

EMPLOYEE JOB SATISFACTION IN INDUSTRY 4.0 ERA: INSIGHTS FROM THE POLISH SMES

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Purpose: The aim of this article is to identify the key factors influencing the achievement of job satisfaction by employees in Polish small and medium-sized manufacturing enterprises during digital transformation.

Design/methodology/approach: The research covered employees of Polish small and medium-sized manufacturing enterprises and was divided into three main stages. In the first two stages, the subjects for the research were selected, i.e. those companies that have achieved a high degree of digital maturity. Then, in order to identify and recognize which factors are most important for achieving employee job satisfaction in the Industry 4.0 era, a survey questionnaire was used for the study.

Findings: Empirical research indicates the most important factors related to job satisfaction in manufacturing SMEs with a high degree of maturity level are: job security, autonomy, and empowerment.

Research limitations/implications: The main limitation is the selection of the sample, i.e. Polish SMEs, as well as the last economic conditions and the global crisis, which can have an impact on the research results and limit the generalization of the results.

Practical implications: The conducted empirical research contributes to the science and practice of management by providing insight into the premises and factors related to achieving job satisfaction in small and medium-sized industrial enterprises in the Industry 4.0 era.

Originality/value: The results of this article may be useful for understanding the phenomenon of achieving employee job satisfaction in the Industry 4.0 era, as they identify key factors in this area.

Keywords: job satisfaction, SMEs, Industry 4.0.

Category of the paper: Research paper.

1. Introduction

Industry 4.0 has become one of the most popular topics and most chosen areas in academic and professional fields (Frank et al., 2019). Referred to as the Fourth Industrial Revolution, it was introduced in 2014 by the German Federal Government as a technology plan for German industry (Machado et al., 2020). The literature has mainly focused on the digital transformation of industries and companies to the level of 'Industry 4.0' (Dalenogare et al., 2018), however, the Fourth Industrial Revolution covers many areas and fields of activity, and the solutions introduced have implications for a state in every sphere of economic and social life. The digital transformation affects the labor market, where the adaptation of companies in terms of competencies to the requirements of Industry 4.0 becomes crucial for their competitiveness. Industry 4.0, as a broad field, includes data management, manufacturing competitiveness, production processes, and productivity.

Industry 4.0 is a term that encapsulates the integration of intelligent machines, and systems and the way in which changes are made to production processes to achieve even better productivity. It can be described as the current trends in data exchange and automation between production technologies or activities. Industry 4.0 focuses on the development of 'smart' factories that can meet dynamic production scenarios, management objectives, and new business models (Oztemel, Gursev, 2018). The digital transformation process has been supported by the implementation of four underlying technologies: the Internet of Things (IoT), Cloud Computing, Big Data, and Artificial Intelligence (AI) (Frank et al., 2019). As numerous studies have shown, digital transformation does not aim to eliminate human labor but to support and complement it by introducing collaboration between machines, people, and systems. Robots can, for example, perform tasks that require adverse working conditions. An important element of Industry 4.0 is also the increasingly far-reaching integration of CPS (cyber-physical systems), which translates into the use of artificial intelligence in production, dynamic production control, as well as real-time access to information. The past three Industrial Revolutions (Industry 1.0; Industry 2.0; Industry 3.0) were driven by mechanization, electrification, and information technology in manufacturing which enhanced resource utilization as well as productivity (Zhong et al., 2017). One of the hallmarks of the Fourth Industrial Revolution compared to previous revolutions is the continuous real-time interconnectivity among processes, products, services, and people (Chiarini et al., 2020).

The literature on the subject does not present a single, coherent, and closed catalog of technologies supporting the Industry 4.0 concept; indeed, there are some discrepancies in this respect (Fettermann et al., 2018). Based on a critical analysis of the available literature, enabling technologies for digital transformation include Big data and Analytics, the Internet of Things, Cyber-Physical Systems, Artificial Intelligence, Cloud Technology, Automation, and Industrial Robots.

