CONSUMER DECISION-MAKING STYLES IN THE DIGITAL PRODUCT CATEGORY

STILOVI ODLUČIVANJA POTROŠAČA U KATEGORIJI DIGITALNIH PROIZVODA

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Abstract

Purpose – The aim of this paper is to explore consumer decision-making styles when buying digital products, and to identify different clusters of consumers based on their approaches in choosing digital products. The literature regarding consumer decision-making styles when purchasing digital products is rather scarce. Therefore, a research study on behavioral patterns and product attributes important to consumers when they purchase digital goods might contribute to a more comprehensive understanding of this type of consumer behavior while also broadening the existing body of knowledge.

Design/Methodology/Approach – Empirical data were collected using an online questionnaire consisting of items borrowed from the relevant literature and adapted to the research context. Research results are presented using descriptive statistics, exploratory factor analysis, Cronbach's alpha coefficient, and k-means cluster analysis.

Findings and implications – This study has revealed four distinct consumer groups that differ in their consumer decision-making styles when buying digital products. Both theoretical and managerial implications of the research findings are discussed. Results of this research serve as helpful insights into consumer behavior characteristics in a digital products market, providing digital goods companies with valuable inputs for planning their marketing strategies and activities.

Sažetak

Svrha – Cilj je rada istražiti stilove odlučivanja potrošača u kupovini digitalnih proizvoda te utvrditi postojanje različitih klastera potrošača temeljem njihovih pristupa odabiru digitalnih proizvoda. Literatura o stilovima odlučivanja potrošača u kupovini digitalnih proizvoda prilično je oskudna. Stoga istraživanje obrazaca ponašanja i obilježja proizvoda važnih potrošačima u kupovini digitalnih proizvoda može pridonijeti cjelovitijem razumijevanju njihova ponašanja i proširiti postojeća znanja iz ovog područja istraživanja.

Metodološki pristup – Empirijski podaci prikupljeni su putem online upitnika koji se sastojao od tvrdnji posuđenih iz relevantne znanstvene literature, a koje su prilagođene kontekstu istraživanja. Rezultati istraživanja prikazani su korištenjem deskriptivne statistike, eksplorativne faktorske analize, Cronbach alfa koeficijenta i k-means klaster analize.

Rezultati i implikacije – Istraživanje je pokazalo da postoje četiri različite skupine potrošača koje se razlikuju po stilovima odlučivanja u kupovini digitalnih proizvoda. U radu su raspravljene teorijske implikacije rezultata istraživanja kao i one koje se odnose na poslovnu praksu. Rezultati istraživanja mogli bi poslužiti kao koristan uvid u ponašanje potrošača na tržištu digitalnih proizvoda pružajući poduzećima u industriji digitalnih proizvoda vrijedne smjernice pri planiranju marketinških strategija i aktivnosti.

Limitations – The results of the present research apply to digital products in general. Future research should develop and confirm these initial findings further by incorporating specific digital product categories and focusing on other socio-cultural contexts.

Originality – By identifying six consumer decision-making styles and four distinct clusters, this study contributes to a more comprehensive understanding of consumer approaches when buying digital products, thereby broadening the existing theoretical knowledge of consumer decision-making styles.

Keywords – consumer decision-making styles, Consumer Style Inventory (CSI), digital products, cluster analysis

Ograničenja – Rezultati provedenog istraživanja odnose se općenito na kategoriju digitalnih proizvoda. Budućim bi istraživanjima trebale biti obuhvaćene specifične kategorije digitalnih proizvoda, a istraživanja bi trebala biti provedena u drugim društveno-kulturnim okruženjima.

Doprinos – Identificirajući šest stilova odlučivanja potrošača i četiri karakteristična klastera, studija pridonosi sveobuhvatnijem razumijevanju ponašanju potrošača u kupovini digitalnih proizvoda, a time ujedno proširuje postojeća teorijska znanja o stilovima potrošačkoga odlučivanja.

