

The Role of Digital Skills in Knowledge Management and Eco-Friendly Consumer Behaviour

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Abstract: Digital transformation and the growing importance of knowledge management processes are having a significant impact on contemporary society and the way in which consumers acquire, evaluate and use information when making decisions. In the digital environment, digital competences are becoming an important prerequisite for informed decision-making and for the development of environmentally responsible attitudes. This study focuses on examining the relationships between selected dimensions of digital competences and eco-friendly consumer behaviour. Specifically, it analyses the links between digital self-confidence, digital awareness, eco-orientation and the willingness to pay a higher price for eco-friendly products. From a knowledge management perspective, digital competences can be understood as the abilities that enable individuals to identify reliable information, understand environmental knowledge and apply it in everyday consumer decisions. The empirical research was conducted via an online questionnaire survey on a sample of 396 respondents. The results indicated partially significant relationships between the variables under investigation. No relationship was found between digital self-confidence and eco-orientation, whilst digital awareness was positively associated with a willingness to pay a higher price for eco-friendly products. A positive relationship was also confirmed between eco-orientation and a willingness to pay higher prices for eco-friendly products. The findings highlight the importance of digital awareness as a factor promoting eco-friendly consumer behaviour and point to the role of digital competences in knowledge management processes that contribute to the formation of environmentally responsible decision-making. The results may contribute to the development of environmental education and marketing and communication strategies focused on sustainability.

Keywords: Digital competences, Knowledge management, Eco-friendly consumer behaviour, Digital awareness, Eco-friendly consumer, Eco-orientation, Digital self-confidence

1. Introduction

Digital transformation is one of the most significant factors influencing contemporary society. It is a dynamic process involving the integration of digital technologies into all areas of life – from the workplace through education to everyday communication and social interaction (Adama & Okeke, 2024). Individuals' ability to adapt to digitalisation depends to a large extent on their digital competences and their ability to navigate the digital environment, which is referred to in the literature as digital literacy (Saladin & Faoziyah, 2024). This ability is not merely a technical skill, but also the capacity to approach digital information critically, use it effectively, and at the same time be aware of the risks posed by digital technologies (Bolaños & Pilerot, 2023). Digital literacy is therefore becoming increasingly important (Gutiérrez-Ángel et al., 2022), as defined by the authors, because it influences the way people receive and interpret information and subsequently use it in their everyday decision-making. Authors such as Huang and Ball (2024), Qiu (2024) and Prasastiningtyas et al. (2024) suggest in their work that users who feel confident in the digital environment and are able to critically assess the quality of information have the ability to make informed decisions, both in the digital environment and in real life. At the same time, it is clear that different cohorts of target groups, i.e. age and social groups of users, approach digitalisation differently, with younger age groups, according to Markoca (2025), often having a higher level of digital literacy due to more frequent contact with digital technologies, a finding also confirmed by Sanders et al. (2024). In parallel with digital transformation, the importance of environmental awareness is currently increasing significantly (Arantes & Ferreira, 2025), which, according to Yu (2024), is linked to growing awareness of environmental issues in society. This behaviour is particularly evident in changes in consumer behaviour, where an increasing proportion of the population is turning to products and services that are environmentally friendly or sustainable (Tsimonis, 2024). Consumers' eco-consciousness is reflected not only in their attitudes but also in practical consumer decisions, such as a willingness to pay a higher price for eco-friendly products, seeking out eco-friendly products, or supporting companies with an environmentally responsible stance (Hwang, 2024). Zhou (2025) defines the factors influencing eco-friendly consumer behaviour as including the perceived importance of environmental issues, social norms, awareness of the environmental impacts of one's own behaviour, and the technological availability of information, to name but a few. It is clear from the above sources that digital technologies provide consumers with access to a wide range of information that can significantly influence their environmental awareness and behaviour. On the other hand, Tass and Malik (2025) add that digital technologies, and in particular digital social media platforms, now play an important role in shaping

