

Proceedings of the 6th International Conference on Economics and Social Sciences (2023), ISSN 2704-6524, pp. 151-162

The 6th International Conference on Economics and Social Sciences Geopolitical Perspectives and Technological Challenges for Sustainable Growth in the 21st Century June 15-16, 2023 Bucharest University of Economic Studies, Romania

The Use of Logistic Models in Predicting Factors Influencing the Millennials and Generation Z's Buying Decision of Innovative Products: Evidence from Romania

Eleonora Gabriela CONŢU¹, Andreea ARDELEAN^{2*}

DOI: 10.24789788367405546-016

Abstract

Nowadays, in the context of technical and scientific progress, major changes can be observed in the contemporary society. Therefore, the development and introduction of innovative products in the business market have major influences on the adoption of a lifestyle by consumers. One of the major benefits of innovation is its contribution to economic growth, and thus it is essential to be able to identify what people consider important when looking for novelty in purchased products. This study aims to identify the main factors that influence the decision to buy an innovative product, at the level of generations x and y, and to discover the possible differences and specific features. It emphasises the importance of higher education in the development of sustainable principles and consumer choices and it also attempts to outline the profile of the innovative products consumer and determine the best predictors using logistic models. The difference between those that already bought a product and between those that intend to buy it's also studied. Overall, this article examines the main factors of influencing a consumer's purchase decision and checks which apply and which do not apply in the case of innovative products. The study consisted in a survey based on a questionnaire given to 500 people and captures the differences regarding the decision to buy innovative products between the two generations characterised by the degree of use and increased familiarity with communication, media, and digital technologies. It will be noticed that many of these generations associate innovation with sustainable choices.

Keywords: Generation Y, Generation Z, intergenerational consumer behavior, innovative products, logistic models.

JEL Classification: C01, C10, C12, C40, C50, C83, D10, D91.

¹ University of Bucharest, Bucharest, Romania, eleonora.contu@faa.unibuc.ro.

² University of Bucharest, Bucharest, Romania, andreea.ardelean@faa.unibuc.ro.

^{*} Corresponding author.

^{© 2023} E.G. Conţu, A. Ardelean, published by Sciendo. This work is licensed under the Creative Commons Attribution 4.0 License.

1. Introduction

The investigation of the market and of the consumption needs represents a complex and constantly changing universe, so a special interest belongs to the identification of the specific needs of different categories of the population, but also to their hierarchy, in general, and especially at the individual level.

Psychosociological research on consumers can only bring success to companies in their approach to position themselves in the business market either as leading companies or as companies aspiring first place. By investigating consumer needs and desires – a prerequisite of marketing, from the perspective of the stages, that economic agents have to go through in order to achieve their objectives, specialists in the field conduct market research in order to launch the new product/service to meet the needs and desires of the modern consumer, the central element of the market. In this context, the innovation of products/services in a constantly changing environment is a necessity in obtaining the competitive advantage of the modern enterprise. Thus, innovation requires precision and accuracy, but also intuition and creativity, the ultimate goal being to offer consumers value and benefits, by placing on the market products/services superior to existing ones (Dziallas, Blind, 2019).

Furthermore, an important role in the study of consumer behaviour is occupied by influencing factors, which are widely presented in the literature review, but in general. Thus, this paper has a much more specific objective: identifying the main factors that influence the decision to buy innovative products, that from the authors' point of view, can be a starting point in future research for the studied issue. At the secondary level, the research captures the importance of the level of education, noting that among those interviewed, those with higher education prefer to choose innovative products, considering the introduction of innovation into their lives as a sustainable choice.

2. The Consumer and the Progress of Technology: Offering Value to Customers through Innovative Products

Contemporary society is undergoing major changes, changes that lead to extensive transformations. Thus, one can currently observe the magnitude of the digital world, which certainly has an impact on the behaviour of producers, and especially on consumers. Recent changes have facilitated the evolution of marketing, and even a rethinking of it. Marketing has moved from product-centred marketing (Marketing 1.0) and consumer orientation (Marketing 2.0) towards value-driven marketing (Marketing 3.0).

What awaits us? Is marketing changing forever? Modern marketing will aim to promote other values and aspects of the digital world. Artificial intelligence will significantly change the lifestyle of the modern consumer, who wants nothing more than the integration of technology in everyday life.