Ključne riječi – stilovi odlučivanja potrošača, CSI mjerna ljestvica, digitalni proizvodi, klaster analiza

1. INTRODUCTION

Consumer decision-making styles (CDMS), as a significant determinant of consumer behavior (Walsh, Hennig-Thurau, Wayne-Mitchell & Wiedmann, 2001) and a helpful market segmentation criterion (Rashmi & Janmejay, 2017; Mishra, 2015; Wiedmann, Walsh, Hennig-Thurau & Mitchell, 2001), have been drawing scholarly attention for decades. Introduced into the literature by Sproles and Kendall (1986), consumer decision-making style refers to "a mental orientation characterizing a consumer's approach to making choices" (Sproles & Kendall, 1986, p. 268). Researchers use this theoretical framework to explain and describe different consumer personalities and market segment characteristics, assuming a difference in consumers' behavioral patterns and a tendency to choose a criterion that will prevail when evaluating and purchasing a particular product (Sproles & Kendall, 1986). Research studies have shown that consumer decision-making styles, due to their relative stability over time (Walsh et al., 2001), can be a valuable market segmentation tool in numerous product category contexts (Eom, Youn & Lee, 2020; Mohsenin Sharifsamet, Esfidani & Skoufa, 2018).

Due to technological advances, various digital goods have been offered to and successfully adopted by consumers. According to Niu (2013), the Internet and advances in technology have transformed consumer purchasing behavior. For example, in a virtual environment, consumers have become more quality conscious, with online shopping perceived to be more convenient since it allows customers to gather information more quickly and easily compared to offline purchases (Niu, 2013). In addition, Li (2021) also underlines several important benefits to consumers when purchasing a digital product, such as lower monetary costs and a broader selection of digital products. The latter indicates that consumer decision-making styles might differ when it comes to purchases of digital products.

Consumer decision-making styles have been tested to date across numerous product cate-gories (Sarkar, Khare & Sadachar, 2020). However, when it comes to digital products (such as e-books, music, movie, and video files, games, software), there is a lack of research studies in this area. Therefore, the aim of this paper is to explore the applicability of the framework of consumer decision-making styles in the digital product context and to identify and profile market segments with respect to digital products according to the main characteristics of consumer decision-making styles.

The structure of this paper is as follows: After the introduction, the theoretical framework is presented. Within this part of the paper, an elaboration of the main theoretical concept (consumer decision-making styles) is followed by a description of the research context (digital goods). The next section of the paper deals with the research methodology, data analysis, research results, and discussion. The last section contains the concluding remarks and provides the limitations of the study, as well as recommendations for future research.

2. THEORETICAL FRAMEWORK

2.1. Consumer Decision-Making Styles

When making their purchase decisions, consumers differ from one another in terms of their decision-making modes, which are influenced by various factors, including quality, price, and brand (Lysonski, Durvasula & Zotos, 1996). According to Sproles and Kendall (1986), those decisions and purchasing patterns also reflect basic consumers' personalities, which can be categorized into eight dimensions: Perfectionism or high-quality consciousness, Brand consciousness, Price and "value for money" shopping consciousness, Novelty-fashion consciousness, Recreational, hedonistic shopping consciousness, Impulsiveness, Confusion from overchoice, and Habitual, brand-loyal orientation toward consumption. The aforementioned dimensions (or mental orientations) can be described as follows.

According to Sproles and Kendall (1986), Perfectionism is a consumer decision-making style found in consumers who tend to buy only high-quality products. Therefore, this dimension is also known as the consumer decision-making style of High-quality consciousness. Since a "good enough" product is perceived as a solution that will not provide customer satisfaction (Park & Gretzel, 2010), the consumers concerned choose carefully among the options provided by involving themselves in the purchasing process and comparing the products to find the perfect solution for the problem they are facing or a need they are trying to fulfill (Sproles & Kendall, 1986). In other words, as the main utilitarian benefit such consumers seek to gain is high quality (Sarkar et al., 2020), they are determined to find a lasting product with superior performance (Leo, Bennett & Härtel, 2005).

As a consumer decision-making style, Brand consciousness refers to a consumer's tendency to make their purchasing choice based on an assumption that price reflects quality; therefore, only well-known, widely advertised, and often expensive brands are the best option for this relatively price-insensitive market segment (Sproles & Kendall, 1986; Park & Gretzel, 2010). In light of this, such consumers are described not only as brand-conscious, but also as price-equal-quality consumers (Kendall Sproles & Sproles, 1990), given that they perceive the price of a product as a positive cue in the purchasing process, specifically as a product quality indicator (Lichtenstein, Ridgway & Netemeyer, 1993).

