# The Impact of Green Entrepreneurship Orientation on Sustainable Performance: The Mediating Effect of Knowledge Management 

Dr. Ashraf Mohammad Teehi Alfandi, Dr. Mohammad Saleh Enaizan Bataineh<br>Department of Entrepreneurship, Faculty of administrative and financial sciences, Irbid National University, Near Nuaima Bridge, 21110. Irbid, Jordan<br>Email: Alfandi@inu.ed.jo, bataineh1986@inu.ed.jo

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#### Abstract

Green entrepreneurial orientation, knowledge management, and sustainable performance were explored in Jordanian five-star hotels in this study. The current study investigated the mediating influence of knowledge management on the link between Green entrepreneurial orientation and sustainable performance. A quantitative approach was adopted. Through a self-administered questionnaire, 108 questionnaires were collected from five-star employees in managerial positions. The gathered data was analyzed using structural equation modeling to assess the link between our research variables. According to the findings of structural equation modeling, Green entrepreneurial orientation has a beneficial impact on knowledge management and sustainable performance. Furthermore, the knowledge management has a favorable effect on the sustainable performance. The outcome also revealed that knowledge management partially mediates between Green entrepreneurial orientation and sustainable performance, suggesting that the favorable effects of Green entrepreneurial orientation on sustainable performance may be amplified by knowledge management's mediating action. The findings have implications on the Jordanian's tourism and hospitality industry.


Keywords: Green Entrepreneurial Orientation, Knowledge Management, Sustainable Performance, Five-Star Hotels, Jordan.

## Introduction

Global environmental issues are escalating, and humanity is currently facing its greatest challenge since our lives and all other creatures on the earth are still being impacted by climate change. Because it relies on land, resources, fossil fuels, and continuous production and consumption, the human industry contributes significantly to climate change. On the other hand, and from a global perspective, leaders, industrial practitioners, researchers, and policymakers in all industries concur that a variety of factors, such as air emissions, resource depletion, hazardous materials, rising air and water pollution, climate change, and energy consumption, are to blame for the environment's decline. In this case, helping business owners, managers, and executives make their firms more environmentally conscious is
necessary. One decent example of an industry that could help the environment and sustainability is hotel and tourism industry, where entrepreneurship requires a high level of commitment. The need for new forms of tourism, such as opportunities for more sustainable tourism, requires the diversification of tourism products and services. However, even though the tourism industry can help the environment by conserving and preserving nature (Alfandi and AI-Zoubi, 2022), their operations also run the risk of destroying the natural environment in the areas where they are located, such as through construction activity, noise, sewage, and air pollution (Kolawole et al., 2016; Pramanik and Ingkadijaya, 2018), Therefore, increasing company sustainability initiatives will aid in lowering the causes of climate change. Both internal and external variables may have an impact on a company's sustainability initiatives. Customers and governmental rules are examples of external forces, whereas the internal organization's culture, structures, and resources can also influence how much environmental sustainability is desired.

Without a doubt, businesses that prioritize sustainability must integrate environmental processes into their operating procedures (Merriman et al., 2016). An essential intangible resource that distinguishes a firm-level strategic organizational orientation is the entrepreneurial orientation (EO) which focuses on innovation, proactivity, and the propensity to take risks while assisting a company in identifying and seizing opportunities. In this case, EO may aid a company in identifying and pursuing sustainability goals through its internal processes, structures, and behaviors (Rauch et al., 2009; Dickel, 2018). As such, the present study attempts to investigate the connection between green entrepreneurial orientation (GEO) and sustainable performance (SP), especially in the context of Jordanian tourism and hospitality enterprises, namely, the Jordanian five-star hotels. In addition, the mediating effect of knowledge management (KM) between these two variables will be examined.

