

The Mediating Role of Strategic Management in the Relationship between Environmental Protection, Sustainable Performance and Competitive Advantage

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This study provides a holistic introduction to the interconnected concepts of strategic management and sustainability, emphasizing their pivotal role in organizational success in achieving sustainable development. The integration of sustainability into strategic management is explored for its benefits in goal alignment, efficient resource allocation, and addressing key challenges, particularly through a lens of social responsibility, economic viability, and environmental protection. The research aims to investigate the relationship between strategic management, performance, and sustainable development in the UAE, addressing challenges and offering insights for both academic research and practical policymaking. The narrative extends to the United Arab Emirates, examining how strategic management contributes to sustainable development goals, with a focus on the government's strategic planning and resource allocation. A quantitative approach was adopted, and data was collected from 397 employees in UAE government institutions using a structured questionnaire. The data were analyzed using SPSS and PLS-SEM through SmartPLS. The findings showed that strategic management significantly influenced environmental protection, social responsibility, and economic performance. These three dimensions also had significant effects on sustainable performance, which in turn positively affected sustainable development. The mediation results confirmed that sustainable performance played an important mediating role. The study contributes to the literature by providing empirical evidence on how strategic management supports sustainable development in the UAE public sector and offers practical insights for improving sustainability-oriented government practices.

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introduction

Strategic management and sustainability are closely linked concepts (Kulkarni et al., 2020).

Strategic management is the process of planning, organizing, and directing the resources of an organization towards the achievement of long-term goals and objectives. In contrast,

sustainability is defined as the ability of future generations to meet their own needs (Olsson and Bosch 2025). By integrating sustainability into strategic management, organizations can ensure that their actions align with the principles of sustainable development, which include economic growth, social inclusion, and environmental protection. One of the main ways that strategic management and sustainability are linked is through the setting of targets and objectives (Attia 2025). For the purpose, a core framework guiding global efforts towards sustainability is the United Nations Sustainable Development Goals (SDGs) (Srinivas Rao A 2015). Adopted by a UN member states in 2015, the SDGs consist of 17 interconnected goals that serve as the blueprint to achieve a better and more sustainable future for all by 2030. These goals include a wide range of vital global concerns including poverty eradication, excellent education, climate action, clean energy, sustainable cities, responsible consumerism, and institutional development. The SDGs reflect an urgent call for action by countries across all sectors, public, private, and civil society, to achieve long-term prosperity while protecting the planet (Attia 2025). Globally, governments and institutions are increasingly aligning their national policies and development agendas with the SDGs. Strategic management plays a central role in this alignment process. It helps public institutions to transfer these goals aspirations into measurable national objectives, prioritize inventions, and allocate resources effectively resources (Tzavlopoulos et al., 2019). For example, many countries now embed SDG targets in their national vision plans or sustainable development strategies, using strategic management tools such as Key Performance Indicators (KPIs), balanced scorecards, and strategic planning framework to monitor progress and adapt to emerging challenges. Moreover, the integration of SDGs into strategic management ensures that organizations move beyond short-term decision-making and embrace a more holistic, long-term vision. This is particularly important in a global context characterized by climate change, resource

depletion, and social inequality. International Organizations like the World Bank, OECD, and UNDP advocate for strategic governance approaches that balance economic efficiency with equity and environment sustainability – aligning closely with SGD principles. Strategic management, therefore, becomes not only a tool for organizational performance but also a vehicle for transformative change on a global scale. This study aims to analyze how strategic management practices are integrated into public sector institutions in the UAE to promote the achievement of sustainable development, by revealing institutional motives, evaluating implementation mechanisms, analyzing their impact on economic, social and environmental dimensions, and identifying the challenges facing effective implementation (Cocu et al. 2025).

Problem Statement

Accounting Insights, strategic financial management involves analyzing financial statements, controlling costs, and managing cash flow to strengthen profitability. It's not just about maximizing revenue—it's about building a resilient, adaptable organization that thrives over time. Organizations that master this balance are better equipped to navigate uncertainty, attract top talent, and maintain brand strength (Bombiak & Marciniuk-Kluska, 2018). These organizations continuously seek new tactics and policies, that can help them to avail brighter opportunities regarding business development, and success and also to generate a greater revenue (Nedelea & Păun, 2009).

For this purpose, companies pay special consideration to introducing new policies and designing improved strategies, that further bring fruitful outcomes. These entities are results-oriented and aim to attain the maximum commercial benefit by resorting to their competitive advantage in general (Umair, Waqas, and Mrugalska 2024). In this regard, (Mansoori et al. 2024) explained strategic management is considered as a behavioral characteristic that primarily depends on the execution of tactful policies for commercial purposes. Here Jones &

Mosteanu (2019) also cited an example of business policies in the UAE as distinguished and comparatively more profitable for the investors. UAE has a strong business infrastructure, a reliable political system, and a distinguished bank system, which make it an ideal hub for business development, progress and financial benefits. The local government also allowed the foreigner investors to make hefty investments and attain the brighter business opportunities (Malkawi et al. 2024)

