

Original scientific paper

UDC: 339.138:502/50

doi:10.5937/ekonhor2501049F

THE IMPACT OF SOCIAL MEDIA MARKETING ACTIVITIES ON CONSUMER BEHAVIOR TOWARDS GREEN PRODUCTS - AN ANALYSIS OF LOCAL AND GLOBAL COMPANIES

Jovana Filipović* and Srđan Šapić

University of Kragujevac, Faculty of Economics, the Republic of Serbia

Considering the significance of the Internet and communication with consumers in the online environment primarily through social media, as well as the growing importance of sustainability in modern business, this paper aims to analyze consumer behavior regarding green products in the context of social media. Specifically, social media marketing activities of local and global companies in the Republic of Serbia were analyzed, incorporating the five aspects: entertainment, interaction, trendiness, customization, and electronic word-of-mouth. Empirical research was conducted using the survey method and the SEM analysis was applied so as to determine that the mentioned aspects of social media differently affected the attitudes towards the green products of local and global companies. A positive moderating influence of the global identity on the relationships in the models was found. The main contribution of the paper relates to the analysis of the relationship between social media marketing activities and consumer behavior towards green products, with a comparative analysis of local and global companies.

Keywords: sustainability, green marketing, consumer behavior, social media, local companies, global companies

JEL Classification: M31

INTRODUCTION

The internet has significantly changed modern business both for companies and consumers. Companies' visibility on the Internet through their websites (Kocić, Šapić & Sofronijević, 2022) and social

media has become necessary for communication with consumers and businesses as a whole. In particular, the importance and role of social media in modern global business is witnessed by the number of users and popularity. In 2023, there were almost five billion users of social media, which is over 60% of the total world population and more than 90% of the total number of Internet users (Backlinko team, 2024). These trends in the growth of social media users have started a new era of business for global brands

* Correspondence to: J. Filipović, University of Kragujevac,
Faculty of Economics, Liceja Kneževine Srbije 3, Kragujevac;
e-mail: jovanagolo@kg.ac.rs

and companies, in which they are forced to find new, interactive ways to communicate with consumers (Gallaughier & Ransbotham, 2010). The increasing importance of social media has led companies worldwide to include this type of media in their marketing plans as part of their overall business strategy.

Sustainability has become an essential concept in the contemporary business environment. The rising significance of various problems concerning the environment, such as climate issues or pollution, compels companies to react to these matters through their promotional channels. By creating appropriate content on their social media, brands can incorporate different issues concerning sustainability and create a perception of responsible behavior among consumers. On the other hand, consumer behavior and their concern for sustainability will shape consumption for years to come. Therefore, understanding how consumers make purchasing decisions, especially those regarding green products, is paramount for brand and marketing managers.

In the scientific literature, the impact of social media marketing activities on the attitudes and the acceptance of green products has been analyzed in a certain number of studies (Pop, Săplăcan & Alt, 2020; Sun & Wang, 2020; Gupta & Syed, 2022). In addition, in certain studies, the authors investigated the impact of this type of marketing activity on the consumer purchasing behavior of global brands (Godey, Manthiou, Pederzoli, Rokka, Aiello, Donvito & Singh, 2016; Hassan & Sohail, 2021). However, there are no studies that analyze the influence of social media marketing activities concerning green products in the context of global and local companies. This study aims to overcome this research gap and investigate the connection between social media marketing activities and consumer behavior regarding the purchase of the green products of local and global companies. Bearing in mind the fact that Serbia is a developing country, this issue is gaining in importance given the fact that sustainability and green marketing are more prevalent in developed countries (Feng, Hu, Afshan, Irfan, Hu & Abbas, 2023). To test the hypotheses, empirical research was conducted using survey

methods and the obtained data were analyzed using the structural equation model, i.e. SEM analysis.

The paper is structured into a few sections. The introductory considerations are followed by the literature review in which the concepts of green marketing and social media marketing activities, as well as their connection which is reflected in the defined research hypotheses, are analyzed. The most important part of the paper is empirical research, in which the hypotheses from the conceptual model are tested using appropriate statistical techniques. At the end of the paper, the obtained results are analyzed in the discussion, as well as the implications and limitations of the paper in the conclusion section.

LITERATURE REVIEW

Green marketing

In recent years, green marketing has been gaining in importance, both in the marketing literature and in the business practices of companies. Green products are “those that can be recycled, require less natural resources, and act as a non-polluter for the earth, with environmentally friendly packaging” (Gupta & Syed, 2022).

Over time, companies have increased the use of social media for the promotion of their green products. In particular, companies and brands can use social media to communicate to consumers the characteristics and production methods of their green products and maintain their brands’ green credibility (Kang & Kim, 2017).

Various research has shown that online technologies, such as Web 2.0 and social media, can significantly spur pro-environmental behavior. The Technologies for Pro-environmental Action Model (TPAM), which describes how environmental actions and behavior can be facilitated through the specific functions of Web 2.0 and social media, is a model related to the application of technology for environmental action (Ballew, Omoto & Winter, 2015). Specifically, the model explains that pro-environmental behavior

(such as purchasing hybrid vehicles, recycling, or the consumption of energy sources) is influenced by various functions of Web 2.0 and social media (i.e. informational, relational, and experiential ones) which create personal, social, and contextual paths for this type of consumer behavior.

