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# THE IMPACT OF INTERNAL GREEN MARKETING ON MANAGERS' ORGANIZATIONAL IDENTIFICATION AND FINANCIAL PERFORMANCE OF ORGANIZATIONS OF THE AGRIBUSINESS SECTOR IN SERBIA

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## ABSTRACT

The purpose of the paper was to examine the impact of internal green marketing on managers' organizational identification and the financial performance of the organizations. The empirical research was carried out by an online survey. The model proposed in this paper was tested on a sample of 53 managers of Serbian organizations in the agribusiness sector. For empirical testing of the proposed hypotheses, partial least squares structural equation modeling was used. The findings revealed that the direct effect of internal green marketing on managers' organizational identification as well as the direct effect of managers' organizational identification on financial performance is positive and statistically significant. Managers' organizational identification fully mediates the relationship between internal green marketing and financial performance. This paper can contribute to better understanding of green internal marketing and its effect on organizations, especially in the agribusiness sector. The results can be useful to managers in the agribusiness sector.

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## Introduction

Green orientation of an organization is the imperative of modern business. The implementation of green orientation in an organization is supported by the implementation of green marketing, its dimensions and programs. The implementation of green marketing leads to the achievement of organizational goals including more successful environmental protection (Crittenden et al., 2011), better organizational performance (Fraj et al., 2011; Papadas et al., 2019), and satisfaction of all stakeholders (Polonsky, 1995).

The internal green marketing concept is based on the concept of internal marketing and the concept of green marketing. From the internal green marketing perspective, organizations take care of their employees – the most important internal stakeholders (from the internal marketing perspective) as well as of the environment (from the green marketing perspective). Internal green marketing, as the dimension of green marketing, has recently begun to attract the attention of researchers and practitioners. The focus of the research in this field is on the organizations operating in the environmentally sensitive sectors including the agribusiness sector.

The relevant literature states that internal green marketing orientation contributes to the promotion of environmental (or green) awareness in an organization (see: Papadas et al., 2017), the creation of green organizational culture and the promotion of green organizational identity (Chen, 2011). The role of leaders and managers, especially middle managers, in building member identification “lays the foundation for internal marketing” (Wieseke et al., 2009, p. 123; Šapić et al., 2018), and thus the foundation for its green dimension. It is confirmed that managers’ internal marketing adoption can improve employees’ perception of internal marketing as well as the level of employees’ organizational identification (e.g. Boukis et al., 2015), which results in better employees’ performance and better financial performance of the business unit of the managers identified with the organization (Wieseke et al., 2009). However, there is a lack of empirical studies on the impact of internal green marketing on the organizational identification both of employees and managers, especially the studies from less developed countries as well as the studies on the impact of managers’ organizational identification on the financial performance of an organization. Finally, although it is confirmed that environmental marketing positively influences the organization’s commercial and operational performance (Fraj-Andrés et al., 2009), that green marketing strategy positively influences marketing performance (Fraj et al., 2011), and that strategic green marketing orientation has a positive (indirect) effect on financial performance (Papadas et al., 2019; Vukosavljević et al., 2021), there is no empirical research on the impact of internal dimension of green marketing on the financial performance of an organization. At the same time, taking care of employees, the environmental protection, and financial results is not always easy to harmonize. Managers play a key role in this organizational task. In regard with that, the purpose of this paper is to examine the impact of internal green marketing on managers’ organizational identification as well as the financial performance of the organizations operating in the environmentally sensitive sector such as the agribusiness sector.

## Conceptual framework and the development of hypotheses

Most definitions of green (environmental) marketing “suggest that the firm’s, consumer’s and society’s needs be satisfied in a profitable and sustainable way and be compatible with the natural environment and eco-systems” (Papadas et al., 2017, p. 237). Therefore, green marketing construct includes the following dimensions: 1) strategic green marketing 2) tactical green marketing, and 3) internal green marketing (Leonidou, Leonidou, 2011). However, not all its dimensions have been empirically examined equally. In this regard, most previous studies have examined both strategic and tactical dimensions of green marketing rather than the internal dimension of green marketing (e.g. Fraj et al., 2011; Papadas et al., 2019; Santoso et al., 2019; Sharma et al., 2017; Milošević et al., 2021; Ullah, Qaiser Danish, 2020; Wang et al., 2021).

