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PERCEPTION OF THE PROJECT MANAGER'S ROLE IN THE POLISH AUTOMOTIVE INDUSTRY: AN EXPLORATORY STUDY FROM THE TEAM'S PERSPECTIVE

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Purpose: This article aims to identify how members of project teams in the Polish automotive industry perceive the role of the project manager, which competencies they consider key for this role, and what directions of change in these expectations they foresee for the future.
Design/methodology/approach: The study was conducted using an online survey among 156 employees of the Polish automotive industry with experience in project work. An exploratory approach and descriptive statistical analysis were employed. The sample selection was non-probability-based; therefore, the results cannot be treated as representative of the entire population of automotive sector employees in Poland.
Findings: The results indicate that the project manager is perceived primarily as a coordinator and team leader. The highest ratings were given to competencies related to team management, communication, and goal-setting, with technical competencies considered relatively less important. The perception of the project manager's role focuses on interpersonal and organisational competencies, the importance of which, according to the respondents, will increase as project complexity in the automotive industry grows.
Research limitations/implications: The study is exploratory and based on a non-random sample of respondents from a single sector and a single country, limiting the generalisability of the results. Further research should cover other sectors, international comparisons, and projects of varying scale and organisational maturity.
Practical implications: The findings may support the design of development programmes for project managers, focused on developing interpersonal and leadership competencies in an industrial environment.
Social implications: Better alignment of the project manager's role with team expectations may improve collaboration, communication, and working conditions within project teams.
Originality/value: The value of the article lies in presenting an exploratory, sector-specific picture of how project team members perceive project managers' roles in the Polish automotive industry. The study complements the normative approaches dominant in the literature with a team-based perspective, without making claims to statistical generalisations.
Keywords: project manager role, project manager competencies, project team, automotive industry.
Category of the paper: Research paper.

1. Introduction

The project manager is widely recognised as a key participant in the project implementation process. The importance of this role is emphasised in both the international literature and Polish academic studies on project manager competencies (Bashir et al., 2021; Crawford, 2005; Marek-Kołodziej, 2023; Müller, Turner, 2010; Meng, Boyd, 2017; Spalek, 2014). In modern organisations, project managers are responsible for coordinating activities and fostering collaboration within project teams. Traditionally, this role was primarily associated with delivering projects within time, cost, and scope constraints (Caccamese, Bragantini, 2012; Podgórska, 2022), but increasingly, its leadership nature and the importance of interpersonal skills, such as communication, motivation, and conflict resolution, are being emphasised (PMI, 2021).

The importance of the project manager's role is particularly evident in dynamic sectors such as the automotive industry, which is characterised by highly complex projects, time pressure, and the need for interdisciplinary collaboration (Hecklau et al., 2016; Kerzner, 2009; Spalek, 2014). The Polish automotive industry, which is closely linked to European markets, is undergoing significant changes driven by electrification, sustainability requirements, and the restructuring of global supply chains (Bednarz, 2024). These changes increase organisational uncertainty and reinforce the need for effective management of complex projects (Biskupek, Spałek, 2016).

The transformation of the automotive sector is also accompanied by changes in the labour market and in terms of expected competencies. Despite reductions in certain production roles, the industry continues to face a shortage of highly qualified specialists and managers capable of operating in project-based environments (Bednarz, 2024). New investments are generating demand for both technical competencies and leadership, teamwork, and adaptability (Royal Academy of Engineering, 2024), consistent with research findings indicating the growing importance of adaptability, collaboration, and learning among project managers (Balcerzyk, Žukovskis, 2024).

Previous research on project management has focused mainly on normative models of project manager competencies and their significance in the context of digital transformation and Industry 4.0 (Hecklau et al., 2016; Ribeiro et al., 2021). The perspective of project team members is analysed much less frequently, even though research in organisational behaviour indicates that how the project manager's role is perceived influences levels of trust, commitment, and teamwork effectiveness (Spendlove, 2007; Smith, Wolverton, 2010). In particular, there remains a limited understanding of how project managers are perceived by project team members themselves, operating under conditions of high process standardisation, quality pressure, and cross-functional collaboration typical of the automotive sector.

In the Polish automotive industry, empirical research on project team members' perceptions of the project manager's role and competencies remains limited, underscoring the need for further analysis in this area.

