SUSTAINABLE POLICY-MAKING IN URBAN AREAS: STRATEGIC MARKETING BEHAVIORS IN ENVIRONMENTALLY PROACTIVE ORGANIZATIONS

Elvira NICA^{a*}, Milos POLIAK^b, Katarina VALASKOVA^c

^a Bucharest University of Economic Studies, Romania
 ^b University of Zilina, Zilina, Slovak Republic
 ^c University of Zilina, Zilina, Slovak Republic

ABSTRACT

We configure a conceptual framework developed on a systematic and comprehensive literature review on sustainable policy-making in urban areas. Building our argument by utilizing data collected from European Commission, we carried out analyses and made estimates concerning strategic marketing behaviors in environmentally proactive organizations. The data for our research were gathered via an online survey questionnaire and were inspected on a sample of 4,500 respondents. Descriptive statistics of collected data from the finalized surveys were determined when significant.

KEYWORDS: *sustainability; policy-making; marketing; environment; proactive; organization.*

1. INTRODUCTION

Carrying out environmental management routines, organizations eventually are more sustainable (Lima Silva Borsatto et al., 2019). Increasing public interest in the natural environment is swiftly reorganizing the competitive landscape, compelling organizations to embrace green innovation approaches. Organizational green culture can shape green performance and competitive advantage. Green innovation thoroughly mediates between organizational green culture and green performance, having to some extent a mediating impact on the link between organizational green culture and competitive advantage, impacted by environmental concerns. Governmental supervision and governance of ecological consequences of production operations are carried out to reduce environmental deterioration (environmental issues shape manufacturing companies' innovation) (Wang, 2019).

2. CONCEPTUAL FRAMEWORK AND LITERATURE REVIEW

In conjunction with specific regulations, the institutional setting in which organizations operate influences their competitiveness (Ionescu, 2020; Popescu Ljungholm, 2019; Keane, 2020; Turnbull et al., 2020; Harrower, 2019), and has a part in the striving towards environmental approaches. Environmental procedures and the magnitude of organizations positively impact the latter's green innovation endeavors (Lima Silva Borsatto et al., 2019). The environmental technological innovation capacity of a company positively and considerably impacts its competitiveness (Costea, 2020; Graessley et al., 2019; Adams, 2020; Tisdell et al., 2020; Wingard, 2019), but various constituents have distinct consequences on its effectiveness. Product differentiation slightly impacts the link between the environmental technological innovation capacity of a company and competitiveness

^{*} Corresponding author. E-mail address: popescu_elvira@yahoo.com

(Ionescu, 2020; Davidson, 2020; Eysenck, 2020; Peters et al., 2020; Williams, 2020), while its mediating consequence is dissimilar, being determined by its constituents. The company's scale thoroughly moderates the link between the organization's environmental technological innovation capacity and its competitiveness by use of product differentiation (Li et al., 2019). Dealing with growing environmental issues, numerous less advanced economies which operate as global main business-to-business servicing marketplaces providing manufacturing and sourcing services are in quest of ways out to diminish environmental deterioration (Wong et al., 2019). Organizational green culture may influence personnel to embrace green innovation as a key value of the company and thus to participate in environmental matters. As companies having no green culture may have inadequate resources to invest in their ecological approach, upper management may allocate them to more vital organizational urgencies, in preference to environmental procedures. When companies with organizational green culture encounter demand from environmental protection to advance and disclose green performance (Mircica, 2020; Davis et al., 2020; Harrower, 2020; Bell, 2020; Johnson, 2020), organizational green culture is possibly an essential determinant of green performance (Wang, 2019). Adequate green, social, and economic settings can in conjunction be instrumental in furthering lasting sustainable competitiveness outcomes (Möbius and Althammer, 2020). Green consumption covers the implementation of positions and actions that have the least possible effect on the environment, e.g. low energy utilization, recycling, and purchasing low-carbon products. Green consumers are familiar with the perception of goods and advertisements when inquired regarding their eagerness to buy. The adoption of standards and altering of attitudes can result in consumers' more sustainable behaviors. Eagerness to purchase green goods is mainly shaped by environmental interest, social standards, companies' past performances, and customers' psychological profiles (Semprebon et al., 2019).

