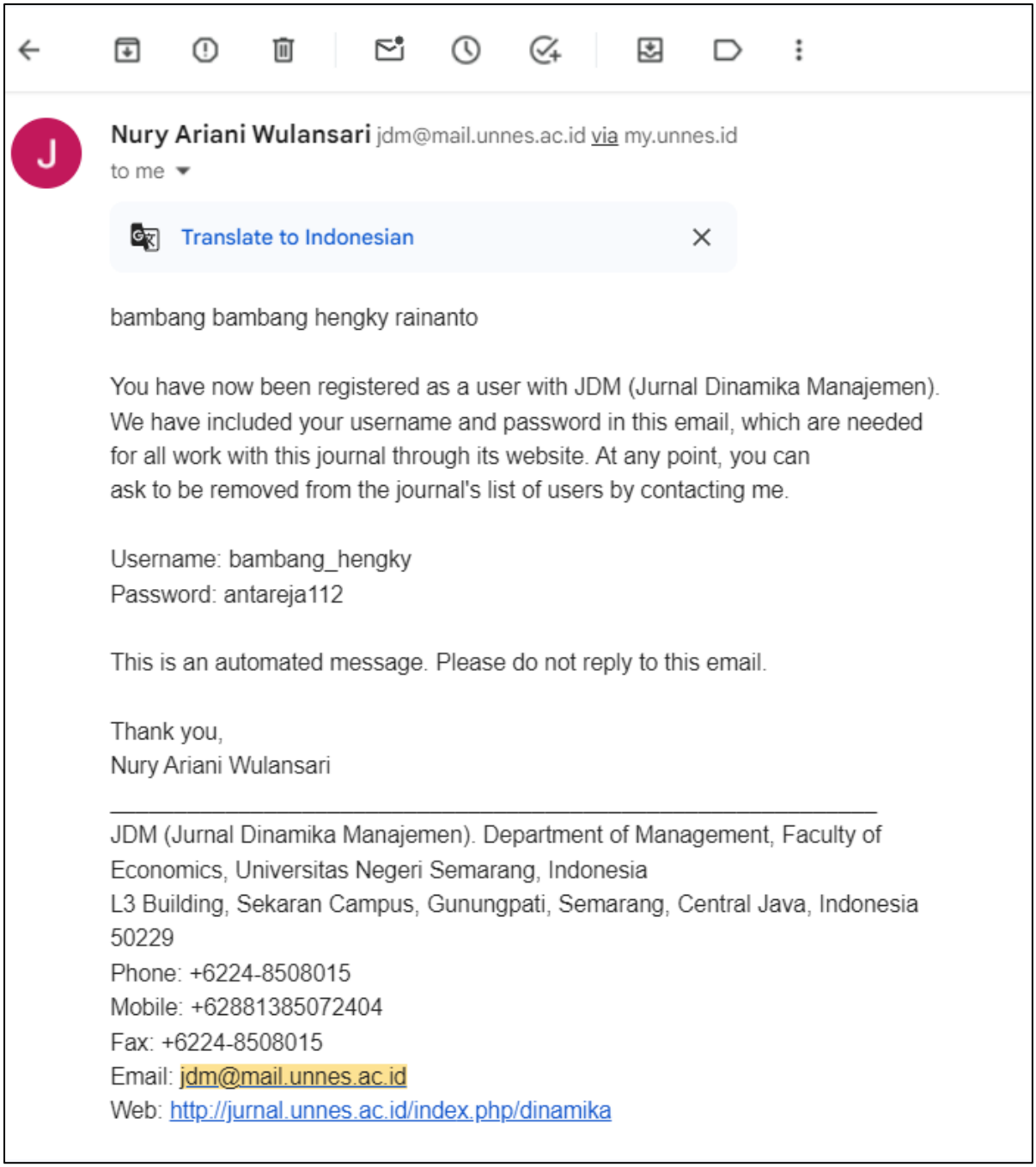


Nury Ariani Wulansari jdm@mail.unnes.ac.id via my.unnes.id
to me

Translate to Indonesian

bambang bambang hengky rainanto

You have now been registered as a user with JDM (Jurnal Dinamika Manajemen). We have included your username and password in this email, which are needed for all work with this journal through its website. At any point, you can ask to be removed from the journal's list of users by contacting me.

Username: bambang_hengky
Password: antareja112

This is an automated message. Please do not reply to this email.

Thank you,
Nury Ariani Wulansari

JDM (Jurnal Dinamika Manajemen). Department of Management, Faculty of Economics, Universitas Negeri Semarang, Indonesia
L3 Building, Sekaran Campus, Gunungpati, Semarang, Central Java, Indonesia 50229
Phone: +6224-8508015
Mobile: +62881385072404
Fax: +6224-8508015
Email: jdm@mail.unnes.ac.id
Web: http://jurnal.unnes.ac.id/index.php/dinamika

[JDM] Submission Acknowledgement

External Inbox ×

Nury Ariani Wulansari jdm@mail.unnes.ac.id via my.unnes.id
to me

Translate to Indonesian ×

bambang bambang hengky rainanto:

Thank you for submitting the manuscript, "Achieving Sustainable Performance in the Hospitality Industry based on Environmental Management, Pro-Environmental Behavior and Green Marketing Mix 7P" to JDM (Jurnal Dinamika Manajemen). With the online journal management system that we are using, you will be able to track its progress through the editorial process by logging in to the journal web site:

Manuscript URL:
https://journal.unnes.ac.id/nju/index.php/jdm/author/submission/42972
Username: bambang_hengky

If you have any questions, please contact me. Thank you for considering this journal as a venue for your work.

Nury Ariani Wulansari
JDM (Jurnal Dinamika Manajemen)

JDM (Jurnal Dinamika Manajemen). Department of Management, Faculty of Economics, Universitas Negeri Semarang, Indonesia
L3 Building, Sekaran Campus, Gunungpati, Semarang, Central Java, Indonesia 50229
Phone: +6224-8508015
Mobile: +62881385072404
Fax: +6224-8508015
Email: jdm@mail.unnes.ac.id
Web: http://jurnal.unnes.ac.id/index.php/dinamika

[JDM] Submission Acknowledgement

External Inbox ×

Nury Ariani Wulansari jdm@mail.unnes.ac.id via my.unnes.id
to me

Translate to Indonesian ×

bambang bambang hengky rainanto:

Thank you for submitting the manuscript, "Achieving Sustainable Performance in the Hospitality Industry based on Environmental Management, Pro-Environmental Behavior and Green Marketing Mix 7P" to JDM (Jurnal Dinamika Manajemen). With the online journal management system that we are using, you will be able to track its progress through the editorial process by logging in to the journal web site:

Manuscript URL:
https://journal.unnes.ac.id/nju/index.php/jdm/author/submission/42998
Username: bambang_hengky

If you have any questions, please contact me. Thank you for considering this journal as a venue for your work.

Nury Ariani Wulansari
JDM (Jurnal Dinamika Manajemen)

JDM (Jurnal Dinamika Manajemen). Department of Management, Faculty of Economics, Universitas Negeri Semarang, Indonesia
L3 Building, Sekaran Campus, Gunungpati, Semarang, Central Java, Indonesia 50229
Phone: +6224-8508015
Mobile: +62881385072404
Fax: +6224-8508015
Email: jdm@mail.unnes.ac.id
Web: http://jurnal.unnes.ac.id/index.php/dinamika

[JDM] Editor Decision

External Inbox ×

Euis Soliha esoliha@gmail.com via my.unnes.id
to me

Translate to Indonesian

bambang bambang hengky rainanto:

We have reached a decision regarding your submission to JDM (Jurnal Dinamika Manajemen), "Achieving Sustainable Performance in the Hospitality Industry based on Environmental Management, Pro-Environmental Behavior and Green Marketing Mix 7P".

Our decision is to: Revisions Required

Euis Soliha
[SCOPUS ID: 57211538859], Department of Management, Stikubank University, Indonesia
esoliha@gmail.com

JDM (Jurnal Dinamika Manajemen). Department of Management, Faculty of Economics, Universitas Negeri Semarang, Indonesia
L3 Building, Sekaran Campus, Gunungpati, Semarang, Central Java, Indonesia 50229
Phone: +6224-8508015
Mobile: +62881385072404
Fax: +6224-8508015
Email: jdm@mail.unnes.ac.id
Web: http://jurnal.unnes.ac.id/index.php/dinamika

Jurnal Dinamika Manajemen, Vol (No) 20…., xx-xx

http://jdm.unnes.c.id

Nationally Accredited based on the Decree of the Minister of Research, Technology, and Higher Education, Number 36a/E/KPT/2016

Achieving Sustainable Performance in the Hospitality Industry based on Environmental Management, Pro-Environmental Behavior, and Green Marketing Mix 7P

Bambang Hengky Rainanto[1], Abdul Talib Bon[2], Jonathan van Melle[3], Yuari Farradia[4] and Ani Mekaniwati[5]

[1]Department of Tourism, Faculty of Tourism and Informatics, Institut Bisnis dan Informatika Kesatuan, Bogor, Indonesia
[2]Department of Production and Operations Management, Universiti Tun Hussein Onn Malaysia, Parit Raja, Malaysia
[3]Avans School of Business and Entrepreneurship, Avans University of Applied Sciences, Hogeschoollaan, Breda, Netherlands
[4]Department of Management (Marketing), Faculty of Business, Economics and Social Development, University of Malaysia Terengganu, Kuala Nerus, Terengganu, Malaysia
[5]Department of Bioentrepreneur, Faculty of Business, Institut Bisnis dan Informatika Kesatuan, Bogor, Indonesia

Info Article

History Article:
Submitted
Revised
Accepted

Keywords:
Green Marketing Mix 7p'S, Environmental Management System, Pro-Environmental Behavior, Sustainable Performance

Abstract

Tourism undeniably can grow the economy of a country. However, if not managed properly, tourism also has negative impacts that must be watched out for. The object of this study was General Managers or Hotel Managers in East Java Province, Indonesia with 228 respondents. This research is important because the tourism sector is an effective sector to increase foreign exchange for the province of East Java. This study aims to develop a relationship model between the Environmental Management System (EMS), Pro-Environmental Behavior (PEB), and the Green Marketing Mix 7 P's (GMM 7P's) as a mediator to achieve Sustainable Industrial Performance (SIP) with 17 hypotheses. The research uses quantitative methods, data collection through surveys, and processing using SmartPLS 3. The study results found that 14 hypotheses were accepted, while three hypotheses were rejected. The results of the study show that EMS implementation has a significant relationship with economic and social performance but has no relationship with environmental performance. PEB directly has a significant relationship with environmental performance but not with economic and social. GMM has a significant relationship with the three SIP elements. GMM is also a suitable partial mediator for EMS and PEB to achieve SIP.

Mewujudkan Kinerja Berkelanjutan di Industri Perhotelan berdasarkan Manajemen Lingkungan, Perilaku dan Green Marketing Mix 7P

Abstrak

Sektor pariwisata tidak bisa dipungkiri dapat menumbuhkan perekonomian suatu negara. Namun apabila tidak dikelola secara benar, pariwisata juga memiliki dampak negatif yang harus diwaspadai. Penelitian ini berlokasi di Provinsi Jawa Timur, Indonesia dengan 228 responden dengan jabatan General Manager atau Manager Hotel. Penelitian ini penting karena sektor pariwisata merupakan sektor yang efektif untuk meningkatkan devisa bagi provinsi Jawa Timur. Penelitian ini bertujuan untuk mengembangkan model hubungan antara Sistem Manajemen Lingkungan (EMS), Perilaku Pro Lingkungan (PEB), dengan Bauran Pemasaran Hijau (GMM) sebagai mediator untuk mencapai Kinerja Industri Berkelanjutan (SIP) dengan 17 hipotesis. Penelitian menggunakan metode kuantitatif, pengambilan data melalui survei dan pengolahan menggunakan SmartPLS 3. Hasil penelitian menemukan 14 hipotesis diterima, sedangkan 3 hipotesis ditolak. Hasil penelitian menunjukkan bahwa penerapan EMS memiliki hubungan yang signifikan dengan kinerja ekonomi dan sosial tetapi tidak memiliki hubungan dengan kinerja lingkungan. PEB secara langsung memiliki hubungan yang signifikan dengan kinerja lingkungan tetapi tidak dengan ekonomi dan sosial. GMM memiliki hubungan yang signifikan dengan ketiga unsur SIP. GMM juga menjadi mediator parsial yang cocok untuk EMS dan PEB untuk mencapai SIP.

JEL Classification: Z31 Industry Studies

How to Cite: Author's name. (20…). Title of the article. *Jurnal Dinamika Manajemen, Vol*(No), xx-xx

Correspondence Address
Institutional address: IBIK Jl. Rangagading No.1, Bogor 16123
E-mail: bambang@ibik.ac.id

ISSN
2086-0668 (print)
2337-5434 (online)
DOI: xxxxxxxxxxxxx

INTRODUCTION

The very fast growth of the hospitality industry supports the tourism sector which has boosted the economy, but on the other hand, it can have an impact on the environment (Masa'deh et al., 2017). In several countries, the massive growth of tourism has had an environmental impact, for example in Spain there has been an increase in pollution, landfills, disruption of biodiversity, decreased environmental quality, and exploitation of water and water resources (Moliner *et al.*, 2019). This negative impact has also been studied in several other countries, such as Jordan (Masa'deh *et al.*, 2017), the Netherlands (Postma & Schmuecker, 2017), Malaysia, Singapore, and Thailand (Azam *et al.*, 2018), and Taiwan (Peng & Lee, 2019). In Indonesia, research on the negative effects of the hotel industry has been published (Lampung *et al*., 2020; Yuniati, 2021), and concluded the impact on disruption of the natural environment, built environment, and local culture.

Commented [L1]: 1.Please use reference manager, such as Mendeley, endnote or others.
2.Make sure your references between 2013-2023

The Environmental Management System (EMS) focuses on fulfilling commitments by organizations to several policies for environmental management. This commitment includes reducing negative environmental impacts from the organization's products, services, and activities (Rainanto *et al*., 2020).

Pro-Environmental Behavior (PEB) is human behavior that understands and implements principles aimed at protecting the environment. The application of Pro-Environmental Behavior (PEB) is voluntary for the tourism industry, especially the hospitality industry (Fatoki, 2019; Li & Wu, 2019).

Green Marketing Mix 7Ps (GMM 7Ps) is a strategy for fulfilling 7 basic attributes that will support marketing activities while upholding environmental protection. The hotel industry needs to implement the Green Marketing Mix 7P's strategy to realize sustainable tourism (Rainanto *et al.*, 2022b).

The hotel industry's business performance is considered successful and sustainability is realized from success in terms of the economy (business), preservation of the surrounding environment, and maintaining the socio-cultural conditions of the local community. Business continuity in the hospitality sector is not enough to be seen from the side of economic benefits, it is also necessary to look at it from the perspective of the surrounding environmental and social conditions (Pereira et al., 2021; Rainanto et al., 2022a; Sharpley, 2020).

Cities that have potential as tourist destinations tend to experience high growth in the number of hotels compared to other cities. This is because tourist destination cities are attractive economic potential for hospitality investors and tourist destinations. For some residents who "benefit" from their city becoming a tourist destination, this will be considered attractive, but for some other residents, this can be a problem (Rainanto, 2022). (Ilhami et al., 2020) stated that until 2019 there was a traffic jam in Batu City, which is located in East Java Province, on certain days due to the large number of tourist vehicles entering the city. This is supported by data from the Central Bureau of Statistics for the City of Batu in 2019 which stated that visitors to tourist attractions and souvenir tours in Batu City in 2019 totaled 6,047,460 tourists with a total of 1,354 hotels (BPS Kota Batu, 2020). The ratio of the population of Batu City to the number of tourists coming to the city in 2019 is that the population of Batu City is 0.02% of the number of tourists (BPS Kota Batu, 2020).

The number of tourists in Batu City, Malang City, and Malang Regency in East Java Province increased rapidly at weekends. The arrival of these tourists caused congestion on several roads there. The results of the research on the noise level conducted on Jalan WR Supratman which is one of the main roads in Malang City, East Java Province on Sunday is 81.2 dBA - 86.1 dBA, while on Monday it is 72.0 dBA - 79, 1dBA (N.J. Putra, H. Setyabudiarso, 2022). By the Decree of the Minister of State for the Environment No. 48 of 1996, Appendix 1 includes a table regarding Noise Level Standards according to area designation. The standard threshold values for Noise Level according to the regulations include Housing and Settlements (55 dbA); Trade and Services (70 dBA); Office Building (dbA); Green Open Space (50 dbA); Industrial (70 dbA); Government and Public Facilities (60 dBA); Recreation (70 dbA) (KepMen LH No.48, 1999). Meanwhile, the Noise Threshold Value (NAV) according to Kepmenaker No. per-51/MEN/1999, ACGIH, 2008 and SNI 16-7063-2004 is 85 dB (Menteri Tenaga Kerja Republik Indonesia, 1999). Another negative effect is that the water discharge becomes weak at certain times. According to the Indonesian Forum for the Environment (WALHI) of East Java Province, the water quality index in East Java from 2016 to 2020 has decreased and is of concern and has a very concerning status. The data is also following the Statistical Report on Water Quality, Air and Land Cover issued by the Ministry of Environment and Forestry, Directorate General of Pollution Control and Environmental Damage, which stated that the water quality of all major rivers in East Java Province was classified as heavily polluted from 2015 to 2020 (Kementerian Lingkungan Hidup dan Kehutanan, 2021). Based on the East Java Province Environmental Management Quality

Commented [L2]: Please do not forget the references

Commented [L3]: Need references

Commented [L4]: References

Commented [L5]: References

Commented [I6]: it needs to be stated what the number of declines is and from what number to how much

Index Report. WALHI (2020) notes that more than 800,000 hectares of forest in East Java have been damaged. Walhi (2021) stated that in East Java Province cumulatively based on BNPB records from 2013 to 2019 there have been 2676 hydrometeorological disasters.

In addition to the negative impacts of environmental conditions, there are also negative impacts from the economic sector, such as high property prices which combine because many migrants are interested in owning homes in tourist destinations. Massive property development has also reduced the area of paddy fields and open land in these tourist destinations. (Hengky & Kikvidze, 2021) reports that the area of land in Malang is getting narrower every year. This is due to the conversion of land into residential and industrial areas. Currently, the area of agricultural land in the city of Malang, especially for rice farming, is only 821 hectares out of 1,104 hectares. One of the impacts felt is the frequent occurrence of floods in several areas of Malang Metropolitan in recent years. If this negative impact is left unchecked, it will affect the comfort of the Malang Metropolitan City.

The World Tourism Organization (WTO) defines Sustainable Tourism as: "Tourism that takes into account its current and future economic, environmental, and social impacts, meeting the needs of consumers, the environment, industry, and local communities". The concept of sustainable tourism states that tourism development should not damage nature, the environment, or land, especially agricultural land (Guanabara *et al.*, 2013). UNWTO's conceptual definition of sustainable tourism must: (i) Make optimal use of environmental resources, which are a key element in tourism development, safeguarding important ecological processes and helping to preserve the natural heritage and biodiversity; (ii) Respect the socio-cultural authenticity of the host communities, preserve the cultural heritage and traditional values that they have built and live by, and contribute to intercultural understanding and tolerance; (iii) Ensure proper and long-term economic operations, provide socio-economic benefits that are distributed fairly to all stakeholders, including stable employment and income opportunities and social services for local communities, and contribute to poverty alleviation.

There are three sustainable performances for industrial companies along with details on their constituent parameters (Hourneaux *et al.*, 2018). The three sustainable performances include 1. Sustainable Environmental Performance, consisting of (a) Reduction of wastewater, (b) Reduction of emissions, and waste, (c) Reduction of costs for environmental aspects of products and services, (d) Environmental compliance, (e) Reduction costs for common environmental problems; 2. Sustainable Economic Performance, consisting of (a) Profit from operations, (b) Sales growth, (c) Return on equity, (d)Return on investment, (e) Cost per unit produced, (f) Net cash flow, (g) Market share, (h) On-time delivery, (i) Customer response time, (j) Number of warranty claims, (k) Number of customer complaints, (l) Customer satisfaction survey, (m) Material efficiency variations; 3. Sustainable Social Performance, consisting of (a) Social commitment, (b) Environmental preservation, (c) Increasing employee job satisfaction, (d) Training and education, and (e) Compliance with products and services.

The novelties of the research are measuring Sustainable Performance in the Hospitality Industry based on an Environmental Management System, Behavior that supports the environment, and the application of the Green Marketing Mix 7P as a mediator. The measurement of sustainable performance for the hotel industry is something new in research because what usually measures sustainable performance is done in the goods or manufacturing industries.

Commented [L7]: Need explanation why measuring sustainable performance is a novelty.

Hypothesis Development

Relationship between Two or More Variables

The hypothesis that forms the basis of this study is 17 relationships. The development of 17 hypotheses is based on a literature review of the dependent to independent variables, as well as the moderator variable which is the link between the dependent and independent variables. 11 hypotheses are directly related, and 6 hypotheses that are indirectly related using the Green

Commented [L8]: Please elaborate how the author develop 17 hypothesis. No need to be very detail, but still need explanation

Marketing Mix 7P (GMM 7's) mediation. The research hypothesis in this study is in Figure 1 below.

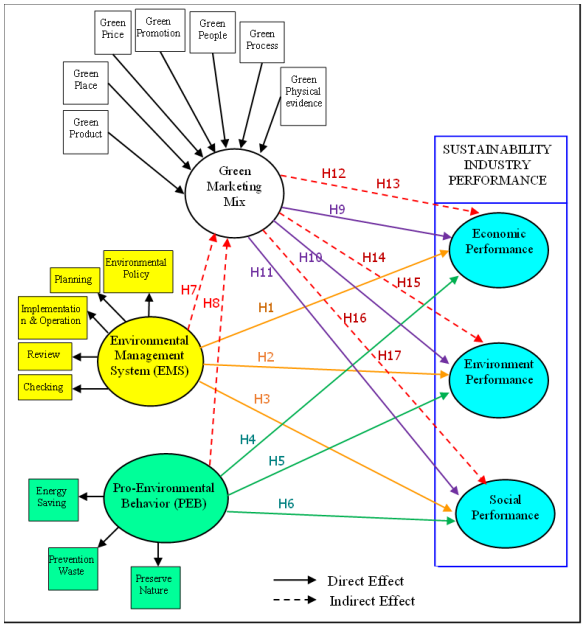


Figure 1. Research Hypothesis

The 17 hypotheses in this study are proposed in detail as follows:
H1: The EMS has a significant and direct relationship to sustainable economic performance
H2: The EMS has a significant and direct relationship to environmental performance
H3: The EMS has a significant and direct relationship to social performance
H4: The PEB has a significant and direct relationship to economic sustainability
H5: The PEB has a significant and direct relationship to environmental sustainability
H6: The PEB has a significant and direct relationship to social sustainability
H7: The EMS directly has a significant relationship on GMM
H8: The PEB directly has a significant relationship on GMM
H9: The GMM has a significant and direct relationship to economic sustainability
H10: The GMM has a significant and direct relationship to environmental sustainability
H11: The GMM has a significant and direct relationship to social sustainability
H12: The GMM mediates between EMS and economic sustainable performance
H13: The GMM mediates between PEB and economic sustainable performance
H14: The GMM mediates between EMS and environmentally sustainable performance
H15: The GMM mediates between PEB and environmentally sustainable performance
H16: The GMM mediates between EMS and social sustainable performance
H17: The GMM mediates between PEB and social sustainability

METHOD

This research method was chosen quantitatively by collecting primary data as the main source of the data being analyzed. A total of 228 respondents with the position of a hotel manager or general manager are the basis for calculating the analysis.

This study uses a simple sampling method because the selection of the sample is completely random and member of the hotel industry population has an equal chance of being selected to be part of the sample. Furthermore, the use of a purposive sampling method was because the respondents selected as questionnaire fillers are hotel employees with the position of General Manager or Manager. The reason for selecting respondents at the Manager or General Manager level is because those two positions understand and are competent with matters relating to policies carried out by hotel management. These policies, among others, relate to EMS, PEB, and GMM toward SIP.

Commented [L9]: Please explain why the author choose GM as the respondent.

Research analysis based on research objectives: (1) Research analysis to find out the direct relationship between the X and Mediator variables with the Sustainable Industry Performance variable using Smart-PLS 3; (2) Research analysis to determine the recommended relationship model between variable X and Mediator with the Sustainable Industry Performance variable using Smart-PLS 3.

RESULT AND DISCUSSION

Commented [L10]: 1.The author needs to elaborate more detail the discussion. It is not enough just to explain a statistical result. The core of the research is the discussion of each hypotheses. 2.How about the novelty? Which hypotheses that will answer the novelty? The author needs to explain specifically the novelty.

The results of the analysis using Smart PLS 3 through several stages of the process. The stages of the process include Measurement of Construct Variable, Model validation, Assessment of measurement model, Measurement validity of first-order construct – reflective model, Loading Factor, Convergent Validity – Average Variance Extracted (AVE), Convergent Validity – Composite Reliability (CR), Cronbach's Alpha (α), Cross Loading, Fornell-Larcker Criterion, Heterotrait-monotrait (HTMT), Measurement Model Result – Outer model, Validity and Reliability of Second-Order Construct – Two-Stage Approach, Two stage approach (reflective-formative measurement model), Structural model/inner model measurement, Collinearity statistics (VIF) – Outer & Inner VIF, Hypotheses Testing (Path Coefficient), Coefficient of Determinant (R2), Effect Size (f2), Predictive Relevance (Q2), Hypothesis Evaluation, Testing the mediating roles, and finally the Recommended Model.

Fornell & Larcker (1981) states that the Convergent Validity of Cronbach's Alpha and Composite Reliability (CR) must be more than 0.70, while the Average Variance Extracted (AVE) value must pass 0.50. Based on the critical threshold value above, a summary of the measurement validity is shown in Table 1.

Table 1. Reliability Value of Reflective Construct

Reflective Construct	Items	Loading Factor (> 0.7)	AVE (> 0.5)	Composite Reliability (>0.7)	Cronbach's Alpha (α ≥0.70)
EMS					
Environmental Policy			0.760	0.927	0.894
	EnvPolicy1	0.890			
	EnvPolicy 2	0.905			
	EnvPolicy 3	0.882			
	EnvPolicy 4	0.807			
Planning			0.781	0.934	0.906
	Plan5	0.861			
	Plan6	0.896			
	Plan7	0.905			
	Plan8	0.872			
Implementation and Operation			0.794	0.939	0.912
	ImlOpr9	0.896			
	ImlOpr10	0.938			
	ImlOpr11	0.932			
	ImlOpr12	0.790			
Checking and Corrective Action			0.961	0.980	0.959
	CheckCor13	0.980			

	CheckCor14	0.980			
Management Review			0.821	0.948	0.927
	MgtRev15	0.871			
	MgtRev16	0.908			
	MgtRev17	0.916			
	MgtRev18	0.929			
PEB					
Save Energy			0.844	0.942	0.907
	EnSav19	0.936			
	EnSav20	0.955			
	EnSav21	0.863			
Waste Prevention			0.695	0.872	0.781
	PrevWaste22	0.861			
	PrevWaste23	0.860			
	PrevWaste24	0.777			
Nature Preservation			0.803	0.942	0.917
	PresNat25	0.828			
	PresNat26	0.911			
	PresNat27	0.922			
	PresNat28	0.919			
Environmental Performance			0.592	0.853	0.894
	EnvSust57	0.771			
	EnvSust58	0.787			
	EnvSust59	0.792			
	EnvSust60	0.727			
Economics Performance			0.774	0.954	0.942
	EconSust61	0.867			
	EconSust62	0.843			
	EconSust63	0.910			
	EconSust64	0.908			
	EconSust65	0.897			
	EconSust66	0.853			
Social Performance			0.789	0.949	0.933
	SosSust67	0.847			
	SosSust68	0.891			
	SosSust69	0.935			
	SosSust70	0.923			
	SosSust71	0.842			

Measurement of the second-order construct with reflective and formative measurement indicators needs to be taken into account. A two-stage approach was carried out before analyzing the structural model and the interaction between the mediator and moderator. A summary of all the results of the second-order PLS algorithm (Reflective - Formative) is presented in Table 2.

Table 2. Measurement of Two-Stage Process for Second-Order (Reflective – Formative)

Construct	Item	Loading Factor	Ave	Composite Reliability	Weight	VIF	T-Values Weights	P Value Weight
Reflective Model Second Order								
EMS			0.739	0.934				
	Environ. Policy	0.880						
	Planning	0.908						
	Implement & Operation	0,911						
	Check & Corrective Act.	0.735						
	Management Review	0.873						
PEB			0.807	0.926				
	Save Energy	0.877						
	Waste Prevention	0.915						

	Nature Preservation	0.902						
Environ. Sustainable Perform			0.592	0.853				
	Environ. Sustain57	0.773						
	Environ. Sustain58	0.783						
	Environ. Sustain59	0.792						
	Environ. Sustain60	0.727						
Economics Sustainable Perform			0.774	0.954				
	Economics Sustain61	0.869						
	Economics Sustain62	0.845						
	Economics Sustain63	0.910						
	Economics Sustain64	0.906						
	Economics Sustain65	0,895						
	Economics Sustain66	0.854						
Social Sustainable Perform			0.789	0.949				
	Social Sustainable67	0.845						
	Social Sustainable68	0.891						
	Social Sustainable69	0.936						
	Social Sustainable70	0.924						
	Social Sustainable71	0.842						
Formative Model Second Order								
GMM								
	Green Product				0.151	2.347	3.331	0.001
	Green Place				**0.065**	4.227	1.117	**0.264**
	Green Price				0.169	3.046	3.337	0.001
	Green Promotion				**0.030**	2.984	0.674	**0.500**
	Green Process				0.213	2.200	4.817	0.000
	Green People				0.393	1.865	9.632	0.000
	Green Physical Evidence				0.191	4.161	3.027	0.002

Two variables are considered Moderate, namely Environmental Policy and Checking and Correction Actions. The combined effect of the first order explaining the variance in Environmental Policy, Planning, Implementation & Operation, Inspection & Corrective Action, Management Review, Saving Energy, Waste Prevention, and Nature Preservation is accepted. The PLS algorithm for the results of R2 is presented in Figure 2 about First Order Construct below.

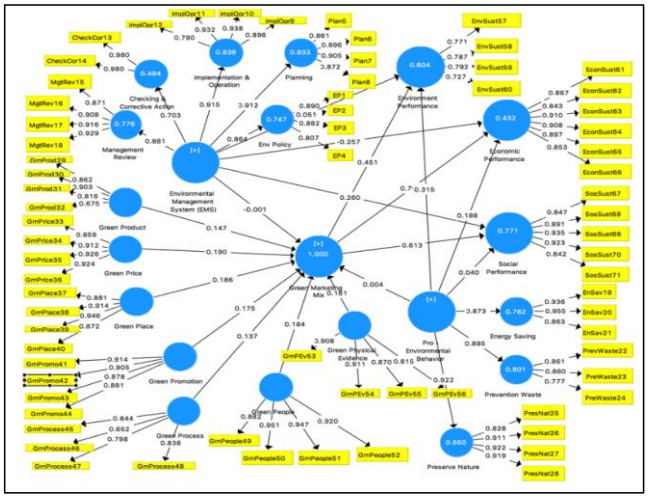


Figure 2. First Order Construct

The second-order construct model in this research is reflective-formative. The higher-order constructs are for the mediator variable. Due to the formative nature of the mediator constructs, the recommended measurement approach for this type of HCM model is the two-stage PLS. The two-stage PLS approach takes advantage of the advantages of PLS path modeling to explicitly measure the values of latent variables, also be implemented in models with interaction effects between all constructs as measured by reflective indicators. Figure 2 below shows the results from the Second Order Construct.

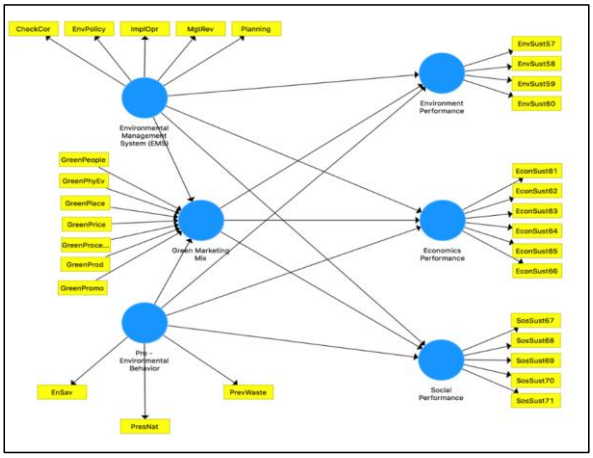


Figure 3. Second Order Construct

The results of the hypothesis for a direct relationship are obtained from several criteria such as t-value, p-value, and f^2. The relationship between variables in a positive (supported) result is based on a t-value above 1.645 (Hair *et al.*, 2017); then the P-value must be less than 0.10 (Hair *et al.*, 2017); and f^2 must be greater than 0.02. The details of the hypotheses are presented in Table 3 and Table 4.

Table 3. Hypothesis Testing (Direct Effect Result Test)

Hypothesis		Original Sample (O) /β	Std Dev/ Stand Error	T stat t-value (>1.645)	p-value (<0.10)	R^2	f^2 (≥ 0.02)	Q^2 (> 0)	Decision
H1	EMS → Economy SP	-0.262	0.103	2.545	0.005	0.421	0.028	0.295	Supported
H2	EMS → Environ. SP	-0.018	0.098	**0.187**	**0.426**	0.625	**0.000**	0.334	**Un-Support**
H3	EMS → Social SP	0.250	0.075	3.330	0.000	0.763	0.062	0.561	Supported
H4	PEB → Economy SP	0.125	0.109	**1.149**	**0.125**	0.421	**0.006**	0.295	**Un-Support**
H5	PEB → Environ. SP	0.202	0.102	1.976	0.024	0.625	0.025	0.334	Supported
H6	PEB → Social SP	-0.029	0.070	**0.417**	**0.338**	0.763	**0.001**	0.561	**Un-Support**
H7	EMS → GMM 7P's	0.465	0.062	7.503	0.000	0.814	0.373	0.486	Supported
H8	PEB → GMM 7P's	0.480	0.060	8.050	0.000	0.814	0.398	0.486	Supported
H9	GMM → Economy SP	0.753	0.113	6.641	0.000	0.421	0.182	0.486	Supported
H10	GMM → Environ. SP	0.626	0.100	6.284	0.000	0.625	0.194	0.486	Supported
H11	GMM → Social SP	0.675	0.072	9.340	0.000	0.763	0.357	0.486	Supported

Table 4. Hypothesis Testing on Mediating

Hypothesis		Original Sample (O)/β	Std Dev/ Stand Error	T statistic t-value (> 1.96)	p-value	Confidence Interval (BC)		Decision
						2.5%	97.5%	
H12	EMS → GMM → Economy SP	0.350	0.075	4.650	0.000	0.215	0.503	Supported
H13	EMS → GMM → Environ. SP	0.291	0.061	4.798	0.000	0.181	0.417	Supported
H14	EMS → GMM → Social SP	0.314	0.052	6.057	0.000	0.220	0.422	Supported
H15	PEB → GMM → Economy SP	0.362	0.070	5.183	0.000	0.230	0.501	Supported
H16	PEB → GMM → Environ. SP	0.300	0.064	4.730	0.000	0.177	0.428	Supported
H17	PEB → GMM → Social SP	0.324	0.057	5.662	0.000	0.226	0.448	Supported

After the results of the analysis with several previous stages, it was concluded that of the 17 initial hypotheses, it was proven that 14 hypotheses were accepted, while 3 hypotheses were rejected. Easily, the final results of the study table be seen in Figure 3 below.