Social media marketing activities (SMMA)

Social media can be defined as “online application programs, platforms, or media that facilitate interactions, collaboration, or content sharing” (Richter & Koch, 2007). Online social media websites and applications, such as Facebook, Instagram and YouTube, among others, have seen continuous growth in the number of users and popularity in general, leading to many world-renowned companies and brands using them for promotional purposes. In fact, companies have increasingly been using social media for communication with consumers and the promotion of their products in the last few years (Okazaki, Díaz-Martín, Rozano & Menéndez-Benito, 2015). A. J. Kim and E. Ko (2010) established a framework for the analysis of social media, which implies that they have five basic dimensions, namely entertainment, interaction, customization, trendiness, and electronic word-of-mouth.

Entertainment

Consumers often use social media to have fun, escape from everyday responsibilities, and for enjoyment. Social media users can be described as pleasure-seekers who have fun and enjoy this activity (Manthiou, Chiang & Liang (Rebecca), 2013). Entertainment implies that users use social media to relax or escape from problems or routines, as a way to improve their emotional state, then for cultural or aesthetic enjoyment, and as a way to pass their time faster, which all implies that “social media users consume brand-related content on social media for enjoyment, relaxation, and entertainment” (Muntinga, Moorman & Smit, 2011).

It has empirically been confirmed that, as an aspect of social media, entertainment positively influences

consumer attitudes towards green products (Wang, Chowdhury, Deng & Wang, 2019; Gupta & Syed, 2022). In addition, A. J. Kim and E. Ko (2012) found that entertainment positively impacted consumer evaluations of brands, as well as the development of brand-consumer relationships. Bearing in mind the previous statements, the following hypothesis is defined:

H1: Social media entertainment has a positive and statistically significant effect on attitudes towards green products.

Interaction

Social media provide an opportunity for discussion and opinion exchange between consumers. Thus, companies can gain an insight into the consumers who participate in the social media platforms of specific brands through their mutual interactions. Consumers interact with each other in cyberspace and discuss products, brands, or companies (Muntinga *et al*, 2011). Consumer interactions essentially change the nature of communication between brands and users, i.e. consumers, and motivate the expansion of user-generated content (UGC) in social media as well (Bazi, Filieri & Gorton, 2020).

The previously mentioned TPAM model implies that social motivations influence pro-environmental behavior, these motivations being fulfilled through interactions in social media. The interaction feature enables consumers to feel as if they were part of the community through groups and conversations with other users. Companies can use this increased sense of consumer commitment to encourage green behavior. Therefore, using this feature of social media enables the creation of online communities that have the potential to motivate environmental actions (Ballew *et al*, 2015).

The previous theoretical claims are supported by the findings of empirical studies. In particular, M. Gupta and A. A. Syed (2022) show that interaction strongly influences consumer preferences for green products. Similarly, Y. Wang *et al* (2019) show that interaction affects preferences for green products. Bearing in

mind the theoretical aspects and the conclusions of the empirical research, the hypothesis reads as follows:

H2: Interaction in social media has a positive and statistically significant effect on attitudes towards green products.

Customization

As an aspect of social media, customization enables companies to establish customized information and customized information searches, through which feature consumers can plan and customize the products they want to buy. An example of customization could be sending personalized messages or emails to consumers, with special offers or incentives, allowing consumers to customize products to their unique needs. Y.-Q. Zhu and H.-G. Chen (2015) point out the fact that customization is based on the two types of messages that can be sent to consumers: customized messages and broadcast messages. Customized messages target a specific person or a smaller number of people, such as messages on the Facebook platform, whereas broadcast messages are aimed at all the people who may be interested (messages on the Twitter platform).

Social media customization enables an individual approach to consumers, where it largely differs from traditional media, which means that companies can individually optimize information for specific consumers (Seo & Park, 2018). Customization also serves as an instrument companies use to point out to consumers what makes their brands unique and to improve their attitudes and loyalty to their brands (Martin & Todorov, 2010).

There are studies showing that customization is a significant determinant in the process of making decisions on purchasing products (Godey *et al*, 2016). When green products are concerned, a similar result was obtained in the research study conducted by M. Gupta and A. A. Syed (2022), whereas Y. Wang *et al* (2019) found that customization positively influenced purchase commitment, but did not have any influence on preferences for green brands. These results made

it possible to define the following hypothesis, which reads:

H3: Social media customization has a positive and statistically significant effect on attitudes towards green products.

Trendiness

Consumers can have access to the latest, current news and topics for discussion through social media. Additionally, consumers can gain an insight into the recent news and information about products and the company, resulting in social media being used as a search engine. Therefore, consumers may have more confidence in news and information gathered from social media than in those learned from traditional media (Naaman, Becker & Gravano, 2011). Accordingly, this aspect of social media is defined as “providing the latest information about products or services” (Godey *et al*, 2016).

D. G. Muntinga *et al* (2011) point out the fact that trendiness in social media fulfills the four types of motivation in consumers, namely: surveillance, knowledge, pre-purchase information, and inspiration. Surveillance means that consumers can perceive and inform themselves about their social environment. Knowledge relates to the fact that consumers search for information about brands online so as to benefit from other consumer knowledge and experience and to find out more about the desired product. Pre-purchase information means that consumers can read reviews of products or discussions about brands when making a purchase decision. Inspiration refers to the situation when consumers are getting new ideas, based on information about brands, implying that this is what inspires consumers.

