

# EMPLOYEE ATTITUDES TOWARD AI AND AUTOMATION IN THE WORKPLACE: AN EMPIRICAL STUDY

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**Abstract:** *The aim of the paper is to examine how employees' attitudes toward work automation in enterprises and their perception of the effects of artificial intelligence implementation correspond with their socio-demographic characteristics (gender, age, level of education, marital status, economic sector, place of residence, i.e., urban/rural area, voivodship). The operationalization of the research objective consists in developing perceptual maps as a graphical presentation of the results of classical correspondence analysis. The results indicate a clear polarization of attitudes, determined primarily by education level, gender, marital status, and employment sector. Higher education promotes greater acceptance of AI and a clearer perception of the benefits of automation, particularly among men. Conversely, individuals with lower levels of education are more likely to express fear of losing control over technology and unpredictable machine development. The analysis also reveals significant gender differences, with men demonstrating a more optimistic and pragmatic approach to AI, while women more frequently highlight threats related to the labor market and the possibility of losing their jobs. Respondents' marital status also plays a role. Single women are more likely to fear the economic consequences of AI development, while married women express existential and technological concerns. Unmarried men prove to be the most open to change. Industry analysis, meanwhile, shows that attitudes toward AI are strongly linked to the level of digitization and the nature of work in a given sector. Modern and service industries demonstrate high acceptance of the technology, operational sectors see the potential for relief from routine duties, while administrative and financial sectors fear job losses. The greatest distance toward AI is evident in traditional sectors, where concerns about losing control over technology predominate.*

**Key words:** *artificial intelligence, AI, augmentation, automation, countervailing effects, labor market*

**JEL codes:** *O33, J23, J24*

## 1. Introduction

The dynamic development of artificial intelligence (AI), and in particular the widespread use of advanced generative AI (GenAI) tools, is driving significant structural changes globally, becoming a general-purpose technology comparable to the steam engine or the internet. These advancements are fundamentally shaping labor markets and service sectors, sparking both widespread enthusiasm for increased productivity and heightened fear of mass unemployment and worker displacement in public debate. However, contemporary scientific literature points to a significant consensus: AI is not generating a sudden, widespread employment crisis, but rather initiating a process of profound reconfiguration of professional tasks. At the heart of this transformation lie the phenomena of automation, defined as the complete replacement of human labor by machines, and augmentation, understood as the collaboration and complementation of human and algorithmic competencies (Zúñiga-Segura, 2026). Automation focuses on reducing human involvement in specific operations, which works best for repetitive, mechanical, or analytical tasks. AI systems primarily take on relatively simple tasks based on rigid rules. Augmentation, on the other hand, involves the interaction of advanced algorithms with human work to enhance natural human capabilities and stimulate innovation (Davenport & Kirby, 2016). Effective implementation of this role division requires special attention to inter-task complementarity, which stems from the fact that humans and AI demonstrate advantages in completely different types of operations. Concurrently, intra-task complementarity is also important, i.e., a situation where direct collaboration between humans and AI allows for higher quality than if they worked separately (Fügener et al., 2026).

However, the practical implementation of these systems poses significant psychological, managerial, and social challenges. In customer-centric sectors such as tourism and hospitality, consumer aversion to full computerization of service can be a barrier to innovation. Research shows that strategically presenting AI systems as augmentation tools, which support employees rather than completely replace them, significantly increases technology acceptance, as it allows for the combination of AI's analytical ease of use with the irreplaceable human emotional element. From an organizational perspective, automating routine tasks frees up human resources, allowing them to be reallocated to resolving the most complex cases. Nevertheless,

expectations regarding AI's effectiveness confront its inherent limitations. AI often still demonstrates weaknesses in areas requiring intuition, flexibility, broad cultural context, and tacit knowledge, which remains the domain of humans (Lei & Kim, 2024).

In the face of these changes, it is essential to develop systemic programs for upskilling and retraining employees, preparing them to perform new cognitive tasks that require analytical thinking and resilience to change. Failure to introduce appropriate interventions and adopt flexible educational policies may deepen socio-economic inequalities and widen the digital gap across institutional, gender, and regional dimensions (Vorobeva et al., 2024). The division of tasks between humans and artificial intelligence has profound dimensions, not only structural and organizational, but also individual and cognitive. (Theoharakis & Mylonopoulos, 2026). The dynamic evolution of AI means that as many as 91% of users rely on their preferred algorithmic tools in everyday decision-making (Carolan et al., 2025; OpenAI, 2025). This approach, referred to as "AI-first," positions artificial intelligence as an epistemic authority, a credible source of knowledge and reasoning (Zagzebski, 2012). However, it remains unclear how consumers accept and justify the fact that a computer system is, in a sense, beginning to think on their behalf. Although AI significantly increases efficiency and personalization, it carries the risk of overdependence on algorithms, degradation of one's own skills (Kosmyrna et al., 2025), and erosion of individual autonomy (Banker & Khetani, 2019; Crisafulli et al., 2025; Du & Xie, 2021; Ferraro et al., 2024). Unthinkingly accepting AI-generated results leads to relinquishing the ability to think independently, which contradicts the ingrained human need for agency and control (Fuchs et al., 2010).

