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A COMPARATIVE ANALYSIS OF PERCEIVED VALUE DIMENSIONS OF APPLE IPHONE FROM THE PERSPECTIVE OF GENERATIONS Y AND Z

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The global market is undergoing rapid development, creating a significant challenge for businesses in identifying and catering to the unique needs of target customer groups to survive in the market. The concept of customer value is essential for understanding consumer behaviour for both, managers, and researchers. There are various forms of perceived value, and companies must understand which aspects are most important to their target customers. Furthermore, differences between generations may also play a role in the assessment scores. The theoretical section of the paper delves into the topic of perceived product value, its key characteristics, and the distinctions between generations Y and Z. Additionally, this study seeks to examine the perception of the value of Apple's iPhone mobile phones among members of generations Y and Z, focusing on the dimensions of value that they deem significant. Furthermore, the research aims to determine whether there are any discrepancies in the assessment of the dimensions of the perceived value of Apple iPhone products between these two generations.

Keywords: *product; perceived value; generation Y; generation Z; value dimensions.*

1. Introduction

The modern market is characterized by a high level of product and service saturation, as well as intense competition among companies. Value creation emerges as a critical objective for businesses, with the necessity of developing products and services that resonate with customers (Sheth and Uslay, 2007). The transfer of value occurs from the company to its customers, who then evaluate the market offerings and select the one that provides the best

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value. Therefore, it is important to understand what customers want and how they behave to successfully manage a business. Customer-perceived value has received much attention in the past few decades as more customers have become value-driven (El-Adly and Eid, 2015). The concept of customer value is essential for understanding consumer behavior by both managers and researchers (Sheth et al., 1991; Holbrook, 2002; El-Adly, 2019; Ge et al., 2021). It is based on the notion that the value of a product is perceived by the customer and influenced by all tangible and intangible characteristics of the offering (Van der Haar et al., 2001). Companies must consider differences in the perceived value of their products or services from the perspective of consumers. The perceived value of a product is a multidimensional concept that is influenced by various factors that customers consider when evaluating a specific product or service.

Moreover, it is essential for companies to be aware of different consumer generations and their unique characteristics to better understand their target audience and needs. By studying and analyzing specific generations, companies can gain insights into their customers' preferences and tailor their products and services accordingly. For example, researchers studying hospitality and tourism have identified the importance of generational cohorts to the health of the sector (Beldona, Nusair, and Demicco, 2009). In addition, there is a need to investigate the attitudes and behaviors of generational cohorts more thoroughly as the foundation for behavioral and psychographic segmentation (Pennington-Gray and Blair, 2010). Companies should consider which generation is most relevant to their business and focus their efforts on understanding and catering to that generation. If necessary, they could extend their analysis to include multiple generations.

This study examined the perception of the value of Apple's iPhone mobile phones among members of generations Y and Z, focusing on the dimensions of value that they deem significant. Additionally, this research aims to determine whether there are any discrepancies in the assessment of the dimensions of the perceived value of Apple iPhone products between these two generations. The dimensions of perceived value that will be considered in this research are functional, which represents the product's appropriate performance and resulting outcomes; economic, which represents the profitability of investments in the product; emotional, which indicates the degree to which the customer identifies with the product; and social, which reflects the product's status, image, and prestige in social groups. The remainder of this paper is organized as follows. First, a comprehensive review of the literature on customer perceived value and the specific characteristics of each generation is provided. Subsequently, the relationship between each generation and the perceived value dimensions was conceptualized. Finally, the research methodology is described. The primary outcomes of this study are presented below. Finally, the theoretical and practical implications of the study are discussed, along with its limitations and potential areas for future research.

2. Literature review

Perceived value is the basis for understanding consumer behavior by both managers and researchers (Sheth et al., 1991; Holbrook, 1996; Roig et al., 2006; Parente and Costa, 2015; Gallarza et al., 2016; Slack, 2020). The concept of perceived value assesses the value of a

product or service offered to the user, considering all tangible and intangible characteristics (Van der Haar et al., 2001). Sanchez-Fernandez and Iniesta-Bonillo (2007) define the perceived value as a cognitive-affective evaluation of the exchange relationship brought by an individual at any stage of the purchase process, which results from a group of tangible and intangible features that are determined by a comparative, personal, and preference assessment depending on place, time, and circumstances of the purchase. Perceived value is characterized as the interactive experience between a subject and object (Holbrook and Corfman, 1985). In this context, value is derived from the consumption or use of a product or service, undergoing a relational approach between the company and the consumer. This perspective considers perceived value as a multidimensional construct, with numerous researchers adept at identifying several dimensions to operationalize perceived value (Sheth et al., 1991; Sweeney and Soutar, 2001). Roig et al. (2006) also defined it as a multidimensional construct, composed of functional and affective values. Functional value represents a rational assessment of an individual in which quality and price play a significant role, whereas the affective dimension consists of feelings and the relationship with the environment through the purchase process. An examination of the existing literature indicates that most researchers have combined functional, social, and emotional values in their analyses. Sweeney and Soutar (2001) propose that perceived value comprises functional values, which involve a logical assessment of usefulness in terms of cost and quality (Zeithaml, 1988), as well as affective values (symbolic and hedonic), specifically social and emotional values. Functional value is characterized as "a perceived utility from an alternative's capacity for functional, utilitarian, or physical performance" (Sheth et al., 1991). It encompasses both price value (monetary value) and quality value (Sweeney and Soutar, 2001). Monetary value signifies the economic advantage a product or service provides to its user, often described as 'what you get for what you pay' (Kumar and Lim, 2008). This relates to perceptions of superior value for money or lower prices compared to other options (Sheth et al., 1991). Emotional value denotes sentiments or affective states generated by the experience of consuming or using a product or service (Pura, 2005; Sweeney and Soutar, 2001). In the context of this study, this refers to pleasure, positive emotions, and emotional reactions evoked during product usage. Lastly, social value is defined as "the perceived utility acquired from an alternative's association with one or more specific social groups" (Sheth et al., 1991). This value pertains to social acceptance and standing (Bearden and Netemeyer, 1999; Pura, 2005). In this setting, products and services can be utilized as tools for enhancing one's self-perception, showcasing individuality, or positioning oneself within a particular social stratum. Consumer decisions are influenced by various value dimensions that carry different weights in diverse scenarios; however, these dimensions may be interrelated. There is consensus among scholars that perceived value is shaped by consumer insights, preferences, and benchmarks, rather than supplier-defined criteria (Zeithaml, 1988). Consequently, the analysis of perceived value centers on placing customers at the core of contemporary marketing. This prompts marketers to concentrate on value-creation processes for customers to achieve a competitive edge, as consumers evaluate offerings in relation to those of rivals. The perception of value is a psychological assessment that goes beyond specific products or acquisitions and is rooted in the consumers themselves (Tynan et al., 2010). Value manifests in various forms and originates from multiple sources including product functionality, quality,