environmental attitudes, as they significantly reduce the often problematic access to information about eco-friendly products and enable users to more easily compare alternatives in terms of their environmental impact. This opens up the possibility of exploring the relationship between the level of digital literacy and consumers' environmental attitudes, which may be valuable for understanding how digitalisation influences the environmental behaviour of different user groups, building on the work of Tsimonis (2024). Based on the above findings, the research question arises as to whether there is a link between digital literacy, environmental attitudes and consumers' willingness to invest in environmentally sustainable products. Based on the theoretical foundations outlined above, research questions and hypotheses were formulated. Several international studies highlight the growing importance of this issue and emphasise the role of digital competencies in shaping contemporary consumer behaviour and decision-making processes. The study by Hu and Meng (2023) focuses on an analysis of the relationship between digital literacy and eco-friendly consumer behaviour. Their assumptions are based on social-cognitive theory as well as self-regulation theory, focusing on identifying the cognitive and affective mechanisms through which digital literacy can significantly influence consumers' eco-oriented purchasing decisions. The empirical research was conducted in two separate studies, which confirmed that a higher level of digital literacy increases the likelihood of eco-friendly consumer behaviour. The study also highlighted the finding that greater availability of eco-friendly products reinforces the positive influence of self-efficacy and anticipated engagement on consumers' decision-making when selecting eco-friendly products (Hu & Meng, 2023). Based on the above, it can be concluded that a higher level of digital literacy significantly supports consumers' eco-friendly purchasing decisions, as it increases their motivation and thus their ability to effectively search for, critically evaluate and practically utilise relevant information in their eco-friendly consumer decisions. Interesting findings were reported in a study conducted in Poland in 2025. In their study, Wolny et al. (2025) examined the relationship between digital skills and the environmental aspects of consumer behaviour in a sample of 1,246 respondents. The results showed that digital skills significantly influence digital consumer behaviour, with the resulting model accounting for 48% of the variability in digital consumer behaviour. At the same time, it was confirmed that such digital consumer behaviour is positively associated with environmental awareness, with the model explaining 31% of the variance in environmental awareness. The authors' findings suggest that consumers with higher levels of digital competence are able to search for and evaluate information on the environmental characteristics of products significantly more effectively, which to a large extent supports environmentally oriented consumer decision-making (Wolny et al., 2025). The results of both empirical studies highlighted the significant role that a higher level of digital literacy plays in positively influencing consumers' purchasing decisions. Although the relationship between digital competences and eco-friendly consumer behaviour has not yet been sufficiently empirically investigated in the Slovak context, understanding it is important for developing more effective strategies in the areas of sustainable marketing, education and environmental campaigns, particularly in relation to target groups defined by their digital skills and preferences. Research by Musová et al. (2021), conducted on a sample of 434 Slovak respondents, confirmed that environmental attitudes and knowledge of eco-labels are among the significant determinants of environmentally responsible consumer behaviour. Although the authors did not directly examine digital literacy in their research, their findings suggest that consumers' ability to search for, understand and utilise relevant information is a significant prerequisite for environmentally oriented decision-making (Musová et al., 2021). Based on these findings, we can say that this study complements the findings of the international authors Hu and Meng (2023) and Wolny et al. (2025) and extends them to the Slovak context. Examining these relationships may contribute to a better understanding of how digital competences influence environmental behaviour in contemporary society.

