

THE EFFECT OF GREEN SUPPLY CHAIN MANAGEMENT PRACTICES ON THE COMPETITIVE ADVANTAGES AND ORGANIZATIONAL PERFORMANCE

Astawa I.K., Pirzada K., Budarma I.K., Widhari C.I.S., Suardani A.A.P.*

Abstract: The concern of academics and practitioners towards the environment and the inclusion of green practices in the supply chain is important in the literature. However, in the context of the hospitality industry, further investigation is needed. The present study aims to examine the nexus between green supply management practices on the competitive advantage and organizational performance of 5-star hotels in Bali, Indonesia. The quantitative design adopted in this study involved 145 respondents from 5-star hotels in Bali, Indonesia, then analyzed using SmartPLS software. The results revealed that green supply chain management practices positively and significantly affect the performance and competitive advantage of five-star hotels. Also, the results show that competitive advantage functions as a mediator. The theoretical research findings are the relationship between variables, especially competitive advantage as a mediator variable, while from a practical point of view it shows that managers need to build competitive advantage to strengthen hotel business performance. Therefore, green supply chain management practices are recommended to be applied in five-star hotels as an effective competitive advantage strategy.

Keywords: Green Supply Chain Management Practices; Competitive Advantage; Organizational Performance; Five-star hotels.

DOI: 10.17512/pjms.2021.24.1.03

Article history:

Received September 10, 2021; *Revised* October 28, 2021; *Accepted* November 12, 2021

Introduction

There are different groups of consumers in a hotel; those that are very concerned about the environment, male customers interested in luxurious or moderate prices, and those willing to pay better for green practices (Lee, Hsu, Han & Kim, 2010). It has also been reported that female and older customers are usually interested in paying higher prices for the existence of green practices in a hotel (Han, Hsu & Lee, 2009; Han, Hsu & Sheu, 2011; Han et al., 2009; Sukmaningrum et al. 2020).

* **I Ketut Astawa** Drs., MM., MMTHRL, **Cokorda Istri Sri Widhari** Dra., MM., Politeknik Negeri Bali, Tourism Department, Bali, Indonesia, **Kashan Pirzada** Dr., Asian Research Institute for Corporate Governance (AIRCG) and Tunku Puteri Intan Safinaz School of Accountancy, College of Business, Universiti Utara Malaysia, Sintok, Malaysia, **I Ketut Budarma** Dr, M.Par., **Anak Agung Putri Suardani SE**, MM., Politeknik Negeri Bali, Accounting Department, Bali, Indonesia

✉ Corresponding author: ketutastawa@pnb.ac.id

✉ kashan@uum.edu.my; ketutbudarma@pnb.ac.id; widhari@pnb.ac.id;

agungputrisuardani@pnb.ac.id

This generally indicates customers interested in green practices are not usually worried about paying premium prices for the services and are also concerned about the information and certification of the hotel as well as the services enjoyed during their stay (Boronat-Navarro, M. & Pérez-Aranda, J. A, 2020). In recent times, tourists have mostly preferred hotels that continuously implement environmentally friendly practices in their businesses. Environmentally friendly management is one factor that encourages tourists to select certain accommodations (Rahmafitria, 2014; Indrasari & Rosi, 2020). This means there is a need to ensure the application of environmental conservation principles, empower the community, improve education, sustain ecology, reduce damage to the environment, and use local products in order to operate sustainable accommodation facilities and also implement the green strategies and innovation for environmental performance (Arsawan et al., 2021). Within each hotel, a business is a team dedicated to organizing the key operations of the hotel. They acquire goods from suppliers to conduct operational activities. However, the challenges associated with obtaining environmentally friendly products and services at the right place, time and lowest cost are always increasing in the environmentally friendly space. Apart from improving efficiencies within an organization, the whole supply chain of a company needs to be competitive. The understanding and practice of Green Supply Chain Management (GSCM) is a prerequisite for global competitiveness and enhancing profitability (Childerhouse & Towill, 2003; Tan, Lyman & Wisner, 2002). GSCM explicitly recognizes the strategic nature of coordination between trading partners and explains its dual purpose, including improving the performance of an individual organization and the whole supply chain (Suryani & Pirzada, 2018).

GSCM was implemented as a form of a competitive strategy designed to seamlessly integrate the flow of information and material in a supply chain system (Childerhouse & Towill, 2003; Feldmann & Muller, 2003). It has been experiencing consistent and continuous focus from several stakeholders including business managers, academics and consultants (Feldmann & Müller, 2003; Van Hoek, Harrison & Christopher, 2001; Tan et. al., 2002; Yuliawati et al. 2021). It is observed by several organization to be the main factor for the development of sustainable competitive advantage for their products and services in the market discovered to be continuously competitive (Khalil, Khalil & Khan, 2019). The ability to build a sustainability strategy in the hotel industry is achieved through the application of competitive advantage (CA) to achieve organizational performance (Sukawati, Riana, Rajiani & Abbas, 2020; Kot, & Kozicka, 2018). Companies can maintain sustainability and competitiveness through GSCM using a systematic and integrated approach (Deshmukh & Vasudevan, 2014). This study discusses various diverse but interesting aspects of the relationship between GSCM practices, Competitive Advantage (CA), and organizational performance in five-star hotels in Bali. Specifically, it examines 3 questions, including whether (1) the GSCM practices of five-star hotels in Bali affect organizational performance, (2) the GSCM practices of

five-star hotels in Bali affect competitive advantage (3) CA affects organizational performance. Therefore, this study aims to empirically test hypotheses that identify the relationship between among GSCM practices, CA, and organizational performance in five-star hotels in Bali.