Big data and analytics, i.e. the collection and analysis of large amounts of data, where data is processed in larger volumes, at higher speeds, and with greater variety (Fosso Wamba et al., 2015). The Internet of Things is an information network of physical objects that enables the collection and exchange of data, while also enabling the interaction and collaboration of these objects (Oztemel, Gursev, 2018). Cyber-physical systems, are a set of transformative technologies whose main purpose is to monitor physical systems while creating a virtual copy (Alguliyev et al., 2018). Artificial intelligence, i.e. a system that thinks rationally and in the way humans think according to six main disciplines: natural language processing, knowledge representation, automatic inference, machine learning, computer vision, and robotics (Monostori, 2003). Cloud technology is a system for storing all software, applications, and data online on a virtual server without installation (Xu, 2012). Industrial automation and robots, i.e. machines and devices that automate operational processes, allow humans and machines to work together in a shared learning environment (Ghobakhloo, 2018).

Industry 4.0 requires companies to introduce a range of solutions and to have resources with the right competencies, both soft, transversal, and traditional technical skills, including digital. Due to the rapid pace of technology development, and the resultant rapid obsolescence of skills among both low-skilled and skilled workers, employees are required and expected to develop and adapt their competencies to the requirements of Industry 4.0.

The changes associated with digital transformation, implementation, and application of Industry 4.0 solutions are not without impact on employees and their perception of job satisfaction. Job satisfaction is defined as an employee's emotional state resulting from the individual's perception of his or her job as realizing or providing the opportunity to realize the important values available at work, provided that these values coincide with his or her needs (Locke, 1969). Achieving job satisfaction for employees received the attention of many researchers because it is important for the individual's performance within the organization (Mohammad et al., 2017) and despite its wide recognition in the literature, is still a topical issue and remains of interest to theorists and practitioners. Job satisfaction is linked to a number of factors that influence and enable it to be achieved. In view of the progressive digitization of many branches of the economy and different spheres of life, where never before has technology, which links various industries and society, had such a strong impact on the type and volume of activities and production, it seems necessary to identify the factors influencing the achievement of job satisfaction. Hence, the aim of this article is to identify factors influencing the achievement of job satisfaction by employees in Polish small and medium-sized manufacturing enterprises in the Industry 4.0 era.

Based on an in-depth analysis of the literature, the following factors related to achieving employee job satisfaction were selected: (1) supervisory communication, (2) person-organization fit, (3) supervisor support, (4) rewards, (5) organizational commitment, (6) work-life balance, (7) organizational pride, (8) leadership style, (9) quality of work-life, (10) job security, (11) autonomy, (12) teamwork, (13) salary, (14) empowerment.

The article consists of three main parts. First, a brief review of the literature on selected factors affecting employee job satisfaction is made. Then the research procedure is presented and the main stages of the empirical study are described in detail. The results of the analysis and conclusions are discussed in the last section.

2. Theoretical background

Taking after Mitchell et al. (2017), job satisfaction is the Holy Grail of organizational psychology. Job satisfaction indicates the degree to which people like or dislike their jobs (Badrianto, Ekhsan, 2020). Job satisfaction can be defined as employees' attitudes toward the company, the duties performed, co-workers, and other factors that may be related to the psychological atmosphere of the work environment (Bae, Kim, 2016). Job satisfaction is one of the factors that must be managed in such a way that employees retain their enthusiasm and energy to dedicate themselves to achieving organizational goals (Nyanga et al., 2018). In addition, it is an important factor for the survival and development of enterprises, even more so during the economic recession and crisis caused by the COVID-19 pandemic and the war in Ukraine. Job satisfaction is important because an employee's attitude and beliefs can influence his behavior and relationship with the organization. Job satisfaction can also be viewed in the broader context of issues affecting an employee's work experience, or quality of work life. Moreover, employees spend most of their day in the work environment, so job satisfaction not only affects their overall well-being but translates into their attitudes and feelings in other areas of their lives as well.

Based on an extensive review of the literature on the subject, a total of fourteen of the most common and recurring factors associated with achieving employee job satisfaction were selected. These factors will be characterized below.

Supervisory communication is important in managing the organization and has been identified as a strong factor in predicting the organizational environment. Is connected with, among others, the style of leadership (Graen, Uhl, 1995) or job satisfaction (Gok et al., 2014). Even if it is not clearly defined, the function of supervisory communication serves as a large determinant of job satisfaction. Various researchers use the term interchangeably with leadership and managerial communication (Bakar et al., 2007).

Person-organization fit is a complex and multidimensional concept analyzed from the perspective of fitting a person to the environment and its various aspects, such as: fitting a person's organization, fitting a person to work, and fitting a person to the environment (Jansen, Kristof, 2006). The person-organization fit can be defined as the similarity of values, the similarity of goals and compliance of employees' needs with support in the work environment, and compliance of individual and organizational characteristics. The higher the

level of person-organization fit, the greater the impact on the results desired by the company, including increased satisfaction with work, organizational commitment, and reducing the level of departure of employees (Jin et al., 2018).