Internal green marketing orientation as a holistic orientation “involves the pollination of environmental values across the organization to embed a wider corporate green culture” (Papadas, Avlonitis, 2014 as cited in Papadas et al., 2017, p. 238). Managers spread the philosophy of internal green marketing among employees. In addition, managers develop and shape the internal green culture of the organization (adapted by Papadas, Avlonitis, 2014 as cited in Papadas et al., 2019, p. 636) while all internal stakeholders should follow its values. Therefore, it is important that managers adopt internal green marketing philosophy and that they are identified with the organization, especially as it was confirmed that managers’ internal marketing adoption can improve employees’ internal marketing adoption (e.g. Boukis et al., 2015). At the same time, organizational identification of managers affects the organizational identification of their employees i.e. followers (Wieseke et al., 2009). So, if employees identify with their organization than they can contribute to the organization’s effective facing with green environmental challenges (adapted from Chen, 2011). Finally, it is confirmed that managers that are identified with their organizations in the internal marketing context contribute to improving the financial performance of their business unit (Wieseke et al., 2009; Pantić et al., 2021). However, the internal green marketing construct has been recently given (Qureshi, Mehraj, 2022), so there is a lack of the empirical research on the effects of the application of internal green marketing in practice as opposed to the research on the effects of the application of internal marketing. In this regard, to authors’ knowledge, no previous study has tested the relationship between the mentioned variables – between internal green marketing and managers’ organizational identification, on the one hand, and between internal green marketing, managers’ organizational identification, and the financial performance of the organizations operating in the agribusiness sector, on the other hand. Therefore, this paper relies on the studies on these relationship in the internal marketing context conducted in other sectors (Boukis et al., 2015, banking sector; Hernández-Díaz et al., 2017, higher education institution; Wieseke et al., 2009, pharmaceutical company, travel agencies) as well as on the study on strategic and internal green marketing orientation in the organizational outcomes context (Papadas et al., 2019). In regard with this, it is assumed that:

H1: Internal green marketing has a positive direct effect on managers’ organizational identification

H2: Managers' organizational identification has a positive direct effect on financial performance

H3a: Internal green marketing has a positive indirect effect on financial performance through managers' organizational identification

H3b: Internal green marketing has a positive direct effect on financial performance.

### Methodology

*Data collection:* The empirical research was carried out by an online survey on a sample of the managers of the organizations operating in the agribusiness sector of the Republic of Serbia in the period March - June 2022. The e-mail addresses of organizations or managers were taken from various sources (e.g. Agro club, <https://www.agroklub.rs/partner>; All companies in Serbia, <https://kompanije.co.rs>; Best of Serbia, <https://www.bestofserbia.rs>; Agriculture sphere, <https://www.poljosfera.rs/agrosfera/adresar/>; Vojvodina organic cluster, <https://vok.org.rs>).

*Sample:* The number of active business entities in the agribusiness sector at the end of 2017 in the Republic of Serbia (enterprises/entrepreneurs) was 12,823, of which micro: 11,142 or 86.90%, small: 1,249 or 9.75%, medium: 350 or 2.7%, and large: 82 or 0.65% (The Serbian Business Registers Agency as cited in: The analysis of prospective occupations in the agro-business sector, *Table 7*). The small (10-49 employees), medium (50-249 employees) and large organizations (>250 employees) were selected for this survey. From 421 distributed questionnaires (by a random sampling method), 53 completed questionnaires were returned (the response rate: 13%). Questionnaires were filled out by managers. The reluctance and the unwillingness of many managers to participate in this survey were noted.

