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Business Ethics in IT from a Generational Perspective – An Empirical Approach

Abstract

Research background and purpose: The dynamic growth of IT, remote work, and the increasing use of AI intensify ethical dilemmas and may differentiate moral judgments across generations. The literature lacks comparisons of five ethical orientations among Polish IT employees, with a distinction between generations X, Y, and Z. The aim of the study was to profile attitudes toward business ethics and examine whether generational affiliation differentiates the intensity of orientations measured by the ATBEQ questionnaire: Machiavellianism, moral objectivism, ethical relativism, social Darwinism, and legalism.
Design/methodology/approach: The ATBEQ questionnaire, measuring five ethical orientations, was used. Data were collected using the PAPI and CAWI methods between 2022 and 2024 among 175 Polish IT employees. Analyses included descriptive statistics, ANOVA with the Scheffè test, and the Kruskal-Wallis test with Bonferroni correction.
Findings: The study showed that legalism is rated lowest, social Darwinism highest, while Machiavellianism, moral objectivism, and ethical relativism remain close to neutral. H1 was confirmed – differences exist between the five attitudes, with a significantly lower rating for legalism. H2 was partially confirmed: the generational factor differentiates Machiavellianism and moral objectivism (Generation Y rated higher than X), while no differences were found for ethical relativism and social Darwinism, and the picture of legalism remains ambiguous. Taken together, the results indicate the lack of a single dominant ethical philosophy and the selective role of generational affiliation.
Value added and limitations: IT employees are not guided by a single ethical philosophy but choose a context-dependent approach. The low acceptance of legalism demonstrates the limited usefulness of law in rapidly changing technology, while the higher acceptance of social Darwinism highlights the importance of competition. This study empirically mapped the five ATBEQ orientations in Polish IT, pointing to the selective role of age in Machiavellianism and moral objectivism. The findings suggest the need to combine law with clear standards, introduce "ethical gates," and develop intergenerational mentoring. Limitations include the non-representative sample, self-representation in the questionnaire, unequal generational sizes, lack of control for covariates, and the national context. The results provide a starting point for further research on ethics in the technological environment.

Keywords: *business ethics, IT sector, generational differences (Generation X, Y, Z), ethical ideologies (ATBEQ)*

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1. Introduction

The IT sector is changing rapidly, remaining not only one of the fastest-growing sectors of the economy but also one of the most attractive in terms of employment (Jakubowski & Masiukiewicz, 2018). Changes resulting from technological advancements, particularly artificial intelligence, as well as new work models largely based on remote work, make the issue of shaping the behaviour of employees in this sector ever more relevant. Questions arise about how the values, beliefs, and attitudes of industry representatives influence its development, but also the way work environments are created. The level of trust, loyalty, and employee engagement – traits that, in conditions of intense competition, become particularly desirable to employers – also merit discussion.

Practical experience shows that the IT sector is largely owned by young people – including Generations Y and Z, whose adolescence and professional development coincided with a period of significant technological development in history, significantly changing approaches to shaping the work environment, building and developing careers, and managing people. Literature cites numerous characteristics of younger generations, presenting a picture of people who are very demanding, yet also determined in their actions and aware of their own expectations (see, e.g., Gajda, 2017; Konkel, 2023). Generations Y and Z were the first to clearly voice their needs and expectations not only regarding work and career but also toward supervisors, managers, and colleagues, thus defining what they consider acceptable and desirable in the professional sphere.

Attention should also be paid to the development and use of artificial intelligence, which already raises questions about new practices and risks in recruitment, team management, and broader human collaboration. It prompts reflection on which values will guide us as increasingly advanced AI tools enter recruitment processes and task execution. The ethical dimension is also emphasized (Stylec- Szromek, 2018).

Phenomena such as the strong presence of younger cohorts in the IT industry, the rapid adoption of artificial intelligence, and changing work models reinforce the need to analyse attitudes toward business ethics. Understanding these attitudes has practical implications for recruitment, designing organizational policies, and building a culture of trust within technology teams. From a theoretical perspective, this issue lies at the intersection of business ethics, organizational behaviour, and technology management. Forsyth (1980) conceptualized ethical ideologies as cognitive dispositions that influence how moral dilemmas are resolved, while in the organizational context, their expression depends on work culture, trust, and the perception of social responsibility (Hofstede, 2001; Kaptein, 2019).

The literature lacks empirical analyses of attitudes toward business ethics in the Polish IT sector, distinguishing between Generations X, Y, and Z, based on a consistent measurement tool that allows for the comparison of the five ethical orientations

within the same sample. The scarcity of such studies limits the possibility of drawing conclusions about the profile of attitudes and potential intergenerational differences. Previous international studies indicate that ethical orientations in IT differ culturally – in French-Romanian studies, relativism dominated (Bageac et al., 2011), while in Vietnam and Finland, moral objectivism was more important (Clark et al., 2020; Ludlum et al., 2025). Furthermore, research by Stylianou et al. (2013) showed that in Anglo-Saxon countries, Machiavellianism significantly influenced decisions to report unethical IT practices.

The aim of the study was to determine the profile of attitudes toward business ethics among IT employees from Generations X, Y, and Z and to examine whether generational affiliation differentiates the intensity of five orientations measured by the ATBEQ: Machiavellianism, moral objectivism, ethical relativism, social Darwinism, and legalism. Based on the literature, it can be expected that differences in ethical orientations reflect both individual values and generational experiences, which justifies the need for empirical verification of whether the five ATBEQ attitudes differ within the IT population and whether these differences are intergenerational.

The following research questions were formulated in the text:

RQ1: What is the profile and mutual differences in the intensity of the five attitudes toward business ethics among IT employees?
RQ2: Does generational affiliation (X, Y, Z) differentiate the intensity of these orientations, and if so, between which generations and with what effect size?

The following hypotheses were formulated:

H1: The average intensity of the five attitudes toward business ethics differs significantly within the studied sample of IT employees.
H2: Generational affiliation differentiates the intensity of at least some of the attitudes toward business ethics.

The article includes a literature review, research methodology, analysis of the obtained results, a discussion situating them in the context of international research, and a summary with practical implications, limitations, and directions for further research.

2. Ethical attitudes toward business – essence, definitions, measurement methods

Ethics, as the study of moral judgments, the appropriateness of actions, and principles of conduct, constitutes an important area of reflection on the decisions of individuals

and organizations. It offers models of behaviour that constitute an alternative to coercion and government regulations, and at the individual level, it becomes a reference point for justifying actions and evaluating the behaviour of others through a rational analysis of moral issues (Reiss, 2025). Ethics is not limited to the description of moral phenomena; it also serves a critical function – it analyses and evaluates behaviours, attitudes, and norms, indicating whether they are morally good or bad. Its goal is not to "make people moral" but to support the making of the best possible decisions (Strzelecki, 2005).