Supervisor support is the degree to which employees perceive that their superiors care about their well-being (De Clercq et al., 2016). Supervisor support creates a sense of value for the employee and builds a strong relationship between the employee and the organization (Dhir, Dutta, 2020). Feedback from the supervisor is also a form of support (van der Klink et al., 2001). Bibi et al. (2018) also explained that if employees receive adequate support from their supervisor, they will behave positively towards the organization. Anderson et al. (2002) showed that supervisory support was directly related to job satisfaction.

The reward is defined as all the monetary, non-monetary, and psychological payments that an organization provides to its employees (Bartol, Locke, 2000). Gerald and Dorothee (2004) indicate that rewards for work are a strong indicator of job satisfaction and are largely related to professionalism and job satisfaction, which depends on both financial and non-financial rewards. Organizational reward systems should therefore include both financial rewards, such as non-financial rewards. In addition, the rewards are divided into internal rewards and external rewards. Rehman et al. (2010) found that external rewards had a strong relationship with job satisfaction as compared to internal rewards. The reward can affect job satisfaction and employee productivity (Riasat et al., 2016), but an internal reward is a form of complacency that has a greater impact on job satisfaction (Putra et al., 2018).

Organizational commitment is an emotional and psychological bond and a link with the organization (Andi Kele et al., 2016). Commitment often results in positive outcomes such as increased productivity, better performance, reduced absenteeism, and employee turnover (Suliman, AlJunaibi, 2010). Organizational commitment is the level of employees' ability to identify and actively participate in the organization, which was characterized by the willingness to maintain membership in the organization, trust, and acceptance of the values and goals of the organization, and the willingness to cooperate as closely as possible in the interest of the organization (Nor et al., 2022). Organizational commitment can be defined as the bond and loyalty of an employee to his organization and work (Mahmoud et al., 2020). Organizational commitment is the predecessor of many important organizational constructs, such as motivation, stress, job satisfaction, and work commitment (Bozeman, Perrewé, 2001).

Swami (2007) defined **work-life balance** as a practice that concerns providing employees with the opportunity to balance their work with the responsibilities and interests they have outside of work. The determinants of the conflict between work and private life are organizational and industry attributes (e.g. working hours, low wages, low skills, education mismatch, lack of career development, and need for conditional employment) (Deery, 2008) and employee dimensions (e.g. stress, burnout, emotional exhaustion) (Deery, 2008). Work-life balance helps a person achieve both personal and professional goals (Oludayo et al., 2015).

Recent findings (Kasbuntoro et al., 2020) directly indicate that work-life balance has a profound effect on job satisfaction.

Organizational pride is based on certain psychological structures, with reference to the relationship between employees and these organizations (Haslam, 2004). Mischkind's (1998) definition indicates organizational pride as the positive feeling of an employee in his institution. Research has shown the effect of pride on job satisfaction (Arnett et al., 2002). Employees who identify with their work and take pride in working in the company are also satisfied with their work (Van Dick et al., 2004). Organizational pride is considered a precursor to job satisfaction as it relates to an employee's emotional attachment, identification with and commitment to the organization (Lok, Crawford, 2001).

Leadership is a process of social influence in which the leader strives for the voluntary participation of subordinates in the pursuit of organizational goals. It is a process in which one person exerts a social influence on other members of a group, the process of influencing the actions of an individual or a group of individuals striving to achieve a goal in given situations, and a concept of a relationship that includes both the influencer and the person affected (Bhatti et al., 2012). Studies in the areas of management and organizational behavior show that the **leadership style** of managers affects employee satisfaction with work (Judge et al., 2001). In addition, researchers recognize that leadership styles are a key aspect of an organization's achievements or failure (Trottier et al., 2008), and employee management is entirely dependent on the quality of leadership (Arnold et al., 2015). Most leaders adapt their leadership style to the needs and working environment of the organization (Zahari, Shurbagi, 2012), and Rowold et al. (2014) propose that the leadership style of the supervisor positively influences employees' organizational commitment and job satisfaction.

The quality of work life has for years been of interest to psychologists and sociologists, as well as scientists (Back et al., 2011). QWL is the favorable conditions and environments of a workplace that support and promote employees' satisfaction by providing them with job security and reward (Lau, 2008). The scope of QWL affects not only employee satisfaction with work (Koonmee et al., 2010), but also life outside work, such as family, other activities and social needs (Gallie, 2003).