*Sample structure:* The structure of the organizations in the sample is following: 28.3% were small organizations, 64.2 were medium organizations, and 7.5% were large organizations. Besides, 43.4% of these organizations operate in the Sector A – Division 01 “Agricultural production, hunting and related service activities” (or “Crop and animal production, hunting and related service activities”, SIC codes - <https://www.siccodes.net/classification/>): A01, code 01.1; 01.2; 01.3; 01.4, 01.5, 01.6), 37.7% of these organizations operate in the Sector C – Division 10 and 11 “Manufacturing”: C10 “Manufacture of food products” and C11 “Manufacture of beverages”, 11.3% of these organizations operate in the Sector G – Division 47 “Retail trade, except of motor vehicles and motorcycles”: G47.11 “Retail sale in non-specialized stores with food, beverages or tobacco predominating” and G47.2 “Retail sale of food, beverages and tobacco in specialized stores”, 7.6% have no data (this question was not answered by all respondents).

Regarding the gender distribution of managers as the respondents: 49% of them are male, whereas 51% are females. As for the age distribution of managers as the respondents, 22.6% of managers are under 31, 28.3% of them are aged 31-40, 20.8% between 41-50, 18.9% between 51-60, and 9.4% are over 60. The educational distribution of the

managers is following: 84.9% of them have higher education whereas 15.1% have secondary education. Most managers have been working less than 20 years (less than 11 years: 32.1%, from 11 to 20 years: 30.2%), 22.6% from 21 to 30 years, 11.3% from 31-40 years, and 3.8% over 40 years. Regarding the position of the managers, 34.5% of them are general or executive managers, 21.3% are financial managers, 19.4% are marketing managers, 19% are human resource managers, and 5,8% are managers of business unit.

*Measurement scales:* Three constructs were defined in this paper: internal green marketing (IGM), managers' organizational identification (OI<sub>m</sub>), and financial performance (FP). Internal green marketing implies the extent to which an organization endorses green (environmental) values as well as develops green culture (adapting to Qureshi, Mehraj, 2022). According to Papadas et al. (2019) internal green marketing (orientation) was observed as one-dimensional construct. In this paper, internal green marketing (IGM) was observed as a multidimensional construct i.e. a second-order reflective construct including: green internal communication – GIC (five items; GIC1=GIC1; GIC2=GIC2; GIC4=GIC3; GIC5=GIC4; GIC6=GIC5, Qureshi, Mehraj, 2022, *Table 3* = this paper, *Table 1*), green skill development – GSD (five items), and green rewards – GRs (five items) (the scale from Qureshi, Mehraj, 2022). Organizational identification is defined as the perceived oneness of an employee with his/her organization, and experience of its “successes and failures as one’s own” (Mael, Ashforth, 1992, p. 103). Managers' organizational identification (OI<sub>m</sub>) as a reflective construct was measured by four items (the scale was adapted from Mael, Ashforth, 1992). The managers rated on a scale of 1 (strongly disagree) to 5 (strongly agree) the extent to which they agreed with statements offered in the survey regarding internal green marketing and the managers' organizational identification. A subjective measure was used regarding financial performance. A subjective measures of performance are still used in many studies. In previous research, economic performance, marketing performance and operative performance (Fraj et al., 2011) or financial performance (Papadas et al., 2019; Wieseke et al., 2009) were observed, including firm's profitability, sales growth, firm's economic results, profit before tax, market share (according to Morgan 2004 as cited in Papadas et al., 2019, *Table 2*). Based on the previous studies (Fraj et al., 2011; Papadas et al., 2019), in this paper financial performance was defined as a reflective construct including three indicators. Namely, the managers were asked to indicate the level of sales revenue growth, the level of profitability growth as well as the level of costs reduction that were achieved in the year 2021 (1–not achieved at all; 5–fully achieved).

*Data analysis:* Partial least squares structural equation modeling (PLS-SEM) was used. All calculations were done in SmartPLS, version 3.3.9. This method was chosen for several reasons. First, PLS-SEM is a technique that is more advanced and gives better results than regression analysis and other first-generation methods, because it can test causal relationships (Lowry, Gaskin, 2014). Second, this method enables the establishment of relationships between latent variables (latent constructs) that are unobserved, i.e. that are described through a set of indicators (Hair et al., 2019). It also enables the modeling of higher-order constructs (Sarstedt et al., 2019; Karavelić

et al., 2021). Third, PLS-SEM is suitable for working with small samples because it generates a large number of sub-samples using the Bootstrapping procedure, and in this way, the maximum information is obtained based on the available sample (Hair et al., 2017). PLS-SEM technique requires two steps. The first is testing of the measurement model, and the second is testing of structural relationships in the model (Hair et al., 2019). Since the proposed model includes the variable IGM, which is a second-order variable, the disjoint two-stage approach was used in order to generate appropriate indicators of reliability and validity of the model (Hair et al., 2018).