Gathering information and following the latest trends in social media have a significant impact on the purchase of green products among younger consumers, as is proven by S. Xie and G. R. Madni (2023). Also, a similar result was obtained in the research conducted by the authors Y. Wang *et al* (2019), who show that trendiness influences consumer

preferences towards green products. Bearing in mind the previous statements, the following hypothesis is defined:

H4: Social media trendiness has a positive and statistically significant effect on attitudes towards green products.

Electronic word-of-mouth

Electronic word-of-mouth involves online social media interaction between consumers pertaining to brands (Muntinga *et al*, 2011). Research has shown that consumers find electronic word-of-mouth to be characterized by greater credibility, empathy, and relevance, than the information sources created by companies on the Internet (Gruen, Osmonbekov & Czaplewski, 2006). Instead of just following companies' ads, consumers value other consumer experiences and knowledge shared in social media by those other consumers. Social media are perfect for this type of word-of-mouth, since users can create and share information about brands to their friends, family, and peers, without any restrictions at all (Kim & Ko, 2012; Godey *et al*, 2016).

According to S.- C. Chu and Y. Kim (2011), electronic word-of-mouth in social media can be perceived from the three perspectives: opinion seeking, opinion giving, and opinion transmission. Opinion-seeking consumers usually look for advice or reviews from other consumers when they want to decide on purchasing a desired product. Some consumers prefer to give their opinions on various topics (commonly known as opinion leaders), and they have a considerable effect on consumer attitudes and behavioral intentions. The latter perspective implies that the transmission of an opinion in the online environment is the feature of electronic word-of-mouth that facilitates the flow of information among consumers.

Numerous studies have pointed to the importance of electronic word-of-mouth propaganda on consumer behavior. M. A. Saeed, A. Farooq, W. Kersten and S. I. Ben Abdelaziz (2019) showed that consumer behavior regarding the purchase of green products was

influenced by both positive and negative information about sustainability in their social media. Similar results were obtained in a study carried out by M. Gupta and A. A. Syed (2022), where, of all the aspects of social media marketing, electronic word-of-mouth had the greatest influence on the attitudes consumers had towards green products. The previous results allow the following hypothesis to be defined:

H5: Electronic word-of-mouth in social media has a positive and statistically significant effect on attitudes towards green products.

Consumer behavior in the context of purchasing green products

According to the Theory of Reasoned Action (TRA) (Ajzen & Fishbein, 1980) and the Theory of Planned Behavior (TPB) (Ajzen, 1991), attitudes demonstrated in the purchase decision-making process precede the intention to buy certain products. In addition, according to these theories, intentions lead to actual behavior, which is the reason why they are used as a human behavior predictor. This theoretical approach is used in a large number of studies that focus on predicting consumer behavior within the framework of social media marketing (Kim & Ko, 2012), as well as green marketing (Pop *et al*, 2020; Sun & Wang, 2020). Bearing in mind the above-mentioned theoretical aspects, the following hypothesis is defined:

H6: Attitudes towards green products have a positive and statistically significant effect on the intention to purchase these products.

Global consumer identity

The notions of the local and global identities have emerged in the domain of consumer psychology as one of the consequences of globalization (Arnett, 2002). Consumers with a strong global identity feel a greater connection with people outside their country than with those in their local environment, whereas people with a strong local identity feel more connected to people in the local environment (Zhang & Khare, 2009). In other words, the global identity

means that “consumers feel they belong to a global community and identify with a global lifestyle” (Tu, Khare & Zhang, 2012).

Numerous studies have shown that the development of the global identity in individuals can be a consequence of the influence of globalization and foreign cultures (Alden, Steenkamp & Batra, 2006; Steenkamp & De Jong, 2010). The assumption is that an increased sense of connectedness to world culture leads individuals with a pronounced global identity to feel greater personal responsibility for the matters, such as pollution and climate issues among others, affecting the well-being of the world. This strong feeling of personal concern and responsibility towards the well-being of the world should in turn encourage them to behave in a way that is better for the environment, such as buying environmentally friendly products, i.e. green products, which claim has empirically been tested in several studies. Specifically, S. Ng and S. Basu (2019) found that individuals with a pronounced global identity will have the feeling of personal responsibility towards the environment. Additionally, because they feel personally responsible, these individuals will tend to demonstrate pro-environmental behavior, such as the purchase of green products. For this reason, this research study investigates the moderating influence

that the global identity has on the relationships in the model. Accordingly, the following hypothesis is defined:

H7: The global consumer identity has a moderating influence on the relationships between the social media marketing activities: a) entertainment, b) interactions, c) customization, d) trend following and e) electronic word-of-mouth and consumer attitudes towards green products.

The research model and the relationships between the variables in it are shown in Figure 1.

METHODOLOGY

Bearing in mind the defined hypotheses and the research model, a questionnaire was compiled covering the five aspects of marketing in social media (the independent variables), as well as the dependent variables related to consumer behavior. In addition, the global identity was included as the moderator variable. The questionnaire consisted of the 22 statements originally found in the previously conducted studies and modified for the needs of the green product research. The respondents evaluated the statements using the five-point Likert scale.