The starting point for understanding the ethical context of management are individual ethical norms, which are influenced by the organizational environment. This environment largely shapes the framework for ethical behaviour in the workplace (Serafin, 2005). Research confirms that one of the most important factors determining employees' ethical standards is their level of education. As it increases, the tendency to justify abuses decreases, while the belief in the positive relationship between reporting irregularities and the organization's interests increase. Higher education is also associated with greater rigor in a company's adherence to ethical principles, which is consistent with Lipset's (1995) classic thesis that education strengthens the development of value systems, individual and social norms, and fosters mature civic attitudes.

The literature also indicates that a sense of organizational belonging and consistency with institutional values strongly shape loyalty and the level of acceptance for unethical behaviour. The lack of a clearly defined organizational culture and codes of conduct leads to the blurring of ethical boundaries and facilitates manipulation. In turn, organizations that have implemented ethical standards and employees identify with their values have the lowest risk of abuse (Kutera, 2016).

Organizational factors, however, are not the only source of ethical behaviour. As Turek (2011) emphasizes, individual behaviour is also determined by subjective factors such as age, gender, religious beliefs, moral development, ego strength, self-esteem, motivational mechanisms, social status, and individual values. Czaińska (2018), in turn, notes that the moral climate of an organization is shaped not only by internal culture but also by the moral climate of local and industry communities. Employee ethical behaviour is influenced by both superiors and co-workers, as well as the way ethics are institutionalized within the management system.

Among the key competencies of the modern employee, alongside creativity, the ability to collaborate, and independence, ethical competence, the ability to understand work-related values and apply them responsibly, is increasingly lacking. Choosing a profession is not only an act of will but also the choice of a specific value system, which is directly linked to professional ethics (Sadłowska-Wrzesińska & Gruszka, 2017).

Despite the growing interest in generational diversity in the workplace, research on ethical attitudes, especially among younger generations, is still scarce. Most analyses focus

on students, who often do not yet operate in real-world business environments (Moore & Radloff, 1996; Aldarabseh, 2019; Nguyen, 2015; Gulova & Eryilmaz, 2013; Chow, 2025). Meanwhile, ethical ideologies have a real impact on moral decision-making: idealism increases moral intensity and the importance of ethics in organizational effectiveness, while relativism weakens moral sensitivity and the tendency to notice ethical problems (Winter et al., 2004).

Based on this, ideological approaches are increasingly being used in business ethics research, such as D. Forsyth's (1980) model of ethical ideologies, which distinguishes two dimensions: idealism and relativism. Their combinations lead to the emergence of various ethical orientations – from deontological, focused on rules and obligations, to consequentialist, which evaluate actions based on their consequences.

One of the most commonly used instruments based on this model is the ATBEQ (Attitudes Toward Business Ethics Questionnaire), developed by Neumann and Reichel (1987) and later expanded by Preble and Reichel (1988). The questionnaire comprises 30 statements representing five ethical philosophies: Machiavellianism, ethical relativism, legalism, social Darwinism, and moral objectivism (Ludlum et al., 2025; Clark et al., 2020). Each of these orientations describes a different way of thinking about morality in business (Wasiluk, 2024):

- Machiavellianism – assumes that the ends can justify the means; moral norms are instrumental in nature and can be bent if this serves the effectiveness of action or the interest of the organization;
- Ethical relativism – the assessment of right and wrong depends on the situation, culture, or individual beliefs; there are no universal principles, and morality is relative;
- Legalism – equates morality with compliance with the law and formal rules; conduct is considered ethical if it falls within the bounds of regulations;
- Social Darwinism – based on the belief that competition and domination by the stronger are natural and beneficial to the development of organizations and society;
- Moral objectivism – assumes the existence of universal ethical principles that apply regardless of the situation and should guide professional decisions.

The ATBEQ allows not only for examining individual differences in ethical approaches but also for analysing the influence of cultural and organizational factors on attitudes toward morality in business (Preble & Reichel, 1988; Bageac et al., 2011). This tool is widely used in international studies – in the USA, Israel, France, Romania, Vietnam, and Finland – and enables cross-cultural and intergenerational comparisons (Clark et al., 2020; Ludlum et al., 2025).

From a management science perspective, ethical orientations are a component of organizational behaviour and reflect the ethical climate of a company. Kaptein (2019) points out that this climate shapes managers' decisions and the way moral dilemmas are resolved, while Treviño and Weaver (2003) emphasize that organizational ethics

should be analysed not only individually but also institutionally – as a result of the interaction of values, leadership, and social responsibility. Contemporary research in the IT sector demonstrates that moral decisions depend on a combination of individual and organizational factors: individual values, peer pressure, leadership style, and perceptions of social responsibility (Stylianou et al., 2013; Dhirani et al., 2023). Consequently, it can be expected that even within a single sector, different professional groups will differ in the intensity of individual ethical orientations.

On this basis, the research hypothesis was formulated:

H1: The average intensity of five attitudes toward business ethics varies significantly within the studied sample of IT employees.

3. Generations X, Y, and Z and functioning in the workplace

The work environment, regardless of the specific nature of the business itself, is constantly evolving. Changes in the labour market, but also in the social and cultural spheres, mean that accelerating trends can become a source not only of challenges and opportunities but also of intergenerational conflicts. Demographics, declining benefits for many representatives of Generation X, the extended lifespan of the baby boom generation, the growing influence of Generation Y, who are currently experiencing the peak of their professional activity, the accelerating development of technology, which exacerbates tensions between the technological and social preferences of Generations Y and Z, and finally, social trends. Different experiences determine the approach to work-life balance, the emergence of women within Generation Y as a strong source of influence, as well as the preference of Generations Y and Z for being more "reflective" and making more independent decisions. All these changes are changing the perspective of organizations, and the generational race for resources and power has just begun (Gratton, 2011).

The need to understand the population and its characteristic characteristics has led to generational segmentation. In this way, Generation X, born between 1965 and 1979 and adapting to the use of ICT, Generation Y (Millennials), born between 1980 and 1994, and Generation Z, whose birth year is assumed to be between 1995 and 2010, were distinguished (Dolot, 2018; Hysa, 2016; Konkel, 2023). It should be emphasized that the literature does not create arbitrary, sharp boundaries between cohorts – there are slight differences in the adopted ranges (Espejo, Perez, et.al., 2024). Different generations represent different expectations, needs, and opportunities, but also challenges from the perspective of organizational functioning.