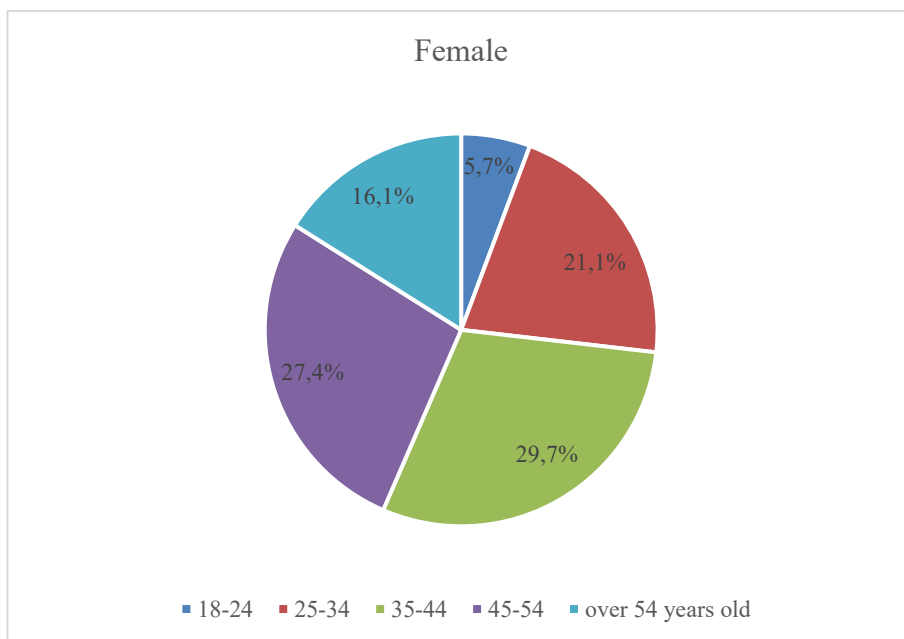
Previous literature often treats the determinants of technology acceptance in isolation (e.g., examining only the impact of education level or age). This article contributes a unique, intersectional approach to sociodemographic characteristics, demonstrating that attitudes toward AI are not linear. The study reveals specific configurations of characteristics, demonstrating, for example, a profound polarization of women's fears depending on their marital status (single women fearing economic consequences vs. married women declaring existential and technological fears) and identifying unmarried men as the group most inclusive of change.

The aim of the paper is to examine how employees' attitudes toward work automation in enterprises and their perception of the effects of artificial intelligence implementation correspond with their socio-demographic characteristics (gender, age, level of education, marital status, economic sector, place of residence, i.e., urban/rural area, voivodship of Poland).

## **2. Methodology and Data**

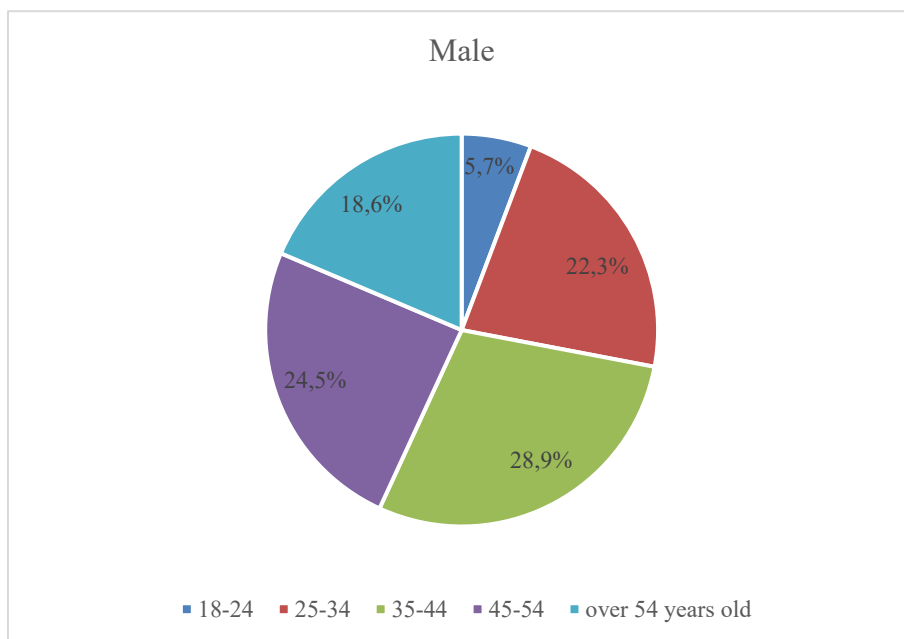
The data source is direct research (survey) conducted by the Department of Labor Market Analysis and Forecasting at the University of Economics in Katowice. The study was conducted using an online survey (CAWI) in the fourth quarter of 2024. The study covered a representative sample of 1,067 adult Poles (492 women and 575 men). The age structure of the respondents is presented in Charts 1 and 2. The distribution of education in the surveyed sample is as follows: education at most lower secondary school – 11 respondents (including 4 women and 7 men); vocational education – 75 respondents (including 24 women and 51 men); secondary education – 406 respondents (including 168 women and 238 men); and higher education – 575 respondents (including 296 women and 279 men).

**Fig. 1** Female Respondents by Age Group



Source: own estimation based on the results of the author's own survey.