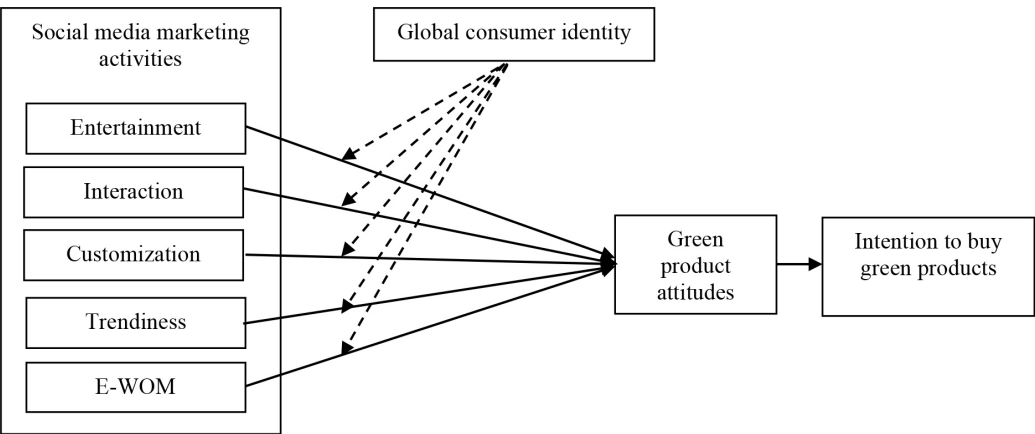


Figure 1 The conceptual research model

Source: Authors

The variable relating to the social media marketing activities was conceptualized and adjusted according to the studies conducted by B. Godey *et al* (2016) and A. J. Kim and E. Ko (2012). The global identity was taken from the paper by L. Tu *et al* (2012). The variable attitudes towards green products were formed according to the papers by the authors M. Gupta and A. A. Syed (2022) and J.-H. Kim and Y. J. Hyun (2011), whereas the intentions to buy a green product were taken from the paper by the authors A. J. Kim and E. Ko (2012). Additionally, all the statements in the questionnaire were adapted for the case of the global and local companies operating in the Republic of Serbia. At the beginning of the questionnaire, the respondents were informed about the research subject and said whether they had previously bought green products from local and global companies or not. To add, the respondents also said whether they used social media to gather information about companies and products or not. Only the questionnaires filled out by the respondents who said that they had had the experience of buying this type of product and who were social media users were included in the analysis.

After having collected the surveys, statistical data processing was carried out in the IBM SPSS and AMOS programs. Descriptive statistics, confirmatory factor analysis, and SEM analysis were implemented in order to analyze the relationships in the research models, as well as the analysis of the interaction effect of the global identity on the selected relationships in the models.

The sample characteristics

The survey process was conducted in the period from November 2023 to January 2024. The questionnaires were collected in person on the territory of the city of Kragujevac and other larger cities of Šumadija District. After compiling the first version of the questionnaire, it was tested on a group of 30 students, in which way minor corrections were made to the questionnaire. The corrections were made to the ambiguities and the wording of certain questions. In the survey main phase, 350 surveys were prepared. Upon completion

of the survey process, a fact was established that 23 surveys were not completed correctly, which is the reason why they were eliminated from further analysis. The final sample consisted of 327 valid surveys. Descriptive statistics were used to determine the structure of the sample, as is shown in Table 1.

Table 1 The descriptive statistics pertaining to the respondents' characteristics

Demographic characteristic		% of the respondents
Sex	Male	48.3
	Female	51.7
Age	18-24	28.2
	25-34	19.6
	35-44	19.8
	45-54	23.5
	55 and older	8.9
Education	High school	48.7
	Undergraduate study	14.1
	Graduate and postgraduate studies	37.2
Occupation	Manager, entrepreneur	14.6
	Professor, doctor, engineer	15.2
	Clerk, worker	35.4
	Student	24.9
	Other occupations	9.9

Source: Authors

RESEARCH RESULTS

The first step in the hypothesis testing is to create research models and check their validity. Table 2 shows the validity indicators of the models. Bearing in mind the fact that the research included the green products of both global and local companies in Serbia, two research models were formed. Various indicators were used to analyze the validity of the models. Primarily, the χ^2/df indicator whose value was less than 3 was used in the case of the valid model (Bagozzi & Yi, 1988), the condition that was

Table 2 The model validity analysis

Indicators of the model validity	Research model - Local green products	Research model - Global green products	Recommended value
χ^2/df	1.652	1.974	<3
GFI	0.921	0.902	>0.9
IFI	0.952	0.932	>0.9
TLI	0.939	0.912	>0.9
CFI	0.951	0.932	>0.9
RMSEA	0.045	0.055	<0.08

Source: Authors

met by both models. The indicators GFI, IFI, TLI, and CFI should have a value greater than 0.9 (Byrne, 1998), which was also fulfilled in both models. Finally, the RMSEA value should have a value less than 0.08 (Hair, Black, Babin, Anderson & Tatham, 2006). According to the indicators in the table, the assumptions of validity are fulfilled in both models.

Table 3 contains the results of the confirmatory factor analysis. Namely, the convergent validity of the model is achieved if the values of the average extracted variance (AVE) are above the level of 0.5 (Fornell & Larcker, 1981), which is fulfilled in the case of all the variables in both analyzed models. In addition, the values of the composite reliability of all the variables in the analyzed models are above 0.7, which also meets the established criterion for the validity of the model (Fornell & Larcker, 1981). The largest number of the statements in the models have the values of factor loadings exceeding 0.7, and the values of Cronbach's Alpha coefficient of all the formed variables exceed 0.7, which indicates their good internal consistency (Nunnally, 1978).

