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Assessing the Effect of Green Supply Chain Management on the Triple Bottom Line at McDonald's Bandung

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ABSTRACT

This study aims to analyze the effect of GSCM implementation on TBL at McDonald's in Bandung, given the limited number of similar studies in Indonesia, particularly in the fast food sector. This study used a quantitative approach with a survey method of 184 McDonald's employees in Bandung selected through purposive sampling. Data were collected through an ordinalscale questionnaire and analyzed using Partial Least Squares Structural Equation Modeling (PLS-SEM) to test validity, reliability, and relationships between variables. The study variables included GSCM (dimensions of internal management, green design, and green production), TBL (economic, social, and environmental performance), organizational size, and organizational culture. The results showed that GSCM had a significant positive effect on TBL. This finding aligns with McDonald's efforts to implement environmentally friendly policies, such as reducing plastic waste and using recycled materials, which have been shown to support business sustainability. This study provides practical contributions for businesses optimizing GSCM strategies to achieve sustainability, as well as academic contributions by enriching the literature on GSCM in the fast food industry. Suggestions for further research include expanding the sample to more diverse geographic regions and exploring mediating variables such as technological innovation to deepen the analysis.

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Introduction

The food or culinary business is one of the businesses that is constantly growing today. In Indonesia, this business has increased in recent years. This is partly due to the demands and lifestyles of increasingly advanced societies. Fast food, which offers a variety of food choices and a comfortable environment, has become a favorite for the majority of people. Modern lifestyles encourage people to move more, leading many to prefer fast food over home-cooked meals. Fast food restaurants typically have a limited menu, and most of their service focuses on self-service. According to Ali-Alsaadi et al. (2023), the fast food phenomenon is also related to the growing consumer culture in modern society. Fast food is often promoted through social media, influencing the preferences and eating habits of the younger generation. Exposure to advertisements and viral food trends on social media makes fast food more attractive to young consumers.

The positive response of the global population to fast food has led to the continued growth of large companies and the influence on individual eating habits. Fast food consumption has increased over the past 50 years due to modern developments that have led people to work outside the home and become accustomed to purchasing

readily available food (Reardon et al., 2021). Companies undertake massive industrial expansion as economies develop, leading them to deplete and use more natural resources than ever before to maximize profits and survive in economic competition. At the same time, the development and pollution generated by businesses, as well as the overuse and depletion of natural resources, cause significant environmental damage. This loss can then lead to significant ecological damage, one of which is climate change.

Countries around the world have implemented green industrial management, which aims to achieve economic prosperity while considering social and environmental aspects. The term "green" in green supply chain management symbolizes the implementation of environmentally friendly practices into the supply chain. The emergence of the Green Supply Chain concept represents an evolution from conventional supply chain models, which are increasingly irrelevant to today's environmental context. The previous focus on optimizing production and distribution is no longer sufficient to address the complexity of global challenges such as climate change (Jeremić et al., 2024). This concept encompasses various aspects such as material selection, production methods, and efficient distribution of goods to end users (Sadiku et al., 2019). Green supply chain management will reduce the risk of impacts such as pollution, waste, and other environmental threats (Hendayani et al., 2022). Therefore, the adoption of GSCM is increasingly being undertaken by organizations in response to growing consumer demand for environmentally friendly products and services and sustainable production processes (Irjayanti et al, 2025; Yalviolita & Hendayani, 2022).

PT. Rekso Nasional Food, the exclusive McDonald's franchise in Indonesia, has implemented green industry principles in its operations, particularly in addressing the challenge of packaging waste. As part of McDonald's Corporation's global commitment to sustainability, the company has undertaken several important initiatives due to the large amount of fast food packaging waste that has become a serious problem in various countries, including Indonesia.

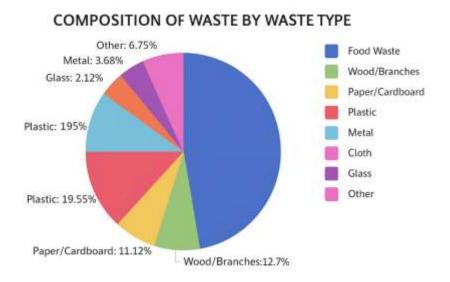


Figure 1. Waste Composition Graph in 2024 Source: sipsn (2024)

According to Figure 1, based on data and information from the National Waste Management Information System (SIPSN) (2024), Indonesia produces 33.5 million tons of waste per year, or approximately 91.7 tons of waste per day for a population of 270 million.

Table 1. McDonald's Greening Program

	Program	Description		
1	No Straw Campaign	McDonald's no longer uses straws for		
		every drink.		

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	Program	Description
2	Replacing the coffee stirrer from plastic to	McDonald's Indonesia, as part of its
	wood	global commitment to reducing plastic
		waste, has replaced single-use plastic
		coffee stirrers with more environmentally
		friendly wooden ones
3	Reusable Bag	McDonald's has introduced reusable
		shopping bags to replace single-use
		plastic bags. They are made from
		recycled or environmentally friendly
		materials such as canvas or recycled
		polyester.