In the context of the development of technics and technology, when the digital age is present in the life of the modern consumer, new products/services are essential for both the consumer and the producers (Armstrong, Kotler, 2015). The success of

companies depends on the development of a process through which to launch and develop new products/services to meet the increasingly sophisticated needs of the modern consumer. Generations are changing. In the past, Generation X was in the attention of manufacturing companies, which designed their product/service offer according to the profile of these consumers. Over time, however, the Y, Z and Alpha generations have followed, and these ones do not only use technology, but also make it a way of life (Armstrong, Kotler, 2015; Kotler, Kartajaya, Setiawan, 2021).

Analysing and studying the market, the ideas of new products/services will meet the needs of these consumers, but especially the ones of Gen Z and Y, who practically, from birth, have known the effects of technology in their everyday life. Also, it is noticed that the role of digitisation is increasing in the last decade (Verhoef et al., 2021). In this context, the literature shows that "the wave of digitalisation unleashed in the first two decades of this millennium", is significantly important in the way of how consumers are purchasing online products/services through mobile apps (Scuotto, Kaur, 2021; Talwar et al., 2020).

Hofstede (2011) considers that "as a result, under certain conditions, the behaviour of consumers can be predicted from their attitudes towards products, services, and brands, and a purchase prediction is derived from a positive attitude".

A question arises: What motivates people to make purchasing decisions? Literature review shows that "understanding the variations of what motivates people is important for positioning brands in different markets" (Hofstede, 2011).

3. Factors Influencing the Consumer Behavior

Demographic factors are influenced by the variety of variables that influence the manifestation of consumer behaviour. Thus, age group, level of education, occupation, etc. are demographic factors that can provide pragmatic results in studying consumer behaviour (Herve, Mullet, 2009; Abu et al., 2013, Kumar, 2014; Cruz-Cardenas et al., 2019). Also, when it comes to the study of consumer behaviour, specialists in the field pay special attention to economic factors (personal income, price of products/services, etc.), factors specific to the marketing mix, but also situational factors (time pressure, the presence of other people when the consumer makes the purchase decision, environment, etc.). Also, among the determinants of consumer behaviour, there are both endogenous and exogenous variables.

Exogenous variables such as culture, subculture, social class, and social factors (e.g. reference groups, family, and social roles and statuses) are very important when it is expressed the necessity to study the consumer buying behaviour (Kotler, Keller, 2006; Kanuk, Schiffman, 2007). Family is the most important exogenous variable that influences the consumer behaviour. Each stage of the "family life cycle" provides key answers for marketers who analyse this "composite variable based explicitly on marital and family status but implicitly reflects relative age, income, and employment status" (Kanuk, Schiffman, 2007).

Social class can be "measured by a weighted index of several demographic variables, such as education, occupation, and income" (Kanuk, Schiffman, 2007).

People buy particular products and services according to their education and occupation. Also, income is an important factor that can influence the consumer buying behaviour. The literature review presents membership groups as – primary groups (such as family, friends, etc.) and secondary groups (such as religious and professional groups, etc.) – which can significantly influence consumer buying behaviour. Also, aspirational groups and dissociative groups – groups to which consumers do not belong – can exert a significant influence on consumer behaviour (Kotler, Keller, 2006).

Learning is an endogenous determinant of individual's behaviour that involves changes in his/her behaviour "arising from experience" and it is known that "most human behaviour is learned", "learning being produced by the action of drives, stimuli cues, responses, and reinforcement" (Kotler, Keller, 2006). People also learn from personal experiences.

The literature review shows that "a lifestyle is a person's pattern of living in the world as expressed in activities, interests, and opinions" (Kotler, Keller, 2006). Moreover, in time, marketers discovered new trends in consumer lifestyle. Nowadays, marketers "are facing the challenge of serving five different generations: Baby Boomers, Generation X, Generation Y, Generation Z, and Generation Alpha" (Kotler, Kartajaya, Setiawan, 2021). Sociocultural environment and life experience are very important when it is necessary to characterise new generations. For instance, Generation X, as adults, "experienced the world without and with the Internet" (Kotler, Kartajaya, Setiawan, 2021), while Generation Y has grown with technology. Also, it is important to note that Millennials have been shown to differ from past generations, as they are "digital natives and technology savvy" (Calvo-Porral, Pesqueira-Sanchez, 2019). The common experiences of Millenials when it comes to the discussion of buying products are considered to be mainly related to "the Internet, digital revolution and globalisation" (Andrze, 2020). Millennials not only use technology frequently, but they make it a new lifestyle, and their feedback on online platforms is given according to their engagement through particular brands (Kotler, Armstrong, 2015).