brand image (shaped by advertising and promotional efforts), accessibility, and supplementary services. In the realm of consumer behavior, value serves as a crucial factor influencing individual choices and actions. Companies can use customers' experiential value to understand their preferences and make adjustments to improve the value of the product, enhance the experience outcomes, and increase product value (Shobeiri et al. 2013; Wittmer and Rowley 2014).

Several generational groups can be distinguished based on the birth period of their members. In addition to age, the differences between them are also reflected in the way they behave in the market as well as the values they represent. A generation consists of a group of people determined by age, who grew up in similar conditions and had similar experiences. However, the authors do not agree on the exact time limits when a certain generation begins and when it ends. They agree on the existence of the following generations: veterans, the baby boom generation, Generation X, Generation Y, Generation Z, and Generation Alpha (Šimunić Rod, 2020). Zemke et al. (2013) stated that there are no strict boundaries for defining individual generations; however, in their work, they still stated the basic guidelines and characteristics (Kilber et al., 2014):

- Veterans – born between 1922 and 1943, the population born before the Second World War with which they associate their first memories. They are also called traditionalists, and 50% of the members of this generation in America are war veterans, who are also patriots. These people believe in logic rather than magic.
- Baby-boom generation – born between 1943 and 1960, the population born after World War II, a period of social progress and optimism. Members of this generation are optimistic and idealistic, have questioned authority, and live their lives to the fullest extent.
- Generation X – born between 1960 and 1980, the population born during the rise of the Asian Tigers of Hong Kong, South Korea, Singapore, and Taiwan. Parents of this generation spend a lot of time at work; therefore, members of this generation feel neglected. Therefore, they rejected their careers and focused on their families' lives.
- Generation Y – born between 1980 and 1994, a population that grew up in a time of technological progress and optimism, they are also called the digital generation because they have not experienced life without technology.
- Generation Z – born between 1995 and 2010, the generation that grew up with social networks, mobile devices and virtual reality.
- Generation Alpha – born between 2010 and 2025.

It is clear that members of different generations were born under different conditions, and their characteristics distinguish them, from which it can be concluded that each generation requires a different approach. From the above, it can be assumed that members of different generations potentially have different perceptions of the value of products/services, and the same will be analyzed for members of generations Z and Y.

Generation Y or the so-called digital generation is a group of people who grew up during the Cold War, with television, mobile devices, and computers, and life without devices is unimaginable for them (Kilber et al., 2014). They are optimistic, realistic, and ecologically and

globally aware people and their characteristics differ from those of previous generations that had different characteristics (Gibson, et al., 2009).

Optimism, willingness to work, openness to helping, and volunteering certainly represent a role model for the next generations, Z and Alpha, which, in general, are becoming individually oriented.

These two generations have a link between openness to innovation, flexibility, and willingness to adapt in terms of new forms of social communication (social networks, digitalization, etc.). Generation Z, often referred to as "The Face Generation", is characterized by distinct differences from previous generations. This generation, who grew up in an era of digital and mobile devices, social networks, and virtual reality, communicates primarily through these platforms. They have grown up in the information age, where access to information is instantaneous and ubiquitous. Consequently, Generation Z members expect immediate access to information, with minimal effort required in its acquisition. Park (2015) suggests that this generation's digital literacy and multitasking abilities set them apart from other generations. This unique trait, while providing an advantage in certain scenarios, also poses a challenge for those outside of Generation Z, particularly in the labor market. Helsper and Eynon (2010) further underscore this point. In terms of value systems and lifestyle, Generation Z exhibits a self-centric orientation. While they are not socially insensitive, they place a high value on appreciation, respect, and tolerance. Fistrić (2019) in "The Impact of Digitization on the Generation Gap – from Baby Boomers to Generation Z" highlights these characteristics. However, Generation Z members also exhibit symptoms of anxiety and a heightened sense of worthlessness. This can be attributed to their egocentric tendencies and a greater focus on personal achievements, which can lead to a sense of alienation from the collective. Djedović et al., (2021) in "Postmillennial: Let's Get to Know Generation Z" further elaborates on this issue. Therefore, Generation Z, or "The Face Generation", presents a unique blend of characteristics that set them apart from previous generations. Understanding these differences is crucial for developing effective strategies to engage and communicate with this generation.