2. Theoretical Foundations of the Research Hypotheses

Based on the theoretical knowledge outlined above and the findings of empirical research, it can be assumed that relationships exist between the dimensions under investigation. In the following section, we therefore formulate the research question and research hypotheses. In relation to the first research hypothesis, it can be assumed that individuals who feel confident when using digital technologies have a greater ability to effectively search for, compare and critically evaluate information available in the digital environment. In their work, Gutiérrez-Ángel et al. (2022) emphasise the fact that digital literacy is a key prerequisite for navigating an information-saturated environment and for making informed decisions. Huang and Ball (2024), Qiu (2024) and Prasastiningtyas et al. (2024) point out that a higher level of digital self-confidence and the ability to critically assess the quality of information supports informed consumer decision-making in various areas of their daily lives. These findings are also endorsed by the authors Hu and Meng (2023) and Wolny et al. (2025), who further confirm that higher levels of digital literacy and digital skills positively influence environmentally conscious consumer behaviour. In his paper, Alshammari (2023) emphasises the importance of technological competence,

which represents a key factor shaping consumer preferences regarding environmental sustainability. And it is precisely on the basis of the aforementioned theoretical and empirical findings that it can be assumed that higher digital self-confidence is associated with greater environmental orientation among consumers. Following on from the second research hypothesis, it can be assumed that respondents who perceive digital literacy as a key competence will show a greater willingness to pay a higher price for eco-friendly products. This assumption is supported by current scientific findings, according to which digital literacy has a direct positive impact on consumers' environmental decision-making. Yang et al. (2026) state that consumers with a higher level of digital literacy are able to search for, process and evaluate information on the environmental characteristics of products more effectively, which increases their environmental awareness and simultaneously strengthens their willingness to purchase eco-friendly products. Similar conclusions are drawn by He, Liu et al. (2025), who, in a study focusing on the consumption of green foods, demonstrated that digital literacy, combined with ecological values, significantly strengthens consumers' attitudes and purchase intentions regarding eco-friendly products. The authors also note that digital competencies enhance consumers' ability to understand environmental benefits, leading to a greater willingness to prioritise sustainable alternatives even at a higher price. Similar correlations are highlighted by Yu (2024) and Fahlevi et al. (2024), according to whom consumers who have more relevant information and a better understanding of the environmental consequences of their consumption attribute much greater value to eco-friendly products and are more willing to accept the higher price associated with them. Based on the above findings, it can be assumed that consumers with a higher level of digital literacy show a greater willingness to accept the higher price of eco-friendly products. The third research hypothesis takes into account the assumption that respondents with a higher level of environmental orientation will also show a greater willingness to pay a higher price for eco-friendly products. Environmental orientation represents a tendency among consumers to prioritise decisions that contribute to environmental protection and simultaneously support the principles of sustainable development. Previous research indicates that consumers who actively seek out eco-friendly products are also more willing to accept a higher price for products with environmental added value (Hwang, 2024; Hasanah & Yanuar, 2024). Zhou (2025) emphasises that eco-friendly attitudes are often reflected in consumers' economic behaviour. Research findings by Musová et al. (2021) confirm the assertion that environmental attitudes are among the significant determinants of eco-responsible consumer behaviour. Similar conclusions are drawn by Kamboj, Arora and Thakur (2025), who state that consumers with stronger environmental motivation and a positive attitude towards eco-friendly products demonstrate a higher purchase intention and a greater willingness to invest in eco-friendly food despite its higher price. Based on the above findings, it can be assumed that a stronger ecological orientation will be associated with a greater willingness to pay a higher price for organic products.

Based on the above theoretical foundations, the research question and research hypotheses were formulated:

Research question: RQ: Is there a correlation between the variables of respondents' digital competence—specifically their confidence in using technology and their awareness of the importance of digital literacy—and their eco-friendly behaviour, including actively seeking out eco-friendly products and a willingness to pay a higher price for them? (He et al., 2025)

Research hypotheses:

H1: Respondents with higher digital self-confidence, in the form of confidence in using technology, will also be more environmentally oriented and will be more likely to actively seek out eco-friendly products. (Hu & Meng, 2023)

H2: Respondents who perceive digital literacy as an important skill in the form of digital awareness will demonstrate a greater willingness to pay more for eco-friendly products. (Hu & Meng, 2023)