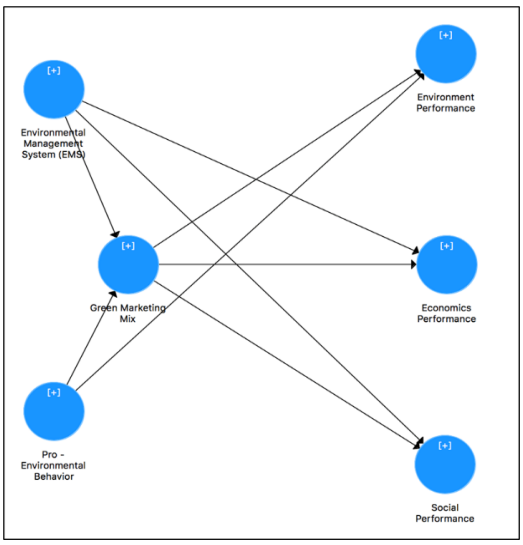


Figure 3. The Results of Full Model Analysis

The results of the research based on the analysis result model are that the Environmental Management System (EMS) variable supports Sustainable Economy, Social Sustainable, and Green Marketing Mix 7P. The Pro-Environmental Behavior (PEB) variable supports the Sustainable Environment and Green Marketing Mix 7P. The 7P Green Marketing Mix Variables are also three sustainable variables namely Economic, Environmental, and Social. The 7P Green Marketing Mix function as a mediator between EMS and PEB in Sustainable Industrial Performance is also supported. The novelty of this research for the hospitality industry is the 7P Green Marketing Mix, both directly and as a moderator for EMS and PEB will provide positive benefits for the sustainability of the hospitality businesses

The hypotheses that support the novelty of the results of this study include H12 (EMS - GMM - Economic Sustainable Performance); H13 (PEB - GMM - Economic Sustainable Performance); H14 (EMS - GMM - Environmental Sustainable Performance); H15 (PEB - GMM

- Environmental Sustainable Performance); H16 (EMS - GMM - Social Sustainable Performance); and H17 (PEB - GMM - Social Sustainable Performance).

The benefits of this research can be used by several parties such as Hotel owners, Managers, Regional Governments, Central Government, and Hospitality Associations, all of that in the framework of creating sustainable tourism.

CONCLUSION AND RECOMMENDATION

There are seventeen hypotheses linking the Environmental Management System (EMS), Pro-Environmental Behavior (PEB) for Sustainable Industry Performance (SIP) with the Green Marketing Mix 7P's Mediation (GMM 7P's). Fourteen hypotheses are accepted and three hypotheses are rejected. Fourteen hypotheses were accepted, consisting of: H1, H3, H5, H7, H8, H9, H10, H11, H12, H13, H14, H15, H16, and H17. While the three hypotheses are rejected, namely: H2, H4, and H6. There are 11 hypotheses related to the direct interaction hypothesis, eight hypotheses are accepted, while three are not accepted. The conclusion from the research results is that the Environmental Management System (EMS) supports Sustainable Economy, Social Sustainable, and Green Marketing Mix 7P. For Pro-Environmental Behavior (PEB) supports Sustainable Environment and Green Marketing Mix 7P. Then the Green Marketing Mix 7P supports the three sustainable variables, namely Economic, Environmental, and Social. The Green Marketing Mix 7P function as a mediator between EMS and PEB on Sustainable Industry Performance is also supported. The benefit of this research for the hotel industry is that implementing EMS and PEB through the 7P Green Marketing Mix will provide positive benefits for the sustainability of the hotel business. The limitation of this research is the scope of the research location which is only in East Java. On the other hand, there is the Covid-19 pandemic which has forced several hotels to not operate. The recommendation for further research is to expand the scope of research locations to other provinces so that it can become a policy decision in managing the hospitality industry in the Republic of Indonesia.

Commented [L11]: It is not enough. The author need to elaborate more detail and what is the limitation and recommendation for future research.

ACKNOWLEDGEMENT

I would like to thank my three research friends, including Prof. Dr. Abdul Talib Bon from the University of Tun Hussein Onn Malaysia, also to Dr. Jonathan van Melle from Avans University of Applied Sciences, Netherlands, and Dr. Yuari Farradia from the Faculty of Business, Economics and Social Development, University of Malaysia Terengganu, Malaysia. Also, thanks to my institution at the Institut Bisnis dan Informatika Kesatuan, especially the Department of Tourism which has provided support for the research and writing of this paper.

REFERENCES

Commented [L12]: The references really not sufficient. Need minimum 30 references from good reputable journals

Azam, M., Alam, M. M., & Haroon Hafeez, M. (2018). Effect of tourism on environmental pollution: Further evidence from Malaysia, Singapore and Thailand. *Journal of Cleaner Production*, *190*, 330–338.

BPS Kota Batu. (2020). Kota Batu Dalam Angka 2020. *Badan Pusat Statistik Kota Batu*, 250–255.

Fatoki, O. (2019). Hotel employees' pro-

environmental behavior: Effect of leadership behavior, institutional support, and workplace spirituality. *Sustainability (Switzerland)*, *11*(15), 1-15. page number?

World Tourism Organization. (2013). *Sustainable Tourism for Development Guidebook - Enhancing capacities for Sustainable Tourism for development in developing countries.* https://www.e-unwto.org/doi/book/10.18111/9789284415496 title of the journal? journal's edition and page numbers?

Hengky, S. H., & Kikvidze, Z. (2021). Sustainable Coastal Tourism in Tanjung Kelayang, Indonesia. *Tourism Planning and Development*, *18*(3), 365–370.

Hourneaux, F., Gabriel, M. L. da S., & Gallardo-Vázquez, D. A. (2018). Triple bottom line and sustainable performance measurement in industrial companies. *Revista de Gestao*, *25*(4), 413–429.

Ilhami, M. R., Anugrah Santaufanny, F. F., & Sinambella, R. (2020). Efektivitas Aver Viewer dalam Memantau Kemacetan Lalu Lintas di Kota Batu. *Jurnal Publisitas*, *7*(1), 11–22.

Kementerian Lingkungan Hidup dan Kehutanan. (2020, Desember 31). *Statistik Kualitas Air, Udara, dan Tutupan Lahan 2020*. https://ppkl.menlhk.go.id/website/filebox/1033/210930123917BUKU%20STATISTIK%20PPKL%202020%20 please adjust to the format for internet sources

KepMen LH No.48. (1999). Keputusan Menteri Negara Lingkungan Hidup No. 48 Tahun 1996 Tentang : Baku Tingkat Kebisingan. 48.

Lampung, U. B., Rama, A., Barusman, P., Virgawenda, T. M. B., & Arwis, Y. A. (2020). Factors that Effect the Level of Consumers Loyalty for Budget Hotel in Indonesia. *2932 Talent Development & Excellence*, *12*(1), 2932–2942.

Li, Q. C., & Wu, M. Y. (2019). Rationality or morality? A comparative study of pro-environmental intentions of local and nonlocal visitors in nature-based destinations. *Journal of Destination Marketing and Management*, *11*(July 2018), 130–139.

Masa'deh, R., Nasseef, M. A., Suliman, M., & Albawab, M. (2017). The Effect of Hotel Development on Sustainable Tourism Development. *International Journal of Business Administration*, *8*(4), 16.

Menteri Tenaga Kerja Republik Indonesia. (1999). Nilai Ambang Batas Faktor Fisika Di Tempat Kerja Menteri Tenaga Kerja Republik Indonesia. *Kep.51/Men/1999*, 15–20.

Moliner, M. Á., Monferrer, D., Estrada, M., & Rodríguez, R. M. (2019). Environmental sustainability and the hospitality customer experience: A study in tourist accommodation. *Sustainability (Switzerland)*, *11*(19), 1-15. page number?

N.J. Putra, H. Setyabudiarso, H. (2022). Kota Malang Analysis Of Noise Levels Of W .R. *Jurnal Enviro Prodi Teknik Lingkungan – ITN Malang*, *10(2)*,1-8. please adjust to the APA format

Peng, X., & Lee, S. (2019). Self-discipline or self-interest? The antecedents of hotel employees' pro-environmental behaviours. *Journal of Sustainable Tourism*, *27*(9), 1457–1476.

Pereira, V., Silva, G. M., & Dias, Á. (2021). Sustainability practices in hospitality: Case study of a luxury hotel in Arrábida Natural Park. *Sustainability (Switzerland)*, *13*(6), 1–21.

Postma, A., & Schmuecker, D. (2017). Understanding and overcoming negative impacts of tourism in city destinations: conceptual model and strategic framework. *Journal of Tourism Futures*, *3*(2), 144–156.

Rainanto, B. H. (2022). *Environmental Management System and Pro-Environmental Behavior With Green*

Marketing Mix as a Mediator for Sustainable Industry Performance in Hotel Industry in East Jawa Province, Indonesia. (Disertation: Universiti Tun Hussein Onn Malaysia). http://eprints.uthm.edu.my/8407/ please adjust to the APA format

Rainanto, B. H., Bon, A. T., & Purba, J. H. V. (2020). Environmental management system (EMS) and green marketing mix (7Ps) for hotel sustainable industrial performance: A conceptual model. *International Journal of Advanced Science and Technology*, *29*(7 Special), 3724–3732.

Rainanto, B. H., Bon, A. T., & Purba, J. H. V. (2022a). Developing the Conceptual Model of Sustainable Industrial Performance in the Hospitality Industry. *International Journal of Global Optimization and Its Application*, *1*(2), 80–89.

Rainanto, B. H., Bon, A. T., & Purba, J. H. V. (2022b). Environmental Management System and Pro-Environmental Behavior in Realizing Sustainable Industry Performance: Mediating Role of Green Marketing Management. *International Journal of Global Optimization and Its Application*, *1*(1), 12–21.

Sharpley, R. (2020). Tourism, sustainable development and the theoretical divide: 20 years on. *Journal of Sustainable Tourism*, *28*(11), 1932–1946.

Yuniati, N. (2021). Green Hotel Concept and Practices in Indonesia. *E-Journal of Tourism*, *8*(2), 184.

UNWTO World Tourism Organization. Actual Trends vs Tourist 2030 Forecast-World. https://www.moodiedavittreport.com/global-tourist-arrivals-leap-by-6-in-2018-reports-unwto/. 14 April 2019

UNWTO World Tourism Organization. Sustainable Development of Tourism. dt.unwto.org/content/about-us-5. 17 April 2019

Undang-Undang Republik Indonesia No.4 tahun 1982 tentang Ketentuan-Ketentuan Pokok Pengelolaan Lingkungan Hidup (UPPLH)

Undang-Undang Republik Indonesia No.23 tahun 1997 tentang Pengelolaan Lingkungan Hidup

Undang-Undang Republik Indonesia No.32 tahun 2009 tentang Perlindungan dan Pengelolaan Lingkungan Hidup

Undang-Undang Republik Indonesia No.90/1990 tentang Kepariwisatan

Commented [M113]: Please write references according to the APA format. The doi address needs to be removed.
Please capitalize the first letter in the title of the journal/book.
There are references that still have not written down the edition and page numbers.

Example: Toby, A. (2020). Empirical Study of the Liquidity Management Practices of Nigerian Banks. *Journal of Financial Management & Analysis*, *19*(1), 57-70.

For internet sources:
Endra. (2014). *Pola Kecenderungan Memetakan Potensi CSR di Indonesia.* Available at: http://lingkarlsm.com/pola-kecenderunganmemetakan-potensi-csr-di-indonesia/. 30 March 2015.

For Government Official Documents:
Undang-Undang Republik Indonesia Nomor 40 tahun 2007 tentang Perseroan Terbatas pasal 74 ayat 1.

Initial CE_Rainanto

by Management Analysis Journal

General metrics

34,703	4,882	709	19 min 31 sec	37 min 33 sec
characters	words	sentences	reading time	speaking time

Score

This text scores better than 87% of all texts checked by Grammarly

Writing Issues

168	21	147
Issues left	Critical	Advanced

Writing Issues

21	**Correctness**	
11	Wrong or missing prepositions	
3	Determiner use (a/an/the/this, etc.)	
2	Unknown words	
1	Comma misuse within clauses	
2	Confused words	
1	Incorrect noun number	
1	Mixed dialects of english	

Unique Words

Measures vocabulary diversity by calculating the percentage of words used only once in your document

21%

unique words

Rare Words

Measures depth of vocabulary by identifying words that are not among the 5,000 most common English words.

34%

rare words

Word Length

Measures average word length

4.4

characters per word

Sentence Length

Measures average sentence length

6.9

words per sentence

Initial CE_Rainanto

Ira Indrawardana / Komunitas 4 (1) (2012)

Jurnal Dinamika Manajemen Vol. ..... , No. ..... , 2015, pp: ..... - .....

2

Jurnal Dinamika Manajemen, Vol (No) 20...., xx-xx

http://jdm.unnes.c.id

Nationally Accredited based on the Decree of the Minister of Research, Technology, and Higher Education, Number 36a/E/KPT/2016

Achieving Sustainable Performance in the Hospitality Industry based on Environmental Management, Pro-Environmental Behavior, and Green Marketing Mix 7P

Bambang Hengky Rainanto1, Abdul Talib Bon2, Jonathan van Melle3, Yuari Farradia4
and Ani Mekaniwati5

1Department of Tourism, Faculty of Tourism and Informatics, Institut Bisnis dan Informatika Kesatuan, Bogor, Indonesia
2Department of Production and Operations Management, Universiti Tun Hussein Onn Malaysia, Parit Raja, Malaysia
3Avans School of Business and Entrepreneurship, Avans University of Applied Sciences, Hogeschoollaan, Breda, Netherlands
4Department of Management (Marketing), Faculty of Business, Economics and Social Development, University of Malaysia Terengganu, Kuala Nerus, Terengganu, Malaysia
5Department of Bioentrepreneur, Faculty of Business, Institut Bisnis dan Informatika Kesatuan, Bogor, Indonesia

Info Article

_____
History Article:
Submitted
Revised
Accepted

_____
Keywords:
Green Marketing Mix 7p'S, Environmental Management System, Pro-Environmental Behavior, Sustainable Performance

_____

Abstract

_____

Tourism undeniably can grow the economy of a country. However, if not managed properly, tourism also has negative impacts that must be watched out for. The object of this study was General Managers or Hotel Managers in East Java Province, Indonesia with 228 respondents. This research is important because the tourism sector is an effective sector to increase foreign exchange for the province of East Java. This study aims to develop a relationship model between the Environmental Management System (EMS), Pro-Environmental Behavior (PEB), and the Green Marketing Mix 7 P's (GMM 7P's) as a mediator to achieve Sustainable Industrial Performance (SIP) with 17 hypotheses. The research uses quantitative methods, data collection through surveys, and processing using SmartPLS 3. The study results found that 14 hypotheses were accepted, while three hypotheses were rejected. The results of the study show that EMS implementation has a significant relationship with economic and social performance but has no relationship with environmental performance. PEB directly has a significant relationship with environmental performance but not with economic and social. GMM has a significant relationship with the three SIP elements. GMM is also a suitable partial mediator for EMS and PEB to achieve SIP.

Mewujudkan Kinerja Berkelanjutan di Industri Perhotelan berdasarkan Manajemen Lingkungan, Perilaku dan Green Marketing Mix 7P

Abstrak

_____

Sektor pariwisata tidak bisa dipungkiri dapat menumbuhkan perekonomian suatu negara. Namun apabila tidak dikelola secara benar, pariwisata juga memiliki dampak negatif yang harus diwaspadai. Penelitian ini berlokasi di Provinsi Jawa Timur, Indonesia dengan 228 responden dengan jabatan General Manager atau Manager Hotel. Penelitian ini penting karena sektor pariwisata merupakan sektor yang efektif untuk meningkatkan devisa bagi provinsi Jawa Timur. Penelitian ini bertujuan untuk mengembangkan model hubungan antara Sistem Manajemen Lingkungan (EMS), Perilaku Pro Lingkungan (PEB), dengan Bauran Pemasaran Hijau (GMM) sebagai mediator untuk mencapai Kinerja Industri Berkelanjutan (SIP) dengan 17 hipotesis. Penelitian menggunakan metode kuantitatif, pengambilan data melalui survei dan pengolahan menggunakan SmartPLS 3. Hasil penelitian menemukan 14 hipotesis diterima, sedangkan 3 hipotesis ditolak. Hasil penelitian menunjukkan bahwa penerapan EMS memiliki hubungan yang signifikan dengan kinerja ekonomi dan sosial tetapi tidak memiliki hubungan dengan kinerja lingkungan. PEB secara langsung memiliki hubungan yang signifikan dengan kinerja lingkungan tetapi tidak dengan ekonomi dan sosial. GMM memiliki hubungan yang signifikan dengan ketiga unsur SIP. GMM juga menjadi mediator parsial yang cocok untuk EMS dan PEB untuk mencapai SIP.

JEL Classification: Z31 Industry Studies

How to Cite: Author's name. (20...). Title of the article. Jurnal Dinamika Manajemen, Vol(No), xx-xx

*Correspondence Address

Institutional address: IBIK Jl. Rangagading No.1, Bogor 16123

E-mail: bambang@ibik.ac.id

ISSN

2086-0668 (print)

2337-5434 (online)

DOI: xxxxxxxxxxxxxx

INTRODUCTION

The very fast growth of the hospitality industry supports the tourism sector which has boosted the economy, but on the other hand, it can have an impact on the environment (Masa'deh et al., 2017). In several countries, the massive growth of tourism has had an environmental impact, for example in Spain there has been an increase in pollution, landfills, disruption of biodiversity, decreased environmental quality, and exploitation of water and water resources (Moliner et al., 2019). This negative impact has also been studied in several other countries, such as Jordan (Masa'deh et al., 2017), the Netherlands (Postma & Schmuecker, 2017), Malaysia, Singapore, and Thailand (Azam et al., 2018), and Taiwan (Peng & Lee, 2019). In Indonesia, research on the negative effects of the hotel industry has been published (Lampung et al., 2020; Yuniati, 2021), and concluded the impact on disruption of the natural environment, built environment, and local culture.

The Environmental Management System (EMS) focuses on fulfilling commitments by organizations to several policies for environmental management. This commitment includes reducing negative environmental impacts from the organization's products, services, and activities (Rainanto et al., 2020).

Pro-Environmental Behavior (PEB) is human behavior that understands and implements principles aimed at protecting the environment. The application of Pro-Environmental Behavior (PEB) is voluntary for the tourism industry, especially the hospitality industry (Fatoki, 2019; Li & Wu, 2019).

Green Marketing Mix 7Ps (GMM 7Ps) is a strategy for fulfilling 7 basic attributes that will support marketing activities while upholding environmental protection. The hotel industry needs to implement the Green Marketing Mix 7P's strategy to realize sustainable tourism (Rainanto et al., 2022b).

The hotel industry's business performance is considered successful and sustainability is realized from success in terms of the economy (business), preservation of the surrounding environment, and maintaining the socio-cultural conditions of the local community. Business continuity in the hospitality sector is not enough to be seen from the side of economic benefits, it is also necessary to look at it from the perspective of the surrounding environmental and social conditions (Pereira et al., 2021; Rainanto et al., 2022a; Sharpley, 2020).

Cities that have potential as tourist destinations tend to experience high growth in the number of hotels compared to other cities. This is because tourist destination cities are attractive economic potential for hospitality investors and tourist destinations. For some residents who "benefit" from their city becoming a tourist destination, this will be considered attractive, but for some other residents, this can be a problem (Rainanto, 2022). (Ilhami et al., 2020) stated that until 2019 there was a traffic jam in Batu City, which is located in East Java Province, on certain days due to the large number of tourist vehicles entering the city. This is supported by data from the Central Bureau of Statistics for the City of Batu in 2019 which stated that visitors to tourist attractions and souvenir tours in Batu City in 2019 totaled 6,047,460 tourists with a total of 1,354 hotels (BPS Kota Batu, 2020). The ratio of the population of Batu City to the number of tourists coming to the city in 2019 is that the population of Batu City is 0.02% of the number of tourists (BPS Kota Batu, 2020).

The number of tourists in Batu City, Malang City, and Malang Regency in East Java Province increased rapidly at weekends. The arrival of these tourists caused congestion on several roads there. The results of the research on the noise level conducted on Jalan WR Supratman which is one of the main roads in Malang City, East Java Province on Sunday is 81.2 dBA - 86.1 dBA, while on Monday it is 72.0 dBA - 79, 1dBA (N.J. Putra, H. Setyabudiarso, 2022). By the Decree of the Minister of State for the Environment No. 48 of 1996, Appendix 1 includes a table regarding Noise Level Standards according to area designation. The standard threshold values for Noise Level according to the regulations include Housing and Settlements (55 dbA); Trade and Services (70 dBA); Office Building (dbA); Green Open Space (50 dbA); Industrial (70 dbA); Government and Public Facilities (60 dBA); Recreation (70 dbA) (KepMen LH No.48, 1999). Meanwhile, the Noise Threshold Value (NAV) according to Kepmenaker No. per-51/MEN/1999, ACGIH, 2008 and SNI 16-7063-2004 is 85 dB (Menteri Tenaga Kerja Republik Indonesia, 1999). Another negative effect is that the water discharge becomes weak at certain times. According to the Indonesian Forum for the Environment (WALHI) of East Java Province, the water quality index in East Java from 2016 to 2020 has decreased and is of concern and has a very concerning status. The data is also following the Statistical Report on Water Quality, Air and Land Cover issued by the Ministry of Environment and Forestry, Directorate General of Pollution Control and Environmental Damage, which stated that the water quality of all major rivers in East Java Province was classified as heavily polluted from 2015 to 2020 (Kementerian Lingkungan Hidup dan Kehutanan, 2021). Based on the East Java Province Environmental Management Quality Index Report. WALHI (2020) notes that more than 800,000 hectares of forest in East Java have been damaged. Walhi (2021) stated that in East Java Province cumulatively based on BNPB

records from 2013 to 2019 there have been 2676 hydrometeorological disasters.

In addition to the negative impacts of environmental conditions, there are also negative impacts from the economic sector, such as high property prices which combine because many migrants are interested in owning homes in tourist destinations. Massive property development has also reduced the area of paddy fields and open land in these tourist destinations. (Hengky & Kikvidze, 2021) reports that the area of land in Malang is getting narrower every year. This is due to the conversion of land into residential and industrial areas. Currently, the area of agricultural land in the city of Malang, especially for rice farming, is only 821 hectares out of 1,104 hectares. One of the impacts felt is the frequent occurrence of floods in several areas of Malang Metropolitan in recent years. If this negative impact is left unchecked, it will affect the comfort of the Malang Metropolitan City.

The World Tourism Organization (WTO) defines Sustainable Tourism as: "Tourism that takes into account its current and future economic, environmental, and social impacts, meeting the needs of consumers, the environment, industry, and local communities". The concept of sustainable tourism states that tourism development should not damage nature, the environment, or land, especially agricultural land (Guanabara et al., 2013). UNWTO's conceptual definition of sustainable tourism must: (i) Make optimal use of environmental resources, which are a key element in tourism development, safeguarding important ecological processes and helping to preserve the natural heritage and biodiversity; (ii) Respect the socio-cultural authenticity of the host communities, preserve the cultural heritage and traditional values that they have built and live by, and contribute to intercultural understanding and tolerance; (iii) Ensure proper and long-term

economic operations, provide socio-economic benefits that are distributed fairly to all stakeholders, including stable employment and income opportunities and social services for local communities, and contribute to poverty alleviation.

There are three sustainable performances for industrial companies along with details on their constituent parameters (Hourneaux et al., 2018). The three sustainable performances include 1. Sustainable Environmental Performance, consisting of (a) Reduction of wastewater, (b) Reduction of emissions, and waste, (c) Reduction of costs for environmental aspects of products and services, (d) Environmental compliance, (e) Reduction costs for common environmental problems; 2. Sustainable Economic Performance, consisting of (a) Profit from operations, (b) Sales growth, (c) Return on equity, (d)Return on investment, (e) Cost per unit produced, (f) Net cash flow, (g) Market share, (h) On-time delivery, (i) Customer response time, (j) Number of warranty claims, (k) Number of customer complaints, (l) Customer satisfaction survey, (m) Material efficiency variations; 3. Sustainable Social Performance, consisting of (a) Social commitment, (b) Environmental preservation, (c) Increasing employee job satisfaction, (d) Training and education, and (e) Compliance with products and services.

The novelties of the research are measuring Sustainable Performance in the Hospitality Industry based on an Environmental Management System, Behavior that supports the environment, and the application of the Green Marketing Mix 7P as a mediator. The measurement of sustainable performance for the hotel industry is something new in research because what usually measures sustainable performance is done in the goods or manufacturing industries.

Hypothesis Development

Relationship between Two or More Variables

The hypothesis that forms the basis of this study is 17 relationships. The development of 17 hypotheses is based on a literature review of the dependent to independent variables, as well as the moderator variable which is the link between the dependent and independent variables. 11 hypotheses are directly related, and 6 hypotheses that are indirectly related using the Green Marketing Mix 7P (GMM 7's) mediation. The research hypothesis in this study is in Figure 1 below.

Figure 1. Research Hypothesis

The 17 hypotheses in this study are proposed in detail as follows:

H1: The EMS has a significant and direct relationship to[1] sustainable economic performance

H2: The EMS has a significant and direct relationship to[2] environmental performance

H3: The EMS has a significant and direct relationship to[3] social performance

H4: The PEB has a significant and direct relationship to[4] economic sustainability

H5: The PEB has a significant and direct relationship to[5] environmental sustainability

H6: The PEB has a significant and direct relationship to[6] social sustainability

H7: The EMS directly has a significant relationship on[7] GMM

H8: The PEB directly has a significant relationship on[8] GMM

H9: The GMM has a significant and direct relationship to[9] economic sustainability

H10: The GMM has a significant and direct relationship to[10] environmental sustainability

H11: The GMM has a significant and direct relationship to social sustainability

H12: The GMM mediates between EMS and economic sustainable performance

H13: The GMM mediates between PEB and economic sustainable performance

H14: The GMM mediates between EMS and environmentally sustainable performance

H15: The GMM mediates between PEB and environmentally sustainable performance

H16: The GMM mediates between EMS and social sustainable performance

H17: The GMM mediates between PEB and social sustainability

METHOD

This research method was chosen quantitatively by collecting primary data as the main source of the data being analyzed. A total of 228 respondents with the position of a hotel manager or general manager are the basis for calculating the analysis.

This study uses a simple sampling method because the selection of the sample is completely random and member of the hotel industry population has an equal chance of being selected to be part of the sample. Furthermore, the use of a purposive sampling method was because the respondents selected as questionnaire fillers are hotel employees with the position of General Manager or Manager. The reason for selecting respondents at the Manager or General Manager level is because those two positions understand and are competent with matters relating to policies carried out by hotel management. These policies, among others, relate to EMS, PEB, and GMM toward SIP.

Research analysis based on research objectives: (1) Research analysis to find out the direct relationship between the X and Mediator variables with the Sustainable Industry Performance variable using Smart-PLS 3; (2) Research analysis to determine the recommended relationship model between variable X

and Mediator with the Sustainable Industry Performance variable using Smart-PLS 3.

RESULT AND DISCUSSION

The results of the analysis using Smart PLS 3 through several stages of the process. The stages of the process include Measurement of Construct Variable, Model validation, Assessment of measurement model, Measurement validity of first-order construct – reflective model, Loading Factor, Convergent Validity – Average Variance Extracted (AVE), Convergent Validity – Composite Reliability (CR), Cronbach's Alpha (α), Cross Loading, Fornell-Larcker Criterion, Heterotrait-monotrait[13] (HTMT), Measurement Model Result – Outer model, Validity and Reliability of Second-Order Construct – Two-Stage Approach, Two stage approach (reflective-formative measurement model), Structural model/inner model measurement, Collinearity statistics (VIF) – Outer & Inner VIF, Hypotheses Testing (Path Coefficient), Coefficient of Determinant (R2), Effect Size (f2), Predictive Relevance (Q2), Hypothesis Evaluation, Testing the mediating roles, and finally the Recommended Model.
Fornell & Larcker (1981) states that the Convergent Validity of Cronbach's Alpha and Composite Reliability (CR) must be more than 0.70, while the Average Variance Extracted (AVE) value must pass 0.50. Based on the critical threshold value above, a summary of the measurement validity is shown in Table 1.

Table 1. Reliability Value of Reflective Construct

Reflective Construct

Items

Loading Factor (> 0.7)

AVE

(> 0.5)

Composite Reliability (>0.7)

Cronbach's Alpha (α 0.70)

EMS

Environmental Policy

0.760

0.927

0.894

EnvPolicy1

0.890

EnvPolicy 2

0.905

EnvPolicy 3

0.882

EnvPolicy 4

0.807

Planning

0.781

0.934

0.906

Plan5

0.861

Plan6

0.896

Plan7

0.905

Plan8

0.872

Implementation and Operation

0.794

0.939

0.912

ImlOpr9

0.896

ImlOpr10

0.938

ImlOpr11

0.932

ImlOpr12

0.790

Checking and Corrective Action

0.961

0.980

0.959

CheckCor13

0.980

CheckCor14

0.980

Management Review

0.821

0.948

0.927

MgtRev15

0.871

MgtRev16

0.908

MgtRev17

0.916

MgtRev18

0.929

PEB

Save Energy

0.844

0.942

0.907

EnSav19

0.936

EnSav20

0.955

EnSav21

0.863

Waste Prevention

0.695

0.872

0.781

PrevWaste22

0.861

PrevWaste23

0.860

PrevWaste24

0.777

Nature Preservation

0.803

0.942

0.917

PresNat25

0.828

PresNat26

0.911

PresNat27

0.922

PresNat28

0.919

Environmental Performance

0.592

0.853

0.894

EnvSust57

0.771

EnvSust58

0.787

EnvSust59

0.792

EnvSust60

0.727

Economics Performance

0.774

0.954

0.942

EconSust61

0.867

EconSust62

0.843

EconSust63

0.910

EconSust64

0.908

EconSust65

0.897

EconSust66

0.853

Social Performance

0.789

0.949

0.933

SosSust67

0.847

SosSust68

0.891

SosSust69

0.935

SosSust70

0.923

SosSust71

0.842

Measurement of the second-order construct with reflective and formative measurement indicators needs to be taken into account. A two-stage approach was carried out before analyzing the structural model and the interaction between the mediator and moderator. A summary of all the results of the second-order PLS algorithm (Reflective - Formative) is presented in Table 2.

Table 2. Measurement of Two-Stage Process for Second-Order (Reflective – Formative)

Construct	Item	Loading Factor	Ave	Composite Reliability	Weight	VIF	T-Values Weights	P Value Weight
Reflective Model Second Order								
EMS								
	0.739							
	0.934							
Environ. Policy								
	0.880							

Planning

0.908

Implement & Operation

0,911

Check & Corrective Act.

0.735

Management Review

0.873

PEB

0.807

0.926

Save Energy

0.877

Waste Prevention

0.915

Nature Preservation

0.902

Environ. Sustainable Perform

0.592

0.853

Environ. Sustain57

0.773

Environ. Sustain58

0.783

Environ. Sustain59

0.792

Environ. Sustain60

0.727

Economics Sustainable Perform

0.774

0.954

Economics Sustain61

0.869

Economics Sustain62

0.845

Economics Sustain63

0.910

Economics Sustain64

0.906

Economics Sustain65

0,895

Economics Sustain66

0.854

Social Sustainable Perform

0.789

0.949

Social Sustainable67

0.845

Social Sustainable68

0.891

Social Sustainable69

0.936

Social Sustainable70

0.924

Social Sustainable71

0.842

Formative Model Second Order

GMM

Green Product

0.151

2.347

3.331

0.001

Green Place

0.065

4.227

1.117

0.264

Green Price

0.169

3.046

3.337

0.001

Green Promotion

0.030

2.984

0.674

0.500

Green Process

0.213

2.200

4.817

0.000

Green People

0.393

1.865

9.632

0.000

Green Physical Evidence

0.191

4.161

3.027

0.002

Two variables are considered Moderate, namely Environmental Policy and Checking and Correction Actions. The combined effect of the first order explaining the variance in Environmental Policy, Planning, Implementation & Operation, Inspection & Corrective Action, Management Review, Saving Energy, Waste Prevention, and Nature Preservation is accepted. The PLS algorithm for the results of R2 is presented in Figure 2 about First Order Construct below.

Figure 2. First Order Construct

The second-order construct model in this research is reflective-formative. The higher-order constructs are for the mediator variable. Due to the formative nature of the mediator constructs, the recommended measurement approach for this type of HCM model is the two-stage PLS. The two-stage PLS approach takes advantage of the advantages of PLS path modeling to explicitly measure the values of latent variables, also be implemented in models with interaction effects between all constructs as measured by reflective indicators. Figure 2 below shows the results from the Second Order Construct.

Figure 3. Second Order Construct

The results of the hypothesis for a direct relationship are obtained from several criteria such as t-value, p-value, and f2. The relationship between variables in a positive (supported) result is based on a t-value above 1.645 (Hair et al., 2017); then the P-value must be less than 0.10 (Hair et al., 2017); and f2 must be greater than 0.02. The details of the hypotheses are presented in Table 3 and Table 4.

Table 3. Hypothesis Testing (Direct Effect Result Test)

Hypothesis

Original Sample (O) /β

Std Dev/

Stand

Error

T stat

t-value

(>1.645)

p-value

(<0.10)

R2

f2

(👍 0.02)

Q2

(> 0)

Decision

H1

EMS " Economy SP

-0.262

0.103

2.545

0.005

0.421

0.028

0.295

Supported

H2

EMS " Environ. SP

-0.018

0.098

0.187

0.426

0.625

0.000

0.334

Un-Support

H3

EMS " Social SP

0.250

0.075

3.330

0.000

0.763

0.062

0.561

Supported

H4

PEB " Economy SP

0.125

0.109

1.149

0.125

0.421

0.006

0.295

Un-Support

H5

PEB " Environ. SP

0.202

0.102

1.976

0.024

0.625

0.025

0.334

Supported

H6

PEB " Social SP

-0.029

0.070

0.417

0.338

0.763

0.001

0.561

Un-Support

H7

EMS " GMM 7P's

0.465

0.062

7.503

0.000

0.814

0.373

0.486

Supported

H8

PEB " GMM 7P's

0.480

0.060

8.050

0.000

0.814

0.398

0.486

Supported

H9

GMM " Economy SP

0.753

0.113

6.641

0.000

0.421

0.182

0.486

Supported

H10

GMM " Environ. SP

0.626

0.100

6.284

0.000

0.625

0.194

0.486

Supported

H11

GMM " Social SP

0.675

0.072

9.340

0.000

0.763

0.357

0.486

Supported

Table 4. Hypothesis Testing on Mediating

Hypothesis

Original Sample (O)/β

Std Dev/

Stand Error

T statistic

t-value

(> 1.96)

p-value

Confidence Interval (BC)

Decision

2.5%

97.5%

H12

EMS " GMM " Economy SP

0.350

0.075

4.650

0.000

0.215

0.503

Supported

H13

EMS " GMM " Environ. SP

0.291

0.061

4.798

0.000

0.181

0.417

Supported

H14

EMS " GMM " Social SP

0.314

0.052

6.057

0.000

0.220

0.422

Supported

H15

PEB " GMM " Economy SP

0.362

0.070

5.183

0.000

0.230

0.501

Supported

H16

PEB " GMM " Environ. SP

0.300

0.064

4.730

0.000

0.177

0.428

Supported

H17

PEB " GMM " Social SP

0.324

0.057

5.662

0.000

0.226

0.448

Supported

After the results of the analysis with several previous stages, it was concluded that of the 17 initial hypotheses, it was proven that 14 hypotheses were accepted, while 3 hypotheses were rejected. Easily, the final results of the study table be seen in Figure 3 below.

Figure 3. The Results of Full Model Analysis

The results of the research based on the analysis result model are that the Environmental Management System (EMS) variable supports Sustainable Economy, Social Sustainable, and Green Marketing Mix 7P. The Pro-Environmental Behavior (PEB) variable supports the Sustainable Environment and Green Marketing Mix 7P. The 7P Green Marketing Mix Variables are also three sustainable variables namely Economic, Environmental, and Social. The 7P Green Marketing Mix function as a mediator between EMS and PEB in Sustainable Industrial Performance is also supported. The novelty of this research for the hospitality industry is the 7P Green Marketing Mix, both directly and as a moderator for EMS and PEB will provide positive benefits for the sustainability of the hospitality businesses

The hypotheses that support the novelty of the results of this study include H12 (EMS - GMM - Economic Sustainable Performance); H13 (PEB - GMM -

Economic Sustainable Performance); H14 (EMS - GMM - Environmental Sustainable Performance); H15 (PEB - GMM - Environmental Sustainable Performance); H16 (EMS - GMM - Social Sustainable Performance); and H17 (PEB - GMM - Social Sustainable Performance).

The benefits of this research can be used by several parties such as Hotel owners, Managers, Regional Governments, Central Government, and Hospitality Associations, all of that in the framework of creating sustainable tourism.