In the professional sphere, Generation X is perceived as placing great importance on maintaining a work-life balance, constantly seeking balance. They value their time and emphasize their demands most strongly when faced with problems that may impact their

lives. At the same time, this generation has great confidence in its own competences and is therefore focused on independence, especially in the context of carrying out assigned professional tasks (cf. Kian & Yusoff, 2012). Labour market experts point out that Generation X includes mature, professionally active people who prefer stability, work calm and confident, with limited challenges. This generation is also loyal to employers and trustworthy (Dolińska-Weryńska, 2016).

Generation Y, also known as the Millennial generation (Millennials), grew up during a period of rapid development in digital technologies. They are characterized by high technological proficiency, flexibility, and a focus on personal development; they are ambitious and have specific expectations for managerial roles (Gajda, 2017; Konkel, 2023). They are sometimes described as less cynical, more optimistic, and idealistic, and at the same time, contrary to stereotypes, they value tradition more than Generation X in certain areas (Hymowitz, 2007). Literature also emphasizes Millennials' pragmatism, combining freedom and convenience with teamwork and a strong sense of agency (Ilieva & Vitanova, 2019). In the context of ethics, Millennials are more likely to evaluate behaviours through the lens of consequences and utility (consequentialist orientation), as shown by research in IT environments (Verma & Garg, 2023).

Generation Z grew up "online," with the offline-online boundary blurred. They are characterized by innovation, creativity, aversion to rigid rules, and a high need for meaning and authenticity in work. At the same time, high creativity can be linked to susceptibility to boredom and higher turnover (Maha et al., 2025). The literature explores the role of narcissism in shaping this generation's self-esteem and life satisfaction (Nguyen et al., 2025). From an expectations perspective, Z generation values work-life balance, organic structures instead of hierarchies, opportunities for horizontal and vertical development, avoidance of routine, room for creativity and innovation, evaluation based on results instead of time, and financial and psychological satisfaction (Arar et al., 2018). This may foster autonomous standards of moral judgment (moral objectivity) while simultaneously risking opportunistic reactions in situations of time and technological pressure – as observed in studies of IT professionals in Finland and Vietnam (Clark et al., 2020; Ludlum et al., 2025).

Intergenerational differences concern not only work practices but also value hierarchies and ethical frameworks. In light of cultural dimensions, younger cohorts more often combine higher individualism and lower power distance, which enhances autonomy in moral decisions and a tendency to subjectively interpret rules (Hofstede et al., 2011). Generation X is more likely to rely on organizational norms and institutional accountability; Generation Y is more likely to rely on self-fulfilment, efficiency, and pragmatism; and Generation Z is more likely to rely on authenticity and social sensitivity (Konkel, 2023; Gajda, 2017). In Forsyth's (1980) model of ethical ideologies, this diversity may translate into varying degrees of the five orientations measured by the ATBEQ: legalism, relativism, moral objectivity, Machiavellianism, and social Darwinism.

International research confirms the cultural and generational nature of ethical differences in IT. In analyses from India, the USA, and Europe, younger generations more often interpreted ethical behaviour through the lens of social impact and utility, while older generations emphasized compliance with organizational rules and standards (Verma & Garg, 2023; Bageac et al., 2011). At the same time, numerous studies on Y and Z have focused on the needs, motivations, and HR practices of these cohorts, marginalizing a systemic understanding of the values, ethics, and morality of these cohorts at work (Filatrovi, 2021; Ozturk & Yildirim, 2023). This is important because the value system of young people co-shapes the values of future society and is sometimes described as post-materialistic (Danilov et al., 2017), while also being vulnerable to information polyphony and the disintegration of value frameworks (Yanitskiy et al., 2020), which complicates socialization and self-fulfilment. In organizational practice, Generations Y and Z have high expectations for work (autonomy, flexibility, meaning, development), are willing to change employers when conditions are not suitable, and their pragmatism and result-oriented approach are combined with a need for teamwork and self-direction (Filatrovi, 2021; Ilieva & Vitanova, 2019). Comparatively, Millennials combine freedom and comfort with the demands of efficiency, while Generation Z strives for an exciting career while maintaining independence (Ilieva & Vitanova, 2019). The youngest professionally active individuals are also aware of social responsibility, knowledge of law and regulations, and often demonstrate ambition and leadership predispositions (Peredy et al., 2024). These patterns, combined with time pressure and the pace of technological change in IT, may reinforce the situational framework of moral evaluation, which is reflected in the ATBEQ dimensions. The above findings indicate that the diverse social and professional experiences of individual cohorts lead to differences in the understanding and application of business ethics. Older groups (X) are more likely to adhere to organizational norms and rules (legalism, conventionality), while younger groups (Y and Z) demonstrate a more flexible and individualized approach to assess ethical actions (greater autonomy of principles and/or consequential pragmatism). Consequently, we can expect differences in the intensity of individual ATBEQ ethical orientations between generations. On this basis, the following hypothesis was formulated:

H2: Generational affiliation differentiates the intensity of at least some attitudes toward business ethics.

4. Methods

The study was conducted between 2022 and 2024. The Attitudes Towards Business Ethics Questionnaire (ATBEQ) was used, consisting of 30 statements representing five ethical

orientations: Machiavellianism, moral objectivism, legalism, social Darwinism, and ethical relativism. Respondents were asked to indicate their position on each statement, selecting a response on a five-point Likert scale ranging from 1 ("strongly disagree") to 5 ("strongly agree").

The questionnaire was translated from English into Polish by a translator and then verified for linguistic and substantive accuracy by a business ethics researcher. The scale's reliability was assessed using Cronbach's alpha, which was 0.83, confirming its good internal consistency and allowing for further statistical analysis.

The study was directed exclusively at individuals employed in the IT sector. Before the survey began, respondents confirmed that they met this requirement. Generational affiliation was determined based on year of birth, in accordance with the following definitions found in the literature:

- Generation X – individuals born between 1965 and 1979,
- Generation Y (Millennials) – between 1980 and 1994,
- Generation Z – individuals born after 1995.

Data was collected using two methods: a paper-based survey (PAPI) and an online survey (CAWI). Both methods were designed to reach a broad and generationally diverse group of respondents. The electronic format enabled us to reach younger individuals (Generations Y and Z), who prefer online tools, while the paper version allowed us to include Generation X, who are less active on social media. Combining these methods broadened the study's reach and improved intergroup balance. Comparison of responses from both forms revealed no significant differences, confirming the consistency of the data collected. The online survey was posted on Google Drive, and a link to it, along with information about the purpose and anonymity of the study, was disseminated via social media. A non-random "snowball" sampling method was used. Participants who completed the survey were asked to share it with others in the IT industry. Ultimately, 175 correctly completed questionnaires were obtained, including:

- Generation X – 8.00% (14 participants),
- Generation Y – 41.71% (73 participants),
- Generation Z – 50.29% (88 participants).