Source: McDonald's.com (2025)

Companies must have internal awareness to implement environmental practices such as Green Supply Chain Management (GSCM). Based on Decree of the Minister of Environment and Forestry of the Republic of Indonesia Number SK.1049/MENLHK/SETJEN/PKL.4/12/2019 concerning the Results of the Environmental Management Rating Assessment for 2018-2019, 26 manufacturing companies received a gold rating and 174 manufacturing companies received a green rating out of 2,045 manufacturing companies. This demonstrates the lack of corporate awareness to adopt green values in their operations. Consequently, research on GSCM in Indonesia is still scarce. This research focuses on the GSCM variables, which are rarely studied in Indonesia, and the Triple Bottom Line variables, which are rarely used in manufacturing companies like McDonald's Indonesia outlets.

The increasing number of fast food outlets in Bandung brings complexity, competition, change, and uncertainty. Facing intense competition, fast food businesses must be able to compete effectively. Every company should have a competitive advantage and maintain sustainable growth to survive in today's business competition. A strong value chain is a crucial component in enhancing competitiveness and achieving optimal performance. Bandung is a contemporary and strategic location, following lifestyle trends, requiring McDonald's outlets to continuously compete and innovate by developing their business ideas. This is the reason the authors conducted this study in Bandung, where McDonald's outlets are relatively evenly distributed.

Therefore, it is important to assess McDonald's' GSCM implementation to determine its impact and whether it is working well or encountering challenges. In the production process, GSCM is an innovation in the implementation of an environmentally-based supply chain strategy that encompasses actions such as reduce, collect, reuse, and recover. Therefore, further research is needed to determine the impact of McDonald's GSCM implementation on the Triple Bottom Line: economic, social, and environmental performance, which aims to positively impact and generate profits for the company.

Literature Review

Operations Management

Operations management is a collection of actions that generate value in the form of goods and services by transforming inputs into outputs (Heizer et al., 2022). In producing goods or services, operations management has several functions that can increase productivity, serving as a benchmark for successful operations management implementation, thereby increasing the productivity of all elements. According to Putra & Irawan (2018), operations management is a crucial strategic decision to ensure the smooth running of production and service processes, including supply chain management and product design, which impact overall company performance. According to (Heizier et al., 2022), these functions include: a) marketing, by generating or receiving demand for a product; b) production, which can produce products; and c) finance, which can monitor the organization's performance.

Supply Chain Management (SCM)

SCM is a collection of operations that encompasses product planning, management, and activation (Azis & Irjayanti, 2024). Efficient, controlled cost strategies that have the potential to increase profits are implemented for each operation (Hastari, 2023). Supply chain management is a way to incorporate the supply chain into business plans, including decisions about what goods to purchase, from whom, and under what conditions. Supply Chain Management (SCM) provides interdepartmental and intercompany integration, including materials and information, to transform and utilize resources along the supply chain most efficiently for suppliers (Irjayanti et al, 2025). A supply chain is a physical network. This means that every company supplies raw materials, manufactures products, and delivers them to customers or end users. Supply chain management oversees three flows: the flow of goods, the flow of money, and the flow of information from upstream to downstream (Putra & Hendayani, 2022).

Green Supply Chain Management

Green supply chain management (GSCM) is an extension of traditional supply chain management concepts by integrating environmental principles into the entire supply chain process. This encompasses all activities, from raw material procurement and production to distribution, and even post-life product management, known as reverse logistics. GSCM emphasizes the importance of environmental sustainability in every supply chain activity, prioritizing it for achieving competitive advantage while preserving the environment (Birasnav et al., 2022; Jum'a et al., 2024). GSCM implementation encompasses the adoption of green practices by all stakeholders in the supply chain network, from suppliers to end consumers, and can create synergies between sustainability and operational efficiency (Nugroho & Amaratya, 2021; Subramanian & Suresh, 2022).

Triple Bottom Line

Triple Bottom Line concept is used as a basis for implementing Corporate Social Responsibility programs in companies. The three main objectives and outline of corporate social responsibility constitute the Triple Bottom Line. This concept has become a popular reporting tool for articulating a company's social, environmental, and economic performance. This concept places great emphasis on its success and adequacy as a tool for reporting the extent to which an organization has fulfilled its social responsibilities. The Triple Bottom Line consists of Economic Performance, Social Performance, and Environmental Performance.

Economic or cost performance illustrates how well a company manages its finances, taking into account the efficiencies of environmentally friendly practices. These savings are reflected in reduced raw material and energy consumption, optimized waste disposal, and risk prevention (Nengsih et al., 2023). However, one of the most debated aspects of GSCM is its impact on a business's financial performance. There are two perspectives on this topic. De Giovanni (2020) suggests that transitioning to green practices requires significant initial investment, the economic benefits of which may not be immediately visible. However, Bag et al. (2021) demonstrate that energy efficiency and sound waste management can reduce operational costs by up to 25% within three years. According to a second and more recent perspective, GSCM will positively impact a company's ECP.