CONCLUSION AND RECOMMENDATION

There are seventeen hypotheses linking the Environmental Management System (EMS), Pro-Environmental Behavior (PEB) for Sustainable Industry Performance (SIP) with the Green Marketing Mix 7P's Mediation (GMM 7P's). Fourteen hypotheses are accepted and three hypotheses are rejected. Fourteen hypotheses were accepted, consisting of: H1, H3, H5, H7, H8, H9, H10, H11, H12, H13, H14, H15, H16, and H17. While the three hypotheses are rejected, namely: H2, H4, and H6. There are 11 hypotheses related to the direct interaction hypothesis, eight hypotheses are accepted, while three are not accepted. The conclusion from the research results is that the Environmental Management System (EMS) supports Sustainable Economy, Social Sustainable, and Green Marketing Mix 7P. For Pro-Environmental Behavior (PEB) supports Sustainable Environment and Green Marketing Mix 7P. Then the Green Marketing Mix 7P supports the three sustainable variables, namely Economic, Environmental, and Social. The Green Marketing Mix 7P function as

a mediator between EMS and PEB on Sustainable Industry Performance is also supported. The benefit of this research for the hotel industry is that implementing EMS and PEB through the 7P Green Marketing Mix will provide positive benefits for the sustainability of the hotel business. The limitation of this research is the scope of the research location which is only in East Java. On the other hand, there is the Covid-19 pandemic which has forced several hotels to not operate. The recommendation for further research is to expand the scope of research locations to other provinces so that it can become a policy decision in managing the hospitality industry in the Republic of Indonesia.

ACKNOWLEDGEMENT

I would like to thank my three research friends, including Prof. Dr. Abdul Talib Bon from the University of Tun Hussein Onn Malaysia, also to Dr. Jonathan van Melle from Avans University of Applied Sciences, Netherlands, and Dr. Yuari Farradia from the Faculty of Business, Economics and Social Development, University of Malaysia Terengganu, Malaysia. Also, thanks to my institution at the Institut Bisnis dan Informatika Kesatuan, especially the Department of Tourism which has provided support for the research and writing of this paper.

REFERENCES

Azam, M., Alam, M. M., & Haroon Hafeez, M. (2018). Effect of tourism on environmental pollution: Further evidence from Malaysia, Singapore and[14] Thailand. Journal of Cleaner Production, 190, 330–338. https://doi.org/10.1016/j.jclepro.2018.04.168

BPS Kota Batu. (2020). Kota Batu Dalam Angka 2020. Badan Pusat Statistik Kota Batu, 250–255.

Fatoki, O. (2019). Hotel employees' pro-environmental behavior: Effect of leadership behavior, institutional support, and workplace spirituality. Sustainability (Switzerland), 11(15). https://doi.org/10.3390/su11154135 page number?

Guanabara, E., Ltda, K., Guanabara, E., & Ltda, K. (2013). Sustainable Tourism for Development. UNWTO. title of the journal? journal's edition and page numbers?

Hengky, S. H., & Kikvidze, Z. (2021). Sustainable Coastal Tourism in Tanjung Kelayang, Indonesia. Tourism Planning and Development, 18(3), 365–370. https://doi.org/10.1080/21568316.2020.1763444

Hourneaux, F., Gabriel, M. L. da S., & Gallardo-Vázquez, D. A. (2018). Triple bottom line and sustainable performance measurement in industrial companies. Revista de Gestao, 25(4), 413–429. https://doi.org/10.1108/REGE-04-2018-0065

Ilhami, M. R., Anugrah Santaufanny, F. F., & Sinambella, R. (2020). Efektivitas Aver Viewer dalam Memantau Kemacetan Lalu Lintas di Kota Batu. Jurnal Publisitas, 7(1), 11–22. https://doi.org/10.37858/publisitas.v7i1.36

Kementerian Lingkungan Hidup dan Kehutanan. (2021). Statistik Kualitas Air, Udara, dan Tutupan Lahan 2020. 1, 39–48. https://ppkl.menlhk.go.id/website/filebox/1033/210930123917buku Statistik Ppkl 2020 (versi[15] Cetak).pdf please[16] adjust to the format for internet sources

KepMen LH No.48. (1999). Keputusan Menteri Negara Lingkungan Hidup No. 48 Tahun 1996 Tentang : Baku Tingkat Kebisingan. 48.

Lampung, U. B., Rama, A., Barusman, P., Virgawenda, T. M. B., & Arwis, Y. A. (2020). Factors that Effect[17] the Level of Consumers Loyalty for Budget Hotel[18] in

Indonesia. 2932 Talent Development & Excellence, 12(1), 2932–2942. http://www.iratde.com

Li, Q. C., & Wu, M. Y. (2019). Rationality or morality? A comparative study of pro-environmental intentions of local and nonlocal visitors in nature-based destinations. Journal of Destination Marketing and Management, 11(July 2018), 130–139. https://doi.org/10.1016/j.jdmm.2019.01.003

Masa'deh, R., Nasseef, M. A., Suliman, M., & Albawab, M. (2017). The Effect of Hotel Development on Sustainable Tourism Development. International Journal of Business Administration, 8(4), 16. https://doi.org/10.5430/ijba.v8n4p16

Menteri Tenaga Kerja Republik Indonesia. (1999). Nilai Ambang Batas Faktor Fisika Di Tempat Kerja Menteri Tenaga Kerja Republik Indonesia. Kep.51/Men/1999, 15–20.

Moliner, M. Á., Monferrer, D., Estrada, M., & Rodríguez, R. M. (2019). Environmental sustainability and the hospitality customer experience: A study in tourist accommodation. Sustainability (Switzerland), 11(19). https://doi.org/10.3390/su11195279 page number?

N.J. Putra, H. Setyabudiarso, H. (2022). Kota Malang Analysis Of Noise Levels Of W . R .please adjust to the APA format

Peng, X., & Lee, S. (2019). Self-discipline or self-interest? The antecedents of hotel employees' pro-environmental behaviours[19]. Journal of Sustainable Tourism, 27(9), 1457–1476. https://doi.org/10.1080/09669582.2019.1632320

Pereira, V., Silva, G. M., & Dias, Á. (2021). Sustainability practices in hospitality: Case[20] study of a luxury hotel in Arrábida Natural Park. Sustainability (Switzerland), 13(6), 1–21. https://doi.org/10.3390/su13063164

Postma, A., & Schmuecker, D. (2017). Understanding and overcoming negative impacts of tourism in city destinations: conceptual[21] model and strategic

framework. Journal of Tourism Futures, 3(2), 144–156. https://doi.org/10.1108/JTF-04-2017-0022

Rainanto, B. H. (2022). A t t p (Issue August). Universiti Tun Hussein Onn Malaysia. please adjust to the APA format

Rainanto, B. H., Bon, A. T., & Purba, J. H. V. (2020). Environmental management system (EMS) and green marketing mix (7Ps) for hotel sustainable industrial performance: A conceptual model. International Journal of Advanced Science and Technology, 29(7 Special), 3724–3732.

Rainanto, B. H., Bon, A. T., & Purba, J. H. V. (2022a). Developing the Conceptual Model of Sustainable Industrial Performance in the Hospitality Industry. International Journal of Global Optimization and Its Application, 1(2), 80–89. https://doi.org/10.56225/ijgoia.v1i2.17

Rainanto, B. H., Bon, A. T., & Purba, J. H. V. (2022b). Environmental Management System and Pro-Environmental Behavior in Realizing Sustainable Industry Performance: Mediating Role of Green Marketing Management. International Journal of Global Optimization and Its Application, 1(1), 12–21. https://doi.org/10.56225/ijgoia.v1i1.9

Sharpley, R. (2020). Tourism, sustainable development and the theoretical divide: 20 years on. Journal of Sustainable Tourism, 28(11), 1932–1946. https://doi.org/10.1080/09669582.2020.1779732

Yuniati, N. (2021). Green Hotel Concept and Practices in Indonesia. E-Journal of Tourism, 8(2), 184. https://doi.org/10.24922/eot.v8i2.76346

UNWTO World Tourism Organization. Actual Trends vs Tourist 2030 Forecast-World. https://www.moodiedavittreport.com/global-tourist-arrivals-leap-by-6-in-2018-reports-unwto/. 14 April 2019

UNWTO World Tourism Organization. Sustainable Development of Tourism. dt.unwto.org/content/about-us-5. 17 April 2019

Undang-Undang Republik Indonesia No.4 tahun 1982 tentang Ketentuan-Ketentuan Pokok Pengelolaan Lingkungan Hidup (UPPLH)

Undang-Undang Republik Indonesia No.23 tahun 1997 tentang Pengelolaan Lingkungan Hidup

Undang-Undang Republik Indonesia No.32 tahun 2009 tentang Perlindungan dan Pengelolaan Lingkungan Hidup

Undang-Undang Republik Indonesia No.90/1990 tentang Kepariwisatan

1.	~~to~~ → with	Wrong or missing prepositions	Correctness
2.	~~to~~ → with	Wrong or missing prepositions	Correctness
3.	~~to~~ → with	Wrong or missing prepositions	Correctness
4.	~~to~~ → with	Wrong or missing prepositions	Correctness
5.	~~to~~ → with	Wrong or missing prepositions	Correctness
6.	~~to~~ → with	Wrong or missing prepositions	Correctness
7.	~~on~~ → with	Wrong or missing prepositions	Correctness
8.	~~on~~ → with	Wrong or missing prepositions	Correctness
9.	~~to~~ → with	Wrong or missing prepositions	Correctness
10.	~~to~~ → with	Wrong or missing prepositions	Correctness
11.	~~to~~ → with	Wrong or missing prepositions	Correctness
12.	~~a~~ hotel	Determiner use (a/an/the/this, etc.)	Correctness
13.	*Heterotrait-monotrait*	Unknown words	Correctness
14.	, and	Comma misuse within clauses	Correctness
15.	*versi*	Unknown words	Correctness
16.	~~please~~ → Please	Confused words	Correctness
17.	~~Effect~~ → Affect	Confused words	Correctness
18.	~~Hotel~~ → Hotels	Incorrect noun number	Correctness
19.	~~behaviours~~ → behaviors	Mixed dialects of English	Correctness
20.	A case	Determiner use (a/an/the/this, etc.)	Correctness
21.	a conceptual	Determiner use (a/an/the/this, etc.)	Correctness

Artikel Bambang Hengky Rainanto

by Jdm Unnes

Submission date: 20-Jun-2023 08:30AM (UTC+0700)
Submission ID: 2119382872
File name: Initial_CE_Rainanto.docx (865.31K)
Word count: 4868
Character count: 29197

Jurnal Dinamika Manajemen, Vol (No) 20…., xx-xx

http://jdm.unnes.c.id

Nationally Accredited based on the Decree of the Minister of Research, Technology, and Higher Education, Number 36a/E/KPT/2016

Achieving Sustainable Performance in the Hospitality Industry based on Environmental Management, Pro-Environmental Behavior, and Green Marketing Mix 7P

Bambang Hengky Rainanto[1], Abdul Talib Bon[2], Jonathan van Melle[3], Yuari Farradia[4] and Ani Mekaniwati[5]

[1]Department of Tourism, Faculty of Tourism and Informatics, Institut Bisnis dan Informatika Kesatuan, Bogor, Indonesia
[2]Department of Production and Operations Management, Universiti Tun Hussein Onn Malaysia, Parit Raja, Malaysia
[3]Avans School of Business and Entrepreneurship, Avans University of Applied Sciences, Hogeschoollaan, Breda, Netherlands
[4]Department of Management (Marketing), Faculty of Business, Economics and Social Development, University of Malaysia Terengganu, Kuala Nerus, Terengganu, Malaysia
[5]Department of Bioentrepreneur, Faculty of Business, Institut Bisnis dan Informatika Kesatuan, Bogor, Indonesia

Info Article

History Article:
Submitted
Revised
Accepted

Keywords:
Green Marketing Mix 7p'S, Environmental Management System, Pro-Environmental Behavior, Sustainable Performance

Abstract

Tourism undeniably can grow the economy of a country. However, if not managed properly, tourism also has negative impacts that must be watched out for. The object of this study was General Managers or Hotel Managers in East Java Province, Indonesia with 228 respondents. This research is important because the tourism sector is an effective sector to increase foreign exchange for the province of East Java. This study aims to develop a relationship model between the Environmental Management System (EMS), Pro-Environmental Behavior (PEB), and the Green Marketing Mix 7 P's (GMM 7P's) as a mediator to achieve Sustainable Industrial Performance (SIP) with 17 hypotheses. The research uses quantitative methods, data collection through surveys, and processing using SmartPLS 3. The study results found that 14 hypotheses were accepted, while three hypotheses were rejected. The results of the study show that EMS implementation has a significant relationship with economic and social performance but has no relationship with environmental performance. PEB directly has a significant relationship with environmental performance but not with economic and social. GMM has a significant relationship with the three SIP elements. GMM is also a suitable partial mediator for EMS and PEB to achieve SIP.

Mewujudkan Kinerja Berkelanjutan di Industri Perhotelan berdasarkan Manajemen Lingkungan, Perilaku dan Green Marketing Mix 7P

Abstrak

Sektor pariwisata tidak bisa dipungkiri dapat menumbuhkan perekonomian suatu negara. Namun apabila tidak dikelola secara benar, pariwisata juga memiliki dampak negatif yang harus diwaspadai. Penelitian ini berlokasi di Provinsi Jawa Timur, Indonesia dengan 228 responden dengan jabatan General Manager atau Manager Hotel. Penelitian ini penting karena sektor pariwisata merupakan sektor yang efektif untuk meningkatkan devisa bagi provinsi Jawa Timur. Penelitian ini bertujuan untuk mengembangkan model hubungan antara Sistem Manajemen Lingkungan (EMS), Perilaku Pro Lingkungan (PEB), dengan Bauran Pemasaran Hijau (GMM) sebagai mediator untuk mencapai Kinerja Industri Berkelanjutan (SIP) dengan 17 hipotesis. Penelitian menggunakan metode kuantitatif, pengambilan data melalui survei dan pengolahan menggunakan SmartPLS 3. Hasil penelitian menemukan 14 hipotesis diterima, sedangkan 3 hipotesis ditolak. Hasil penelitian menunjukkan bahwa penerapan EMS memiliki hubungan yang signifikan dengan kinerja ekonomi dan sosial tetapi tidak memiliki hubungan dengan kinerja lingkungan. PEB secara langsung memiliki hubungan yang signifikan dengan kinerja lingkungan tetapi tidak dengan ekonomi dan sosial. GMM memiliki hubungan yang signifikan dengan ketiga unsur SIP. GMM juga menjadi mediator parsial yang cocok untuk EMS dan PEB untuk mencapai SIP.

JEL Classification: Z31 Industry Studies

How to Cite: Author's name. (20…). Title of the article. *Jurnal Dinamika Manajemen, Vol*(No), xx-xx

Correspondence Address
Institutional address: IBIK Jl. Rangagading No.1, Bogor 16123
E-mail: bambang@ibik.ac.id

ISSN
2086-0668 (print)
2337-5434 (online)
DOI: xxxxxxxxxxxxx

INTRODUCTION

The very fast growth of the hospitality industry supports the tourism sector which has boosted the economy, but on the other hand, it can have an impact on the environment (Masa'deh et al., 2017). In several countries, the massive growth of tourism has had an environmental impact, for example in Spain there has been an increase in pollution, landfills, disruption of biodiversity, decreased environmental quality, and exploitation of water and water resources (Molinero *et al*., 2019). This negative impact has also been studied in several other countries, such as Jordan (Masa'deh *et al*., 2017), the Netherlands (Postma & Schmuecker, 2017), Malaysia, Singapore, and Thailand (Azam *et al*., 2018), and Taiwan (Peng & Lee, 2019). In Indonesia, research on the negative effects of the hotel industry has been published (Lampung *et al*., 2020; Yuniati, 2021), and concluded the impact on disruption of the natural environment, built environment, and local culture.

Commented [L1]: 1.Please use reference manager, such as Mendeley, endnote or others.
2.Make sure your references between 2013-2023

The Environmental Management System (EMS) focuses on fulfilling commitments by organizations to several policies for environmental management. This commitment includes reducing negative environmental impacts from the organization's products, services, and activities (Rainanto *et al*., 2020).

Pro-Environmental Behavior (PEB) is human behavior that understands and implements principles aimed at protecting the environment. The application of Pro-Environmental Behavior (PEB) is voluntary for the tourism industry, especially the hospitality industry (Fatoki, 2019; Li & Wu, 2019).

Green Marketing Mix 7Ps (GMM 7Ps) is a strategy for fulfilling 7 basic attributes that will support marketing activities while upholding environmental protection. The hotel industry needs to implement the Green Marketing Mix 7P's strategy to realize sustainable tourism (Rainanto *et al.*, 2022b).

The hotel industry's business performance is considered successful and sustainability is realized from success in terms of the economy (business), preservation of the surrounding environment, and maintaining the socio-cultural conditions of the local community. Business continuity in the hospitality sector is not enough to be seen from the side of economic benefits, it is also necessary to look at it from the perspective of the surrounding environmental and social conditions (Pereira et al., 2021; Rainanto et al., 2022a; Sharpley, 2020).

Cities that have potential as tourist destinations tend to experience high growth in the number of hotels compared to other cities. This is because tourist destination cities are attractive economic potential for hospitality investors and tourist destinations. For some residents who "benefit" from their city becoming a tourist destination, this will be considered attractive, but for some other residents, this can be a problem (Rainanto, 2022). (Ilhami et al., 2020) stated that until 2019 there was a traffic jam in Batu City, which is located in East Java Province, on certain days due to the large number of tourist vehicles entering the city. This is supported by data from the Central Bureau of Statistics for the City of Batu in 2019 which stated that visitors to tourist attractions and souvenir tours in Batu City in 2019 totaled 6,047,460 tourists with a total of 1,354 hotels (BPS Kota Batu, 2020). The ratio of the population of Batu City to the number of tourists coming to the city in 2019 is that the population of Batu City is 0.02% of the number of tourists (BPS Kota Batu, 2020).

The number of tourists in Batu City, Malang City, and Malang Regency in East Java Province increased rapidly at weekends. The arrival of these tourists caused congestion on several roads there. The results of the research on the noise level conducted on Jalan WR Supratman which is one of the main roads in Malang City, East Java Province on Sunday is 81.2 dBA - 96.1 dBA, while on Monday it is 72.0 dBA - 79, 1dBA (N.J. Putra, H. Setyabudiarso, 2022). By the Decree of the Minister of State for the Environment No. 48 of 1996, Appendix 1 includes a table regarding Noise Level Standards according to area designation. The standard threshold values for Noise Level according to the regulations include Housing and Settlements (55 dbA); Trade and Services (70 dBA); Office Building (dbA); Green Open Space (50 dbA); Industrial (70 dbA); Government and Public Facilities (60 dBA); Recreation (70 dbA) (KepMen LH No.48, 1999). Meanwhile, the Noise Threshold Value (NAV) according to Kepmenaker No. per-51/MEN/1999, ACGIH, 2008 and SNI 16-7063-2004 is 85 dB (Menteri Tenaga Kerja Republik Indonesia, 1999). Another negative effect is that the water discharge becomes weak at certain times. According to the Indonesian Forum for the Environment (WALHI) of East Java Province, the water quality index in East Java from 2016 to 2020 has decreased and is of concern and has a very concerning status. The data is also following the Statistical Report on Water Quality, Air and Land Cover issued by the Ministry of Environment and Forestry, Directorate General of Pollution Control and Environmental Damage, which stated that the water quality of all major rivers in East Java Province was classified as heavily polluted from 2015 to 2020 (Kementerian Lingkungan Hidup dan Kehutanan, 2021). Based on the East Java Province Environmental Management Quality

Commented [L2]: Please do not forget the references

Commented [L3]: Need references

Commented [L4]: References

Commented [L5]: References

Commented [I6]: it needs to be stated what the number of declines is and from what number to how much

Index Report. WALHI (2020) notes that more than 800,000 hectares of forest in East Java have been damaged. Walhi (2021) stated that in East Java Province cumulatively based on BNPB records from 2013 to 2019 there have been 2676 hydrometeorological disasters.

In addition to the negative impacts of environmental conditions, there are also negative impacts from the economic sector, such as high property prices which combine because many migrants are interested in owning homes in tourist destinations. Massive property development has also reduced the area of paddy fields and open land in these tourist destinations. (Hengky & Kikvidze, 2021) reports that the area of land in Malang is getting narrower every year. This is due to the conversion of land into residential and industrial areas. Currently, the area of agricultural land in the city of Malang, especially for rice farming, is only 821 hectares out of 1,104 hectares. One of the impacts felt is the frequent occurrence of floods in several areas of Malang Metropolitan in recent years. If this negative impact is left unchecked, it will affect the comfort of the Malang Metropolitan City.

The World Tourism Organization (WTO) defines Sustainable Tourism as: "Tourism that takes into account its current and future economic, environmental, and social impacts, meeting the needs of consumers, the environment, industry, and local communities". The concept of sustainable tourism states that tourism development should not damage nature, the environment, land, especially agricultural land (Guanabara *et al.,* 2013). UNWTO's conceptual definition of sustainable tourism must: (i) Make optimal use of environmental resources, which are a key element in tourism development, safeguarding important ecological processes and helping to preserve the natural heritage and biodiversity; (ii) Respect the socio-cultural authenticity of the host communities, preserve the cultural heritage and traditional values that they have built and live by, and contribute to intercultural understanding and tolerance; (iii) Ensure proper and long-term economic operations, provide socio-economic benefits that are distributed fairly to all stakeholders, including stable employment and income opportunities and social services for local communities, and contribute to poverty alleviation.

There are three sustainable performances for industrial companies along with details on their constituent parameters (Hourneaux *et al.,* 2018). The three sustainable performances include 1. Sustainable Environmental Performance, consisting of (a) Reduction of wastewater, (b) Reduction of emissions, and waste, (c) Reduction of costs for environmental aspects of products and services, (d) Environmental compliance, (e) Reduction costs for common environmental problems; 2. Sustainable Economic Performance, consisting of (a) Profit from operations, (b) Sales growth, (c) Return on equity, (d)Return on investment, (e) Cost per unit produced, (f) Net cash flow, (g) Market share, (h) On-time delivery, (i) Customer response time, (j) Number of warranty claims, (k) Number of customer complaints, (l) Customer satisfaction survey, (m) Material efficiency variations; 3. Sustainable Social Performance, consisting of (a) Social commitment, (b) Environmental preservation, (c) Increasing employee job satisfaction, (d) Training and education, and (e) Compliance with products and services.

The novelties of the research are measuring Sustainable Performance in the Hospitality Industry based on an Environmental Management System, Behavior that supports the environment, and the application of the Green Marketing Mix 7P as a mediator. The measurement of sustainable performance for the hotel industry is something new in research because what usually measures sustainable performance is done in the goods or manufacturing industries.

Commented [L7]: Need explanation why measuring sustainable performance is a novelty.

Hypothesis Development

Relationship between Two or More Variables

Commented [L8]: Please elaborate how the author develop 17 hypothesis. No need to be very detail, but still need explanation

The hypothesis that forms the basis of this study is 17 relationships. The development of 17 hypotheses is based on a literature review of the dependent to independent variables, as well as the moderator variable which is the link between the dependent and independent variables. 11 hypotheses are directly related, and 6 hypotheses that are indirectly related using the Green

Marketing Mix 7P (GMM 7's) mediation. The research hypothesis in this study is in Figure 1 below.

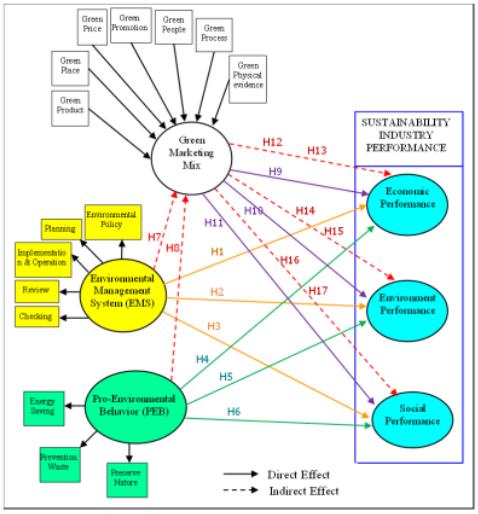


Figure 1. Research Hypothesis

The 17 hypotheses in this study are proposed in detail as follows:
H1: The EMS has a significant and direct relationship to sustainable economic performance
H2: The EMS has a significant and direct relationship to environmental performance
H3: The EMS has a significant and direct relationship to social performance
H4: The PEB has a significant and direct relationship to economic sustainability
H5: The PEB has a significant and direct relationship to environmental sustainability
H6: The PEB has a significant and direct relationship to social sustainability
H7: The EMS directly has a significant relationship on GMM
H8: The PEB directly has a significant relationship on GMM
H9: The GMM has a significant and direct relationship to economic sustainability
H10: The GMM has a significant and direct relationship to environmental sustainability
H11: The GMM has a significant and direct relationship to social sustainability
H12: The GMM mediates between EMS and economic sustainable performance
H13: The GMM mediates between PEB and economic sustainable performance
H14: The GMM mediates between EMS and environmentally sustainable performance
H15: The GMM mediates between PEB and environmentally sustainable performance
H16: The GMM mediates between EMS and social sustainable performance
H17: The GMM mediates between PEB and social sustainability

METHOD

This research method was chosen quantitatively by collecting primary data as the main source of the data being analyzed. A total of 228 respondents with the position of a hotel manager or general manager are the basis for calculating the analysis.

This study uses a simple sampling method because the selection of the sample is completely random and member of the hotel industry population has an equal chance of being selected to be part of the sample. Furthermore, the use of a purposive sampling method was because the respondents selected as questionnaire fillers are hotel employees with the position of General Manager or Manager. The reason for selecting respondents at the Manager or General Manager level is because those two positions understand and are competent with matters relating to policies carried out by hotel management. These policies, among others, relate to EMS, PEB, and GMM toward SIP.

Research analysis based on research objectives: (1) Research analysis to find out the direct relationship between the X and Mediator variables with the Sustainable Industry Performance variable using Smart-PLS 3; (2) Research analysis to determine the recommended relationship model between variable X and Mediator with the Sustainable Industry Performance variable using Smart-PLS 3.

Commented [L9]: Please explain why the author choose GM as the respondent.

RESULT AND DISCUSSION

Commented [L10]: 1.The author needs to elaborate more detail the discussion. It is not enough just to explain a statistical result. The core of the research is the discussion of each hypotheses.
2.How about the novelty? Which hypotheses that will answer the novelty? The author needs to explain specifically the novelty.

The results of the analysis using Smart PLS 3 through several stages of the process. The stages of the process include Measurement of Construct Variable, Model validation, Assessment of measurement model, Measurement validity of first-order construct – reflective model, Loading Factor, Convergent Validity – Average Variance Extracted (AVE), Convergent Validity – Composite Reliability (CR), Cronbach's Alpha (α), Cross Loading, Fornell-Larcker Criterion, Heterotrait-monotrait (HTMT), Measurement Model Result Outer model, Validity and Reliability of Second-Order Construct – Two-Stage Approach, Two stage approach (reflective-formative measurement model), Structural model/inner model measurement, Collinearity statistics (VIF) – Outer & Inner VIF, Hypotheses Testing (Path Coefficient), Coefficient of Determinant (R2), Effect Size (f2), Predictive Relevance (Q2), Hypothesis Evaluation, Testing the mediating roles, and finally the Recommended Model.

Fornell & Larcker (1981) states that the Convergent Validity of Cronbach's Alpha and Composite Reliability (CR) must be more than 0.70, while the Average Variance Extracted (AVE) value must pass 0.50. Based on the critical threshold value above, a summary of the measurement validity is shown in Table 1.

Table 1. Reliability Value of Reflective Construct

Reflective Construct	Items	Loading Factor (> 0.7)	AVE (> 0.5)	Composite Reliability (>0.7)	Cronbach's Alpha (α ≥0.70)
EMS					
Environmental Policy			0.760	0.927	0.894
	EnvPolicy1	0.890			
	EnvPolicy 2	0.905			
	EnvPolicy 3	0.882			
	EnvPolicy 4	0.807			
Planning			0.781	0.934	0.906
	Plan5	0.861			
	Plan6	0.896			
	Plan7	0.905			
	Plan8	0.872			
Implementation and Operation			0.794	0.939	0.912
	ImlOpr9	0.896			
	ImlOpr10	0.938			
	ImlOpr11	0.932			
	ImlOpr12	0.790			
Checking and Corrective Action			0.961	0.980	0.959
	CheckCor13	0.980			

	CheckCor14	0.980			
Management Review			0.821	0.948	0.927
	MgtRev15	0.871			
	MgtRev16	0.908			
	MgtRev17	0.916			
	MgtRev18	0.929			
PEB					
Save Energy			0.844	0.942	0.907
	EnSav19	0.936			
	EnSav20	0.955			
	EnSav21	0.863			
Waste Prevention			0.695	0.872	0.781
	PrevWaste22	0.861			
	PrevWaste23	0.860			
	PrevWaste24	0.777			
Nature Preservation			0.803	0.942	0.917
	PresNat25	0.828			
	PresNat26	0.911			
	PresNat27	0.922			
	PresNat28	0.919			
Environmental Performance			0.592	0.853	0.894
	EnvSust57	0.771			
	EnvSust58	0.787			
	EnvSust59	0.792			
	EnvSust60	0.727			
Economics Performance			0.774	0.954	0.942
	EconSust61	0.867			
	EconSust62	0.843			
	EconSust63	0.910			
	EconSust64	0.908			
	EconSust65	0.897			
	EconSust66	0.853			
Social Performance			0.789	0.949	0.933
	SosSust67	0.847			
	SosSust68	0.891			
	SosSust69	0.935			
	SosSust70	0.923			
	SosSust71	0.842			

Measurement of the second-order construct with reflective and formative measurement indicators needs to be taken into account. A two-stage approach was carried out before analyzing the structural model and the interaction between the mediator and moderator. A summary of all the results of the second-order PLS algorithm (Reflective - Formative) is presented in Table 2.

Table 2. Measurement of Two-Stage Process for Second-Order (Reflective – Formative)

Construct	Item	Loading Factor	Ave	Composite Reliability	Weight	VIF	T-Values Weights	P Value Weight
Reflective Model Second Order								
EMS			0.739	0.934				
	Environ. Policy	0.880						
	Planning	0.908						
	Implement & Operation	0,911						
	Check & Corrective Act.	0.735						
	Management Review	0.873						
PEB			0.807	0.926				
	Save Energy	0.877						
	Waste Prevention	0.915						

	Nature Preservation	0.902						
Environ. Sustainable Perform			0.592	0.853				
	Environ. Sustain57	0.773						
	Environ. Sustain58	0.783						
	Environ. Sustain59	0.792						
	Environ. Sustain60	0.727						
Economics Sustainable Perform			0.774	0.954				
	Economics Sustain61	0.869						
	Economics Sustain62	0.845						
	Economics Sustain63	0.910						
	Economics Sustain64	0.906						
	Economics Sustain65	0.895						
	Economics Sustain66	0.854						
Social Sustainable Perform			0.789	0.949				
	Social Sustainable67	0.845						
	Social Sustainable68	0.891						
	Social Sustainable69	0.936						
	Social Sustainable70	0.924						
	Social Sustainable71	0.842						
Formative Model Second Order								
GMM								
	Green Product				0.151	2.347	3.331	0.001
	Green Place				**0.065**	4.227	1.117	**0.264**
	Green Price				0.169	3.046	3.337	0.001
	Green Promotion				**0.030**	2.984	0.674	**0.500**
	Green Process				0.213	2.200	4.817	0.000
	Green People				0.393	1.865	9.632	0.000
	Green Physical Evidence				0.191	4.161	3.027	0.002

Two variables are considered Moderate, namely Environmental Policy and Checking and Correction Actions. The combined effect of the first order explaining the variance in Environmental Policy, Planning, Implementation & Operation, Inspection & Corrective Action, Management Review, Saving Energy, Waste Prevention, and Nature Preservation is accepted. The PLS algorithm for the results of R2 is presented in Figure 2 about First Order Construct below.

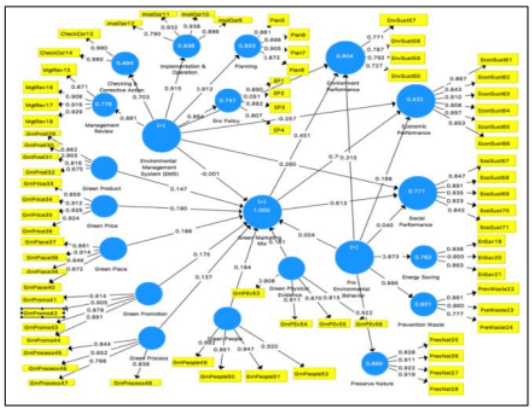


Figure 2. First Order Construct

The second-order construct model in this research is reflective-formative. The higher-order constructs are for the mediator variable. Due to the formative nature of the mediator constructs, the recommended measurement approach for this type of HCM model is the two-stage PLS. The two-stage PLS approach takes advantage of the advantages of PLS path modeling to explicitly measure the values of latent variables, also be implemented in models with interaction effects between all constructs as measured by reflective indicators. Figure 2 below shows the results from the Second Order Construct.

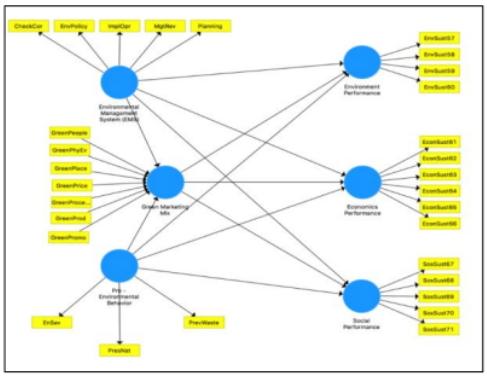


Figure 3. Second Order Construct

The results of the hypothesis for a direct relationship are obtained from several criteria such as t-value, p-value, and f^2. The relationship between variables in a positive (supported) result is based on a t-value above 1.645 (Hair *et al.*, 2017); then the P-value must be less than 0.10 (Hair *et al.*, 2017); and f^2 must be greater than 0.02. The details of the hypotheses are presented in Table 3 and Table 4.

Table 3. Hypothesis Testing (Direct Effect Result Test)

Hypothesis		Original Sample (O) /β	Std Dev/ Stand Error	T stat t-value (>1.645)	p-value (<0.10)	R^2	f^2 (≥ 0.02)	Q^2 (> 0)	Decision
H1	EMS → Economy SP	-0.262	0.103	2.545	0.005	0.421	0.028	0.295	Supported
H2	EMS → Environ. SP	-0.018	0.098	**0.187**	**0.426**	0.625	**0.000**	0.334	**Un-Support**
H3	EMS → Social SP	0.250	0.075	3.330	0.000	0.763	0.062	0.561	Supported
H4	PEB → Economy SP	0.125	0.109	**1.149**	**0.125**	0.421	**0.006**	0.295	**Un-Support**
H5	PEB → Environ. SP	0.202	0.102	1.976	0.024	0.625	0.025	0.334	Supported
H6	PEB → Social SP	-0.029	0.070	**0.417**	**0.338**	0.763	**0.001**	0.561	**Un-Support**
H7	EMS → GMM 7P's	0.465	0.062	7.503	0.000	0.814	0.373	0.486	Supported
H8	PEB → GMM 7P's	0.480	0.060	8.050	0.000	0.814	0.398	0.486	Supported
H9	GMM → Economy SP	0.753	0.113	6.641	0.000	0.421	0.182	0.486	Supported
H10	GMM → Environ. SP	0.626	0.100	6.284	0.000	0.625	0.194	0.486	Supported
H11	GMM → Social SP	0.675	0.072	9.340	0.000	0.763	0.357	0.486	Supported

Table 4. Hypothesis Testing on Mediating

Hypothesis		Original Sam (O)/β	Std Dev/ Stand Error	T statistic t-value (> 1.96)	p-value	Confidence Interval (BC)		Decision
						2.5%	97.5%	
H12	EMS → GMM → Economy SP	0.350	0.075	4.650	0.000	0.215	0.503	Supported
H13	EMS → GMM → Environ. SP	0.291	0.061	4.798	0.000	0.181	0.417	Supported
H14	EMS → GMM → Social SP	0.314	0.052	6.057	0.000	0.220	0.422	Supported
H15	PEB → GMM → Economy SP	0.362	0.070	5.183	0.000	0.230	0.501	Supported
H16	PEB → GMM → Environ. SP	0.300	0.064	4.730	0.000	0.177	0.428	Supported
H17	PEB → GMM → Social SP	0.324	0.057	5.662	0.000	0.226	0.448	Supported

After the results of the analysis w several previous stages, it was concluded that of the 17 initial hypotheses, it was proven that 14 hypothe s were accepted, while 3 hypotheses were rejected. Easily, the final results of the study table be seen in Figure 3 below.