Nowadays Generations Y and Z are often analysed in the literature review. Their characteristics are listed as a response to technological and economic influences in their everyday activities, Generation Z using more likely the Internet than the previous generation (Czerwińska, Czerwiński, 2021). In fact, the members of Generation Z are dependent on technology, multi-task, are more on virtual social networks, and use more kinds of media simultaneously (Desai, Lele, 2017). Generation Z (also called iGen) "has never experienced life before the Internet" (Roblek et al., 2019). Thus, Generation Z's behaviour and lifestyle are expected, to create new opportunities for the investigation and understanding of the most sophisticated needs and motives to buy innovative products.

4. Research Purpose and Objectives. Methodology

The main purpose of this research is to determine key factors in making the decision to buy innovative products. The selected factors to be verified were

collected from the literature review presented above on the part of consumer behaviour, in general, and the identification of the relevant ones on the part of innovative products is desired. It also aims to identify differences in preferences by analysing the two generations that have grown completely in the age of digital technology: Millennials and Generation Z.

Research objectives and hypotheses are related to:

- Identifying which factor regarding aspects like level of education, occupation, income, living conditions, identification with reference groups, opinion of family members identified in the literature review, might be considered a predictor or has a greater weight in making the purchase decision when referring to innovative products, by using rankings and logistic regression. Logistic regression models are often used in studying purchase behaviour, offering important insights (Allenby, Lenk, 1994; Menard, 2009; Wickramarachchi, 2020; Dragos et al., 2020);

- Determining specific features of those who buy innovative products with also the use of logistic models and statistical hypothesis testing and creating profiles by finding common characteristics and socio-demographic data;

- Identifying differences between generations in terms of behaviour using statistical hypothesis testing (Chi-Square test, Likelihood Ratio test, Fisher's exact test, Linearby-linear Association test). These tests are used according to the type of variables included in the analysis (Jaba, 2002; Lehmann, Romano, 2022).

The models were estimated and the hypotheses were tested using R software version 4.2.3 with the "vcd", the "tidverse", the "caret" and the "leaps" packages. The descriptive analysis part was carried out using SPSS Statistics software.

In order to obtain the information, a questionnaire was made based on main factors extracted from the literature review that are supposed to characterise those who purchase innovative products. It was distributed on online platforms to Romanian citizens belonging to either Gen Z or Gen Y. The general principles of developing a questionnaire were taken into account (Niculescu-Aron, 2005; Pfeffermann, Rao, 2009), and the data were collected between October 2022 and January 2023. The sample consists of 500 persons: 440 from Gen Z and 60 from Gen Y. Those who are from Generation Z have an average age of 19,7 and 88 % are students, while 12 % are employees. 27 % come from rural areas and 73 % come from urban areas. Millennials from the sample have an average age of 33.75 and 12 % are students, 85 % are employees or have a business, while 3 % are unemployed. 72 % completed higher education. 5 % come from rural areas and 95 % come from urban areas.

Thus, when referring to the consumption of innovative products, literature review focuses on factors relating to: education and occupation, income, living conditions, age group, economic factors, identification with specific groups (e.g., family members, friends, role models), price, benefits (Li et al., 2022, Shafi et al., 2021; Abbas et al., 2017; Siegrist, 2008).

5. Research Findings and Discussion

Out of the total, 61.6 % have purchased innovative products (80 % from Gen Z, 55 % from Gen Y) and 38.4% have not. 43.8 % intend to purchase innovative products in the next 6 months (60 % from Gen Z, 23 % from Gen Y) and 56.2 % do not.