Given the limited body of empirical research on the perception of the project manager's role in the Polish automotive industry, this study poses the following research questions:

1. How do project team members perceive the role of the project manager in the Polish automotive industry?
2. Which competencies and personal characteristics of the project manager are considered most important by project team members?
3. How do project team members perceive the future role and competency requirements of project managers in the automotive industry?
4. To what extent do project team members perceive the presence of a project manager as essential for the successful implementation of a project?

2. Literature review

The literature on the subject commonly emphasises the project manager's key role in project implementation. Project manager competencies are defined as a set of personality traits, knowledge, skills, and attitudes that enable effective performance in complex organisational conditions (White, 1959; McClelland, Burnham, 1995; Škrinjarić, 2022; Quinn et al., 2021; PMI, 2021; IPMA, 2015).

Empirical research conducted in recent years confirms that effective project management requires a comprehensive set of competencies, including managerial, interpersonal, leadership, communication, and decision-making skills (Azevedo et al., 2012; Kerzner, 2009; Müller, Turner, 2010; Shtub, Bard, Globerson, 2004; Wysocki, 2014).

The variation in the competence profile of project managers depending on the industry and type of project has been confirmed by research conducted, amongst others, in the fields of human resource management, research and development, higher education, advanced technologies, the financial sector and construction projects (Dreyfus, 2008; Smith, Wolverton, 2010; Spendlove, 2007; Wang et al., 2004; Montenegro et al., 2019; Liu et al., 2022). In the automotive industry, empirical research is limited, and existing studies focus mainly on design improvements or Industry 4.0-related issues (Zhuang, 2024; Hecklau et al., 2016; Ribeiro et al., 2021).

To address the need to standardise the assessment of project managers' competencies, numerous competency models have been developed. The most frequently cited frameworks are those proposed by the Project Management Institute, the International Project Management Association, and the Association for Project Management, which distinguish between technical,

behavioural (human), and contextual (perspectives) dimensions of a project manager's competencies (PMI, 2017; IPMA, 2015; APM, 2023). These models emphasise the importance of balancing technical knowledge with leadership, social and strategic competencies, particularly in conditions of increased complexity and uncertainty.

The literature on Industry 4.0 and digital transformation further emphasises the growing importance of adaptability, interdisciplinary collaboration, and continuous learning as key competencies for project managers (Hecklau et al., 2016; Ribeiro et al., 2021; Royal Academy of Engineering, 2024). Recent research also points to the integration of digital competencies and skills in working with advanced technologies, including solutions based on artificial intelligence, as a key element of contemporary project manager competency profiles (Zemlińska-Sikora, Kozarkiewicz, 2023; PMI, 2018).

Despite an extensive theoretical and normative framework, the literature refers only briefly to empirical analyses of how project team members perceive the role and competencies of a project manager, particularly from a sectoral and national perspective (Lutas et al., 2020; Marek-Kołodziej, 2023). Research on project managers' competencies is largely dominated by a normative approach based on competency models and professional standards (Chomicz, 2015; Moczydłowska, Sadkowska, 2021; Ochoa Pacheco, 2023), whilst emphasising the multidimensional nature of this role, encompassing, amongst other things, leadership, communication, team management and technical expertise (Grant et al., 2001; Müller, Turner, 2010; Wysocki, 2014; Marek-Kołodziej, 2023). Research on organisational behaviour suggests that how a team perceives its manager directly translates into mutual trust, relationships, and project effectiveness (Spendlove, 2007; Smith, Wolverton, 2010). In the Polish automotive industry, this gap remains particularly evident, underscoring the need for further empirical research.

3. Research methodology

3.1. Research design

The study adopted an exploratory research design, the aim of which was to identify how project team members perceive the role, responsibilities, and competencies of project managers in the Polish automotive industry, and to identify the competencies considered most important both currently and in the future. An exploratory approach is particularly appropriate when empirical evidence is limited, and the study aims to identify the phenomenon under investigation (Cooper, Schindler, 2014).

Due to the perceptual nature of the research problem, a questionnaire survey was used as the primary method of data collection, focusing on the subjective assessments of those directly involved in project implementation.

3.2. Sample and data collection

Empirical data were collected via an online survey conducted between March and April 2024. The research population consisted of employees in the Polish automotive industry with experience in project work. Non-probabilistic purposive sampling was used, justified by the exploratory nature of the study and the limited availability of respondents who met the participation criteria.