H3: Respondents who actively seek out eco-friendly products in the form of eco-orientation will also demonstrate a greater willingness to pay higher prices for eco-friendly products in the form of willingness to pay for eco-friendly products. (Kamboj et al., 2025)

3. Methods

The main objective of the research was to determine what relationships exist between respondents' digital skills—specifically their self-confidence in using technology and their awareness of the importance of digital skills—and their attitudes or behaviour towards the environment. The research focused on whether respondents who are more digitally skilled or have greater digital awareness also show a stronger interest in eco-friendly products or a greater willingness to pay for them. Data were collected using the Computer-Assisted Web Interviewing (CAWI) method via a custom online questionnaire created in Google Forms, which was

distributed to respondents using a convenience sample method. The research sample consisted of a total of 396 respondents. A total of 396 respondents took part in the survey. In terms of gender, women predominated, accounting for 69.9% of the sample (277 respondents), whilst men accounted for 30.1% of the sample (119 respondents). The age structure of the respondents included the 18–28 age group (132 respondents) and the 61–79 age group (132 respondents), with both categories accounting for 33.3% of the sample. Next was the group of respondents aged 45–60, who accounted for 24.2% (96 respondents), followed by respondents in the 29–44 age category, accounting for 7.1% (28 respondents). Respondents aged over 79 (the ‘older’ category) accounted for 2.0% of the sample (8 respondents). The sample covers the age diversity of the target group cohorts and has the correct sample size, which enabled a more comprehensive analysis of the defined relationships. Each respondent answered four questions focusing on two areas of interest: digital competence and environmental behaviour. In the area of digital competence, the questions focused, on the one hand, on subjective self-confidence in using modern technologies, which ultimately defines the theoretical concept of digital self-confidence, and, on the other hand, on the awareness of the importance of digital literacy in today’s world in a theoretical context as digital awareness. Environmental behaviour was measured by asking questions about the frequency of actively seeking out eco-friendly products when shopping, understood theoretically as environmental orientation, and also the respondents’ willingness to pay a higher price for eco-friendly products compared to conventional alternatives, defined in a theoretical perspective as environmental willingness to pay.

Table 1: Operationalisation of questionnaire items (digital confidence, digital awareness, eco-orientation, eco-willingness to pay)

Theoretical definition	Questionnaire item
Digital confidence	Do you feel confident when using technology?
Digital awareness	Do you think digital literacy is important in today’s world?
Environmental awareness	Do you actively look for organic products when shopping?
Willingness to pay for eco-friendly products	Would you be willing to pay a higher price for eco-friendly products compared to conventional products?

Each construct was measured by a single item, which is consistent with the exploratory nature of the study. A three-point scale was chosen to ensure clarity for respondents in the target groups. Table 1 shows the operationalisation of the questionnaire variables. Respondents answered closed-ended questions on a three-point scale. Given the ordinal nature of the scales used (three response levels), Spearman’s correlation analysis was primarily used to analyse the relationships between variables. Spearman’s correlation formula is as follows.

$$\rho = 1 - [6 \sum di^2 / (n(n^2 - 1))] \quad (1)$$

di is the difference in rank (rating) between the values of the two variables.

n is the number of pairs of observations.

This statistical procedure was chosen because it does not require the assumption of a normal distribution of the variables under investigation. For a more comprehensive analysis of the data, the results were supplemented with Pearson’s correlation analysis. The formula for Pearson’s correlation is as follows.

$$r = [\sum (xi - \bar{x})(yi - \bar{y})] / \sqrt{[\sum (xi - \bar{x})^2 \sum (yi - \bar{y})^2]} \quad (2)$$

xi, yi are the values of the two variables for the i-th observation.

$\bar{x}$, $\bar{y}$ are the means of the individual variables.

n is the number of pairs of observations.