## Results

*Measurement model assessment:* Indicators of the reliability and validity are obtained by using PLS Algorithm function. The results of the both phases of the disjoint two-stage approach are presented in *Table 1*. Descriptive statistics for all the indicators and variables are also provided in *Table 1*.

All constructs in the model are defined as reflective. That is why, in order to validate the measurement scales, factor loadings, Chronbach's alpha coefficient (Ch. Alpha), composite reliability (CR), and average variance extracted (AVE) were observed. In order to acquire convergent validity for the OIm variable, some of the items were deleted and excluded from further analysis. Items excluded from further analysis in this paper are: "When someone criticizes" my organization, "it feels like a personal insult" (1); My organization's successes are my successes (4); „If a story in the media criticized“ my organization, „I would feel embarrassed“ (6) (Mael, Ashforth, 1992, p. 122). Hence item 2 (Mael, Ashforth, 1992, p. 122) is OIm1, item 3 (Mael, Ashforth, 1992, p. 122) is OIm2, item 5 (Mael, Ashforth, 1992, p. 122) is OIm3 (see: *Table 1*). Besides, the item that was added is statement of employees' level of awareness of belonging to their organization (OIm4 in *Table 1*). After the refinement of the OIm scale, factor loadings for all constructs were higher than 0.708 meaning that convergent validity was established for all constructs (Carmines, Zeller, 1979). In order to establish internal consistency reliability of the measurement scales the value of Chronbach's alpha should be above 0.7 (Churchill, 1979) and composite reliability should be between 0.7 and 0.95 (Diamantopoulous et al., 2012). This requirement is also satisfied for all the constructs defined in the model. Convergent validity was assessed based on composite reliability and the values of average variance extracted (AVE). CR values are greater than 0.7, AVE values are greater than 0.5, and CR values are greater than AVE values ( $CR > AVE$ ) for all constructs indicating that convergent validity exists (Fornell, Larker, 1981).

**Table 1.** Descriptive statistics, reliability and convergent validity

Constructs and their indicators	Mean	Std. Dev.	Factor loadings	Ch. Alpha	CR	AVE
<i>IGM (second-order reflective construct)</i>	3.40	0.012		<i>0.917</i>	<i>0.947</i>	<i>0.856</i>
GIC (first-order reflective construct)	3.72	0.054		0.948	0.959	0.825
GIC1	3.94	1.134	0.878			
GIC2	3.77	1.235	0.943			
GIC3	3.58	1.184	0.891			
GIC4	3.60	1.198	0.945			
GIC5	3.72	1.277	0.882			
GSD (first-order reflective construct)	3.47	0.063		0.922	0.941	0.761
GSD1	3.25	1.239	0.873			
GSD2	3.53	1.154	0.908			
GSD3	3.85	1.133	0.836			
GSD4	3.58	1.082	0.912			
GSD5	3.15	1.215	0.827			
GRs (first-order reflective construct)	3.01	0.040		0.947	0.957	0.817
GRs1	3.06	1.277	0.932			
GRs2	3.06	1.277	0.959			
GRs3	3.02	1.308	0.923			
GRs4	2.34	1.208	0.828			
GRs5	3.57	1.233	0.871			
OIm (reflective construct)	4.52	0.174		0.753	0.842	0.572
OIm1	4.21	0.885	0.822			
OIm2	4.75	0.477	0.710			
OIm3	4.57	0.605	0.736			
OIm4	4.55	0.722	0.752			
FP (reflective construct)	4.13	0.459		0.818	0.879	0.709
FP1	4.36	0.787	0.813			
FP2	4.11	0.847	0.831			
FP3	3.92	0.730	0.880			

\*Note: Italics were used for the indicators obtained in the second stage of the disjoint two-stage approach.