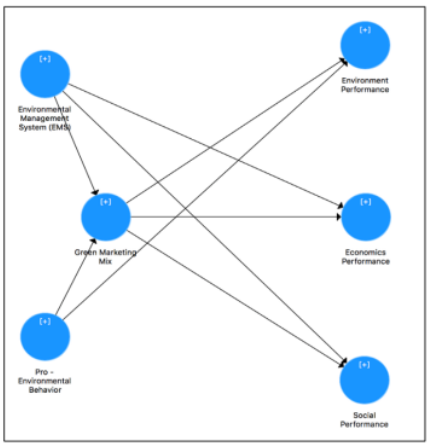


Figure 3. The Results of Full Model Analysis

The results of the research based on the analysis result model are that the Environmental anagement System (EMS) variable supports Sustainable Economy, Social Sustainable, and Green Marketing Mix 7P. The Pro-Environmental Behavior (PEB) variable supports the Sustainable Environment and Gree Marketing Mix 7P. The 7P Green Marketing Mix Va bles are also three sustainable variables namely Economic, Environmental, and Social. The 7P Green Marketing Mix function as a mediator between EMS and PEB in Sustainable Industrial Performance is also supported. The novelty of this research for the hospitality industry is the 7P Green Marketing Mix, both directly and as a moderator for EMS and PEB will provide positive benefits for the sustainability of the hospitality businesses

The hypotheses that support the novelty of the results of this study include H12 (EMS - GMM - Economic Sustainable Performance); H13 (PEB - GMM - Economic Sustainable Performance); H14 (EMS - GMM - Environmental Sustainable Performance); H15 (PEB - GMM

- Environmental Sustainable Performance); H16 (EMS - GMM - Social Sustainable Performance); and H17 (PEB - GMM - Social Sustainable Performance).

The benefits of this research can be used by several parties such as Hotel owners, Managers, Regional Governments, Central Government, and Hospitality Associations, all of that in the framework of creating sustainable tourism.

CONCLUSION AND RECOMMENDATION

There are seventeen hypotheses linking the Environmental Management System (EMS), Pro-Environmental Behavior (PEB) for Sustainable Industry Performance (SIP) with the Green Marketing Mix 7P's Mediation (GMM 7P's). Fourteen hypotheses are accepted and three hypotheses are rejected. Fourteen hypotheses were accepted, consisting of: H1, H3, H5, H7, H8, H9, H10, H11, H12, H13, H14, H15, H16 and H17. While the three hypotheses are rejected, namely: H2, H4, and H6. There are 11 hypotheses related to the direct interaction hypothesis, eight hypotheses are accepted, while three are not accepted. The conclusion from the research results is that the Environmental Management System (EMS) supports Sustainable Economy, Social Sustainable, and Green Marketing Mix 7P. For Pro-Environmental Behavior (PEB) supports Sustainable Environment and Green Marketing Mix 7P. Then the Green Marketing Mix 7P supports the three sustainable variables, namely Economic, Environmental, and Social. The Green Marketing Mix 7P function as a mediator between EMS and PEB on Sustainable Industry Performance is also supported. The benefit of this research for the hotel industry is that implementing EMS and PEB through the 7P Green Marketing Mix will provide positive benefits for the sustainability of the hotel business. The limitation of this research is the scope of the research location which is only in East Java. On the other hand, there is the Covid-19 pandemic which has forced several hotels to not operate. The recommendation for further research is to expand the scope of research locations to other provinces so that it can become a policy decision in managing the hospitality industry in the Republic of Indonesia.

Commented [L11]: It is not enough. The author need to elaborate more detail and what is the limitation and recommendation for future research.

ACKNOWLEDGEMENT

I would like to thank my three research friends, including Prof. Dr. Abdul Talib Bon from the University of Tun Hussein Onn Malaysia, also to Dr. Jonathan van Melle from Avans University of Applied Sciences, Netherlands, and Dr. Yuari Farradia from the Faculty of Business, Economics and Social Development, University of Malaysia Terengganu, Malaysia. Also, thanks to my institution at the Institut Bisnis dan Informatika Kesatuan, especially the Department of Tourism which has provided support for the research and writing of this paper.

REFERENCES

Commented [L12]: The references really not sufficient. Need minimum 30 references from good reputable journals

Azam, M., Alam, M. M., & Haroon Hafeez, M. (2018). Effect of tourism on environmental pollution: Further evidence from Malaysia, Singapore and Thailand. *Journal of Cleaner Production*, *190*, 330–338. https://doi.org/10.1016/j.jclepro.2018.04.168

BPS Kota Batu. (2020). Kota Batu Dalam Angka 2020. *Badan Pusat Statistik Kota*

Batu, 250–255.

Fatoki, O. (2019). Hotel employees' pro-environmental behavior: Effect of leadership behavior, institutional support, and workplace spirituality. *Sustainability (Switzerland)*, *11*(15). https://doi.org/10.3390/su11154135 page number?

Guanabara, E., Ltda, K., Guanabara, E., & Ltda, K. (2013). *Sustainable Tourism for Development*. UNWTO. title of the journal? journal's edition and page numbers?

Hengky, S. H., & Kikvidze, Z. (2021). Sustainable Coastal Tourism in Tanjung Kelayang, Indonesia. *Tourism Planning and Development*, *18*(3), 365–370. https://doi.org/10.1080/21568316.2020.1763444

Hourneaux, F., Gabriel, M. L. da S., & Gallardo-Vázquez, D. A. (2018). Triple bottom line and sustainable performance measurement in industrial companies. *Revista de Gestao*, *25*(4), 413–429. https://doi.org/10.1108/REGE-04-2018-0065

Ilhami, M. R., Anugrah Santaufanny, F. F., & Sinambella, R. (2020). Efektivitas Aver Viewer dalam Memantau Kemacetan Lalu Lintas di Kota Batu. *Jurnal Publisitas*, *7*(1), 11–22. https://doi.org/10.37858/publisitas.v7i1.36

Kementerian Lingkungan Hidup dan Kehutanan. (2021). *Statistik Kualitas Air, Udara, dan Tutupan Lahan 2020*. *1*, 39–48. https://ppkl.menlhk.go.id/website/filebox/1033/210930123917buku Statistik Ppkl 2020 (versi Cetak).pdf please adjust to the format for internet sources

KepMen LH No.48. (1999). Keputusan Menteri Negara Lingkungan Hidup No. 48 Tahun 1996 Tentang : Baku Tingkat Kebisingan. 48.

Lampung, U. B., Rama, A., Barusman, P., Virgawenda, T. M. B., & Arwis, Y. A. (2020). Factors that Effect the Level of Consumers Loyalty for Budget Hotel in Indonesia. *2932 Talent Development & Excellence*, *12*(1), 2932–2942. http://www.iratde.com

Li, Q. C., & Wu, M. Y. (2019). Rationality or morality? A comparative study of pro-environmental intentions of local and nonlocal visitors in nature-based destinations. *Journal of Destination Marketing and Management*, *11*(July 2018), 130–139. https://doi.org/10.1016/j.jdmm.2019.01.003

Masa'deh, R., Nasseef, M. A., Suliman, M., & Albawab, M. (2017). The Effect of Hotel Development on Sustainable Tourism Development. *International Journal of Business Administration*, *8*(4), 16. https://doi.org/10.5430/ijba.v8n4p16

Menteri Tenaga Kerja Republik Indonesia. (1999). Nilai Ambang Batas Faktor Fisika Di Tempat Kerja Menteri Tenaga Kerja Republik Indonesia. *Kep.51/Men/1999*, 15–20.

Moliner, M. Á., Monferrer, D., Estrada, M., & Rodríguez, R. M. (2019). Environmental sustainability and the hospitality customer experience: A study in tourist accommodation. *Sustainability (Switzerland)*, *11*(19). https://doi.org/10.3390/su11195279 page number?

N.J. Putra, H. Setyabudiarso, H. (2022). *Kota Malang Analysis Of Noise Levels Of W . R* .please adjust to the APA format

Peng, X., & Lee, S. (2019). Self-discipline or self-interest? The antecedents of hotel employees' pro-environmental behaviours. *Journal of Sustainable Tourism*, *27*(9), 1457–1476. https://doi.org/10.1080/09669582.2019.1632320

Pereira, V., Silva, G. M., & Dias, Á. (2021). Sustainability practices in hospitality: Case study of a luxury hotel in Arrábida Natural Park. *Sustainability*

(Switzerland), *13*(6), 1–21. https://doi.org/10.3390/su13063164

Postma, A., & Schmuecker, D. (2017). Understanding and overcoming negative impacts of tourism in city destinations: conceptual model and strategic framework. *Journal of Tourism Futures*, *3*(2), 144–156. https://doi.org/10.1108/JTF-04-2017-0022

Rainanto, B. H. (2022). *A t t p* (Issue August). Universiti Tun Hussein Onn Malaysia. please adjust to the APA format

Rainanto, B. H., Bon, A. T., & Purba, J. H. V. (2020). Environmental management system (EMS) and green marketing mix (7Ps) for hotel sustainable industrial performance: A conceptual model. *International Journal of Advanced Science and Technology*, *29*(7 Special), 3724–3732.

Rainanto, B. H., Bon, A. T., & Purba, J. H. V. (2022a). Developing the Conceptual Model of Sustainable Industrial Performance in the Hospitality Industry. *International Journal of Global Optimization and Its Application*, *1*(2), 80–89. https://doi.org/10.56225/ijgoia.v1i2.17

Rainanto, B. H., Bon, A. T., & Purba, J. H. V. (2022b). Environmental Management System and Pro-Environmental Behavior in Realizing Sustainable Industry Performance: Mediating Role of Green Marketing Management. *International Journal of Global Optimization and Its Application*, *1*(1), 12–21. https://doi.org/10.56225/ijgoia.v1i1.9

Sharpley, R. (2020). Tourism, sustainable development and the theoretical divide: 20 years on. *Journal of Sustainable Tourism*, *28*(11), 1932–1946. https://doi.org/10.1080/09669582.2020.1779732

Yuniati, N. (2021). Green Hotel Concept and Practices in Indonesia. *E-Journal of Tourism*, *8*(2), 184. https://doi.org/10.24922/eot.v8i2.76346

UNWTO World Tourism Organization. Actual Trends vs Tourist 2030 Forecast-World. https://www.moodiedavittreport.com/global-tourist-arrivals-leap-by-6-in-2018-reports-unwto/. 14 April 2019

UNWTO World Tourism Organization. Sustainable Development of Tourism. dt.unwto.org/content/about-us-5. 17 April 2019

Undang-Undang Republik Indonesia No.4 tahun 1982 tentang Ketentuan-Ketentuan Pokok Pengelolaan Lingkungan Hidup (UPPLH)

Undang-Undang Republik Indonesia No.23 tahun 1997 tentang Pengelolaan Lingkungan Hidup

Undang-Undang Republik Indonesia No.32 tahun 2009 tentang Perlindungan dan Pengelolaan Lingkungan Hidup

Undang-Undang Republik Indonesia No.90/1990 tentang Kepariwisatan

Commented [M113]: Please write references according to the APA format. The doi address needs to be removed.
Please capitalize the first letter in the title of the journal/book.
There are references that still have not written down the edition and page numbers.

Example: Toby, A. (2020). Empirical Study of the Liquidity Management Practices of Nigerian Banks. *Journal of Financial Management & Analysis*, *19*(1), 57-70.

For internet sources:
Endra. (2014). *Pola Kecenderungan Memetakan Potensi CSR di Indonesia*. Available at: http://lingkarlsm.com/pola-kecenderunganmemetakan-potensi-csr-di-indonesia/. 30 March 2015.

For Government Official Documents:
Undang-Undang Republik Indonesia Nomor 40 tahun 2007 tentang Perseroan Terbatas pasal 74 ayat 1.

Artikel Bambang Hengky Rainanto

ORIGINALITY REPORT

20%	20%	2%	3%
SIMILARITY INDEX	INTERNET SOURCES	PUBLICATIONS	STUDENT PAPERS

PRIMARY SOURCES

1	eprints.uthm.edu.my Internet Source	8%
2	rigeo.org Internet Source	5%
3	doc-pak.undip.ac.id Internet Source	1%
4	ejournal.unisbablitar.ac.id Internet Source	1%
5	Submitted to Universitas Negeri Semarang Student Paper	1%
6	www.researchgate.net Internet Source	1%
7	journal.srnintellectual.com Internet Source	1%
8	www.frontiersin.org Internet Source	1%
9	inotera.poltas.ac.id Internet Source	1%

Exclude quotes	Off	Exclude matches	< 1%
Exclude bibliography	On		

JDM
JURNAL DINAMIKA MANAJEMEN

Jurusan Manajemen, Fakultas Ekonomi, Universitas Negeri Semarang
Gedung L2 Kampus Sekaran Gunungpati, Semarang Indonesia
Telp/Fax: +6224-8508015;Hp: 0813-8507-2404
Email: jdm@mail.unnes.ac.id

ARTICLE REVIEW FORM
JURNAL DINAMIKA MANAJEMEN
Management Department Faculty of Economics
Universitas Negeri Semarang

Dear Reviewer,
Thank you in advance for reviewing the following article. Please be mindful that you belong to a community of scholars, educators, and practitioners who devote their energy to sharing knowledge. Always be respectful and professional when providing feedback. Referees are encouraged to be critical, constructive, and, above all, respectful.

Read the article and complete the reviewer report form within this document.

- Make **annotations or comment** to the article using a method that clearly differentiates your text from the author's such as block letters, different colored text, or the "Track Changes" function in Microsoft Word.
- **Please make sure that your identity stay hidden** while you are make a comment as we are using double-blind review process.
- Upload the completed report using the same link from which you downloaded the original report. When uploading the completed report, please include the recommendation regarding the publication decision.
- **Deadline:** Reports should be returned within **two weeks** of this invitation. Please see the referee selection email for your deadline.

Please do not hesitate to contact us by email if you have any questions about the refereeing process. We look forward to hearing from you.

Sincerely,

Jurnal Dinamika Manajemen

PLANNING REVIEW ARTICLES

Tittle	**Achieving Sustainable Performance in the Hospitality Industry based on Environmental Management, Pro-Environmental Behavior and Green Marketing Mix 7P**

REVIEW ARTICLES

Please give examination on each of the section on table below

General Comments	Overall this article is good enough written in English
Abstract	Good
Introduction	State of the art and research gaps need to be added to support the novelty presented
Method	Good enough
Result & Discussion	good
Conclusion & Recommendation	There are no conclusions and suggestions/recommendations, which are submitted only research results. So it is necessary to add conclusions and suggestions that are relevant to the research results.
References	Must follow APA Style

ASSESTMENT SUMMARY
(please check the boxes)

ASSESSMENT INDICATORS	**Very Good**	**Good**	**Fair**	**Poor**
Originality	☒	☐	☐	☐
Scholarly	☐	☒	☐	☐
Technical Quality	☐	☒	☐	☐
Appearance	☐	☒	☐	☐
Depth of the Research	☐	☒	☐	☐

ASSESTMENT SUMMARY
Reviewer Recommendation

☒ Accepted with minor revisions

☐ Accepted with major revisions

☐ Suggested to sent it to other journals such as:

☐ Rejected with the reason:

Jurnal Dinamika Manajemen, Vol (No) 20…., xx-xx

http://jdm.unnes.c.id

Nationally Accredited based on the Decree of the Minister of Research, Technology and Higher Education, Number 36a/E/KPT/2016

Achieving Sustainable Performance in the Hospitality Industry based on Environmental Management, Pro-Environmental Behavior and Green Marketing Mix 7P

Info Article

History Article:
Submitted
Revised
Accepted

Keywords:
Green Marketing Mix 7p'S, Environmental Management System, Pro-Environmental Behavior, Sustainable Performance

Abstract

Tourism is undeniable can grow the economy of a country. However, if not managed properly, tourism also has negative impacts that must be watched out for. The object of this study was General Managers or Hotel Managers in East Java Province, Indonesia with 228 respondents. This research is important because the tourism sector is an effective sector to increase foreign exchange for the province of East Java. This study aims to develop a relationship model between the Environmental Management System (EMS), Pro-Environmental Behavior (PEB), and the Green Marketing Mix 7 P's (GMM 7P's) as a mediator to achieve Sustainable Industrial Performance (SIP) with 17 hypotheses. The research uses quantitative methods, data collection through surveys and processing using SmartPLS 3. The results of the study found 14 hypotheses were accepted, while three hypotheses were rejected. The results of the study show that EMS implementation has a significant relationship with economic and social performance but has no relationship with environmental performance. PEB directly has a significant relationship with environmental performance but not with economic and social. GMM has a significant relationship with the three SIP elements. GMM is also a suitable partial mediator for EMS and PEB to achieve SIP.

Mewujudkan Kinerja Berkelanjutan di Industri Perhotelan berdasarkan Manajemen Lingkungan, Perilaku dan Green Marketing Mix 7P

Abstrak

Sektor pariwisata tidak bisa dipungkiri dapat menumbuhkan perekonomian suatu negara. Namun apabila tidak dikelola secara benar, pariwisata juga memiliki dampak negatif yang harus diwaspadai. Penelitian ini berlokasi di Provinsi Jawa Timur, Indonesia dengan 228 responden dengan jabatan General Manager atau Manager Hotel. Penelitian ini penting karena sektor pariwisata merupakan sektor yang efektif untuk meningkatkan devisa bagi provinsi Jawa

Timur. Penelitian ini bertujuan untuk mengembangkan model hubungan antara Sistem Manajemen Lingkungan (EMS), Perilaku Pro Lingkungan (PEB), dengan Bauran Pemasaran Hijau (GMM) sebagai mediator untuk mencapai Kinerja Industri Berkelanjutan (SIP) dengan 17 hipotesis. Penelitian menggunakan metode kuantitatif, pengambilan data melalui survei dan pengolahan menggunakan SmartPLS 3. Hasil penelitian menemukan 14 hipotesis diterima, sedangkan 3 hipotesis ditolak. Hasil penelitian menunjukkan bahwa penerapan EMS memiliki hubungan yang signifikan dengan kinerja ekonomi dan sosial tetapi tidak memiliki hubungan dengan kinerja lingkungan. PEB secara langsung memiliki hubungan yang signifikan dengan kinerja lingkungan tetapi tidak dengan ekonomi dan sosial. GMM memiliki hubungan yang signifikan dengan ketiga unsur SIP. GMM juga menjadi mediator parsial yang cocok untuk EMS dan PEB untuk mencapai SIP.

JEL Classification: Z31 Industry Studies

How to Cite: Author's name. (20…). Title of the article. *Jurnal Dinamika Manajemen*, *Vol*(No), xx-xx

correspondence Address
Institutional address:
E-mail:

ISSN
2086-0668 (print)
2337-5434 (online)
DOI: xxxxxxxxxxxxxx

INTRODUCTION

The very fast growth of the hospitality industry supports the tourism sector which has boosted the economy, but on the other hand it can have an impact on the environment (Masa'deh *et al.*, 2017). In several countries, the massive growth of tourism has had an environmental impact, for example in Spain there has been an increase in pollution, landfills, disruption of biodiversity, decreased environmental quality, and exploitation of water and water resources (Moliner *et al.*, 2019). This negative impact has also been studied in a number of other countries, such as Jordan (Masa'deh *et al.*, 2017), the Netherlands (Postma & Schmuecker, 2017), Malaysia, Singapore and Thailand (Azam *et al.*, 2018) and Taiwan (Peng & Chen, 2019). In Indonesia, research on the negative effects of the hotel industry has been published by Wibowo *et al.* (2017), who concluded the impact on disruption of the natural environment, built environment and local culture.

The Environmental Management System (EMS) focuses on fulfilling commitments by organizations to several policies for environmental management. This commitment includes reducing negative environmental impacts from the products, services and activities undertaken by the organization.

Pro-Environmental Behavior (PEB) is human behavior that understands and implements principles aimed at protecting the environment. The application of Pro-Environmental Behavior (PEB) is voluntary for the tourism industry, especially the hospitality industry (Fatoki, 2019; Li & Wu, 2019).

Green Marketing Mix 7Ps (GMM 7P's) is a strategy for fulfilling 7 basic attributes that will support marketing activities while upholding environmental protection. The hotel industry needs to implement the Green Marketing Mix 7P's strategy to realize sustainable tourism (Rainanto *et al*., 2022a).

The hotel industry's business performance is considered successful and sustainability is realized from success in terms of the economy (business), preservation of the surrounding environment, and maintaining the socio-cultural conditions of the local community. Business

continuity in the hospitality sector is not enough to be seen from the side of economic benefits, it is also necessary to look at it from the perspective of the surrounding environmental and social conditions (Alatsas, 2020; Pereira *et al.*, 2021; Rainanto *et al*, 2022b).

Cities that have potential as tourist destinations have a tendency to experience high growth in the number of hotels compared to other cities. This is because tourist destination cities are attractive economic potentials for hospitality investors and tourist destinations. For some residents who "benefit" from their city becoming a tourist destination, this will be considered attractive, but for some other residents, this can be a problem. Ilhami *et al.* (2020) stated that until 2019 there was traffic jam in Batu City, which is located in East Java Province, on certain days due to the large number of tourist vehicles entering the city. This is supported by data from the Central Bureau of Statistics for the City of Batu in 2019 which stated that visitors to tourist attractions and souvenir tours in Batu City in 2019 totaled 6,047,460 tourists with a total of 1,354 hotels. The ratio of the population of Batu City to the number of tourists coming to the city in 2019 is that the population of Batu City is 0.02% of the number of tourists.

The number of tourists in Batu City, Malang City and Malang Regency in East Java Province increased rapidly at weekends. The arrival of these tourists caused congestion on several roads there. Tjahjono *et al.* (2020) explained that noise level data around roads in Malang City, East Java, has exceeded the required noise level, namely the average noise value is 85.2 dB. Meanwhile, the Noise Threshold Value (NAV) according to Kepmenaker No. per-51/MEN/1999, ACGIH, 2008 and SNI 16-7063-2004 is 85 dB. Another negative effect is that the water discharge becomes weak at certain times. According to the Indonesian Forum for the Environment (WALHI) of East Java Province, the water quality index in East Java from 2016 to 2020 has decreased and is of concern and has a very concerning status. The data is also in accordance with the Statistical Report on Water Quality, Air and Land Cover issued by the Ministry of Environment and Forestry, Directorate General of Pollution Control and Environmental Damage, which stated that the water quality of all major rivers in East Java Province was classified as heavily polluted from 2015 to 2020 (Kementerian Lingkungan Hidup dan Kehutanan, 2020). Based on the East Java Province Environmental Management Quality Index Report. WALHI (2020) notes that more than 800,000 hectares of forest in East Java have been damaged. Walhi (2021) stated that in East Java Province cumulatively based on BNPB records from 2013 to 2019 there have been 2676 hydrometeorological disasters.

Commented [I1]: it needs to be stated what the number of declines is and from what number to how much

In addition to the negative impacts from environmental conditions, there are also negative impacts from an economic sector, such as high property prices which combine because many migrants are interested in owning homes in tourist destinations. Massive property development has also reduced the area of paddy fields and open land in these tourist destinations. Tanjung (2019) reports that the area of land in Malang is getting narrower every year. This is due to the conversion of land into residential and industrial areas. Currently the area of agricultural land in the city of Malang, especially for rice farming, is only 821 hectares out of 1,104 hectares. One of the impacts felt is the frequent occurrence of floods in several areas of Malang Metropolitan in recent years. If this negative impact is left unchecked, it will affect the comfort of the Malang Metropolitan City.

The World Tourism Organization (WTO) defines Sustainable Tourism as: "Tourism that takes into account its current and future economic, environmental and social impacts, meeting the needs of consumers, the environment, industry and local communities". The concept of sustainable tourism states that tourism development should not damage nature, the environment, land, especially agricultural land (UNWTO, 2019). UNWTO (2019) conceptual definition of sustainable tourism must: (i) Make optimal use of environmental resources, which are a key element in tourism development, safeguarding important ecological processes and helping to preserve natural heritage and biodiversity; (ii) Respect the socio-cultural authenticity of the host communities, preserve the cultural heritage and traditional values that they have built and live by, and contribute to

intercultural understanding and tolerance; (iii) Ensure proper and long-term economic operations, provide socio-economic benefits that are distributed fairly to all stakeholders, including stable employment and income opportunities and social services for local communities, and contribute to poverty alleviation.

Hourneaux *et al*, (2018) explain three sustainable performances for industrial companies along with the details of the constituent parameters. The three sustainable performances include: 1. Sustainable Environmental Performance, consisting of: (a) Reduction of waste water, (b) Reduction of emissions, waste and waste, (c) Reduction of costs for environmental aspects of products and services, (d) Environmental compliance, (e) Reduction costs for common environmental problems; 2. Sustainable Economic Performance, consisting of: (a) Profit from operations, (b) Sales growth, (c) Return on equity, (d)Return on investment, (e) Cost per unit produced, (f) Net cash flow, (g) Market share, (h) On-time delivery, (i) Customer response time, (j) Number of warranty claims, (k) Number of customer complaints, (l) Customer satisfaction survey, (m) Material efficiency variations; 3. Sustainable Social Performance, consisting of: (a) Social commitment, (b) Environmental preservation, (c) Increasing employee job satisfaction, (d) Training and education, (e) Compliance with products and services.

The novelties of the research are measuring Sustainable Performance in the Hospitality Industry based on an Environmental Management System, Behavior that supports the environment, and the application of the Green Marketing Mix 7P as a mediator.

Hypothesis Development

Relationship between Two or More Variables

The hypothesis that forms the basis of this study are 17 relationships. There are 11 hypotheses that are directly related and 6 hypotheses that are indirectly related using the Green Marketing Mix 7P (GMM 7's) mediation. The research hypothesis in this study in Figure 1 below.

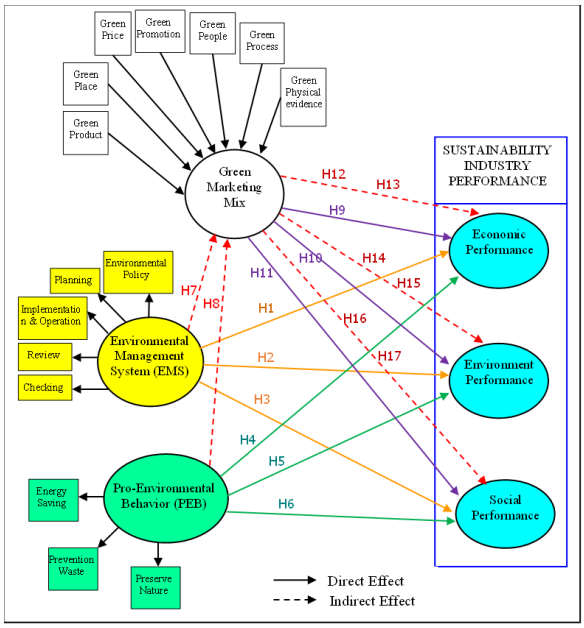


Figure 1. Research Hypothesis

The 17 hypotheses in this study are proposed in detail as follows:
H1: The EMS has a significant and direct relationship to sustainable economic performance
H2: The EMS has a significant and direct relationship to environmental performance
H3: The EMS has a significant and direct relationship to social performance
H4: The PEB has a significant and direct relationship to economic sustainability
H5: The PEB has a significant and direct relationship to environmental sustainability
H6: The PEB has a significant and direct relationship to social sustainability
H7: The EMS directly has a significant relationship on GMM
H8: The PEB directly has a significant relationship on GMM
H9: The GMM has a significant and direct relationship to economic sustainability
H10: The GMM has a significant and direct relationship to environmental sustainability
H11: The GMM has a significant and direct relationship to social sustainability
H12: The GMM mediate between EMS and economic sustainable performance
H13: The GMM mediate between PEB and economic sustainable performance
H14: The GMM mediate between EMS and environmentally sustainable performance
H15: The GMM mediate between PEB and environmentally sustainable performance
H16: The GMM mediate between EMS and social sustainable performance
H17: The GMM mediate between PEB and social sustainability

METHOD

This research method was chosen quantitatively by collecting primary data as the main source of the data being analyzed. A total of 228 respondents with the position of hotel manager or general manager are the basis for calculating the analysis.

This study uses a simple sampling method because the selection of the sample is completely random and member of the hotel industry population has an equal chance of being selected to be part of the sample. Furthermore, the use of purposive sampling method because the respondents selected as questionnaire fillers are hotel employees with the position of General Manager or Manager.

Research analysis based on research objectives: (1) Research analysis to find out the direct relationship between the X and Mediator variables with the Sustainable Industry Performance variable using Smart-PLS 3; (2) Research analysis to determine the recommended relationship model between variable X and Mediator with the Sustainable Industry Performance variable using Smart-PLS 3.

Commented [I2]: it is necessary to mention the amount of data used in this study

RESULT AND DISCUSSION

The results of the analysis using Smart PLS 3 through several stages of the process. The stages of the process include: Measurement of Construct Variable, Model validation, Assessment of measurement model, Measurement validity of first-order construct – reflective model, Loading Factor, Convergent Validity – Average Variance Extracted (AVE), Convergent Validity – Composite Reliability (CR), Cronbach's Alpha (α), Cross Loading, Fornell-Larcker Criterion, Heterotrait-monotrait (HTMT), Measurement Model Result – Outer model, Validity and Reliability of Second-Order Construct – Two-Stage Approach, Two stage approach (reflective-formative measurement model), Structural model/inner model measurement, Collinearity statistics (VIF) – Outer & Inner VIF, Hypotheses Testing (Path Coefficient), Coefficient of Determinant (R2), Effect Size (f2), Predictive Relevance (Q2), Hypothesis Evaluation, Testing the mediating roles, and finally the Recommended Model.

According to Fornell & Larcker (1981) states that the Convergent Validity of Cronbach's Alpha and Composite Reliability (CR) must be more than 0.70, while the Average Variance

Extracted (AVE) value must pass 0.50. Based on the critical threshold value above, a summary of the measurement validity is shown in Table 1.

Table 1. Reliability Value of Reflective Construct

Reflective Construct	Items	Loading Factor (> 0.7)	AVE (> 0.5)	Composite Reliability (>0.7)	Cronbach's Alpha (α ≥0.70)
EMS					
Environmental Policy			0.760	0.927	0.894
	EnvPolicy1	0.890			
	EnvPolicy 2	0.905			
	EnvPolicy 3	0.882			
	EnvPolicy 4	0.807			
Planning			0.781	0.934	0.906
	Plan5	0.861			
	Plan6	0.896			
	Plan7	0.905			
	Plan8	0.872			
Implementation and Operation			0.794	0.939	0.912
	ImlOpr9	0.896			
	ImlOpr10	0.938			
	ImlOpr11	0.932			
	ImlOpr12	0.790			
Cheking and Corrective Action			0.961	0.980	0.959
	CheckCor13	0.980			
	CheckCor14	0.980			
Management Review			0.821	0.948	0.927
	MgtRev15	0.871			
	MgtRev16	0.908			
	MgtRev17	0.916			
	MgtRev18	0.929			
PEB					
Save Energy			0.844	0.942	0.907
	EnSav19	0.936			
	EnSav20	0.955			
	EnSav21	0.863			
Waste Prevention			0.695	0.872	0.781
	PrevWaste22	0.861			
	PrevWaste23	0.860			
	PrevWaste24	0.777			
Nature Preservation			0.803	0.942	0.917
	PresNat25	0.828			
	PresNat26	0.911			
	PresNat27	0.922			
	PresNat28	0.919			
Environmental Performance			0.592	0.853	0.894
	EnvSust57	0.771			
	EnvSust58	0.787			
	EnvSust59	0.792			
	EnvSust60	0.727			
Economics Performance			0.774	0.954	0.942
	EconSust61	0.867			
	EconSust62	0.843			
	EconSust63	0.910			
	EconSust64	0.908			
	EconSust65	0.897			
	EconSust66	0.853			
Social Performance			0.789	0.949	0.933
	SosSust67	0.847			
	SosSust68	0.891			

SosSust69	0.935			
SosSust70	0.923			
SosSust71	0.842			

Measurement of the second order construct with reflective and formative measurement indicators needs to be taken into account. A two-stage approach was carried out prior to analyzing the structural model and the interaction between the mediator and moderator. A summary of all the results of the second-order PLS algorithm (Reflective - Formative) is presented in Table 2.

Table 2. Measurement of Two-Stage Process for Second-Order (Reflective – Formative)

Construct	Item	Loading Factor	Ave	Composite Reliability	Weight	VIF	T-Values Weights	P Value Weight
Reflective Model Second Order								
EMS			0.739	0.934				
	Environ. Policy	0.880						
	Planning	0.908						
	Implement & Operation	0,911						
	Check & Corrective Act.	0.735						
	Management Review	0.873						
PEB			0.807	0.926				
	Save Energy	0.877						
	Waste Prevention	0.915						
	Nature Preservation	0.902						
Environ. Sustainable Perform			0.592	0.853				
	Environ. Sustain57	0.773						
	Environ. Sustain58	0.783						
	Environ. Sustain59	0.792						
	Environ. Sustain60	0.727						
Economics Sustainable Perform			0.774	0.954				
	Economics Sustain61	0.869						
	Economics Sustain62	0.845						
	Economics Sustain63	0.910						
	Economics Sustain64	0.906						
	Economics Sustain65	0,895						
	Economics Sustain66	0.854						
Social Sustainable Perform			0.789	0.949				
	Social Sustainable67	0.845						
	Social Sustainable68	0.891						
	Social Sustainable69	0.936						
	Social Sustainable70	0.924						
	Social Sustainable71	0.842						
Formative Model Second Order								
GMM								
	Green Product				0.151	2.347	3.331	0.001
	Green Place				**0.065**	4.227	1.117	**0.264**
	Green Price				0.169	3.046	3.337	0.001
	Green Promotion				**0.030**	2.984	0.674	**0.500**
	Green Process				0.213	2.200	4.817	0.000
	Green People				0.393	1.865	9.632	0.000
	Green Physical Evidence				0.191	4.161	3.027	0.002

There are two variables that are considered Moderate, namely Environmental Policy and Checking and Correction Actions. The combined effect of the first order explaining the variance in Environmental Policy, Planning, Implementation & Operation, Inspection & Corrective Action, Management Review, Saving Energy, Waste Prevention, Nature Preservation is accepted. The PLS algorithm for the results of R2 is presented in Figure 2 about First Order Construct below.

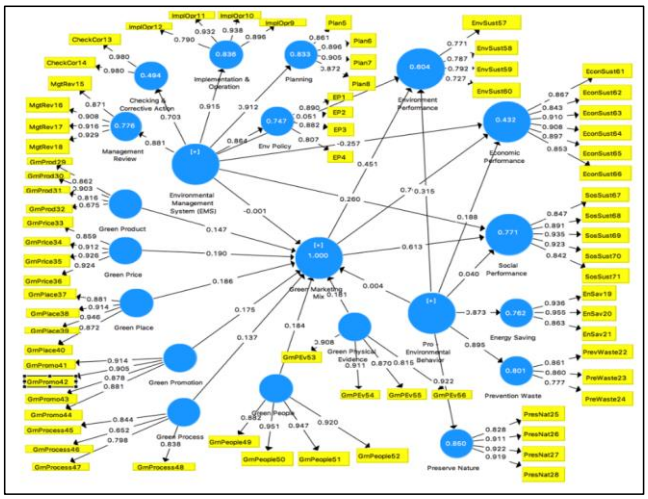


Figure 2. First Order Construct

The second order construct model in this research is reflective-formative. The higher order constructs are for the mediator variable. Due to the formative nature of the mediator constructs, the recommended measurement approach for this type of HCM model is the two-stage PLS. The two-stage PLS approach takes advantage of the advantages of PLS path modeling to explicitly measure the values of latent variables, also be implemented in models with interaction effects between all constructs as measured by reflective indicators. Figure 2 below shows the results from the Second Order Construct.