The work environment and employee motivation not only influence individual performance (Ramdhani & Indiyati, 2023). In recent years, organizational and social changes have encouraged businesses worldwide to focus on social responsibility, and communities are being asked to support corporate activities. Consequently, businesses are increasingly aware of the importance of stakeholder relationships in ensuring long-term sustainability (Yıldız Çankaya & Sezen, 2019). To measure Social Performance (SOP), we evaluate three main dimensions: involvement and impact on local communities, worker welfare and rights, and skills development through ongoing training programs. Although the economic and environmental aspects of GSCM have received significant attention, the social dimension of green supply chain implementation remains a frequently overlooked element (De Lima et al., 2021; Silva et al., 2023). Recent studies indicate that less than 30% of companies implementing GSCM consistently monitor social indicators comprehensively (Wang & Zhang, 2022). On the other hand, increasing awareness of CSR requires considering social concerns throughout the supply chain. By reducing environmental damage, green supply chain practices will improve a company's image among stakeholders, the community, customers, employees, and the government (Yıldız Çankaya & Sezen, 2019).

A company's EVP is measured by how well it limits the negative impacts on the environment caused by its activities (Khan et al., 2021). GSCM practices encompass all efforts to reduce the negative impacts of a company's products or services on the environment. Improved EVP can be achieved by reducing the use of



hazardous materials, reducing waste, reducing environmental accidents, and improving public health through these efforts. When considering green practices in small and medium enterprises (SMEs), Studies found that the most effective way to reduce waste is to implement green practices. Implementing environmentally friendly practices in company operations has been shown to positively impact overall performance. Overall, research shows that environmentally friendly practices positively impact operational performance by reducing waste disposal and energy and material consumption (M. T. Khan et al., 2022).

Organizational Size and Culture

According to Ashari (2020), organizational size is a measure of a company's size, based on its asset value, number of employees, and sales volume. The most important operational factor influencing how a company operates in a new environment is its size. Factors such as perceived organizational performance, employee morale, and willingness to change jobs are reflected in organizational size. Organizational structure and work procedures are based on these organizational standards.

Fernandes et al. (2023) state that organizational culture is generally associated with the values, norms, attitudes, and work ethics that exist within an organization. Akpamah et al. (2021) state that organizational culture is a perception shared by all members of an organization, considered a guiding principle of organizational values, which can influence the behavior and work of organizational members. Therefore, this value system can differentiate one organization from another. According to Tanas et al. (2025), one definition of organizational culture is a collection of long-standing, agreed-upon, and adhered-to values, beliefs, assumptions, or norms that guide behavior and solve organizational problems. Based on the various expert opinions above, it can be concluded that organizational culture is a collection of values, beliefs, and behavioral patterns that distinguish one organization from another.

The hypotheses for this study are as follows:

H1: Green supply chain management practices have a positive effect on the implementation of the Triple Bottom Line.

H2: Organizational culture empirically strengthens the relationship between Green Supply Chain Management and the Triple Bottom Line.

H3: Organizational size empirically strengthens the relationship between Green Supply Chain Management and the Triple Bottom Line.

The conceptual framework of this study is illustrated as the following framework:

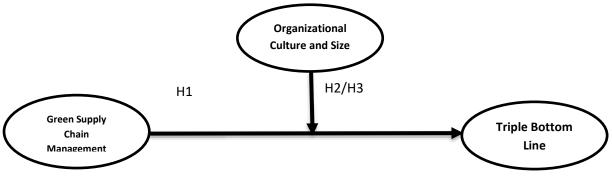


Figure 2. Conceptual Framework Adopted from Huang et al (2023) and Susitha & Nanayakkara (2023);

Research Methodology

This study uses quantitative methods. McDonald's stores will be the research object, with the population consisting of 340 employees of McDonald's stores in Bandung. The researcher used purposive sampling to determine the sample. The Slovin formula was used to determine the sample size, which totalled 184 people. Data collection techniques in this study included observation, literacy studies, and questionnaires. Data were collected using a questionnaire with a five-level ordinal scale. Validity and reliability tests were conducted on the question indicators. The SMARTPLS 4.0 program was used to analyze the data through descriptive analysis. In this study, moderator hypothesis testing was conducted using the interaction effect approach in SMARTPLS. Moderation was tested by forming interaction variables between GSCM \times Organizational Culture and GSCM \times Organizational Size. These interaction variables were then entered into a structural model to determine their effect on the Triple Bottom Line. The moderation effect was declared significant if the interaction path coefficient had a t-statistic value ≥ 1.96 and a p-value ≤ 0.05 .

Findings snd Discussion Descriptive Variable Analysis

The respondents in this study were 184 McDonald's employees in Bandung City, selected through purposivesampling. The respondents consisted of restaurant crew, supervisors, and shift managers. The majority of respondents were aged 20–30 years, with 1–3 years of service. These characteristics are relevant because this group is the primary operational implementer directly involved in implementing GSCM practices and understands their impact on the company's sustainability.