**Fig. 2** Male Respondents by Age Group



Source: own estimation based on the results of the author's own survey

The survey questionnaire consisted of nineteen questions and addressed respondents' professional lives, including their attitudes toward work automation, the employment implications of artificial intelligence integration, working hours and forms, factors determining

professional life satisfaction, and trends in labor market transformation. It also covered concerns about the future of work, the evaluation of upcoming skills and competencies, and work-life balance. The survey further included twelve socio-demographic questions, specifically addressing gender, age, education, marital status, number of household members, employment status, income, place of residence (urban/rural, voivodeship), and the sector in which the respondents work.

The operationalization of the research objective consists in developing perceptual maps as a graphical presentation of the results of classical correspondence analysis. Correspondence analysis is a multidimensional, exploratory statistical method (Greenacre, 1988; Greenacre, 2017). As a variant of factor analysis, it enables the examination and visualization of relationships between qualitative variables (nominal, interval). The main goal of correspondence analysis is to present the analyzed data set in a maximum of a three-dimensional space, while maintaining the most complete possible information about the differentiation between rows and columns (Machowska-Szewczyk & Sompolska-Rzechuła, 2010; Stanimir, 2005; Gatnar & Walesiak, 2004; Wierzbńska, 2018).

The values on the axes of a perceptual map are coordinates in a multidimensional space, typically reduced to two dimensions ( $X$ ,  $Y$ ). They determine the distance of individual categories from the origin (0.0), which represents the average profile. These numbers do not have an intuitive unit of measurement and serve to assess spatial relationships. The key rule is that the further a given category is from the point (0.0), the more it differs from the average profile of the studied sample (i.e., it is more specific).

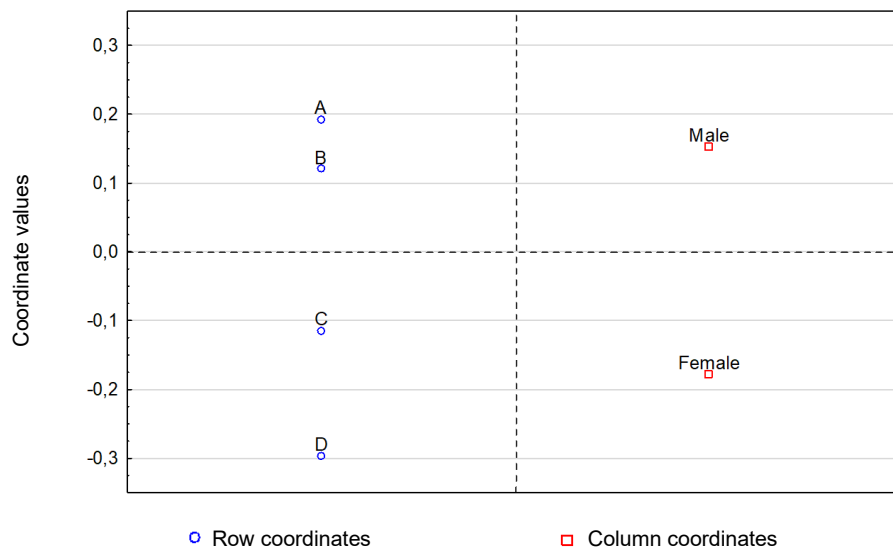
Points located close to the center of the perceptual map represent categories that do not stand out in any particular way. Their distribution of responses is very close to the average of the entire research sample. Points located far from the center of the perceptual map represent distinct, specific, and highly differentiated categories. These are the ones that contribute the most to building the structure of dependencies between the analyzed variables. The distance between points of different variables allows for assessing how individual categories of these variables correspond with one another. The closer the points are to each other, provided they are simultaneously distant from the origin of the chart, the stronger the relationship between the respective categories of the analyzed variables.

### 3. Results

The results of the correspondence analysis indicate that in the study sample, there is a statistically significant correlation ( $p < .05$ ) between the distribution of response options to the question regarding employees' attitudes toward automation and artificial intelligence and gender (see Fig. 3). Relatively significant gender differences are evident in the respondents' opinions. Men are significantly more likely than women to not be concerned about automation and artificial intelligence. At the same time, they express satisfaction that more and more tedious, boring tasks and activities in the workplace will be performed by autonomous machines and artificial intelligence.

For women, the situation is substantially different. Women fear not only the consequences of technological developments but also the possibility that robots will one day escape human control. Women, significantly more often than men, fear that their jobs will be replaced by automation and artificial intelligence, thus displacing them from the labor market. Based on the estimated relative inertia (0.12), it can be concluded that the category "B - I'm glad that more and more tedious and boring tasks are being done by machines and AI" is closest to the average profile (see Fig. 3).