Literature Review

Hotels often use supply chain systems that build trust and long-term relationships with suppliers. A supplier refers to the party that provides input such as the raw materials required to produce the final goods (Pujawan, I Nyoman and Mahendrawathi, 2017). The green concept focuses on assisting business organizations achieving stability between economic and environmental abilities, limiting the impact of their goods and services on the environment, and enhancing their brand image. The major objective is to reduce the harmful effect of business organizations on the environment (Sarkis, 2006). Green supply chain management (GSCM) practices ensure that organizations assess their suppliers' environmental performance by promoting actions that enhance the environmental quality of products and evaluate the costs of waste in the operational systems (Handfield, Walton, Sroufe & Melnyk, 2002). This ranges from environmentally friendly purchasing to an integrated supply chain that includes suppliers, producers, and customers, as well as recycling and re-production (Husaini, Pirzada & Saiful, 2020). GSCM refers to the integration of environmental thinking into supply chain management, including product design, selection of raw and supporting materials, manufacturing processes, delivery of final products to customers, and disposal of goods post-consumption (Aslam, Waseem & Khurram, 2019 & Vazquez-Brust, 2019). Green Supply Chain (GSC) is environmentally friendly and promotes commercial values and honest business principles. It includes green production, supplier selection, purchasing, distribution and design, and reverse logistics (Petljak, Zulauf, Štulec, Seuring & Wagner, 2018). The Practice of SCM involves the activities conducted within an organization to promote efficient supply chain management. Some of the goals associated with SCM in the short term include an increase in productivity and a decrease in inventory and lead times whilst the long-term goals of SCM include an increment in the market share and a consolidated supply chain (Koh, Demirbag, Bayraktar, Tatoglu & Zaim, 2007). According to Donlon (1996), SCM practice includes sharing of information technology, compression of cycle time, supplier partnerships, continuous process flow, and outsourcing. It was also categorized in relation to several other factors by Koh et al. (2007) including the proximity with customers and suppliers, strategical plan to benchmark supply chain, just-in-time supply, holding safety stock, having different suppliers, procuring materials electronically, and consistent subcontracting practices. This generally means the practices are categorized into management of demand, customer and supplier relationships, capacity and resource, service performance, information and technology, service supply chain finance, and order process (Chong, Chan, Ooi & Sim, 2011). In this study, GSCM practices are in line

with the hospitality industry, including strategic suppliers, customer relationships and the quality of information sharing to be included in the framework (Hanif, Rakhman, Nurkholis & Pirzada, 2019). The proposed hypothesis in this study is:

H1: Green supply chain management practices in five-star hotels in Bali have a significant effect on organizational performance.

Sustainable practices in a hotel refer to product availing strategies based on demand. Due to the increasing demand for green products, hotels continuously innovate their production patterns by adopting business models that focus on green practices to gain CA. The philosophy of competitive advantage is "the higher attraction rates a company offers compared to its competitors" (Hakkak & Ghodsi, 2015). Specifically, CA is the extent to which an organization creates a defensible position over its competitors (Porter & Advantage, 1985). The principle of CA asserts that customers often accept products of higher value. This helps companies earn higher profit margins with low production costs (Ranko, Berislav & Antun, 2008; Salman et al., 2020; Nimo et al., 2020). Generally, hotels need to develop organizations, especially green supply chains, and promote a common vision to meet the standards of green products. According to Dranove et al. (2017), CA exists when companies earn higher profits than the average in the same market. Saloner et. al. (2005) state that a company could produce more valuable products or services than their competitors. Additionally, Saloner perceives CA as a condition where a company innovates products or services to meet stakeholders' needs and ensure their continued existence in the market (Arniati, Puspita, Amin & Pirzada, 2019). Koufteros et al. (2002) describe a framework for competitive capabilities and define competitive and premium pricing, value to customer quality, dependable delivery, and innovating production. The aspects of the CA constructs used in this study include price/cost, quality, delivery dependability, product innovation, and time to market. The second proposed hypothesis is as follows:

H2: Green supply chain management practices of five-star hotels in Bali have a significant effect on competitive advantage.

The intense competition in the hotel industry forces hotels to find competitive values to exist in the market (Koopman, Mitchell & Thierer, 2014). Therefore, CA is highly dependent on the needs and preferences of a company. Goals can be achieved when expectations and preferences of companies are met (Arsawan et al. 2021). Organizational performance refers to how well an organization achieves its market-oriented and financial goals (Yamin, Gunasekaran & Mavondo, 1999; Ristyawan, 2020). Moreover, the increment of market share and the interests to be distributed to the stakeholders were discovered to the long-term aim of the supply chain management while the increment in productivity and reduction of inventory and cycle time are associated with the short term. In this study, organizational performance aligns with the concept developed by Tan, Kannan & Handfield (1998), measured through marketing and financial performance parameters. The third proposed hypothesis is:

H3: Competitive advantage significantly affects organizational performance.