Source: Authors' calculation

Discriminant validity is assessed based on Heterotrait-Monotrait ratio (HTMT) as suggested by Henseler et al. (2015). HTMT values greater lower than 0.9 for all constructs in the model confirm that constructs conceptually differ, and that discriminant validity is acquired. The obtained results are presented in *Table 2*.

**Table 2.** HTMT ratio

	<b>FP</b>	<b>OIm</b>	<b>GSD</b>	<b>GIC</b>	<b>GRs</b>
OIm	0.428				
GSD	0.173	0.479			
GIC	0.115	0.404	0.800		
GRs	0.091	0.320	0.869	0.780	
<i>IGM</i>	<i>0.121</i>	<i>0.464</i>	<i>n.a.</i>	<i>n.a.</i>	<i>n.a.</i>

\*Note: Italics were used for the values obtained in the second stage of the disjoint two-stage approach

Source: Authors' calculation

*Testing of the structural relationships:* Before the testing of the structural relationships in the model, the quality of the structural model was assessed. It was shown that collinearity does not present a problem in this research, since VIF values for both predictors of FP (OIm and IGM) were 1.191 which is below 3, as recommended by Hair et al. (2017). The model's explanatory power was assessed based on the coefficient of determination ( $R^2$ ). Value of  $R^2$  for the endogenous variable FP is 0.128, which is satisfactory in social science research (Falk, Miller 1992; Shmueli, Koppius, 2011).

After the structural model was assessed, Bootstrap procedure (BCa method; 5000 subsamples; one-tailed t-test; 0.1 significance level) was applied in order to test the hypothesized relationships. The results are presented in *Table 3*.

**Table 3.** Hypotheses testing

<b>Hypotheses</b>	<b>Beta coefficient</b>	<b>t-value</b>	<b>p-value</b>	<b>Supported</b>
H1: IGM -> OIm	0.400	2.667	0.004	Yes
H2: OIm -> FP	0.361	2.186	0.014	Yes
H3a: IGM -> OIm -> FP	0.145	1.553	0.060	Yes
H3b: IGM -> FP	-0.018	0.113	0.455	No

Source: Authors' calculation

Based on the results (*Table 3*), there is a positive and statistically significant relationship between IGM and OIm ( $\beta=0.400$ ;  $p<0.1$ ), and between OIm and FP ( $\beta=0.361$ ;  $p<0.1$ ). The first hypothesis is confirmed: Internal green marketing has a positive direct effect on managers' organizational identification. The second hypothesis is confirmed: Managers' organizational identification has a positive direct effect on financial performance. In accordance with the third hypothesis (H3a), the indirect effect of IGM on FP through OIm is positive and statistically significant ( $\beta=0.145$ ;  $p<0.1$ ). The third hypothesis - H3a is confirmed. At the same time, a positive direct effect of IGM on FP was not supported, rejecting thus the hypothesis H3b. Managers' organizational identification (OIm) fully mediates the relationship between IGM and FP.

## Discussion

The studies that tested the relationship between internal marketing and employees'/managers' organizational identification are scarce (e.g. Boukis et al., 2015; Bogavac et al., 2021; Hernández-Díaz et al., 2017). In addition, the studies that examined the impact of managers' organizational identification on employees' organizational identification in the internal marketing context are scarce as well as the studies that examined the impact of managers' organizational identification on financial performance (e.g. Wieseke et al., 2009), especially in the agrobusiness sector. In this regard, there are no studies that tested these relationships in the internal green marketing context and the agribusiness environment. That is why the results of this paper are even more significant.

The one of the results of this paper confirmed that internal green marketing affects organizational identification (in this case managers' organizational identification in the agribusiness sector), similar to the impact of green marketing on employees' organizational identification in the service sector (Boukis et al., 2015; Hernández-Díaz et al., 2017). This result confirmed the relevance of an implementation of this concept and its effects in the sector where services are not the primary activity. Relying on the finding of Wieseke et al. (2009), it is expected that the managers' organizational identification of the organizations operating in the Serbian agribusiness sector will affect the organizational identification of their followers in the context of implemented internal green marketing orientation. Having in mind that the employees who are identified with their organization achieve better performance (Wieseke et al., 2009), it is necessary to constantly improve the organizational identification of employees and managers, which also applies to the agribusiness sector. Managers, especially middle managers, play a significant role in this.