The study involved 156 respondents representing various roles within project teams, including engineers, specialists, and managers. Participation in the study was voluntary and anonymous. The sample was not random and cannot be considered representative of the entire population of automotive industry employees in Poland.

Due to the non-probabilistic and non-random selection of the sample, as well as the focus on a single industry and a single country, the results obtained should be interpreted as specific to the context under study. The study does not permit statistical generalisations to the entire Polish automotive sector.

3.3. Research tool

The research tool was a structured questionnaire developed from a literature review of project management and competency models for project managers. The questionnaire was designed to capture respondents' perceptions of: (1) the role and responsibilities of a project manager, (2) the key competencies required for this position, and (3) changes in the required competencies in the future, as well as an assessment of the importance of a project manager's presence for the effective implementation of projects.

The questionnaire consisted of three parts: closed-ended Likert-scale questions and demographic questions, which enabled characterisation of the research sample.

3.4. Data analysis

Descriptive statistical methods were used to analyse the collected data, enabling the identification of dominant ratings, trends, and response patterns within the sample. Given the exploratory nature of the study, the data analysis aimed to describe and interpret perceptions rather than test statistical relationships.

4. Results

The study was conducted among 156 respondents employed in the automotive industry in Poland. Data were collected via an online survey between 1 March and 30 April 2024. The demographic and professional characteristics of the respondents are presented in Table 1. Given the non-random selection of the sample, the results presented should be interpreted with caution, as a description of trends within the study group rather than a representative picture of the entire sector.

Table 1.
Characteristics of respondents (n = 156)

Characteristics	Category	Number of respondents	Percentage (%)
Gender	Women	114	73.0
	Men	42	27.0
Age	under 35	94	60.0
	35 years and over	62	40.0
Education	secondary	35	22.4
	first-cycle degree	57	36.6
	Master's degree	57	36.6
	third-cycle higher education	7	4.4
Experience	less than 2 years	83	53.0
	3-10 years	47	30.0
	11-20 years	16	10.0
	over 20 years	10	6.7

Source: own analysis.

Women dominated the sample (73%), and the majority of respondents were under 35 years of age. All participants had at least a secondary education, with a significant proportion holding a higher education qualification. Over half of the respondents (53%) reported less than two years' professional experience in the automotive industry, and around 30% had between 3 and 10 years' experience, indicating a predominance of employees at the early and mid-stages of their careers.

Project experience was reported by 62.8% of respondents. Detailed data on project participation, roles performed, and project characteristics are presented in Table 2. The most frequently cited role was that of a non-managerial project team member (41.8%), followed by 'other' (25.6%) and a product-delivery role (15.3%). Most respondents had participated in a small number of projects over the past five years, most often of medium or small scale. Projects related to the development of new products and the implementation and improvement of processes predominated.

Table 2.
Respondents' project experience

Project-related characteristics	Category	Number of respondents	Percentage (%)
Participation in projects	Yes	98	62.8
	no	58	37.2
Role in projects (n = 98)	project team member (without a managerial role)	41	41.8
	role related to product delivery	15	15.3
	project manager	10	10.2
	specialist (quality, finance, planning)	5	5.1
	other	27	25.6
Number of projects in which respondents have participated in the last 5 years (n = 98)	less than 3	41	41.8
	3–5 projects	31	31.6
	6–9 projects	15	15.3
	10 or more projects	11	11.3
Project size (n = 98)	small	31	31.6
	medium	52	53.1
	large	15	15.3
Type of projects (multiple answers allowed)	development of a new product	62	46.3
	implementation of a new process	26	19.4
	process improvement	26	19.4
	fulfillment of customer orders	15	11.2

Source: own analysis.

The study analysed perceptions of the project manager's role in automotive industry projects. The distribution of responses is shown in Figure 1.