The research directly emphasizes that the sense of **job security** is conducive to the organizational commitment of employees, which concerns the degree of identification of the employee with their work or organization and its goals (Apkan, 2013) and that the impact of occupational safety on job satisfaction is large and significant (Kraimer et al., 2005). Research by Wolff (2008) found that job insecurity showed a strong association with negative physical health conditions such as fatigue, insomnia, and body pain. In turn, Silla et al. (2009) found that high perceptions of occupational safety will also result in higher job satisfaction.

Job autonomy is characterized as the level of control an employee has over his direct tasks and planning (Liu et al., 2005) and describes the degree to which work provides the employee with freedom in planning work (Chang, Cheng, 2014). In addition, it relates to the degree of

control and discretion an employee can exercise over the way they perform their work (Voydanoff, 2004). Autonomy is a predictor of job satisfaction (Chang, Cheng, 2014) and is widely recognized as beneficial to the organization as it is generally associated with positive work outcomes (Kubicek et al., 2017).

Teamwork is a group of people who strive to achieve specific goals and relies heavily on understanding between colleagues, using communication skills (Sanyal, Hisam, 2018). Teamwork is seen as mobilizing a small number of talented people who are committed to a common goal, operational goal, and self-management (Greenberg, Baron, 2003). Working teams are groups whose members work intensively on a specific and use their positive relationships, individual and team responsibility, and cooperation skills (Robbins, Coulter, 2012). Daft (2012) suggests that building effective teamwork involves issues such as general clear goals, appropriate skills, mutual trust, commitment, good communication, negotiation skills, appropriate leadership, internal support, and external support. Teamwork influences job satisfaction, which means that better teamwork will result in higher satisfaction (Musriha, 2013).

Salary is another factor related to achieving job satisfaction. It is defined as the amount that employers pay their employees for the performance of their contractual obligations. Research indicates that salary is related to achieving job satisfaction (Prakash Sharma, Bajpai, 2011). A study by Hamermesh (1999) found that workers who receive higher wages achieve higher job satisfaction, while lower wages will lead to lower job satisfaction.

Empowerment is the willingness of the superior to give decision-making powers to his subordinates, which allows them to think, act, control, and decide on their own work for themselves. It is used as a strategy to improve the organizational commitment of employees (Limpanitgul et al., 2017) and is especially important for employees who interact with customers as it provides flexibility in meeting customer wishes (Li et al., 2018). Research shows a strong positive relationship between structured empowerment and work attitudes (job satisfaction, work commitment) (Kuo et al., 2008; Lu et al., 2019) and organizational commitment.

3. Methodology of research

The purpose of this article is to identify factors influencing employees' achievement of job satisfaction in Polish small and medium-sized manufacturing enterprises in the Industry 4.0 era. The survey, which was conducted from May to July 2022, covered Polish small and medium-sized manufacturing enterprises, located throughout the country. The survey consisted of several stages. Stage one involved the selection of the research sample, that is, the selection of Polish small and medium-sized enterprises with experience in the area of digital transformation.

Therefore, at the outset, 358 small and medium-sized manufacturing enterprises were selected from our SME database, which was created in the course of studies conducted within the framework of the university and departmental scientific and research projects, as well as the author's own shaft research, and were sent an invitation to participate in the research along with their detailed characteristics.

Of the 358 invitations sent, 223 entities responded positively, expressing their willingness to cooperate. Since digital maturity is widely recognized as a standard for assessing digital transformation performance (Li, Shi, Li, Xing, Wang, Ying, Zhang, Sun, 2018), in the next step, the author's intention was to identify entities with a high degree of digital maturity. To this end, executives of these enterprises were asked to complete a survey containing questions about the digital maturity of the organizations they manage. The digital performance assessment model of Gill and Vanboskirk (2016) was used. The model used contains four measurement items that define digital maturity for four dimensions. These include; culture, organization, technology, and insight. The digital maturity questionnaire contained a total of fourteen questions, that is, five items for each dimension mentioned earlier. Executives were asked to rate themselves on a five-point, where 1 means strongly disagree and 5 means strongly agree.