The present study defined GEO as a responsible decision-making process that influences a company's desire to innovate, be more aggressive than competitors, and take risks in order to increase performance through sustainable means. On the other hand, the triple-bottomline approach, or the convergence of social fairness, economic growth, and environmental conservation, is necessary to achieve SP (Qorri et al., 2018; Mikušová, 2017; Elkington, 1998). This approach considers social and environmental performance in addition to financial performance. The purpose of this study was to investigate the connections between GEO, KM, and SP. Additionally, the study looks into KM's function as a mediating factor in the connection between GEO, and SP. As a result, three research questions, in particular, are intended to be addressed by this study:

1. Is there a significant relationship between GEO and KM in Jordanian five-star hotels?
2. Is there a significant relationship between GEO and SP in Jordanian five-star hotels?
3. Is there a significant relationship between KM and SP in Jordanian five-star hotels?
4. Does KM mediate the relationship between GEO and SP in Jordanian five-star hotels?

## Green Entrepreneurship Orientation (GEO)

Previously, some scholars such as Covin and Slevin (1989); Lumpkin and Dess (1996) believed that entrepreneurial orientation refers to how inventive, risk-taking and strategically proactive a firm is. They argued that it is concerned with new business entry, and answers issues like "What business do we enter?" and "How do we ensure the success of the new business?" More recently, Covin and Wales (2019) support for an ongoing pattern of entrepreneurial behavior is a sign of an organization's commitment to entrepreneurship orientation. Wales et al (2020) go on to describe EO as an attribute of an organization that
appears when its elemental configuration, top management style, and new entry efforts exhibit a common entrepreneurial pattern.

In terms of the tourism and hospitality industry, EO is associated with green, eco, environmental and sustainable entrepreneurship orientation. Due to its rapid international market growth and widespread activities at the local and global levels, the tourism and hospitality industry is an economic sector that requires a high level of entrepreneurial involvement. For instance, Luu (2020) defined EO in the tourism industry as "the extent to which an organization is strategically proactive, risk-taking, and innovative in initiating and introducing green innovative products or services into the market". As mentioned previously, businesses are to blame for several environmental issues, and these difficulties can, in fact, present opportunities for both new and established entrepreneurial ventures, and have resulted in the rise of "green entrepreneurship," a business model that balances profit and environmental protection (Dean and McMullen, 2007; Nikolaou et al., 2018). Green entrepreneurship is a company's proclivity to focus on opportunities that provide financial and environmental benefits by utilizing green activities. A concept derived from entrepreneurship orientation called green entrepreneurial orientation combines entrepreneurial orientation and green entrepreneurship. Additionally, Ge et al (2016); Jiang et al (2019) approved that business prospects can be found using GEO while taking environmental factors into account.

## Sustainable Performance (SP)

Sustainability is an integrated approach that takes into account ecological, social, and economic elements that must be considered together to achieve long-term prosperity (Alfandi, 2020). It considers the working environment a success factor that should be combined with business processes (Ploum et al., 2018). In the tourism and hospitality industry, sustainability is any activity that continuously works to maintain and promote the environment, other natural resources, cultural values, and social justice (Alfandi, 2016).

In response to growing environmental consciousness, business performance has emerged as one of the sustainability pillars among scholars, governments, NGOs, customers, and industries in recent years. Previously, we used both financial and non-financial viewpoints to analyze performance. The non-financial perspective includes elements like employee and customer satisfaction, whereas the financial perspective considers indicators of gross profit, net profit, return on assets, and return on equity. However, in recent years, there has been a paradigm shift toward performance measurement using sustainable metrics due to environmental issues and call it SP. The performance of a company in all areas and for all corporate sustainability drivers is known as "sustainability performance." The triple bottom line (TBL) strategy, which incorporates both environmental and social factors into traditional financial outcomes, is one way to gauge SP (Elkington, 1998; Qorri et al., 2018). Hence, a more comprehensive approach to sustainability in the tourism industry is needed, with sustainable entrepreneurship at its center. This approach will positively influence social and environmental conditions while still earning financial revenues (Cohen and Winn, 2007). By examining SP from the financial, environmental and social viewpoints, the current study aims to respond to the earlier query in the context of the tourism and hospitality industry.