When purchasing an innovative product, 60.3 % are influenced by price, 26 % by the degree of novelty, and 13.7 % by the brand name. Proportions for Gen Z are: price - 62 %, degree of novelty - 23.6 % and brand name - 14.3 %. Proportions for Millennials are: price -61.7 %, degree of novelty -30 % and brand name -8.3 %. Although the price matters the most for both generations, for Gen Z the degree of novelty follows as important, while for the Millennials the brand's reputation follows. But when purchasing an innovative product and considering the brand, 19.5 % are influenced to a very large extent, 56.4 % are largely influenced, 12.4 % have no opinion, 10.6 % to a small extent, and 1.2 % to a very small extent. Proportions for Gen Z are: 19.1 % are influenced to a very large extent, 58.2 % are largely influenced, 10.9% have no opinion, 1.1% to a small extent, and 1.1% to a very small extent. Proportions for Millennials are: 21.7 %% are influenced to a very large extent, 43.3 % are largely influenced, 23.3 % have no opinion, 10 % to a small extent, and 1.7% to a very small extent. In terms of brand loyalty, 65.8% are loyal, while 34.2 % are not. 69.3 % of Gen Z and 51.7 of Millennials are loyal. 41.1% are used to purchase personalised products or services, and 58.9 % are not (42.7 % from Gen Z and 36.7% from Millennials). 98.6% are active Internet users, and 1.4% are not. 99.3 % of Gen Z and 96.7 % of Millennials are active users. In terms of hours spent daily on the Internet, none spend less than 30 minutes, 25% spend between 1-2 hours, 26.4 % spend between 3-4 hours, and 48.6 % spend more than 5 hours. 76.7 % are reading online content when enquiring about purchasing a product or service, and 23.3 % are not. 69.9 % have purchased innovative products recommended through online posts, articles, or videos, and 30.1 % have not.

There are significant statistical differences between Gen Z and Gen Y regarding the purchase and intending to buy innovative products when applying the chi-square tests (p-value < 0.05). There are also differences in brand loyalty, hours spent daily on the Internet and reading online content when inquiring about purchasing innovative products (p-value < 0.05). Gen Z are slightly more inclined to be loyal to a product and to spend more time on the Internet, whilst gen y is slightly more interested in reading online content when buying products.

Regarding the statements below, there were no differences between the answers given, at the level of generations: p-value > 0.05 (Table 1). The following table includes the percentages to what extent the respondents agree, where 1 represents total agreement and 7 – total disagreement.

Tuble 1. Characteristics of the consumer behaviour of milovative products							
Statement	1	2	3	4	5	6	7
1. Products with innovative	25%	13.3%	6.7%	6.7%	18.3%	11.7%	18.5%
designs arouse my curiosity.							
2. When I purchase innovative	13.3%	13.3%	21.7%	15%	11.7%	20%	5%
products, the decor and ambient sound in the store							
influence my choice.							
3. I buy innovative products that	16.7%	10%	16.7%	8.3%	11.7%	23.3%	13.3%
suit my personality.							
4. The innovative products	8.3%	10%	16.7%	15%	21.7%	18.3%	10%
purchased help me form a new							
lifestyle.							
5. The innovative products	11.7%	10%	25%	15%	10%	15%	13.3%
purchased give me a new status							
in society.							

 Table 1. Characteristics of the consumer behaviour of innovative products

Source: Our elaboration using SPSS Statistics based on questionnaire answers.

Respondents tend to disagree with being aroused by curiosity regarding products with innovative designs. They tend to be influenced by the décor and the ambient sound in the store when deciding what to buy, and a factor that contributes to this aspect is whether they are employees/ unemployed/ self-employed/ students/ retired/ housewives/ without occupation (p-value < 0.05). They are not inclined to buy innovative products that suit their personality; neither they consider that those products help them form a new lifestyle. The 4th statement also has as a factor of influence the environment of residence (p-value < 0.05). Generally, they tend to consider that the innovations purchased give them a new status in society.

Initially, by ranking factors according to the importance that the respondents considered having in influencing the purchasing behaviour of innovative products, the preferences were framed as follows:

Table 2. Raiks						
	Total	Gen Z	Gen Y			
1	Occupation	Occupation	Level of education			
2	Level of education	Economic factors	Economic factors			
3	Economic factors	Level of education	Living conditions			
4	Age group	Age group	Occupation			
5	Living conditions	Living conditions	Age group			
6	6 Identification with reference groups					
7	Identification with membership groups					

Table 2. Ranks

Source: Our elaboration using R Software based on questionnaire answers.