Participation in the study was completely voluntary and anonymous.

Due to the non-representative nature of the sample and the use of a volunteer method, the results are exploratory in nature. The aim of the study was to identify intergenerational differences in ethical orientations, not to estimate population parameters.

Descriptive statistics were used to test hypothesis H1: mean (M), median (Me), and standard deviation (SD). Differences between the five attitudes were assessed using a one-way within-group analysis of variance (ANOVA). Once significance was established,

post-hoc comparisons were performed using the Scheffè test. The results provided the F value, p values, and the η^2 effect size.

Hypothesis H2 was tested using the Kruskal-Wallis test for three generations (X, Y, Z).

For overall test significance, post-hoc comparisons were performed using the Dunn test with Bonferroni correction. The results provided the H statistic, adjusted p values, and the r effect size.

The significance threshold was set at 0.05. Differences were considered significant when $p < 0.05$.

5. Results

Descriptive statistics analysis indicates a diversity of ethical attitudes among the surveyed group of IT industry employees (Table 1). The lowest mean (2.37) and median (2.00) values were obtained for legalism, suggesting limited acceptance of the belief that compliance with the law alone is a sufficient criterion for evaluating business activities. At the same time, the high standard deviation (1.40) indicates significant individual variance in this regard.

The highest level of acceptance was recorded for social Darwinism (M = 3.05 and Me = 3.13), indicating moderate acceptance of the belief that success in business is based on competition and the "survival of the fittest" mechanism. The relatively low standard deviation (0.63) suggests consistency among the survey participants' views. The results for Machiavellianism (M = 2.99 and Me = 2.92) and moral objectivism (M = 3.00 and Me = 2.83), however, indicate a moderately positive attitude toward both attitudes. Standard deviations (0.63 and 0.77, respectively) suggest moderate variation in responses. Ethical relativism reached values close to neutral (M = 2.90 and Me = 3.00), with a slightly higher level of variation (0.81), which may indicate a flexible approach to this orientation among respondents. Considering the above, it should be noted that a clear, strongly preferred ethical philosophy does not dominate among the surveyed IT professionals. The least accepted stance is a legalistic stance, which may suggest that simply adhering to the law is not a sufficient indicator of business ethics for respondents. The highest level of acceptance was achieved by the social Darwinist stance, which may indicate an internalized competitive orientation in this environment. The remaining stances, namely Machiavellianism, moral objectivism, and ethical relativism, achieved scores close to neutral, which may indicate their selective application depending on the situation.

Table 1. **Descriptive statistics of the ATBEQ results and the results of the Scheffè test**

Ethical attitudes	Descriptive statistics			Scheffè test results				
	M	Me	SD	MA	OM	RE	DS	L
Machiavellianism (MA)	2.99	2.92	0.63		0.9998	0.7621	0.9470	$p < 0.001$
Moral objectivism (OM)	3.00	2.83	0.77	0.9998		0.6571	0.9794	$p < 0.001$
Ethical relativism (RE)	2.90	3.00	0.81	0.7621	0.6571		0.2961	$p < 0.001$
Social Darwinism (DS)	3.05	3.13	0.63	0.9470	0.9794	0.2961		$p < 0.001$
Legalism (L)	2.37	2.00	1.40	$p < 0.001$	$p < 0.001$	$p < 0.001$	$p < 0.001$	-

M – mean, Me – median, SD – standard deviation, p significant when < 0.05

Source: own study

To verify the differences between the analysed ethical attitudes, a one-way analysis of variance was conducted within the groups. The obtained F result ($F(4, 700) = 16.11$) was statistically significant ($p < 0.001$), confirming the existence of significant differences between the studied orientations. The η^2 coefficient value = 0.084 indicates a moderate effect size, meaning that approximately 8.4% of the variance in the results can be explained by differences in ethical attitudes.

On this basis, additional post-hoc analyses using the Scheffè test (Table 1) were performed to determine which of the five analysed attitudes differed significantly in terms of respondents' mean scores. The results showed that legalism significantly differed from all other attitudes ($p < 0.001$). This means that this orientation, based on strict adherence to the law as a criterion for ethical actions, was rated significantly lower than the other approaches. This can be interpreted as a reflection of the limited role of legalism in the participants' value systems and its low acceptability in business practice.

For the remaining attitudes, i.e., Machiavellianism, moral objectivism, ethical relativism, and social Darwinism, no statistically significant differences were found ($p > 0.05$). Mean acceptance levels were similar, suggesting that study participants consider them similar in terms of their own moral beliefs. This result may indicate a degree of internal consistency among these orientations, which, despite their different theoretical foundations, share greater flexibility and pragmatism than legalism.

To examine differences in attitudes toward business ethics between representatives of different generations, the nonparametric Kruskal-Walli's test was used (Table 2).

Table 2. **Comparison of ethical attitudes by generation**

Ethical attitudes	Generation X			Generation Y			Generation Z			*H*	*p*	*r*
	M	Me	SD	M	Me	SD	M	Me	SD			
Machiavellianism	2,54	2,58	0,60	3,13	3,08	0,69	2,95	2,92	0,54	9,60	0,008	0,24
Moral objectivism	2,40	2,50	0,75	3,17	3,17	0,83	2,96	2,83	0,68	9,63	0,008	0,24
Ethical relativism	2,75	2,67	0,67	2,96	3,00	0,80	2,89	3,00	0,83	0,74	0,689	0,07
Social Darwinism	2,81	2,88	0,49	3,10	3,13	0,68	3,03	3,00	0,60	2,33	0,311	0,12
Legalism	1,67	1,00	1,07	2,66	2,00	1,50	2,25	2,00	1,32	6,38	0,041	0,19

M – mean, SD – standard deviation, H – Kruskal-Walli's test statistic, p – statistical significance, r – effect size index

Source: own study

Generational analysis of the results revealed that differences in ethical attitudes between representatives of Generations X, Y, and Z were statistically significant for three orientations: Machiavellianism, moral objectivism, and legalism (Table 2). No significant differences were found for ethical relativism and social Darwinism, which may indicate the relative uniformity of these attitudes regardless of generational affiliation.