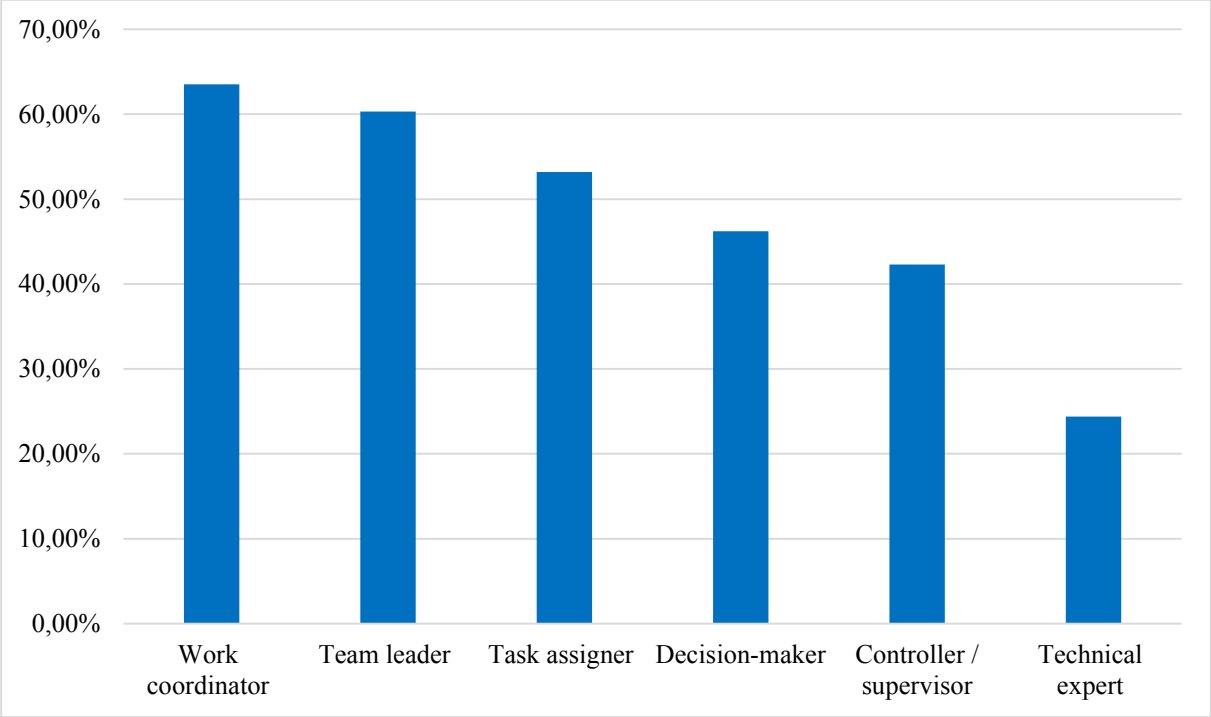

Figure 1. Respondents' perceptions of the role of a project manager.

Source: own analysis.

The data analysis shows that the project manager is most often perceived as a work coordinator and team leader, responsible for organising activities, assigning tasks, and ensuring cooperation within the project team. Responsibility for decision-making and overseeing project progress was also frequently cited. The role of the project manager as a technical expert was mentioned less often.

In addition, the importance of selected project manager competencies for project delivery was analysed. The results of this assessment are presented in Figure 2. The highest ratings were given to competencies related to team management (50%), communication (44.4%), and goal setting (44.4%). Technical competencies were considered important by 38.9% of respondents. A significant proportion of respondents also highlighted the importance of decision-making and coping with stress (33% each). Competencies related to conflict resolution were mentioned least frequently. It can therefore be concluded that effective project management requires a combination of interpersonal, organisational, and technical competencies. This may suggest that, although respondents perceive conflicts as a frequent challenge in project work, the project manager's competencies in resolving them are not regarded as a key factor in the successful delivery of a project, but rather as an area of responsibility for the entire team or organisation.