In opposition to the previously described segment is a segment consisting of relatively price-sensitive consumers characterized by a consumer decision-making style called Price and "value for money" shopping consciousness. Such consumers seek economic benefit before making a purchase decision (Sarkar et al., 2020). Therefore, they are more prone to comparison shopping and tend to look for a low price as the main product attribute; in other words, such consumers compare product prices, tend to choose the best value-for-money solution (Sproles &

Kendall, 1986), and are highly conscious of lower and sale prices (Kendall Sproles & Sproles, 1990).

The next consumer decision-making style is Novelty-fashion consciousness. In general, novelty refers to "experiencing or encountering something different to the objects regularly encountered" (Skavronskaya, Moyle & Scott, 2020, p. 3). In addition, novelty-seeking represents one of the consumer behavioral traits related to exploratory behavior (Hirschman & Stern, 2001). Therefore, Novelty-fashion consciousness can be defined as a consumer decision-making style reflecting an individual's tendency to be innovative, curious, and trendy, to enjoy experiences of finding and purchasing something different and new (Urbonavicius, Dikcius, Adomaviciute & Urbonavicius, 2019; Sproles & Kendall, 1986), and of searching for new information and/or products (Hirschman, 1980).

Likewise, Recreational, hedonistic shopping consciousness refers to the consumers' tendency to enjoy themselves while purchasing and to perceive the overall buying process as entertaining (Kendall Sproles & Sproles, 1990). This consumer decision-making style is hedonic in its nature (Lysonski & Durvasula, 2013), relying on the emotional needs of consumers who expect excitement and enjoyment while shopping (Lee, Kim & Lee, 2013).

Impulsiveness is a characteristic attributable to consumers who tend to be negligent while shopping; specifically, these are consumers who do not plan their purchases or seek information beforehand, nor do they concern themselves with the monetary costs they will incur during the buying process (Kendall Sproles & Sproles, 1990). Impulsive consumers tend to behave quickly, on impulse, without thinking (Zhu, Xu, Huang, Yeow & Wang, 2012), acting on their sudden urge to buy a product (Chen, Kassas & Gao, 2021). According to Zhao, Li, Wang, Zhou, and Luo (2021), a substantial number of impulsive purchases takes place in an online environment, making this consumer decision-making style a worthwhile research topic in the context of digital product buying.

As suggested by Mitchell and Bates (1998, p. 221), today's consumers are faced with a "cluttered market place." It is not surprising, therefore, that certain consumers become confused by overchoice. This type of CDMS indicates that those confused by overchoice perceive the number and variety of brands as negative, which makes it difficult for them to make a purchase decision (Sproles & Kendall, 1986). According to Kang, Johnson, and Wu (2014), consumers scoring high on this dimension are confused due to all the choices available and lack confidence in selecting a product. This might lead to additional opinion-seeking behavior with a view to decreasing perceived information overload and the inability to make an optimal choice (Kang et al., 2014).

Finally, the Habitual, brand-loyal orientation toward consumption relates to consumers who exhibit a tendency to repeat their buying choices in terms of brands and visit the same stores (Sproles & Kendall, 1986). In other words, consumers scoring high on this CDMS dimension do not prefer to change brands (Tanksale, Neelam & Venkatachalam, 2014), that is, they purchase their favorite brands and/or visit their preferred stores habitually (Mitchell & Bates, 1998).

2.2. Digital Products

While some research studies on digital products (e.g., Mohsenin et al., 2018) have examined tangible product categories such as laptops, digital cameras, and mobile phones, other studies (e.g., Li, 2021) have focused on digital products in an intangible form. According to Bhattacharjee, Gopal, Marsden, and Sankaranarayanan (2011), digital goods refer to digital versions of tangible products such as music, movies, software, and e-books. The same authors also state that "digital goods/services are either products without a clear physical version or ones that little resemble any earlier physical counterpart" (Bhattacharjee et al., 2011, p. 2). In addition, Wu and Liu (2021) suggest that digital products are intangible goods, represented as media content consumed via digital platforms.