## Knowledge Management (KM)

The basic objective of KM is to permanently supply knowledge to the organization and transform it into a useful attitude that advances those aims (Hatamleh, 2021). KM is a process that involves producing and discovering knowledge, sharing it consistently, and learning to apply it to accomplish the objectives of the organization. However, some researchers, e.g., (Hassan et al., 2019) argued that KM varies depending on the method used to investigate it; the document approach and the technological approach ensure the sustainability of the operations while boosting the present knowledge and its impact, usage, and reuse. The four fundamental KM processes of creating, sharing, storing, and applying information were described in accordance with the social organizational approach, the added value approach, and these methods in general (Lopes et al., 2017). On the other hand, several researchers stressed that the three processes of knowledge acquisition, sharing, and application make up KM in most cases by combining knowledge storing and applying together. In order to attain strong business performance, our study operationalized KM based on these three processes.

## GEO and KM Relationship

KM for organizational benefits has been driven by the recent interest in organizational knowledge (Gold et al., 2001; Teixeira et al., 2018). Accordingly, the main goal of KM is to increase an organization's awareness of its knowledge at both the individual and collective levels, to use that knowledge to develop effective and efficient business processes, and to gain a competitive advantage, which ultimately increases organization performance, customer satisfaction, and profitability in general (Azan et al., 2017). However, to benefit from KM and maintain global competitiveness, a KM strategy must be put in place. In order to apply KM in the organization, developing new ideas and products as well as processes is required. In this line, EO is essential for inspiring and motivating workers to contribute their expertise and skills to the process of constructing knowledge (Lumpkin and Dess, 1996), and because knowledge plays such a big part in finding new opportunities and ideas, it needs to be managed correctly. Several previous studies proved the significant impacts of EO on KM in the case of building strategic alliances (Gupta and Moesel, 2007), leveraging individuals knowledge in the organization (Omotayo, 2015), a direct impact of EO on KM for SMEs in Southern Brazil (Severo et al., 2018), and significant influence of EO on KM for the SMEs in Iran (Madhoushi et al., 2011) and Online business in Malaysia (Adam et al., 2022). Based on the above discussions, the following hypothesis is proposed:
$\mathbf{H}(\mathbf{1})$ : There is a positive and significant relationship between GEO and KM.

## KM and SP Relationship

The primary objective of KM is to raise an organization's awareness of its knowledge and to use that knowledge to create competitive advantages through the development of effective and efficient business processes (Alkhazali et al., 2017) and increased efficiency (Liu and Deng, 2015), which will ultimately improve organization performance, client satisfaction, market share, and profitability overall (Ali et al., 2022; Azan et al., 2017). Kimaiyo et al (2015) highlighted how important each KMP attribute was for improving a firm's performance in general by producing new knowledge, transforming that knowledge into new designs or strategies, safeguarding that knowledge, and learning from past mistakes in particular. In the same line, Jyoti and Rani (2017) discovered a strong link between KM and SP, demonstrating that SP was enhanced by the acquisition, conversion, and application of knowledge within the
organization. In addition, KM was found to have a significant impact on SP through innovation among Jordanian consulting firms (Abbas and Kumari, 2021; Obeidat et al., 2016).

In the tourism and hospitality industry, the positive influence of entrepreneurial orientation on a firm's performance is well established through the reduction of costs. For example, Demirel et al. (2019) claim that green entrepreneurship through innovation and product differentiation could reduce water, energy, and material consumption, increasing transparency, in addition, to enabling a company to comply with requirements while avoiding penalties (Hernandez-Perlines and Cisneros, 2018). However, GEO is not necessarily associated with a positive influence on performance since GEO requires additional costs, and hence affects profitability (Parish, 2010; Nikolaou et al., 2018; Pacheco et al., 2010; Ning et al., 2015). For instance, a negative impact of offering a green product on financial performance has been found by Shrivastava and Tamvada (2019), and any initiative to raise awareness of environmental issues had no direct impact on financial performance (SotoAcosta et al. 2016). Nevertheless, organizations that have strong GEO obtain a strong competitive advantage, which could boost profits by increasing sales and market share.