The statistical significance of the correlations was set at the standard level of $\alpha = 0.05$. The study examined three main correlations: digital confidence and environmental orientation; digital awareness and willingness to pay for eco-friendly products; and, finally, the relationship between environmental orientation and respondents’ willingness to pay more for eco-friendly products. The resulting correlation coefficients were interpreted according to the standard classification from 0 to 1, with values below 0.3 indicating a weak correlation, values between 0.3 and 0.5 indicating a moderate strength of relationship, and values above 0.5 being considered strong correlations. Ethical research principles were also adhered to during the conduct of the research. Respondents were informed of the questionnaire’s objectives and were free to decide whether to participate.

The data were processed anonymously, exclusively for scientific purposes and without the possibility of identifying the respondents. MS Excel was used for data processing and IBM SPSS 30 for statistical validation.

4. Results

The aim of the research was to determine whether there are correlations between the respondents' digital competences, in the form of digital self-confidence and digital awareness, and their environmental behaviour, in the form of ecological orientation and willingness to pay for environmental protection.

Table 2: Verification of hypothesis H1 (digital self-confidence and ecological orientation)

CORRELATION	CORRELATION COEFFICIENT (R/RHO)	SIG. (P-VALUE)	N (SAMPLE SIZE)	HYPOTHESIS RESULT
PEARSON'S CORRELATION	-0.036	0.476	396	Not confirmed
SPEARMAN'S COEFFICIENT	-0.034	0.501	396	Not confirmed

The first hypothesis (H1) posited a positive relationship between respondents' digital self-confidence, in the form of their confidence in using technology, and their environmental orientation, in the form of actively seeking out eco-friendly products. Table 2 presents the statistical verification of hypothesis H1. The results of the analysis did not confirm this relationship. Pearson's correlation coefficient ($r = -0.036$; $p = 0.476$) and Spearman's correlation coefficient ($\rho = -0.034$; $p = 0.501$) were not significant, with both values indicating the absence of any significant relationship between respondents' digital self-confidence and eco-consciousness. Based on these results, hypothesis H1 was therefore not confirmed.

Table 3: Testing of Hypothesis H2 (digital awareness and willingness to pay a higher price for eco-friendly products)

CORRELATION	CORRELATION COEFFICIENT (R/RHO)	SIG. (P-VALUE)	N (SAMPLE SIZE)	HYPOTHESIS RESULT
PEARSON'S CORRELATION	0.207	<0.001	396	Confirmed
SPEARMAN'S COEFFICIENT	0.185	<0.001	396	Confirmed

The second hypothesis (H2) predicted a positive correlation between digital awareness, in the form of the perceived importance of digital literacy, and respondents' willingness to pay a higher price for eco-friendly products. Hypothesis H2 was confirmed (see Table 3), with the results indicating a significant positive correlation. The Pearson correlation coefficient was $r = 0.207$ ($p < 0.001$) and, similarly, Spearman's correlation confirmed this relationship ($\rho = 0.185$; $p < 0.001$). Although this is a weaker relationship, it is highly statistically significant. The results suggest that respondents who consider digital literacy to be important are more willing to pay a higher price for eco-friendly products, which strongly supports Hypothesis H2.

Table 4: Testing of Hypothesis H3 (environmental orientation and stated willingness to pay more for eco-friendly products)

CORRELATION	CORRELATION COEFFICIENT (R/RHO)	SIG. (P-VALUE)	N (SAMPLE SIZE)	HYPOTHESIS RESULT
PEARSON'S CORRELATION	0.372	<0.001	396	Confirmed
SPEARMAN'S COEFFICIENT	0.374	<0.001	396	Confirmed