Li (2021) states that, when considering the purchase of a digital product as opposed to buying its physical counterpart (i.e., a tangible product), there are several attributes of such products that consumers find appealing. Some of these include lower prices, usually accompanied by no additional monetary costs such as shipping fees, the possibility of using a product immediately after payment has been made, a broader selection of digital products, and a different consumer experience of searching for product information and buying and interacting with the product in general. Furthermore, other authors (e.g., Carreiro, 2010) also suggest benefits to consumers when it comes to digital products compared to their physical counterparts. Since the difference between digital goods and tangible products is evident, one can assume that the purchasing behavior patterns will also differ when it comes to choosing digital products. Moreover, as suggested by previous research (e.g., Bauer, Sauer & Becker, 2006), consumer decision-making styles may vary by product category. Hence, this study raises two research questions with regard to digital product purchases: (1) which consumer decision-making styles can be identified, and (2) do consumers differ from one another, and can they be grouped in clusters based on their consumer decision-making styles. In the following sections of the paper, the research methodology, as well as the results of the study, are described in more detail and a discussion of the findings is provided.

3. RESEARCH METHODOLOGY

An online survey was conducted using convenience sampling for data collection, with the target sample consisting of young adults, specifically university students. This sample type is considered appropriate when the aim of the research is to test the applicability of the inventory in different research contexts (Chi & Lovett, 2010). Besides the fact that past research on consumer decision-making styles (e.g., Chi

& Lovett, 2010; Fan & Xiao, 1998) was also conducted by using student samples, the second main reason for including university students as participants in this research study was the fact that they belong to the category of "young adults," along with the presumption that young people constitute a large audience for digital media content. Namely, university students are part of a population of heavy daily Internet users, with secondary data showing that 94% of users between 25 and 34, and 95% of users in the 16-24 age group, use the Internet on a daily basis (2020 data for the EU, according to Statista, 2022). Such data support the notion that young adults have proficient computer skills, as suggested by Norum (2008), and are "technologically aware and driven" (Tanksale et al., 2014, p. 212). Moreover, according to Grant and Waite (2003, p. 49), young adults are also "early adopters of new technology." Finally, since numerous companies nowadays target young adults in their offers, it is important to determine and understand their unique buying and consumption patterns (Akturan, Tezcan & Vignolles, 2011). The latter indicates that young adults are also a potentially interesting and lucrative market segment when it comes to digital products. In light of all of the above, a sample composed of university students is deemed to be favorable because research findings can be beneficial for both theory development and business practices.

Potential respondents were able to participate in the study by completing an online questionnaire that was administered to undergraduate and graduate students enrolled in both university and professional study programs offered by the Faculty of Economics & Business at the University of Zagreb. In total, the sample consisted of 302 respondents who voluntarily agreed to participate in the research process by completing a survey. To avoid potential miscomprehension regarding the research context, an explanation of the term "digital products" was provided at the beginning of the questionnaire, indicating that it refers to digital content in the form

of software, music, movies, games, e-books, etc., for the use of which digital technology is required. In addition, the principle of voluntary participation of the respondents was clearly stated in the introductory part of the questionnaire. Complete anonymity was guaranteed to potential respondents as research participants were not asked to reveal any personally identifiable information, nor was any respondent's email address obtained in the online survey data collection procedure. A set of demographics-related questions (gender, age, current year and level of study program, and monthly household income) was included at the end of the questionnaire. A more detailed description of the sample characteristics is presented in Table 1.

TABLE 1: Sample structure (n = 302)

CHARACTERISTICS OF THE SAMPLE	VALUE
Gender of respondents (%)	
Male	24.2
Female	75.8
Age of respondents (average)	23.7
Respondents' year of study (%)	
1st year	5.3
2nd year	18.9
3rd year	11.9
4th year	35.4
5th year	28.5
Respondents' study program (%)	
Integrated undergraduate and graduate university study program	64.9
Specialist graduate professional study program	35.1
Respondents' monthly household income (%)	
Up to HRK 5,000	5.0
HRK 5,001 to 10,000	17.9
HRK 10,001 to 15,000	22.5
More than HRK 15,000	31.5
Do not know / No answer	23.2

Note: HRK stands for the Croatian currency (Croatian kuna)

Source: Author's own research.