Research on perceived value across generations has revealed both differences and similarities. Gadomska-Lila (2020) found significant differences in the value systems of Baby Boomers, Generation X, Generation Y, and Generation Z, but also identified some commonalities. Similarly, Yang et al. (2018) observed variations in the perceived importance of work values in China, with Millennials showing the highest preference. However, Van Rossem (2019) argued that, while the value assigned to various motivators may not significantly differ across generations, the perception of these motivators does. This was supported by Lyons (2007), who found that millennials and generation Xers placed a higher value on Self-enhancement and Openness to Change than baby boomers and Matures. Younger generations in China have shifted from traditional to modern values in recent social transformation processes. For Generation Y, service improvements are generally valued more than technological improvements in physical fast fashion stores (Rese et al., 2022). The type of service supply, whether product-centric or knowledge-centric, can also impact perceived value, with knowledge-centric services being more effective in creating long-term relational value (Song, 2016). The perceived value of products and services among Generation Z members is

influenced by various factors. Agatha (2021) found that functional, economic, emotional, social, and service dimensions significantly impact their willingness to pay more for local brands. Šramková and Sirotiaková, (2021) revealed that the issue of dual product quality significantly affects the consumer behavior of Generation Z, particularly in non-food products. The characteristics of Generation Y and Z significantly impact their preference for contactless services, with the exception of security-seeking behavior. These younger generations demonstrate a higher perceived interest in new technology and safety-seeking. Social conformity moderates the effect of technology self-efficacy on preference for contactless services (Kim et. al., 2021). Researchers have focused on how age influences perceptions, particularly regarding technology usage (Kumar and Lim, 2008; Morris and Venkatesh, 2000). Kim and Hwang (2006) noted that younger mobile users tend to value emotional and hedonic aspects more, while older users prioritize utilitarian features. In her study of generational motivational factors, Lahouze-Humbert (2010) found that Generation Y exhibits a stronger desire for networking, sharing, and connecting compared to other generations. In this group, mobile phones serve as a means of interaction and relationship maintenance, allowing them to enjoy a network of friends wherever they go.

The swift advancement of information and communication technologies has resulted in the continuous introduction of new high-tech products, each offering substantial enhancements in functionality and advantages compared to its predecessors (Kapur et al., 2010). This ongoing progression has created a dynamic environment where consumers across different age groups must decide whether to embrace or reject these emerging technologies (Kapur et al., 2010). Studies have demonstrated significant generational disparities in attitudes, perceived ease of use, and actual performance regarding the adoption and utilisation of technology (Magsamen-Conrad et al., 2015). Various age cohorts, such as millennials and Generation X, have been found to display distinct patterns in their technology usage, engagement, and behaviour (Calvo-Porrá & Pesqueira-Sanchez, 2019). Older individuals who did not grow up with digital technologies may face greater challenges in adopting and using these products, due to physical and cognitive declines associated with aging, as well as a lack of prior experience with ICT-based interfaces (Vorrink et al., 2017). Furthermore, the motives for using technology varies between generations. For the older population, the primary incentives for employing technology often revolve around maintaining connections with family and friends and accessing social support networks. In contrast, younger generations typically view technology as a means for entertainment and social interaction (Magsamen-Conrad et al., 2015).

These generational variations in the perceived value and adoption of technological products can be traced back to the unique beliefs, motivations, and values shaped by the shared experiences of individuals born within the same time frame (Calvo-Porrá & Pesqueira-Sanchez, 2019). Recognising and comprehending these generational differences is essential for organisations and policymakers aiming to effectively design, market, and promote technological products to diverse consumer segments (Magsamen-Conrad et al., 2015).

3. Methodology

This study was conducted from March 5, 2023, to March 30, 2023, focusing on the dimensions of the perceived value of Apple iPhone products. The research sample consisted of 268 respondents, grouped into two age categories. A survey questionnaire was administered to respondents from two generations, namely Generation Y (aged 28-42 years) and Generation Z (aged 14-27 years). To gather the necessary data, a digital survey questionnaire was employed.

The research primarily aimed to explore the importance of the dimensions of perceived value, namely economic, functional, emotional, and social. This was achieved by examining the perceived value of the iPhone product through these four dimensions, considering the ratings provided by members of Generation Z and Generation Y. Furthermore, the goal was to identify any differences in the perceived value of the iPhone between these two generations.

By understanding the perceived value of the iPhone through these dimensions, the study contributes to the existing literature on consumer behavior and perceived value perception, particularly in the context of technology products. This knowledge is crucial in developing effective marketing strategies that cater to the needs and preferences of Generation Z and Generation Y consumers.