3. METHODOLOGY AND EMPIRICAL ANALYSIS

Building our argument by utilizing data collected from European Commission, we carried out analyses and made estimates concerning strategic marketing behaviors in environmentally proactive organizations. The data for our research were gathered via an online survey questionnaire and were inspected on a sample of 4,500 respondents. Descriptive statistics of collected data from the finalized surveys were determined when significant.

4. RESULTS AND DISCUSSION

Environmental brand innovativeness is directly related to brand loyalty and indirectly shapes the latter through green perceived value. Green knowledge considerably moderates the link between environmental brand innovativeness and green perceived value. To further green brand loyalty, companies should allocate resources so as to improve consumers' perceptions of environmental brand innovativeness and green value, consequently enhancing their environmental knowledge (Lin et al., 2019). (Table 1)

Table 1. Which of the following assertions exemplarily describes your behavior as regards
ecological products? (%)

You often purchase ecological products	28
You sometimes purchase ecological products	57
You do not purchase ecological products, but you certainly plan to do so in the	7
future	
You do not purchase ecological products, but it is possible you do that in the	4
future	
You used to purchase ecological products, but you stopped.	1

You have not purchased ecological products and do not plan to do so	3				
Sources: European Commission; our survey among 4,500 individuals conducted June 2020.					

Organizational green culture is possibly a driver of competitive advantage by having features that are dissimilar from values cultures of its competitors. If competitive advantage is determined by pertinent employee behavior and business value, subsequently a harmonizing organizational green culture can be instrumental for a company (Wang, 2019). (Table 2)

 Table 2. For each assertions as regards the environment and ecological goods specify if you agree or not. (%)

	Strongly	Tend to	Tend to	Strongly	Don't know
	agree	agree	disagree	disagree	
You feel that	57	36	4	2	1
using ecological					
goods is the					
right thing to do					
Purchasing	57	33	5	3	2
ecological goods					
sets a positive					
example					
Your family or	49	37	8	3	3
friends will					
presume it is a					
positive thing if					
you use					
ecological goods					

Sources: European Commission; our survey among 4,500 individuals conducted June 2020.

Organizational green culture influences companies' environmental performance indirectly, by inspiring them to embrace an ecological innovation approach. Organizational green culture has a particular and direct impact on green innovation that mediates the consequences of the organizational green culture on companies' environmental performance (Wang, 2019). (Table 3)

Table 3. When making a decision as regards what goods you purchase, the following
characteristics are relevant or not? (%)

characteristics are recvant of not. (70)				
Very	Fairly	Not very	Not at all	Don't know
important	important	important	important	
67	29	2	1	1
38	45	13	2	2
44	42	10	3	1
28	26	32	12	2
	Very important 67 38 44	Very importantFairly important672938454442	Very importantFairly importantNot very important67292384513444210	Very importantFairly importantNot very importantNot at all important67292138451324442103

Sources: European Commission; our survey among 4,500 individuals conducted June 2020.

Confronted with the progressively competitive setting and impacted by rigorous environmental protection procedures and standards, and by the advance of large-scale consumer environmentalism, organizations should invest ecologically and be commercially successful to satisfy the demands of their shareholders (Lima Silva Borsatto et al., 2019). Companies can regard environmental subsidization as either a detrimental expense of performing business or as a driver of competitive advantage, setting up the link between organizational green culture, competitive advantage, and green performance (Wang, 2019). (Table 4)

Table 4. Which of these actions would impact the most in finding an answer to the
environmental issues in our country? (%)

Recycling and reducing waste	58
Purchasing low energy use home appliances	37
Enveloping houses/apartments	36
Purchasing local agricultural goods	32
Decreasing traveling and using sustainable modes of transport	31
Using less water	28
Buying eco-friendly products	25

Sources: European Commission; our survey among 4,500 individuals conducted June 2020.