Methodology

The population for the study included operational staff, supervisors, and middle and top managers of 5-star hotels in Bali. Table 1 displays the sample demographics. The study used a purposive sampling approach which identified 2 hotels located in Gianyar Regency and 4 hotels in Badung Regency, with a total of 145 responses completed. Sample hotels are St. Regis Bali Resort, Melia Bali, Conrad Bali, Intercontinental Hotel, The Royal Pita Maha Resort and Mandapa Bali. The development of instruments for GSCM practices includes making items (indicators), questionnaire testing and data analysis.

Table 1. Sample demographics summary

	Number
Age group	
≤ 20 years	2
21 – 30 years	59
31 – 40 years	39
41 – 50 years	32
> 50 years	13
Total	145
Education	
Certificate/Diploma	70
Bachelor degree	55
Master degree	10
Doctorate degree	0
Others	10
Total	145
Job title	
General Manager	2
Assistant General Manager	2
Manager	47
Director	11
Supervisor	32
Other	51
Total	145
Years stayed at the organization	
≤ 2 years	31
3 – 5 years	39
6 – 10 years	26
> 10 years	49
Total	145

The questionnaire used in this study consists of 3 parts: the first contains questions regarding demographic information, the second and third include items designed to assess employee perceptions of Supply Chain Management Practices reflected through the Strategic Supplier Partnership (identified as SSP1, SSP2, SSP3), Customer Relationship (CR1, CR2, CR3, CR4), and Quality of Information (IQ1, IQ2, IQ3). CA is identified as Price/Cost (PC1, PC2), the ability of the organization to compete against leading competitors using lower prices, Quality (QL1, QL2, QL3), the ability of the organization to offer quality products and performance which provides better value for the consumers, Delivery Dependability (DD1, DD2, DD3), the ability of the organization to provide the type and volume of products preferred by the consumer(s), Product Innovation (PI1, PI2, PI3), the ability of the organization to introduce new products and features into the market, and Time to Market (TM1, TM2, TM3, TM4), the ability of the organization to introduce new products into the market quicker than leading competitors. Organizational Performance (OP) is identified as OP1, OP2, OP3, OP4, the performance of the organization in achieving market-oriented and financial goals.

An instrument that measures GSCM practices, CA, and OP is adopted from the study of Li, Ragu-Nathan, Ragu-Nathan & Rao (2006). Statistical analysis is used to determine the validity and reliability of GSCM practices, CA, and OP instruments. SEM-PLS 3.3.3 is a data processing instrument applied for further analysis. The process of data collection includes observation, interviews, and questionnaires of the selected samples. Moreover, constructs relating to GSCM practices, CA, and OP were measured using a five-point Likert scale, ranging from strongly disagree to strongly agree. Data was collected in March-May 2021. The framework in the below Figure 1 and related hypotheses are then tested using SEM-PLS.

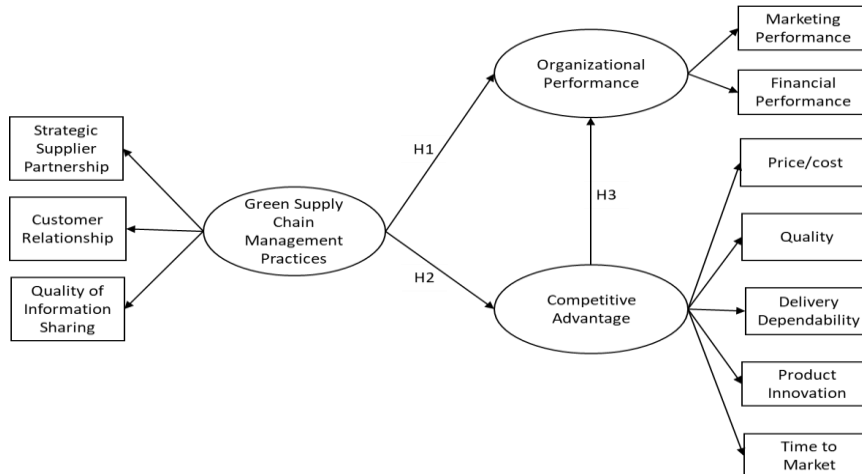


Figure 1: Research framework

Results and Discussion

The validity and reliability of research instruments in SEM-PLS are determined using an outer model measurement, including the loading factor that shows the correlation between an indicator and its construct. If the loading factor value is above 0.70, the indicator is valid (Sarwono, 2016). However, Hair et al. (2014) state that the loading factor value is still tolerable up to 0.50. Figure 2 shows a structural model of the SmartPLS output version 3.3.3 of this study. Almost all of the loading factor values for each latent construct are greater than 0.70, except for the TM3 indicator (We have time-to-market lower than tourism industry average), which is 0.692. A high loading factor means that the correlation of the indicator with the variable is very strong and vice versa. It can be tolerated since this value is close to 0.7 and still greater than 0.5 (Wati, Primiana, Pirzada, Sudarsono, 2019). Therefore, all indicators reflecting the latent constructs of GSCM Practice, CA, and OP are valid. Reliability is determined based on the Cronbach's Alpha and Composite Reliability values as shown in Table 2.