Table 4 presents the results of the hypothesis testing. Regarding the local green products, the variables with a statistically significant impact on the purchasing attitudes are entertainment and electronic word-of-mouth, which indicates that the hypotheses H1 and H5 are confirmed. Conversely, interaction, customization, and trendiness are not confirmed as the predictors of attitudes towards buying green products, so the hypotheses H2, H3, and H4 are not confirmed.

When the green products of the global companies that operate in the Republic of Serbia are concerned, a fact is established that all the aspects of the social media marketing activities, except for customization, significantly and positively influence consumer attitudes towards green products, which means that the hypotheses H1, H2, H4, and H5 are supported, whereas the hypothesis H3 is not. Additionally, a fact is also established that these attitudes have a very strong impact on consumer intentions to buy green products in the case of both types of the companies, which is why the hypothesis H6 is confirmed in both models.

The results of the analysis of the moderating influence of the global identity on the relationships in the models are shown in Table 5. In the case of the green products of the local companies, a fact is established that the global consumer identity has a significant moderating influence in the case of the influence of entertainment on social media, as well as the influence of electronic word-of-mouth propaganda on consumer attitudes, which confirms the hypotheses H7a and H7e in the case of the local companies. Apart from that, a positive and statistically significant moderating influence of the global consumer identity on the social media marketing activities of the green products of the global companies is established in the case of all the observed relationships in the model, except in the case of customization. This confirms all the hypotheses related to the interaction effect of the global identity on the relationships in the models (H7a, H7b, H7d, and H7e) for the global companies, except for the relationship between customization and consumer attitudes.

Table 3 The confirmatory factor analysis (CFA)

Variables	Local green products	Global green products
Entertainment	AVE=0.628 CR=0.835 α =0.800	AVE=0.604 CR=0.820 α =0.787
The content of the social media of my preferred green product is interesting.	0.754	0.791
It's fun to use the social media of my preferred green product.	0.805	0.788
Gathering information about my preferred green product in social media is fun.	0.817	0.751
Interaction	AVE=0.621 CR=0.866 α =0.763	AVE=0.610 CR=0.860 α =0.806
Mutual communication/interaction is possible in the social media of my preferred green product.	0.613	0.836
Conversations or opinion exchange with other users are possible in the social media of my preferred green product.	0.882	0.878
Information exchange with other users is possible in the social media of my preferred green product.	0.803	0.784
I can simply express my opinion in the social media of my preferred green product.	0.828	0.597
Customization	AVE=0.607 CR=0.821 α =0.710	AVE=0.604 CR=0.820 α =0.716
In the social media of my preferred green product, there is a possibility to search for the information I need.	0.864	0.721
The social media of my preferred green product offer information, which I need in real life.	0.789	0.754
The social media of my preferred green product offer a user-friendly service.	0.672	0.851
Trendiness	AVE=0.617 CR=0.761 α =0.702	AVE=0.622 CR=0.765 α =0.715
It's very trendy to use the social media of my preferred green product.	0.870	0.866
The social media of my preferred green product offer the latest and most current information.	0.691	0.703
Electronic word-of-mouth	AVE=0.618 CR=0.763 α =0.706	AVE=0.618 CR=0.760 α =0.738
I like to express my opinion about my preferred green product.	0.718	0.652
I like to pass information about the products or services of my preferred green product to my friends.	0.849	0.901
Global identity	AVE=0.629 CR=0.835 α =0.762	AVE=0.630 CR=0.836 α =0.762
I identify as a global citizen (a citizen of the world).	0.796	0.840
It is important for me to know of global events.	0.811	0.772
I think people need to be more aware of how connected we are with the rest of the world.	0.771	0.768
Attitudes towards green products	AVE=0.636 CR=0.839 α =0.766	AVE=0.608 CR=0.822 α =0.779
I am willing to make a special effort to buy preferred green products.	0.716	0.843
I prefer green products over other products, if they are of a similar quality.	0.773	0.771
I prefer green products over other products, even when their price is slightly higher.	0.893	0.720
The intention to buy a green product	AVE=0.630 CR=0.773 α =0.773	AVE=0.745 CR=0.854 α =0.853
I would like to buy a preferred green product.	0.789	0.878
I would like to recommend my preferred green product to others.	0.799	0.848

Source: Authors

Table 4 The SEM analysis

Hypotheses	Local green products	Hypothesis testing	Global green products	Hypothesis testing
H1: Entertainment → Attitudes towards green products	0.304 ^{***}	Supported	0.279 ^{**}	Supported
H2: Interaction → Attitudes towards green products	0.023 ^{ns}	Not supported	0.274 ^{**}	Supported
H3: Customization → Attitudes towards green products	0.103 ^{ns}	Not supported	0.071 ^{ns}	Not supported
H4: Trendiness → Attitudes towards green products	0.140 ^{ns}	Not supported	0.298 ^{***}	Supported
H5: Electronic word-of-mouth → Attitudes towards green products	0.405 ^{***}	Supported	0.360 ^{***}	Supported
H6: Attitudes towards green products → The intention to buy a green product	0.882 ^{***}	Supported	0.852 ^{***}	Supported

Note: * $p < 0.1$; ** $p < 0.05$; *** $p < 0.001$, ns - not significant.

Source: Authors

DISCUSSION OF THE RESULTS

The research conducted has established numerous relationships between the analyzed variables in the models related to the influence of social media marketing activities on the attitudes and intentions pertaining to the purchase of the green products of the local and global companies. Overall, social media marketing activities are a better predictor of consumer attitudes towards green products from global companies than from local ones. Of the five analyzed aspects of marketing on social media, there are two aspects influencing consumer attitudes towards green products of the local companies, whereas in the case of the global companies, all the analyzed activities influence consumer attitudes towards these products, except for social media customization.