Responses from all respondents to the green supply chain management variable. The table shows that the item "McDonald's recycles materials" has the highest percentage score, at 78.7%, indicating that the majority of respondents agree that McDonald's has recycled materials in its operations. Meanwhile, the item "McDonald's designs environmentally friendly products to support GSCM regulations" has the lowest percentage score, at 66.8%, which is still in the "fair or neutral" category. Based on the results obtained, the overall "green supply chain management" variable remains in the "good" category, at 72.5%.

Responses from all respondents to the triple bottom line variable. The table shows that the items "McDonald's employees are satisfied because they can participate in environmentally friendly practices within the company" and "McDonald's prohibits the use of hazardous materials to reduce the negative impact of solid waste on the environment" have the highest percentage scores, at 76.5%, which are in the "good" category. This indicates that the majority of respondents agree that McDonald's involves its employees in participating in environmentally friendly practices and that McDonald's prohibits the use of hazardous materials in its operations to reduce the negative impact of solid waste on the environment. Meanwhile, the items "McDonald's has experienced increased sales through the implementation of Green Supply Chain Management (GSCM) practices" and "McDonald's routinely cleans surrounding water sources" have the lowest percentage scores, at 67.4%, which are still in the "fair or neutral" category. Based on the results obtained, the overall "triple bottom line" variable remains in the "good" category, at 73.5%.

Based on the data analysis the item "McDonald's employee numbers meet needs" has the highest percentage score, at 78.4%, which falls into the "good" category. This indicates that the majority of respondents agree that McDonald's employee numbers meet operational needs. Meanwhile, the item "McDonald's is widely known as a fast-food restaurant, thus increasing sales" has the lowest percentage score, at 66.5%, which falls into the "fair or neutral" category. Based on the results obtained, the "organizational size" variable overall falls into the "good" category, at 72.8%.

The table shows that the item "I take the initiative to carry out tasks that are my responsibility" has the highest percentage score, at 78.7%, which falls into the "good" category. This indicates that the majority of respondents agree that each employee takes the initiative to carry out their respective responsibilities. Meanwhile, the item "I comply with the company's environmental policies" has the lowest percentage score, at 66%, which falls into the "fair or neutral" category. Based on the results obtained, the overall "organizational culture" variable remains in the "good" category, at 73.7%.

Measurement Model Evaluation Analysis (Outer Model)



For the outer model, the measurement model testing includes convergent validity, discriminant validity, average variance extracted (AVE), and composite reliability. Based on the Partial Least Squares estimation method, the Structural Model obtained is as shown in the following figure:

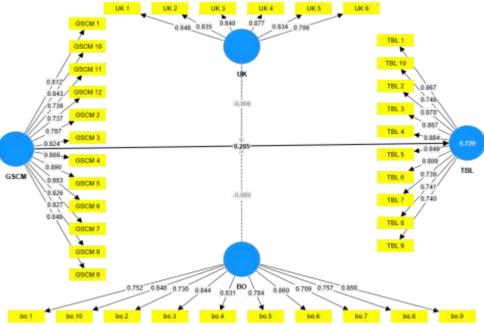


Figure 3. The Outer Model

Loading Factors

Table 1. Loading Factors

	Organization al Culture	Green Supply Chain Managem Ent	Triple Bottom Line	Organization al Size	Organizational Size X Green Supply Chain Management	Organizational Culture X Green Supply Chain Management
GSCM 1		0.812				
GSCM 10		0.843				
GSCM 11		0.739				
GSCM 12		0.737				
GSCM 2		0.787				
GSCM 3		0.824				
GSCM 4		0.889				

	Organization al Culture	Green Supply Chain Managem Ent	Triple Bottom Line	Organization al Size	Organizational Size X Green Supply Chain Management	Organizational Culture X Green Supply Chain Management
GSCM 5		0.890				
GSCM 6		0.863				
GSCM 7		0.826				
GSCM 8		0.826				
GSCM 9		0.849				
TBL 1			0.866			
TBL 10			0.750			
TBL 2			0.870			
TBL 3			0.866			
TBL 4			0.884			
TBL 5			0.849			
TBL 6			0.809			
TBL 7			0.740			
TBL 8			0.741			
TBL 9			0.740			
UK 1				0.848		
UK 2				0.835		
UK 3				0.840		
UK 4				0.877		
UK 5				0.834		
UK 6				0.798		
BO 1	0.827					
BO 10	0.788					
ВО 2	0.801					



	Organization al Culture	Green Supply Chain Managem Ent	Triple Bottom Line	Organization al Size	Organizational Size X Green Supply Chain Management	Organizational Culture X Green Supply Chain Management
во з	0.866					
BO 4	0.840					
ВО 5	0.819					
ВО 6	0.897					
ВО 7	0.742					
ВО 8	0.727					
BO 9	0.774					
Organizational Size X Green Supply Chain Management					1.000	
Organizational Culture X Green Supply Chain Management						1.000

Convergent Validity

Based on the processed data, all scores for each variable, including Green Supply Chain Management, Triple Bottom Line, Organizational Size, and Organizational Culture, showed a score >0.6. Therefore, all statements for each variable are valid, indicating the model has good capability and successfully reflects each construct within each variable. Therefore, it can be concluded that all variables meet the criteria and have a high level of convergent validity.