Previous studies found a positive association between GEO and firm performance (Hernández-Perlines, 2016; Wiklund, and Shepherd, 2005; Pett and Wolff 2016; HernándezPerlines and Cisneros, 2018). In this study, we believe that GEO is a source of competitive advantage that has an indirect and significant impact on SP through KM. GEO is represented in a company's green innovation, proactivity, and risk-taking (Hernández-Perlines and Cisneros, 2018). As such, the present study operationalized the GEO as the owner's methods, practices, and decision-making styles to act entrepreneurially by practicing three elements (innovativeness, proactiveness, and risk-taking,) in managing their tourism and hospitality businesses. Hence, it is fair to say that KM will therefore have a significant impact on Jordanian tourism and hospitality firms' performance. Based on the above discussions, the following hypothesis is proposed

H(2): There is a positive and significant relationship between KM and SP.

## KM as a Mediator in the Relationship between GEO and SP

Several previous studies concentrated on the independent influence of EO on organizations' long-term success, or what they refer to as SP; however, these studies neglected the potential mediating factors between these two variables. Based on the fact that developing new products or services necessitates broad and comprehensive knowledge, workers' expertise and knowledge must be handled as critical inputs due to their important role in discovering possibilities and new ideas (Lumpkin and Dess, 1996). This shows that KM is more than just a standalone managerial practice; it is also a crucial tool for leveraging EO influence on innovation and SP that probably should be managed. In other words, even though the company has a GEO, the influence on organizational performance will not be optimal if knowledge acquired as a result of the learning process is not managed properly. Workers are more likely to transfer and use knowledge to produce new products or services, enhance efficiency, and further achieve favorable innovation results and performance when knowledge can be successfully disseminated (Habib et al., 2020; Gold et al., 2001; Sarin and McDermott, 2003; Argote et al., 2003).

Previous suggested hypotheses connect GEO with KM and KM with SP. For instance, the study of Adam et al (2022) revealed that KM plays a significant role as a mediator between GEO and organizational performance. In addition, KM was found to have a mediating effect
between represented by knowledge-oriented leadership and SP through innovation and implementing KM successfully (Rehman and Iqbal, 2020). The discussion implies that, through its effects on KM, GEO influences SP. As such, we argue that KM plays a mediating role in the relationship between the independent variable of GOE and the dependent variable of SP. Based on the above discussions, the following hypotheses are proposed:

H (3): There is a positive and significant relationship between GEO and SP
H (4): KM will mediate the relationship between GEO and SP.

## Methodology

## Sampling

The current study sought to investigate the effects of GEO and KM on the SP as well as the mediating effects of KM on the link between GEO and the SP. The present study selects five-star hotels in Amman, Jordan's capital, as the majority of five-star hotels are located there (20 out of 42). Because the study factors of GEO, KM, and SP exhibit the strategic stance through organization processes, practices, and activities, choosing five-star hotels makes sense (Lumpkin et al., 2009; Wales et al., 2013). Smaller hotels typically have less structured processes, thus it is best to choose hotels with at least 100 people to ensure that strategic management principles like GEO are codified in the target organizations (Andreeva and Garanina, 2016; Krieg et al., 2018).

According to the Ministry of tourism and antiquities, (2023) there are 20 hotels classified as five-star hotels located in Amman. Around 5700 employees working in these fivestar hotels represent the study populations. However, only people in managerial positions could reveal accurate and sufficient information since they are knowledgeable in the organization's policies and practices and convey and enforce organizational policies within departments. With that in mind, questionnaires will be distributed to those who have management positions in the five-star hotels located in the capital of Jordan, Amman.

In terms of sample size, Roscoe (1975) stated that the most optimal sample size for most studies is less than 500. Likewise, David and Sutton (2004) indicated that researchers can increase the sample size based on their expertise and taking into account cost and effort, but it should be more than 30 and less than 500 . Based on this, and to select a safe number of respondents, the sample size was 120 full-time hotel employees working in various departments and having managerial positions. Of the 120 questionnaires distributed, 111 questionnaires were returned, accounting for $92 \%$ of the total sample, and three of them were deemed invalid, leaving 108 genuine surveys with a $90 \%$ response rate.