In the case of local companies, entertainment, and electronic word-of-mouth have a statistically significant effect on consumer attitudes towards green products, which indicates that the fun and hedonic aspects of social media are important to consumers when green products are in question. In addition, other users' recommendations for and experiences with green products which they share in social media are very important to consumers. On the other hand, interaction with local companies via social media,

customization, and trendiness are not significant predictors of attitudes towards green products, which may indicate the insufficient presence of local companies in social media in terms of up-to-date and relevant pieces of information about green products. This results in a lower level of interaction with consumers. Neither do consumers perceive the social media of the local companies as current and "trendy", which local companies can improve through the promotion of green products. The above results can also be interpreted by the fact that, as a concept, sustainability in developing countries is at the initial level of development (Feng *et al*, 2023) and that local companies do not fully use the possibilities of social media to promote their green products.

On the other hand, social media marketing activities of global companies related to the promotion of green products have a much greater impact on consumer perceptions of these products. All the aspects of global companies' social media, except for customization, have a positive influence on consumer attitudes, with electronic word-of-mouth and trendiness exerting the greatest one. The results obtained are consistent with the results of previous research (Seo & Park, 2018; Gupta & Syed, 2022), which implies that the interaction consumers have with global companies is important to them, as well as the exchange of opinions

Table 5 Testing the relationships in the model (SEM) - The moderation effects

Selected relationships in the model (Dependent variable: Attitudes towards green products)	Local green products	Hypothesis testing	Global green products	Hypothesis testing
H7a: Entertainment × Global Identity	0.667**	Supported	0.517***	Supported
H7b: Interaction × Global Identity	0.231 ^{ns}	Not supported	0.439***	Supported
H7c: Customization × Global Identity	0.252 ^{ns}	Not supported	0.096 ^{ns}	Not supported
H7d: Trendiness × Global Identity	0.112 ^{ns}	Not supported	0.535**	Supported
H7e: Electronic word-of-mouth × Global Identity	0.731***	Supported	0.716***	Supported

Note: * $p < 0.1$; ** $p < 0.05$; *** $p < 0.001$, ns - not significant.

Source: Authors

and experiences with other users of green products that is achieved through social media. In addition, consumers use the social media of global companies because they are fun, current, up-to-date, and follow trends in green products.

The moderating influence of the global identity on the relationships in the models is very pronounced, especially in the case of the green products of the global companies. Namely, the connection and identification of consumers with people around the world, world events, and global culture strengthen the relationship between the marketing activities of the local and global companies in social media and the attitudes towards green products. In the case of the local companies, the interaction effect of the global identity is visible in the relationship between entertainment and electronic word-of-mouth, as the two aspects of social media, and the attitudes towards green products. For the global companies, the interaction effects are present in all the relationships of the model, except in the case of the link between customization and consumer attitudes. This indicates that global consumer identification significantly strengthens positive attitudes towards green products, which they form based on the use of social media. It should also be noted that the coefficients indicating the strength of the interaction are extremely high, which indicates that consumer global identity is a characteristic that can significantly influence their willingness to buy green products. Therefore, this

segment of consumers is extremely important for the promotion of green products, which is the result that corresponds to the results of the previously conducted research (Ng & Basu, 2019).

CONCLUSION

This research study is focused on the impact of social media marketing activities on consumer behavior with respect to the green products of the local and global companies operating in the Republic of Serbia. The results of the conducted empirical research are significant from both the theoretical and especially the practical point of view given the fact that they provide an insight into the antecedents that consumers perceive as significant when the promotion of green products through social media is concerned.

The theoretical implications of the research are multiple. Bearing in mind the fact that the practice of green marketing is in the initial stage of its development in developing countries compared to developed countries, there is not a large number of the papers that analyze these issues in detail. Consequently, it is very significant to analyze how consumers from developing countries perceive the marketing activities of companies in social media, which may influence their purchase of green products. In the era of digitization and the

emphasized importance of sustainability, both in the business done by companies and in the way consumers behave, these results provide an insight into the aspects of marketing in social media that are important to consumers when making decisions on purchasing green products.

The practical implications refer to the possibilities for marketing managers not only in the Republic of Serbia but in other countries as well to apply the obtained results which particularly indicate that local companies do not use the potential of social media sufficiently enough, considering that consumers do not perceive these activities as sufficiently current, informative, and with a high level of adaptability to users. On the other hand, in the case of foreign companies, all the analyzed activities have an impact on consumer behavior, except for customization. Given the fact that global companies mostly come from developed markets, where business sustainability and green marketing are at a higher level, these results can provide local companies with concrete guidelines for creating content in social media. The very significant and positive influence of the global identity on the relationships in the models indicates that consumers with this characteristic represent an extremely important segment for marketing campaigns, both for global companies and for local ones.

The limitations of this research study primarily reflect in the fact that the research was conducted on the territory of Kragujevac and Central Serbia, which may represent an obstacle in terms of the generalization and applicability of the results in other countries. Also, the research focused on green products in a general sense. In subsequent research, different types of green products, such as food, clothing, or cosmetic products can be analyzed so as to obtain specific results for different industries. Finally, further studies may include additional variables in the analysis, either independent or moderator variables, in order to provide a deeper understanding of how consumers perceive marketing activities in social media and their importance for purchasing green products.