The second result of this paper confirmed that managers' organizational identification has a positive and significant effect on the financial performance of the organizations in the agribusiness sector of Serbia. Thus, the finding of the previous research (Wieseke et al., 2009) was confirmed, although Wieseke et al. (2009) conducted their examination at the business unit level in the context of internal marketing, and in the service sector. At the same time, the third result of this paper can be based on this finding of Wieseke et al. (2009) that there is the indirect, positive and statistically significant effect of internal green marketing on financial performance through managers' organizational identification. A direct effect of internal green marketing on financial performance was not supported. Previous study confirmed that even strategic green marketing orientation (SGMO) has no significant direct impact on financial performance (competitive advantage mediates the impact of SGMO on financial performance) and that internal green marketing orientation "intensifies the positive effect of SGMO on competitiveness" (Papadas et al., 2019, p. 639). In this sense, the level of managers' organizational identification should be constantly improved because managers' organizational identification fully mediates the relationship between internal green marketing and financial performance of the organizations in the Serbian agribusiness sector.

Effective, open, two-way and continuous green internal communication, rewarding both green initiatives and green activities of managers, as well as training and education to develop their green skills affect the level of managers' organizational identification of the agribusiness sector. In this regard, the managers feel respected by their organization. The managers, also, are becoming aware of their role in achieving green marketing and organizational goals as well as implementing green marketing and business (environmental) strategy. As a result, managers feel a sense of belonging to their (green) organization. When they talk about their organizations, they usually say "we" (rather than "they"). When someone praises their organization, they feel it as a personal compliment. Managers are also very interested in what others think about their organizations. Such managers contribute to financial performance of their organizations i.e. sales revenue growth, profitability growth, and costs reduction. This is very important, given the need for organizations operating in the environmentally sensitive sectors to align financial, marketing and environmental goals.

### **Conclusion**

Having in mind that taking care of employees, the environmental protection, and financial results are not always easy to harmonize, and that managers play a key role in this task, this paper examined the impact of internal green marketing on managers' organizational identification and financial performance of the organizations operating in the agribusiness sector in Serbia. A review of the literature found that there is a lack of empirical studies in this field. In this regard, one of the main contributions in this paper is that the hypotheses were tested in the agribusiness sector organizations of less developed country such as Serbia, where these relationships have not been tested. Environmental protection, green orientation, green marketing and management, and thus internal green marketing are keys in these organizations. Besides, this paper extends the results of earlier research with regards to the relationship between internal dimension of marketing, managers' organizational identification as the individual outcome and financial performance as the organizational outcome.

The findings of the research revealed that there is a positive and statistically significant direct effect of internal green marketing on managers' organizational identification, a positive and statistically significant direct effect of managers' organizational identification on financial performance as well as a positive and statistically significant indirect effect of internal green marketing on financial performance through managers' organizational identification. According to the research findings in this paper, organizations in the agribusiness sector of Serbia should implement internal green marketing, and pay attention to the organizational identification.

This findings contribute to better understanding of internal green marketing, its impact on employees, especially on managers, their organizational identification and financial performance. In addition, the results of the paper can be used by managers in agribusiness sector in Serbia to improve their organizational identification as well as employees' organizational identification, and finally to improve financial performance.

Since internal green marketing a priori includes environmental protection, it is easier to optimize environmental, marketing and economic goals in these conditions.

The results of this paper refer to small, medium and large-sized organizations (enterprises and entrepreneurs) operating in the agribusiness sector in the Republic of Serbia. The number of managers (organizations) that participated in the survey is modest. Besides, the responses may be biased. Although the findings show some interesting insights into links between internal green marketing, managers' organizational identification and financial performance, these results cannot be generalized in another business context. There is a lack of controlling for other factors including contextual factors and some exogenous effects that could affect managers' perception of internal green marketing adoption and its effects on the observed dependent variables. These limitations should be taken into account in future research.

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### Conflict of interests

The authors declare no conflict of interest.

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