Table 2. Value of Cronbach's Alpha and Composite Reliability

	Cronbach's Alpha	Composite Reliability
Competitive Advantage	0.960	0.964
Green Supply Chain Management Practices	0.941	0.950
Organizational Performance	0.950	0.964

An instrument is reliable when the composite reliability value is higher than 0.8 and the Cronbach's alpha is greater than 0.6. It can be observed from Table 1 that all the latent constructs used in this research have a Cronbach Alpha that is greater than 0.6. The composite reliability of all the latent constructs is also greater than 0.8. Therefore, the research instruments used to measure the latent constructs of GSCM Practice, CA, and OP are reliable. The R^2 value is the coefficient of determination in the endogenous construct with a 0.67 value regarded as strong, 0.33 as moderate, and 0.19 as weak based on the findings of Chin (2010).

Table 3. R-Square Value

	R Square	R^2 Adjusted
Competitive advantage	0.535	0.532
Organizational Performance	0.598	0.592

Table 3 show the R-Square value in CA is 0.535. This shows that about 53.5% of CA is described by GSCM Practice, while the remaining $100\% - 53.5\% = 46.5\%$ is explained by other exogenous constructs not considered in this study. The value of R-Square on OP is 0.598. This shows that about 59.8% of OP is explained by GSCM Practice and CA, while the remaining $100\% - 59.8\% = 40.2\%$ is explained by other exogenous constructs not considered in this study. Apart from examining the R-Square, the effect of endogenous latent constructs on exogenous, based on the effect

size value, has also been assessed. Hair et al. (2014) report that in the Effect Size criterion, an f^2 value found to be 0.02 is classified to have a lower effect on the exogenous latent predictor construct at the structural level. Suppose the f^2 value is 0.15, the latent predictor construct has sufficient influence at the structural level. If the f^2 value is 0.35, the latent predictor construct has a strong influence at the structural level. Table 4 shows that GSCM Practices sufficiently affect OP. GSCM Practices have a strong impact on CA. Similarly, CA has a strong influence on OP.

Table 4. Value of Effect Size

	CA	OP
Competitive Advantage		0.277
Green Supply Chain Management Practices	0.150	0.134

In contrast to CB-SEM, the GoF value in SEM-PLS needs to be calculated manually. In line with the formula from Tenenhaus (2004), $GoF = \sqrt{(AVE \times R^2)}$. Therefore, the GoF of CA is $\sqrt{(0,640 \times 0,535)} = 0,585$. The GoF from OP is $\sqrt{(0,870 \times 0,598)} = 0,721$. According to Tenenhaus (2004), a minimum GoF value of 0.38 indicates a large influence or a structural model is suitable to predict endogenous constructs, meets goodness of fit, and is well-formed. It fits the field conditions for the structural model to be acceptable. There are 2 things discussed in testing the hypotheses, including estimating the path coefficient original sample (O) and t-statistics or p-value. These show the significant effect of endogenous on exogenous constructs and the indicators with a major contribution in reflecting or transforming a latent construct.

The estimation of Path Coefficients was conducted using a Bootstrapping procedure. Table 5 shows the Bootstrapping results for estimating the Path Coefficient (O), T-Statistics, and P-Value of the Total Effect.

Table 5. Estimated Path Coefficients and T-Statistic

	Original Sample (O)	T Statistics ((O/STDEV))	P Value	Remarks
Competitive Advantage -> Organizational Performance	0.489	5.214	0.000	Supported
Green Supply Chain Management Practices -> Competitive Advantage	0.731	13.979	0.000	Supported
Green Supply Chain Management Practices -> Organizational Performance	0.340	3.598	0.000	Supported

Based on the Original Sample (O) values in Table 4 and Figure 1 by showing the previous Structural Model, the main structural equations are formed as follows:

Model 1: $CA = 0,731 \cdot GSCMP + \zeta_1$

Model 2: $OP = 0,340 \cdot GSCMP + 0,489 \cdot CA + \zeta_2$

Where CA is Competitive Advantage, GSCMP is Green Supply Chain Management Practices, OP is Organizational Performance, ζ_1 and ζ_2 are error models 1 and 2, respectively.