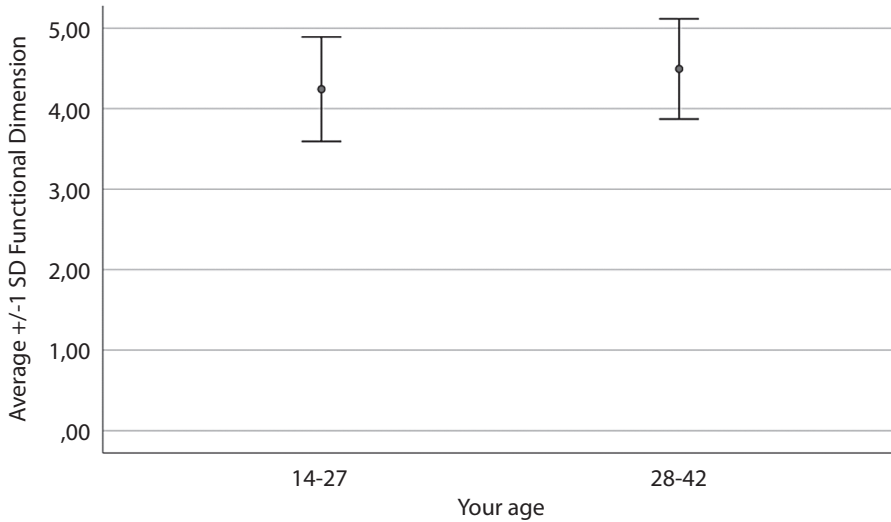
The results of the research were presented using both absolute and relative frequencies and graphical. The arithmetic mean was used as the mean value, while the standard deviation was used as an indicator of deviation from the mean. The t-test for independent measurements was used to examine the research questions. The analysis was conducted using MS EXCEL 365 statistical software. A total of 170 respondents from Generation Z (aged 14-27) and 98 respondents from Generation Y (aged 28-42) participated in the study. Respondents were asked to indicate their level of agreement with 13 statements, with a range of 1 to 5, where 1 represented complete disagreement and 5 represented complete agreement with the statement presented.

The five constructs identified in the study consist of the: functional dimension, which refers to the benefit or profit that a customer receives from a product; the economic dimension, which considers factors such as product price, discounts, and resale value; the emotional dimension, which includes systems such as experiences, feelings, and emotions that are characteristic of all consumers; the social dimension, which explains that a product or service achieves its social value through positive or negative associations with different social groups; and the overall perception of value.

Additionally, to determine the public perception of the mobile phone brand and compare with the results of the statistical analysis, sentiment analysis was conducted using selected software tools.

According to the data presented in Graph 1, it is evident that the functional dimension of the Apple iPhone product is rated 0.25 points higher on average among respondents of Generation Y compared to those of Generation Z. The rating for the functional dimension among Generation Z respondents is 4.24, while the rating among generation Y respondents is 4.49.

Graph 1: An Overview of the Functional Dimension Ratings of the iPhone Mobile Phone

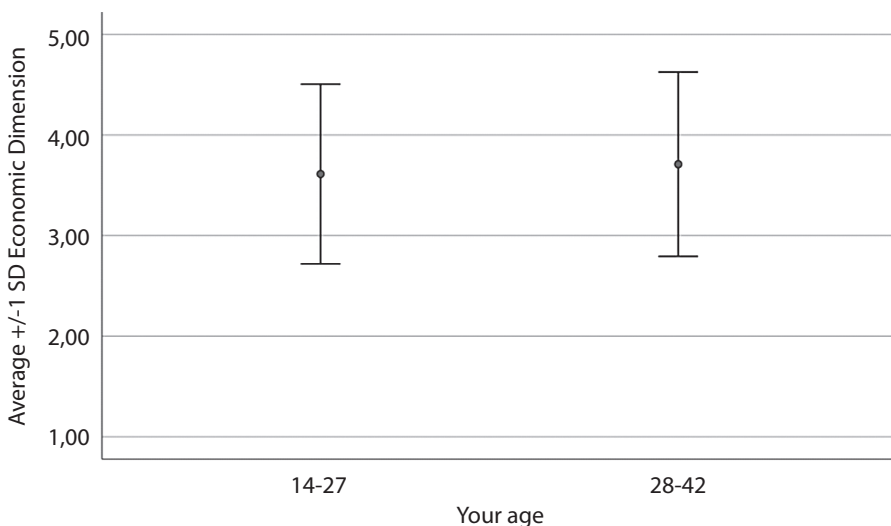


Source: Bilandžić (2023)

The study found that there was a statistically significant difference in the evaluation of the functional aspect of perceived value between generations Z and Y. This conclusion was drawn based on the calculated t-value of 3.11, which was found to be statistically significant at a level of significance of 0.002, which was less than 0.050.

The assessment of the economic aspect of the Apple iPhone among the older generation Y is 0.10 points greater than that of the younger generation Z. The evaluation of the economic dimension of the iPhone for Generation Y was 3.71, whereas for Generation Z it was 3.61.

Graph 2: An Overview of the Economic Dimension Ratings of the iPhone Mobile Phone

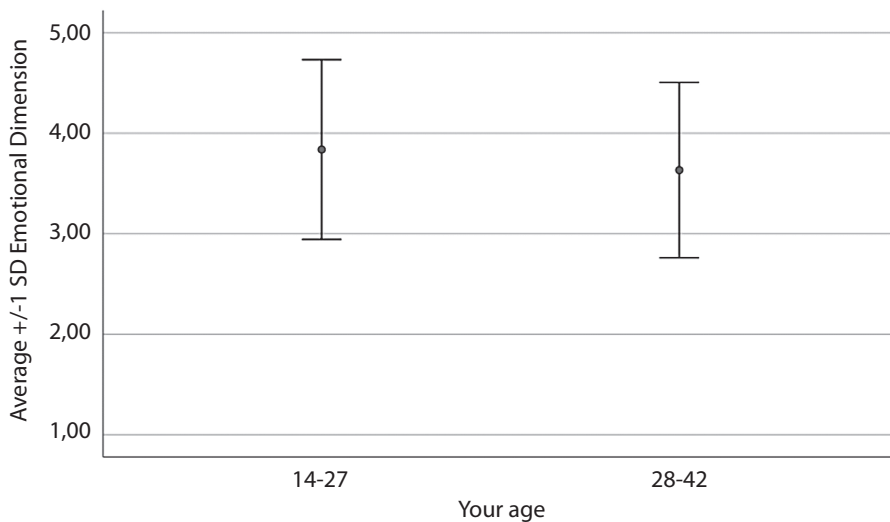


Source: Bilandžić (2023)

Statistical analysis revealed that there is no statistically significant disparity in the economic dimension between Generations Z and Y. This finding was reached on account of the empirical t-value, which amounted to 0.85, and the empirical level of significance, which was 0.395, surpassing the threshold of 0.050.