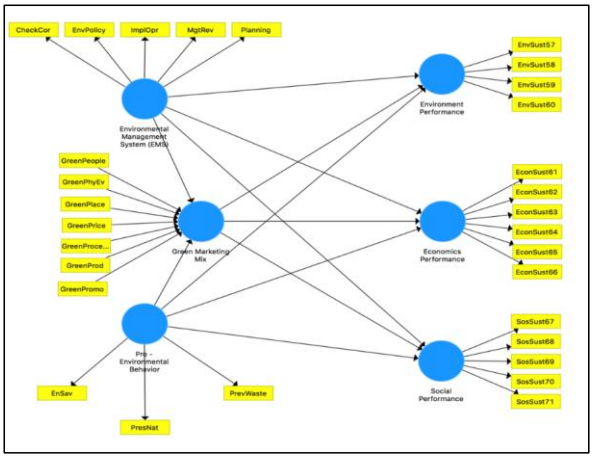


Figure 3. Second Order Construct

The results of the hypothesis for a direct relationship are obtained from several criteria such as t-value, p-value, and f^2. The relationship between variables in a positive (supported) result is based on a t value above 1.645 (Hair *et al.*, 2017); then the P-value must be less than 0.10 (Hair *et al.*, 2017); and f^2 must be greater than 0.02. The details of the hypotheses is presented in Table 3 and Table 4.

Table 3. Hypothesis Testing (Direct Effect Result Test)

Hypothesis		Original Sample (O) /β	Std Dev/ Stand Error	T stat t-value (>1.645)	p-value (<0.10)	R^2	f^2 (≥ 0.02)	Q^2 (> 0)	Decision
H1	EMS → Economy SP	-0.262	0.103	2.545	0.005	0.421	0.028	0.295	Supported
H2	EMS → Environ. SP	-0.018	0.098	**0.187**	**0.426**	0.625	**0.000**	0.334	**Un-Support**
H3	EMS → Social SP	0.250	0.075	3.330	0.000	0.763	0.062	0.561	Supported
H4	PEB → Economy SP	0.125	0.109	**1.149**	**0.125**	0.421	**0.006**	0.295	**Un-Support**
H5	PEB → Environ. SP	0.202	0.102	1.976	0.024	0.625	0.025	0.334	Supported
H6	PEB → Social SP	-0.029	0.070	**0.417**	**0.338**	0.763	**0.001**	0.561	**Un-Support**
H7	EMS → GMM 7P's	0.465	0.062	7.503	0.000	0.814	0.373	0.486	Supported
H8	PEB → GMM 7P's	0.480	0.060	8.050	0.000	0.814	0.398	0.486	Supported
H9	GMM → Economy SP	0.753	0.113	6.641	0.000	0.421	0.182	0.486	Supported
H10	GMM → Environ. SP	0.626	0.100	6.284	0.000	0.625	0.194	0.486	Supported
H11	GMM → Social SP	0.675	0.072	9.340	0.000	0.763	0.357	0.486	Supported

Table 4. Hypothesis Testing on Mediating

Hypothesis		Original Sample (O)/β	Std Dev/ Stand Error	T statistic t-value (> 1.96)	p-value	Confidence Interval (BC)		Decision
						2.5%	97.5%	
H12	EMS → GMM → Economy SP	0.350	0.075	4.650	0.000	0.215	0.503	Supported
H13	EMS → GMM → Environ. SP	0.291	0.061	4.798	0.000	0.181	0.417	Supported
H14	EMS → GMM → Social SP	0.314	0.052	6.057	0.000	0.220	0.422	Supported
H15	PEB → GMM → Economy SP	0.362	0.070	5.183	0.000	0.230	0.501	Supported
H16	PEB → GMM → Environ. SP	0.300	0.064	4.730	0.000	0.177	0.428	Supported
H17	PEB → GMM → Social SP	0.324	0.057	5.662	0.000	0.226	0.448	Supported

After the results of the analysis with several previous stages, it was concluded that of the 17 initial hypotheses, it was proven that 14 hypotheses were accepted, while 3 hypotheses were rejected. Easily, the final results of the study able be seen in Figure 3 below.

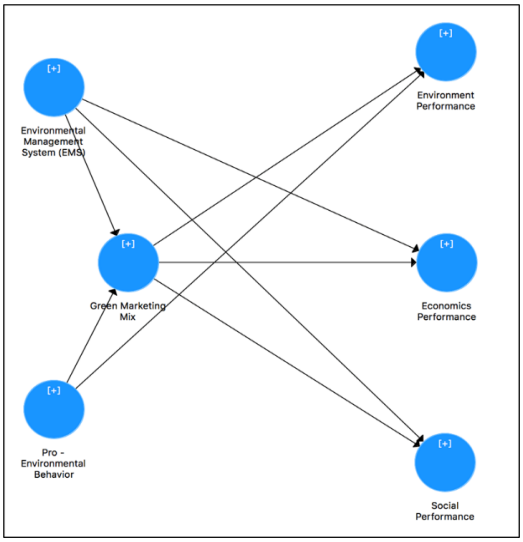


Figure 3. The Results of Full Model Analysis

The benefits of this research can be used by several parties such as: Hotel owners, Managers, Regional Governments, Central Government, and Hospitality Associations, all of that in the framework of creating sustainable tourism.

CONCLUSION AND RECOMMENDATION

There are seventeen hypotheses linking the Environmental Management System (EMS), Pro-Environmental Behavior (PEB) for Sustainable Industry Performance (SIP) with the Green Marketing Mix 7P's Mediation (GMM 7P's). There are fourteen hypotheses which are accepted and three hypotheses which are rejected. Fourteen hypotheses were accepted, consisting of: H1, H3, H5, H7, H8, H9, H10, H11, H12, H13, H14, H15, H16, and H17. While the three hypotheses are rejected, namely: H2, H4, and H6. There are 11 hypotheses related to the direct interaction hypothesis, eight hypotheses are accepted, while three are not accepted. The conclusion from the research results is that the Environmental Management System (EMS) supports Sustainable Economy, Social Sustainable, and Green Marketing Mix 7P. For Pro-Environmental Behavior (PEB) supports Sustainable in Environment and Green Marketing Mix 7P. Then the Green Marketing Mix 7P supports the three sustainable variables, namely Economic, Environmental and Social. The Green Marketing Mix 7P function as a mediator between EMS and PEB on Sustainable Industry Performance is also supported. The benefit of this research for the hotel industry is that implementing EMS and PEB through the 7P Green Marketing Mix will provide positive benefits for the sustainability of the hotel business.

Commented [I3]: Provide conclusions from the results of your research, not just writing research results and provide suggestions that are relevant to the results of your research

ACKNOWLEDGEMENT

I would like to thank you to my three research friends, including Prof. Dr. Abdul Talib Bon from University of Tun Hussein Onn Malaysia, also to Dr. Jonathan van Melle from Avans University of Applied Sciences, Netherlands, and Dr. Yuari Farradia from the Faculty of Business, Economics and Social Development, University of Malaysia Terengganu, Malaysia. Also, thanks to my institution at the Institut Bisnis dan Informatika Kesatuan, especially the Department of Tourism which has provided support for the research and writing of this paper.

REFERENCES

Alatsas, Peter. (2020). *Symbiosis in Hospitality Management*. Austin Macauley. London, UK.

Azam, M., Alam, Md. M. & Hafeez, M.H. (2018). Effect of tourism on environmental pollution: Further evidence from Malaysia, *Singapore and Thailand. Journal of Cleaner Production 190*, 330-338.

Fatoki, Olawale. (2019). Hotel Employees' Pro-Environmental Behaviour: Effect of Leadership Behaviour, Institutional Support and Workplace Spirituality. *Sustainability*, 1-15.

Fornell, C. & Larcker, D.F. (1981). Evaluating Structural Equation Models with Unobservable Variables and Measurement Error. *Journal of Marketing Research, 18(1)*, 39-50

Hair, J., Hair, J., Hollingsworth, C. L., Hollingsworth, C. L., Randolph, A. B., Randolph, A. B. & Chong, A. Y. L. (2017a). An updated and expanded assessment of PLS-SEM in information systems research. *Industrial Management & Data Systems, 117(3),* 442-458.

Hourneaux, F., Gabriel, M. & Gallardo-vazquez, D. (2018). Triple bottom line and sustainable performance measurement in industry companies. *Revista de Gestão*, 413-429.

Ilhami, M., Anugrah Santaufanny, F., & Sinambella, R. (2020). Efektivitas Aver Viewer dalam Memantau Kemacetan Lalu Lintas di Kota Batu. *Jurnal Publisitas, 7(1),* 11-22.

Kementerian Lingkungan Hidup dan Kehutanan, Direktorat Jenderal Pengendalian Pencemaran dan Kerusakan Lingkungan. (2020). Statistik Kualitas Air, Udara dan Tutupan Lahan Tahun 2020. Direktorat Jenderal Pengendalian Pencemaran dan Kerusakan Lingkungan.

Peng, N. & Chen, A., (2019). Luxury Hotels Going Green - The Antecendents and Consequences of Consumer Hesitation. *Journal of Sustainable Tourism*, 1-19.

Pereira, V., Silva, G. M., & Dias, Á. (2021). Sustainability Practices in Hospitality: Case Study of a Luxury Hotel in Arrábida Natural Park. *Sustainability*, *13(6)*, 1-21.

Rainanto B.H., Bon, A.T.B., & Purba J.H. (2022a). Environmental Management System and Pro-Environmental Behavior in Realizing Sustainable Industry Performance: Mediating Role of Green Marketing Management. *International Journal of Global Optimization and Its Optimization*, 1(2), 12-21.

Rainanto B.H., Bon, A.T.B., & Purba J.H. (2022b). Developing the Conceptual Model of Sustainable Industrial Performance in the Hospitality Industry. *International Journal of Global Optimization and Its Optimization*, 1(2), 80-89.

Commented [I4]: Follow APA style

Tanjung, F. (2019). *Lahan pertanian di Kota Malang semakin berkurang*. Retrieved on December 12, 2020, from: https://radarmalang.id/lahan-pertanian-di-kota-malang-semakin-berkurang/

Tjahjono, Ngudi., Hanafi, I., Latipun, L., & Suyadi. (2020). Attitudes and Responses Residents Against Traffic Noise in Malang City, East Java, Indonesia. J-PAL, 11(2), 56-63.

UNWTO World Tourism Organization. Actual Trends vs Tourist 2030 Forecast-World. https://www.moodiedavittreport.com/global-tourist-arrivals-leap-by-6-in-2018-reports-unwto/.

UNWTO World Tourism Organization. Sustainable Development of Tourism. dt.unwto.org/content/about-us-5.

Walhi. (2020). *Bahaya! Kualitas Air di Jawa Timur Mengalami Penurunan*. Retrieved on December 2021, from:suarasurabaya.net.

Walhi. (2021). *Tingginya Intensitas Bencana Hidrometeorologi di Jawa Timur dan Pentingnya Peran Pemerintah*. Walhijatim.

JURNAL DINAMIKA MANAJEMEN

Jurusan Manajemen, Fakultas Ekonomi, Universitas Negeri Semarang
Gedung L2 Kampus Sekaran Gunungpati, Semarang Indonesia
Telp/Fax: +6224-8508015;Hp: 0813-8507-2404
Email: jdm@mail.unnes.ac.id

ARTICLE REVIEW FORM
JURNAL DINAMIKA MANAJEMEN
Management Department Faculty of Economics
Universitas Negeri Semarang

Dear Reviewer,
Thank you in advance for reviewing the following article. Please be mindful that you belong to a community of scholars, educators, and practitioners who devote their energy to sharing knowledge. Always be respectful and professional when providing feedback. Referees are encouraged to be critical, constructive, and, above all, respectful.

Read the article and complete the reviewer report form within this document.

- Make **annotations or comment** to the article using a method that clearly differentiates your text from the author's such as block letters, different colored text, or the "Track Changes" function in Microsoft Word.
- **Please make sure that your identity stay hidden** while you are make a comment as we are using double-blind review process.
- Upload the completed report using the same link from which you downloaded the original report. When uploading the completed report, please include the recommendation regarding the publication decision.
- **Deadline:** Reports should be returned within **two weeks** of this invitation. Please see the referee selection email for your deadline.

Please do not hesitate to contact us by email if you have any questions about the refereeing process. We look forward to hearing from you.

Sincerely,

Jurnal Dinamika Manajemen

PLANNING REVIEW ARTICLES

Tittle	**Analysis of Customer Behavior and Attitudes (General Risk) on Satisfaction, Trust and Halal Awareness of Purchase Intentions in Food Delivery Applications** .

Commented [L1]: Please make a catchy title

REVIEW ARTICLES

Please give examination on each of the section on table below

General Comments	The topic of this article is quite interesting, but still need a lot of revision.
Abstract	Need explanation more on the findings and do not use the number in the abstract
Introduction	1. Need to explain more about the novelty of this article. 2. The writing style needs to follow the journal template 3. Not consistent using Mendeley. 4. Please explain each hypothesis development 5. Some explanation about methodology write in the introduction. Please re-read and re-write in the right section.
Method	Not clear enough
Result & Discussion	Need more detailed explanation and discussion
Conclusion & Recommendation	

References	Need more references

ASSESTMENT SUMMARY
(please check the boxes)

ASSESSMENT INDICATORS	Very Good	Good	Fair	Poor
Originality	☐	☒	☐	☐
Scholarly	☐	☐	☒	☐
Technical Quality	☐	☐	☒	☐
Appearance	☐	☐	☒	☐
Depth of the Research	☐	☒	☐	☐

ASSESTMENT SUMMARY

Reviewer Recommendation

☐ Accepted with minor revisions
☒ Accepted with major revisions
☐ Suggested to sent it to other journals such as:
☐ Rejected with the reason:

Jurnal Dinamika Manajemen, Vol (No) 20…., xx-xx

http://jdm.unnes.c.id

Nationally Accredited based on the Decree of the Minister of Research, Technology and Higher Education, Number 36a/E/KPT/2016

Analysis of Customer Behavior and Attitudes (General Risk) on Satisfaction, Trust and Halal Awareness of Purchase Intentions in Food Delivery Applications

Info Article

History Article:
Submitted
Revised
Accepted

Keywords:
Food Delivery Applications; General Risks; Halal Awareness; Purchase Intentions.

Abstract

The COVID-19 pandemic in Indonesia has caused changes in people's behavior, such as increased use of online shops, working at home (WFH), and other social activities carried out virtually or online. One of the policies in the era of the COVID-19 pandemic is social distancing or physical distancing, which causes people to keep their distance and avoid crowds to break the chain of the spread of COVID-19. In addition, the existence of social distancing or physical distancing policies has resulted in high product purchases online, one of which is product purchases in food delivery applications. Now, on the food delivery application isn't policy regarding halal awareness so that purchasing products online makes customers see common risks such as health risks, psychological risks, environmental risks, social risks, quality risks, financial risks, and time-loss risk that affects customer trust, customer satisfaction, and purchase intention. The purpose of this study is to identify the factors of customer attitudes and behavior (general risks) that affect customer satisfaction and trust and the effect of awareness, satisfaction, and trust of halal customers on the intention to buy halal products in food delivery applications. The analysis used the PLS-SEM method, and the sampling technique was convenience sampling with 230 respondents. The results showed that customer attitudes and behavior (general risk) had a significant effect on satisfaction and trust with path values ~~of (β=0.797)~~ and ~~(β=0.686~~ respectively). In addition, halal awareness, trust, and satisfaction had a significant impact on purchase intention, with path values respectively ~~(β=0.202), (β=0.285), and (β=0.250).~~

Commented [L2]: No need to write the numbers in the abstract. Only the result / findnings

Indonesian Title (Capitalize Each Words)

Abstrak

Pandemi COVID-19 di Indonesia menyebabkan perubahan perilaku masyarakat, seperti meningkatnya penggunaan toko online, WFH) dan aktivitas sosial lainnya yang dilakukan secara virtual atau online. Salah satu kebijakan di era pandemi COVID-19 adalah social distancing atau physical distancing, yang menyebabkan masyarakat menjaga jarak dan menghindari keramaian untuk memutus rantai penyebaran COVID-19. Kebijakan tersebut mengakibatkan tingginya pembelian secara online, salah satunya pembelian di aplikasi

pengiriman makanan. Saat ini aplikasi pengiriman makanan belum ada kebijakan mengenai kesadaran halal sehingga membuat pelanggan melihat risiko umum seperti risiko kesehatan, risiko psikologis, risiko lingkungan, risiko sosial, risiko kualitas, risiko finansial, dan risiko kerugian waktu yang mempengaruhi kepercayaan pelanggan, kepuasan pelanggan, dan niat beli. Tujuan penelitian ini adalah untuk mengidentifikasi faktor-faktor sikap dan perilaku pelanggan (resiko umum) yang mempengaruhi kepuasan dan kepercayaan pelanggan serta pengaruh kesadaran, kepuasan, dan kepercayaan pelanggan halal terhadap niat membeli produk halal pada aplikasi pengiriman makanan. Analisis menggunakan metode PLS-SEM, dan teknik pengambilan sampel adalah convenience sampling dengan jumlah responden 230 orang. Hasil penelitian menunjukkan bahwa sikap dan perilaku pelanggan (risiko umum) berpengaruh signifikan terhadap kepuasan dan kepercayaan dengan nilai jalur masing-masing ~~(β=0,797) dan (β=0,686)~~. Selain itu, kesadaran halal, kepercayaan, dan kepuasan memiliki dampak yang signifikan terhadap niat beli, dengan nilai jalur masing-masing ~~(β=0.202), (β=0.285), dan (β=0.250)~~

JEL Classification: Marketing Management

How to Cite: Author's name. (20…). Title of the article. *Jurnal Dinamika Manajemen, Vol*(No), xx-xx

ISSN
2086-0668 (print)
2337-5434 (online)
DOI: xxxxxxxxxxxxxx

INTRODUCTION

Commented [L3]: 1.Please consistently use Mendeley
2.Please write your paper following the journal template.

Indonesia is the fourth most populous country in the world. Therefore the Covid-19 pandemic is predicted to be very impactful and in a longer period when compared to other countries (Bank, 2020). One of the Covid-19 pandemic policies is social distancing or physical distancing applied to all Indonesian citizens. One of the impacts of implementing social distancing or physical distancing policies is a business in food and beverage, where customers are no longer allowed to enjoy food and drinks in restaurants and shops (Aditya, 2020). Changes in behavior make people use food delivery applications more to meet their food needs.

Commented [L4]: Some of your citation already used Mendeley, but some is not. Why?

Government Regulation Number 86 of 2019 concerning food safety is one of the regulations to protect the state by protecting the people regarding safe food consumption for the health and safety of the Indonesian people (Pemerintah Tentang Keamanan Pangan, 2019). Therefore, for products on the markets to ensure that they are safe for consumption, food safety practices must be implemented along the food chain, especially in the distribution or delivery process to the end-user technological advances making product delivery possible using smartphones. Some examples of food delivery applications in Indonesia that are currently trending are Gofood and Grabfood, which are the market leaders for food delivery applications in Indonesia (Statista, 2020).

According to the Statista survey (2020), users of food delivery applications in Indonesia for June 2020 stated that around 84% of respondents would continue to use food delivery applications as often as possible, even after the policy is lifted. Approximately 16% of respondents will switch to systems offline. The survey reinforces the notion that the number of users of food delivery apps is still high. However, in activities in the field, business owners on the food delivery application such as GoFood and GrabFood in collaborating with partners producing food and beverage products, no provision requires partners to have halal product standards such as MUI halal certification or have a halal

logo to identify their products (Gojek, 2020). So that when purchasing a food delivery application, customers will feel the risk to the product they are going to buy.

According to Tieman et al. (2013), buying products online exposes customers to several common types of risks. According to Olya & Al-ansi (2018), Customer attitudes and behavior are considered perceived risks and lead to negative and positive consequences under different conditions of uncertainty. Several risks such as health risk, quality risk, social risk, lost time risk, environmental risk, psychological risk, and financial risk, which are referred to as the framework of customer attitudes and behavior (general risk), are used to support the interaction of various types of risks perceived by customers (Al-Ansi et al., 2019).

The perceived risk perception of customers towards the food products they consume will affect customer satisfaction (Al-Ansi et al., 2019). Roudposhti et al. (2018) added a relationship between satisfaction and customer behavior and a relationship between customer satisfaction and purchase intention. Customers' satisfaction also has a positive close relationship with customer trust in consuming a product (Yoga et al., 2016).

Trust is recognized as a key driver of customer satisfaction and desired behavioral outcomes in social sciences (Al-Ansi et al., 2019). Trust is a value inferred from the facts about how trustworthy the product from the manufacturer is. The customer's trust can affect the customer's purchase intention, so the higher the customer's trust, the higher the intention to buy a product (Istri et al., 2018). Roudposhti et al. (2018) state that when customers trust the products they consume, they are more likely to buy these products in the future.

During this Covid-19 pandemic, people need to consume healthy food because it is very important in boosting the immune system. Apart from the health side, customers must also be smart when buying products online (Sumartomdjon, 2020). The most sought after and purchased products during the pandemic are definitely safe, healthy, and healthy by Government Regulation Number 86 of 2019 concerning Food Safety. According to Mohtar et al. (2014), safe, healthy, hygienic, and environmentally friendly products are the concepts of halal products. So, to see the health and safety side of a product, it can be seen from the halal side of the product. In addition, halal-certified products also have the advantage that customers will be loyal to these halal products (Yasin & Norjanah, 2021). Around 86% of Indonesians are Muslim. The Muslim community generally maintains halalness to ensure a high-quality lifestyle and peace of mind by adhering to their religious beliefs. According to Battour et al. (2012), many customers consciously always practice their trust during their trips and holidays, such as consuming halal food and using products and services that comply with Sharia law. In addition, non-Muslim communities are also interested in using halal products because of the concept of halal products that ensure the health and hygiene of their products (Mohtar et al., 2014). This statement aligns with the halal vision that must be applied to fulfill customer consumption, especially in food delivery applications.

Halalness a product become a mandatory requirement for each customer as well as already stipulated in the UU No. 33 of 2014 concerning Guarantee of halal products, which states that every product that enters circulates and is traded in the territory of Indonesia must be certified halal except for products that are not halal. Therefore, every product sold either on food delivery applications or sold directly at other restaurants must guarantee the halalness of each product.

According to Yunus et al. (2014), The attitude and behavior of customers towards the consumption of a product is a vital factor in avoiding doubtful food products. Halal

awareness will help customers get a clearer picture of the product they will buy, which can help customers make purchasing decisions that align with customer preferences and beliefs (Yunus et al., 2014). In line with other research, halal certification and halal awareness also positively affect purchase intention (Budiman, 2019; Septiani & Ridlwan, 2020).

Currently, the potential share of the halal market in Indonesia is still very wide. Muslims and non-Muslims consume halal products with a total halal market demand capable of reaching 2.8 billion dollars per year (Kahraman, 2016). Furthermore, the increase in the halal market is estimated to continue to grow by an average of 5.3% and reach US$ 330.5 billion in 2025 (Katadata, 2020). Therefore, with the high percentage of the halal market in Indonesia for the next five years, Indonesia is a potential market for halal products such as halal food and drinks or other halal products. So, it can be said that this research needs to be done to find out the factors that influence the purchase intention of customers from various types of food delivery applications.

This study uses the SEM-PLS method, which is considered suitable for predicting path coefficients and investigating the complexity of the relationship model built from a wide variety of variables. In addition, SEM-PLS has advantages, namely the ability to relate the relationship between variables, efficiency in examining measurement model items, and the required sample is not much. Another study from Briliana & Mursito (2017) & Olya & Al-ansi (2018) also uses SEM-PLS because of its efficiency in examining measurement model items. Added from Briliana & Mursito (2017), PLS-SEM is an alternative method used if the assumptions in CB-SEM cannot be met. If the research objective predicts confirmation of a theory SEM-PLS is used to explore a hypothesis.

Therefore, needed exploratory research to how the influence of customer attitudes and behavior (general risk) on trust and satisfaction, trust, satisfaction, and halal awareness on purchase intention halal products in delivery applications food. Based on the existing phenomena from previous research regarding customer attitudes and behavior (general risk), customer satisfaction, customer trust, halal awareness and its influence on purchase intentions, as well as the existing condition of food delivery application providers where there is no provision to require selling halal-standard products for partners in food delivery applications. This research uses the SEM-PLS method, which is suitable to see the relationship between variables. A sample limit is not too large where this research is only in the Karawang Regency.

Commented [L5]: Need to explain what is the novelty of this research.

Commented [L6]: Please explain this in methodology section.

Commented [L7]: Why only In Karawang?

Hypothesis Development

Relationship between Two or More Variables

Attitudes and customer behavior (risk for general) identify various aspects of real-life decisions that can explain customer decision-making processes in risky conditions such as health, psychological, environmental, social, quality, financial, and lost time risks (Al-Ansi et al., 2019). This study will identify factors in customer behavior and how they affect customer satisfaction, customer trust, halal awareness, customer trust, and customer satisfaction with purchase intentions in food delivery applications. Some explanations of the related variables are as follows;

Halal Awareness for Muslims in buying and consuming products, it is very important to pay attention to awareness of the products they will consume. Types of halal products ranging from various local and imported foods are produced and handled by different ethnic groups. Halal awareness for Muslims in Indonesia determines their food choices based on the halal logo and certification from the Indonesian Ulema Council (MUI) (Pramintasari & Fatmawati, 2017). The number of products that have been declared halal

from LPPOM MUI is 688,615 units, the number of companies certified halal is 55,626 units, and the number of halal certificate holders is 65,116 units. (Petriella, 2019)

According to Yunus et al. (2014), the increase in the number of products that follow halal certification can encourage the perception that Muslims are increasingly aware of the importance of halal products, which indirectly leads to the development of the global halal food industry. This assumption proves that Muslim customers are becoming more aware of considering the halal issue more seriously. Therefore, Muslims need to understand and know the halalness of a product in measuring halal awareness.

Halal awareness is an understanding for Muslims regarding issues related to the halal concept (Nurcahyo & Hudrasyah, 2017). Yunus et al. (2014) added that customer attention, especially food consumption, is vital in avoiding uncertain food products. Later, it will help customers have a clearer picture that will help them make purchasing decisions according to customer preferences and beliefs.

According to Briliana & Mursito (2017), customer awareness regarding halal-labeled products is increasing. Therefore, the food and beverage industry need to know about customer care, awareness, intention, and use of halal products. With the increasing awareness of halal customers, it is hoped that it can help them generate more income and attract customers to buy food and beverage products in food delivery applications.

The customer attitudes and behaviors (general risk) framework identify customer behaviors and attitudes through various aspects of real-life decisions. Reducing the risk that occurs can increase the likelihood of customers buying a product (Marakanon & Panjakajornsak, 2017). This framework is used to describe individual decision-making processes in at-risk conditions. Al-Ansi et al. (2019) modeled customer behavior when making decisions based on different profit and loss values.

Customer satisfaction is defined as the overall acceptance of the experience and expectations of product quality obtained after utilizing or consuming products or services by customers, influencing their purchasing decisions (Al-Ansi et al., 2019). satisfaction is considered an important variable because of its high effect on the behavior and attitudes of future customers about certain products or services (Jani & Han, 2014). Several different studies examine and examine the relationship between the overall risk construct and customer satisfaction. In addition, the risk perceived by customers in the context of food consumption has a negative association with customer satisfaction (Jani & Han, 2014). Al-Ansi et al. (2019) added that customer satisfaction is influenced by the customer's perception of the risk of food that he consumes.

Commented [L8]: ??

Roudposhti et al. (2018) state that trust is a value that concludes the fact that how trustworthy the entire system according to its users is. Trust is an attitude clearly shown from the quality provided by service or product providers (Islam et al., 2021). Trust describes a set of personal beliefs that a person feels about a particular attribute. Trust has a relationship with risk, and if customer attitudes and behavior get a good thought on chance, it will increase customer trust.

According to Yunus et al. (2014), the intention is a state of a person's willingness to perform a behavior, which is considered a direct antecedent of behavior. Nilashi. et al. (2016) added that intention is a person's motivation in the sense of his conscious plan to exert effort to perform a behavior. Direct measurement of indicators of an intention to do something refers to an evaluative assessment of the advantages and disadvantages of doing a behavior. Purchase intention shows individual human beliefs to buy halal food products. For example, a Muslim customer has the intention to purchase halal food products that are served when displayed at the place of purchase (Aziz & Vui, 2012).

Roudposhti et al. (2018) added that purchase intention is used to help predict future buying behavior. Nilashi et al. (2016) added a relationship between customer trust and purchase intention in a recommendation system e-commerce. Other research from Briliana & Mursito (2017) also states a positive relationship between attitudes and intentions to choose halal products. The intention is "the motivation of a person in the sense of his conscious plan to exert effort to perform a behavior.

This research is quantitative research with the data source used as primary data. The data obtained is the result of distributing questionnaires to respondents offline and online with a google form. According to Sekaran & Bougi (2009), the questionnaire is a research questionnaire in the form of several questions that have been formulated in advance as respondent's answers and is an appropriate data collection in measuring variable interest. Furthermore, the scale range used is 1-5 because it is considered a better instrument test index (Budiaji, 2013). The attributes of the questionnaire adapted from several previous studies are described in Table 1.

Table 1. Attributes of the Research Questionnaire

Indicator	Variable	Code	Source
Health Risk	Conditions	RS1	
	Disease Outbreaks	RS2	
	unhygienic non-Halal products	RS3	
	Dangers of Consumption of Halal Products	RS4	
Psychological Risk	Anxiety about consuming non-halal products	RP1	
	Uncomfortable consumption of non-halal products	RP2	
	Stress due to consumption of non-halal products	RP3	
Environmental Risk Environmental	Conditions	RL1	
	Standards of cleanliness	RL2	
	Physical condition and storage	RL3	
Social Risk	Self-image	RSS1	(Olya & Al-ansi, 2018)
	Other people's perspectives	RSS2	
	Status incompatibility live	RSS3	
Risk Quality	Integrity manufacturer	RK1	
	Hope to product quality	RK2	
	Truth description of the product with quality products	RK3	
	requirements of halal products	RK4	
Financial Risks	high costs	RU1	
	Price kosher products	RU2	
	existence of additional costs	RU3	
Risk of Losing time	Wasting time	RW1	
	time planning purchase kosher products	RW2	
	time dispersions what are halal products	RW3	
Satisfaction	Enjoying halal products	ST1	(Al-Ansi et al., 2019)
	Easy to find products Good	ST2	
	experience	ST3	
Trust	Trust of products	TR1	(Roudposhti et al., 2018)
	Increase trust	TR2	
	Trust in providers	TR3	
Halal awareness	Likes to Halal products	HA1	(Briliana & Mursito, 2017)
	Search for Halal labels	HA2	
	Importance of halal products	HA3	
	Willingness to consume halal products	HA4	
	Environmental impact on halal products	HA5	
	Aim to Purchase	PI1	

Commented [L9]: This table suppose to be in methodological section

Indicator	Variable	Code	Source
Purchase Intentions	Possibility of making purchases	PI2	(Yunus et al., 2014)
Intention to	Considerations for product purchases halal	PI3	

The formulation of the research hypothesis is as follows;

H1: Attitudes and behavior of customers (general risk) significantly affect Satisfaction in Food Delivery Applications.

H2: Attitudes and behavior of customers (general risk) significantly influence Trust in Food Delivery Applications.

H3: Satisfaction has a significant effect on Purchase Intention in Food Delivery Applications.

H4: Trust has a significant influence on Purchase Intention in Food Delivery Applications.

H5: Halal Awareness has a significant influence on Purchase Intention in Food Delivery Applications.

Commented [L10]: Explain the development of the hypothesis for each of them. Don't just one direct description produce 5 hypotheses. Explain one by one.

METHOD

The object of this research is the customer of a food delivery application in Karawang. Therefore, data collection, which is done online through a google form, requires an appropriate sampling technique. Therefore, this study uses a sampling technique accidental (convenience) to select a sample of most easily found or accessed people and follow the research object.

Commented [L11]: 1.Why only in Karawang. You need to justify your choice of Karawang.
2.Your sample criteria needs to explain more. Why do you use convenience. Are you sure this accidental sampling method is the proper one?
3.

After collecting data using a questionnaire, the research instrument was tested using validity, reliability, and normality tests with the help of IBM SPSS 26. Furthermore, the SEM-PLS method of data processing was tested with the help of software WarpPLS 7.0to analyze the results of the outer model and inner model and hypothesis testing.

Commented [L12]: What method do you use for validity etc test?

The criteria for testing the hypothesis are by looking at having values path coefficient and p-value if the value path coefficient > 0.10 and p-value < 0.05 The research hypothesis is acceptable (significant).

RESULT AND DISCUSSION

The research data collection was carried out for two months, starting from December 22, 2020, to February 20, 2021, with a total number of 298 respondents. After classifying respondents by looking at outliers, 230 respondents matched this research. Following the determination of the number of research samples using Cohen's formula with an error rate of 5%, a minimum sample size of 228 respondents was obtained (Sholihin & Ratmono, 2013).

Commented [L13]: You need to write this in metodological section

During the dissemination and collection of data, there are several stages. Starting with a preliminary questionnaire, the writer took the initial data of 30 respondents to test the validity and reliability. The results of the preliminary instrument test of the respondents obtained showed four items of invalid questionnaire indicators, namely indicators RS1, RL1, RL2, Rl3, and RL4. The r table value with a sample size of 30 is 0.361, while each indicator RS1, RL1, RL2, Rl3, and RL4 has an r-value of 0.311, 0.255, 0.233, and 0.164. So it can be concluded that the four indicators are not valid because they have an r value <0.361 so that the researchers made changes to the editorial and eliminated one of the items, namely RL1, because it was not on target for research with respondents from food delivery applications.

Commented [L14]: Put in the methodology section

After the editorial changes and the deletion of one of the indicator items, then the recollection of data by taking an initial sample of 30 respondents, then testing the validity and reliability. Testing using the IBM SPSS Statistics 26 program shows that all questionnaire items are valid and reliable. The next stage is testing the data description and recapitulation of the questionnaire, testing the research instrument, and assessing the structural model.

Results Description of Data from the Recapitulation of the Questionnaire

The description of the data from the questionnaire results is known by measuring the frequency distribution of the questionnaire results, which is the basis for summarizing the questionnaire results. It has been obtained using IBM SPSS Statistics 26. The classification of respondents' answer groups is presented in Table 2. as follows;

Table 2. Description of Respondents Answers

Indicator	Mean	Category	Mean Total	Interval score for the respondent's answer
RS1	3.717	Agree	3.757	Strongly disagree (1.00 – 1.80), Not Agree (1.81 – 2.60), quite agree (2.61 – 3.40), Agree (3.41 – 4.20), dan Strongly Agree (4.21 – 5.00)
RS2	3.748	Agree		
RS3	3.696	Agree		
RS4	3.865	Agree		
RP1	3.843	Agree	3.749	
RP2	3.904	Agree		
RP3	3.500	Agree		
RL1	4.070	Agree	4.043	
RL2	4.017	Agree		
RSS1	3.691	Agree	3.614	
RSS2	3.743	Agree		
RSS3	3.409	Agree		
RK1	3.361	Agree	3.578	
RK2	3.661	Agree		
RK3	3.700	Agree		
RK4	3.591	Agree		
RU1	3.404	Agree	3.548	
RU2	3.548	Agree		
RU3	3.691	Agree		
RW1	3.839	Agree	3.771	
RW2	3.796	Agree		
RW3	3.678	Agree		
ST1	4.117	Agree	4.081	
ST2	4.122	Agree		
ST3	4.004	Agree		
TR1	3.800	Agree	3.838	
TR2	3.896	Agree		
TR3	3.817	Agree		

Commented [L15]: Please make an interesting table. This table is too long and difficult to understand

Indicator	Mean	Category	Mean Total	Interval score for the respondent's answer
HA1	3.9913	Agree		
HA2	3.9217	Agree		
HA3	4.1174	Agree	4.007	
HA4	4.117	Agree		
HA5	3.887	Agree		
PI1	3.9739	Agree	3.899	
PI2	3.8826	Agree		
PI3	3.8391	Agree		

Based on Table 2, the data description from the questionnaire recapitulation shows that the food delivery application customers who are respondents are in range 4 with a score between 3,548-4,081. Therefore, it can be interpreted that customer perceptions of food delivery applications in Karawang agree. In line with the research of Olya & Al-ansi (2018) and Al-Ansi et al. (2019) that if the product provider minimizes the general risks that will occur, then it makes customers believe and feel satisfied with the products they consume. This study also states that the results of the description of the data respondents agree that trust and satisfaction will affect customers' purchase intentions. According to research by Roudposhti et al. (2018), it is stated that customers will buy products if they trust the recommendation system provided by e-commerce. In addition, the respondents of this study also agreed that halal awareness could affect customers' purchase intentions. In line with Briliana & Mursito's (2017) research and Yunus et al. (2014), if halal awareness is applied to a product, it will increase customers' purchase intention.