REFERENCES

- Ajzen, I. (1991). The theory of planned behavior. *Organizational Behavior and Human Decision Processes*, 50(2), 179-211. [https://doi.org/10.1016/0749-5978\(91\)90020-t](https://doi.org/10.1016/0749-5978(91)90020-t)
- Ajzen, I., & Fishbein, M. (1980). *Understanding Attitudes and Predicting Social Behavior*. Englewood Cliffs, NJ: Prentice-Hall.
- Alden, D. L., Steenkamp, J.-B. E. M., & Batra, R. (2006). Consumer attitudes toward marketplace globalization: Structure, antecedents and consequences. *International Journal of Research in Marketing*, 23(3), 227-239. <https://doi.org/10.1016/j.ijresmar.2006.01.010>
- Arnett, J. J. (2002). The psychology of globalization. *American Psychologist*, 57(10), 774-783. <https://doi.org/10.1037//0003-066x.57.10.774>
- Backlinko team. (2024). *Social Media Usage & Growth Statistics*. <https://backlinko.com/social-media-users> (Accessed on 21 February 2024)
- Bagozzi, R. P., & Yi, Y. (1988). On the evaluation of structural equation model. *Journal of the Academy of Marketing Science*, 16(1), 74-94. <https://doi.org/10.1007/bf02723327>
- Ballew, M., Omoto, A., & Winter, P. (2015). Using web 2.0 and social media technologies to foster proenvironmental action. *Sustainability*, 7(8), 10620-10648. <https://doi.org/10.3390/su70810620>
- Bazi, S., Filieri, R., & Gorton, M. (2020). Customers' motivation to engage with luxury brands on social media. *Journal of Business Research*, 112, 223-235. <https://doi.org/10.1016/j.jbusres.2020.02.032>
- Byrne, B. M. (1998). *Structural Equation Modeling with LISREL, PRELIS, and SIMPLIS: Basic Concepts, Applications, and Programming*. Hillsdale, NJ: Lawrence Erlbaum.
- Chu, S.-C., & Kim, Y. (2011). Determinants of consumer engagement in electronic word-of-mouth (eWOM) in social networking sites. *International Journal of Advertising*, 30(1), 47-75. <https://doi.org/10.2501/ija-30-1-047-075>
- Feng, Y., Hu, J., Afshan, S., Irfan, M., Hu, M., & Abbas, S. (2023). Bridging resource disparities for sustainable development: A comparative analysis of resource-rich and resource-scarce countries. *Resources Policy*, 85, 103981. <https://doi.org/10.1016/j.resourpol.2023.103981>

- Fornell, C., & Larcker, D. F. (1981). Evaluating structural equation models with un-observable variables and measurement error. *Journal of Marketing Research*, 18(1), 39-50. <https://doi.org/10.2307/3151312>
- Gallaughier, J., & Ransbotham, S. (2010). Social media and customer dialog management at Starbucks. *MIS Quarterly Executive*, 9(4), 197-212.
- Godey, B., Manthiou, A., Pederzoli, D., Rokka, J., Aiello, G., Donvito, R., & Singh, R. (2016). Social media marketing efforts of luxury brands: Influence on brand equity and consumer behavior. *Journal of Business Research*, 69(12), 5833-5841. <https://doi.org/10.1016/j.jbusres.2016.04.181>
- Gruen, T. W., Osmonbekov, T., & Czaplewski, A. J. (2006). eWOM: The impact of customer-to-customer online know-how exchange on customer value and loyalty. *Journal of Business Research*, 59(4), 449-456. <https://doi.org/10.1016/j.jbusres.2005.10.004>
- Gupta, M., & Syed, A. A. (2022). Impact of online social media activities on marketing of green products. *International Journal of Organizational Analysis*, 30(3), 679-698. <https://doi.org/10.1108/ijoa-02-2020-2037>
- Hair, J. F., Black, B., Babin, B., Anderson, R. E., & Tatham, R. L. (2006). *Multivariate Data Analysis*. 6th ed., Upper Saddle River, NJ: Prentice Hall.
- Hassan, M., & Sohail, M. S. (2021). The influence of social media marketing on consumers' purchase decision: Investigating the effects of local and nonlocal brands. *Journal of International Consumer Marketing*, 33(3), 350-367. <https://doi.org/10.1080/08961530.2020.1795043>
- Kang, J.-Y. M., & Kim, J. (2017). Online customer relationship marketing tactics through social media and perceived customer retention orientation of the green retailer. *Journal of Fashion Marketing and Management: An International Journal*, 21(3), 298-316. <https://doi.org/10.1108/jfmm-08-2016-0071>
- Kim, A. J., & Ko, E. (2010). Impacts of luxury fashion brand's social media marketing on customer relationship and purchase intention. *Journal of Global Fashion Marketing*, 1(3), 164-171. <https://doi.org/10.1080/20932685.2010.10593068>
- Kim, A. J., & Ko, E. (2012). Do social media marketing activities enhance customer equity? An empirical study of luxury fashion brand. *Journal of Business Research*, 65(10), 1480-1486. <https://doi.org/10.1016/j.jbusres.2011.10.014>
- Kim, J.-H., & Hyun, Y. J. (2011). A model to investigate the influence of marketing-mix efforts and corporate image on brand equity in the IT software sector. *Industrial Marketing Management*, 40(3), 424-438. <https://doi.org/10.1016/j.indmarman.2010.06.024>
- Kocić, M., Šapić, S., & Sofronijević, K. (2022). The influence of website quality on cognitive and affective attitudes towards organic food. *Economic Horizons*, 24(3), 313-327. <https://doi.org/10.5937/ekonhor2203313k>
- Manthiou, A., Chiang, L., & Liang (Rebecca), T. (2013). Identifying and responding to customer needs on facebook fan pages. *International Journal of Technology and Human Interaction*, 9(3), 36-52. <https://doi.org/10.4018/jthi.2013070103>
- Martin, K., & Todorov, I. (2010). How will digital platforms be harnessed in 2010, and how will they change the way people interact with brands? *Journal of Interactive Advertising*, 10(2), 61-66. <https://doi.org/10.1080/15252019.2010.10722170>
- Muntinga, D. G., Moorman, M., & Smit, E. G. (2011). Introducing COBRAs. *International Journal of Advertising*, 30(1), 13-46. <https://doi.org/10.2501/ija-30-1-013-046>
- Naaman, M., Becker, H., & Gravano, L. (2011). Hip and trendy: Characterizing emerging trends on Twitter. *Journal of the American Society for Information Science and Technology*, 62(5), 902-918. <https://doi.org/10.1002/asi.21489>
- Ng, S., & Basu, S. (2019). Global identity and preference for environmentally friendly products: The role of personal responsibility. *Journal of Cross-Cultural Psychology*, 50(8), 919-936. <https://doi.org/10.1177/0022022119873432>
- Nunnally, J. C. (1978). *Introduction to Psychological Measurement*, New York, NY: McGraw-Hill.
- Okazaki, S., Díaz-Martín, A. M., Rozano, M., & Menéndez-Benito, H. D. (2015). Using twitter to engage with customers: A data mining approach. *Internet Research*, 25(3), 416-434. <https://doi.org/10.1108/intr-11-2013-0249>
- Pop, R.-A., Săplăcan, Z., & Alt, M.-A. (2020). Social media goes green—The impact of social media on green cosmetics purchase motivation and intention. *Information*, 11(9), 447. <https://doi.org/10.3390/info11090447>
- Richter, A., & Koch, M. (2007). Social software-status quo und zukunft. *Technischer Bericht*, Nr. 2007-01, Fakultät Für Informatik, GER: Universität der Bundeswehr Munchen.