Conceptual framework

A conceptual framework for strategic management to achieve sustainable development can be developed by considering the following key elements: strategic management, environmental protection, social responsibility, and economic performance (ICAO, 2021; Kobayashi et al., 2018; Suriyankietkaew & Petison, 2019, 2020). As Figure 1. As suggested above, a concurrent systematic integration of these multiple orientations will reshape business operations at all levels towards the achievement of sustainable balance of the triad, strategic competitive advantage, and stronger government institutions performance on the triple-bottom-line in government institutions (Britzelmaier et al. 2013). From a longer-term perspective, integrating all three dimensions systematically and simultaneously will also build the government institution's resilience by improving its ability to withstand shocks and adaptability to uncertainties in the environment over time (Bieñkowska & Tworek, 2020). This combined effect is what leads to 'sustainability' of government institutions. In fact, the conceptual model is proposed as a proxy for a sustainability-oriented business model, which will be discussed later (Habes et al. 2023).

This model is, therefore, adopted as a strategic framework, which underlines the scope of our UAE government institutions study. The model is also employed as a conceptual filter during the identification of eligible studies for this review. The strategic management involves the process of planning, organizing, and implementing

actions to achieve sustainable development goals. It includes setting clear goals and objectives, developing and implementing strategies, and monitoring progress (Legault, 2020). Environmental protection involves taking actions to protect and preserve the natural environment, such as reducing carbon emissions, promoting the use of renewable energy, and conserving natural resources (Cirrincione, Plescia, et al., 2020). Social responsibility involves taking action to address social and economic issues, such as poverty, inequality, and unemployment. It also includes taking actions to promote social and economic inclusion, such as providing education and training opportunities (ICAO 2021). The economic performance involves taking actions to promote economic growth and prosperity, such as encouraging investment, creating jobs, and increasing exports. It also includes taking actions to promote economic stability, such as reducing debt and inflation (Acimovic, 2006). By considering these elements, organizations and countries can develop a comprehensive and integrated approach to sustainable development that addresses the interrelated economic, social, and environmental challenges and opportunities (Shankar et al., 2020). This framework can help to ensure that sustainable UAE development efforts are aligned with strategic goals and objectives of UAE government institutions, and that they are implemented in a way that promotes economic growth, social responsible, and environmental protection (Biscotti et al., 2018).

Hypotheses Development

The hypotheses suggest a complex web of relationships, with environmental protection, economic performance, social responsibility, and sustainable performance or competition advantage playing distinct roles in influencing strategic management and ultimately, contributing to sustainable development in UAE government sector. The proposed model imply that the impact of certain factors on strategic management is not direct but is channeled through intermediate variables, providing a nuanced understanding of the dynamics

involved (Habas et al. 2026; Habes et al. n.d.; Salaq, Habes, and Hatamleh 2026). The hypothesis are postulated as follows for further investigation.

Strategic management has a statistically significant impact on environmental protection in the United Arab Emirates.

This hypothesis is based on the premise that strategic management enables government entities to integrate environmental objectives into their corporate vision and long-term implementation plans. This includes optimizing resource consumption, reducing emissions, and adopting green economy policies (Dzwigol & Dzwigol-Barosz, 2020). Strategic planning facilitates resource allocation for environmental initiatives and strengthens monitoring and evaluation mechanisms, leading to improved environmental performance indicators. In the UAE context, this aligns with national trends toward climate neutrality and environmental sustainability, where strategy serves as a governing tool for linking policies to measurable environmental outcomes (Davies & Al, 2022).

H1: Strategic management has a statistically significant impact on environmental protection in the United Arab Emirates.

H1: Strategic management has a significant positive effect on environmental protection.

Strategic management has a statistically significant impact on enhancing social responsibility in the United Arab Emirates.

Strategic management contributes to establishing a culture of social responsibility by incorporating sustainability values and stakeholder engagement into corporate objectives (Srinivas Rao A 2015). When social considerations are integrated into long-term planning, community programs, equitable service delivery, and the empowerment of diverse groups become integral to corporate performance, rather than isolated initiatives (Olsson and Bosch 2025). According to stakeholder theory, effective strategic management balances economic and social interests, thereby enhancing institutional trust

and strengthening social capital. In the UAE context, this aligns with quality of life policies and the promotion of social cohesion within national agendas (Olsson and Bosch 2025)

H2: Strategic management has a significant positive effect on social responsibility.

Strategic management has a statistically significant impact on improving economic performance in the UAE.

Strategic management leads to increased efficiency in resource allocation and improved financial planning and risk management processes, resulting in better economic outcomes (Alhantoobi, Alghizzawi, and Ezmigna 2024). Strategic planning contributes to supporting innovation, enhancing competitiveness, and improving institutional productivity—elements directly linked to economic performance (Galpin & Hebard, 2018). Furthermore, strategic vision enables organizations to respond more flexibly to global and local economic changes. In the UAE context, this intersects with economic diversification and knowledge-based economy policies, where strategic management provides a framework for ensuring financial sustainability and long-term growth (Alsharari 2024; Meyer and Mamédio 2024)

H3: Strategic management has a significant positive effect on economic performance.