Research Instrument Test

There are three research instrument tests: Validity Test, Reliability Test, and Data Normality Test (Kolmogorov-Smirnov), which was carried out using the program IBM SPSS Statistics 26.

The validity test was carried out by comparing the value of the r-value with the value of the r-table. It is known that there are 230 samples of respondents, with a degree of freedom 228 (df) and a significant 0.05 (two-tailed), so that the r-value table is 0.1294. At the same time, the value of r-value searched using the program IBM SPSS Statistics 26 with the results of a range of values of r-value 0.376 - 0.890. Therefore, it can be concluded all indicators considered valid because it has r-value greater than the value of r-table.

While the reliability test is calculated based on the value Cronbach Alpha, the data can be valid if the value Cronbach Alpha is greater than the value, Cronbach Alpha which is 0.700. By using the IBM SPSS Statistics 26 program, the value range is Cronbach Alpha

Commented [L16]: I think, all the table like this put and explain in methodology section
And again, try to make the table looks more interesting.

0.974 - 0.976. Therefore, it can be concluded that all indicators are reliable and reliable to measure what should be measured.

Furthermore, the normality test is used to determine whether the indicator (statement item) has a data distribution that is normally distributed or not by using the approach Kolmogorov-Smirnov through the program, IBM SPSS Statistics 26 the data processing values Asymp Obtained. Sig. (2-tailed) 0.033, where the value is less than 0.005, then the data is not normally distributed, so the data can be used for the SEM-PLS method because it does not require that all construct variables have a normal data distribution.

Assessment of Structural model

Data processing with the SEM-PLS method has two stages: the measurement of the outer and inner models. This study uses one type of processing in SEM-PLS, namely Second-Order Construct, which is data processing consisting of various dimensions or components called multidimensional constructs (Sholihin & Ratmono, 2013).

In this research, the outer model, the inform of convergent validity, is used to determine the validity of each indicator to the variable construct or latent variable. Then discriminant validity is used to ensure that each concept of each construct is different from other construct variables. The reliability test can be seen from the composite value reliability and Cronbach alpha. Based on data processing with the program, 7.0 WarpPLSobtained results are presented in Table 3.

Tabel 3. Measurement Model Outer

Indicator	Loading Factor	AVE	*Cronbach Alpha*	*Composite Reliability*
Health Risk		0.902	0.923	0.946
RS1	0.914			
RS2	0.914			
RS3	0.875			
RS4	0.903			
Psychological Risk		0.907	0.891	0.933
RP1	0.913			
RP2	0.945			
RP3	0.860			
Environmental Risk		0.956	0.905	0.955
RL1	0.956			
RL2	0.956			
Social risk		0.841	0.792	0.878
RSS1	0.838			
RSS2	0.830			
RSS3	0.854			
Quality Risk		0.847	0.868	0.91
RK1	0.851			
RK2	0.775			
RK3	0.871			

Indicator	Loading Factor	AVE	*Cronbach Alpha*	*Composite Reliability*
RK4	0.885			
Financial Risk		0.842	0.795	0.88
RU1	0.817			
RU2	0.837			
RU3	0.873			
Risk of Losing Time		0.927	0.918	0.948
RW1	0.908			
RW2	0.956			
RW3	0.917			
Satisfaction		0.778	0.891	0.915
ST1	0.948			
ST2	0.941			
ST3	0.911			
Confidence		0.917	0.906	0.941
TR1	0.903			
TR2	0.915			
TR3	0.934			
Halal Awareness		0.876	0.924	0.943
HA1	0.899			
HA2	0.841			
HA3	0.902			
HA4	0.925			
HA5	0.809			
Purchase Intention		0.895	0.876	0.924
PI1	0.891			
PI2	0.926			
PI3	0.868			

Based on Table 3. the value loading factor on all indicators has a value > 0. Therefore, it can be concluded that the data has good convergent validity, meaning that the indicator has been able to interpret each construct. The AVE value in the diagonal column is greater than the correlation between the construct variables in the same column. It can explain that the square root of the AVE has been fulfilled and has good discriminant validity. This meaning that each indicator in the construct variable has a different concept from the other construct variables. The value of composite reliability and Cronbach's alpha must be > 0.7 so that it can be said to be reliable in the model. Based on the data processing carried out, each indicator of the construct variable is reliable and has a good level of consistency.

Furthermore, in processing the SEM-PLS data, the measurement Inner model is carried out to test the relationship between latent constructs/variables (Sholihin & Ratmono, 2013). Pengukuran inner model dilihat dari uji kecocokan model (Model fit), nilai koefisien determinan (R^2), relevansi prediktif (Q^2), ukuran efek (f^2) dan nilai koefisien jalur (β).

Commented [L17]: Still in Bahasa Indonesia

The model fit test (Model fit) seen from the APC and ARS values each has a value of =0.650, p<0.001 and =0.5990, p<0.00 already meets the criteria, namely having a p-value<0.001 then it can be said that the model is fit. Furthermore, the AVIF value of 2.916 has met the requirements, namely Good if < 5 or ideally 3.3, then it can be said that there is no multicollinearity in the variables studied.

The value of the determinant coefficient (R^2) on the satisfaction of 0.630, belief is 0.470, and purchase intention is 0.590. Therefore, it can be concluded that the satisfaction construct belongs to the category of having a substantial determinant coefficient value, and the constructs of trust and purchase intention are included in the category of having a moderate average determinant coefficient. Furthermore, processing determinant coefficients interpret that as much 63% of satisfaction is influenced by general risk, as much 47% of the trust construct is influenced by the general risk, and 59% of the variation is influenced by the halal awareness, satisfaction, and trust.

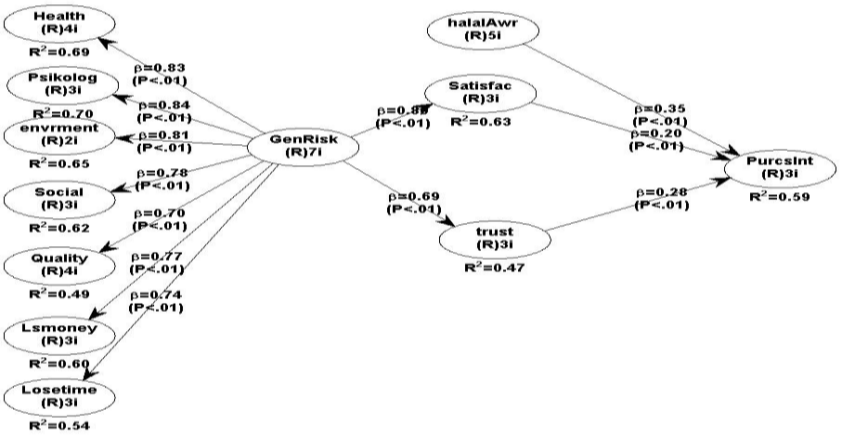
Predictive relevance value constructs (Q^2) of health risk 0.691, psychological risk 0.700, environmental risk 0.654, social risk 0.616, quality risk 0.492, financial risk 0.600, time loss risk 0.543, satisfaction 0.633, trust 0.472, and purchase intention 0.586. Based on the results, in processing the data, it can be concluded that predictive relevance has met the value greater than 0, so that means that the study has a good level of observation.

Results of data processing can be concluded that the construct variables have a substantial effect. The effect size (f^2) value of the general risk to satisfaction is 0.635, and the general risk to trust is 0.471. The value of the effect size of satisfaction on purchase intention is 0.140, satisfaction to purchase intention is 0.196, and halal awareness to purchase intention is 0.250, based on the value of the effect size of the three correlations of the construct variables between construct variables has a medium or moderate effect.

Path coefficient value (β) is the value of the relationship between each construct variable. The value (β) of general risk to satisfaction is 0.797, a general risk to trust is 0.686, satisfaction to purchase intention is 0.202, trust to purchase intention is 0.285, Halal awareness to purchase intention is 0.250. Based on data processing, it can be concluded that each construct variable relationship in the study has a significant influence, meaning that there is a relationship between the construct variables in the research model.

Hypothesis testing aims to determine whether the proposed research hypothesis can be accepted or rejected. Based on data processing with the program WarpPLS 7.0, the path coefficient and p-value are in Figure 1.

Figure 1. Output Hypothesis Testing WarpPLS 7.0



Obtained as shown based on the figure, the obtained path coefficient and p-value are as in Table 4.

Table 4. Hypothesis Testing

Hypotheses Research	*Path*	*Path Coefficient*	*P-Value*	Description
H1	General Risk → Satisfaction	0.797	<0.001	Significant
H2	General Risk → Trust	0.686	<0.001	Significant
H3	Satisfaction → Purchase Intention	0.202	<0.001	Significant
H4	Trust → Purchase Intention	0.285	<0.001	Significant
H5	Halal Awareness → Purchase Intention	0.250	<0.001	Significant

Consideration of the p-value, if the p-value <0.05, the hypothesis is accepted and vice versa. The results of testing the general risk hypothesis have a significant influence on customer satisfaction and trust in food delivery applications with the value path coefficient (0.797) > 0.1 and p-value <0.001 and the path coefficient customer trust (0.686) > 0.1 and p-value < 0.001. This study follows Al-Ansi et al. (2018), which states that general risk influences customer satisfaction and customer trust, so it must consider the general risks inherent in halal products as an indicator of the effect of customer satisfaction and trust.

Satisfaction has a significant influence on Purchase Intention in Food Delivery Applications with value path coefficient (0.202) > 0.1 and p-value <0.001. The results of this study are by the research of Roudposthi (2013), which states that satisfaction has a significant influence on customer purchase intentions. According to Jani & Han (2014) satisfaction, is considered an important variable because of its high effect on future customer behavior and attitudes about a specific product or service.

Trust has a significant influence on Purchase Intention in Food Delivery Applications with a value path coefficient (0.285) > 0.1 and p-value <0.001. The results of this study are by Roudposthi (2013), which states that trust has a significant influence on customer

Commented [L18]: 1.Hypothesis testing result is the most important part in the research. So you have to explain one by one and not only in one description.
2.You need to discuss more for the hypothesis testing result. Not only reading the statistical result.

purchase intentions. According to Roudposthi (2013), although online purchases provide convenience in purchasing products, there are still deficiencies in risk and customer trust that affect purchase intention. The results of the study state that food delivery application customers have high purchase intentions if they already believe in the product they are going to buy.

Halal Awareness has a significant influence on Purchase Intentions. Food Delivery Application Value path coefficient (0.250) > 0.1 and p-value <0.001. The study results are by Briliana & Mursito (2017) research that the antecedent of halal awareness of a cosmetic product significantly influences purchase intention. According to Briliana & Mursito (2017), customers in Indonesia are aware of and have a very positive attitude towards halal products, which positively affects their intention to buy these products, such as halal cosmetics and personal care products.

This study has limitations in the scope of the research sample, which is only in the Karawang Regency. It is hoped that further research can conduct research sampling throughout major cities in Indonesia, especially those with food delivery services available. There are many factors of halal awareness that can be applied so that further research is expected to see what kind of halal awareness a priority in can be influencing purchase intentions, especially in food delivery applications. In addition, the factors that influence halal awareness of purchase intentions in food delivery applications.

CONCLUSION AND RECOMMENDATION

The general risk perceived by customers in consuming products sold in food delivery applications greatly affects customer trust and satisfaction. In addition, one important factor is customer halal awareness that food delivery application providers must consider. The results of this study imply that food delivery application providers must consider customer attitudes and behavior (general risks) attached to halal products because they can affect customer satisfaction and trust. Therefore, food delivery applications are advised to raise awareness of business people, especially MSMEs who work together to provide halal products. Besides that, it also provides knowledge about the risks associated with the production and consumption of halal products, which can help them understand their basic needs and preferences of halal customers in food delivery applications. Therefore, the first step by food delivery applications owner is to facilitate the process of establishing halal labeling by conducting halal certification for sellers, especially SMEs who not yet halal certification, to provide the best satisfaction and trust for customers in food delivery applications.

ACKNOWLEDGEMENT

REFERENCES

Commented [L19]: Please add more references.

Al-Ansi, A., Olya, H. G. T., & Han, H. (2019). Effect of general risk on trust, satisfaction, and recommendation intention for halal food. *International Journal of Hospitality Management*, *83*(October), 210–219. https://doi.org/10.1016/j.ijhm.2018.10.017

Aziz, Y. ., & Vui, C. . (2012). The Role of Halal Awareness and Halal Certification in Influencing Non-Muslim's Purchase Intention. *International Conference on Business and Economic Research*, 1822.

Bank, A. D. (2020). ADB Approves $3 Million Grant to Support Indonesia's Fight Against COVID-19. Retrieved from https://www.adb.org/news/adb-approves-3-million-grant-support-indonesias-fight-against-covid-19

Battour, M. M., Battor, M. M., & Ismail, M. (2012). The mediating role of tourist satisfaction: A study of Muslim tourists in Malaysia. *Journal of Travel and Tourism Marketing*, *29*(3), 279–297. https://doi.org/10.1080/10548408.2012.666174

Briliana, V., & Mursito, N. (2017). Exploring antecedents and consequences of Indonesian Muslim youths' attitude towards halal cosmetic products: A case study in Jakarta. *Asia Pacific Management Review*, *22*(4), 176–184. https://doi.org/10.1016/j.apmrv.2017.07.012

Budiaji, W. (2013). Skala Pengukuran dan Jumlah Respon Skala Likert (The Measurement Scale and The Number of Responses in Likert Scale). *Ilmu Pertanian Dan Perikanan*, *2*(2), 127–133.

Budiman, R. (2019). Factors Influencing Purchase Intention of Halal Products in Pontianak City. *Indonesian Journal of Halal Research*, *1*(2), 46–48. https://doi.org/10.15575/ijhar.v1i2.4440

Gojek. (2020). Cara Daftar GoFood Secara Online 2020 & Biaya Pendaftarannya. Retrieved from https://www.gojek.com/blog/gofood/cara-daftar-go-food/

Islam, T., Islam, R., Pitafi, A. H., Xiaobei, L., Rehmani, M., Irfan, M., & Mubarak, M. S. (2021). The impact of corporate social responsibility on customer loyalty: The mediating role of corporate reputation, customer satisfaction, and trust. *Sustainable Production and Consumption*, *25*, 123–135. https://doi.org/10.1016/j.spc.2020.07.019

Istri, C., Putri, D., & Sudiksa, I. B. (2018). *RISIKO TERHADAP NIAT BELI ONLINE PADA SITUS LAZADA Fakultas Ekonomi dan Bisnis Universitas Udayana , Bali , Indonesia ABSTRAK Era globalisasi saat ini menjadikan perkembangan teknologi informasi yang berkembang semakin pesat . Perkembangan teknologi terse*. *7*(7), 3532–3563.

Jani, D., & Han, H. (2014). International Journal of Hospitality Management Personality , satisfaction , image , ambience, and loyalty : Testing their relationships in the hotel industry. *International Journal of Hospitality Management*, *37*, 11–20. https://doi.org/10.1016/j.ijhm.2013.10.007

KAHRAMAN, B. (2016). مقياس مقترح لتقييم جودة خدمات الملحقيات الثقافية المقدمة للطلاب.:, *147*, 11–40.

Marakanon, L., & Panjakajornsak, V. (2017). Perceived quality, perceived risk, and customer trust affecting customer loyalty to environmentally friendly electronics products. *Kasetsart Journal of Social Sciences*, *38*(1), 24–30. https://doi.org/10.1016/j.kjss.2016.08.012

Mohtar, N. M., Amirnordin, N. A., & Haron, H. (2014). Ayamas Food Corporation Sdn. Bhd: A Study on the Factors of Consumer Behaviour towards Halal Product Selection. *Procedia - Social and Behavioral Sciences*, *121*(September 2012), 166–185. https://doi.org/10.1016/j.sbspro.2014.01.1118

Nilashi, M., Jannach, D., Ibrahim, O. bin, Esfahani, M. D., & Ahmadi, H. (2016). Recommendation quality, transparency, and website quality for trust-building in recommendation agents. *Electronic Commerce Research and Applications*, *19*, 70–84. https://doi.org/10.1016/j.elerap.2016.09.003

Nurcahyo, A., & Hudrasyah, H. (2017). The Influence of Halal Awareness, Halal Certification, and Personal Societal Purchase Intention. *Journal of Business and Management*, *6*(1), 21–31.

Olya, H. G. T., & Al-ansi, A. (2018). Risk assessment of halal products and services: Implication for tourism industry. *Tourism Management*, *65*, 279–291. https://doi.org/10.1016/j.tourman.2017.10.015

Pemerintah Tentang Keamanan Pangan. *Peraturan Pemerintah Republik Indonesia Nomor 86 Tahun 2019 Tentang Keamanan Pangan.* , (2019).

Pramintasari, T., & Fatmawati, I. (2017). Pengaruh Keyakinan Religius, Peran Sertifikasi Halal, Paparan Informasi, Dan Alasan Kesehatan Terhadap Kesadaran Masyarakat Pada Produk Makanan Halal. *Jurnal Manajemen Bisnis*, *8*(1), 1–33.

Roudposhti, V. M., Nilashi, M., Mardani, A., Streimikiene, D., Samad, S., & Ibrahim, O. (2018). A new model for customer purchase intention in e-commerce recommendation agents. *Journal of International Studies*, *11*(4), 237–253. https://doi.org/10.14254/2071-8330.2018/11-4/17

Sekaran, U., & Bougie, R. (2009). *Research Methods for Business*.

Septiani, D., & Ridlwan, A. A. (2020). The Effects of Halal Certification and Halal Awareness on Purchase Intention of Halal Food Products in Indonesia. *Indonesian Journal of Halal Research*, *2*(2), 55–60. https://doi.org/10.15575/ijhar.v2i2.6657

Sholihin, M., & Ratmono, D. (2013). *Analasis SEM-PLS dengan WarpPLS 3.0 untuk Hubungan Nonlinear dalam Penelitian Sosial dan Bisnis* (Seno, Ed.). Yogyakarta: CV ANDI OFFSET.

Tieman, M., Ghazali, M. C., & van der Vorst, J. G. A. J. (2013). Consumer perception on halal meat logistics. *British Food Journal*, *115*(8), 1112–1129. https://doi.org/10.1108/BFJ-10/2011-0265

Yasin, R. M., & Norjanah, S. (2021). The Influenced Factors of the Switching Customer to Halal Cosmetic Products. *Indonesian Journal of Halal Research*, *3*(1), 27–33. https://doi.org/10.15575/ijhar.v3i1.10536

YOGA, I., SURYAWARDANI, G., & ANGRENI, I. (2016). Hubungan Kepuasan Dan Kepercayaan Terhadap Loyalitas Konsumen Kopi Bubuk Cap Mutiara Pendekatan Structural Equation Modeling. *E-Journal Agribisnis Dan Agrowisata (Journal of Agribusiness and Agritourism)*, *5*(2), 408–417.

Yunus, N. S. N. M., Rashid, W. E. W., Ariffin, N. M., & Rashid, N. M. (2014). Muslim's Purchase Intention towards Non-Muslim Halal Packaged Food Manufacturer. *Procedia - Social and Behavioral Sciences*, *130*, 145–154. https://doi.org/10.1016/j.sbspro.2014.04.018

Jurnal Dinamika Manajemen, 14 (2) 2032, 1-14
http://jdm.unnes.c.id

Nationally Accredited based on the Decree of the Minister of Research, Technology, and Higher Education, Number 36a/E/KPT/2016

Achieving Sustainable Performance in the Hospitality Industry based on Environmental Management, Pro-Environmental Behavior, and Green Marketing Mix 7P

Bambang Hengky Rainanto[1], Abdul Talib Bon[2], Jonathan van Melle[3], Yuari Farradia[4] and Ani Mekaniwati[5]

[1]Department of Tourism, Faculty of Tourism and Informatics, Institut Bisnis dan Informatika Kesatuan, Bogor, Indonesia
[2]Department of Production and Operations Management, Universiti Tun Hussein Onn Malaysia, Parit Raja, Malaysia
[3]Avans School of Business and Entrepreneurship, Avans University of Applied Sciences, Hogeschoollaan, Breda, Netherlands
[4]Department of Management (Marketing), Faculty of Business, Economics and Social Development, University of Malaysia Terengganu, Kuala Nerus, Terengganu, Malaysia
[5]Department of Bioentrepreneur, Faculty of Business, Institut Bisnis dan Informatika Kesatuan, Bogor, Indonesia

Info Article

History Article:
Submitted
Revised
Accepted

Keywords:
Green Marketing Mix 7p'S, Environmental Management System, Pro-Environmental Behavior, Sustainable Performance

Abstract

The tourism sector is an important sector because it can grow a country's economy through foreign exchange. However, if not managed properly, tourism can also have negative impacts. This research was located in East Java Province, Indonesia with 228 respondents at the Hotel Manager level. This research aims to develop a relationship model between the Environmental Management System (EMS), Pro-Environmental Behavior (PEB), and the Green Marketing Mix mediator (GMM) to achieve Sustainable Industrial Performance (SIP) with 17 hypotheses. Using quantitative methods through surveys and processing using SmartPLS 3. The research results stated that 14 hypotheses were accepted, but 3 hypotheses were rejected. The research results show that the implementation of EMS has a significant relationship with economic and social performance but has no relationship with environmental performance. PEB directly has a significant relationship with environmental performance but not with economic and social performance. GMM has a significant relationship with the three elements of SIP. GMM is also a suitable partial mediator for EMS and PEB to achieve SIP.

Mewujudkan Kinerja Berkelanjutan di Industri Perhotelan berdasarkan Manajemen Lingkungan, Perilaku dan Green Marketing Mix 7P

Abstrak

Sektor pariwisata merupakan sektor yang penting karena dapat menumbuhkan perekonomian suatu negara melalui devisa. Namun apabila tidak dikelola secara benar, pariwisata juga memiliki dampak negatif. Penelitian ini berlokasi di Provinsi Jawa Timur, Indonesia dengan 228 responden di level Manager Hotel. Penelitian ini bertujuan untuk mengembangkan model hubungan antara Sistem Manajemen Lingkungan (EMS), Perilaku Pro Lingkungan (PEB), dengan mediator Bauran Pemasaran Hijau (GMM) untuk mencapai Kinerja Industri Berkelanjutan (SIP) dengan 17 hipotesis. Menggunakan metode kuantitatif melalui survei dan pengolahan menggunakan SmartPLS 3. Hasil penelitian menyatakan 14 hipotesis diterima, namun 3 hipotesis ditolak. Hasil penelitian menunjukkan bahwa penerapan EMS memiliki hubungan signifikan dengan kinerja ekonomi dan sosial tetapi tidak memiliki hubungan dengan kinerja lingkungan. PEB secara langsung memiliki hubungan yang signifikan dengan kinerja lingkungan tetapi tidak dengan ekonomi dan sosial. GMM memiliki hubungan yang signifikan dengan ketiga unsur SIP. GMM juga menjadi mediator parsial yang cocok untuk EMS dan PEB untuk mencapai SIP.

JEL Classification: Z31 Industry Studies

How to Cite: Author's name. (20…). Title of the article. *Jurnal Dinamika Manajemen*, *Vol*(No), xx-xx

Correspondence Address
Institutional address: IBIK Jl. Rangagading No.1, Bogor 16123
E-mail: bambang@ibik.ac.id

ISSN
2086-0668 (print)
2337-5434 (online)
DOI: xxxxxxxxxxxxxx

INTRODUCTION

The very fast growth of the hospitality industry supports the tourism sector which has boosted the economy, but on the other hand, it can have an impact on the environment (Masa'deh et al., 2017). In several countries, the massive growth of tourism has had an environmental impact, for example in Spain there has been an increase in pollution, landfills, disruption of biodiversity, decreased environmental quality, and exploitation of water and water resources (Moliner *et al.*, 2019). This negative impact has also been studied in several other countries, such as Jordan (Masa'deh *et al.*, 2017), the Netherlands (Postma & Schmuecker, 2017), Malaysia, Singapore, and Thailand (Azam *et al.*, 2018), and Taiwan (Peng & Lee, 2019). In Indonesia, research on the negative effects of the hotel industry has been published (Lampung *et al*., 2020; Yuniati, 2021), and concluded the impact on disruption of the natural environment, built environment, and local culture.

The Environmental Management System (EMS) focuses on fulfilling commitments by organizations to several policies for environmental management. This commitment includes reducing negative environmental impacts from the organization's products, services, and activities (Rainanto *et al*., 2020).

Pro-Environmental Behavior (PEB) is human behavior that understands and implements principles aimed at protecting the environment. The application of Pro-Environmental Behavior (PEB) is voluntary for the tourism industry, especially the hospitality industry (Fatoki, 2019; Li & Wu, 2019).

Green Marketing Mix 7Ps (GMM 7Ps) is a strategy for fulfilling 7 basic attributes that will support marketing activities while upholding environmental protection. The hotel industry needs to implement the Green Marketing Mix 7P's strategy to realize sustainable tourism (Rainanto *et al.*, 2022b).

The hotel industry's business performance is considered successful and sustainability is realized from success in terms of the economy (business), preservation of the surrounding environment, and maintaining the socio-cultural conditions of the local community. Business continuity in the hospitality sector is not enough to be seen from the side of economic benefits, it is also necessary to look at it from the perspective of the surrounding environmental and social conditions (Pereira et al., 2021; Rainanto et al., 2022a; Sharpley, 2020).

Cities that have potential as tourist destinations tend to experience high growth in the number of hotels compared to other cities. This is because tourist destination cities are attractive economic potential for hospitality investors and tourist destinations. For some residents who "benefit" from their city becoming a tourist destination, this will be considered attractive, but for some other residents, this can be a problem (Rainanto, 2022). (Ilhami et al., 2020) stated that until 2019 there was a traffic jam in Batu City, which is located in East Java Province, on certain days due to the large number of tourist vehicles entering the city. This is supported by data from the Central Bureau of Statistics for the City of Batu in 2019 which stated that visitors to tourist attractions and souvenir tours in Batu City in 2019 totaled 6,047,460 tourists with a total of 1,354 hotels (BPS Kota Batu, 2020). The ratio of the population of Batu City to the number of tourists coming to the city in 2019 is that the population of Batu City is 0.02% of the number of tourists (BPS Kota Batu, 2020).

The number of tourists in Batu City, Malang City, and Malang Regency in East Java Province increased rapidly at weekends. The arrival of these tourists caused congestion on several

Commented [L1]: 1.Please use reference manager, such as Mendeley, endnote or others.
2.Make sure your references between 2013-2023

Commented [L2]: Please do not forget the references

Commented [L3]: Need references

Commented [L4]: References

Commented [L5]: References

roads there. The results of the research on the noise level conducted on Jalan WR Supratman which is one of the main roads in Malang City, East Java Province on Sunday is 81.2 dBA - 86.1 dBA, while on Monday it is 72.0 dBA - 79, 1dBA (N.J. Putra, H. Setyabudiarso, 2022). By the Decree of the Minister of State for the Environment No. 48 of 1996, Appendix 1 includes a table regarding Noise Level Standards according to area designation. The standard threshold values for Noise Level according to the regulations include Housing and Settlements (55 dbA); Trade and Services (70 dBA); Office Building (dbA); Green Open Space (50 dbA); Industrial (70 dbA); Government and Public Facilities (60 dBA); Recreation (70 dbA) (KepMen LH No.48, 1999). Meanwhile, the Noise Threshold Value (NAV) according to Kepmenaker No. per-51/MEN/1999, ACGIH, 2008 and SNI 16-7063-2004 is 85 dB (Menteri Tenaga Kerja Republik Indonesia, 1999). Another negative effect is that the water discharge becomes weak at certain times. According to the Indonesian Forum for the Environment (WALHI) of East Java Province, the water quality index in East Java from 2016 to 2020 has decreased and is of concern and has a very concerning status. The data is also following the Statistical Report on Water Quality, Air and Land Cover issued by the Ministry of Environment and Forestry, Directorate General of Pollution Control and Environmental Damage, which stated that the water quality of all major rivers in East Java Province was classified as heavily polluted from 2015 to 2020 (Kementerian Lingkungan Hidup dan Kehutanan, 2021). Based on the East Java Province Environmental Management Quality Index Report. WALHI (2020) notes that more than 800,000 hectares of forest in East Java have been damaged. Walhi (2021) stated that in East Java Province cumulatively based on BNPB records from 2013 to 2019 there have been 2676 hydrometeorological disasters.

Commented [I6]: it needs to be stated what the number of declines is and from what number to how much

In addition to the negative impacts of environmental conditions, there are also negative impacts from the economic sector, such as high property prices which combine because many migrants are interested in owning homes in tourist destinations. Massive property development has also reduced the area of paddy fields and open land in these tourist destinations. (Hengky & Kikvidze, 2021) reports that the area of land in Malang is getting narrower every year. This is due to the conversion of land into residential and industrial areas. Currently, the area of agricultural land in the city of Malang, especially for rice farming, is only 821 hectares out of 1,104 hectares. One of the impacts felt is the frequent occurrence of floods in several areas of Malang Metropolitan in recent years. If this negative impact is left unchecked, it will affect the comfort of the Malang Metropolitan City.

The World Tourism Organization (WTO) defines Sustainable Tourism as: "Tourism that takes into account its current and future economic, environmental, and social impacts, meeting the needs of consumers, the environment, industry, and local communities". The concept of sustainable tourism states that tourism development should not damage nature, the environment, or land, especially agricultural land (Guanabara *et al.*, 2013). UNWTO's conceptual definition of sustainable tourism must: (i) Make optimal use of environmental resources, which are a key element in tourism development, safeguarding important ecological processes and helping to preserve the natural heritage and biodiversity; (ii) Respect the socio-cultural authenticity of the host communities, preserve the cultural heritage and traditional values that they have built and live by, and contribute to intercultural understanding and tolerance; (iii) Ensure proper and long-term economic operations, provide socio-economic benefits that are distributed fairly to all stakeholders, including stable employment and income opportunities and social services for local communities, and contribute to poverty alleviation.

There are three sustainable performances for industrial companies along with details on their constituent parameters (Hourneaux *et al.*, 2018). The three sustainable performances include 1. Sustainable Environmental Performance, consisting of (a) Reduction of wastewater, (b) Reduction of emissions, and waste, (c) Reduction of costs for environmental aspects of products and services, (d) Environmental compliance, (e) Reduction costs for common environmental problems; 2. Sustainable Economic Performance, consisting of (a) Profit from operations, (b) Sales growth, (c)

Return on equity, (d)Return on investment, (e) Cost per unit produced, (f) Net cash flow, (g) Market share, (h) On-time delivery, (i) Customer response time, (j) Number of warranty claims, (k) Number of customer complaints, (l) Customer satisfaction survey, (m) Material efficiency variations; 3. Sustainable Social Performance, consisting of (a) Social commitment, (b) Environmental preservation, (c) Increasing employee job satisfaction, (d) Training and education, and (e) Compliance with products and services.

The novelties of the research are measuring Sustainable Performance in the Hospitality Industry based on an Environmental Management System, Behavior that supports the environment, and the application of the Green Marketing Mix 7P as a mediator. The measurement of sustainable performance for the hotel industry is something new in research because what usually measures sustainable performance is done in the goods or manufacturing industries.

Commented [L7]: Need explanation why measuring sustainable performance is a novelty.

Hypothesis Development

Relationship between Two or More Variables

The hypothesis that forms the basis of this study is 17 relationships. The development of 17 hypotheses is based on a literature review of the dependent to independent variables, as well as the moderator variable which is the link between the dependent and independent variables. 11 hypotheses are directly related, and 6 hypotheses that are indirectly related using the Green Marketing Mix 7P (GMM 7's) mediation. The research hypothesis in this study is in Figure 1 below.

Commented [L8]: Please elaborate how the author develop 17 hypothesis. No need to be very detail, but still need explanation

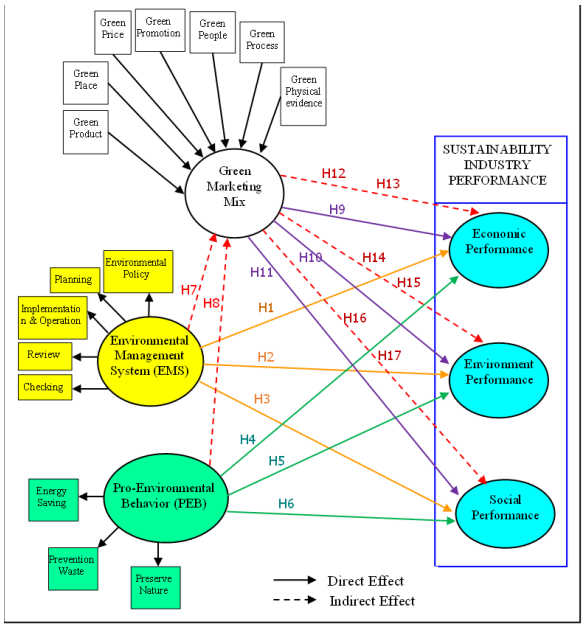


Figure 1. Research Hypothesis

The 17 hypotheses in this study are proposed in detail as follows:
H1: The EMS has a significant and direct relationship to sustainable economic performance
H2: The EMS has a significant and direct relationship to environmental performance
H3: The EMS has a significant and direct relationship to social performance
H4: The PEB has a significant and direct relationship to economic sustainability

H5: The PEB has a significant and direct relationship to environmental sustainability
H6: The PEB has a significant and direct relationship to social sustainability
H7: The EMS directly has a significant relationship on GMM
H8: The PEB directly has a significant relationship on GMM
H9: The GMM has a significant and direct relationship to economic sustainability
H10: The GMM has a significant and direct relationship to environmental sustainability
H11: The GMM has a significant and direct relationship to social sustainability
H12: The GMM mediates between EMS and economic sustainable performance
H13: The GMM mediates between PEB and economic sustainable performance
H14: The GMM mediates between EMS and environmentally sustainable performance
H15: The GMM mediates between PEB and environmentally sustainable performance
H16: The GMM mediates between EMS and social sustainable performance
H17: The GMM mediates between PEB and social sustainability

METHOD

This research method was chosen quantitatively by collecting primary data as the main source of the data being analyzed. A total of 228 respondents with the position of a hotel manager or general manager are the basis for calculating the analysis.

This study uses a simple sampling method because the selection of the sample is completely random and member of the hotel industry population has an equal chance of being selected to be part of the sample. Furthermore, the use of a purposive sampling method was because the respondents selected as questionnaire fillers are hotel employees with the position of General Manager or Manager. The reason for selecting respondents at the Manager or General Manager level is because those two positions understand and are competent with matters relating to policies carried out by hotel management. These policies, among others, relate to EMS, PEB, and GMM toward SIP.

Research analysis based on research objectives: (1) Research analysis to find out the direct relationship between the X and Mediator variables with the Sustainable Industry Performance variable using Smart-PLS 3; (2) Research analysis to determine the recommended relationship model between variable X and Mediator with the Sustainable Industry Performance variable using Smart-PLS 3.

Commented [L9]: Please explain why the author choose GM as the respondent.

RESULT AND DISCUSSION

Commented [L10]: 1.The author needs to elaborate more detail the discussion. It is not enough just to explain a statistical result. The core of the research is the discussion of each hypotheses. 2.How about the novelty? Which hypotheses that will answer the novelty? The author needs to explain specifically the novelty.

The results of the analysis using Smart PLS 3 through several stages of the process. The stages of the process include Measurement of Construct Variable, Model validation, Assessment of measurement model, Measurement validity of first-order construct – reflective model, Loading Factor, Convergent Validity – Average Variance Extracted (AVE), Convergent Validity – Composite Reliability (CR), Cronbach's Alpha (α), Cross Loading, Fornell-Larcker Criterion, Heterotrait-monotrait (HTMT), Measurement Model Result – Outer model, Validity and Reliability of Second-Order Construct – Two-Stage Approach, Two stage approach (reflective-formative measurement model), Structural model/inner model measurement, Collinearity statistics (VIF) – Outer & Inner VIF, Hypotheses Testing (Path Coefficient), Coefficient of Determinant (R2), Effect Size (f2), Predictive Relevance (Q2), Hypothesis Evaluation, Testing the mediating roles, and finally the Recommended Model.