As can be seen, there are slight differences both in total and in each generation (Table 2). The level of education has a great significance in the orientation towards innovative products, and this will also be observed in the analyses carried out below. Using logistic models, we can check and determine the factors that are statistically significant predictors of the intention of purchasing innovative products. Withal, another model is created based on the behaviour of those that already purchased

innovative products in order to compare and observe if the two models are distinct or not. Also, statistical hypothesis testing was applied to check if there are significant differences between generations regarding their behaviour toward purchasing innovative products. For some variables in the dataset, the p-value was less than 0.05. This means that an association exists and that, indeed, there are differences between generations when referring to the factors listed above.

Variable	AIC	BIC	coefficient	p-value
Level of education	86.55	90.74	0.01918	0.887
Occupation	83.35	87.54	0.2634	0.0504 *
Income	86.54	90.73	0.02806	0.852
Living conditions	86.52	90.71	0.03297	0.824
Identification with reference	83.83	88.02	0.21	0.105
groups				
The opinion of family members	85.84	90.03	0.1193	0.398

Table 3. Relevant factors in the purchase of innovative products for Millennials

Source: Our elaboration using R Software based on questionnaire answers.

For the Millennials, when purchasing innovative products, the best predictor is occupation. It has the lowest score for AIC and is BIC and is also the only variable that is statistically significant (Table 3). An increase of one level for this factor multiplies the odds in buying innovative products by 1.3.

Table 4. Relevant factors in the purchase of innovative products for Gen Z						
Variable	AIC	BIC	coefficient	p-value		
Level of education	448.41	456.58	0.086	0.2307		
Occupation	449.74	457.87	0.0268	0.70917		
Income	449.67	457.84	0.0308	0.67842		
Living conditions	447.28	455.45	0.1135	0.1076		
Identification with reference	447.45	455.62	0.1122	0.1244		
groups						
The opinion of family	445.91	454.08	0.1399	0.0519 *		
members						

Table 4. Relevant factors in the purchase of innovative products for Gen Z

Source: Our elaboration using R Software based on questionnaire answers.

For Generation Z, when purchasing innovative products, the best predictor is the opinion of family members. It has the lowest score for AIC and BIC and is also the only variable that is statistically significant (Table 4). An increase of one level for this factor multiplies the odds in buying innovative products by 1.15.

Table 5. Relevant factors in the intention of purchasing innovative products
for Millennials

Variable	AIC	BIC	coefficient	p-value		
Level of education	76.96	81.15	0.4076	0.01683 *		
Occupation	74.25	78.44	0.5130	0.00518 **		
Income	71.47	75.66	0.748	0.00657 **		

Variable	AIC	BIC	coefficient	p-value
Living conditions	72.01	76.2	0.639	0.00353 **
Identification with reference	78.32	82.51	0.3083	0.02299 *
groups				
The opinion of family	80.54	84.72	0.2595	0.0732.
members				

Source: Our elaboration using R Software based on questionnaire answers.

For the Millennials, when they intend to buy an innovative product, the best predictor is income. It has the lowest score for AIC and BIC (Table 5). An increase of one level for this factor multiplies the odds in the intention of buying innovative products within 6 months by 2.11. The second-best predictor is related to living conditions: an increase of one level for this factor multiplies the odds in the intention of buying innovative products within 6 months by 1.89. In this case, all the variables taken into consideration are statistically significant.

 Table 6. Relevant factors in the intention of purchasing innovative products for Gen Z

Variable	AIC	BIC	coefficient	p-value		
Level of education	592.94	60.1.12	0.12186	0.0436 *		
Occupation	595.02	603.19	0.084637	0.155		
Income	593.84	605.01	0.02818	0.649		
Living conditions	596.28	604.45	0.05184	0.381		
Identification with reference	591.65	599.82	0.13893	0.0211 *		
groups						
The opinion of family	594.83	603.04	0.08498	0.138		
members						

Source: Our elaboration using R Software based on questionnaire answers.

When intending to buy an innovative product, for Gen Z, the best predictor is identification with reference groups. It has the lowest score for AIC and BIC (Table 6). An increase of one level for this factor multiplies the odds in the intention of buying innovative products within 6 months by 1.14. In this case, the level of education and the identification with reference groups are statistically significant.