Primary data were collected by using a highly structured questionnaire consisting of 24 items measuring the CDMS, with five questions related to the respondents' demographic data placed at the end of the measurement instrument. Items were borrowed from the original Consumer Style Inventory (CSI), developed by Sproles and Kendall (1986), and adapted to a research context focused on the digital product category. All eight CDMS dimensions were measured using a five-point Likert scale, ranging from 1 ("strongly disagree") to 5 ("strongly agree"). Descriptive statistics of latent variables are presented in Table 2.

TABLE 2: Descriptive statistics of latent variables (n = 302)

VARIABLE	MINIMUM	MAXIMUM	MEAN	STD. DEV.
QUALITY	1.00	5.00	4.07	0.72
BRAND	1.00	5.00	3.80	0.84
RECREATION	1.00	5.00	3.44	0.96
PRICE	1.00	5.00	3.74	0.72
IMPULSE	1.00	5.00	2.08	1.00
CHOICE	1.00	5.00	3.37	0.89

Note: Two latent variables (Novelty-fashion consciousness and Habitual, brand-loyal orientation) were excluded from further analysis since their items had low factor loadings on their respective factor or high cross-loadings on several factors.

Source: Author's own research.

A detailed description of the data analysis is provided in the following section of the paper.

4. DATA ANALYSIS

Upon completion of the survey, primary data were analyzed by employing exploratory factor analysis (EFA) as the first step. In order to test the reliability of the measurement scales applied, Cronbach's alpha coefficients were calculated. In addition, data were analyzed using k-means cluster analysis and ANOVA.

EFA was performed on 24 initial CSI items. Factors were extracted using the principal component method with varimax rotation. The six-factor model was confirmed by EFA, with such six-factor solution explaining 78.6% of the variance. Seventeen items were loaded on six of the eight CDMS specified factors: High-quality consciousness (QUALITY), Brand consciousness (BRAND), Recreational, hedonistic shopping consciousness (RECREATION), Price and "value for money" shopping consciousness (PRICE),

Impulsiveness (IMPULSE), and Confused by overchoice (CHOICE). Items for two latent variables, namely Novelty-fashion consciousness and Habitual, brand-loyal orientation, had low factor loadings on their respective factors, or high cross-loadings on several factors. Therefore, those variables were removed from further analysis. In addition, one item related to the CDMS dimension of Impulsiveness (IMPULSE1) was excluded from further analysis based on the same criterion.

Cronbach's alpha coefficient was used as a means of assessing the internal consistency of the applied multi-item measurement scale. The coefficients were found to be in the range of 0.658 to 0.933, indicating an acceptable level of reliability of the empirical data, as suggested by the relevant literature (e.g., Hair, Black, Babin, Anderson & Tatham, 2006).

Furthermore, the k-means clustering technique was applied to identify possible groups of respondents who differ in their consumer decision-making styles in the digital product

purchasing context. Four clusters were identi-fied, indicating significant differences among the respondent groups with regard to the analyzed variables. The results of cluster analysis are provided in Table 3.

TABLE 3: Cluster analysis results (n = 302)

CDMS	Cluster 1: "Careful buyers" (n = 126)	Cluster 2: "Moderate buyers" (n = 74)	Cluster 3: "Relaxed buyers" (n = 39)	Cluster 4: "Impulsive hedonists" (n = 63)
QUALITY	4.37	3.60	3.33	4.50
BRAND	4.02	3.50	2.96	4.25
RECREATION	3.50	3.22	2.38	4.24
PRICE	3.94	3.49	3.37	3.86
IMPULSE	1.34	2.65	1.55	3.25
CHOICE	3.47	3.50	2.15	3.78

Source: Author's own research.

Considering the characteristics of each group, the clusters were named as follows: "Careful buyers", "Moderate buyers", "Relaxed buyers", and "Impulsive hedonists." In the following section of the paper, the characteristics of each identified cluster are described in more detail.