Fornell & Larcker (1981) states that the Convergent Validity of Cronbach's Alpha and Composite Reliability (CR) must be more than 0.70, while the Average Variance Extracted (AVE) value must pass 0.50. Based on the critical threshold value above, a summary of the measurement validity is shown in Table 1.

Table 1. Reliability Value of Reflective Construct

Reflective Construct	Items	Loading Factor (> 0.7)	AVE (> 0.5)	Composite Reliability (>0.7)	Cronbach's Alpha (α ≥0.70)
EMS					
Environmental Policy			0.760	0.927	0.894
	EnvPolicy1	0.890			
	EnvPolicy 2	0.905			
	EnvPolicy 3	0.882			
	EnvPolicy 4	0.807			
Planning			0.781	0.934	0.906
	Plan5	0.861			
	Plan6	0.896			
	Plan7	0.905			
	Plan8	0.872			
Implementation and Operation			0.794	0.939	0.912
	ImlOpr9	0.896			
	ImlOpr10	0.938			
	ImlOpr11	0.932			
	ImlOpr12	0.790			
Checking and Corrective Action			0.961	0.980	0.959
	CheckCor13	0.980			
	CheckCor14	0.980			
Management Review			0.821	0.948	0.927
	MgtRev15	0.871			
	MgtRev16	0.908			
	MgtRev17	0.916			
	MgtRev18	0.929			
PEB					
Save Energy			0.844	0.942	0.907
	EnSav19	0.936			
	EnSav20	0.955			
	EnSav21	0.863			
Waste Prevention			0.695	0.872	0.781
	PrevWaste22	0.861			
	PrevWaste23	0.860			
	PrevWaste24	0.777			
Nature Preservation			0.803	0.942	0.917
	PresNat25	0.828			
	PresNat26	0.911			
	PresNat27	0.922			
	PresNat28	0.919			
Environmental Performance			0.592	0.853	0.894
	EnvSust57	0.771			
	EnvSust58	0.787			
	EnvSust59	0.792			
	EnvSust60	0.727			
Economics Performance			0.774	0.954	0.942
	EconSust61	0.867			
	EconSust62	0.843			
	EconSust63	0.910			
	EconSust64	0.908			
	EconSust65	0.897			
	EconSust66	0.853			
Social Performance			0.789	0.949	0.933
	SosSust67	0.847			
	SosSust68	0.891			
	SosSust69	0.935			
	SosSust70	0.923			
	SosSust71	0.842			

Measurement of the second-order construct with reflective and formative measurement indicators needs to be taken into account. A two-stage approach was carried out before analyzing the structural model and the interaction between the mediator and moderator. A summary of all the results of the second-order PLS algorithm (Reflective - Formative) is presented in Table 2.

Table 2. Measurement of Two-Stage Process for Second-Order (Reflective – Formative)

Construct	Item	Loading Factor	Ave	Composite Reliability	Weight	VIF	T-Values Weights	P Value Weight
Reflective Model Second Order								
EMS			0.739	0.934				
	Environ. Policy	0.880						
	Planning	0.908						
	Implement & Operation	0,911						
	Check & Corrective Act.	0.735						
	Management Review	0.873						
PEB			0.807	0.926				
	Save Energy	0.877						
	Waste Prevention	0.915						
	Nature Preservation	0.902						
Environ. Sustainable Perform			0.592	0.853				
	Environ. Sustain57	0.773						
	Environ. Sustain58	0.783						
	Environ. Sustain59	0.792						
	Environ. Sustain60	0.727						
Economics Sustainable Perform			0.774	0.954				
	Economics Sustain61	0.869						
	Economics Sustain62	0.845						
	Economics Sustain63	0.910						
	Economics Sustain64	0.906						
	Economics Sustain65	0,895						
	Economics Sustain66	0.854						
Social Sustainable Perform			0.789	0.949				
	Social Sustainable67	0.845						
	Social Sustainable68	0.891						
	Social Sustainable69	0.936						
	Social Sustainable70	0.924						
	Social Sustainable71	0.842						
Formative Model Second Order								
GMM								
	Green Product				0.151	2.347	3.331	0.001
	Green Place				**0.065**	4.227	1.117	**0.264**
	Green Price				0.169	3.046	3.337	0.001
	Green Promotion				**0.030**	2.984	0.674	**0.500**
	Green Process				0.213	2.200	4.817	0.000
	Green People				0.393	1.865	9.632	0.000
	Green Physical Evidence				0.191	4.161	3.027	0.002

Two variables are considered Moderate, namely Environmental Policy and Checking and Correction Actions. The combined effect of the first order explaining the variance in Environmental Policy, Planning, Implementation & Operation, Inspection & Corrective Action, Management Review, Saving Energy, Waste Prevention, and Nature Preservation is accepted. The PLS algorithm for the results of R2 is presented in Figure 2 about First Order Construct below.

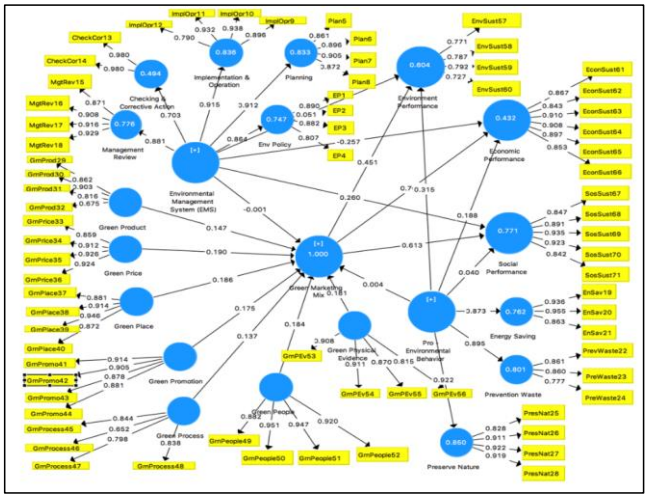


Figure 2. First Order Construct

The second-order construct model in this research is reflective-formative. The higher-order constructs are for the mediator variable. Due to the formative nature of the mediator constructs, the recommended measurement approach for this type of HCM model is the two-stage PLS. The two-stage PLS approach takes advantage of the advantages of PLS path modeling to explicitly measure the values of latent variables, also be implemented in models with interaction effects between all constructs as measured by reflective indicators. Figure 2 below shows the results from the Second Order Construct.

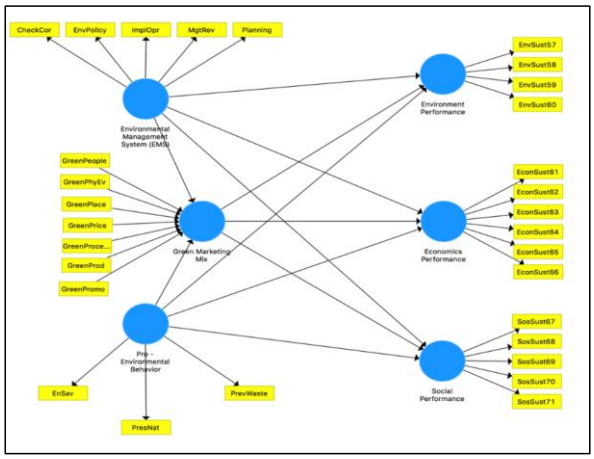


Figure 3. Second Order Construct

The results of the hypothesis for a direct relationship are obtained from several criteria such as t-value, p-value, and f^2. The relationship between variables in a positive (supported) result is based on a t-value above 1.645 (Hair *et al.*, 2017); then the P-value must be less than 0.10 (Hair *et al.*, 2017); and f^2 must be greater than 0.02. The details of the hypotheses are presented in Table 3 and Table 4.

Table 3. Hypothesis Testing (Direct Effect Result Test)

Hypothesis		Original Sample (O) /β	Std Dev/ Stand Error	T stat t-value (>1.645)	p-value (<0.10)	R^2	f^2 (≥ 0.02)	Q^2 (> 0)	Decision
H1	EMS → Economy SP	-0.262	0.103	2.545	0.005	0.421	0.028	0.295	Supported
H2	EMS → Environ. SP	-0.018	0.098	**0.187**	**0.426**	0.625	**0.000**	0.334	**Un-Support**
H3	EMS → Social SP	0.250	0.075	3.330	0.000	0.763	0.062	0.561	Supported
H4	PEB → Economy SP	0.125	0.109	**1.149**	**0.125**	0.421	**0.006**	0.295	**Un-Support**
H5	PEB → Environ. SP	0.202	0.102	1.976	0.024	0.625	0.025	0.334	Supported
H6	PEB → Social SP	-0.029	0.070	**0.417**	**0.338**	0.763	**0.001**	0.561	**Un-Support**
H7	EMS → GMM 7P's	0.465	0.062	7.503	0.000	0.814	0.373	0.486	Supported
H8	PEB → GMM 7P's	0.480	0.060	8.050	0.000	0.814	0.398	0.486	Supported
H9	GMM → Economy SP	0.753	0.113	6.641	0.000	0.421	0.182	0.486	Supported
H10	GMM → Environ. SP	0.626	0.100	6.284	0.000	0.625	0.194	0.486	Supported
H11	GMM → Social SP	0.675	0.072	9.340	0.000	0.763	0.357	0.486	Supported

Table 4. Hypothesis Testing on Mediating

Hypothesis		Original Sample (O)/β	Std Dev/ Stand Error	T statistic t-value (> 1.96)	p-value	Confidence Interval (BC)		Decision
						2.5%	97.5%	
H12	EMS → GMM → Economy SP	0.350	0.075	4.650	0.000	0.215	0.503	Supported
H13	EMS → GMM → Environ. SP	0.291	0.061	4.798	0.000	0.181	0.417	Supported
H14	EMS → GMM → Social SP	0.314	0.052	6.057	0.000	0.220	0.422	Supported
H15	PEB → GMM → Economy SP	0.362	0.070	5.183	0.000	0.230	0.501	Supported
H16	PEB → GMM → Environ. SP	0.300	0.064	4.730	0.000	0.177	0.428	Supported
H17	PEB → GMM → Social SP	0.324	0.057	5.662	0.000	0.226	0.448	Supported

After the results of the analysis with several previous stages, it was concluded that of the 17 initial hypotheses, it was proven that 14 hypotheses were accepted, while 3 hypotheses were rejected. Easily, the final results of the study table be seen in Figure 3 below.

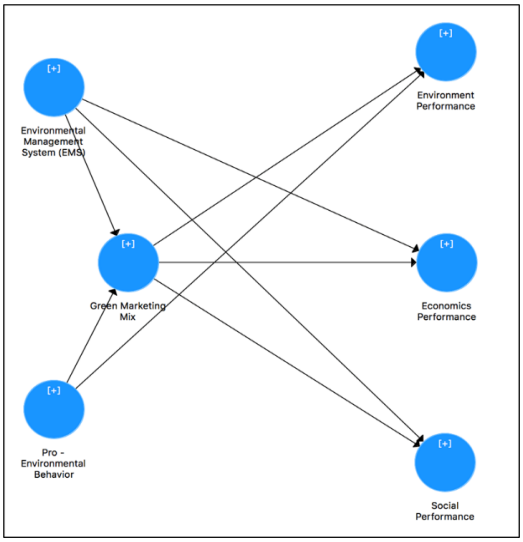


Figure 3. The Results of Full Model Analysis

The results of the research based on the analysis result model are that the Environmental Management System (EMS) variable supports Sustainable Economy, Social Sustainable, and Green Marketing Mix 7P. The Pro-Environmental Behavior (PEB) variable supports the Sustainable Environment and Green Marketing Mix 7P. The 7P Green Marketing Mix Variables are also three sustainable variables namely Economic, Environmental, and Social. The 7P Green Marketing Mix function as a mediator between EMS and PEB in Sustainable Industrial Performance is also supported. The novelty of this research for the hospitality industry is the 7P Green Marketing Mix, both directly and as a moderator for EMS and PEB will provide positive benefits for the sustainability of the hospitality businesses

The hypotheses that support the novelty of the results of this study include H12 (EMS - GMM - Economic Sustainable Performance); H13 (PEB - GMM - Economic Sustainable Performance); H14 (EMS - GMM - Environmental Sustainable Performance); H15 (PEB - GMM - Environmental Sustainable Performance); H16 (EMS - GMM - Social Sustainable Performance); and H17 (PEB - GMM - Social Sustainable Performance).

The benefits of this research can be used by several parties such as Hotel owners, Managers, Regional Governments, Central Government, and Hospitality Associations, all of that in the framework of creating sustainable tourism.

CONCLUSION AND RECOMMENDATION

There are seventeen hypotheses linking the Environmental Management System (EMS), Pro-Environmental Behavior (PEB) for Sustainable Industry Performance (SIP) with the Green Marketing Mix 7P's Mediation (GMM 7P's). Fourteen hypotheses are accepted and three hypotheses are rejected. Fourteen hypotheses were accepted, consisting of: H1, H3, H5, H7, H8, H9, H10, H11, H12, H13, H14, H15, H16, and H17. While the three hypotheses are rejected, namely: H2, H4, and H6. There are

Commented [L11]: It is not enough. The author need to elaborate more detail and what is the limitation and recommendation for future research.

11 hypotheses related to the direct interaction hypothesis, eight hypotheses are accepted, while three are not accepted. The conclusion from the research results is that the Environmental Management System (EMS) supports Sustainable Economy, Social Sustainable, and Green Marketing Mix 7P. For Pro-Environmental Behavior (PEB) supports Sustainable Environment and Green Marketing Mix 7P. Then the Green Marketing Mix 7P supports the three sustainable variables, namely Economic, Environmental, and Social. The Green Marketing Mix 7P function as a mediator between EMS and PEB on Sustainable Industry Performance is also supported. The benefit of this research for the hotel industry is that implementing EMS and PEB through the 7P Green Marketing Mix will provide positive benefits for the sustainability of the hotel business. The limitation of this research is the scope of the research location which is only in East Java. On the other hand, there is the Covid-19 pandemic which has forced several hotels to not operate. The recommendation for further research is to expand the scope of research locations to other provinces so that it can become a policy decision in managing the hospitality industry in the Republic of Indonesia.

ACKNOWLEDGEMENT

I would like to thank my three research friends, including Prof. Dr. Abdul Talib Bon from the University of Tun Hussein Onn Malaysia, also to Dr. Jonathan van Melle from Avans University of Applied Sciences, Netherlands, and Dr. Yuari Farradia from the Faculty of Business, Economics and Social Development, University of Malaysia Terengganu, Malaysia. Also, thanks to my institution at the Institut Bisnis dan Informatika Kesatuan, especially the Department of Tourism which has provided support for the research and writing of this paper.

REFERENCES

Commented [L12]: The references really not sufficient. Need minimum 30 references from good reputable journals

Azam, M., Alam, M. M., & Haroon Hafeez, M. (2018). Effect of tourism on environmental pollution: Further evidence from Malaysia, Singapore and Thailand. *Journal of Cleaner Production*, *190*, 330–338.

BPS Kota Batu. (2020). Kota Batu Dalam Angka 2020. *Badan Pusat Statistik Kota Batu*, 250–255.

Fatoki, O. (2019). Hotel employees' pro-environmental behavior: Effect of leadership behavior, institutional support, and workplace spirituality. *Sustainability (Switzerland)*, *11*(15), 1-15. page number?

World Tourism Organization. (2013). *Sustainable Tourism for Development Guidebook - Enhancing capacities for Sustainable Tourism for development in developing countries.* https://www.e-unwto.org/doi/book/10.18111/9789284415496 title of the journal? journal's edition and page numbers?

Hengky, S. H., & Kikvidze, Z. (2021). Sustainable Coastal Tourism in Tanjung Kelayang, Indonesia. *Tourism Planning and Development*, *18*(3), 365–370.

Hourneaux, F., Gabriel, M. L. da S., & Gallardo-Vázquez, D. A. (2018). Triple bottom line and sustainable performance measurement in industrial companies. *Revista de Gestao*, *25*(4), 413–429.

Ilhami, M. R., Anugrah Santaufanny, F. F., & Sinambella, R. (2020). Efektivitas Aver Viewer dalam Memantau Kemacetan Lalu Lintas di Kota Batu. *Jurnal Publisitas*, *7*(1), 11–22.

Kementerian Lingkungan Hidup dan Kehutanan. (2020, Desember 31). *Statistik Kualitas Air, Udara, dan*

Tutupan Lahan 2020. https://ppkl.menlhk.go.id/website/filebox/1033/210930123917BUKU%20STATISTIK%20PPKL%202020%20 please adjust to the format for internet sources

KepMen LH No.48. (1999). Keputusan Menteri Negara Lingkungan Hidup No. 48 Tahun 1996 Tentang : Baku Tingkat Kebisingan. 48.

Lampung, U. B., Rama, A., Barusman, P., Virgawenda, T. M. B., & Arwis, Y. A. (2020). Factors that Effect the Level of Consumers Loyalty for Budget Hotel in Indonesia. *2932 Talent Development & Excellence*, *12*(1), 2932–2942.

Li, Q. C., & Wu, M. Y. (2019). Rationality or morality? A comparative study of pro-environmental intentions of local and nonlocal visitors in nature-based destinations. *Journal of Destination Marketing and Management*, *11*(July 2018), 130–139.

Masa'deh, R., Nasseef, M. A., Suliman, M., & Albawab, M. (2017). The Effect of Hotel Development on Sustainable Tourism Development. *International Journal of Business Administration*, *8*(4), 16.

Menteri Tenaga Kerja Republik Indonesia. (1999). Nilai Ambang Batas Faktor Fisika Di Tempat Kerja Menteri Tenaga Kerja Republik Indonesia. *Kep.51/Men/1999*, 15–20.

Moliner, M. Á., Monferrer, D., Estrada, M., & Rodríguez, R. M. (2019). Environmental sustainability and the hospitality customer experience: A study in tourist accommodation. *Sustainability (Switzerland)*, *11*(19), 1-15. page number?

N.J. Putra, H. Setyabudiarso, H. (2022). Kota Malang Analysis Of Noise Levels Of W .R. *Jurnal Enviro Prodi Teknik Lingkungan – ITN Malang*, *10(2)*,1-8. please adjust to the APA format

Peng, X., & Lee, S. (2019). Self-discipline or self-interest? The antecedents of hotel employees' pro-environmental behaviours. *Journal of Sustainable Tourism*, *27*(9), 1457–1476.

Pereira, V., Silva, G. M., & Dias, Á. (2021). Sustainability practices in hospitality: Case study of a luxury hotel in Arrábida Natural Park. *Sustainability (Switzerland)*, *13*(6), 1–21.

Postma, A., & Schmuecker, D. (2017). Understanding and overcoming negative impacts of tourism in city destinations: conceptual model and strategic framework. *Journal of Tourism Futures*, *3*(2), 144–156.

Rainanto, B. H. (2022). *Environmental Management System and Pro-Environmental Behavior With Green Marketing Mix as a Mediator for Sustainable Industry Performance in Hotel Industry in East Jawa Province, Indonesia*. (Disertation: Universiti Tun Hussein Onn Malaysia). http://eprints.uthm.edu.my/8407/ please adjust to the APA format

Rainanto, B. H., Bon, A. T., & Purba, J. H. V. (2020). Environmental management system (EMS) and green marketing mix (7Ps) for hotel sustainable industrial performance: A conceptual model. *International Journal of Advanced Science and Technology*, *29*(7 Special), 3724–3732.

Rainanto, B. H., Bon, A. T., & Purba, J. H. V. (2022a). Developing the Conceptual Model of Sustainable Industrial Performance in the Hospitality Industry. *International Journal of Global Optimization and Its Application*, *1*(2), 80–89.

Rainanto, B. H., Bon, A. T., & Purba, J. H. V. (2022b). Environmental Management System and Pro-Environmental Behavior in Realizing Sustainable Industry Performance: Mediating Role of Green Marketing Management. *International Journal of Global Optimization and Its Application*, *1*(1), 12–21.

Sharpley, R. (2020). Tourism, sustainable development and the theoretical divide: 20 years on. *Journal of Sustainable Tourism*, *28*(11), 1932–1946.

Yuniati, N. (2021). Green Hotel Concept and Practices in Indonesia. *E-Journal of Tourism*, *8*(2), 184.

UNWTO World Tourism Organization. Actual Trends vs Tourist 2030 Forecast-World. https://www.moodiedavittreport.com/global-tourist-arrivals-leap-by-6-in-2018-reports-unwto/. 14 April 2019

UNWTO World Tourism Organization. Sustainable Development of Tourism. dt.unwto.org/content/about-us-5. 17 April 2019

Undang-Undang Republik Indonesia No.4 tahun 1982 tentang Ketentuan-Ketentuan Pokok Pengelolaan Lingkungan Hidup (UPPLH)

Undang-Undang Republik Indonesia No.23 tahun 1997 tentang Pengelolaan Lingkungan Hidup

Undang-Undang Republik Indonesia No.32 tahun 2009 tentang Perlindungan dan Pengelolaan Lingkungan Hidup

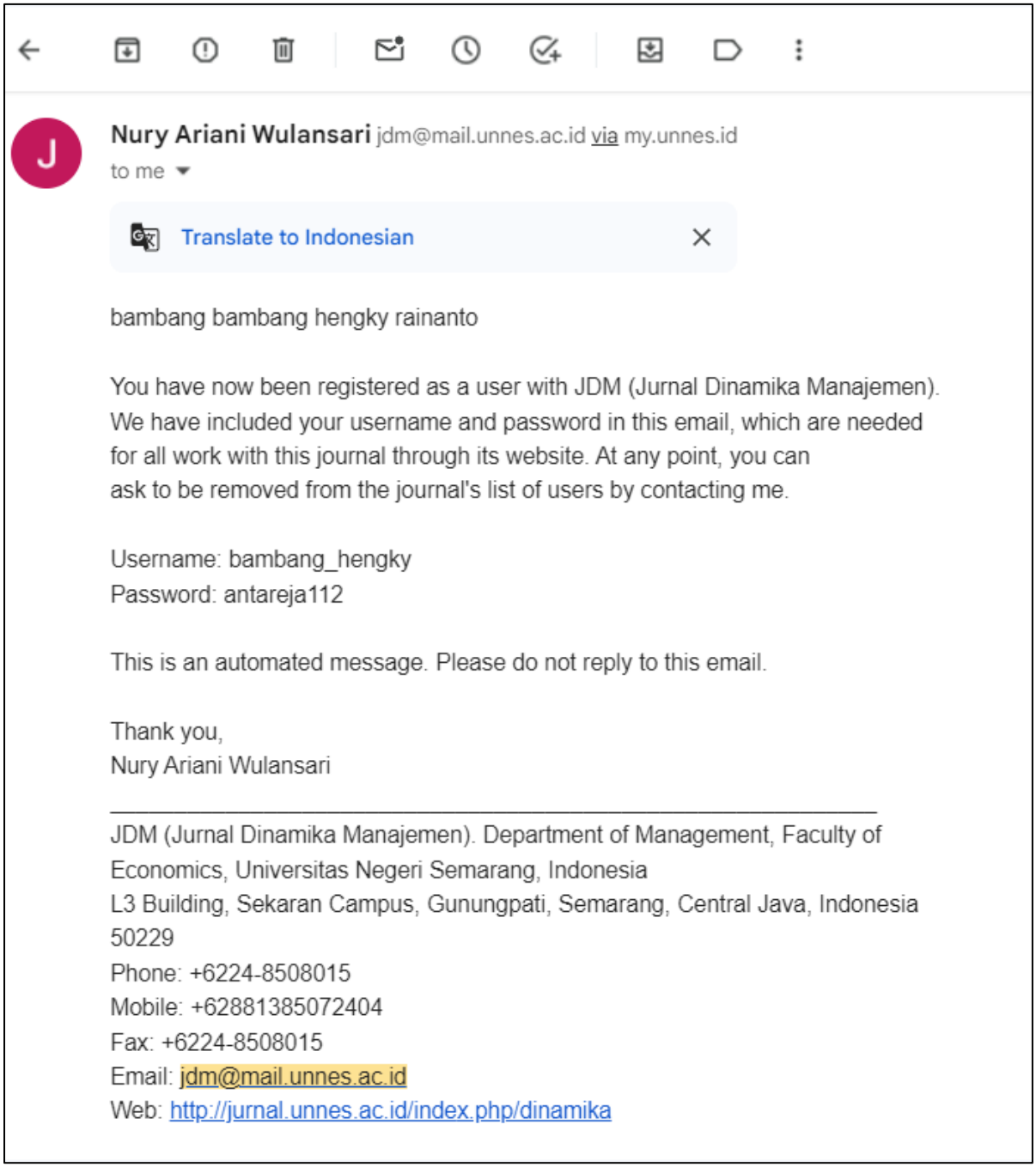
Undang-Undang Republik Indonesia No.90/1990 tentang Kepariwisatan

Commented [M113]: Please write references according to the APA format. The doi address needs to be removed.
Please capitalize the first letter in the title of the journal/book.
There are references that still have not written down the edition and page numbers.

Example: Toby, A. (2020). Empirical Study of the Liquidity Management Practices of Nigerian Banks. *Journal of Financial Management & Analysis*, *19*(1), 57-70.

For internet sources:
Endra. (2014). *Pola Kecenderungan Memetakan Potensi CSR di Indonesia.* Available at: http://lingkarlsm.com/pola-kecenderunganmemetakan-potensi-csr-di-indonesia/. 30 March 2015.

For Government Official Documents:
Undang-Undang Republik Indonesia Nomor 40 tahun 2007 tentang Perseroan Terbatas pasal 74 ayat 1.



Nury Ariani Wulansari jdm@mail.unnes.ac.id via my.unnes.id
to me

Translate to Indonesian

bambang bambang hengky rainanto

You have now been registered as a user with JDM (Jurnal Dinamika Manajemen). We have included your username and password in this email, which are needed for all work with this journal through its website. At any point, you can ask to be removed from the journal's list of users by contacting me.

Username: bambang_hengky
Password: antareja112

This is an automated message. Please do not reply to this email.

Thank you,
Nury Ariani Wulansari

JDM (Jurnal Dinamika Manajemen). Department of Management, Faculty of Economics, Universitas Negeri Semarang, Indonesia
L3 Building, Sekaran Campus, Gunungpati, Semarang, Central Java, Indonesia 50229
Phone: +6224-8508015
Mobile: +62881385072404
Fax: +6224-8508015
Email: jdm@mail.unnes.ac.id
Web: http://jurnal.unnes.ac.id/index.php/dinamika

[JDM] Submission Acknowledgement

External Inbox ×

Nury Ariani Wulansari jdm@mail.unnes.ac.id via my.unnes.id
to me

Translate to Indonesian ×

bambang bambang hengky rainanto:

Thank you for submitting the manuscript, "Achieving Sustainable Performance in the Hospitality Industry based on Environmental Management, Pro-Environmental Behavior and Green Marketing Mix 7P" to JDM (Jurnal Dinamika Manajemen). With the online journal management system that we are using, you will be able to track its progress through the editorial process by logging in to the journal web site:

Manuscript URL:
https://journal.unnes.ac.id/nju/index.php/jdm/author/submission/42972
Username: bambang_hengky

If you have any questions, please contact me. Thank you for considering this journal as a venue for your work.

Nury Ariani Wulansari
JDM (Jurnal Dinamika Manajemen)

JDM (Jurnal Dinamika Manajemen). Department of Management, Faculty of Economics, Universitas Negeri Semarang, Indonesia
L3 Building, Sekaran Campus, Gunungpati, Semarang, Central Java, Indonesia 50229
Phone: +6224-8508015
Mobile: +62881385072404
Fax: +6224-8508015
Email: jdm@mail.unnes.ac.id
Web: http://jurnal.unnes.ac.id/index.php/dinamika

[JDM] Submission Acknowledgement

External Inbox ×

Nury Ariani Wulansari jdm@mail.unnes.ac.id via my.unnes.id
to me

Translate to Indonesian ×

bambang bambang hengky rainanto:

Thank you for submitting the manuscript, "Achieving Sustainable Performance in the Hospitality Industry based on Environmental Management, Pro-Environmental Behavior and Green Marketing Mix 7P" to JDM (Jurnal Dinamika Manajemen). With the online journal management system that we are using, you will be able to track its progress through the editorial process by logging in to the journal web site:

Manuscript URL:
https://journal.unnes.ac.id/nju/index.php/jdm/author/submission/42998
Username: bambang_hengky

If you have any questions, please contact me. Thank you for considering this journal as a venue for your work.

Nury Ariani Wulansari
JDM (Jurnal Dinamika Manajemen)

JDM (Jurnal Dinamika Manajemen). Department of Management, Faculty of Economics, Universitas Negeri Semarang, Indonesia
L3 Building, Sekaran Campus, Gunungpati, Semarang, Central Java, Indonesia 50229
Phone: +6224-8508015
Mobile: +62881385072404
Fax: +6224-8508015
Email: jdm@mail.unnes.ac.id
Web: http://jurnal.unnes.ac.id/index.php/dinamika

[JDM] Editor Decision

External Inbox ×

Euis Soliha esoliha@gmail.com via my.unnes.id
to me

Translate to Indonesian

bambang bambang hengky rainanto:

We have reached a decision regarding your submission to JDM (Jurnal Dinamika Manajemen), "Achieving Sustainable Performance in the Hospitality Industry based on Environmental Management, Pro-Environmental Behavior and Green Marketing Mix 7P".

Our decision is to: Revisions Required

Euis Soliha
[SCOPUS ID: 57211538859], Department of Management, Stikubank University, Indonesia
esoliha@gmail.com

JDM (Jurnal Dinamika Manajemen). Department of Management, Faculty of Economics, Universitas Negeri Semarang, Indonesia
L3 Building, Sekaran Campus, Gunungpati, Semarang, Central Java, Indonesia 50229
Phone: +6224-8508015
Mobile: +62881385072404
Fax: +6224-8508015
Email: jdm@mail.unnes.ac.id
Web: http://jurnal.unnes.ac.id/index.php/dinamika

JDM | JURNAL DINAMIKA MANAJEMEN

Jurusan Manajemen, Fakultas Ekonomi, Universitas Negeri Semarang Gedung L2 Kampus Sekaran Gunungpati, Semarang Indonesia
Telp/Fax: +6224-8508015;Hp: 0813 8507 2404
Email: jdm.unnes@gmail.com

DECLARATION OF ORIGINALITY

The undersigned below:

Name	: Bambang Hengky Rainanto
Phone Number	: +62 8128245626
Place, Date of birth	: Probolinggo, 7 December 1974
Affiliation	: Institut Bisnis dan Informatika Kesatuan (IBIK), Tourism Department, Faculty of Informatics and Tourism
Email	: bambang@ibik.ac.id
Address	: Jl. Antareja 1 No.12, Indraprasta 1, Bogor 16153

I hereby declare that the manuscript entitled " Achieving Sustainable Performance in the Hospitality Industry based on Environmental Management, Pro-Environmental Behavior and Green Marketing Mix 7P"is an original work (not plagiarism), has never been published and is not being sent to another journal for publication.

This statement is made in a conscious state and without any element of coercion from anyone. If later discovered unfair information, then I am willing to be penalized.

Bogor, July 14, 2023

Signature,

(Bambang Hengky Rainanto)

JDM | JURNAL DINAMIKA MANAJEMEN

Jurusan Manajemen, Fakultas Ekonomi, Universitas Negeri Semarang
Gedung L2 Kampus Sekaran Gunungpati, Semarang Indonesia
Telp/Fax: +6224-8508015;Hp: 0813-8507-2404
Email: jdm@mail.unnes.ac.id

Nomor : 021/JDM/II/2023 10 Juli s2023

Hal : Letter of Acceptance (LoA)

Yth. Bapak/Ibu **Bambang Hengky Rainanto**
Institut Bisnis dan Informatika Kesatuan
Bogor

Berdasarkan hasil penelaahan oleh tim reviewer, artikel yang telah dikirimkan dengan keterangan sebagai berikut:

Nama penulis	: Bambang Hengky Rainanto, Abdul Talib Bon, Jonathan van Melle, Yuari Farradia, Ani Mekaniwati
Judul artikel	: Achieving Sustainable Performance in the Hospitality Industry Based on Environmental Management, Pro-Environmental Behavior, and Green Marketing Mix 7P
Bidang	:-

Dinyatakan **diterima dengan revisi** untuk dimuat pada edisi September 2023 (Vol. 14, No. 2) pada terbitan berkala ilmiah Jurnal Dinamika Manajemen (JDM) FE Unnes.

Atas perhatiannya, kami sampaikan terima kasih.

Ketua Dewan Editor

Nury Ariani Wulansari, S.E., M.Sc

JDM
Jurnal Dinamika Manajemen

Jurnal Dinamika Manajemen, 14 (2) 2023, 178-190
http://jdm.unnes.ac.id

Nationally Accredited based on the Decree of the Minister of Research, Technology and Higher Education, Number 85/M/KPT/2020

Achieving Sustainable Performance in the Hospitality Industry based on Environmental Management, Pro-Environmental Behavior, and Green Marketing Mix 7P

Bambang Hengky Rainanto✉[1], Abdul Talib Bon[2], Jonathan van Melle[3], Yuari Farradia[4], Ani Mekaniwati[5]

Department of Tourism, Institut Bisnis dan Informatika Kesatuan, Bogor, Indonesia[1]
Department of Production and Operations Management, Universiti Tun Hussein Onn Malaysia, Malaysia[2]
Avans School of Business and Entrepreneurship, Avans University of Applied Sciences, Netherlands[3]
Department of Management (Marketing), University of Malaysia Terengganu, Malaysia[4]
Department of Bioentrepreneur, Institut Bisnis dan Informatika Kesatuan, Bogor, Indonesia[5]

Info Article

History Article:
Submitted 2 March 2023
Revised 4 May 2023
Accepted 31 May 2023

Keywords:
green marketing mix 7p's; environmental management system; pro-environmental behavior; sustainable performance

Abstract

The tourism sector is an important sector because it can grow a country's economy through foreign exchange. However, if not managed properly, tourism can also have negative impacts. This research was located in East Java Province, Indonesia with 228 respondents at the Hotel Manager level. This research aims to develop a relationship model between the Environmental Management System (EMS), Pro-Environmental Behavior (PEB), and the Green Marketing Mix (GMM) as a mediator to achieve Sustainable Industrial Performance (SIP) with 17 hypotheses. Using quantitative methods through surveys and processing using SmartPLS 3. The research results stated that 14 hypotheses were accepted, but 3 hypotheses were rejected. The research results show that the implementation of EMS has a significant relationship with economic and social performance but has no relationship with environmental performance. PEB directly has a significant relationship with environmental performance but not with economic and social performance. GMM has a significant relationship with the three elements of SIP. GMM is also a suitable partial mediator for EMS and PEB to achieve SIP.

Mewujudkan Kinerja Berkelanjutan di Industri Perhotelan berdasarkan Manajemen Lingkungan, Perilaku dan Green Marketing Mix 7P

Abstrak

Sektor pariwisata merupakan sektor yang penting karena dapat menumbuhkan perekonomian suatu negara melalui devisa. Namun apabila tidak dikelola secara benar, pariwisata juga memiliki dampak negatif. Penelitian ini berlokasi di Provinsi Jawa Timur, Indonesia dengan 228 responden di level Manager Hotel. Penelitian ini bertujuan untuk mengembangkan model hubungan antara Sistem Manajemen Lingkungan (EMS), Perilaku Pro Lingkungan (PEB), dengan mediator Bauran Pemasaran Hijau (GMM) untuk mencapai Kinerja Industri Berkelanjutan (SIP) dengan 17 hipotesis. Menggunakan metode kuantitatif melalui survei dan pengolahan menggunakan SmartPLS 3. Hasil penelitian menyatakan 14 hipotesis diterima, namun 3 hipotesis ditolak. Hasil penelitian menunjukkan bahwa penerapan EMS memiliki hubungan signifikan dengan kinerja ekonomi dan sosial tetapi tidak memiliki hubungan dengan kinerja lingkungan. PEB secara langsung memiliki hubungan yang signifikan dengan kinerja lingkungan tetapi tidak dengan ekonomi dan sosial. GMM memiliki hubungan yang signifikan dengan ketiga unsur SIP. GMM juga menjadi mediator parsial yang cocok untuk EMS dan PEB untuk mencapai SIP.

JEL Classification: M31; Q50; L83

How to Cite: Rainanto, B. H., Bon, A. T., Melle, J., Farradia, Y., & Mekaniwati, A. (2023). Achieving Sustainable Performance in the Hospitality Industry based on Environmental Management, Pro-Environmental Behavior, and Green Marketing Mix 7P. *Jurnal Dinamika Manajemen, 14*(2), 178-190.