## Measures

All constructs in the current study were examined using validated measures that have previously been utilized in other studies. On a five-point Likert scale, with 1 denoting strong disagreement and 5 , denoting strong agreement, respondents were asked to rate their opinions. The process of knowledge acquisition, sharing, and application by staff members in a five-star hotel was operationalized in the current study as KM. As a result, we used items that asked respondents to indicate the extent of KM possessed in their hotel. Eight particular items were specifically taken from earlier studies by (Lin and Lee, 2005; Gold et al., 2001). Respondents were asked to describe the extent to which they obtained knowledge from customers, partners, and employees for three items, reflecting knowledge acquisition. Three
questions were used to evaluate the degree of openness with which knowledge was shared across units, among coworkers, and between supervisors and their direct reports. The study employed two elements to represent managing knowledge sources and applying newly acquired knowledge for a specific purpose in terms of knowledge application.

To measure GEO, eight items were adopted from a previous study by Luu (2020), who originally adapted them from Covin and Slevin's (1989); Covin and Wales' (2012) studies. The respondents were questioned about topics including how their hotel prioritizes technological leadership and breakthroughs in the green space, launches new lines of green services, starts green initiatives, and participates in high-risk projects. For its part, to measure SP, we have used the triple bottom line, which considers the financial, social, and environmental factors of performance. 15 items were adapted from a previous study by Paulraj (2011) to measure financial performance ( 5 items), social performance ( 5 items), and environmental performance ( 5 items).

Prior to the study, a pilot test was conducted on 22 postgraduate entrepreneurial and management students to determine how well the scale captured the construct it was intended to measure. Items having loading times less than 0.40 were eliminated as instructed by Hair et al. (2006). Scale validity and reliability were also investigated. Items with composite reliabilities lower than the recommended criterion of 0.70 were removed (Fornell and Larcker, 1981). The scale was found valid and significant ( $p 0.001$ ) with $t$ values exceeding the crucial value of 3.19 after assessing the significance and size of factor loading as well as the average variance extracted.

## Descriptive Statistics

The findings of the descriptive statistical test of the research variables will be discussed in this section. The general mean for hotel GEO was 3.11, with a standard deviation of 1.081. Three variables were employed to evaluate the SP; financial performance has the greatest mean ( 3.49 and a standard deviation of 1.071), followed by environmental performance (3.20 and a standard deviation of 1.011), and finally social performance ( 3.16 and a standard deviation of 1.008). The general SP factor had a general arithmetic mean of 3.28 and a standard deviation of 1.013.

The overall arithmetic mean of KM was (3.6) with a standard deviation of 1.074. Knowledge sharing, with a mean of 3.9 and a standard deviation of 1.074, has the highest mean of the three measures of KM (acquisition, sharing, and application), followed by knowledge application with a mean of 3.5 and a standard deviation of 1.065 , and knowledge acquisition with a mean of 3.4 and a standard deviation of 1.004.

## Results

In the current study, the indicator loadings, critical ratios, Cronbach's alpha, and AVE of each variable should be investigated. An indicator value less than (0.4) will be ignored as a rule of thumb. The findings showed that all values were greater than ( 0.4 ), indicating that the testing phase was completed. Cronbach's alpha values for the variables covered were greater than 0.70, ranging from ( 0.784 ) for KM to ( 0.811 ) for GEO. The Average Variance Extracted (AVE) was employed as a composite validity measurement. All factors have an AVE greater than 0.5 , ranging from ( 0.598 ) for GEO to ( 0.656 ) for SP. As a result, the validity of all variables was validated.