Based on the structural equation Model 2 formed, the coefficient of the GSCMP main path (O) to OP is also a positive value of 0.340 units. This shows that GSCM Practice positively affects OP. The higher the GSCM Practice is the higher the OP. Furthermore, the increases in each unit of GSCM Practice increase OP by 0.340 units. The t-statistics value of the coefficient of the structural model of the main pathway (O) GSCMP to OP is $3.598 > 1.96$ (normal Z-score for $\alpha = 0.05$) while the P-value is $0.000 < 0.05$. This shows that GSCM Practice has a positive and significant effect on OP. Therefore, H1 is accepted. Based on the structural equation Model 1 formed, the coefficient of the GSCMP main path (O) to the CA structural model is positive at 0.731 units. This shows that GSCM Practice positively affects CA. The higher the GSCM Practice is the higher the CA. Furthermore, the increase in each unit of GSCM Practice increases the CA by 0.731 units. The t-statistics value of the structural model coefficient of the main pathway (O) GSCMP to CA is $13.979 > 1.96$ (normal Z-score for $\alpha = 0.05$) while the P-value is $0.000 < 0.05$. Therefore, GSCM Practice has a positive and significant effect on CA. That means that H2 is accepted. The structural equation Model 2 shows that the coefficient of the structural model of the main path (O) CA to OP is also positive at 0.489 units. This indicates that CA positively affects OP. The higher the CA is the higher the OP. The increase in each unit of CA increases OP by 0.489 units. The t-statistics value of the coefficient of the structural model of the main pathway (O) CA to OP is $5.214 > 1.96$ (normal Z-score for $\alpha = 0.05$), while the P-value is $0.000 < 0.05$. This shows that CA has a positive and significant effect on OP. A higher level of CA increases organizational performance. Therefore, H3 accepted. Based on the conceptual framework formed, it can be assumed that there is an intervening effect between GSCM Practice, CA and Organizational Performance. Specifically, the CA is an intervening variable that mediates the effect of GSCM Practice on OP. The higher the GSCM Practice is the higher the CA. Consequently, the higher the CA is the higher the OP. Table 5 shows the intervening or indirect effect of GSCM Practice on OP through CA. The path coefficient data (O) in Table 6 shows that the indirect effect of GSCM Practice on OP through CA is 0.358. This value is greater than the direct effect of GSCM Practice on OP, which is 0.340. Therefore, the indirect effect of GSCM Practice on OP through CA is greater than its direct effect on OP. This means that CA may mediate the relationship between GSCM Practice and OP. This conclusion is reinforced by the indirect influence t-statistics value of $5.147 > 1.96$ and the p-value of $0.000 < 0.05$, meaning that the indirect effect is significant. The results show that CA mediates the relationship between GSCM Practice and OP.

Table 6. Intervening Effects

	Original Sample (O)	T Statistics (O/STDEV)	P Value
Green Supply Chain Management Practices -> Competitive Advantage -> Organizational Performance	0.358	5.147	0.000

Research on the hospitality industry has been carried out by many researchers such as those related to intellectual capital (Hanif et al., 2019), consumer behavior (Nimo et al., 2020), business performance (Boronat-Navarro & Pérez-Aranda, 2020), the role of expatriates and knowledge transfer (Arsawan et al, 2021) and other related topics. However, the important role of green supply chain management practice still needs to be investigated as an industry effort hospitality in maintaining environmental performance. The present study revealed GSCM practices positively affect organizational performances of five-star hotel in Bali, which is statistically significant at a p-value < 0.05. GSCM practices directly improve the organization's financial and marketing performance in the long run. The results of the study are in line with the findings of Li (2006) that organizational which high levels of supply chain management practices have high levels of organizational performance. Research result of Aslam (2019) shows that external GSCM practices were significant in explaining the image. This shows that it is not enough to merely practices GSCM. In the mind of the end customer, the company needs to communicate its green initiatives to customers. GSCM practices have a positive and significant effect on the competitive advantage at p-value, < 0.05. This finding strengthens the results of research by Li (2006) that the implementation of various GSCM practices such as strategis supplier partnership, customer relationship building and quality of information sharing, may provide the organization with a competitive advantage on cost, quality, dependability, product innovation and time to market dimensions. Competitive advantage affects organizational performance significantly at p-value < 0.05. Competition is an intervening variable that mediates the effect of GSCM practices on organizational performance. The results of the study are in line with Li (2006) that organizational performance is more influenced by competitive advantage. The strengthening of the GSCMP- CA -OP model will be an important trigger for how the hospitality industry builds a sustainable business model to improve the national economy (Trachenko et al., 2021).

Conclusion

Green supply Chain Management (GSCM) practices of five-star hotels in Bali have a significant positive effect on organizational performance. This means that a high level of GSCM Practice supports organizational performance and positively and significantly affects competitive advantage. Furthermore, competitive advantage has

a positive and significant effect on organizational performance. According to the results, competitive advantage mediates the relationship between GSCM Practice and organizational performance. Therefore, GSCM practices of five-star hotels in Bali is an effective strategy to gain a competitive advantage within the market. It is recommended that further studies on the challenges associated with the implementation of green purchasing strategies increase the number of companies in the hospitality sectors, such as those related to hotels, bars and restaurants, to be used as a sample in order to enable the generalization of the results to the hospitality industry. Future research is also needed in the understanding of different secondary markets and how businesses should best sell products. In addition to traditional brokers, many companies are now selling online.