Table 1.
Sample description

Category	Statistics	
Firm size (employees)	Fewer than 50: 50-250:	43,22% 56,77%
Respondent	Age:	
	20-30	15,25%
	31-40	27,11%
	41-50	32,21%
	> 51	25,43%
	Gender:	
	Male	69,49%
	Female	30,51%
Industry sector	Metal industry:	19,49% 23
	Automotive industry:	18,65% 22
	Electrotechnical industry:	16,10% 19
	Pharmaceutical and cosmetic industry:	7,63% % 9
	Chemical industry:	8,47% 10
	Construction industry:	11,02% 13
	Furniture industry:	15,26% 18
	Other:	3,38% 4

Source: own study.

The second stage of the survey resulted in the selection of a total of 118 small and medium-sized manufacturing companies that had a high degree of digital maturity. In the third stage of the research, employees of SMEs selected in the earlier stage of the research were asked to evaluate and rank on a scale from 1 to 14, (where 1= most important and 14 = least important) selected fourteen factors related to achieving job satisfaction, based on their own experiences. Employees were given factors to rank and were asked to assess: what they thought had the

greatest and least impact on their job satisfaction in the era of Industry 4.0. The description of the research sample is included in Table 1.

4. Results

A survey of 118 small and medium-sized manufacturing companies, among a total of 633 employees, found that job security was indicated as the most important factor related to achieving job satisfaction in the era of Industry 4.0. Job security was indicated by 449 employees as the most important element for achieving job satisfaction. The 449 indications of job security as the most important factor accounted for 71% of all responses given by respondents to this question. Autonomy was indicated as the second most important factor related to achieving job satisfaction in the age of digital transformation. It was indicated in second place by 419 SME employees, which accounted for a total of 66% of all, 633 responses under this factor. Empowerment received the third highest score in the survey and was marked as the third most related factor to achieving job satisfaction. Empowerment was indicated in third place by 59% of respondents, that is, 374 SME employees. Compensation is the fourth factor important to achieving employee job satisfaction in the Industry 4.0 era and was marked here by a total of 381 respondents, accounting for 60% of all indications on this factor. Supervisor support ranked fifth in respondents' answers (313 employees indicated this factor as the fifth most important for achieving job satisfaction, which accounted for an outlier of 49.5% of the responses given under this factor). Organizational pride, supervisory communication, and leadership style ranked next in the sixth, seventh and eighth positions in the assessment of SME employees (298 respondents, 281 respondents, and 285 respondents, respectively, rated these factors at the indicated positions of importance for achieving job satisfaction during the Fourth Industrial Revolution). Organizational pride was indicated in sixth place by 47% of respondents, supervisory communication was marked in seventh place by 44% of respondents, and leadership style was indicated by 45% of employees as the eighth most important factor associated with achieving job satisfaction. In ninth place was the reward, which was indicated by 271 respondents in this position, a percentage of 43% among all responses to this question. In tenth and eleventh place in terms of importance for achieving job satisfaction were teamwork and person-organization fit, which were indicated on these items by 41.5% (263 responses) and 44% (280 responses) of respondents, respectively. The last three factors indicated as least important in achieving job satisfaction in the Industry 4.0 era were quality of work-life, work-life balance, and organizational commitment. These factors on the indicated items were rated by 251, 213, and 244 manufacturing employees of SMEs, which accounted for almost 40%, 36.5%, and 38.5% of the total responses given to the listed factors, respectively. None of the selected and rated factors received the same number of responses and ratings regarding their importance

in achieving job satisfaction in the era of digital transformation. The results of the empirical study, along with the percentages of responses under each factor, ranking them in order of importance for achieving job satisfaction under conditions of high digital maturity, are presented in Figure 1.