**Fig. 3** Perceptual map (variables: attitude toward work automation and artificial intelligence, gender,  $p < .05$ )

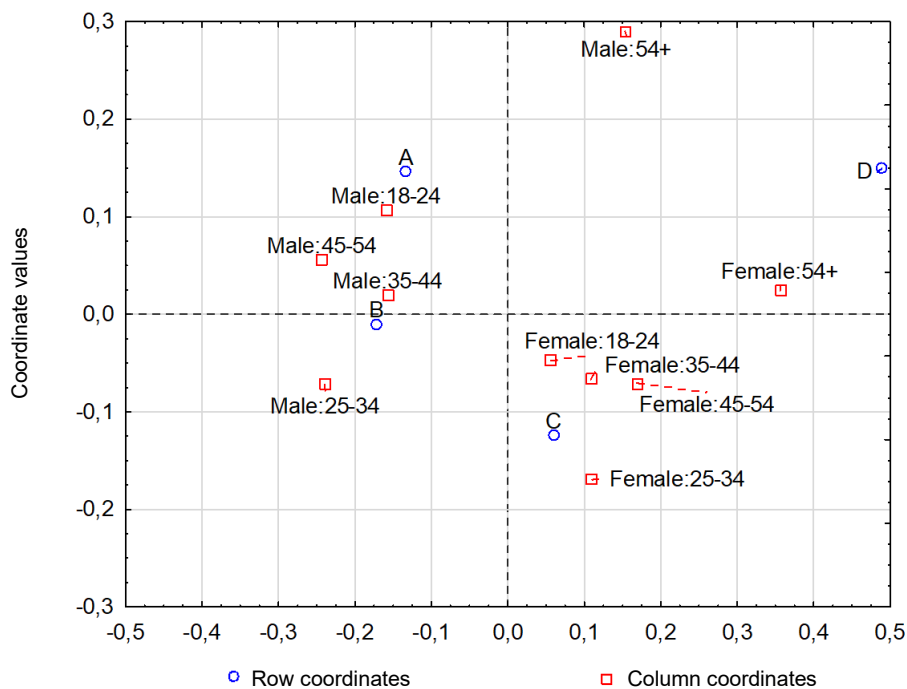


- A - It's a normal consequence of technological development. I'm not afraid of changes.
- B - I'm glad that more and more tedious and boring tasks are being done by machines and AI.
- C - The fear that people will become increasingly redundant in the labour market.
- D - I'm afraid of the consequences of such development (one day robots will get out of control).

Source: own estimation based on the results of the author's own survey.

When considering both age and gender in relation to attitudes toward automation and artificial intelligence, the results reveal that fears regarding the consequences of technological progress and the potential loss of human control over robots are most characteristic of women aged 54 and older (see Fig. 4). Conversely, men in the 54+ cohort exhibit a relatively unique response profile compared to the male sample as a whole; their positions are not clearly aligned with any single response category (A, B, C, or D; see Fig. 4). Concerns stemming from the anticipated replacement of human labor by machines and AI are predominantly the domain of younger and middle-aged women (18–54). Specifically, women aged 25–34 demonstrate the strongest association with point C ("fear of job loss due to technological progress") on the perception map, as evidenced by their close proximity to this coordinate. For men, particularly those aged 18–24, automation and the integration of AI in the workplace are perceived as natural consequences of technological advancement that pose no threat. Meanwhile, among men aged 35–54, satisfaction with the increasing deployment of automation and AI for routine and repetitive tasks remains the dominant sentiment.

**Fig. 4** Perceptual map (variables: attitude toward work automation and artificial intelligence, gender, age  $p < .05$ )

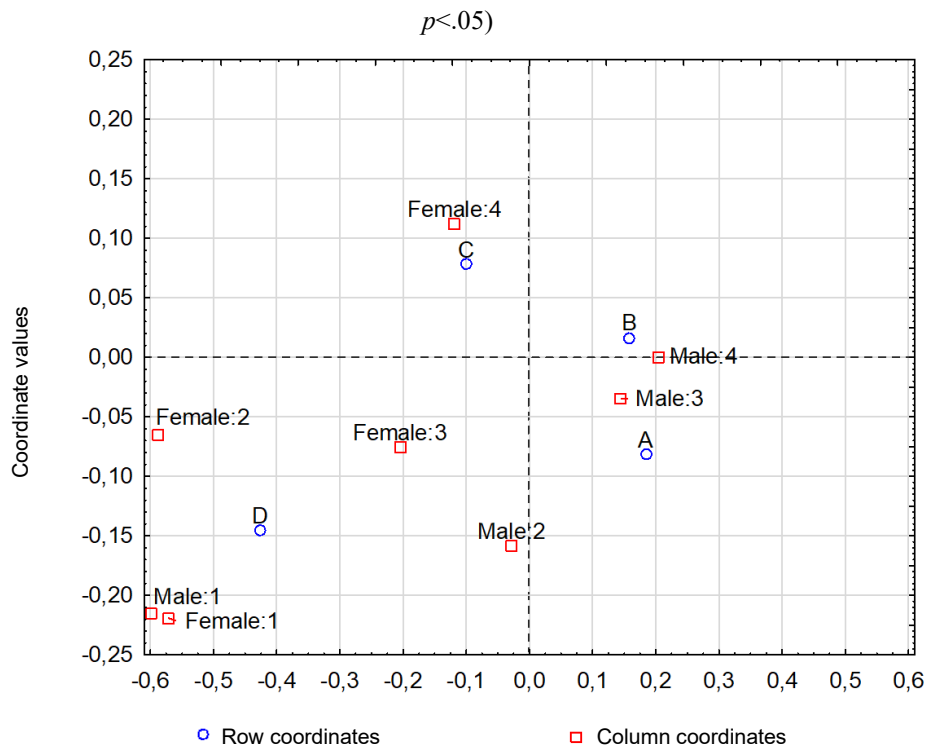


- A - It's a normal consequence of technological development. I'm not afraid of changes.
- B - I'm glad that more and more tedious and boring tasks are being done by machines and AI.
- C - The fear that people will become increasingly redundant in the labour market.
- D - I'm afraid of the consequences of such development (one day robots will get out of control).