For Millennials, among those who bought innovative products, occupation mattered. Probably, these products have significance in the chosen career. But for those who are thinking of buying in the next six months, all the factors that have been taken into account are important. But the least important factor is related to the opinion of the family members, this underlining their degree of independence. The practical side is highlighted by the choice of the most important factors, such as income and living conditions. For Generation Z, among those who bought innovative products, the opinion of family members mattered. A reason could be the fact that they are still quite young and are still financially supported by their parents, so they are still dependent on their opinions. But for those who are thinking of buying in the next six months, the decisive factor has to do with identification with the reference groups, probably aspiring to be like their models.

6. Conclusions

Through the current study, it was demonstrated that the characteristics presented in the literature review related to the decision to purchase products, in general, can also be applied to the decision to purchase innovative ones. An important aspect of this research relates to the fact that, in the construction of the prediction models, it was shown that the predictors are different or have different weights for those who have already purchased innovative products, compared to those who intend to buy in the next 6 months.

It has also been demonstrated that generations behave differently when they buy innovative products, and the criteria that influence consumer behaviour have different weights or they can be met in generation Z and not in generation Y, and vice versa. For Generation Y, relevant factors are related to the level of education, occupation, income, living conditions, and identification with reference groups. The opinion of family members' matters less. Generation Z has fewer relevant factors that are only related to the level of education, identification with reference groups, and the opinion of family members. Millennials associate the decision of buying innovative products with quality, evolution, effectiveness, performance, utility, necessity, ingenuity, novelty, and appearance, while generation Z associates the concept with design, advantages, actuality, attention, brand, quality, curiosity, sustainability, enthusiasm, efficiency, evolution, impulsiveness, information, simplification, progress. Some associations are quite similar, with price being the most important aspect for both generations. But even more important is the fact that it can be seen that Generation Z is more interested in innovative products, compared to Generation Y, both in the case of already purchasing and in the case of purchasing intention. Overall, education (more specifically, higher education) plays an important role in the profile of an innovative product consumer, and many associate innovation with sustainability.

Thus, the findings of this study have important implications for the intergenerational behaviour of consumers regarding innovative products. One of the limitations of this study being the small sample for both generation z and generation y, further research is recommended and can be generalised by adding other factors and extending the sample not only to those two generations included in this research but also to generation x, boomers, and silent. Finally, the influence of these factors can be fragmented and analysed from the perspective of other characteristics, such as occupation, environment, gender, or education profile.

Acknowledgment

Special thanks to Răzvan Zaharia, PhD (Bucharest University of Economic Studies, Bucharest, Romania) for his constant support provided during the research and writing of this article.

References

- Abbas, M., Nawaz, M.S., Ahmad, J., Ashraf, M. (2017). The effect of innovation and consumer related factors on consumer resistance to innovation, *Cogent Business & Management*, 4(1).
- [2] Abu, B., Irshad, A., Mohammad, W. (2013). A Study of Influence of Demographic Factors on Consumer Impulse Buying Behavior, *Journal of Management Research*, 13(3), 145-154, ISSN 0972-5814, online ISSN 0974-455X.
- [3] Allenby, G.M., Lenk, P.J. (1994). Modeling Household Purchase Behavior with Logistic Normal Regression. *Journal of the American Statistical Association*, 89(428), 1218-1231, https://doi.org/10.2307/2290986.
- [4] Andrze, C. (2020). Financial literacy, behaviour and well-being of millennials in Poland compared to previous generations: The insights from three large-scale surveys, *Review of Economic Perspectives*, ISSN 1804-1663, De Gruyter, Warsaw, 20(3), 289-335, http://dx.doi.org/10.2478/revecp-2020-0015.
- [5] Armstrong, G., Kotler, Ph. (2015). Introducere în marketing, Ediția a 12-a, Pearson Education, New Jersey.
- [6] Calvo-Porral, C., Rogelio Pesqueira-Sanchez, R. (2019). Generational differences in technology behaviour: comparing millennials and Generation X, Article in Kybernetes, DOI: 10.1108/K-09-2019-0598.
- [7] Cruz-Cardenas, J., Zabelina, E., Deyneka, O., Guadalupe-Lanas, J., Velin-Farez, M. (2019). Role of demographic factors, attitudes toward technology, and cultural values in the prediction of technology-based consumer behaviors: A study in developing and emerging countries, *Technological Forecasting and Social Change*, Vol. 149, https://doi.org/10.1016/j.techfore.2019.119768.
- [8] Czerwińska, M., Czerwiński, D. (2021). Behavioural Intentions for Health by the Z Generation: A Fuzzy Cognitive Maps Analysis, *European Research Studies Journal*, XXIV(2), 99-111.
- [9] Desai, S.P., Lele, V. (2017). Correlating Internet, Social Networks and Workplace a Case of Generation Z, Students, *Journal of Commerce & Management Thought*, 8-4, 802-815.
- [10] Dragos, S.L., Dragos, C.M., Muresan, G.M. (2020). From intention to decision in purchasing life insurance and private pensions: different effects of knowledge and behavioural factors, *Journal of Behavioral and Experimental Economics*, Vol. 87, 101555, ISSN 2214-8043, https://doi.org/10.1016/j.socec.2020.101555.
- [11] Dziallas, M., Blind, K. (2019). Innovation indicators throughout the innovation process: An extensive literature analysis, *Technovation*, Vol. 80-81, 3-29, https://www.science direct.com/science/article/pii/S0166497217301402.
- [12] Herve, C., Mullet, E. (2009). Age and factors influencing consumer behaviour, *International Journal of Consumer Studies*, 33(3), 302-308, https://doi.org/10.1111/ j.1470-6431.2009.00743.x.
- [13] Hofstede, G. Mooij, M., (2011). Cross-Cultural Consumer Behavior: A Review of Research Findings, *Journal of International Consumer Marketing*, 23, 181-192.
- [14] Jaba, E. (2002). Statistica, Editura Economica, Bucuresti [Statistics, Economic Publishing House, Bucharest].