Environmental business strategies are strongly and positively associated with export financial performance, with internal environmental tendency and cost leadership having an important and positive moderating function. Environmental product differentiation harmonizes green business strategy only when there is a preservation of a cost-leadership approach. Exporting companies from developing markets may attain favorable outcomes in their environmental product differentiation by undertaking a green business strategy (Bıçakcıoğlu et al., 2019). (Table 5)

Table 5. Where would you want to find ecological information as regards a product? (%	Fable 5. Where would you want to	find ecological information a	s regards a product? (%)
---	---	-------------------------------	--------------------------

On the label of the product	84
On the stand where the product is positioned	46
In media advertisements concerning the product	39
On the Internet	31
In a shop leaflet	25
On a scannable bar code by a device supplied in the shop	22

Sources: European Commission; our survey among 4,500 individuals conducted June 2020.

In the current marketplace, organizational success is associated with being green, but firms' sustainability objectives can be attained only in cooperation with customers, who ask for green products and straightforwardness while being preoccupied with the ethical routines of the selling parties (Semprebon et al., 2019). (Table 6)

Table 6. Would you be want to do the following activities for environmental grounds? (Yes,

Eat not so much meat but having certified origin	74
Eat poultry or fish instead of beef or pork	62
Eat rather vegetables than meat	44

Sources: European Commission; our survey among 4,500 individuals conducted June 2020.

Absorptive capacity represents a relevant predictor of sustainable capabilities and environmental innovation implementation. Sustainable orientation and collaboration capabilities are significant

drivers of environmental innovation implementation and mediators of the impact of absorptive capacity on environmental innovation implementation (Aboelmaged and Hashem, 2019). (Table 7)

 Table 7. How much do you have confidence in companies' reports as regards their environmental performance? (%)

Complete confidence	▲ ``´´	13
Somewhat confident		28
Somewhat not confident		34
Not confident at all		25
		1.1.1. 2020

Sources: European Commission; our survey among 4,500 individuals conducted June 2020.

5. CONCLUSIONS AND IMPLICATIONS

Organizations do not attempt to enhance their environmental management operations as a result of certification, or to make public their sustainability reports only to satisfy policy-making guidelines, but certainly to accommodate the concerns of their stakeholders (Lima Silva Borsatto et al., 2019). Managers in companies whose culture is associated with ecological preservation tend to carry out environmental protection approaches, improving organizational green innovation. Companies demarcate their green innovation capacity from their competitors by setting their organizational culture to reinforce criteria of environmental quality (Wang, 2019). Corporate environmental ethics determines performance via the employment of substantive undertakings. Companies having superior environmental ethics tend to carry out green marketing strategies, comprising low-carbon production, estimated costs, delivery, and promotion procedures, followed by enhancing firm performance. Closure mechanisms adversely moderate the mediation impact of green marketing strategies by resulting in reduced trust and reluctance to internal teamwork. The practicality of corporate environmental ethics cannot be clarified without considering both strategy and employees, that may be decisive in undertaking ecologically-oriented performance (Han et al., 2019).

Survey method

The interviews were performed online and collected data were weighted by age, race/ethnicity, gender, education, and geographic region, employing the Census Bureau's American Community Survey to indicate flawlessly the demographic composition of the United States. The effect of weighting is considered by sampling errors and test of statistical relevance. We harnessed stratified sampling methods and weights were moderated not to go beyond 3. At the 95% confidence level, average margins of error are +/-2%. Percentage points are rounded to the nearest whole number for tabulation purposes. We assessed the precision of the online polls by adopting a Bayesian credibility interval, and deployed confirmatory factor analysis to assess the soundness of measurement tools and an Internet-based survey software program for the delivery and gathering of responses.

Data and materials availability

All displayed research has been published and displayed data is available from the specified sources.