Source: own estimation based on the results of the author's own survey.

In the case of women and men with at most a lower secondary education, a relatively homogeneous profile can be observed regarding the perception of technological progress as a source of threats and concerns about robots escaping human control (see Fig. 5). Women and men with higher education form two distinct groups, significantly different in terms of their attitudes toward automation and artificial intelligence. Men with higher or secondary education constitute a group that does not perceive automation as a threat but rather as an opportunity. Women with higher education fear losing their jobs due to the use of artificial intelligence in the workplace. This may be due to the fact that contemporary artificial intelligence language models strongly influence the so-called "white-collar" sectors, where women with higher education often work. Men with secondary and higher education demonstrate the most pragmatic and positive approach to technological development. They see artificial intelligence as an opportunity to relieve routine work and are not afraid of the future (see Fig. 5).

**Fig. 5** Perceptual map (variables: attitude toward work automation and artificial intelligence, gender, education,  $p < .05$ )

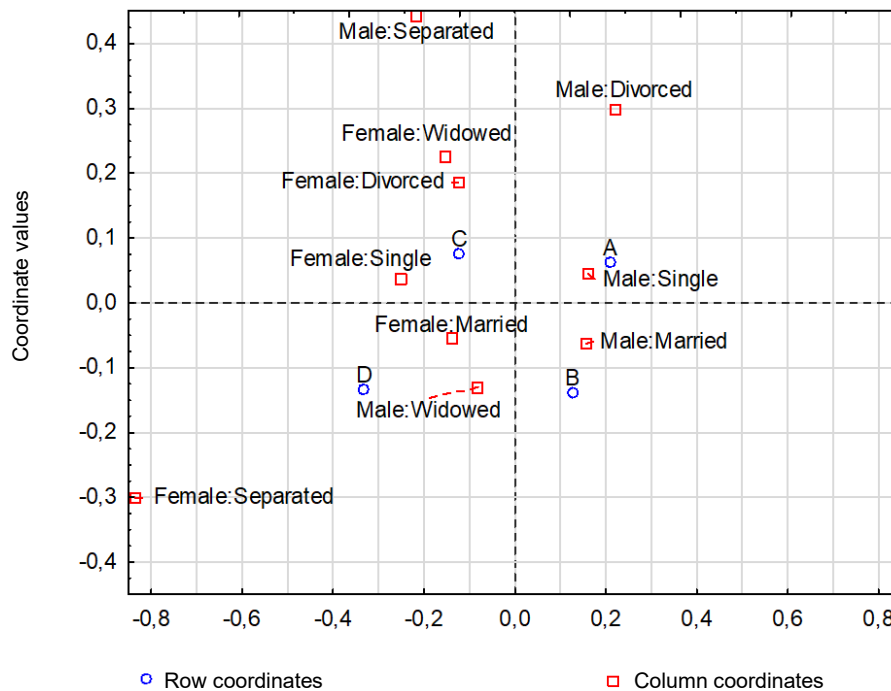


- A - It's a normal consequence of technological development. I'm not afraid of changes.  
 B - I'm glad that more and more tedious and boring tasks are being done by machines and AI.  
 C - The fear that people will become increasingly redundant in the labour market.  
 D - I'm afraid of the consequences of such development (one day robots will get out of control).  
 1 - Lower secondary or below.  
 2 - Vocational.  
 3 - Secondary.  
 4 - Higher.

Source: own estimation based on the results of the author's own survey.

In the lower-left quadrant of the graph (negative values on both axes), a distinct concentration of data points represents individuals with the lowest levels of education who simultaneously express fear of technology (see Fig. 5). Consequently, an attitude toward artificial intelligence that is heavily marked by anxiety appears characteristic of those with a secondary education or lower.

**Fig. 6** Perceptual map (variables: attitude toward work automation and artificial intelligence, gender, marital status,  $p < .05$ )



- A - It's a normal consequence of technological development. I'm not afraid of changes.  
 B - I'm glad that more and more tedious and boring tasks are being done by machines and AI.  
 C - The fear that people will become increasingly redundant in the labour market.  
 D - I'm afraid of the consequences of such development (one day robots will get out of control).

Source: own estimation based on the results of the author's own survey.