Environmental protection has a statistically significant impact on sustainable performance in the United Arab Emirates.

Sustainable performance represents an organization's ability to achieve a balance between economic, social, and environmental dimensions over the long term. Strategic management is the primary tool for achieving this balance by setting measurable sustainable goals and linking them to clear performance indicators. It also enables periodic monitoring and course correction to ensure continuity (United Arab Emirates Ministry of Climate Change & Environment, 2021). According to the Triple Bottom Line framework, effective strategic management integrates profitability, social

responsibility, and environmental protection within a comprehensive performance framework (Boselie and van der Heijden 2024; Ibrahim and Hasan 2024; Yousef, Alghizzawi, and Ezmigna 2024)

H4: Environmental protection has a significant positive effect on sustainable performance.

Social responsibility & Sustainable performance

Recent studies indicate that implementing corporate social responsibility (CSR) practices directly contributes to improving the sustainable performance of organizations by enhancing operational efficiency, reducing environmental risks, and improving stakeholder relationships. These practices also help improve the organization's reputation and increase public and customer trust, which positively impacts its sustainability and its ability to achieve its economic, social, and environmental goals simultaneously (Buallay, 2022). Furthermore, the literature demonstrates that CSR supports sustainable performance by adopting responsible resource management policies, improving working conditions, and contributing to community development. This strengthens organizations' ability to balance economic growth, environmental protection, and social well-being. Organizations that adopt CSR programs are also better positioned to achieve sustainable results and improve their long-term financial and non-financial performance (Khan, Hussain, & Ajmal, 2023). From this perspective, social responsibility is one of the strategic factors that contribute to enhancing sustainable performance, as it helps institutions integrate economic, social and environmental considerations within a comprehensive framework for corporate sustainability, which is in line with global sustainable development trends and the United Nations Sustainable Development Goals (United Nations, 2023).

H5: Social responsibility has a significant positive effect on sustainable performance.

Economic performance, sustainable performance

Numerous recent studies indicate that strong economic performance can contribute to enhanced sustainable performance by providing the financial resources needed to invest in environmental and social initiatives, such as improving energy efficiency, developing clean technologies, and strengthening corporate social responsibility programs. Furthermore, organizations with strong economic performance are better positioned to adopt sustainability strategies and effectively implement sustainable development programs, thereby enhancing their competitiveness and long-term viability (Khan et al., 2022). Other studies have shown that the integration of economic performance and sustainability leads to improved overall organizational performance. Investing in sustainable practices helps reduce operating costs, improve production efficiency, and foster innovation, which in turn positively impacts economic performance. Therefore, the relationship between economic performance and sustainable performance is often complementary, with each supporting the other in achieving organizational growth and long-term sustainability (Naciti, Cesaroni, & Pulejo, 2022). In this context, international reports confirm that institutions that integrate economic considerations within a sustainability framework are better able to balance profitability with environmental and social responsibility, which enhances the achievement of sustainable development goals and increases the ability of institutions to respond to contemporary economic and environmental challenges.

H6: Economic performance has a significant positive effect on sustainable performance.

Sustainable performance and sustainable development.

Recent literature indicates that organizations achieving high levels of sustainable performance are better positioned to contribute to the Sustainable Development Goals (SDGs) by adopting environmentally and socially responsible policies, improving resource management efficiency, and fostering innovation in clean energy and sustainable technologies.

Sustainable performance also contributes to economic and social stability and enhances organizations' ability to respond to contemporary environmental and economic challenges, leading to more sustainable development outcomes at both the organizational and societal levels (Awan, Kraslawski, & Huiskonen, 2022). Studies also demonstrate that adopting sustainable performance practices helps organizations improve their economic, social, and environmental performance simultaneously, which positively impacts the achievement of sustainable development. When organizations integrate sustainability into their strategies and organizational policies, they contribute to enhancing societal well-being, protecting the environment, and achieving sustainable economic growth, aligning with the SDGs that the United Nations aims to achieve by 2030 (United Nations, 2023). Therefore, it can be said that sustainable performance represents a key mechanism that supports the achievement of sustainable development and promotes the continuity of development in the long term (Zhang, Liu, & Wang, 2022).

H7: Sustainable performance has a significant positive effect on sustainable development.

2.19.2 indirect Effect

Sustainable performance is a mediating factor in the relationship between strategic management and sustainable development in the United Arab Emirates.

This hypothesis assumes that the impact of strategic management on sustainable development is not only direct but also mediated through the improvement of sustainable performance (Dzwigol & Dzwigol-Barosz, 2020). This means that strategic management first improves economic, social, and environmental practices within organizations, which is subsequently reflected in achieving sustainable development goals at the national level (Alkhodary, 2023a). Mediation here means that sustainable performance is the mechanism that transforms the strategic vision into tangible development outcomes (Almarzooqi, 2019).

H8: Sustainable performance mediates the relationship between environmental protection and sustainable development.

H9: Sustainable performance mediates the relationship between social responsibility and sustainable development.