References

- Arniati, T., Puspita, D. A., Amin, A. and Pirzada, K., (2019). The implementation of good corporate governance model and auditor independence in earnings' quality improvement. *Entrepreneurship and Sustainability Issues*, 7 (1), 188-200.
- Arsawan, I. W. E., Koval, V., Duginets, G., Kalinin, O. and Korostova, I., (2021). The impact of green innovation on environmental performance of SMEs in an emerging economy. In *E3S Web of Conferences*, 255 (01012), 1-8.
- Aslam, M. M. H., Waseem, M. and Khurram, M., (2019). Impact of green supply chain management practices on corporate image: Mediating role of green communications. *Pakistan Journal of Commerce and Social Sciences (PJCSS)*, 13 (3), 581-598.
- Boronat-Navarro, M., Pérez-Aranda, J. A., (2020). Analyzing willingness to pay more to stay in a sustainable hotel. *Sustainability*, 12 (9), 3730-3747.
- Childerhouse, P., & Towill, D. R. (2003). Simplified material flow holds the key to supply chain integration. *Omega*, 31(1), 17-27.
- Chin, W. W., (2010). How to write up and report PLS analyses. In *Handbook of partial least squares*. Springer, Berlin, Heidelberg. 655-690.
- Chong, A. Y., Chan, F. T., Ooi, K. B. and Sim, J. J., (2011). Can Malaysian firms improve organizational/innovation performance via SCM? *Industrial Management & Data Systems*, 111 (3), 410-431.
- Deshmukh, A. J., Vasudevan, H., (2014). Emerging supplier selection criterion in the context of traditional vs green supply chain management. *International Journal of Managing Value and Supply Chains*, 5 (1), 19-33.
- Donlon, J. P., (1996). Maximizing value in the supply chain, *Chief Executive*, 54-63.
- Dranove, D., Besanko, D., Shanley, M. & Schaefer, S., (2017). *Economics of strategy*. John Wiley & Sons.
- Feldmann, M., Müller, S., (2003). An incentive scheme for true information providing in supply chains. *Omega*, 31(2), 63-73.
- Hair Jr, J. F., Sarstedt, M., Hopkins, L. and Kuppelwieser, V. G., (2014). Partial least squares structural equation modeling (PLS-SEM): An emerging tool in business research. *European business review*, 26 (2), 106-121.

- Hakkak, M., Ghodsi, M., (2015). Development of a sustainable competitive advantage model based on balanced scorecard. *International Journal of Asian Social Science*, 5 (5), 298-308.
- Han, H., Hsu, L. T. J. and Lee, J. S., (2009). Empirical investigation of the roles of attitudes toward green behaviors, overall image, gender, and age in hotel customers' eco-friendly decision-making process. *International journal of hospitality management*, 28 (4), 519-528.
- Han, H., Hsu, L. T. J., Lee, J. S. and Sheu, C., (2011). Are lodging customers ready to go green? An examination of attitudes, demographics, and eco-friendly intentions. *International journal of hospitality management*, 30 (2), 345-355.
- Handfield, R., Walton, S. V., Sroufe, R. and Melnyk, S. A., (2002). Applying environmental criteria to supplier assessment: A study in the application of the Analytical Hierarchy Process. *European journal of operational research*, 141 (1), 70-87.
- Hanif, H., Rakhman, A., Nurkholis, M. and Pirzada, K., (2019). Intellectual capital: extended VAIC model and building of a new HCE concept: the case of Padang Restaurant Indonesia. *African Journal of Hospitality, Tourism and Leisure*, 8, 1-15.
- Husaini, Pirzada, K. and Saiful, (2020). Risk Management, Sustainable Governance Impact on Corporate Performance. *Journal of Security and Sustainability Issues*, 9 (3), 993-1004.
- Indrasari, A., Rosi, J.C.A., (2020). Total Quality Management (TQM), Management Accounting System, Islamic Leadership Style, Organizational Commitment, and Managerial Performance, *Acc. Fin. Review*, 5 (2), 66 – 86.
- Kot, S., Kozicka, K., (2018). Supply chain management evidence from tourism industry in Greece. *Journal of Environmental Management & Tourism*, 9 (4), 683-693.
- Koopman, C., Mitchell, M. and Thierer, A., (2014). The sharing economy and consumer protection regulation: The case for policy change. *J. Bus. Entrepreneurship & L.*, 8, 529.
- Koufteros, X. A., Vonderembse, M. A. and Doll, W. J., (2002). Examining the competitive capabilities of manufacturing firms. *Structural equation modeling*, 9 (2), 256-282.
- Lee, J. S., Hsu, L. T., Han, H. and Kim, Y., (2010). Understanding how consumers view green hotels: how a hotel's green image can influence behavioural intentions. *Journal of sustainable tourism*, 18 (7), 901-914.
- Li, S., Ragu-Nathan, B., Ragu-Nathan, T. S. and Rao, S. S., (2006). The impact of supply chain management practices on competitive advantage and organizational performance. *Omega*, 34 (2), 107-124.
- Nimo, C.A., Agyapong, G.K.Q. and Ofori, D., (2020). Influence of Consumer Buying Orientation and Pro-environmental Values on their Willingness to Patronise Green Hotels, *J. Mgt. Mkt. Review*, 5 (4), 251 – 259.
- Porter, M. E., Advantage, C., (1985). Creating and sustaining superior performance. *Competitive advantage*, 167, 167-206.
- Pujawan, I. N., Mahendrawathi, E., (2017). *Supply Chain Management* (3rd ed.). Yogyakarta: Andi.
- Ristyawan; M.R., (2020). An Integrated Artificial Intelligence and Resource Base View Model for Creating Competitive Advantage, *J. Bus. Econ. Review*, 5 (1), 28– 37.
- Rahmafitria, F., (2014). Eco-Resort dan Green Hotel di Indonesia: Model Sarana Akomodasi yang Berkelanjutan. *Jurnal Manajemen Resort dan Leisure*, 11 (2), 13-34.
- Ranko, S., Berislav, B. and Antun, S., (2008). Document management system as source of competitive advantage. *New Ways in Manufacturing Engineering*, 343-347.