- [15] Kotler, Ph., Kartajaya, H., Setiawan, I. (2021). Marketing 5.0. Technology for Humanity, John Wiley & Sons, Inc., Hoboken, New Jersey.
- [16] Kotler, Ph., Keller, K.L. (2006). Marketing. Management. Twelfth Edition, Pearson Prentice Hall, New Jersey.
- [17] Kumar, R. (2014). Impact of Demographic Factors on Consumer Behaviour A Consumer Behaviour Survey in Himachal Pradesh, *Global Journal of Enterprise Information System*, 6(2), doi: 10.15595/gjeis/2014/v6i2/51844.
- [18] Lehmann, E.L., Romano, J. (2022). Testing Statistical Hypotheses, Springer Cham, ISBN 9783030705770.
- [19] Li, J., Guo, F., Xu, J., Yu, Z. (2022). What Influences Consumers' Intention to Purchase Innovative Products: Evidence From China, Front. Psychol., Sec. Organizational Psychology, Volume 13, https://doi.org/10.3389/fpsyg.2022.838244.
- [20] Menard, S. (2009). Logistic Regression: From Introductory to Advanced Concepts and Applications, SAGE Publications, Inc.
- [21] Niculescu-Aron I.G. (2005). Tehnica sondajelor, Editura ASE, Bucuresti [Survey technique, ASE Publishing House, Bucharest].
- [22] Pfeffermann, D., Rao, C.R. (2009). Sample Surveys: Design, Methods and Applications, 1st edition, North Holland.
- [23] Siegrist, M. (2008). Factors Influencing Public Acceptance of Innovative Food Technologies and Products, *Trends in Food Science & Technology*, 19(11), 603-608, doi: 10.1016/j.tifs.2008.01.017.
- [24] Schiffman, L.G., Kanuk, L.L. (2007). Consumer Behavior, 9th ed., Pearson Prentice Hall, New Jersey.
- [25] Shafi, M., Junrong, L., Yang, Y., Jian, D., Rahman, I.U., Moudi, M. (2021). Factors Influencing the Consumer Acceptance of Innovation in Handicraft Products, SAGE Open, 11(4).
- [26] Talwar, S., Dhir, A., Scuotto, V., Kaur, P. (2021). Barriers and paradoxical recommendation behaviour in online to offline (O2O) services. A convergent mixedmethod study, *Journal of Business Research*, 131, 25-39.
- [27] Verhoef, P.C, Broekhuizen, T., Bart, Y., Bhattacharya, A., Dong, J,Q, Fabian, N., Haenlein, M. (2021). Digital transformation: A multidisciplinary reflection and research agenda, *Journal of Business Research*, 122, 889-901.
- [28] Wickramarachchi, A. (2020). Logistic Regression and Decision Boundary, https://towardsdatascience.com/logistic-regression-and-decision-boundary-eab6e00c1e8.