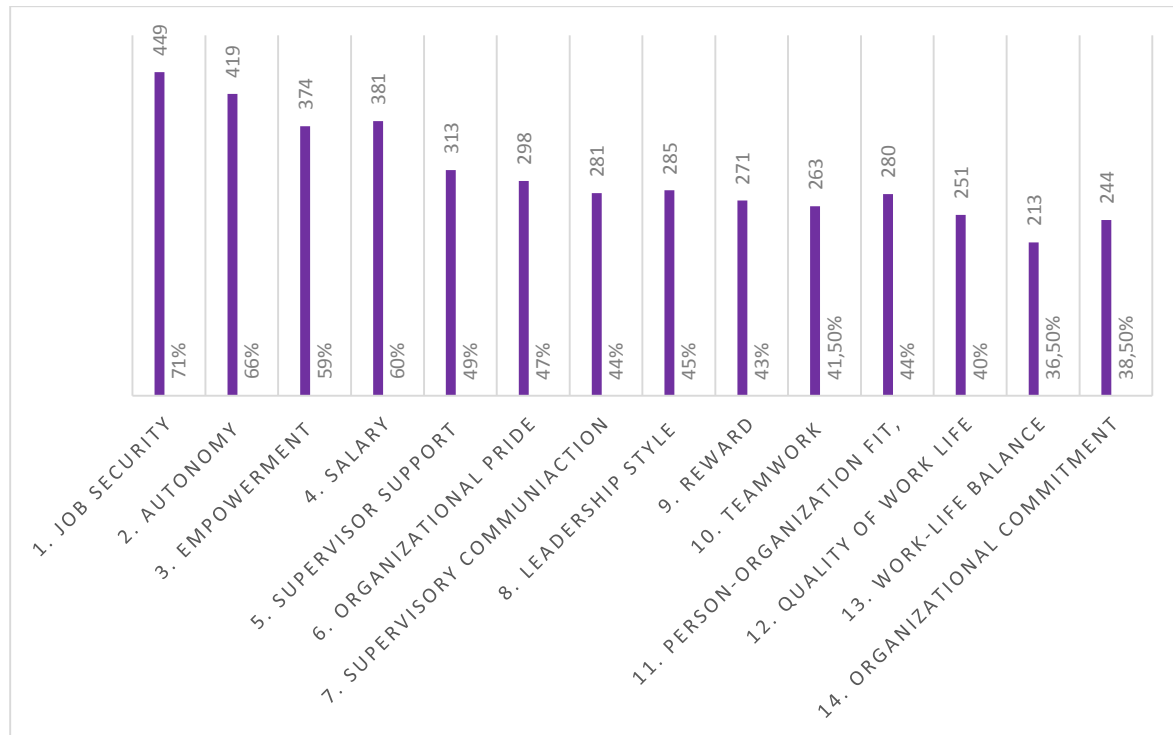


Figure 1. respondents' answers ranking the factors affecting the achievement of job satisfaction.

Source: own study.

5. Discussion and conclusion

The survey conducted among employees of Polish small and medium-sized manufacturing enterprises allowed for the identification and indication of the most important factors related to achieving employee satisfaction in the era of Industry 4.0. It is worth pointing out that research and insights into such a broad set of factors related to achieving job satisfaction in manufacturing SMEs under conditions of high digital maturity have not yet been made. The available numerous research results deal with analyses of single or fewer factors affecting job satisfaction, with few of them addressing the conditions for achieving job satisfaction in the era of Industry 4.0. The conducted study indicated that in SMEs the most important factors related to job satisfaction are: job security, autonomy, and empowerment. The sense of job security promotes the organizational commitment of employees and is related to the degree of employee identification with their work or organization and its goals. The association of job security as an important factor for achieving satisfaction at work confirms the research

conducted by Silla et al. (2009). In addition, this empirical study found that job security ranks among the three most important factors for achieving job satisfaction in manufacturing SMEs with a high degree of digital maturity. Autonomy is characterized as the employee's level of control over their immediate tasks and planning. Job autonomy, which was identified by Chang and Cheng, 2014 as a predictor of job satisfaction and as a factor positively influencing broader job performance (Kubicek et al., 2017), and in the empirical research conducted, was identified as the second most important factor for achieving satisfaction at work under conditions of digital transformation, with a high degree of digital maturity achieved. In a way, the obtained research results develop previous studies, indicating job autonomy not only as a predictor of job satisfaction but as a factor directly related to its achievement. Empowerment, ranked by respondents as the third most important factor influencing feelings of job satisfaction in the selected research sample, and is defined as a supervisor's willingness to give decision-making authority to subordinates, allowing them to think, act, control and decide their own work for themselves. The results of the study corroborate the insights of Kuo et al., (2008) and Lu et al., (2019), who highlight the strong positive relationship between empowerment and work attitudes such as job satisfaction, among others. Marking by the respondents on the basis of their own experience these 3 areas as the most important for the achievement of job satisfaction may indicate some mental conditions and barriers related to the implementation of modern technological solutions. The human approach and mentality are often one of the biggest barriers to the implementation and application of new technologies because there is a belief that the development of a machine park and implementation of modern solutions and technologies is synonymous with the reduction of jobs. Hence, perhaps such a percentage of respondents indicated a sense of security, autonomy, and empowerment as key factors for achieving job performance during the digital transformation. Other factors most important for achieving job satisfaction are salary and supervisor support. The amount of remuneration, providing some stability and being a reflection of the assessment of the contribution and commitment of employees and the support of superiors, which influences and builds a sense of value for the employee, were assessed as one of the key factors influencing job satisfaction in this uncertain and difficult time of the post-pandemic economic crisis and high inflation. Such a result is consistent with the findings of Prakash Sharma and Bajpai (2011), who emphasize the importance of compensation in achieving job satisfaction. In addition, supervisor support is the degree to which employees perceive that their supervisors care about their well-being (De Clercq et al., 2016). Anderson et al. (2002) showed that supervisory support was directly related to job satisfaction, which was also confirmed in the present study, under conditions of the Fourth Industrial Revolution. Consecutively, the respondents indicated organizational pride, supervisory communication, and leadership style as important variables related to achieving job satisfaction. This shows that positive feelings of an employee in his institution together with supervisory communication, which is related to leadership style, help employees achieve positive feelings at work or realize values that are important to them while functioning in