The third hypothesis (H3) examined the relationship between respondents' ecological orientation, manifested in the active search for organic products, and their stated willingness to pay a higher price for organic products. Table 4 presents the statistical verification of hypothesis H3. The hypothesis was confirmed. We found a significant, moderately strong positive relationship. Pearson's correlation was $r = 0.372$ ($p < 0.001$), as was Spearman's correlation $\rho = 0.374$ ($p < 0.001$). The result suggests that respondents who state that they actively seek out organic products are also more willing to pay higher prices for organic products, thereby clearly confirming hypothesis H3. Based on the results of the analysis, it is possible to clarify the defined research question that there is a partially significant relationship between digital competences and the respondents'

environmental attitudes. Digital confidence is not significantly associated with environmental orientation, whilst digital awareness is clearly associated with a willingness to pay higher prices for organic products. Similarly, a moderately strong positive relationship was confirmed between actual eco-friendly behaviour and the willingness to pay more for eco-friendly products, suggesting a certain consistency between declared eco-friendly behaviour and the economic willingness to contribute to sustainability. The results highlight the importance of digital awareness as a potential factor promoting eco-friendly behaviour and thus provide a basis for the further development of eco-oriented marketing communication strategies in the digital age.

5. Discussion

This study examines the relationship between respondents' digital competences and their attitudes and behaviour towards eco-friendly products. The findings suggest important insights relevant to the context of current social trends. The first hypothesis, defined as a potential positive relationship between digital self-confidence in the form of self-efficacy in using technology and the respondents' environmental orientation, was not confirmed. This is also confirmed by Alshammari (2023). This result is particularly important because it is generally expected that digitally competent individuals have the potential to be better informed and, consequently, more environmentally responsible. The reason why the aforementioned relationship was not confirmed in the results may be that the mere ability to use technology does not automatically imply an interest in environmental issues. Digital self-confidence is not necessarily accompanied by environmental awareness. Future research should focus on further investigating which factors or contexts have the potential to influence this relationship in the form of variables such as educational attainment, the type of technology used, or the economic status of respondents in terms of income. The second hypothesis was statistically confirmed, defining a significant positive relationship between digital awareness and willingness to pay for eco-friendly products. Similarly, though with a link to e-commerce, Fahlevi et al. (2024) also found the same result. The findings show that respondents who recognise the importance of digital literacy are more inclined to purchase eco-friendly products. This finding supports the assumption that digital literacy and raising awareness have the potential to be effectively utilised as a tool to promote eco-friendly consumer behaviour. The findings are highly valuable for businesses, which may assist those designing environmental marketing campaigns and strategies. The results of the third hypothesis showed a clear positive relationship between environmental orientation and willingness to pay higher prices for eco-friendly products. Respondents who stated that they actively seek out eco-friendly products were also more inclined to express a willingness to pay more for them. This is similarly confirmed by Hasanah and Yanuar (2024), albeit within the context of perceptions of the organic farming sector and from the perspective of the younger generation. The link between attitudes and economic behaviour is particularly important in terms of realistic opportunities to promote sustainability. On the other hand, it should be noted that stated willingness may not always fully correspond to actual behaviour, which would be worth exploring in more detail in future studies using qualitative methods or experiments. A limitation of the research is the sample of respondents, in which women and specific age cohorts of the target group were significantly overrepresented. A partial influence on the results is potentially possible from the older and younger generations, where there is potential for differing attitudes towards technology and environmental issues. It would be advisable to conduct further research to ensure a more balanced sample or to examine differences between various age groups or genders. The use of convenience sampling and a single-item measure on a three-point scale represents a standard approach for exploratory studies of this type, with these choices being dictated by the breadth of the sample's age diversity and the availability of respondents. Future research could validate the findings on a larger sample using multi-item scales. Further investigation could also focus on a qualitative examination of the specific details of why respondents, despite being digitally competent, do not exhibit a stronger ecological orientation. It might also be appropriate to explore how targeted digitalisation could promote environmental awareness and eco-friendly behaviour, thereby making the findings directly applicable to environmental campaigns and strategic marketing decisions.