H10: Sustainable performance mediates the relationship between economic performance and sustainable development.

Methodology

This research is based on quantitative method design because the researcher wants to select a large sample of UAE official sector workforce to get in depth details. Secondly qualitative studies are time saving and cost effective especially for the academic level researchers. They are significant as their results are credible and generalizable due to advanced empirical approaches and statistical techniques (Mohajan, 2020). The study was adopting the two techniques of direct collection and online collection to reach a relatively specific target (Aleessawi et al. 2026; Salaq, Habes, and Hatamleh 2026; Tahat et al. 2023) The initial phase of data collection will involve a pretest, conducted to assess the questionnaire's content validity. The random sampling method ensures that each member of the population has an equal chance of being included in the sample (Mweshi & Sakyi, 2020)(Hill, 1998), enhancing the generalizability of the findings to the broader population of government employees in the UAE. This approach minimizes bias and allows for a more accurate representation of diverse perspectives within the governmental context (Saunders et al., 2009). Additionally, the decision to employ a sample size of $n=450$ in the study, utilizing a random sampling approach, is rooted in practical considerations and methodological soundness.

Response Rate

The main data which is used for this research are collected from employees working in diverse government institutions within the United Arab Emirates. As discussed in chapter three, 450

questionnaires were distributed. As a result, 397 valid responses were obtained and were found

valid and therefore included in the analysis, while 53 were not returned. (see table 4.1).

Table 1: Response Rate of Questionnaires

Response	Frequency/Rate
Number of Questionnaire administered	450
Questionnaires returned	397
Returned and usable questionnaires	397
Questionnaires not returned	53
Valid Response Rate	88.2%

Multicollinearity Test

Multicollinearity is a state in which two or more exogenous latent construct become highly correlated and its existence within exogenous latent construct affect the estimates of regression coefficients and their statistical significance (Hair, Black, Babin, Anderson, & Tatham, 2006; Chatterjee & Yilmaz, 1992). In structural equation modeling, multicollinearity can be a serious problem and happens when inter-correlations among the predictor variables are too high (Hair, Ringle, & Sarstedt, 2011; Hair et al., 2010). Because standard errors of coefficients are increased with the presence of

multicollinearity and also weaken the analysis (Tabachnick & Fidell, 2007). Multicollinearity in this study was assessed using two methods (Peng & Lai, 2012; Chatterjee & Yilmaz, 1992). Firstly, tolerance value and variance inflated factor (VIF) were evaluated using regression results from the SPSS. As recommended by Hair et al., (2022) that multicollinearity is a concern if tolerance value is less than 0.20 and VIF value is higher than 5. Table 4.2 shows the VIF values and tolerance values for the exogenous latent constructs of the study. It evidently showed that tolerance values range from 0.575 – 0.687 which are greater than 0.20. Likewise, VIF values range between 1.457–1.740 which are less than the threshold of 5.

Table 2: Tolerance and Variance inflated factor (VIF)

Constructs	Collinearity Statistics	
	Tolerance	VIF
SM	0.578	1.729
ENVP	0.675	1.482
SP	0.687	1.457
SR	0.575	1.740
EC	0.649	1.542

Descriptive Statistics of all Latent Constructs

The descriptive statistics of all the variables used in present study are described in this section. It includes: the standard deviation, and mean values

of all the latent constructs. All the latent variables in this study were measured using five-point Likert scale with uniform descriptive anchors

ranging from 1= strongly disagree to 5= strongly agree.

Table 3 Descriptive Statistics of the Latent Variables

Constructs	N	Minimum	Maximum	Mean	Std. Deviation
SM	397	1.64	5.00	3.3165	0.63306
ENVP	397	1.55	5.00	3.4065	0.61347
SP	397	1.00	5.00	3.4574	0.63491
SR	397	1.25	5.00	3.2601	0.72772
EC	397	1.00	5.00	3.5310	0.71730
SD	397	1.92	5.00	3.4858	0.57139

The study encompasses employees working in diverse government institutions within the United Arab Emirates. These institutions represent a broad spectrum of departments and services, providing a suitable context for examining the impact of strategic management on sustainable development and its associated dimensions. As presented in the table 4.9, the mean values of all constructs are greater than 3, indicating that each construct is perceived as important by the respondents, as they tend to agree with most of the statements measuring the variables. Specifically, the mean scores range from 3.2601 to 3.5310. The highest mean value was recorded for economic performance (EC) at 3.5310, followed by sustainable performance (SD) at 3.4858 and social performance (SP) at 3.4574. Environmental protection (ENVP) recorded a mean of 3.4065, while strategic management (SM) had a mean value of 3.3165. The lowest mean value was observed for social responsibility (SR) at 3.2601.

PLS-SEM path model evaluation

This segment reports the results of the assessment of PLS-SEM using two-step process as suggested by Henseler et al., (2009). These two-step process encompasses the evaluation of the suitability of the measurement model and the estimation of the structural model (Hair et al., 2014). The measurement model assessment includes examining the validity and reliability of the model. Afterward, this study assesses the

structural model by evaluating the significance of path coefficients, determining the effect size, the predictive accuracy and predictive power and the assessment of the significance of the mediating and moderating effects.