REFERENCES

- Aboelmaged, M.; Hashem, G. (2019). Absorptive capacity and green innovation adoption in SMEs: The mediating effects of sustainable organisational capabilities. *Journal of Cleaner Production*, 220, 853–863. https://doi.org/10.1016/j.jclepro.2019.02.150.
- Adams, C. (2020). "Smart Sustainable Urban Mobility Behaviors: Public Attitudes and Adoption Intentions Concerning Self-Driving Cars," *Contemporary Readings in Law and Social Justice* 12(1): 16–22. doi:10.22381/CRLSJ12120202

- Bell, E. (2020). "Cognitive Automation, Business Process Optimization, and Sustainable Industrial Value Creation in Artificial Intelligence Data-driven Internet of Things Systems," *Journal of Self-Governance and Management Economics* 8(3): 9–15. doi:10.22381/JSME8320201
- Bıçakcıoğlu, N.; Theoharakis, V.; Tanyeri, M. (2019). Green business strategy and export performance: An examination of boundary conditions from an emerging economy. *International Marketing Review*, 37, 56–75. https://doi.org/10.1108/IMR-11-2018-0317
- Costea, E.-A. (2020). "Machine Learning-based Natural Language Processing Algorithms and Electronic Health Records Data," *Linguistic and Philosophical Investigations* 19: 93–99. doi: 10.22381/LPI1920205
- Davidson, R. (2020). "Cyber-Physical Production Networks, Artificial Intelligence-based Decision-Making Algorithms, and Big Data-driven Innovation in Industry 4.0-based Manufacturing Systems," *Economics, Management, and Financial Markets* 15(3): 16–22. doi:10.22381/EMFM15320202
- Davis, R., Vochozka, M., Vrbka, J., and Neguriță, O. (2020). "Industrial Artificial Intelligence, Smart Connected Sensors, and Big Data-driven Decision-Making Processes in Internet of Things-based Real-Time Production Logistics," *Economics, Management, and Financial Markets* 15(3): 9–15. doi:10.22381/EMFM15320201
- Eysenck, G. (2020). "Sensor-based Big Data Applications and Computationally Networked Urbanism in Smart Energy Management Systems," *Geopolitics, History, and International Relations* 12(1): 52–58. doi:10.22381/GHIR12120203
- Graessley, S., Suler, P., Kliestik, T., and Kicova, E. (2019). "Industrial Big Data Analytics for Cognitive Internet of Things: Wireless Sensor Networks, Smart Computing Algorithms, and Machine Learning Techniques," *Analysis and Metaphysics* 18: 23–29. doi:10.22381/AM1820193
- Han, M.; Lin, H.; Wang, J.; Wang, Y.; Jiang, W. (2019). Turning corporate environmental ethics into firm performance: The role of green marketing programs. *Bus Strat Env.*, 28, 929–938. https://doi.org/10.1002/bse.2290
- Harrower, K. (2019). "Algorithmic Decision-Making in Organizations: Network Data Mining, Measuring and Monitoring Work Performance, and Managerial Control," *Psychosociological Issues in Human Resource Management* 7(2): 7–12. doi:10.22381/PIHRM7220191
- Harrower, K. (2020). "Networked and Integrated Urban Technologies in Sustainable Smart Energy Systems," *Geopolitics, History, and International Relations* 12(1): 45–51. doi:10.22381/GHIR12120202
- Ionescu, D. (2020). "Deep Learning Algorithms and Big Health Care Data in Clinical Natural Language Processing," *Linguistic and Philosophical Investigations* 19: 86–92. doi: 10.22381/LPI1920204
- Ionescu, L. (2020). "Digital Data Aggregation, Analysis, and Infrastructures in FinTech Operations," *Review of Contemporary Philosophy* 19: 92–98. doi:10.22381/RCP19202010
- Johnson, A. (2020). "Medical Wearables and Biosensor Technologies as Tools of Internet of Thingsbased Health Monitoring Systems," *American Journal of Medical Research* 7(1): 7–13. doi:10.22381/AJMR7120201
- Keane, J. (2020). "Can Self-Driving Cars Lead to Sustainability? Autonomous Smart Sensors, Perception and Planning Algorithms, and Data Processing Efficiency," *Contemporary Readings in Law and Social Justice* 12(1): 9–15. doi:10.22381/CRLSJ12120201
- Li, G.; Wang, X.; Su, S.; Su, Y. (2019). How green technological innovation ability influences enterprise competitiveness. *Technology in Society*, 59, 101136. https://doi.org/10.1016/j.techsoc.2019.04.012.
- Lima Silva Borsatto, J.M.; Bartocci Liboni Amui, L. (2019). Green innovation: Unfolding the relation with environmental regulations and competitiveness. *Resources, Conservation and Recycling*, 149, 445–454. https://doi.org/10.1016/j.resconrec.2019.06.005.