- Saeed, M. A., Farooq, A., Kersten, W., & Ben Abdelaziz, S. I. (2019). Sustainable product purchase: Does information about product sustainability on social media affect purchase behavior? *Asian Journal of Sustainability and Social Responsibility*, 4(9). <https://doi.org/10.1186/s41180-019-0029-3>
- Seo, E.-J., & Park, J.-W. (2018). A study on the effects of social media marketing activities on brand equity and customer response in the airline industry. *Journal of Air Transport Management*, 66, 36-41. <https://doi.org/10.1016/j.jairtraman.2017.09.014>
- Steenkamp, J.-B. E. M., & de Jong, M. G. (2010). A global investigation into the constellation of consumer attitudes toward global and local products. *Journal of Marketing*, 74(6), 18-40. <https://doi.org/10.1509/jmkg.74.6.18>
- Sun, Y., & Wang, S. (2020). Understanding consumers' intentions to purchase green products in the social media marketing context. *Asia Pacific Journal of Marketing and Logistics*, 32(4), 860-878. <https://doi.org/10.1108/apjml-03-2019-0178>
- Tu, L., Khare, A., & Zhang, Y. (2012). A short 8-item scale for measuring consumers' local-global identity. *International Journal of Research in Marketing*, 29(1), 35-42. <https://doi.org/10.1016/j.ijresmar.2011.07.003>
- Wang, Y., Chowdhury, A. S., Deng, S., & Wang, H. (2019). Success of social media marketing efforts in retaining sustainable online consumers: An empirical analysis on the online fashion retail market. *Sustainability*, 11(13), 3596. <https://doi.org/10.3390/su11133596>
- Xie, S., & Madni, G. R. (2023). Impact of social media on young generation's green consumption behavior through subjective norms and perceived green value. *Sustainability*, 15(4), 3739. <https://doi.org/10.3390/su15043739>
- Zhang, Y., & Khare, A. (2009). The impact of accessible identities on the evaluation of global versus local products. *Journal of Consumer Research*, 36(3), 524-537. <https://doi.org/10.1086/598794>
- Zhu, Y.-Q., & Chen, H.-G. (2015). Social media and human need satisfaction: Implications for social media marketing. *Business Horizons*, 58(3), 335-345. <https://doi.org/10.1016/j.bushor.2015.01.006>

Received on 28th February 2024,
after revision,
accepted for publication on 10th April 2025.
Published online on 25th April 2025.

Jovana Filipović completed her undergraduate, master's, and doctoral studies at the Faculty of Economics, University of Kragujevac, where she was awarded a doctoral degree in 2020. Her research primarily focuses on international marketing, international business, and service marketing, with a particular emphasis on brand management, international marketing strategies, and consumer behavior.

Srdan Šapić is a Full Professor at the Faculty of Economics, University of Kragujevac, where he completed his undergraduate and postgraduate studies. His research interests are centered on international marketing, international business, and service marketing, with a particular focus on the cultural environment, customer satisfaction, and the dynamics of internationalization.