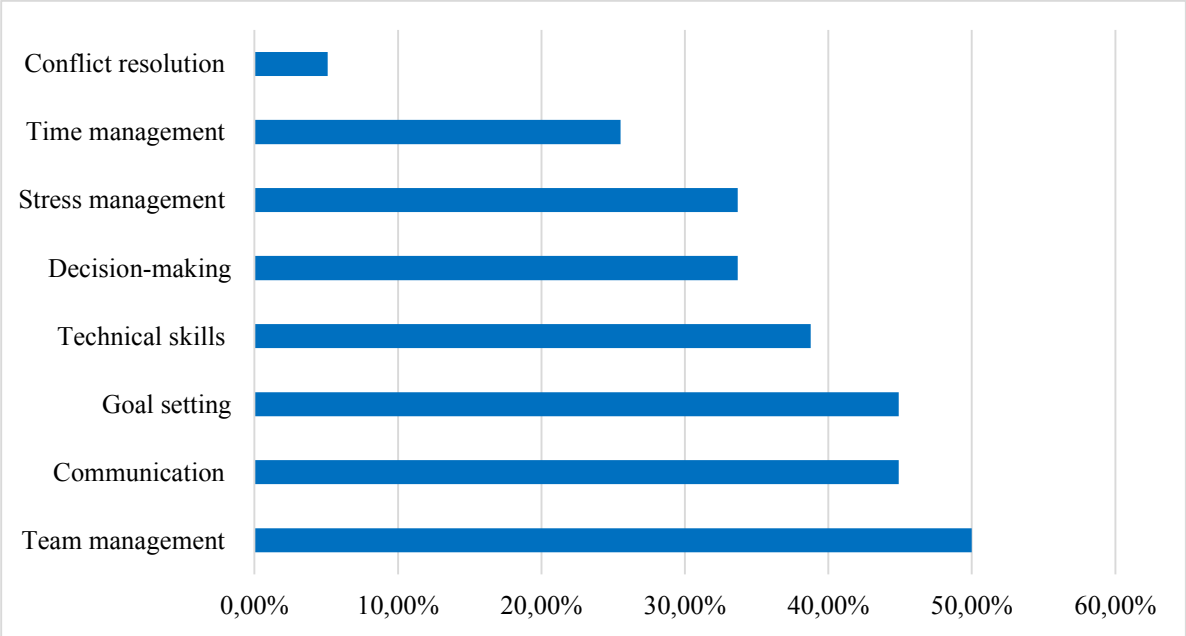

Figure 2. Respondents' perceptions of the importance of a project manager's competencies.
Source: own analysis.

Another area analysed was the competencies related to the most common challenges in project implementation. The most frequently mentioned difficulties were time management (41.7%), communication (41.7%), and conflict resolution (41.7%), as well as coping with stress (33.3%) and decision-making (25.0%). Technical issues (50%) and limited access to resources (50%) were also highlighted as significant barriers to project work, which help identify areas requiring further development of the project manager's competencies.

The analysis also includes an assessment of project manager competencies, both current and future. The results are presented in Figure 3. According to respondents, project team management is a key competency for project managers both now and in the future. An increase in the importance of competencies in decision-making, communication, and stress management is anticipated. Time management and adaptability were also frequently cited as competencies that will be important in the future. At the same time, a comparison of current and future expectations suggests a shift in emphasis from technical competencies towards interpersonal and adaptive competencies.