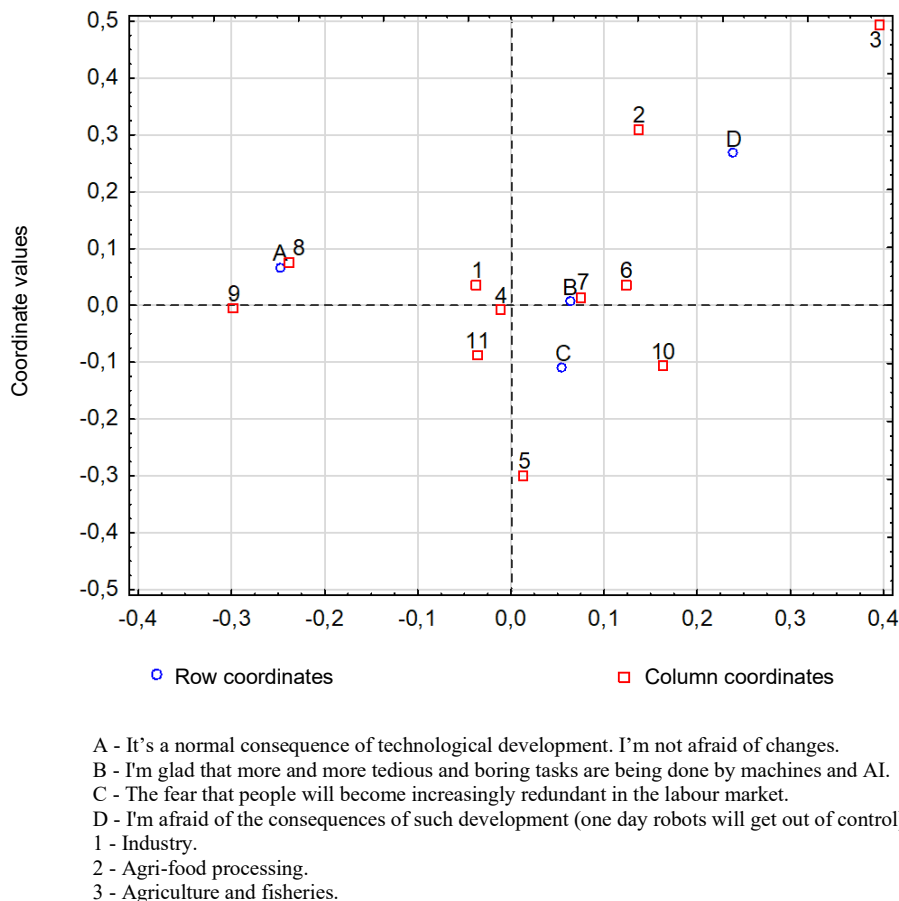
To the right of the dashed vertical axis, intersecting the 0.0 point (positive values on the  $x$ -axis), men with varying marital statuses are clearly clustered (see Fig. 6). These are accompanied by positive opinions about the anticipated effects of AI in the workplace. Single, unmarried men demonstrate the greatest calm and natural acceptance of technological change. In the same quadrant, though slightly higher on the  $y$ -axis, a group of divorced men is found, which also brings them closer to complete acceptance of technological progress in the workplace. Married men approach technology very pragmatically, appreciating it for saving

time and relieving them of routine professional duties. All of the above groups of men can be attributed to attributes of optimism and pragmatism in the context of automation and AI.

Around the dashed vertical axis, in the upper left quadrant, a cluster of points representing women with varying marital statuses and opinions related to the labor market is visible. Point C (“The fear that people will become increasingly redundant in the labor market”) lies near the group of single women. Other groups of women, namely divorced women and widows, also lie relatively close to point C (see Fig. 6). Single women (regardless of the reason – single, divorced, widows) primarily fear loss of economic stability and being pushed out of the labor market by artificial intelligence. This may be due to the fact that, as single households, they feel a greater responsibility for their financial security. In the lower left quadrant, near the minimum values of the coordinates on the  $x$ -axis, we observe existential fears (see Fig. 6).

Married women and widowers fear that robots will escape human control. The opinions of separated women and separated men on the effects of technological progress clearly deviate from the average profile (the intersection of the dashed auxiliary lines). This is due to the underrepresentation of these two groups in the study sample.