6. Conclusion

This study focuses on examining the relationships between digital competences and selected aspects of eco-friendly consumer behaviour in the context of knowledge management and digital transformation. The findings suggest that digital competences play a significant, yet nuanced, role in shaping the responsible behaviour of eco-conscious consumers. The results highlighted and confirmed a moderately strong positive relationship between eco-orientation and the willingness to pay higher prices for eco-friendly products, pointing to a link between eco-friendly attitudes and consumers' economic behaviour. The findings also contribute to a deeper understanding of how digital competences operate within knowledge management processes and what impact

they have on sustainable consumption. **We can state that digital awareness, in particular, has emerged as a significant factor that substantially supports informed and environmentally responsible consumer decision-making.** The results can be utilised in the development of strategies for environmental education, marketing communication and digital campaigns aimed at promoting sustainable consumer behaviour. However, the results should be viewed with a degree of caution, as the sample of respondents was not entirely balanced and each construct was measured by a single question on a three-point scale, which naturally limits the scope for broader generalisation. It would therefore be beneficial if future studies were to verify these findings using a larger and more representative sample, employing scales that capture the phenomena under investigation from multiple perspectives, through quantitative methods, qualitative interviews and experiments that would allow for a deeper exploration of the measured relationships.

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References

- Adama, H. E., & Okeke, C. D. (2024). Digital transformation as a catalyst for business model innovation: A critical review of impacts and implementation strategies. *Magna Scientia Advanced Research and Reviews*, 10(2), 256–264. <https://doi.org/10.30574/msarr.2024.10.2.0066>
- Alshammari, A. F. (2023). Digital transformation, environmental protection and technological competence: An integrated analysis of sustainability preferences. *Revista Amazonia Investiga*, 12(72), 145–158. <https://doi.org/10.34069/AI/2023.72.12.13>
- Arantes, L., & Ferreira, J. J. (2025). Innovative sustainability strategies and the role of digital transformation in organisations. *Corporate Social Responsibility and Environmental Management*, csr.3123. <https://doi.org/10.1002/csr.3123>
- Bolaños, F., & Pilerot, O. (2023). Digital skills between instrumentalisation and empowerment: A discursive analysis of public policy documents on secondary technical and vocational education in Chile. *Journal of Vocational Education & Training*, 75(4), 768–787. <https://doi.org/10.1080/13636820.2021.1973542>
- Fahlevi, M., Rusefani Asetya, D., Dandi, M., Aqil Asyrof, R., Putri Dahlan, S., & Putri Dahlan, O. (2024). Eco-friendly choices: consumer behaviour on e-commerce platforms for agricultural products in Indonesia. *Transactions of the Chinese Society of Agricultural Machinery*, 55(7). <https://doi.org/10.62321/issn.1000-1298.2024.07.02>
- Gutiérrez-Ángel, N., Sánchez-García, J.-N., Mercader-Rubio, I., García-Martín, J., & Brito-Costa, S. (2022). Digital literacy in the university environment: A literature review of empirical studies from 2010 to 2021. *Frontiers in Psychology*, 13, 896–800. <https://doi.org/10.3389/fpsyg.2022.896800>
- Hasanah, S. N., & Yanuar, R. (2024). The willingness of younger generations to pay for organic vegetables in the Bogor and Tasikmalaya regions. *Jurnal Agribisnis Indonesia*, 12(1), 175–189. <https://doi.org/10.29244/jai.2024.12.1.175-189>
- He, J., Liu, K., Ma, Z., & He, Z. (2025). Digital literacy, ecological values, and green food consumption: An extended Theory of Planned Behaviour model in Chinese universities. *Frontiers in Public Health*, 13, 1723436. <https://doi.org/10.3389/fpubh.2025.1723436>
- Hu, X., & Meng, H. (2023). Digital literacy and green consumption behaviour: Exploring dual psychological mechanisms. *Journal of Consumer Behaviour*, 22(2), 272–287. <https://doi.org/10.1002/cb.2122>
- Huang, K., & Ball, C. (2024). The impact of AI literacy on users' trust in ARTIFICIAL INTELLIGENCE in practical scenarios: A pilot study on the digital divide. *Proceedings of the Association for Information Science and Technology*, 61(1), 937–939. <https://doi.org/10.1002/prai.2.1146>
- Hwang, J. (2024). Green marketing and consumer attitudes. *Open Access Research Journal of Multidisciplinary Studies*, 8(2), 076–084. <https://doi.org/10.53022/oarjms.2024.8.2.0068>
- Kamboj, S., Arora, M., & Thakur, V. (2025). Examining the nexus between consumers' intention and buying behaviour towards organic food: Role of motivation-opportunity-ability theory. *British Food Journal*, 127(12), 4626–4652. <https://doi.org/10.1108/BFJ-12-2024-1295>
- Markoc, I. (2025). Digitalisation trends among young adults: Differences by living environment, gender and education. *Online Information Review*, 49(1), 136–163. <https://doi.org/10.1108/OIR-01-2023-0020>
- Musová, Z., Musa, H., & Matiová, V. (2021). Environmentally responsible behaviour of consumers: Evidence from Slovakia. *Economics & Sociology*, 14(1), 178–198. <https://doi.org/10.14254/2071-789X.2021/14-1/12>