- Lin, J.; Lobo, A.; Leckie, C. (2019). The influence of green brand innovativeness and value perception on brand loyalty: the moderating role of green knowledge. *Journal of Strategic Marketing*, 27, 81– 95, DOI: 10.1080/0965254X.2017.1384044
- Mircica, N. (2020). "Restoring Public Trust in Digital Platform Operations: Machine Learning Algorithmic Structuring of Social Media Content," *Review of Contemporary Philosophy* 19: 85– 91. doi:10.22381/RCP1920209
- Möbius, P.; Althammer, W. (2020). Sustainable competitiveness: a spatial econometric analysis of European regions. *Journal of Environmental Planning and Management*, 63, 453–480. DOI: 10.1080/09640568.2019.1593005
- Peters, E., Kliestik, T., Musa, H., and Durana, P. (2020). "Product Decision-Making Information Systems, Real-Time Big Data Analytics, and Deep Learning-enabled Smart Process Planning in Sustainable Industry 4.0," *Journal of Self-Governance and Management Economics* 8(3): 16–22. doi:10.22381/JSME8320202
- Popescu Ljungholm, D. (2019). "Regulating Government and Private Use of Unmanned Aerial Vehicles: Drone Policymaking, Law Enforcement Deployment, and Privacy Concerns," *Analysis* and Metaphysics 18: 16–22. doi:10.22381/AM1820192
- Semprebon, E.; Mantovani, D.; Demczuk, R.; Souto Maior, C.; Vilasanti, V. (2019). Green consumption: a network analysis in marketing. *Marketing Intelligence & Planning*, 37, 18–32. https://doi.org/10.1108/MIP-12-2017-0352
- Tisdell, C., Ahmad, S., Agha, N., Steen, J., and Verreynne, M.-L. (2020). "Microfinance for Wives: Fresh Insights Obtained from a Study of Poor Rural Women in Pakistan," *Journal of Research in Gender Studies* 10(1): 9–37. doi:10.22381/JRGS10120201
- Turnbull, B., Graham, M., and Taket, A. (2020). "Hierarchical Femininities and Masculinities in Australia Based on Parenting and Employment: A Multidimensional, Multilevel, Relational and Intersectional Perspective," *Journal of Research in Gender Studies* 10(2): 9–62. doi:10.22381/JRGS10220201
- Wang, C. (2019). How organizational green culture influences green performance and competitive advantage: The mediating role of green innovation. *Journal of Manufacturing Technology Management*, 30, 666–683. https://doi.org/10.1108/JMTM-09-2018-0314
- Williams, P. (2020). "Medical Big Data, Body Sensor Networks, and Online Patient Engagement in Artificial Intelligence-enabled Healthcare Delivery," *American Journal of Medical Research* 7(1): 14–20. doi:10.22381/AJMR7120202
- Wingard, D. (2019). "Data-driven Automated Decision-Making in Assessing Employee Performance and Productivity: Designing and Implementing Workforce Metrics and Analytics," *Psychosociological Issues in Human Resource Management* 7(2): 13–18. doi:10.22381/PIHRM7220192

Wong, C.W.Y.; Lai, K.-h.; Pang, Y.; Lee, H.S.Y.; Cheng, T.C.E. (2019). Sourcing green makes green: Evidence from the BRICs. *Industrial Marketing Management*. https://doi.org/10.1016/j.indmarman.2019.03.016.