The average value of the emotional dimension of the Apple iPhone product is 0.21 points higher among respondents of Generation Z compared to respondents of Generation Y. The evaluation of the emotional dimension of the iPhone Generation Z was 3.84, whereas the evaluation of the same dimension by Generation Y was 3.63.

Graph 3: An Overview of the average rating of the emotional dimension of the iPhone product among the Yi Z generations

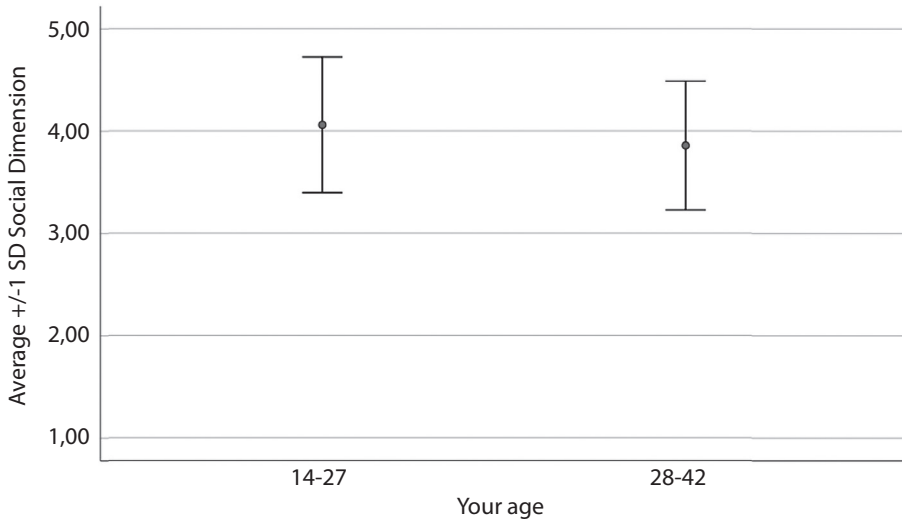


Source: Bilandžić (2023)

Following the evaluation, it was found that there was a statistically significant difference in the emotional dimension between generations Y and Z, but only with a threshold level of significance of 10% being met (not as 5% as before). This conclusion was drawn based on an empirical t value of 1.82 and an empirical level of significance of $0.070 < 0.100$.

It was observed that the social dimension rating for Generation Z was 4.06, whereas for Generation Y it was 3.86. Average score of the social dimension for the Apple iPhone product was 0.20 points higher among Generation Z respondents compared to Generation Y respondents.

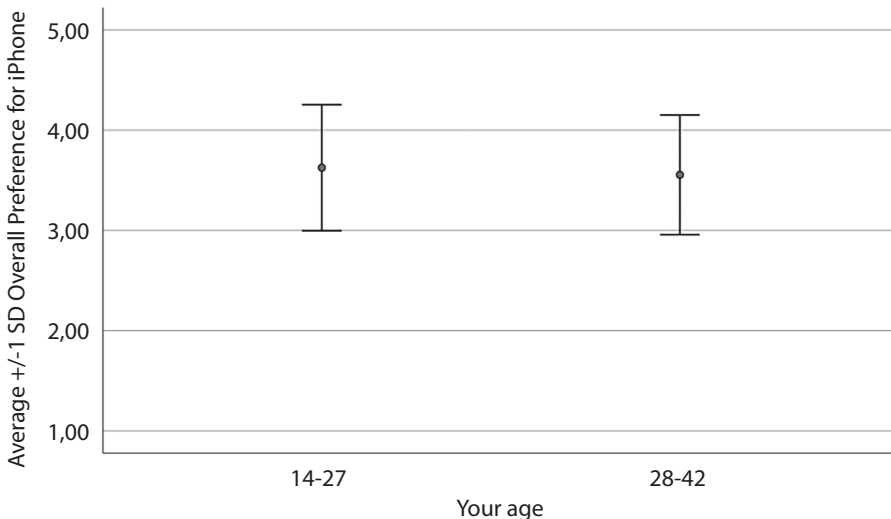
Graph 4: An Overview of the average rating of the social dimension of the iPhone product among the Yi Z generations



Source: Bilandžić (2023)

A statistically significant difference was detected in the social dimension between generations Y and Z, with a level of significance of $0.015 < 0.050$. This conclusion was based on an empirical t-value of 2.44. The research also looked at the overall levels of perceived value between the two generations and found that the average value of the overall perception of the Apple iPhone product is 0.08 points higher among Generation Z respondents than among Generation Y respondents.

Graph 5: Ratings of the Overall Preference for iPhone Mobile Phones



Source: Bilandžić (2023)

The rating of the overall level of preference for the iPhone among Generation Z respondents was 3.63, while it was 3.55 for Generation Y respondents. However, there was no statistically significant difference in the value of the overall perception of the Apple iPhone product between the two generations, with an empirical t-value of 0.91 and an empirical level of significance of $0.364 > 0.050$.