Table 2. Results Summary

		1 4010 2. 100541	15 2 WIIIIII			
	Average Variance Extracted (AVE)	Description	Organizational Culture	Green Supply Chain Management	Triple Bottom Line	Organi zation al Size
Organizational Culture	0.638	Valid	0.799			
Green Supply Chain Management	0.681	Valid	0.704	0.825		
Triple Bottom Line	0.662	Valid	0.790	0.674	0.814	
Organizational Size	0.704	Valid	0.736	0.499	0.760	0.839

As shown in the Table 2, the AVE (Average Variance Extraction) (AVE) is used to assess the quality of indicators related to research variables. The expected criterion is an AVE value ≥ 0.5 . Based on the table above, all research variables—Green Supply Chain Management, Triple Bottom Line, Organizational Size, and Organizational Culture—have an Average Variance Extracted (AVE) value greater than 0.5, indicating that they meet the convergent validity criteria.

The cross-loading measurement requires that the variable loading value on the factor it reflects be greater than the value of the other variables. The processed data above demonstrates that each variable has the ability to predict the size of each other. These results indicate that the total loading value for each variable is higher than the individual loading values for each variable. Therefore, this measurement is declared discriminant valid. The results of the discriminant validity measurement on the Fornell-Larcker criterion value or also called the square root of AVE, this measurement compares the square root of AVE > construct correlation. The results of the data obtained show that the measurement value of organizational culture is 0.799, the green supply variable is 0.825, the Triple Bottom Line variable is 0.814 and the organizational size is 0.839. Therefore, the variables can be declared valid. Because the root value of the square of AVE of each construct is greater than the correlation value between constructs with other constructs. The results of the discriminant validity measurement with the HTMT criteria have conditions. Measurement with the HTMT criteria is declared to pass the test if the HTMT value is <0.9. The processed data showed that the HTMT value for the variables was <0.9, with the highest HTMT value recorded at 0.801, specifically for the relationship between Organizational Size and the Triple Bottom Line, and between Organizational Size × GSCM and Organizational Culture × GSCM. Although relatively high, the value was still <0.90. Therefore, the discriminant validity test for the HTMT criteria was declared valid and acceptable.

Composite Reliability

This test is used to determine the credibility of an indicator. The resulting value indicates the construct's reliability. Composite reliability is the actual construct's reliability value, which can be described as having good reliability or the value of the questionnaire used as a research tool. The composite reliability value must be greater than 0.70 for each variable, and the Cronbach's alpha value must be greater than 0.70 (Ghozali, 2020:85). Based on the data processing results, the resulting values for each variable are considered consistent.

Table 3. Reliability Values

	Cronbach's alpha	Composite reliability (rho_a)	Composite reliability (rho_c)
Organizational Culture	0.936	0.940	0.946
Green Supply Chain Management	0.957	0.960	0.962
Triple Bottom Line	0.942	0.942	0.951
Organizational Size	0.916	0.920	0.934

Model of Structure Evaluation Analysis (Inner Model) Coefficient of Determination (R²)

The coefficient of determination test is used to determine and measure the effect of a combination of exogenous variables on variables on variables. The R-square value describes the variation explained by the exogenous variables on the endogenous variables. The criteria for an R-square value are ≥ 0.7 , indicating strong influence. ≥ 0.5 indicates moderate influence, and < 0.25 indicates weak influence. The data processing results in this study yielded an R-square of 0.729, or 72.9%. This means that the Triple Bottom Line variable can be simultaneously



explained by the variables Green Supply Chain Management, Organizational Culture, Organizational Size, and the moderating interaction between GSCM × Organizational Culture and GSCM × Organizational Size. The remaining 27.1% is explained by other variables outside the research model. It can be concluded that the model strength is strong.

Table 4. R-Square Value

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	R-square	R-square adjusted		
Triple Bottom Line	0.729	0.721		

Effect Size (F²)

Table 5. F-square Value

	F-Square
Organizational Culture → Triple Bottom Line	0.043
Green Supply Chain Management → Triple Bottom Line	0.118
Organizational Size → Triple Bottom Line	0.205
Organizational Size X Green Supply Chain Management → Triple Bottom Line	0.000
Organizational Culture X Green Supply Chain Management → Triple Bottom Line	0.006

Based on the F-Square results above, it can be concluded that:

- 1. The Green Supply Chain Management variable has a small effect on the Triple Bottom Line, with an f-square value of 0.118.
- 2. The Organizational Size variable has an f-square value of 0.205, which is also in the medium effect category, indicating an effect on the Triple Bottom Line.
- 3. The Organizational Culture variable has an f-square value of 0.043, which is in the small effect category, but is still considered to contribute to explaining variation in the Triple Bottom Line.
- 4. The moderating interaction between Organizational Size × GSCM yields an f-square value of 0.000, indicating no effect, while Organizational Culture × GSCM yields a value of 0.006, which is in the small effect category. This indicates that the variables have a small effect on the Triple Bottom Line.