5. RESEARCH FINDINGS AND DISCUSSION

The first cluster named "Careful buyers" consisted of 126 respondents (41.7%). When buying digital products, members of this cluster show the lowest level of impulsiveness and the highest degree of price sensitivity. However, they also seek high-quality digital goods and place substantial importance on the brand of the digital product publisher/seller when making their buying decision. These findings indicate that such consumers are driven by the highest value-for-money motive when buying digital products. Therefore, one can assume that they make very careful decisions about which digital product to choose, while their final selection is based on their value consciousness trait. Furthermore, since they show a relatively high level of confusion from overchoice, this group

of consumers might have an additional motive to rely upon product quality and a well-known brand of the digital product publisher/seller. Specifically, such selection criteria could help consumers avoid the feeling of discomfort and facilitate their purchasing process.

The second cluster named "Moderate buyers" consisted of 74 respondents (24.5%), forming a group of consumers with similar digital product buying behavior to the Careful buyers' segment. Much like the Careful buyers, these consumers tend to be confused by overchoice. However, they exhibit lower price sensitivity than the members of the previous cluster. One can assume that Moderate buyers, being somewhat less price sensitive, will use price as an indicator of product quality when making their final purchase decision, primarily by seeking a middle-range level of product quality and by paying a moderate price for it.

The third cluster, consisting of 39 respondents (12.9%), is named "Relaxed buyers" because research results indicate that its members are the least concerned about purchase outcome when choosing digital products. Compared to all other clusters, members of this group are

characterized by the lowest level of perfectionism, brand consciousness, price consciousness, hedonistic shopping consciousness, and confusion from overchoice. These consumers do not perceive the digital product buying process as an entertaining activity. However, when having to make a final purchase decision on which digital product to choose, they do not exhibit any difficulties thanks to not perceiving the number and variety of brands as negative purchasing cues either. Finally, the Relaxed buyers' tendency toward impulsiveness is also rather low, which could be related to the aforementioned low-level hedonistic and recreational features of their buying behavior. Namely, since the consumers in this cluster do not perceive buying digital goods as an entertaining, fun, or pleasant activity, they might be less inclined to engage in an unplanned buying process for these products.

Finally, the fourth cluster, consisting of 63 respondents (20.9%), is named "Impulsive hedonists" due to the two main features of the consumers belonging to this group. These are the highest level of consumers' recreational and hedonic shopping consciousness when buying digital products, and their impulsiveness. In other words, research results indicate that these consumers perceive the digital goods purchasing process as a pleasant activity. In addition, when compared to other identified clusters, these hedonic and recreational shoppers are characterized by the highest level of impulsiveness – a type of behavior which can also be related to their recreational and hedonistic shopping consciousness. Namely, past research suggests that recreational shoppers tend to buy on impulse since this type of behavior enriches their purchasing experience (Rezaei, 2015, as cited in Sarkar et al., 2020). Moreover, research has shown that consumers as Impulsive hedonists are also characterized by the highest level of perfectionism and brand consciousness. In other words, members of this cluster are prone to buying digital products of high quality, while simultaneously searching for well-known brands of digital product publishers/sellers. However,

these consumers also exhibit the highest level of confusion from overchoice. This might be explained in the following manner. Although Impulsive hedonists find the highest level of product quality and a well-known brand to be important selection criteria, given that they primarily enjoy intentionally searching for various digital products, while likely allowing themselves to engage in unplanned, impulsive purchases at the same time, their perception of the differences among digital products is vague. In general, one can assume that, compared to others, these consumers are the most emotional shoppers driven by hedonic motives when buying digital products. In order to make their purchasing process less difficult and even more pleasant at the same time, the online shopping environment could be customized through the implementation of sophisticated tools (as suggested by Häubl and Trifts, 2000) in order to meet their hedonic needs and to assist them while purchasing digital products.

The findings of this study underline the differences between consumer decision-making patterns in the context of digital product purchases. For marketing managers, these differences should be taken into account when planning marketing activities for a specific target segment. In addition, past research studies that have explored CDMS in other product categories (e.g., Nawaz, Zhang, Mansoor, Ahmad & Bangash, 2019; Anić, Rajh & Piri Rajh, 2015) revealed different patterns of behavior and selection criteria importance, suggesting that consumer decision-making styles can be considered a product-specific behavior.