4.7.1 Measurement (Outer) Model Assessment

Measurement model evaluates the input of each item in representing its related constructs and measure how well the combined set of items symbolize the construct (Hair et al., 2014; Hair, Risher, Sarstedt, & Ringle, 2019). Researchers often evaluate measurement model by determining measurement reliability and validity i.e., individual item reliability, internal consistency reliability, convergent validity; and discriminant validity (Guenther, Guenther, Ringle, Zaefarian, & Cartwright, 2023; Hair et al., 2014; Hair et al., 2011). According to Henseler, Hubona & Ray, (2016, p.10), "If the specified measurement (or outer) model does not possess minimum required properties of acceptable reliability and validity, then the structural (inner) model estimates become meaningless".

4.7.1.1 Individual Items Reliability

Reliability of the individual items is evaluated by considering the factor loadings of each item on its respective constructs (Hair et al. 2017). These loadings normally should not be less than 0.708 thus explaining >50% of an indicator variance by the constructs (Becker, Cheah, Gholamzade, Ringle, & Sarstedt, 2023). Henseler et al., (2009).

Nevertheless, loadings of an item below 0.70 can also be considered to be deleted to increase reliability. Moreover, Hair et al. (2016) indicated that outer loadings below 0.7 but above 0.4 are often retained to contribute to the content validity if removing them does not significantly improve composite reliability. Hence, in this study, as shown in table 4.10 and figure 4.3, the outer loadings of the items indicated that some items were deleted because of lower loadings while those within the acceptable threshold were retained.

4.7.1.2 Internal Consistency Reliability

Constructs' internal consistency reliability can be assessed by composite reliability (CR) or

Cronbach's alpha (CA) (Peterson & Kim, 2013) and rho-A (Dijkstra and Henseler, 2015). But CA was criticized for undermining the true reliability (Hair, Risher, Sarstedt, & Ringle, 2019) as it does consider tau equivalence and according to Hair et al. (2014), Hair et al. (2010) and Becker et al., (2023), CR is more suitable for PLS-SEM. However, in this study, both CR, CA and rho-A were presented. As suggested by Bagozzi & Yi (1988), Hair et al. (2014) and Dijkstra and Henseler, (2015) CR, CA and rho-A values should be at least 0.70. As shown in table 4.11, the CR, CA and rho-A values of all the constructs surpassed the acceptable minimum level of 0.70, indicating satisfactory internal consistency reliability of the measurement used.

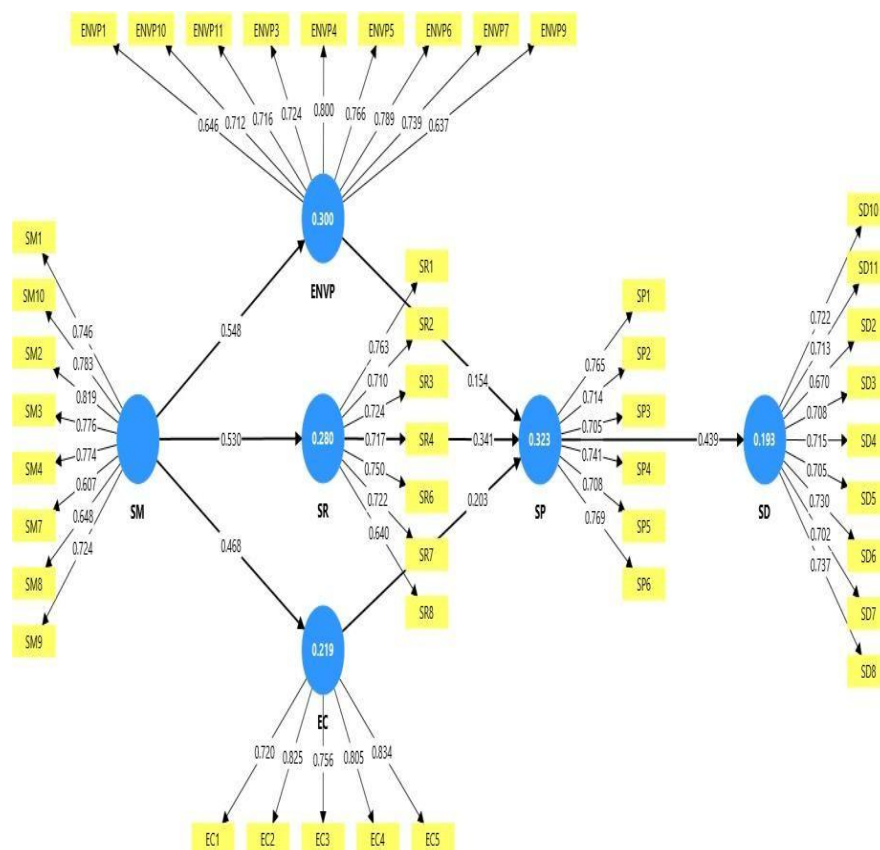


Figure1:Measurement Mod

4.7.1.3 Convergent Validity

Convergent validity is the extent to which indicators symbolize the intended construct and actually correlates with each other in measuring the construct in question (Hair et al., 2009). The average variance extracted (AVE) of the constructs is used to assess the convergent validity of the constructs of the current study. The values of AVE describe the average variance