✉Correspondence Address
Institutional address : IBIK Jl. Rangagading No.1, Bogor 16123
Email: bambang@ibik.ac.id

ISSN
2086-0668 (print)
2337-5434 (online)

INTRODUCTION

The very fast growth of the hospitality industry supports the tourism sector which has boosted the economy, but on the other hand, it can have an impact on the environment (Masa'deh et al., 2017). In several countries, the massive growth of tourism has had an environmental impact, for example in Spain there has been an increase in pollution, landfills, disruption of biodiversity, decreased environmental quality, and exploitation of water and water resources (Moliner et al., 2019) and requires a general structure to lend coherence to its approach. There is a need for empirical research to fathom the question of environmental sustainability and customer experience in the hospitality industry and to study the interaction between the two concepts. This paper aims to close these gaps by establishing the nature of the relationship between customers' perceptions of the environmental practices in tourism accommodation and their customer experiences and levels of satisfaction. The working hypotheses, based on a review of the literature on environmental sustainability and customer experience in the hospitality industry, are tested in an empirical study of 412 Spanish customers who stayed in various types of tourist accommodation. The main conclusion is that the relationship between environmental sustainability and customer experience in the hospitality industry can be demonstrated. This paper also validates a measurement scale based on the most accepted dimensionality of the construct: cognitive (think. This negative impact has also been studied in several other countries, such as Jordan (Masa'deh et al., 2017), the Netherlands (Postma & Schmuecker, 2017), Malaysia, Singapore, and Thailand (Azam et al., 2018), and Taiwan (Peng & Lee, 2019). In Indonesia, research on the negative effects of the hotel industry has been published (Lampung et al., 2020; Yuniati, 2021) and concluded the impact on disruption of the natural environment, built environment, and local culture.

The Environmental Management System (EMS) focuses on fulfilling commitments by organizations to several policies for environmental management. This commitment includes reducing negative environmental impacts from the organization's products, services, and activities (Rainanto et al., 2020) academics and practitioners pay attention to sustainable hotel industry performance by adopting an environmental management system (EMS).

Pro-Environmental Behavior (PEB) is human behavior that understands and implements principles aimed at protecting the environment. The application of Pro-Environmental Behavior (PEB) is voluntary for the tourism industry, especially the hospitality industry (Fatoki, 2019; Li & Wu, 2019).

Green Marketing Mix 7Ps (GMM 7Ps) is a strategy for fulfilling 7 basic attributes that will support marketing activities while upholding environmental protection. The hotel industry needs to implement the Green Marketing Mix 7P's strategy to realize sustainable tourism (Rainanto et al., 2022b).

The hotel industry's business performance is considered successful and sustainability is realized from success in terms of the economy (business), preservation of the surrounding environment, and maintaining the socio-cultural conditions of the local community. Business continuity in the hospitality sector is not enough to be seen from the side of economic benefits, it is also necessary to look at it from the perspective of the surrounding environmental and social conditions (Pereira et al., 2021; Rainanto et al., 2022a; Sharpley, 2020).

Cities that have potential as tourist destinations tend to experience high growth in the number of hotels compared to other cities. This is because tourist destination cities are attractive economic potential for hospitality investors and tourist destinations. For some residents who "benefit" from their city becoming a tourist destination, this will be considered attractive, but for some other residents, this can be a problem (Rainanto, 2022). (Ilhami et al., 2020) stated that until 2019 there was

a traffic jam in Batu City, which is located in East Java Province, on certain days due to the large number of tourist vehicles entering the city. This is supported by data from the Central Bureau of Statistics for the City of Batu in 2019 which stated that visitors to tourist attractions and souvenir tours in Batu City in 2019 totaled 6,047,460 tourists with a total of 1,354 hotels (BPS Kota Batu, 2020). The ratio of the population of Batu City to the number of tourists coming to the city in 2019 is that the population of Batu City is 0.02% of the number of tourists (BPS Kota Batu, 2020).

The number of tourists in Batu City, Malang City, and Malang Regency in East Java Province increased rapidly at weekends. The arrival of these tourists caused congestion on several roads there. The results of the research on the noise level conducted on Jalan WR Supratman which is one of the main roads in Malang City, East Java Province on Sunday is 81.2 dBA - 86.1 dBA, while on Monday it is 72.0 dBA - 79, 1dBA (Putra & Setyabudiarso, 2022). By the Decree of the Minister of State for the Environment No. 48 of 1996, Appendix 1 includes a table regarding Noise Level Standards according to area designation. The standard threshold values for Noise Level according to the regulations include Housing and Settlements (55 dbA); Trade and Services (70 dBA); Office Building (dbA); Green Open Space (50 dbA); Industrial (70 dbA); Government and Public Facilities (60 dBA); Recreation (70 dbA) (KepMen LH No.48, 1999). Meanwhile, the Noise Threshold Value (NAV) according to Kepmenaker No. per-51/MEN/1999, ACGIH, 2008 and SNI 16-7063-2004 is 85 dB (Menteri Tenaga Kerja Republik Indonesia, 1999). Another negative effect is that the water discharge becomes weak at certain times. According to the Indonesian Forum for the Environment (WALHI) of East Java Province, the water quality index in East Java from 2016 to 2020 has decreased and is of concern and has a very concerning status. The data is also following the Statistical Report on Water Quality, Air and Land Cover issued by the Ministry of Environment and Forestry, Directorate General of Pollution Control and Environmental Damage, which stated that the water quality of all major rivers in East Java Province was classified as heavily polluted from 2015 to 2020 (Kementerian Lingkungan Hidup dan Kehutanan, 2021). Based on the East Java Province Environmental Management Quality Index Report. WALHI (2020) notes that more than 800,000 hectares of forest in East Java have been damaged. Walhi (2021) stated that in East Java Province cumulatively based on BNPB records from 2013 to 2019 there have been 2676 hydrometeorological disasters.

In addition to the negative impacts of environmental conditions, there are also negative impacts from the economic sector, such as

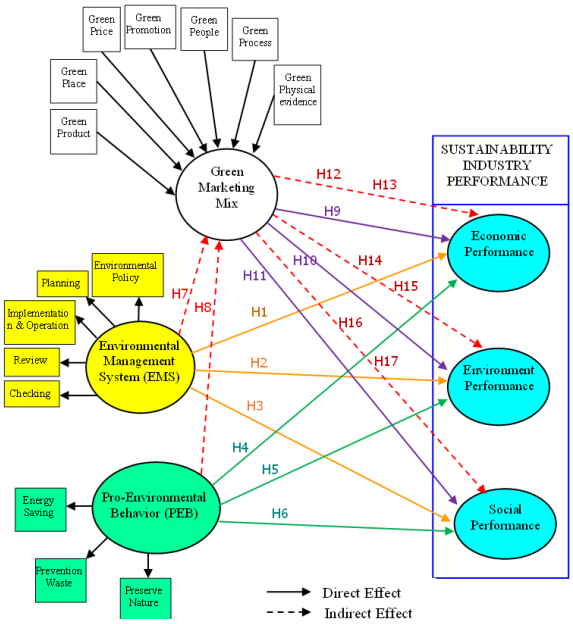


Figure 1. Research Hypothesis

high property prices which combine because many migrants are interested in owning homes in tourist destinations. Massive property development has also reduced the area of paddy fields and open land in these tourist destinations. (Hengky & Kikvidze, 2021) reports that the area of land in Malang is getting narrower every year. This is due to the conversion of land into residential and industrial areas.

Currently, the area of agricultural land in the city of Malang, especially for rice farming, is only 821 hectares out of 1,104 hectares. One of the impacts felt is the frequent occurrence of floods in several areas of Malang Metropolitan in recent years. If this negative impact is left unchecked, it will affect the comfort of the Malang Metropolitan City.

The World Tourism Organization (WTO) defines Sustainable Tourism as: "Tourism that takes into account its current and future economic, environmental, and social impacts, meeting the needs of consumers, the environment, industry, and local communities". The concept of sustainable tourism states that tourism development should not damage nature, the environment, or land, especially agricultural land (Guanabara et al., 2013). UNWTO's conceptual definition of sustainable tourism must: (i) Make optimal use of environmental resources, which are a key element in tourism development, safeguarding important ecological processes and helping to preserve the natural heritage and biodiversity; (ii) Respect the socio-cultural authenticity of the host communities, preserve the cultural heritage and traditional values that they have built and live by, and contribute to intercultural understanding and tolerance; (iii) Ensure proper and long-term economic operations, provide socio-economic benefits that are distributed fairly to all stakeholders, including stable employment and income opportunities and social services for local communities, and contribute to poverty alleviation.

There are three sustainable performances for industrial companies along with details on their constituent parameters (Hourneaux et al., 2018). The three sustainable performances include 1. Sustainable Environmental Performance, consisting of (a) Reduction of wastewater, (b) Reduction of emissions, and waste, (c) Reduction of costs for environmental aspects of products and services, (d) Environmental compliance, (e) Reduction costs for common environmental problems; 2. Sustainable Economic Performance, consisting of (a) Profit from operations, (b) Sales growth, (c) Return on equity, (d)Return on investment, (e) Cost per unit produced, (f) Net cash flow, (g) Market share, (h) On-time delivery, (i) Customer response time, (j) Number of warranty claims, (k) Number of customer complaints, (l) Customer satisfaction survey, (m) Material efficiency variations; 3. Sustainable Social Performance, consisting of (a) Social commitment, (b) Environmental preservation, (c) Increasing employee job satisfaction, (d) Training and education, and (e) Compliance with products and services.

The novelties of the research are measuring Sustainable Performance in the Hospitality Industry based on an Environmental Management System, Behavior that supports the environment, and the application of the Green Marketing Mix 7P as a mediator. The measurement of sustainable performance for the hotel industry is something new in research because what usually measures sustainable performance is done in the goods or manufacturing industries.

Hypothesis Development

Relationship between Two or More Variables

The hypothesis that forms the basis of this study is 17 relationships. The development of 17 hypotheses is based on a literature review of the dependent to independent variables, as well as the moderator variable which is the link between the dependent and independent variables. 11 hypotheses are directly related, and 6 hypotheses that are indirectly related using the Green Marketing Mix 7P (GMM 7's) mediation. The research hypothesis in this study is in Figure 1 below.

The 17 hypotheses in this study are proposed in detail as follows:

H1: The EMS has a significant and direct relationship to sustainable economic performance

H2: The EMS has a significant and direct relationship to environmental performance

H3: The EMS has a significant and direct relationship to social performance

Table 1. Reliability Value of Reflective Construct

Reflective Construct	Items	Loading Factor (> 0.7)	AVE (> 0.5)	Composite Reliability (>0.7)	Cronbach's Alpha (α ≥0.70)
EMS					
Environmental Policy			.760	.927	.894
	EnvPolicy1	.890			
	EnvPolicy 2	.905			
	EnvPolicy 3	.882			
	EnvPolicy 4	.807			
Planning			.781	.934	.906
	Plan5	.861			
	Plan6	.896			
	Plan7	.905			
	Plan8	.872			
Implementation and Operation			.794	.939	.912
	ImlOpr9	.896			
	ImlOpr10	.938			
	ImlOpr11	.932			
	ImlOpr12	.790			
Checking and Corrective Action			.961	.980	.959
	CheckCor13	.980			
	CheckCor14	.980			
Management Review			.821	.948	.927
	MgtRev15	.871			
	MgtRev16	.908			
	MgtRev17	.916			
	MgtRev18	.929			
PEB					
Save Energy			.844	.942	.907
	EnSav19	.936			
	EnSav20	.955			
	EnSav21	.863			
Waste Prevention			.695	.872	.781
	PrevWaste22	.861			
	PrevWaste23	.860			
	PrevWaste24	.777			
Nature Preservation			.803	.942	.917
	PresNat25	.828			
	PresNat26	.911			
	PresNat27	.922			
	PresNat28	.919			

Environmental Performance			.592	.853	.894
	EnvSust57	.771			
	EnvSust58	.787			
	EnvSust59	.792			
	EnvSust60	.727			
Economics Performance			.774	.954	.942
	EconSust61	.867			
	EconSust62	.843			
	EconSust63	.910			
	EconSust64	.908			
	EconSust65	.897			
	EconSust66	.853			
Social Performance			.789	.949	.933
	SosSust67	.847			
	SosSust68	.891			
	SosSust69	.935			
	SosSust70	.923			
	SosSust71	.842			

H4: The PEB has a significant and direct relationship to economic sustainability

H5: The PEB has a significant and direct relationship to environmental sustainability

H6: The PEB has a significant and direct relationship to social sustainability

H7: The EMS directly has a significant relationship on GMM

Table 2. Measurement of Two-Stage Process for Second-Order (Reflective – Formative)

Construct	Item	Loading Factor	Ave	Composite Reliability	Weight	VIF	T-Values Weights	P Value Weight
Reflective Model Second Order								
EMS			.739	.934				
	Environ. Policy	.880						
	Planning	.908						
	Implement & Operation	.911						
	Check & Corrective Act.	.735						
	Management Review	.873						
PEB			.807	.926				
	Save Energy	.877						
	Waste Prevention	.915						
	Nature Preservation	.902						

Environ. Sustainable Perform		.592	.853			
	Environ. Sustain57	.773				
	Environ. Sustain58	.783				
	Environ. Sustain59	.792				
	Environ. Sustain60	.727				
Economics Sustainable Perform		.774	.954			
	Economics Sustain61	.869				
	Economics Sustain62	.845				
	Economics Sustain63	.910				
	Economics Sustain64	.906				
	Economics Sustain65	.895				
	Economics Sustain66	.854				
Social Sustainable Perform		.789	.949			
	Social Sustainable67	.845				
	Social Sustainable68	.891				
	Social Sustainable69	.936				
	Social Sustainable70	.924				
	Social Sustainable71	.842				
Formative Model Second Order						
GMM						
	Green Product			.151	2.347	3.331	.001
	Green Place			.065	4.227	1.117	.264
	Green Price			.169	3.046	3.337	.001
	Green Promotion			.030	2.984	.674	.500
	Green Process			.213	2.200	4.817	.000
	Green People			.393	1.865	9.632	.000
	Green Physical Evidence			.191	4.161	3.027	.002

H8: The PEB directly has a significant relationship on GMM
H9: The GMM has a significant and direct relationship to economic sustainability
H10: The GMM has a significant and direct relationship to environmental sustainability
H11: The GMM has a significant and direct relationship to social sustainability
H12: The GMM mediates between EMS and economic sustainable performance
H13: The GMM mediates between PEB and economic sustainable performance
H14: The GMM mediates between EMS and environmentally sustainable performance
H15: The GMM mediates between PEB and environmentally sustainable performance
H16: The GMM mediates between EMS and social sustainable performance
H17: The GMM mediates between PEB and social sustainability

METHOD

This research method was chosen quan-

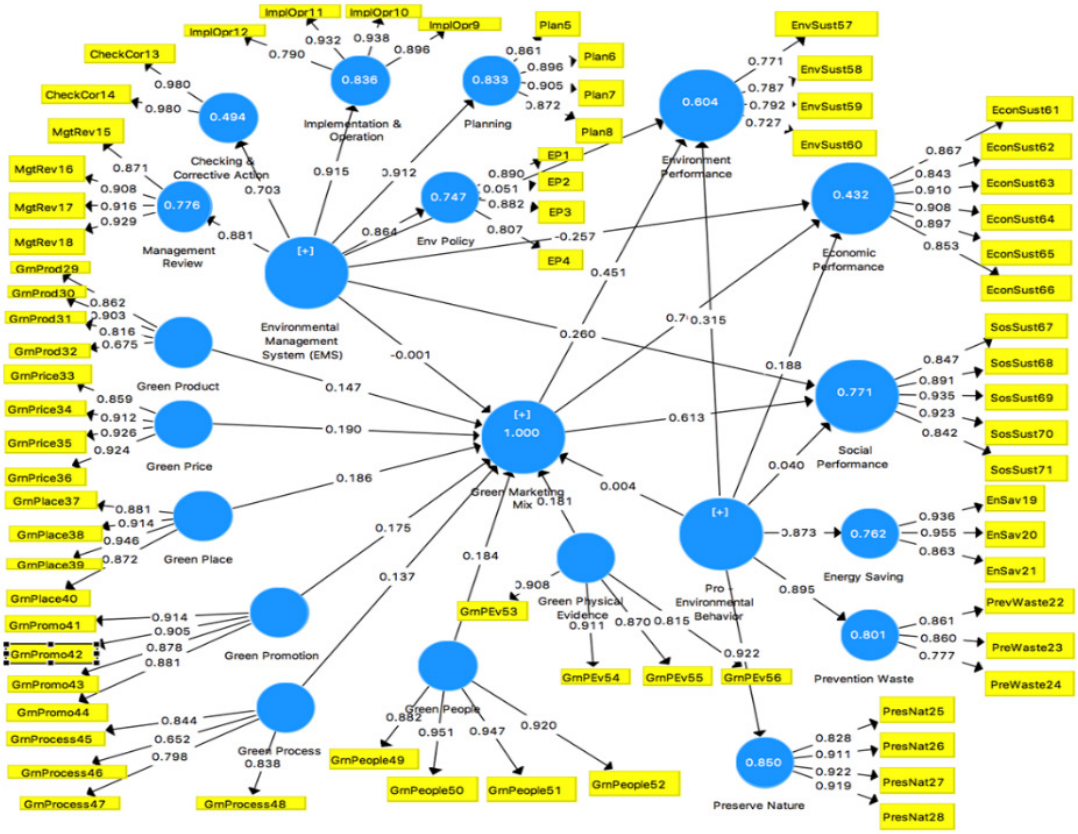


Figure 2. First Order Construct

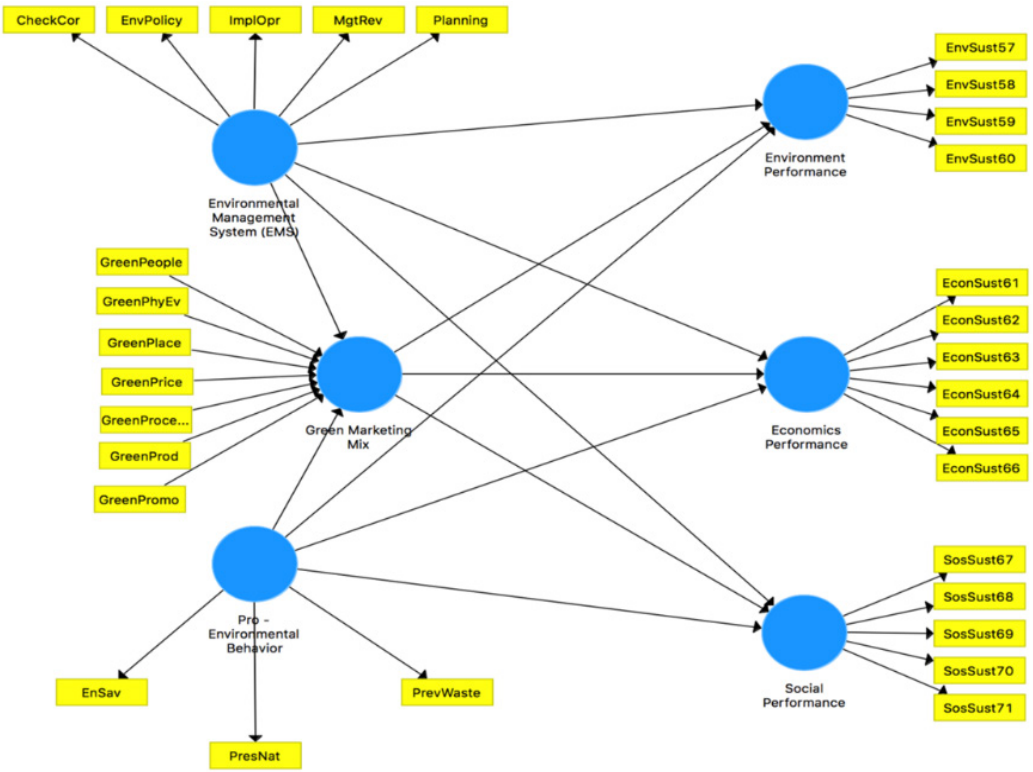


Figure 3. Second Order Construct

titatively by collecting primary data as the main source of the data being analyzed. A total of 228 respondents with the position of a hotel manager or general manager are the basis for calculating the analysis.

This study uses a simple sampling method because the selection of the sample is completely random and member of the hotel industry population has an equal chance of being selected to be part of the sample. Furt-

Table 3. Hypothesis Testing (Direct Effect Result Test)

Hypothesis		Original Sample (O) /β	Std Dev/ Stand Error	T stat t-value (>1.645)	p-value (<0.10)	R^2	f^2 (≥ 0.02)	Q^2 (> 0)	Decision
H1	EMS → Economy SP	-0.262	0.103	2.545	0.005	.421	0.028	0.295	Supported
H2	EMS → Environ. SP	-0.018	0.098	0.187	0.426	.625	0.000	0.334	Un-Support
H3	EMS → Social SP	0.250	0.075	3.330	0.000	0.763	0.062	0.561	Supported
H4	PEB → Economy SP	0.125	0.109	1.149	0.125	0.421	0.006	0.295	Un-Support
H5	PEB → Environ. SP	0.202	0.102	1.976	0.024	0.625	0.025	0.334	Supported
H6	PEB → Social SP	-0.029	0.070	0.417	0.338	0.763	0.001	0.561	Un-Support
H7	EMS → GMM 7P's	0.465	0.062	7.503	0.000	0.814	0.373	0.486	Supported
H8	PEB → GMM 7P's	0.480	0.060	8.050	0.000	0.814	0.398	0.486	Supported
H9	GMM → Economy SP	0.753	0.113	6.641	0.000	0.421	0.182	0.486	Supported
H10	GMM → Environ. SP	0.626	0.100	6.284	0.000	0.625	0.194	0.486	Supported
H11	GMM → Social SP	0.675	0.072	9.340	0.000	0.763	0.357	0.486	Supported

Table 4. Hypothesis Testing on Mediating

Hypothesis		Original Sample (O)/β	Std Dev/ Stand Error	T statistic t-value (> 1.96)	p-value 2.5%	Confidence Interval (BC) 97.5%		Decision
H12	EMS → GMM → Economy SP	0.350	0.075	4.650	0.000	0.215	0.503	Supported
H13	EMS → GMM → Environ. SP	0.291	0.061	4.798	0.000	0.181	0.417	Supported
H14	EMS → GMM → Social SP	0.314	0.052	6.057	0.000	0.220	0.422	Supported
H15	PEB → GMM → Economy SP	0.362	0.070	5.183	0.000	0.230	0.501	Supported

Table 4. Hypothesis Testing on Mediating

	Hypothesis	Original Sample (O)/β	Std Dev/ Stand Error	T statistic t-value (> 1.96)	p-value 2.5%	Confidence Interval (BC) 97.5%		Decision
H16	PEB → GMM → Environ. SP	0.300	0.064	4.730	0.000	0.177	0.428	Supported
H17	PEB → GMM → Social SP	0.324	0.057	5.662	0.000	0.226	0.448	Supported

hermore, the use of a purposive sampling method was because the respondents selected as questionnaire fillers are hotel employees with the position of General Manager or Manager. The reason for selecting respondents at the Manager or General Manager level is because

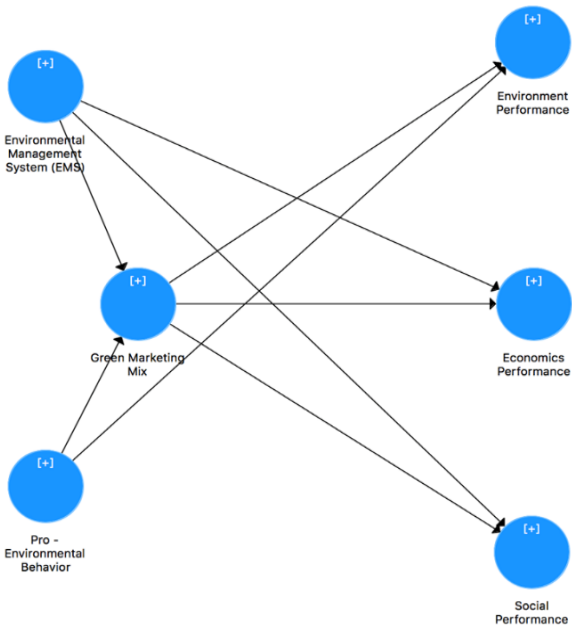


Figure 3. The Results of Full Model Analysis

those two positions understand and are competent with matters relating to policies carried out by hotel management. These policies, among others, relate to EMS, PEB, and GMM toward SIP.

Research analysis based on research objectives: (1) Research analysis to find out the direct relationship between the X and Mediator variables with the Sustainable Industry Performance variable using Smart-PLS 3; (2) Research analysis to determine the recommended relationship model between variable X and Mediator with the Sustainable Industry Performance variable using Smart-PLS 3.

RESULT AND DISCUSSION

The results of the analysis using Smart PLS 3 through several stages of the process. The stages of the process include Measurement of Construct Variable, Model validation, Assessment of measurement model, Measurement validity of first-order construct – reflective model, Loading Factor, Convergent Validity – Average Variance Extracted (AVE), Convergent Validity – Composite Reliability (CR), Cronbach's Alpha (α), Cross Loading, Fornell-Larcker Criterion, Heterotrait-monotrait (HTMT), Measurement Model Result – Outer model, Validity and Reliability of Second-Order Construct – Two-Stage Approach, Two stage approach (reflective-formative measurement model), Structural model/inner model measurement, Collinearity statistics (VIF) – Outer & Inner VIF, Hypotheses Testing (Path Coefficient), Coefficient of Determinant (R2), Effect Size (f2), Predictive Relevance (Q2), Hypothesis Evaluation, Testing the mediating roles, and finally the Recommended Model.

Fornell & Larcker (1981) states that the Convergent Validity of Cronbach's Alpha and Composite Reliability (CR) must be more than 0.70, while the Average Variance Extracted (AVE) value must pass 0.50. Based on the critical threshold value above, a summary of the measurement validity is shown in Table 1.

Measurement of the second-order construct with reflective and formative measurement indicators needs to be taken into account. A

two-stage approach was carried out before analyzing the structural model and the interaction between the mediator and moderator. A summary of all the results of the second-order PLS algorithm (Reflective - Formative) is presented in Table 2.

Two variables are considered Moderate, namely Environmental Policy and Checking and Correction Actions. The combined effect of the first order explaining the variance in Environmental Policy, Planning, Implementation & Operation, Inspection & Corrective Action, Management Review, Saving Energy, Waste Prevention, and Nature Preservation is accepted. The PLS algorithm for the results of R2 is presented in Figure 2 about First Order Construct below.

The second-order construct model in this research is reflective-formative. The higher-order constructs are for the mediator variable. Due to the formative nature of the mediator constructs, the recommended measurement approach for this type of HCM model is the two-stage PLS. The two-stage PLS approach takes advantage of the advantages of PLS path modeling to explicitly measure the values of latent variables, also be implemented in models with interaction effects between all constructs as measured by reflective indicators. Figure 2 below shows the results from the Second Order Construct.

The results of the hypothesis for a direct relationship are obtained from several criteria such as t-value, p-value, and f^2. The relationship between variables in a positive (supported) result is based on a t-value above 1.645 (Hair et al., 2017) then the P-value must be less than 0.10 (Hair et al., 2017); and f^2 must be greater than 0.02. The details of the hypotheses are presented in Table 3 and Table 4.

After the results of the analysis with several previous stages, it was concluded that of the 17 initial hypotheses, it was proven that 14 hypotheses were accepted, while 3 hypotheses were rejected. Easily, the final results of the study table be seen in Figure 3 below.

The results of the research based on the analysis result model are that the Environmental Management System (EMS) variable supports Sustainable Economy, Social Sustainable, and Green Marketing Mix 7P. The Pro-Environmental Behavior (PEB) variable supports the Sustainable Environment and Green Marketing Mix 7P. The 7P Green Marketing Mix Variables are also three sustainable variables namely Economic, Environmental, and Social. The 7P Green Marketing Mix function as a mediator between EMS and PEB in Sustainable Industrial Performance is also supported. The novelty of this research for the hospitality industry is the 7P Green Marketing Mix, both directly and as a moderator for EMS and PEB will provide positive benefits for the sustainability of the hospitality businesses

The hypotheses that support the novelty of the results of this study include H12 (EMS - GMM - Economic Sustainable Performance); H13 (PEB - GMM - Economic Sustainable Performance); H14 (EMS - GMM - Environmental Sustainable Performance); H15 (PEB - GMM - Environmental Sustainable Performance); H16 (EMS - GMM - Social Sustainable Performance); and H17 (PEB - GMM - Social Sustainable Performance).

The benefits of this research can be used by several parties such as Hotel owners, Managers, Regional Governments, Central Government, and Hospitality Associations, all of that in the framework of creating sustainable tourism.

CONCLUSION AND RECOMMENDATION

There are seventeen hypotheses linking the Environmental Management System (EMS), Pro-Environmental Behavior (PEB) for Sustainable Industry Performance (SIP) with the Green Marketing Mix 7P's Mediation (GMM 7P's). Fourteen hypotheses are accepted and three hypotheses are rejected. Fourteen hypotheses were accepted, consisting of: H1, H3, H5, H7, H8, H9, H10, H11, H12, H13, H14, H15, H16, and H17. While the three hypotheses are rejected, namely: H2, H4, and H6. There are 11 hypotheses related to the direct interaction hypothesis, eight hypotheses are accepted, while

three are not accepted. The conclusion from the research results is that the Environmental Management System (EMS) supports Sustainable Economy, Social Sustainable, and Green Marketing Mix 7P. For Pro-Environmental Behavior (PEB) supports Sustainable Environment and Green Marketing Mix 7P. Then the Green Marketing Mix 7P supports the three sustainable variables, namely Economic, Environmental, and Social. The Green Marketing Mix 7P function as a mediator between EMS and PEB on Sustainable Industry Performance is also supported. The benefit of this research for the hotel industry is that implementing EMS and PEB through the 7P Green Marketing Mix will provide positive benefits for the sustainability of the hotel business. The limitation of this research is the scope of the research location which is only in East Java. On the other hand, there is the Covid-19 pandemic which has forced several hotels to not operate. The recommendation for further research is to expand the scope of research locations to other provinces so that it can become a policy decision in managing the hospitality industry in the Republic of Indonesia.

REFERENCES

Azam, M., Alam, M. M., & Haroon Hafeez, M. (2018). Effect of Tourism on Environmental Pollution: Further Evidence from Malaysia, Singapore and Thailand. *Journal of Cleaner Production*, *190*, 330–338.

BPS Kota Batu. (2020). Kota Batu dalam Angka 2020. *Badan Pusat Statistik Kota Batu*, 250–255.

Fatoki, O. (2019). Hotel Employees' Pro-Environmental Behavior: Effect of Leadership Behavior, Institutional Support, and Workplace Spirituality. *Sustainability (Switzerland)*, *11*(15), 1-15.

World Tourism Organization. (2013). *Sustainable Tourism for Development Guidebook - Enhancing capacities for Sustainable Tourism for development in developing countries.* Available at: https://www.e-unwto.org/doi/book/10.18111/9789284415496.

Hengky, S. H., & Kikvidze, Z. (2021). Sustainable Coastal Tourism in Tanjung Kelayang, Indonesia. *Tourism Planning and Development*, *18*(3), 365–370.

Hourneaux, F., Gabriel, M. L. da S., & Gallardo-Vázquez, D. A. (2018). Triple Bottom Line and Sustainable Performance Measurement in Industrial Companies. *Revista de Gestao*, *25*(4), 413–429.

Ilhami, M. R., Anugrah Santaufanny, F. F., & Sinambella, R. (2020). Efektivitas Aver Viewer dalam Memantau Kemacetan Lalu Lintas di Kota Batu. *Jurnal Publisitas*, *7*(1), 11–22.

Kementerian Lingkungan Hidup dan Kehutanan. (2020). *Statistik Kualitas Air, Udara, dan Tutupan Lahan 2020.* . Available at https://ppkl.menlhk.go.id/website/filebox/1033/210930123917BUKU%20STATISTIK%20PPKL%202020%20.

KepMen LH No.48. (1999). Keputusan Menteri Negara Lingkungan Hidup No. 48 Tahun 1996 Tentang : Baku Tingkat Kebisingan. 48.

Lampung, U. B., Rama, A., Barusman, P., Virgawenda, T. M. B., & Arwis, Y. A. (2020). Factors that Effect the Level of Consumers Loyalty for Budget Hotel in Indonesia. *2932 Talent Development & Excellence*, *12*(1), 2932–2942.

Li, Q. C., & Wu, M. Y. (2019). Rationality or Morality? a Momparative Study of Pro-Environmental Intentions of Local and Nonlocal Visitors in Nature-Based Destinations. *Journal of Destination Marketing and Management*, *11*, 130–139.

Masa'deh, R., Nasseef, M. A., Suliman, M., & Albawab, M. (2017). The Effect of Hotel Development on Sustainable Tourism Development. *International Journal of Business Administration*, *8*(4), 16.

Menteri Tenaga Kerja Republik Indonesia. (1999). Nilai Ambang Batas Faktor Fisika di Tempat Kerja Menteri Tenaga Kerja Republik Indonesia. *Kep.51/Men/1999*, 15–20.

Moliner, M. Á., Monferrer, D., Estrada, M., & Rodríguez, R. M. (2019). Environmental Sustainability and the Hospitality

Customer Experience: a Study in Tourist Accommodation. *Sustainability (Switzerland)*, *11*(19), 1-15.

Putra, N. F., Setyabudiarso, H., Hendriarianti, E. (2022). Kota Malang Analysis of Noise Levels of W .R. *Jurnal Enviro Prodi Teknik Lingkungan – ITN Malang*, *10*(2),1-8.

Peng, X., & Lee, S. (2019). Self-Discipline or Self-Interest? the Antecedents of Hotel Employees' Pro-Environmental Behaviours. *Journal of Sustainable Tourism*, *27*(9), 1457–1476.

Pereira, V., Silva, G. M., & Dias, Á. (2021). Sustainability Practices in Hospitality: Case Study of a Luxury Hotel in Arrábida Natural Park. *Sustainability (Switzerland)*, *13*(6), 1–21.

Postma, A., & Schmuecker, D. (2017). Understanding and Overcoming Negative Impacts of Tourism in city Destinations: Conceptual Model and Strategic Framework. *Journal of Tourism Futures*, *3*(2), 144–156.

Rainanto, B. H. (2022). *Environmental Management System and Pro-Environmental Behavior with Green Marketing Mix as a Mediator for Sustainable Industry Performance in Hotel Industry in East Jawa Province, Indonesia*. (Disertation: Universiti Tun Hussein on Malaysia). http://eprints.uthm.edu.my/8407/

Rainanto, B. H., Bon, A. T., & Purba, J. H. V. (2020). Environmental Management System (EMS) and Green Marketing Mix (7Ps) for Hotel Sustainable Industrial Performance: a Conceptual Model. *International Journal of Advanced Science and Technology*, *29*(7), 3724–3732.

Rainanto, B. H., Bon, A. T., & Purba, J. H. V. (2022). Developing the Conceptual Model of Sustainable Industrial Performance in the Hospitality Industry. *International Journal of Global Optimization and Its Application*, *1*(2), 80–89.

Rainanto, B. H., Bon, A. T., & Purba, J. H. V. (2022). Environmental Management System and Pro-Environmental Behavior in Realizing Sustainable Industry Performance: Mediating Role of Green Marketing Management. *International Journal of Global Optimization and Its Application*, *1*(1), 12–21.

Sharpley, R. (2020). Tourism, Sustainable Development and the Theoretical Divide: 20 Years on. *Journal of Sustainable Tourism*, *28*(11), 1932–1946.

Yuniati, N. (2021). Green Hotel Concept and Practices in Indonesia. *E-Journal of Tourism*, *8*(2), 184.

Undang-Undang Republik Indonesia No.4 tahun 1982 tentang Ketentuan-Ketentuan Pokok Pengelolaan Lingkungan Hidup (UPPLH)

Undang-Undang Republik Indonesia No.23 tahun 1997 tentang Pengelolaan Lingkungan Hidup

Undang-Undang Republik Indonesia No.32 tahun 2009 tentang Perlindungan dan Pengelolaan Lingkungan Hidup

Undang-Undang Republik Indonesia No.90/1990 tentang Kepariwisatan