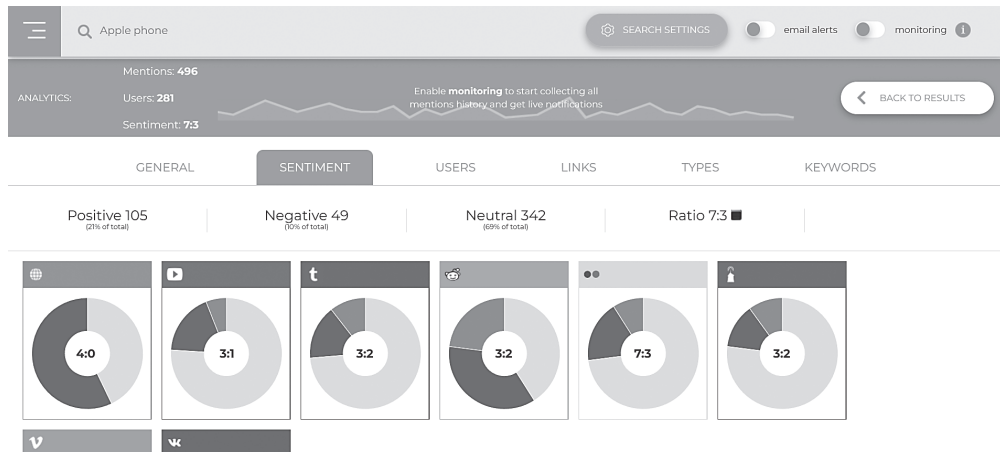
Additionally, to determine the public perception of the mobile phone brand, sentiment analysis was conducted using selected software tools. The aim was to identify whether there were differences between the direct responses collected through the survey and those published in the media.

The analysis conducted in program Hootsuite tool for sentiment analysis yielded the following result:

Summary: The sentiment towards Apple is overwhelmingly positive. Consumers see Apple products as high-quality, reliable, and worth the price. They believe that Apple offers innovative features and designs that justify the premium prices. Many people are willing to pay more for an Apple product because they trust the brand's reputation for excellence. Many people admire their sleek design, user-friendly interfaces, and innovative technology. Customers often show loyalty to the brand, praising their products for their high quality and performance. The Apple community is known for its passion and enthusiasm, making the overall sentiment towards the brand very positive.

According to the results generated on platform Socialsearcher, it is evident that the majority of content related to the Apple iPhone on social media is either positive (105) or neutral (342), while only a small portion is negative (49).

Figure 1: Results on Apple Iphone generated on Socialsearcher



Source: <https://www.social-searcher.com/social-buzz/?wblng=&ntw=&psttyp=&searchid=0&period=&value=&fbpage=&q5=Apple+phone> (19.10.2024.)

It is evident that the public sentiment towards the Apple iPhone brand is predominantly positive. However, it is essential to regularly analyze negative connotations to identify areas for necessary improvements.

4. Results

Concluding the conducted research, it is possible to determine several key findings. In examining the functional dimension of the perceived value of the iPhone, a statistically significant difference was found between generations Y and Z, with the former placing greater importance on this aspect. This suggests that Generation Y values the functionality of the product and its fundamental benefit more than Generation Z. Additionally, the economic dimension was found to be equally perceived by both generations, with no statistically significant difference in ratings. This indicates that both generations view the financial aspect of the iPhone and its profitability in the same way. Finally, when considering the emotional dimension, a statistically significant difference in perception was observed in favor of Generation Z. This suggests that members of Generation Z place a higher importance on the emotional connection with owning an iPhone compared to Generation Y. Overall, these findings indicate that both generations have distinct preferences and priorities when it comes to the perceived value of the iPhone. In light of the social implications of mobile phone ownership, a statistically significant difference in perception has been discovered between generations Y and Z about their sensitivity to social status and image associated with iPhone ownership. This suggests that Generation Z is more attuned to these aspects, indicating a greater concern for maintaining a positive social status and image. These results are in accordance with some previous research, for example, Gadowska-Lila (2020) observed substantial variations in the value systems of Baby Boomers, Generation X, Generation Y, and Generation Z. However, she also noted certain shared characteristics among these generations. Kim and Hwang (2006) emphasized that younger mobile users tend to prioritize emotional values and, consequently, hedonic elements, whereas older mobile users place more emphasis on utilitarian values. Furthermore, Lyons (2007) determined that Millennials and Generation Xers ascribed greater importance to Self-enhancement and Openness to change compared to Baby Boomers and Matures. However, when examining the overall perceived value of the iPhone, no statistically significant difference was found in perception between the two generations. This indicates that the general perception of the iPhone among both generations is similar.

Comparing sentiment analysis with statistical data ensures a comprehensive understanding of public perception and helps pinpoint trends or issues that might not be immediately obvious from raw sentiment scores alone. This combination of qualitative and quantitative insights can guide more strategic decision-making for brand management.

5. Conclusion

When examining the perception of product value, it is essential to take into account the differences between generations. Millennials, or Generation Y (28-42 years old), are characterized as optimistic, hardworking, and eager to volunteer. Conversely, members of Generation Z, or the Face Generation (22-27 years old), are more individualistic, inward-focused, and open-minded, with a strong attachment to their mobile phones.