6. CONCLUSION, LIMITATIONS, AND RECOMMENDATIONS

This paper contributes to the existing body of knowledge by examining the applicability of consumer decision-making style when buying digital products. In other words, this research attempts to explore the widely used Sproles and

Kendall's (1986) eight-factor model of consumer decision-making styles in the context of digital product purchase. The study has shown that six out of eight consumer decision-making styles apply to digital goods purchasing behavior. Specifically, when buying digital products, consumers' purchase decisions are influenced by high product quality, a well-known brand of the digital product publisher/seller, product price, the consumers' own recreational and hedonistic shopping consciousness, their impulsiveness, and confusion from overchoice. Two consumer decision-making styles, namely Novelty-fashion consciousness and Habitual, brand-loyal orientation, were not found to explain digital product purchasing behavior. In fact, neither novelty as a product attribute nor brand loyalty toward a particular publisher/seller were important to consumers in the observed digital product context. The finding related to novelty-fashion consciousness might be explained by the uniqueness of digital products compared to their physical, tangible counterparts. Namely, due to their specific nature, digital products might have less potential to be consumed visibly, which is why trendiness might also be a less important criterion to consumers when choosing a digital product. The finding related to habitual, brand-loyal orientation indicates that consumers are more inclined to give themselves greater freedom when exploring which digital product to choose. This could be explained by the consumers' potential perception of the numerous and various digital products offered, while their search for the best option might be based on some other selection criteria to which they attribute greater importance, with motivation to be loyal to a particular brand not being an important option. These research results support the past research finding which revealed the importance of further examining the CDMS across product categories and developing inventory related to the observed product category, as suggested by Bauer et al. (2006). Given that the present research has, on the whole, been conducted in a digital product setting, its findings should not be generalized to a specific digital product category. Hence, the similarities and differences in consumer decision-making styles across various digital product categories (e-books, audiobooks, movie, video, and music files, games, etc.) should topics to be explored in future research.

One of the raised research questions sought to examine the possibility of consumer segmentation and profiling based on CDMS. This study has shown that four clusters can be identified based on the consumer decision-making styles in digital product purchasing situations. This finding contributes to a more comprehensive understanding of consumer behavior and broadens the existing theoretical knowledge in the observed field.

There are several potential research limitations of the study. First, empirical research was conducted by using a non-probabilistic sample that limits generalizability (Frost & Rickwood, 2017). However, respondents who participated in this study were young adults who tend to be heavy daily Internet users. Thus, one can assume that they represent the main, large audience for digital media content and a valuable market segment in the case of digital products. Therefore, irrespective of the sampling procedure applied, the findings of this study might still provide valuable insights into consumer behavior when it comes to digital product purchases.

Further research should also consider examining CDMS clusters in other markets. For this study, data were gathered from a sample of Croatian consumers, and although the measurement items borrowed from the relevant literature (Sproles & Kendall, 1986) and adapted to the digital product research context showed an acceptable level of reliability, some of the items had to be dropped from the analysis due to their high loading on some other factor. Therefore, it should not be assumed that the measurement instrument validated on the Croatian student sample is immediately applicable to other countries (Lysonski et al., 1996) because the measurement instrument might be sample-specific for a variety of reasons (Parameswaran & Yaprak, 1987).

An additional limitation of this study lies in its cross-sectional nature. Since consumers' behavioral patterns and preferences are subject to change, future research might apply a longitudinal approach in examining possible differences in consumer decision-making styles that have occurred over time.

Furthermore, the research findings also provide managerial implications. This study has confirmed that CDMS can be used as a valuable market segmentation tool in the context of digital products. The identification of four different clusters indicates that consumers are not homogeneous when buying digital products. Therefore, marketers need to conduct market segmentation in order to create, or adjust, an offer that would be more suitable to the specific needs of a target segment. Taking the CDMS characteristics of each identified cluster into account is necessary to ensure that the offer made by a company is precisely defined, leading to a higher level of value perceived by the consumer.

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