**Fig. 7** Perceptual map (variables: attitude toward work automation and artificial intelligence, sector,  $p < .05$ )

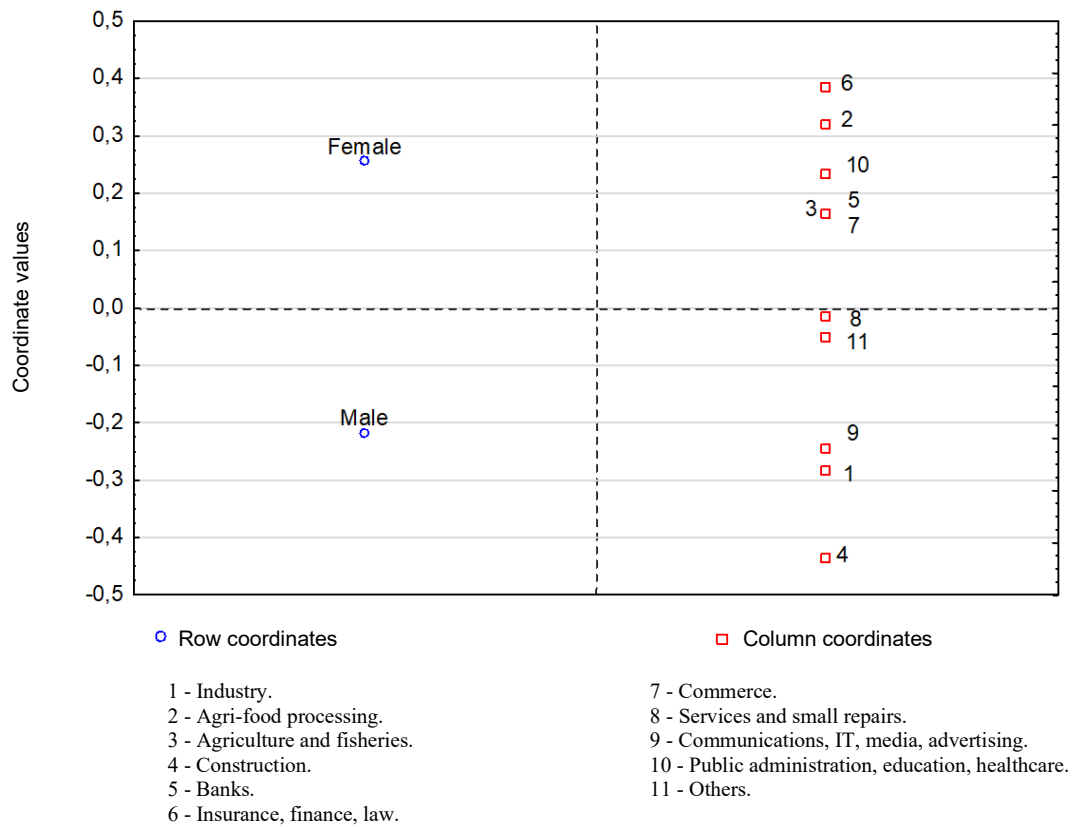


- 4 – Construction.
- 5 - Banks.
- 6 - Insurance, finance, law.
- 7 - Commerce.
- 8 - Services and small repairs.
- 9 - Communications, IT, media, advertising.
- 10 - Public administration, education, healthcare.
- 11 - Others.

Source: own estimation based on the results of the author's own survey.

To the left of the dashed vertical line (negative values on the  $x$ -axis), a distinct group of industries strongly associated with a positive opinion of technological progress stands out (see Fig. 7). Point A almost perfectly aligns with industry 8 (Services and small repairs). Point 9, representing industries (Communications, IT, media, advertising), is also very close to this opinion. Employees in the high-tech sector (IT/advertising) and the craft/repair services sector treat technological development as natural and feel no fear of it. In IT, change is an everyday occurrence, while in small services, the human factor (skills) is difficult to directly replace with artificial intelligence, which gives employees a sense of relative security. Sectors based on repetitive processes (trade, industrial production lines, repetitive construction work) are very enthusiastic about automation (see Fig. 7). Employees in these industries see a real benefit in relieving them of the most monotonous or physically demanding tasks. Employees in the public sector, education, finance, and banking sectors fear most massive layoffs caused by artificial intelligence. These are industries that rely on information processing, data processing, and procedures (so-called "white collar"), areas where AI algorithms demonstrate the highest effectiveness (see Fig. 7). Employees in traditional sectors, such as land and food processing, exhibit the greatest fear of technology in a catastrophic sense (loss of control over machines). Due to the nature of their work, they may feel the greatest distance from the digital revolution (see Fig. 7). To compare the employee opinions presented above on the effects of automation and artificial intelligence by gender and the economic sectors in which they work, a perception map was also developed, presenting the gendered nature of the sector (see Fig. 8).

**Fig. 8** Perceptual map (variables: gender, sector of economy,  $p < .05$ )



Source: own estimation based on the results of the author's own survey.

Women in the study sample are significantly more likely to be employed in sectors related to finance, law, education, health, trade, and food processing (see Fig. 8). Men dominate sectors traditionally considered technical and physical, such as construction and manufacturing, as well as the new technologies (IT) and media sectors (see Fig. 8). Consequently, it can be concluded that one of the factors determining men's positive attitudes toward the use of automation and artificial intelligence in the workplace is the relatively resistant profile of jobs held by men to the displacement of human labor by technological progress.

The results of correspondence analysis conducted on data covering the employees' place of residence, i.e., by urban and rural areas, as well as by voivodeship, proved statistically insignificant. The test probability value ( $p$ ) for the urban/rural division was  $p = .4361$  and for the voivodeships  $p = .3437$ . Consequently, it should be stated that the row and column variables in these cases, i.e. attitude to automation and place of residence (city/village) as well as voivodeships, are independent.

## 4. Conclusions

Respondents' education level is one of the key determinants influencing attitudes toward artificial intelligence and automation in the workplace. A phenomenon of social polarization

can be observed: individuals with higher education, especially men, are more open to new technologies, demonstrate greater acceptance of innovation, and recognize the benefits of AI development. At the opposite extreme are those with only primary education. This group is dominated by a strong fear of losing control over the autonomous development of machines. Analysis of the group of individuals with higher education indicates profound gender differences. While men with the highest educational status (higher education) demonstrate enthusiasm and calm, women with similar education express highly rational and pragmatic fears. Their concerns revolve around measurable economic threats, including, above all, the risk of losing a stable position in the labor market as a result of automation.

The spatial configuration of the results (along the x-axis) clearly confirms the dichotomous division of attitudes based on gender. Men tend to be on the optimistic and utilitarian side. In this context, the most responsive, flexible, and lowest-anxiety group in the entire survey are unmarried men (single). Meanwhile, among women, marital status becomes a moderator, determining the specific type of anxiety experienced. Single women (singles, divorcees, widows) perceive AI development through the prism of a direct threat to their financial security (fear of unemployment). Married women, on the other hand, more often shift their concerns to the existential and technological levels, worrying about the prospect of machines operating beyond human control.