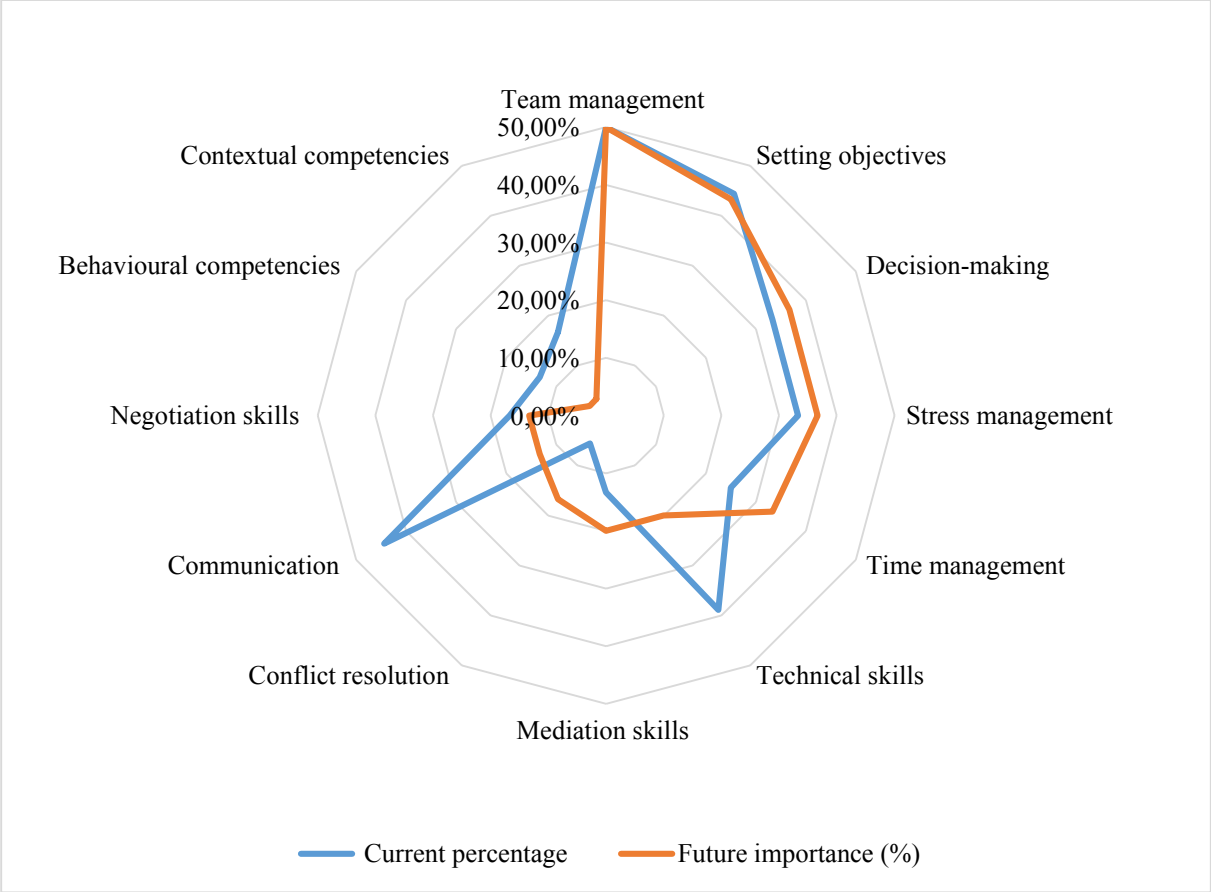

Figure 3. Current and future expectations regarding project manager competencies.
Source: own analysis.

The perceived possibility of successfully delivering projects without a formally appointed project manager was also analysed (Figure 4).

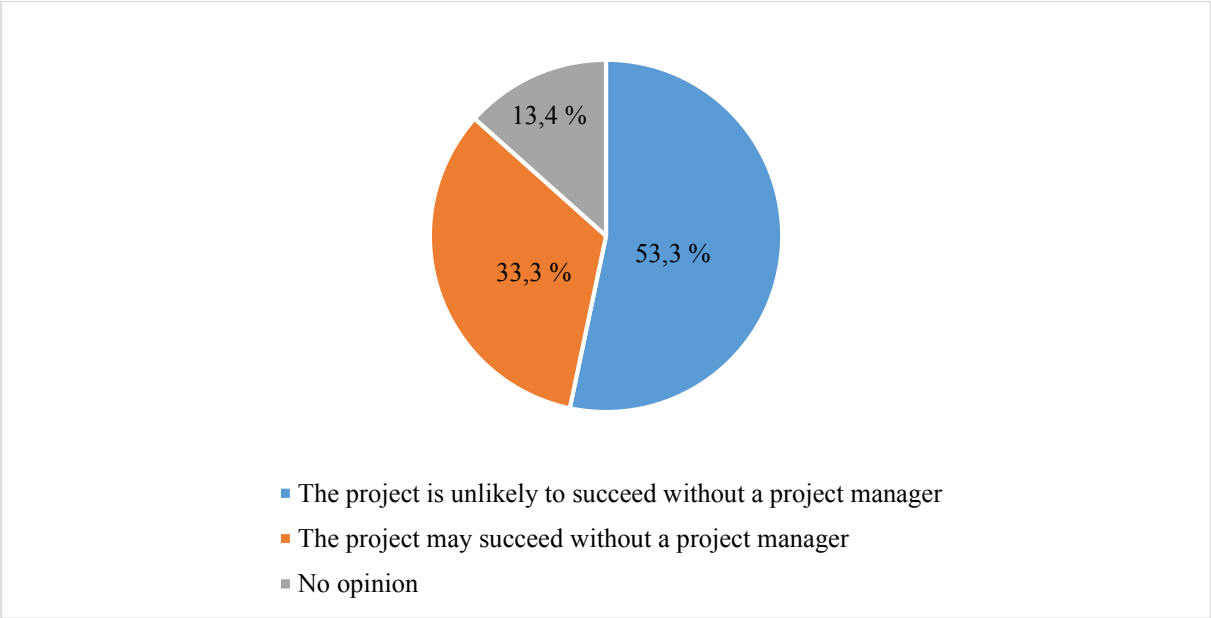

Figure 4. Perception of the project manager's role as a factor in project success.
Source: own analysis.