The greatest variation was observed for Machiavellianism. Generation Y respondents achieved the highest mean score (3.13), while the lowest level of acceptance of this attitude was observed in Generation X (2.54). Generation Z participants placed intermediately (2.95). These differences were statistically significant ($H = 9.60$; $p = 0.008$), and the effect size ($r = 0.24$) indicates a moderate effect. Post-hoc analysis using Dunn's test with Bonferroni correction revealed that significant differences primarily concerned the X–Y pair ($p < 0.05$), while no significant differences were observed between Y–Z and X–Z. This result may suggest that younger individuals, especially those from Generation Y, are more likely to adopt pragmatic action strategies, in which purpose and effectiveness may be more important than moral principles. This may reflect the influence of the professional environment, in which efficiency, adaptability, and results orientation are key competencies.

A similar pattern was observed with respect to moral objectivity. The highest mean values for this attitude were also obtained in Generation Y (3.17), while the lowest in Generation X (2.40). The Kruskal-Walli's test confirmed the significance

of the differences (H = 9.63, p = 0.008 and r = 0.24), and post hoc analysis indicated significant differences between Generation X and Generation Y. This may indicate a greater importance of an internal value system and an autonomous moral code among Generation Y representatives. At the same time, the lower score among older respondents may indicate a greater distance from moral absolutism or a preference for more flexible solutions in professional practice.

In the case of legalism, although the overall test result reached statistical significance (H = 6.38, p = 0.041), post hoc analysis did not reveal significant differences between the pairs of compared groups (p > 0.05). This may suggest that the differences between the generations are rather apparent and not stable. The particularly high variability of responses among Generation Y representatives (SD = 1.50) may have influenced the statistical test result without translating into a clear pattern of differences. Ultimately, this result should be interpreted cautiously as a sign of possible diversity in approaches to legalism, but without clear generational boundaries.

For ethical relativism (H = 0.74 and p = 0.689) and social Darwinism (H = 2.33 and p = 0.311), no statistically significant differences were observed between the groups. This means that, regardless of age, study participants similarly accept approaches that allow for the situational nature of moral judgments (relativism) and the competitive nature of the professional environment (Darwinism). This may indicate the existence of a common, cross-generational pattern of approach to these aspects of ethics, shaped by the specific nature of the IT industry, where independence, speed of action, and cultural diversity are the professional norm.

However, it should be noted that the Generation X group was small (n = 14), which limits the power of the tests and the stability of conclusions for this group. Therefore, the results regarding generational differences should be considered preliminary and require confirmation in a larger sample. Based on the above analyses, it can be concluded that attitudes toward business ethics vary moderately across generations. Compared to Generation X, Generation Y exhibits higher levels of both moral objectivity and Machiavellianism, which may indicate a complex structure of ethical attitudes combining value orientation with a simultaneous readiness for pragmatic action. No significant differences were noted in the remaining areas, which may indicate the existence of stable moral beliefs, relatively independent of age and generational experiences.

6. Discussion

The study results indicate that generational affiliation selectively differentiates attitudes toward business ethics. Statistically significant differences were revealed only in relation to Machiavellianism, moral objectivism, and, to a limited extent, legalism.

In the remaining cases, i.e., ethical relativism and social Darwinism, no statistically significant differences were observed between generational groups, which may suggest relative uniformity of these attitudes regardless of age or career stage.

The outlined pattern, i.e., low legalism with relatively higher social Darwinism, is consistent with the notion that in areas of rapid innovation, norms and regulations often lag behind practice, making legality alone insufficient for practitioners to assess their actions (Dhirani et al., 2023). In such conditions, utilitarian calculations and competitive patterns of action become more important, which may stabilize the acceptance of elements of social Darwinism in the IT sector. This result can also be interpreted in light of cultural dimensions (Hofstede et al., 2011). In environments with higher power distance and moderate collectivism, typical of Central European countries, relatively greater acceptance of competition and business pragmatism coexists with a lower commitment to legal formalism. Therefore, Polish cultural specificity may reinforce this combination of low legalism and moderate Darwinism.

The strongest and most unambiguous differences concern moral objectivity. The highest levels of this attitude were observed among Generation Y individuals, which may indicate this group's greater commitment to self-constructed, internal ethical principles. In the context of professional work, particularly in the IT industry, this may reflect the need to develop one's own moral standards in response to the inadequacy or inadequacy of external regulations in the face of the rapidly changing technological landscape. The lower levels of moral objectivity among Generation X individuals may reflect a more pragmatic approach to professional ethics, based on experience and a willingness to compromise with the institutional environment. It is worth emphasizing that the predominance of moral objectivity in Generation Y deviates from patterns observed in general populations, where older workers are more likely to formulate stricter ethical judgments (Lasthuizen et al., 2023). This suggests that IT-specific environmental factors (task autonomy, exposure to data/algorithms) may modify typical age effects. These results can also be linked to Kohlberg's (1981) theory of moral development, according to which individuals with higher levels of moral self-reflection are more likely to be guided by internal principles than external norms. In this perspective, Generation Y may represent a shift from conventional morality (obedience to institutional norms) to postconventional morality (autonomous moral reasoning), which would be consistent with the growing importance of individual values and ethical self-regulation in knowledge-based work.

A similar pattern is observed with respect to Machiavellianism. Here, too, Generation Y individuals scored higher than Generation X, which may indicate a greater acceptance of pragmatic and goal-oriented strategies in professional contexts. It is worth noting, however, that an increase in Machiavellianism does not necessarily indicate cynicism or manipulative intentions, but may represent

an adaptive response to the demands of the modern work environment, where flexibility, effectiveness, and resourcefulness are valued competencies. In this perspective, the coexistence of high scores on both Machiavellianism and moral objectivism may be a manifestation of complex ethical motivations, i.e., combining a focus on results while maintaining internal moral boundaries. The association of elevated Machiavellianism with greater acceptability of problematic IT practices and a lower tendency to react to violations is confirmed by previous research in this sector (Winter et al., 2004; Stylianou et al., 2013). This context organizes the X-Y differences observed in this study. Incorporating Forsyth's (1980) perspective allows us to interpret the higher scores of Generation Y as a manifestation of so-called "situational idealism," combining pragmatism with declarative moral sensitivity. This combination well explains the simultaneous presence of high objectivism and moderate Machiavellianism in the same group.

In the case of legalism, a statistically significant difference was noted in the general analysis, but the lack of confirmation of these differences in post hoc analyses suggests their limited interpretability. The high level of response variability, especially among Generation Y, may indicate internal heterogeneity in attitudes toward legalism within this group. This may be the result of a tension between, on the one hand, a growing awareness of the need for regulations in the digital space and, on the other, a belief in their insufficiency or incompatibility with technological realities. Such internal contradictions can result in an unstable attitude toward law as a criterion for ethical assessment.