shared between a construct and its associated indicator (Fornell & Larcker, 1981). Typically, if the values of AVE are 0.5 or more it indicates adequate convergent validity (Ali, Rasoolimanesh, Sarstedt, Ringle, & Ryu, 2018; Becker et al., 2023; Ringle, Sarstedt, Sinkovics, & Sinkovics, 2023). As indicated in table 4.10, AVE values ranged from 0.896 to 0.670 indicating that all the constructs displayed satisfactory levels of convergent validity.

Table 4: Convergent Validity

Construct	Items	Factor Loadings	AVE	Alpha	CR	VIF
Strategic Management	SM1	0.746	0.544	0.879	0.904	1.739
	SM2	0.819				2.374
	SM3	0.776				1.949
	SM4	0.774				1.994
	SM7	0.607				1.505
	SM8	0.648				1.610
	SM9	0.724				1.815
	SM10	0.783				2.069
Environmental Protection	ENVP1	0.646	0.529	0.888	0.910	1.581
	ENVP3	0.724				1.806
	ENVP4	0.800				2.137
	ENVP5	0.766				1.989
	ENVP6	0.789				2.107
	ENVP7	0.739				1.769
	ENVP9	0.637				1.470
	ENVP10	0.712				1.718
	ENVP11	0.716				1.752
Social Responsibility	SR1	0.763	0.517	0.844	0.882	1.787
	SR2	0.710				1.567
	SR3	0.724				1.671
	SR4	0.717				1.578
	SR6	0.750				1.740
	SR7	0.722				1.855
	SR8	0.640				1.675
Economic Performance	EC1	0.720	0.623	0.848	0.892	1.457
	EC2	0.825				2.343
	EC3	0.756				1.671
	EC4	0.805				1.954
	EC5	0.834				2.217
Sustainable Performance	SP1	0.765	0.539	0.829	0.875	1.704
	SP2	0.714				1.591
	SP3	0.705				1.523
	SP4	0.741				1.663

Sustainable Development	SP5	0.708				1.586
	SP6	0.769				1.784
	SD2	0.670	0.506	0.878	0.902	1.554
	SD3	0.708				1.704
	SD4	0.715				1.748
	SD5	0.705				1.675
	SD6	0.730				1.788
	SD7	0.702				1.724
	SD8	0.737				1.880
	SD10	0.722				1.794
	SD11	0.713				1.908

7.1.4 Discriminant Validity

Discriminant validity is another criterion, which evaluates the extent to which a construct is indeed not the same from other constructs (Byrne, 2010; Hair, Hult, Ringle, and Sarstedt, 2022).

Discriminant validity can also be seen as the degree to which a variable particularly differs from other variables (Duarte & Raposo, 2010). In

this study therefore, discriminant validity was ascertained using the square root of a variable's AVE (Fornell & Larcker, 1981), loadings and cross-loadings (Chin (1998) and heterotrait-monotrait ratio (HTMT) (Franke, and Sarstedt, 2019; Henseler, Ringle, & Sarstedt, 2015). As shown in Table 4.11, the square root of the AVE values, were greater than the correlations of the constructs, signifying sufficient discriminant validity.

Table 5: Fornier and Lacker (1981)

Constructs	EC	ENVP	SD	SM	SP	SR
EC	0.789					
ENVP	0.366	0.727				
SD	0.443	0.333	0.711			
SM	0.468	0.548	0.461	0.738		
SP	0.443	0.372	0.439	0.459	0.734	
SR	0.537	0.421	0.541	0.530	0.515	0.719

Also, discriminant validity was ascertained using Chin (1998) standard by comparing the items loadings with other items in the cross loadings (See Table 4.12). Cross Loadings (item-level discriminant validity) is also one of the criteria for assessing discriminant validity. This criterion is more substantial in terms of signifying discriminant validity (Henseler et al., 2015). According to Gefen and Straub (2005, p. 92), “discriminant validity is shown when each measurement item correlates weakly with all other constructs except for the one to which it is

theoretically associated.”. In this study, cross-loadings were assessed to provide support for discriminant validity.

In addition, a more reliable criterion, heterotrait-monotrait (HTMT) ratio for assessing discriminant validity was examined as suggested by previous studies (Ali, et al., (2018; Franke, and Sarstedt, 2019), Hair, Sarstedt, & Ringle, 2019; Henseler et al., 2014; Henseler, Ringle, & Sarstedt, 2015). HTMT values were above the critical value of 0.9 or 0.85 indicated

discriminant validity problem (Legate, Hair Chretien, & Risher, 2023) In this study as shown in Tables 4.13, the highest correlation is within the conventional yardstick of 0.90 (Henseler et al., 2015) hence, HTMT criterion displays satisfactory discriminant validity. Moreover, the

upper bound of the 95% percentile bootstrap confidence interval (one-sided) was below 1.00 for all HTMT inference results indicating that the HTMT values are significantly lower than the critical value (Franke & Sarstedt, 2019; Hair, & Alamer, 2022; Hair et al., 2022).