- Salman, A., Jaafar, M. and Mohammad, D., (2020). Endeavours: Exploring the significance of stakeholder management in ecotourism implementation, *GATR Global J. Bus. Soc. Sci. Review*, 8 (4), 236 – 245.
- Saloner, G., Shepard, A. & Podolny, J., (2005). *Strategic Management* (revised ed.), United States of America.
- Sarkis, J., (Ed.), (2006). *Greening the supply chain*. Springer Science & Business Media, Germany.
- Sarwono, J., (2016). Making Thesis, Thesis and Dissertation with Partial Least Square SEM (PLS-SEM), Yogyakarta: ANDI.
- Sukawati, T. G. R., Riana, I. G., Rajiani, I. and Abbas, E. W., (2020). Managing corporate sustainability by revitalizing Balinese cultural identity. *Polish Journal of Management Studies*, 21 (1), 382-393
- Sukmaningrum, P.S., Pirzada, K., Rusmita, S.A., Hasib, F.F., Widiastuti, T. and Hendratmi, A., (2020). Determinants of Islamic Bank Profitability: Evidence from Indonesia, *J. Fin. Bank. Review*, 5 (1), 01 – 13.
- Suryani, A., Pirzada, K., (2018). Analysis of opportunistic behavior of management to company performance. *Polish Journal of Management Studies*, 18 (1) 379-388.
- Tan, K. C., Kannan, V. R. and Handfield, R. B., (1998). Supply chain management: supplier performance and firm performance. *International Journal of Purchasing & Materials Management*, 34 (3), 1-23.
- Tan, K. C., Lyman, S. B. and Wisner, J. D., (2002). Supply chain management: a strategic perspective. *International journal of operations & production management*, 22 (6), 614-631.
- Wati, L.N., Primiana, H.I., Pirzada, K. and Sudarsono, R., (2019). Political connection, blockholder ownership and performance, *Entrepreneurship and Sustainability Issues*, 7 (1), 52-68.
- Yamin, S., Gunasekaran, A. and Mavondo, F. T., (1999). Relationship between generic strategies, competitive advantage, and organizational performance: an empirical analysis. *Technovation*, 19 (8), 507-518.
- Tenenhaus, M., Amato, S. and Esposito Vinzi, V., (2004, June). A global goodness-of-fit index for PLS structural equation modelling. In *Proceedings of the XLII SIS scientific meeting*, 1 (2), 739-742.
- Trachenko, L., Lazorenko, L., Maslennikov, Y., Hrinchenko, Y., Arsawan, I. W. E. and Koval, V., (2021). Optimization modeling of business processes of engineering service enterprises in the national economy. *Natsional'nyi Hirnychiy Universytet. Naukovyi Visnyk*, (4), 165-171.
- Yuliawati, A.K., Rofaida, R, Gautama, B.P. and Aryanti, A.N., (2021). Business Continuity of MSMEs in Small Island Facing the Covid-19 Pandemic, *GATR Global J. Bus. Soc. Sci. Review*, 9 (1), 90 – 98.

Appendix. Measurement Scale

Supply Chain Management Practice (Li et al., 2006; Donlon, 1996; Deshmukh and Vasudevan, 2014; Hanif et al., 2019)

Strategic Supplier Partnership

Please indicate the numbers that correspond to your perception. The item scales are five points Likert scales with 1= strongly disagree, 2= disagree, 3=neutral, 4=agree, 5=strongly agree

- We consider quality as our number one criterion in selecting suppliers.
- We include our key suppliers in our planning and goal-setting activities.
- We actively involve our key suppliers in new product development processes.

Customer Relationship

Please indicate the numbers that correspond to your perception. The item scales are five points Likert scales with 1= strongly disagree, 2= disagree, 3=neutral, 4=agree, 5=strongly agree

- We frequently interact with customers to set reliability, responsiveness, and other standards for us.
- We frequently measure and evaluate customer satisfaction.
- We frequently determine future customer expectations.
- We periodically evaluate the importance of our relationship with our customers.

Quality of Information

Please indicate the numbers that correspond to your perception. The item scales are five points Likert scales with 1= strongly disagree, 2= disagree, 3=neutral, 4=agree, 5=strongly agree

- The exchange of information between our trading partners and us is timely.
- The exchange of information between our trading partners and us is accurate.
- The exchange of information between our trading partners and us is complete.

Competitive Advantage (Koufteros et al., 2002; Li et al., 2006; Hakkak and Ghodsi, 2015; Sukawati et al., 2020)

Price/Cost (PC): an organization is capable of competing against major competitors based on low price.