The identified attitudes toward AI form a specific pattern that reflects the degree of digitization and the specific nature of work processes in individual industries. Based on this, four distinct sectoral profiles can be identified:

1. Modern and high-technology sectors (IT, media, specialized services): characterized by assimilation of change. Respondents from these industries demonstrate the highest level of adaptive readiness and are not afraid of technological transformation.
2. Physical and operational sectors (trade, manufacturing): optimism prevails; automation is seen as an opportunity to relieve employees of routine, heavy, and repetitive tasks.
3. Official and financial sectors (banking, administration, legal): this group clearly demonstrates concerns directly related to the prospect of job cuts and the replacement of white-collar work due to the use of automation and artificial intelligence.
4. Traditional and primary sectors (agriculture): these sectors are characterized by a distance from innovation, with the dominant component of resistance being the fear of losing control over technological processes and excessive dependence on unreliable systems.

The presented results open up new avenues of research and indicate the need for deeper analysis in several key areas. Future analyses should focus on monitoring the phenomenon of economic anxiety among women with higher education to determine whether their concerns stem from a genuine threat to employment structures in feminized "white-collar" sectors (e.g., administration, HR, marketing) or are a result of general inequality in risk perception. Further research would be worthwhile to expand the analysis by taking into account demographic variables (age, gender) and the actual level of digital competence of respondents.

## References

- Banker, S., Khetani, S. (2019). Algorithm overdependence and the erosion of human choice. *Journal of Consumer Psychology*, 29(4), 621–635.
- Carolan, S., Martin, A. W., Gong, C. C., Borja, S. (2025). *The "AI-First" mindset: How daily reliance on generative tools shapes executive decision-making*. Harvard Business Review / Tech Trends Report 2025.
- Crisafulli, B., Guesalaga, R., Dimitriu, R. (2025). *Delegating reasoning: Consumer autonomy and algorithmic authority in the age of generative AI*. *Journal of Marketing Research*, 62(2), 204–221.
- Davenport, T. H., Kirby, J. (2016). *Only Humans Need Apply: Winners and Losers in the Age of Smart Machines*. HarperBusiness. 55-84.
- Du, S., Xie, C. (2021). Paradoxes of artificial intelligence in consumer markets: Autonomy vs. algorithmic dependence. *International Journal of Research in Marketing*, 38(4), 812–830.
- Ferraro, C., Demsar, V., Sands, S., Restrepo, M., Campbell, C. (2024). The Paradoxes of Generative AI-Enabled Customer Service: A Guide for Managers. *Business Horizons* 67, no. 5: 549–559.
- Fuchs, C., et al. (2010). The autonomy paradox: Why consumers desire control but delegate choice. *Journal of Consumer Research*, 37(3), 411–425.
- Fügener, A., Walzner, D. D., Gupta, A. (2026). Roles of Artificial Intelligence in Collaboration with Humans: Automation, Augmentation, and the Future of Work. *Management Science*, 72(1), 538–557.
- Gatnar, E., Walesiak, M. (red.). (2004). *Metody statystycznej analizy wielowymiarowej w badaniach marketingowych*. Wydawnictwo AE we Wrocławiu. 221-246.
- Greenacre, M. (1988). *Correspondence Analysis of Multivariate Categorical Data by Controlling the Marginal Distributions*. „Biometrika”, 75(3), 457–467.
- Greenacre, M. (2017). *Correspondence Analysis in Practice* (3rd Edition). Chapman and Hall/CRC. 1-64.
- Kosmyna, N., et al. (2025). Cognitive offloading and skill decline in the era of generative artificial intelligence. *Nature Human Behaviour*, 9(1), 74–86.
- Lei, Y.-W., Kim, R. (2024). Automation and Augmentation: Artificial Intelligence, Robots, and Work. *Annual Review of Sociology*, 50, 251–272.
- Machowska-Szewczyk, M., Sompolska-Rzechuła A. (2010). Analiza korespondencji w badaniu postaw osób dokonujących zakupów przez internet. *Prace Naukowe Uniwersytetu Ekonomicznego we Wrocławiu. Ekonometria* 29. Vol. 141. 9-20.
- OpenAI. (2025). *GenAI adoption patterns and user reliance metrics: An annual ecosystem report*. OpenAI Policy

Research.

- Stanimir, A. (2005). *Analiza korespondencji jako narzędzie badania zjawisk ekonomicznych*. Wydawnictwo AE we Wrocławiu. 23-56.
- Theoharakis, V., Mylonopoulos, N. (2026). The individual-cognitive dimension of human-AI task division. *Management Science*, 72(1), 112–128.
- Vorobeva, D., Costa Pinto, D., António, N., Mattila, A. S. (2024). The augmentation effect of artificial intelligence: can AI framing shape customer acceptance of AI-based services? *Current Issues in Tourism*, 27(10), 1551–1571.
- Wierzbńska, W. (2018). *Zastosowanie analizy korespondencji w badaniach społeczno-gospodarczych*. Wydawnictwo Uniwersytetu w Białymstoku. 85-164.
- Zagzebski, L. (2012). *Epistemic Authority: A Theory of Trust, Authority, and Autonomy in Belief*. Oxford University Press.
- Zúñiga-Segura, L. (2026). Transformación laboral y nuevas habilidades en la era de la inteligencia artificial. *Revista Tecnología en Marcha*, 39(5), 382–392.