Hypothesis Testing

From the path coefficient result, it can be explained and concluded that Hypothesis 1 (H1): "Green Supply Chain Management practices have a positive effect on the implementation of the Triple Bottom Line." The results show a P-value of $0.000 \le 0.05$ and a T-statistic of $4.056 \ge 1.96$. Therefore, it can be concluded that green supply chain management has a positive and significant effect on the Triple Bottom Line. Therefore, Hypothesis 1 is "accepted." This finding supports various previous studies that demonstrate that Green Supply Chain Management is an important strategy in facing regulatory pressures and market demands that increasingly shift toward sustainability. This aligns with research conducted by Athaluthfi (2024), which suggests that the implementation of Green Supply Chain Management has a positive impact on the Triple Bottom Line. For companies like McDonald's in Bandung, the implementation of Green Supply Chain Management provides a competitive advantage and helps the company adapt to global trends toward greener business practices.

Hypothesis 2 (H2): "Organizational culture empirically strengthens the relationship between Green Supply Chain Management and the Triple Bottom Line." The results of the study showed P-values of $0.425 \ge 0.05$ and T-statistics of $0.798 \le 1.96$, so it can be concluded that the relationship between organizational culture and green supply chain management does not significantly influence the Triple Bottom Line, therefore hypothesis 2 is "rejected". The results of this study indicate that the interaction between organizational culture and green supply chain management does not have a significant influence on the triple bottom line, meaning that organizational culture is not proven to strengthen or moderate the relationship between green supply chain management and the triple bottom line.

Hypothesis 3 (H3) "Organizational Size empirically strengthens the relationship between Green supply chain management and the Triple Bottom Line". The results showed P-values of $0.949 \ge 0.05$ and T-statistics of $0.063 \le 1.96$, so it can be concluded that the relationship between organizational size and green supply chain management does not significantly influence the Triple Bottom Line, therefore hypothesis 2 is "rejected". The results of this study concluded that the size of the organization was not proven to strengthen the relationship between green supply management practices and the Triple Bottom Line. This finding shows that the size of the organization does not determine the strength or weakness of the influence of GSCM on achieving the triple bottom line. From this study, it is known that the effectiveness of green supply management on achieving the Triple Bottom Line does not depend on the scale of the company.

Table 6. Hypothesis Test Results

	Original sample (O)	Sample mean (M)	Standard deviation	T statistics (O/STDEV)	P values
	F 1 (1)		(STDEV)	(1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-	
OC → TBL	0.245	0.243	0.105	2.322	0.020
GSCM → TBL	0.285	0.289	0.070	4.056	0.000
OS → TBL	0.378	0.380	0.077	4.882	0.000
OS X GSCM →TBL	-0.006	-0.005	0.097	0.063	0.949
OC X GSCM →TBL	-0.089	-0.087	0.111	0.798	0.425

Based on the results of the hypothesis test presented in Table 6, it can be concluded that most of the direct relationships in the research model are proven to be significant. Organizational Culture (OC) has a positive and significant effect on the Triple Bottom Line (TBL), as indicated by a path coefficient value of 0.245 with a T-statistic value of 2.322 and a p-value of 0.020. Furthermore, Green Supply Chain Management (GSCM) is also proven to have a positive and significant effect on TBL, with a coefficient of 0.285, a T-statistic value of 4.056, and a p-value of 0.000. Similar results are shown by Organizational Strategy (OS) which has a positive and significant effect on TBL, with a coefficient of 0.378, a T-statistic value of 4.882, and a p-value of 0.000. These findings indicate that organizational culture, the implementation of GSCM practices, and organizational strategy are important factors in improving sustainability performance as measured through economic, environmental, and social dimensions. However, the results of the moderation effect test indicate that GSCM does not act as a moderating variable in the relationship between OS and TBL or between OC and TBL. This is indicated by the OS × GSCM interaction coefficient of -0.006 with a T-statistic of 0.063 and a p-value of 0.949, and the OC × GSCM interaction coefficient of -0.089 with a T-statistic of 0.798 and a p-value of 0.425. Thus, although GSCM has a direct effect on TBL, its presence does not strengthen or weaken the influence of organizational culture and strategy on achieving the Triple Bottom Line.

