjnością pracowniczą w czasach COVID-19, czyli jak w kryzysie wzmocnić potencjał innowacyjny członków organizacji. Ementor, 5(87), 55-63.

https://doi.org/10.15219/em87.1493.

- Monczka, R.M., Handfield, R.B., Giunipero, L.C., Patterson, J.L. 2016. Purchasing and supply chain management. Cengage Learning.
- Ocicka, B. 2019. Rola zakupów w działalności przedsiębiorstw. Wydawnictwo Naukowe PWN.
- Ocicka, B. 2024. Zarządzanie zakupami w dążeniu do zrównoważonego rozwoju działalności przedsiębiorstwa w kontekście ESG. Studia I Prace Kolegium Zarządzania I Finansów, (197), 203-213. https://doi.org/10.33119/SIP.2024.197.15.

Patton, M.Q. 2002. Qualitative research and evaluation methods (3rd ed.). Sage Publications.

- Poissonnier, H. 2017. How purchasing became a strategic function: From purchasing to external resources management. Strategic Direction, 33(2), 1-3. https://doi.org/10.1108/SD-11-2016-0156.
- Prahalad, C., Hamel, G. 1990. The core competence of the corporation. Harvard Business Review, (90).
- Sikorska, Z., Hadaś, Ł. 2024. Digital transformation on purchasing process due to events with a destructive impact. Scientific Papers of Silesian University of Technology. Organization and Management Series, 197.
- Van Weele, A.J. 2014. Purchasing and supply chain management (6th ed.). Cengage Learning EMEA.
- Van Weele, A.J. 2018. Purchasing and supply chain management: Analysis, strategy, planning and practice (7th ed.). Cengage Learning.
- Van Weele, A.J., van Raaij, E.M. 2014. The future of purchasing and supply management research: About relevance and rigor. Journal of Supply Chain Management, 50(1), 56-72.
- Wynstra, F., Suurmond, R., Nullmeier, F. 2019. Purchasing and supply management as a multi-disciplinary research field: Unity in diversity? Journal of Purchasing and Supply Management, 25(4), 100578.