It is worth emphasizing that the interpretation of legalism requires caution. The pattern of general significance in the absence of post hoc differences is consistent with the observation that age differences are behaviour-specific, not global (Branley-Bell et al., 2022; Baltuttis et al., 2024). The high variability of responses among Generation Y may therefore have biased the global test without stable pairwise contrasts. Furthermore, cultural context may partially explain the limited role of legalism. In countries with lower levels of institutional trust and greater norm flexibility, such as Poland, compliance with the law is often perceived as a minimum requirement rather than a determinant of ethicality (Husted & Just, 2022).

The lack of significant generational differences in ethical relativism and social Darwinism may indicate a common, cross-generational pattern of approach to these ethical orientations. In the case of relativism, such uniformity may reflect a widespread awareness in this industry of the complexity of professional contexts and the need to flexibly respond to ambiguous moral situations. In turn, the similar level of acceptance of social Darwinism suggests that, regardless of generational affiliation, respondents similarly perceive the professional environment as a space of competition, in which success requires adapting to the logic of efficiency and selection. The lack of intergenerational differences in relativism and Darwinism may reflect a cross-generational effect of the IT

work environment, which is supported by more recent studies demonstrating clusters of security practices and technology ethics that transcend simple demographic divisions (Baltuttis et al., 2024; Branley-Bell et al., 2022).

When interpreting these results, it is important to consider the industry context, which may foster the convergence of certain ethical attitudes regardless of age. The project-based nature of work in the IT sector, based on high autonomy and time pressure, may influence the development of similar moral decision-making mechanisms across age groups. At the same time, the observed differences in more reflective attitudes related to the assessment of the purposefulness of actions indicate that generational experiences continue to play a significant role in shaping ethical attitudes. Taken together, the results are consistent with the thesis that ethical patterns in IT are shaped by both the logic of organizational action and generational experiences, and their intensity depends on the type of professional practices (Winter et al., 2004; Stylianou et al., 2013; Branley-Bell et al., 2022; Baltuttis et al., 2024). Thus, the study contributes new knowledge, demonstrating that in the context of the Polish IT sector, cultural and organizational factors can modify the mechanisms of generational differences known from the literature. Incorporating the theoretical perspectives of Kohlberg, Hofstede (and co-authors), and Forsyth allows us to place the obtained results in a broader, international context of research on work ethics, making a significant contribution to the development of comparative research on business ethics in the technological environment.

7. Conclusions

The study allowed us to determine the profile of attitudes toward business ethics among IT sector employees in Poland and to determine whether generational affiliation differentiates the intensity of these attitudes. The statistical procedures used allowed us to verify two research hypotheses and formulate conclusions relevant to practice and further analyses.

The obtained results provide new knowledge about the diversity of ethical attitudes in the technology industry in the cultural context of Central Europe, a phenomenon rarely described in the international literature. They also demonstrate that classical theories of moral development (Kohlberg, 1981) and Hofstede's (2011) value dimensions can be useful in interpreting contemporary ethical patterns in the IT environment.

Regarding H1, differences were found between the five attitudes. Legalism was rated significantly lower than the other orientations, social Darwinism received relatively high ratings, while Machiavellianism, moral objectivism, and ethical relativism remained close to neutral. Hypothesis H1 was confirmed. Hypothesis H2 was partially confirmed.

Generational affiliation differentiates the intensity of attitudes toward Machiavellianism and moral objectivism. The results are ambiguous for legalism, and no differences were found for ethical relativism and social Darwinism.

The obtained results expand our understanding of the structure of ethical beliefs in the IT environment, revealing both common elements across generations and differences resulting from different social and professional experiences. From a practical perspective, this means that regulatory compliance alone is not sufficient for making responsible decisions in IT projects. Policies are needed that combine regulatory compliance requirements with clearly defined standards of conduct and the development of judgment in industry-specific situations, such as privacy protection, intellectual property, the use of data in automated reasoning systems, and working under time pressure. The observed acceptance of competitive logic also indicates the need to balance goal systems and reward indicators of cooperation, quality, and security, as well as to ensure efficient, secure channels for reporting concerns and violations. Observed intergenerational differences in Machiavellianism and moral objectivity justify a differentiated approach to team management. On the one hand, non-negotiable principles are necessary, while on the other, clear boundaries for "efficiency at all costs" are necessary. In practice, this means incorporating risk reviews alongside security testing, case study work, short decision checklists, and intergenerational mentoring into management.

In the area of legality, it is worth clarifying when "legal" does not equate to "acceptable" and ensuring prompt ethics consultations for sensitive projects. It is also good practice to incorporate ethical goals into the management system and periodically monitor the ethical climate by role and generation to identify risks early and appropriately target development activities.

A limitation of the study is the unrepresentative sample. The method of recruitment and survey distribution does not allow for generalization of results across the IT sector. The use of the self-report ATBEQ questionnaire may introduce self-presentation bias and differences in understanding ethical concepts. Additionally, uneven generational size and the failure to consider covariates (e.g., length of service, level of responsibility) limit the reliability of comparisons. The study's domestic context (Poland) limits the transferability of conclusions to other markets. Despite these limitations, the obtained results remain valuable cognitively, as they demonstrate trends consistent with international research and allow for a better understanding of ethical mechanisms in the specific Polish IT work environment. Future research directions should include in-depth qualitative analyses, enabling a better understanding of the context of moral decision-making in the technological environment. It would also be worthwhile to compare ethical attitudes across sectors and internationally, as well as to explore the impact of other variables, such as length of service, professional role, level of education, and experience in projects related to ethical technological challenges. Furthermore, it is worthwhile to employ a more representative sample, e.g., stratified sampling by role,

length of service, level of responsibility, type and size of organization, and region, with equalization of generational size, including the inclusion of Baby Boomers. Extending the analyses in this direction will enable comparison of results with other organizational cultures and assessment of the extent to which ethical attitudes in IT are universal and to what extent they are locally determined.

Authors' contribution

A.W.: Article conception, research methods applied, conducting the research, data collection, analysis and interpretation of results. **A.K.-K.**: theoretical content of the article, conducting the research, data collection, draft manuscript preparation.

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Declaration of Generative AI and AI-assisted technologies in the writing process

During the preparation of this work the authors used Consensus, Google Scholar, Scopus, and BazEkon in order to search for relevant literature. The authors used Statistica 13.0 in order to conduct statistical analyses. The authors used ChatGPT (OpenAI) in order to support the editorial process and improve the style of the text. The authors used DeepL Translator in order to translate selected parts of the text into English, and Grammarly in order to proofread the English version. After using these tools/services, the authors reviewed and edited the content as needed and take full responsibility for the content of the publication.