Conclusions and Suggestions

Based on the data analysis and discussion, as presented in the table 6 we can conclude that the research results show that Green Supply Chain Management has a positive and significant impact on the Triple Bottom Line (TBL), with a t-statistic of $4.056 \ge 1.96$ and a p-value of $0.000 \le 0.05$. This proves that the better the implementation of Green Supply Chain Management in a company, the higher the sustainability achievements. Also, the research results empirically demonstrate the relationship between organizational culture, Green Supply Chain Management, and the Triple Bottom Line, with p-values of $0.425 \ge 0.05$ and t-statistics of $0.798 \le 1.96$. This indicates that the relationship between organizational culture and green supply chain management does not significantly impact the triple bottom line.

The research results demonstrate the relationship between organizational size and green supply chain management and the triple bottom line, demonstrated by a t-statistic of $0.063 \le 1.96$ and a p-value of $0.949 \ge 0.05$. Therefore, it can be concluded that the relationship between organizational size and green supply chain management does not significantly influence the triple bottom line. This empirically demonstrates that organizational size does not strengthen the relationship between Green Supply Chain Management and the Triple Bottom Line. It also suggests that larger organizational size tends to weaken the effect of Green Supply Chain Management on the Triple Bottom Line. This indicates that large companies face more complex structural challenges in implementing Green Supply Chain Management comprehensively and consistently.



The results of the moderation test indicate that the two moderator variables, namely organizational culture and organizational size, do not have a significant influence in strengthening the relationship between GSCM and TBL. This is indicated by a p-value > 0.05 and a t-statistic < 1.96. Thus, the two moderators are not proven to have a strengthening effect in the model.

Based on the research results and discussion described previously, the researcher offers several suggestions regarding the influence of green supply chain management on the triple bottom line at McDonald's in Bandung. The following suggestions and recommendations are expected to be considered by McDonald's. Based on the research results and discussion, the researcher recommends further research on a more complex sample. Further research is also recommended to be conducted using different methods such as qualitative methods through direct interviews with respondents to obtain information related to the related research. Due to the author's limitations, this study can still be developed by using other variables that can influence the triple bottom line. The results of previous studies, researchers can suggest several related to the Green Supply Chain variable, it is recommended that McDonald's increase efforts in designing environmentally friendly products. This shows that the design aspect of environmentally friendly products is not yet optimal. Therefore, McDonald's needs to strengthen innovation and development that supports environmental regulations, such as the use of biodegradable packaging materials. Regarding the Triple Bottom Line variable, it was found that the contribution of Green Supply Chain Management to economic and environmental aspects is still not optimally felt. Therefore, it is recommended that McDonald's emphasize the integration of Green Supply Chain Management in its sales strategy, as well as expand external and sustainable environmental actions to achieve a balance between all aspects of the Triple Bottom Line. Regarding the organizational size variable, it should be noted that the indicator "McDonald's is widely known as a fast food restaurant so that it is able to increase sales" is still in the fairly good or neutral category. Therefore, it is recommended that McDonald's improve its brand communication and promotional strategies to strengthen its image as a fast-food restaurant that is not only popular but also has a stronger appeal. Regarding organizational culture variables, it is recommended that McDonald's take a more intensive approach to instilling the values of compliance with the company's environmental policies. This effort can be carried out through regular socialization of environmental policies, environmentally friendly training, and providing appreciation to employees who demonstrate a good level of compliance. These steps are expected to strengthen the culture of environmental compliance within the organization.

References

- Akpamah, P., Ivan-Sarfo, E., & Matkó, A. (2021). Organizational Culture As A Strategy. Cross-Cultural Management Journal, 23(1).
- Ali-Alsaadi, A. A., Cabeza-Ramírez, L. J., Sántos-Roldán, L., & Loor-Zambrano, H. Y. (2023). Digital marketing and fast-food intake in the UAE: the role of firm-generated content among adult consumers. Foods, 12(22), 4089.
- Athaluthfi, Z. and Hendayani, R. (2024) 'The Influence of Green Supply Chain Management On Environment Performance and Economic Performance In Palm Oil Plantation Companies (Case Study: PT Produk Sawitindo Jambi (MAKIN GROUP))', COSTING: Journal of Economic, Business and Accounting, 7(5).
- Azis, A. M., & Irjayanti, M. (2024). Strengthening the accuracy and visibility of supply chain management data in the coffee industry. *Cogent Business & Management*, 11(1), 2380811.
- Bag, S., Gupta, S., Kumar, S., & Sivarajah, U. (2021). Role of technological dimensions of green supply chain management practices on firm performance. Journal of Enterprise Information Management, 34(1), 1-27.
- Birasnav, M., Chaudhary, R., Dunne, J. H., Bienstock, J., & Seaman, C. (2022). Green supply chain management: a theoretical framework and research directions. Computers & Amp; Industrial Engineering, 172.
- De Giovanni, P. (2020). Blockchain and smart contracts in supply chain management: A game theoretic model. International Journal of Production Economics, 228, 107855.