Over half of the respondents (53.3%) considered the success of a project without a project manager to be unlikely. At the same time, some (33.3%) of the respondents indicated that it is possible to implement a project without a formally appointed project manager successfully. However, this depends on the project's size, complexity, and organisational context. This points to varying perceptions of the necessity of formally holding the project manager role.

5. Discussion

The research focused on how project team members perceive the role and competencies of project managers in the Polish automotive industry. The exploratory approach adopted enabled the capture of project team members' perspectives.

The results show that project managers are perceived primarily as coordinators and team leaders, responsible for organising work and communication, and for overseeing the achievement of project objectives. The findings are consistent with the approaches presented in standards and competency models, which emphasise the role of leadership, coordination, and communication as key elements of project management (PMI, 2021; IPMA, 2015), as well as with findings regarding the importance of interpersonal competencies in project management practice (Müller, Turner, 2010).

Respondents attached particular importance to competencies in team management, communication, and goal-setting. Although technical competencies remain important, especially in projects of high technological complexity, the study's results indicate that,

from the perspective of project teams, interpersonal and organisational skills are of key importance, which is in line with broader trends identified in the literature (Wysocki, 2014; PMI, 2021).

The importance of contextual competencies is underscored by the specific nature of project work in the automotive industry, which is characterised by strong organisational, regulatory, and technological constraints. Respondents highlighted the need for project managers to understand the broader project environment, consistent with competency models that account for the contextual dimension of project management in sectors transforming (IPMA, 2015; Hecklau et al., 2016).

In the automotive sector, these competencies are significantly reinforced by strong interdependencies between quality, production, logistics, and engineering functions, as well as by operating in an environment of highly formalised processes. This means that a project manager's effectiveness depends not only on their knowledge of project management tools, but also on their ability to coordinate the interests of various stakeholder groups in an environment burdened by quality and deadline requirements.

Findings on project challenges indicate time pressure, communication issues, and stress management as recurring difficulties in project implementation. These areas are also identified in the literature as typical challenges in project environments based on advanced technologies and limited resources (Ribeiro et al., 2021).

Looking to the future, respondents anticipate a further increase in the importance of leadership and adaptive competencies. The findings suggest a shift in the project manager's role toward a more people-oriented, flexible function, consistent with current discussions about the future of project management (PMI, 2018; Royal Academy of Engineering, 2024).

6. Summary and conclusions

This exploratory study provides empirical insights into how project team members perceive project managers' roles and competencies in the Polish automotive industry. The findings indicate that project managers are primarily viewed as coordinators and team leaders. Key importance is placed on competencies in team management, communication, goal-setting, and decision-making. From the respondents' perspective, the role of the project manager is therefore primarily characterised by its relational and organisational dimensions rather than solely by technical and administrative tasks. Technical competencies remain an essential element of the project manager's role; however, from respondents' perspectives, behavioural and contextual competencies are becoming increasingly important, as they determine effective functioning in a complex project environment.

This study complements the existing literature by incorporating the perspective of project team members, which has so far been relatively rarely analysed in industry research. However, this contribution is exploratory and contextual, meaning that the results should be interpreted as a basis for further research rather than as a basis for broad generalisations.

From a project management perspective, the results indicate a need to strengthen interpersonal, leadership, and adaptive competencies in development programmes for project managers in the automotive industry. Better alignment between the competency profile and project teams' expectations may foster more effective collaboration and the achievement of project objectives.

However, certain methodological limitations of this study should be highlighted. Firstly, the study was exploratory. Secondly, non-probability sampling was used, and the sample was neither random nor representative of the entire population of employees in the Polish automotive sector. Thirdly, the study focused on a single sector and a single country, limiting the transferability of its results to other organisational and cultural contexts. In the future, it would be worthwhile to conduct cross-sectoral comparative studies, international research, and analyses combining team members' perceptions with assessments of project effectiveness and objective project outcome indicators.

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