Table 6 :HTMT

Latent Constructs	EC	ENVP	SD	SM	SP	SR
EC						
ENVP	0.415					
SD	0.510	0.372				
SM	0.537	0.611	0.523			
SP	0.521	0.433	0.511	0.537		
SR	0.634	0.485	0.627	0.614	0.607	

The results of the measurement model as a whole in this study show that all the constructs reliability and validity were sufficiently achieved. Therefore, reinforces further analysis of the structural (inner) model, to examine the associations among the variables under study (Henseler et al., 2016).

4.7.2 Structural Model Assessment

After confirming that the measurement model met the reliability and validity requirements, the study moved to the structural model (internal model) evaluation phase. The core criteria for structural equation modeling using partial least squares (PLS-SEM) rely on examining the significance of path coefficients, effect size (f^2), coefficient of determination (R^2), and predictive power index (PLSpredict). The structural model in this study included testing the main effects model by analyzing the direct relationships between variables, along with incorporating mediating and adjusting effects within these

relationships. Figure 4.4 illustrates the complete structural model of the study. All relationships were expressed using beta values, and a two-way t-test was used to determine the statistical significance level for both direct and indirect relationships.

4.7.2.1 Hypotheses of the Direct Effects

In the current study, the evaluation of the structural model commences with an assessment of the main effect, i.e., the link between the exogenous variable and the endogenous variable. The magnitude of the beta coefficients was done through PLS-algorithm, and the significance of the relationship (beta coefficients) was done by bootstrapping procedure in the SmartPLS 4 (Ringle, Wende, & Becker, 2022) (see Figure 4.3). In the bootstrapping procedure, 5,000 was used as bootstrapping sub-samples (Hair *et al.*, 2013; Hair, *et al.*, 2012; Hair, *et al.*, 2022 Hair, Ringle, & Sarstedt, 2011; Henseler *et al.*, 2009).

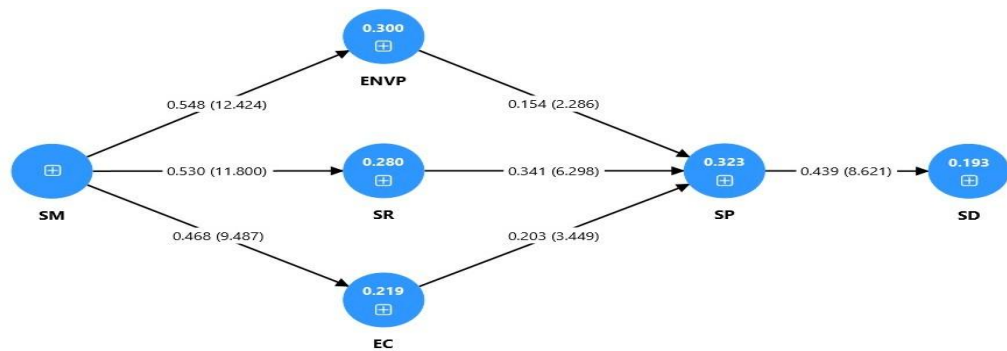


Figure 2 : Structural Model (Direct and Moderating Effect)

Based on the PLS-algorithm and bootstrapping procedure, figure 4.3 displays the beta coefficient and the figure 4.4 shows significance of path coefficient of the relationship between the exogenous and the endogenous variable. The bootstrapping results in figure 4.4 shows that the relationships between the exogenous and the endogenous variable are significant. In addition, table 4.16 displays the beta coefficients, t-values, confidence intervals and p-values of the direct effects.

Summary of Findings

Having presented the results of both the direct and mediating effects in the preceding sections, this section provides a consolidated summary of all hypotheses tested in the study. The findings were derived from the structural model assessment using PLS-SEM

Table 6 : Summary of Hypotheses Testing Results

Hypothesis	Relationship	Decision
H1	Strategic Management → Environmental Protection	Supported
H2	Strategic Management → Social Responsibility	Supported
H3	Strategic Management → Economic Performance	Supported
H4	Environmental Protection → Sustainable Performance	Supported
H5	Social Responsibility → Sustainable Performance	Supported
H6	Economic Performance → Sustainable Performance	Supported
H7	Sustainable Performance → Sustainable Development	Supported
H8	Environmental Protection → Sustainable Performance → Sustainable Development	Supported
H9	Social Responsibility → Sustainable Performance → Sustainable Development	Supported
H10	Economic Performance → Sustainable Performance → Sustainable Development	Supported

Note: All hypotheses were tested using bootstrapping with 5,000 subsamples. Significance was determined at $p < 0.05$ (2-tailed).