To explore the primary goals of the research, the study analyzed the perceived value of the iPhone mobile phone from the perspective of generations Y and Z. The research findings indicate the presence of disparities in the perception of certain dimensions of the value of the Apple iPhone between generations. The research results revealed a statistically significant difference in the perception of the functional dimension of perceived value between generations Y and Z. It was observed that the appropriate performance and the profit achieved from using the product are more important to the millennial group. However, there was no statistically significant difference in the perception of the economic dimension of perceived value between generations, implying that both generations share a similar view of the profitability and quality of iPhone mobile phones. Concerning the emotional dimension, a statistically significant difference in perception was found at a 10% significance level, indicating that the emotional aspect of owning a mobile phone is more important to Generation Z. Furthermore, the social dimension also shows a statistically significant difference in perception between the two generations, with the social aspect of owning a mobile phone being more important to members of Generation Z.

Overall, the research provides insights into the differences in the perception of certain dimensions of the value of the Apple iPhone between generations.

Nevertheless, the study has limitations. Firstly, the structure of the respondents favors a larger number of Generation Z respondents compared to Generation Y. Secondly, there is an imbalance in the number of male and female respondents, with a greater number of female respondents from Generation Z completing the questionnaire. Additionally, the study only involves two generations, Y and Z, so future research could include examining the perceived value of other generations to gain a more comprehensive understanding of generational differences in perceptions of this type of product. To reduce potential errors, increasing the sample size in future studies could confirm or contradict the findings of the current study. This study examines only age differences in perceived value evaluation. Future researchers may also consider the evaluation of perceptual differences between different ethnic groups or cultures. Other demographic variables such as gender, income and education can be used as a demarcation variable in understanding perceived value toward Apple iPhone mobile phones.

LITERATURE

1. Agatha, A., & Afgani, K. F. (2021). The perceived values of Indonesian generation Z towards a local brand's pricing strategy. *Advanced international journal of business, entrepreneurship and sme's (AIJBES)*, 3(9), 36-46.
2. Bearden, W. O., & Netemeyer, R. G. (1999). *Handbook of marketing scales: Multi-item measures for marketing and consumer behavior research*. Sage publications.
3. Beldona, S., Nusair, K., & Demicco, F. (2009). Online travel purchase behavior of generational cohorts: A longitudinal study. *Journal of Hospitality Marketing & Management*, 18(4), 406-420. doi:10.1080/19368620902799627
4. Bilandžić, V. (2023). Comparison of dimensions of the perceived value of Apple iPhone mobile phones from the point of view of generations Y and Z. *Master's thesis*. Split: University of Split, University Department of Professional Studies.

5. Calvo-Porrá, C., Pesqueira-Sánchez, R., & Faiña Medín, A. (2019). A clustered-based categorization of millennials in their technology behavior. *International Journal of Human-Computer Interaction*, 35(3), 231-239.
6. Djedović, V., Mujkanović, E., & Mirković-Hajduković, M. (2021). Post-millennials: Meet Generation Z.
7. El-Adly, M. I. (2019). Modelling the relationship between hotel perceived value, customer satisfaction, and customer loyalty. *Journal of Retailing and Consumer Services*, 50, 322-332.
8. El-Adly, M. I., & Eid, R. (2015). Measuring the perceived value of malls in a non-Western context: the case of the UAE. *International Journal of Retail & Distribution Management*, 43(9), 849-869.
9. Fistrić, M. (2019). The Impact of Digitalization on the Generation Gap—From Baby Boomers to Generation Z. *Communication Management Review*, 4(01), 120-139.
10. Gadomska-Lila, K. (2020). Effectiveness of reverse mentoring in creating intergenerational relationships. *Journal of Organizational Change Management*, 33(7), 1313-1328.
11. Gallarza, M. G., Arteaga-Moreno, F., Del Chiappa, G., & Gil-Saura, I. (2016). Intrinsic value dimensions and the value-satisfaction-loyalty chain: a causal model for services. *Journal of Services Marketing*, 30(2), 165-185.
12. Ge, Y., Yuan, Q., Wang, Y., & Park, K. (2021). The structural relationship among perceived service quality, perceived value, and customer satisfaction-focused on starbucks reserve coffee shops in Shanghai, China. *Sustainability*, 13(15), 8633.
13. Gibson, J. W., Greenwood, R. A., & Murphy Jr, E. F. (2009). Generational differences in the workplace: Personal values, behaviors, and popular beliefs. *Journal of Diversity Management (JDM)*, 4(3), 1-8.
14. Helsper, E. J., & Eynon, R. (2010). Digital natives: where is the evidence?. *British educational research journal*, 36(3), 503-520.
15. Holbrook, M. B. (2002). Introduction to consumer value. In *Consumer value* (pp. 17-44). Routledge.
16. Holbrook, M. B., & Corfman, K. P. (1985). Quality and value in the consumption experience: Phaedrus rides again. In J. Jacoby & J. C. Olson (Eds.), *Perceived quality: How consumers view stores and merchandise* (pp. 31-57). D. C. Heath and Company.
17. Kapur, P. K., Chanda, U., Tandon, A., & Anand, S. (2010, December). Innovation diffusion of successive generations of high technology products. In *2010 2nd International Conference on Reliability, Safety and Hazard-Risk-Based Technologies and Physics-of-Failure Methods (ICRESH)* (pp. 505-510). IEEE.
18. Kilber, J., Barclay, A., & Ohmer, D. (2014). Seven Tips for Managing Generation Y. *Journal of Management Policy & Practice*, 15(4).
19. Kim, D., & Hwang, Y. (2006). A study of mobile internet usage from utilitarian and hedonic user tendency perspectives. *AMCIS 2006 Proceedings*, 251.
20. Kim, Y. J., Park, J. S., & Jeon, H. M. (2021). Experiential value, satisfaction, brand love, and brand loyalty toward robot barista coffee shop: The moderating effect of generation. *Sustainability*, 13(21), 12029.