- Prasastiningtyas, W., Ubaidillah, A. Z., Aprianti, I., & Nurfadilah, L. (2024). Improving literacy in the digital age: Unlocking the potential of critical thinking. *TOPLAMA*, 2(1), 18–27. <https://doi.org/10.61397/tla.v2i1.218>
- Qiu, C. (2024). The influence of media literacy and the credibility of online information on older internet users' fact-checking behaviour: The moderating role of critical thinking. *International Journal of Social Sciences and Public Administration*, 3(3), 352-358. <https://doi.org/10.62051/ijsspa.v3n3.44>
- Saladin, T., & Faoziyah, S. (2024). Digital transformation: Unlocking economic opportunities in the digital era. *International Journal of Business, Law, and Education*, 5(2), 2849-2855. <https://doi.org/10.56442/ijble.v5i2.947>
- Sanders, E., Mois, G., Rogers, W., & Boot, W. (2024). Differential digital divides: Age differences in existing and emerging technologies. *Innovation in Aging*, 8(Supplement_1), 1302-1302. <https://doi.org/10.1093/geroni/igae098.4161>
- Tass, M. A., & Malik, I. A. (2025). Drivers of environmental change: The influence of social media on Generation Z's sustainability efforts. *South Eastern European Journal of Public Health*, 623-641. <https://doi.org/10.70135/seeiph.vi.3639>
- Tsimonis, G. (2024). The transformation of consumption: The role of digital experiences, consumer spirituality, environmental beliefs and digital efficacy in guiding sustainable decisions. *Proceedings of the International Conference on Contemporary Marketing Issues*. <https://doi.org/10.12681/iccmi.7596>
- Wolny, R., Kol, J., Stolecka-Makowska, A., & Szojda, G. (2025). Digital consumer behaviour in Poland and its environmental impact within the framework of sustainability. *Sustainability*, 17(10), 4691. <https://doi.org/10.3390/su17104691>
- Yang, M., Ren, G., Xiao, Y., & Guo, L. (2026). The impact of digital literacy on green consumption behaviour under the moderation of prosocial behaviour. *Scientific Reports*, 16(1), 4459. <https://doi.org/10.1038/s41598-025-34459-5>
- Yu, L. (2024). Digital marketing for behavioural change: Promoting sustainable consumer practices to address environmental issues and support the SDGs. *Journal of Lifestyle and SDGs Review*, 5(2), e03866. <https://doi.org/10.47172/2965-730X.SDGsReview.v5.n02.pe03866>
- Zhou, Y. (2025). External and internal factors influencing sustainable/eco-friendly consumer behaviour. *Advances in Economics, Management and Political Sciences*, 142(1), 161-171. <https://doi.org/10.54254/2754-1169/2024.LD19007>