As presented in **Table 4.21**, the results indicate that **all ten hypotheses (H1–H10) are supported**, demonstrating strong empirical support for the proposed research model. Specifically, the findings reveal that **strategic management has a significant and positive influence on all three sustainability dimensions**, environmental protection, social responsibility, and economic performance, thereby confirming its critical role as a foundational driver of sustainability practices within UAE public sector organizations. Among these relationships, the effect of strategic management on environmental protection ($\beta = 0.548$) and social responsibility ($\beta = 0.530$) appears particularly strong. Furthermore, the results show that **all sustainability dimensions significantly contribute to sustainable performance**, with social responsibility ($\beta = 0.341$) emerging as the strongest predictor, followed by economic performance ($\beta = 0.203$) and environmental protection ($\beta = 0.154$). This suggests that while all dimensions are important, socially oriented initiatives play a more prominent role in enhancing performance outcomes in the public sector.

In addition, **sustainable performance was found to have a significant positive effect on sustainable development ($\beta = 0.439$)**, highlighting its role as a key outcome variable and a critical link between sustainability practices and broader development objectives. With respect to mediation, the findings confirm that **sustainable performance significantly mediates the relationships between environmental protection, social responsibility, economic performance, and sustainable development**. All indirect effects (H8–H10) were statistically significant, with confidence intervals not including zero, thereby validating the mediating role of sustainable performance in the model. Consequently, the results provide robust evidence that **strategic management influences sustainable development both directly and indirectly through sustainability dimensions and sustainable performance**. This supports the hypothesized causal chain and underscores the importance of integrating sustainability into strategic management processes within public sector organizations.

Table 7: Results of the Hypotheses Testing (Direct)

Relationships	Std. Beta	Std. Dev.	t-values	p-values	Confidence intervals		Decision
					LLCI	ULCI	
H1-SM -> ENVP	0.548	0.044	12.424	0.000	0.452	0.625	Supported
H2-SM -> SR	0.530	0.045	11.800	0.000	0.427	0.605	Supported
H3-SM -> EC	0.468	0.049	9.487	0.000	0.353	0.552	Supported
H4-ENVP -> SP	0.154	0.067	2.286	0.022	0.029	0.290	Supported
H5-SR-> SP	0.341	0.054	6.298	0.000	0.228	0.444	Supported
H6-EC -> SP	0.203	0.059	3.449	0.001	0.083	0.312	Supported
H7-SP -> SD	0.439	0.051	8.621	0.000	0.320	0.525	Supported

Note(s): Confidence Intervals Lower Limit = LLCI; Confidence Intervals Upper Limit = ULCI; *P is significant at 0.05 (2-tailed); SD = Standard Deviation.

As shown in Table 7, the direct effects of strategic management and its associated dimensions on sustainable development were examined. The results indicate that all hypothesized relationships are statistically significant, demonstrating the pivotal role of strategic management in advancing sustainability outcomes within UAE government institutions.

Specifically, strategic management (SM) was found to have a significant positive effect on environmental protection (ENVP) ($\beta = 0.548$, $t = 12.424$, $p < 0.001$), social responsibility (SR) ($\beta = 0.530$, $t = 11.800$, $p < 0.001$), and economic performance (EC) ($\beta = 0.468$, $t = 9.487$, $p < 0.001$). These findings suggest that when public organizations formulate clear strategic objectives, align resources effectively, and integrate sustainability considerations into decision-making processes, they are more likely to achieve positive environmental, social, and economic outcomes. The findings are consistent with Strategic Management Theory, which posits that organizations achieve superior performance when strategic resources and capabilities are aligned with long-term organizational goals. In the context of the UAE public sector, strategic management has become increasingly important as government agencies strive to realize the objectives of national initiatives such as the UAE Vision 2031, the Net Zero by 2050 Strategic Initiative, and the National Green Growth Strategy. These policy frameworks emphasize sustainability as a core component of public-sector planning and service delivery.

Conclusion

This study set out to examine the impact of strategic management on sustainable

development through the mediating roles of environmental protection, social responsibility, economic performance, and sustainable performance within UAE public sector organizations. The findings reveal that strategic management is a **critical driver of sustainability dimensions**, significantly influencing environmental, social, and economic practices. These sustainability dimensions, in turn, have a **positive and significant effect on sustainable performance**, with social responsibility emerging as the strongest predictor. Furthermore, sustainable performance was found to significantly influence sustainable development, confirming its role as a key outcome variable. Importantly, the mediation analysis demonstrates that sustainable performance serves as a **crucial mechanism** through which sustainability dimensions translate into sustainable development outcomes. This highlights the importance of focusing not only on sustainability practices but also on their effective implementation and performance outcomes. The study contributes to theory by integrating **RBV and Institutional Theory**, providing a comprehensive explanation of how internal capabilities and external pressures jointly shape sustainability outcomes. Practically, the findings offer valuable insights for policymakers and public sector managers, emphasizing the need for strategic alignment, performance measurement, and stakeholder engagement. In conclusion, this study underscores that achieving sustainable development in the public sector requires a **holistic and strategic approach**, where sustainability is embedded into organizational strategies, supported by strong institutional frameworks, and translated into measurable performance outcomes. This provides a solid foundation for advancing sustainable governance

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