21. Kumar, A., & Lim, H. (2008). Age differences in mobile service perceptions: comparison of Generation Y and baby boomers. *Journal of services marketing*, 22(7), 568-577.
22. Kumar, A., & Lim, H. (2008). Age differences in mobile service perceptions: comparison of Generation Y and baby boomers. *Journal of services marketing*, 22(7), 568-577.
23. Lahouze-Humbert, E. (2010). *Le choc générationnel: Faire travailler ensemble trois générations*. Maxima Laurent du Mesnil.
24. Lyons, S. T., Duxbury, L., & Higgins, C. (2007). An empirical assessment of generational differences in basic human values. *Psychological reports*, 101(2), 339-352.
25. Magsamen-Conrad, K., Upadhyaya, S., Joa, C. Y., & Dowd, J. (2015). Bridging the divide: Using UTAUT to predict multigenerational tablet adoption practices. *Computers in human behavior*, 50, 186-196.
26. Morris, M. G., & Venkatesh, V. (2000). Age differences in technology adoption decisions: Implications for a changing work force. *Personnel psychology*, 53(2), 375-403.
27. Parente, E. S., Costa, F. J., & Leocádio, A. L. (2015). Conceptualization and measurement of customer perceived value in banks: A Brazilian contribution. *International Journal of Bank Marketing*, 33(4), 494-509.
28. Park, Y. J. (2015). My whole world's in my palm! The second-level divide of teenagers' mobile use and skill. *New media & society*, 17(6), 977-995.
29. Pennington-Gray L, Blair S (2010) Nature-based tourism in North America: is generation Y the major cause of increased participation? In: Benckendorff P (ed) Tourism and generation Y. CAB International, Cambridge, pp 73-84
30. Pura, M. (2005). Linking perceived value and loyalty in location-based mobile services. *Managing Service Quality: An International Journal*, 15(6), 509-538.
31. Rese, A., Schlee, T., & Baier, D. (2022). The need for services and technologies in physical fast fashion stores: generation Y's opinion. In *The Role of Smart Technologies in Decision Making* (pp. 71-93). Routledge.
32. Roig, J. C. F., Garcia, J. S., Tena, M. A. M., & Monzonis, J. L. (2006). Customer perceived value in banking services. *International Journal of Bank Marketing*, 24(5), 266-283.
33. Sánchez-Fernández, R., Iniesta-Bonillo, M.A., 2007. The Concept of Perceived Value: A Systematic Review of the Research. *Marketing Theory*, 7 (4), 427-451.
34. Sheth, J. N., & Uslay, C. (2007). Implications of the revised definition of marketing: from exchange to value creation. *Journal of Public Policy & Marketing*, 26(2), 302-307.
35. Sheth, J. N., Newman, B. I., & Gross, B. L. (1991). Why we buy what we buy: A theory of consumption values. *Journal of business research*, 22(2), 159-170.
36. Shobeiri, S., Laroche, M., & Mazaheri, E. (2013). Shaping e-retailer's website personality: The importance of experiential marketing. *Journal of retailing and consumer services*, 20(1), 102-110.
37. Slack, N., Singh, G., & Sharma, S. (2020). Impact of perceived value on the satisfaction of supermarket customers: developing country perspective. *International Journal of Retail & Distribution Management*, 48(11), 1235-1254.
38. Song, B. L., Meysam, S., & Shaheen, M. (2016). The effects of marketing stimuli factors on consumers' perceived value and purchase of organic food in Malaysia. *Jurnal Pengurusan*, 47, 119-130.

39. Sweeney, J.C., Soutar, G.N. (2001). Consumer Perceived Value: The Development of a Multiple Item Scale, *Journal of Retailing*, 77, 203-220.
40. Šimunić Rod, V. (2020): Nova generacija poduzetnika; Generacija Z. *Obrazovanje za poduzetništvo/ Education for entrepreneurship*, 10(1).
41. Šramková, M., & Sirotiaková, M. (2021). Consumer behaviour of generation Z in the context of dual quality of daily consumption products on EU market. In *SHS Web of Conferences* (Vol. 92, p. 06038). EDP Sciences.
42. Tynan, C., McKechnie, S., & Chhuon, C. (2010). Co-creating value for luxury brands. *Journal of business research*, 63(11), 1156-1163.
43. Van der Haar, G. (2020). Land reform, the state, and the Zapatista uprising in Chiapas. In *Rural Chiapas ten years after the Zapatista uprising* (pp. 68-91). Routledge.
44. Van Rossem, A. H. (2019). Generations as social categories: An exploratory cognitive study of generational identity and generational stereotypes in a multigenerational workforce. *Journal of Organizational Behavior*, 40(4), 434-455.
45. Vorrink, S. N., Antonietti, A. M., Kort, H. S., Troosters, T., Zanen, P., & Lammers, J. W. J. (2017). Technology use by older adults in the Netherlands and its associations with demographics and health outcomes. *Assistive Technology*, 29(4), 188-196.
46. Wittmer, A., & Rowley, E. (2014). Customer value of purchasable supplementary services: The case of a European full network carrier's economy class. *Journal of Air Transport Management*, 34, 17-23.
47. Yang, J., Yu, C. S., & Wu, J. (2018). Work values across generations in China. *Chinese Management Studies*, 12(3), 486-505.
48. Zemke, R., Raines, C., & Filipczak, B. (2013). *Generations at work: Managing the clash of Boomers, Gen Xers, and Gen Yers in the workplace*. Amacom.