a highly digital environment. Earlier studies by Arnett et al. (2002) and Van Dick et al. (2004) emphasized the importance of the impact of organizational pride in achieving job satisfaction. The present empirical research confirmed this link in an era of digital transformation. Supervisory communication, which has also been assessed in previous studies as a predictor and variable affecting job satisfaction (Gok et al., 2014), was identified by respondents in the present study as the seventh most important factor associated with feelings of job satisfaction. Numerous studies in the areas of management and organizational behavior emphasize the link between managers' leadership styles on employee job satisfaction (Judge et al., 2001; Rowold et al., 2014). The empirical results obtained confirmed this link. Reward, teamwork, and person-organization fit, employees of small and medium-sized production enterprises that have achieved a high degree of digital maturity, indicated as less important factors from the point of view of achieving satisfaction from work in Industry 4.0. Reward, teamwork, and person-organization fit, employees of small and medium-sized manufacturing companies that have reached a high degree of digital maturity identified as less important factors for achieving job satisfaction in Industry 4.0. The above results confirm previous studies of the relationship between these factors and achieving satisfaction at work (Musriha, 2013; Rehman et al., 2010; Jin et al., 2018), but, interestingly, under conditions of high digital maturity, they were not among the most important factors. The empirical results indicate that financial rewards or non-financial rewards, which are mostly not a permanent salary component, work in a group of co-workers, the compliance of individual and organizational characteristics do not have such a connection with the feeling of satisfaction at work in the era of integration of technologies and digital solutions. The factors of least importance for achieving job satisfaction, according to respondents, are quality of work life, work-life balance, and organizational commitment. The results of the survey thus confirm the work of Lau, (2008) and Koonmee et al. (2010) regarding the link between the quality of work-life and job satisfaction, Kasbuntoro et al.'s (2020) research on the impact of work-life balance on job satisfaction, and Bozeman and Perrewé's (2001) analysis linking organizational commitment to job satisfaction. However, these factors, despite the slightest connection, are not entirely without influence on achieving job satisfaction. It should be emphasized that the cited studies confirming the links between job satisfaction and these three factors involved research samples other than the one selected for this study. In addition, the conditions for the implementation and use of digital technologies are also specific, where the selected SMEs have achieved a high degree of digital maturity. The circumstances of the global economic crisis and the war in Ukraine are not insignificant. The results of the study, concerning the factors of least importance for achieving job satisfaction in the era of Industry 4.0, indicate that achieving work-life balance, having satisfying experiences in various aspects of life, and achieving some balance between work and non-work responsibilities are not as strongly as the other selected factors related to achieving job satisfaction under conditions of digital technology application. The conducted empirical research certainly contributes to the science and practice of management by providing insight

into the premises and factors related to achieving job satisfaction in small and medium-sized industrial enterprises in the Industry 4.0 era. It is worth noting that the timing of the survey - after the pandemic coincided with the economic crisis, very high inflation, and the possible vision of armed conflict on a larger scale, i.e. outside Ukraine. These factors create a sense of fear, danger, and instability in society and are unlikely to have been unaffected by respondents' experiences and feelings about their job satisfaction during the Fourth Industrial Revolution. The above, along with the selection of the research sample, i.e. Polish SMEs, are a certain limitation that makes it difficult to generalize the results.

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