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Table 1
Inter-factor Correlations of constructs.

| Variables | GEO | KM | SP |
| :--- | :--- | :--- | :--- |
| GEO | - |  |  |
| KM | $0.565^{*}$ | - |  |
| SP | $0.511^{*}$ | $0.601^{*}$ | - |

Source: Author
Correlation analysis was done on the survey data based on the independent factors of GEO and KM against the dependent variables of SP in order to understand the link between study variables. When the value of the correlation is less than (0.05), it is considered significant, meaning that the interactions between the variables can be examined. As shown in the above table, the majority of the variable correlation values displayed correlation coefficients below 0.60 and in the desired direction. The inter-factor correlation analysis between each study construct is shown in the table above. The outcome demonstrates that all factors have a strong correlation. The KM and SP showed the strongest connection ( 0.601 , $p$ 0.01) Following that was a correlation of ( $0.565, \mathrm{p} 0.01$ ) between the KM and GEO. The correlation between the SP and GEO was lastly the weakest ( $0.555, \mathrm{p} 0.01$ ). On the basis of these results, a preliminary endorsement of the hypothesized correlations might be made.

The model well fit should be evaluated after confirming that it is significantly correlated with all research variables. Since structural equation modelling (SEM) can simultaneously estimate each predicted path while integrating corrections for measurement error, we utilized it to achieve that and to confirm the hypotheses.

The results of the maximum likelihood estimation revealed that the three-factor model greatly improved and provided good data fit. The model fit was evaluated in particular using the comparative fit index (CFI) and the root-mean-square error of approximation (RMSEA). If the value is equal to or less than (0.05), the RMSEA indicates a good fit, and if it is equal to or less than (0.05), an adequate fit (0.10). The outcome showed that the model suited the data well, since the value was (.079). Since the number was higher than 0.95 , specifically 0.964 , the CFI affirmed the model's ability to fit the data. Aside from that, the outcomes revealed that the $x 2$ was (67.888), the d.f. was (83), the normed $x 2$ was (2.322), and the GFI was (0.01).

Table 2
Structural equation modelling (direct relationships)

| Hypothesis | IV | DV | $\boldsymbol{\beta}$ | S-error | t-statistic | $\boldsymbol{p}$ |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| H1 | GEO | KM | 0.655 | .077 | 5.554 | significant |
| H2 | GEO | SP | 0.589 | .101 | 6.542 | significant |
| H3 | KM | SP | 0.522 | .124 | 5.784 | significant |

Source: Author

The outcomes shown in the above table validated the first three proposed hypotheses (H1, H2, and H3) (2). More precisely, it was discovered that KM and SP were significantly impacted by GEO. This implies that GEO is a significant precursor for KM and SP ( H 1 and H 2 : supported). The SP was also being strongly influenced by KM. This suggests that KM is a crucial precursor for SP (H3: supported). According to the empirical findings from the structural model, GEO had a bigger impact on destination KM ( $\beta=0.655, t=5.554, p 0.05$ ) than SP ( $\beta$ $=0.589, t=6542, p 0.05)$.

In order to test the final hypothesis (H4), Hair et al. (2006) proposed four-step process for the mediating influence of KM on the link between GEO and SP. These include (a) determining whether GEO significantly impacts SP; (b) determining whether GEO significantly impacts KM; (c) determining whether KM significantly impacts SP; and (d) determining whether the impact of GEO on SP statistically decreases when KM is incorporated into the model to predict SP. We discovered strong GEO effects on KM and SP, and KM also predicts SP, therefore the first three phases are completed. The final step investigated the direct impact of GEO on the SP without taking the KM into account. The results revealed a considerable effect of GEO on SP; however, the impact was estimated to be as high as (0.813) at CR (8.66). As a result of the last hypothesis (H4) is being supported, the GEO impact on SP is partially mediated by KM.

## Discussion

This study's aim is to investigate the elements that can enhance sustainable performance (SP) at Jordanian's 5-star hotels in Amman. More specifically, we looked at the influence of two elements on SP; these are KM and GEO. In addition, this study intended to investigate how KM functions as a mediator in the link between GEO and SP. Information was gathered from staff in supervisory positions at a five-star hotel. After conducted the data analysis, the following are the key findings of the current study: 1. GEO has a beneficial impact on both KM and SP in Jordan's five-star hotels. 2. KM has a favourable impact on the SP of Jordan's five-star hotels. 3. KM mediates the link between GEO and SP at Jordan's five-star hotels. The findings clearly support the study's claim that KM is important in mediating the relationship between GEO and SP and that GEO has a direct influence on both the KM and the SP. The KM was also discovered to have a direct influence on the SP. More specifically, through innovation and proactiveness, GEO improves SP in general and financial, social, and environmental performance in particular. GEO assists 5 -star hotels in reducing material consumption, improving process efficiency, and ultimately lowering costs (financial performance), improving compliance with environmental regulations, eliminating potential fines and penalties associated with non-compliance with regulations (environmental performance), and improving employee and customer satisfaction enhances the relationship with external stakeholders (social performance). With changing tourist tastes and a shift toward green purchasing and consumption, GEO allows hotels to be proactive and gain a competitive advantage by being the first to market. This can result in greater sales and profitability, as well as improved hotel performance through cost-cutting and revenue growth through product innovation (Mullens, 2018).