References

Aldarabseh, W. M. (2019). Business student's attitudes towards business ethics in Saudi Arabia: The gender factor. *Eurasian Journal of Business and Management*, *7*(3), 15-21.

Arar, T., & Öneren, M. (2018). Role of talent management in career development of Generation Z: A case study of a telecommunication firm. *International Academic Journal of Social Sciences*, *5*(1), 28-44.

Bageac, D., Furrer, O., & Reynaud, E. (2011). Management students' attitudes toward business ethics: A comparison between France and Romania. *Journal of Business Ethics*, *98*(3), 391-406. https://doi.org/10.1007/s10551-010-0555-5

Baltuttis, D., Teubner, T., & Adam, M. T. P. (2024). A typology of cybersecurity behavior among knowledge workers. *Computers & Security*, *140*, 103741. https://doi.org/10.1016/j.cose.2024.103741

Branley-Bell, D., Coventry, L., Dixon, M., Joinson, A., & Briggs, P. (2022). Exploring age and gender differences in ICT cybersecurity behaviour. *Human Behavior and Emerging Technologies*, *2022*, 2693080. https://doi.org/10.1155/2022/2693080

Chow, P. K. (2025). *A comparison of Chinese and Hong Kong business students' attitudes towards business ethics* (Doctoral dissertation, Open Research Newcastle). https://hdl.handle.net/1959.13/1392663

Clark, D., Tanner, T., Pham, L. N. T., Lau, W. K., & Nguyen, L. D. (2020). Attitudes toward business ethics: Empirical investigation on different moral philosophies among business students in Vietnam. *International Journal of Business Governance and Ethics*, *14*(2), 123-142. https://doi.org/10.1504/IJBGE.2020.106336

Czaińska, K. (2018). Nieetyczne postawy biznesmena, pracodawcy i pracownika: porównanie wyników badań z lat 2010 i 2018 [Unethical attitudes of a businessman, employer and employee: A comparison of findings from 2010 and 2018]. *Zeszyty Naukowe Uniwersytetu Przyrodniczo-Humanistycznego, seria Administracja i Zarządzanie*, *45*(118), 23-33.

Danilov, A. N., Grishchenko, Z. M., & Shchelkova, T. V. (2017). Pokolenie Z: raskol traditsii ili pereshifrovka kul'tury [Generation Z: Split of traditions or recoding of culture]. Zhurnal Belorusskogo gosudarstvennogo universiteta. Sotsiologiya, (1), 109–118. http://elib.bsu.by/bitstream/123456789/181894/1/109-118.pdf

Dhirani, L. L., Mukhtiar, N., Chowdhry, B. S., & Newe, T. (2023). Ethical dilemmas and privacy issues in emerging technologies: A review. *Sensors*, *23*(3), 1151. https://doi.org/10.3390/s23031151

Dolińska-Weryńska, D. (2016). Motywacje i potrzeby pracowników pokolenia Y w gospodarce opartej na wiedzy [Motivations and needs of Generation Y employees in a knowledge-based economy]. *Zeszyty Naukowe. Organizacja i Zarządzanie/Politechnika Śląska*, *92*, 31-47.

Dolot, A. (2018). The characteristics of Generation Z. *E-mentor*, *2*(74), 44-50.

Espejo, L., Perez, N., Mendoza, C., & Gagarín, Y. (2025). A systematic review on unique characteristics of generation Z and their impact on purchasing decisions. *Journal of Ecohumanism*, *4*(1), 12-25.

Filatrovi, E. W. (2021). The Understanding of Millennials Generation. *International Journal of Economics, Business and Accounting Research (IJEBAR)*, *2*(1), 865-873.

Forsyth, D. R. (1980). A taxonomy of ethical ideologies. *Journal of Personality and Social Psychology*, *39*(1), 175-184. https://doi.org/10.1037/0022-3514.39.1.175

Gajda, J. (2017). Oczekiwania przedstawicieli pokolenia Z wobec pracy zawodowej i pracodawcy [Expectations of Generation Z regarding work and employers]. *Prace Naukowe Uniwersytetu Ekonomicznego we Wrocławiu*, *491*, 158-171.

Gratton, L. (2011). Workplace 2025-What will it look like? *Organizational Dynamics*, *40*(4), 246-254.

Gulova, A., Eryilmaz, I., & Ispirli, D. (2013). Attitudes towards business ethics: an empirical study on Turkish senior business students. *International Proceedings of Economics Development and Research*, *65*(9), 42-47.

Hofstede, G., Hofstede, G. J., Minkov, M., & Durska, M. (2011). *Kultury i organizacje: zaprogramowanie umysłu* [Cultures and organizations: Software of the mind]. Polskie Wydawnictwo Ekonomiczne.

Hongell, L., Tigerstedt, Ch., Ludlum, M., McKee, V., & Conklin, M. (2025). Ethical attitudes of Finnish college students: The ATBEQ and the effects of gender and religion. SSRN. https://doi.org/10.2139/ssrn.5384636

Hunt, S. D., & Vitell, S. J. (1986). A general theory of marketing ethics. *Journal of Macromarketing*, *6*(1), 5-16. https://doi.org/10.1177/027614678600600103

Husted, E., & Just, S. N. (2022). The Politics of Trust: How trust reconciles autonomy and solidarity in alternative organizations. *Organization Theory*, *3*(2), 1-19. https://doi.org/10.1177/26317877221098769

Hymowitz, C. (2007, July 9). Managers Find Ways to Get Generations to Close Culture Gaps. *Wall Street Journal*. https://www.wsj.com/articles/SB118393605602060381

Hysa, B. (2016). Zarządzanie różnorodnością pokoleniową [Managing generational diversity]. *Zeszyty Naukowe Politechniki Śląskiej. Seria: Organizacja i Zarządzanie*, *97*, 385-398.

Jakubowski, M., & Masiukiewicz, A. (2018). Rynek pracy w usługach IT-przegląd [The labour market in IT services: A review]. *Zeszyty Naukowe Uczelni Vistula*, *59*(2), 42-59.

Jorgensen, B. (2003). Baby Boomers, Generation X and Generation Y? Policy implications for defence forces in the modern era. *Foresight*, *5*(4), 41-49.