- De Lima, F. A., Seuring, S., & Sauer, P. C. (2021). A systematic literature review exploring uncertainty management and sustainability outcomes in circular supply chains. International Journal of Production Research, 59(19), 5826–5845.
- Fernandes, P., Pereira, R., & Wiedenhöft, G. (2023). Organizational culture and the individuals' discretionary behaviors at work: a cross-cultural analysis. Frontiers in Sociology, 8, 1190488.
- Hastari, I. R. (2023). Supply Chain Management (Manajemen Rantai Pasok). https://www.djkn.kemenkeu.go.id Heizer, J., Render, B., Munson, C. L., & Griffin, P. (2022). Operations management: Sustainability and supply chain management. London: Pearson.
- Hendayani, R., Emmanuel, A. A., Rachmawati, I., & Purwanadita, R. (2022). Environmental and Economic Performance Measurement Through Green Supply Chain and Green in Store Micro, Small and Medium Enterprises in Probolinggo City. International Journal of Economics, Business and Accounting Research.
- Irjayanti, M., Azis, A. M., Susilawati, & Sobari, A. R. (2025). Transformative innovations igniting coffee supply chain process efficiency. *Journal of Innovation and Entrepreneurship*, 14(1), 44.
- Irjayanti, M., Azis, A. M., & Fatimah, N. (2025). Sustainable operations and the controversy of civet coffee. *Discover Sustainability*, 6(1), 820.
- Jeremić, M., Matkovski, B., & Zekić, S. (2024). The Green Food Supply Chain Concept. Proceedings of the 29th International Scientific Conference Strategic Management and Decision Support Systems in Strategic Management.
- Jum'a, L., Alkalha, Z., & Alaraj, M. (2024). Towards environmental sustainability: the nexus between green supply chain management, total quality management, and environmental management practices. International Journal of Quality & Amp; Reliability Management, 41(5), 1209–1234.
- Khan, M. T., Idrees, M. D., Rauf, M., Sami, A., Ansari, A., & Jamil, A. (2022). Green supply chain management practices' impact on operational performance with the mediation of technological innovation. Sustainability, 14(6).
- Khan, S. A. R., Razzaq, A., Yu, Z., & Miller, S. (2021). Industry 4.0 and circular economy practices: A new era of business sustainability. Business Strategy and the Environment, 4001–4014.
- Nengsih, T., Majid, M., & Reza, P. (2023). Determinants of Economic Performance: An Analysis of Green Accounting and Environmental Performance Implementations. https://doi.org/10.4108/eai.19-7-2022.2328256
- Nugroho, B., & Amaratya, N. V. (2021). Pengaruh implementasi green supply chain management terhadap kinerja bisnis dalam perspektif inbound. Jurnal Ekonomi Dan Manajemen, 1(2), 48–53.
- Ramdhani, S., & Indiyati, D. (2023). Pengaruh Lingkungan Kerja Dan Motivasi Kerja Terhadap Kinerja Karyawan Pada Dinas Kebakaran Dan Penanggulangan Bencana Kota Bandung. . JMBI UNSRAT (Jurnal Ilmiah Manajemen Bisnis Dan Inovasi Universitas Sam Ratulangi)., 10(2), 1236–1251.
- Reardon, T., Tschirley, D., Liverpool-tasie, L. S. O., Awokuse, T., Fanzo, J., Minten, B., Vos, R., Dolislager, M., Sauer, C., Dhar, R., Vargas, C., Lartey, A., Raza, A., & Popkin, B. M. (2021). The processed food revolution in African food systems and the double burden of malnutrition. Global Food Security, 28.
- Sadiku, M. N. O., Omotoso, A. A., & Musa, S. M. (2019). Green Supply Chain Management: A Primer. International Journal of Trend in Scientific Research and Development, 3(2), 901–902.
- Silva, M. E., Fritz, M. M. C., & El-Garaihy, W. H. (2023). Measuring social performance in sustainable supply chains: A systematic review of methods. Journal of Cleaner Production.
- Subramanian, N., & Suresh, M. (2022). The contribution of organizational learning and green human resource management practices to the circular economy: a relational analysis evidence from manufacturing SMEs (part II). The Learning Organization, 29(5), 443–462.
- Tanas, J., Fulmer, G. W., Hansen, W. E., & Ashley Fulmer, C. (2025). Using the Lenses of Organizational Culture and Climate for Research on Science Teacher Professional Learning. Science Education, 109(4), 1114-1128.
- Wang, J., & Zhang, Y. (2022). Social sustainability assessment in green supply chains: An empirical analysis of manufacturing firms in China. Sustainability, 14(5).
- Yalviolita, C., & Hendayani, R. (2022). Pengaruh green supply chain management terhadap kinerja lingkungan dan ekonomi perusahaan pada peternakan ayam di Kabupaten Pesisir Selatan Sumatera Barat. Jurnal Ilmiah Akuntansi Dan Keuangan.
- Yıldız Çankaya, S., & Sezen, B. (2019). Effects of green supply chain management practices on sustainability performance. Journal of Manufacturing Technology Management, 30(1), 98–121.