Please indicate the numbers that correspond to your perception. The item scales are five points Likert scales with 1= strongly disagree, 2= disagree, 3=neutral, 4=agree, 5=strongly agree

- We offer a competitive price.
- We are able to offer prices as low or lower than our competitors.

Quality (QL): an organization is capable of offering product quality and performance that creates higher value for customers.

Please indicate the numbers that correspond to your perception. The item scales are five points Likert scales with 1= strongly disagree, 2= disagree, 3=neutral, 4=agree, 5=strongly agree

- We are able to compete based on quality.
- We offer products that are highly reliable.
- We offer high quality products to our customers.

Delivery Dependability (DD): an organization is capable of providing on time the type and volume of product required by customer(s).

Please indicate the numbers that correspond to your perception. The item scales are five points Likert scales with 1= strongly disagree, 2= disagree, 3=neutral, 4=agree, 5=strongly agree

- We deliver the kind of products needed.
- We deliver customer order on time.
- We provide dependable delivery.

Product Innovation (PI): an organization is capable of introducing new products and features in the market places.

Please indicate the numbers that correspond to your perception. The item scales are five points Likert scales with 1= strongly disagree, 2= disagree, 3=neutral, 4=agree, 5=strongly agree

- We provide customize products.
- We alter our product offerings to meet client needs.
- We respond well to customer demand for “new” features.

Time to Market (TM): an organization is capable of introducing new products faster than major competitors.

Please indicate the numbers that correspond to your perception. The item scales are five points Likert scales with 1= strongly disagree, 2= disagree, 3=neutral, 4=agree, 5=strongly agree

- We deliver a product to market quickly.
- We are first in the market in introducing new products.
- We have time-to-market lower than the tourism industry average.
- We have fast product development.

Organizational Performance (Tan and Handfield, 1998; Li et al., 2006).

How well an organization achieves its market-oriented goals as well as its financial goals.

Please circle the appropriate number which best indicates your company’s overall performance. The item scales are five points Likert scales with 1=significant decrease, 2= decrease, 3=same as before, 4=increase, 5=significant increase.

- The growth of market share.
- The growth of sales.
- Profit margin on sales.
- Overall competitive position.

WPLYW PRAKTYK ZARZĄDZANIA ZIELONYM ŁAŃCUCHEM DOSTAW NA PRZEWAGI KONKURENCYJNE I WYNIKI ORGANIZACYJNE

Streszczenie: Troska naukowców i praktyków o środowisko oraz włączenie zielonych praktyk w łańcuchach dostaw jest ważnym tematem w literaturze. Jednak w kontekście branży hotelarskiej potrzebne są dalsze badania. Niniejsze badanie ma na celu zbadanie powiązania między praktykami ekologicznego zarządzania dostawami a przewagą konkurencyjną i wydajnością organizacyjną 5-gwiazdkowych hoteli na Bali w Indonezji. Projekt ilościowy przyjęty w tym badaniu objął 145 respondentów z 5-gwiazdkowych hoteli na Bali w Indonezji, a następnie został przeanalizowany za pomocą oprogramowania SmartPLS. Wyniki wykazały, że praktyki zarządzania zielonym łańcuchem dostaw mają pozytywny i znaczący wpływ na wyniki i przewagę konkurencyjną hoteli pięciogwiazdkowych. Pokazują również tę przewagę konkurencyjną jako mediatorzy. Wyniki badań teoretycznych dotyczą relacji między zmiennymi, zwłaszcza przewagi konkurencyjnej jako zmiennej mediatora, natomiast z praktycznego punktu widzenia pokazuje to, że menedżerowie muszą budować przewagę konkurencyjną, aby wzmocnić wyniki biznesowe hoteli. Dlatego zaleca się stosowanie praktyk zarządzania zielonym łańcuchem dostaw w hotelach pięciogwiazdkowych jako skutecznej strategii przewagi konkurencyjnej.

Słowa kluczowe: praktyki zarządzania zielonym łańcuchem dostaw; Przewaga konkurencyjna; Wydajność organizacyjna; Hotele pięciogwiazdkowe.

绿色供应链管理实践对竞争优势和组织绩效的影响

摘要: 学者和从业者对环境的关注以及将绿色实践纳入供应链是文献中的一个重要主题。然而，在酒店业的背景下，需要进一步调查。本研究旨在检验绿色供应链管理实践与印度尼西亚巴厘岛 5 星级酒店的竞争优势和组织绩效之间的关系。本研究采用的定量设计涉及来自印度尼西亚巴厘岛 5 星级酒店的 145 名受访者，然后使用 SmartPLS 软件进行分析。结果表明，绿色供应链管理实践对五星级酒店的绩效和竞争优势具有积极而显著的影响。也显示出作为中介的竞争优势。理论研究结果是变量之间的关系，尤其是作为中介变量的竞争优势，而从实践的角度来看，管理人员需要建立竞争优势来加强酒店的经营绩效。因此，建议将绿色供应链管理实践作为有效的竞争优势战略应用于五星级酒店。

关键词: 绿色供应链管理实践；竞争优势；组织绩效；五星级酒店