The positive and significant association between GEO and KM is compatible with the Resource-Based View Theory, which asserts that GEO is made up of resources and capabilities and may be used to construct a company plan (Do et al., 2022; Nasution et al., 2021). These conclusions are consistent with empirical studies on the effects of EO on KM, such as (Ramdan et al. 2022; Jiang et al., 2018; Gupta and Moesel, 2007; Omotayo, 2015; Severo, 2018; Matin et al., 2013; Madhoushi, 2011). This demonstrates that a strong GEO may improve KM in the 5-star hotels. As a result, GEO and KM developed a positive relationship.

In consistent with previous studies findings e.g., (Ramdan et al., 2022; Jyoti and Rani, 2017; Liu and Deng, 2015; Kimaiyo et al., 2015; Nawaz and Shaukat, 2014), the findings of the current study revealed that SP was significantly influenced by KM. Organizations could increase their SP by implementing KM process. Because knowledge is a resource that is challenging to imitate, managing knowledge will foster SP. Successfully acquiring knowledge
makes a business more outstanding and gives it a significant competitive advantage. The majority of earlier studies have found that the most successful tactic for organizational growth and survival is KM. The results of this study also provide empirical evidence that KM influences SP. Therefore, KM plays a significant role in raising SP for Jordan's 5-star hotels.

Finally, the strong findings on the indirect relationship between GEO and SP via KM are similar with other studies e.g., (Habib et al., 2020; Madhoushi, 2011; Wang and Huynh, 2013; Rizkyan, 2020; Ramdan et al., 2022). These findings demonstrated that an effective KM was used in five hotels in Jordan to improve the link between GEO and SP. The most vital resource for a hotel to prosper and distinguish out from the competition is knowledge. This finding adds to the important theoretical implications of five-star hotel performance and provides a unique perspective into this field of study. More importantly, effective use of KM in five-star hotels improved the link between GEO and SP.

## Limitations and Further Studies

We should point out the study's limitations. First, the study is confined to five-star hotels in Amman, Jordan's capital. As a result, the sample could not be considered representative of all types of hotels. As a result, the study might be reproduced using a different market source, such as five-star hotels in other locations or hotels of varying classifications. Second, the sample was restricted to employees in managerial roles. Other studies could be conducted on personnel at various managerial levels. This may provide more information about hotel GEO and KM practices. Third, a future study on the impact of KM and GEO on a specific type of performance, such as environmental, social, or financial performance, might be done.

## Contribution

In the following aspects, the work contributes to sustainability and tourism research: First, while green entrepreneurship is becoming increasingly important in terms of sustainable development, it is still highly understudied by academics, particularly in the context of the hotel industry. Second, while academics have generally supported the positive association between entrepreneurial orientation and performance in the setting of typical profit-maximizing businesses, the relationship between EO and performance in the context of green entrepreneurship remains questionable (Lumpkin and Brigham, 2011). Furthermore, the impact of GEO on business performance is unknown. While some research reveal a strong positive association between GEO and financial and environmental performance, others find little or a negative relationship (Gibbs and O'Neill, 2014; Shrivastava and Tamvada, 2019; Amankwoh-Amoah et al. 2018; Jiang et al. 2019). The investigation was prompted by these gaps in the current literature. The study's findings can help tourism and hospitality organizations understand firm-level elements that can affect sustainability programs and their SP.

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