Kaptein, M. (2019). The moral entrepreneur: A new component of ethical leadership. *Journal of Business Ethics*, *156*(4), 1135-1150. https://doi.org/10.1007/s10551-017-3641-0

Kian, T. S., & Yusoff, W. F. W. (2012). Generation X and Y and their work motivation. *Proceedings of the International Conference on Technology Management, Business and Entrepreneurship*, 396-408. https://www.researchgate.net/publication/262639919_Generation_X_Y_and_Their_Work_Motivation

Kohlberg, L. (1984). *Essays on moral development: Vol. 2. The psychology of moral development*. Harper & Row.

Konkel, W. (2023). Oczekiwania młodego pokolenia na rynku pracy [Expectations of the young generation in the labour market]. *Zeszyty Studenckie „Nasze Studia"*, *13*, 224-238.

Kutera, M. (2016). Etyczne aspekty zwalczania nadużyć finansowych [Ethical aspects of combating financial fraud]. *Prace Naukowe Uniwersytetu Ekonomicznego we Wrocławiu*, *436*, 174-185.

Lasthuizen, K., Huberts, L., Lepistö, T., Vlahović, T., & de Graaf, G. (2023). A cross-country comparison of gender and age differences in the ethical judgment of employees and managers. *Administrative Sciences*, *13*(5), 136. https://doi.org/10.3390/admsci13050136

Lipset, S. M. (1995). *Homo politicus: Społeczne podstawy polityki* [Homo politicus: Social foundations of politics]. PWN.

Maha, V. N. A., Tj, H. W., & Wahyoedi, S. (2025). The influence of transformational leadership on career development of generation Y and Z employees mediated by job satisfaction at PT. VCN. *MES Management Journal*, *4*(2), 677-684.

Moore, R. S., & Radloff, S. E. (1996). Attitudes towards business ethics held by South African students. *Journal of Business Ethics*, *15*(8), 863-869.

Neumann, Y., & Reichel, A. (1987). *The development of attitudes toward business ethics questionnaire (ATBEQ): Concepts, dimensions, and relations to work values* (Working Paper). Department of Industrial Engineering and Management, Ben Gurion University of the Negev.

Nguyen, L. D. (2015). Would taking ethics course and having business law training make a difference in the attitudes towards business ethics? An examination of business students in the U.S. In J. O. Okpara (Ed.), *2015 BAASANA International Conference proceedings* (pp. 106–110). Baruch College, City University of New York

Nguyen, T. N. D., Tran, H. Y., Nguyen, G. H. M., Nguyen, Y. K., & Dinh, H. T. M. (2025). Narcissism, Social Media Addiction, Self-Esteem, and Haxeco Traits: Exploring Influences on Life Satisfaction

Among Generation Z. *Psychology Research and Behavior Management*, *18*, 419-434. https://doi.org/10.2147/PRBM.S447067

Ozturk, U., & Yildirim, E. (2023). The evaluation of generation Z in innovation of career success: comparative analysis with generation Y. *Marketing i Menedžment Innovacij*, *14*(2), 115-126.

Peredy, Z., Vigh, L., Wei, Q., & Jiang, M. (2024). Analysing generation Z communication attitudes, values and norms. *Acta Periodica (Edutus)*, *30*, 4-19.

Preble, J. F., & Reichel, A. (1988). Attitudes toward business ethics of future managers in the U.S. and Israel. *Journal of Business Ethics*, *7*(12), 941-949.

Reiss, T. (2025). *Ethics matters: Understanding their impact on individuals, organizations, and society* [Preprint]. Social Science Research Network. https://doi.org/10.2139/ssrn.5262076

Sadłowska-Wrzesińska, J., & Gruszka, J. (2017). Kompetencja etyczna-kluczowy element projakościowych aspektów zarządzania bezpieczeństwem pracy [Ethical competence as a key element of pro-quality aspects of occupational safety management]. *Zeszyty Naukowe Politechniki Poznańskiej. Organizacja i Zarządzanie*, *72*, 187-198.

Serafin, K. (2005). Kulturowy aspekt etyki biznesu [The cultural aspect of business ethics]. *Studia Ekonomiczne*, *35*, 69-82.

Strzelecki, A. (2005). Etyka kierownika w administracji publicznej [Ethics of a manager in public administration]. In B. Sprengel & A. Strzelecki (Eds.), *Urzędnik w administracji publicznej* [A public administration officer] (pp. 77-101). Wyższa Szkoła Humanistyczno-Ekonomiczna we Włocławku.

Stylec-Szromek, P. (2018). Sztuczna inteligencja-prawo, odpowiedzialność, etyka [Artificial intelligence: Law, responsibility, ethics]. *Zeszyty Naukowe Politechniki Śląskiej. Organizacja i Zarządzanie*, *123*, 501-509.

Stylianou, A. C., Winter, S. J., Niu, Y., Giacalone, R. A., & Campbell, M. (2013). Understanding the behavioral intention to report unethical IT practices: The role of Machiavellianism, gender, and computer expertise. *Journal of Business Ethics*, *117*(2), 333-343. https://doi.org/10.1007/s10551-012-1521-1

Treviño, L. K., & Weaver, G. R. (2003). *Managing Ethics in Business Organizations: Social Scientific Perspectives*. Stanford University Press.

Turek, D. (2011). Czy etyka w zarządzaniu może przeciwdziałać nieetycznemu postępowaniu pracowników? [Can ethics in management prevent unethical employee behaviour?]. *Organizacja i Kierowanie*, *144*(1), 99-115.

Verma, S., & Garg, N. (2023). Exploring intergenerational differences in technology-oriented ethical behavior. *Kybernetes*, *52*(6), 2164-2180. https://doi.org/10.1108/K-09-2021-0897

Wasiluk, A. (2024). Różnice w postawach wobec etyki biznesu kobiet i mężczyzn z pokolenia Z [Differences in attitudes toward business ethics among Generation Z women and men]. In B. Buchelt (Ed.), *Zarządzanie ludźmi wobec wyzwań technologicznych i społeczno-demograficznych* [People management facing technological and socio-demographic challenges] (pp. 123-140). CeDeWu.

Winter, S. J., Stylianou, A. C., & Giacalone, R. A. (2004). Individual differences in the acceptability of unethical information technology practices: The case of Machiavellianism and ethical ideology. *Journal of Business Ethics*, *54*(3), 275-296. https://doi.org/10.1007/s10551-004-1772-6

Yanitskiy, M. S., Seryy, A. V., & Braun, O. A. (2020). Generation Z Value Preferences And Their Sociocultural Determinants. *European Proceedings of Social and Behavioural Sciences*, 1211-1218. https://doi.org/10.15405/epsbs.2020.10.05.161