

BALANCING SUSTAINABILITY AND INNOVATION: EXPLORING THE INTERVENTION OF STRATEGIC AMBIDEXTERITY IN PROCESS INNOVATION

Muhammad Mukarram

Chaudhary Abdul Rehman Business School, Faculty of Business & Management Sciences, The Superior University Lahore, Lahore, Pakistan.

Muhammad Haseeb Shakil

*Department of Management Sciences, Faculty of Business Administration, COMSATS University Islamabad, Lahore Campus, Lahore, Pakistan.
Lahore Business School, Faculty of Management Sciences, The University of Lahore, Lahore, Pakistan.*

Sadaf Ehsan

Department of Management Sciences, Faculty of Business Administration, COMSATS University Islamabad, Lahore Campus, Lahore, Pakistan.

Rao Tahir Anees*

Lahore Business School, Faculty of Management Sciences, The University of Lahore, Lahore, Pakistan.

Nordiana Ahmad Nordin

Faculty of Economics and Business, Universiti Malaysia, Sarawak, Malaysia.

ABSTRACT

Accomplishing sustainable performance notwithstanding an inexorably uncertain environment has become both a basic test and a convincing objective inside the domain of contemporary business. Even with rising uncertainty, accomplishing sustainable performance has arisen as a foremost test and a convincing objective in contemporary business. The study aims to address the imperative set by the United Nations Sustainable Development Goals (UN-SDGs) by exploring the mediation role of strategic ambidexterity in the relationship between intellectual capital dimensions (Structural Capital, Relational Capital, Human Capital, Social Capital) and sustainable performance within businesses. Given the increasing global challenges, particularly the call for sustainability, this research investigates the intricate connections among these variables. Employing quantitative methods and Smart PLS, the study conducted an online survey distributed to managers of selected hotels, yielding 385 workable responses out of 500. The results reveal a positive correlation among the variables of interest, confirming the acceptance of all hypotheses. In conclusion, the findings suggest that hotels strategically leveraging their intellectual capital for innovative exploration and exploitation processes exhibit enhanced capabilities to attain sustainable performance, aligning with the broader goals of global

* Corresponding author: Rao Tahir Anees, 1-Km Defence Road, near Bhuptian Chowk, Lahore, Pakistan. Phone No.: +923002607162 email: dr.raoanees@gmail.com

sustainability. The managers could benefit from the implementation of putting resources into the turn of maintenance of a very capable workforce, supporting social ties inside and outside the association. Furthermore, executing situation arranging and possibility techniques empower fast arrangement, adding to sustained performance.

Keywords: Sustainable Performance, Strategic Ambidexterity, Process Innovation, Intellectual Capital

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1. INTRODUCTION

Even with rising uncertainty, accomplishing sustainable performance has arisen as a foremost test and a convincing objective in contemporary business. The worldwide basis for sustainability, as characterized by the US Environmental Protection Agency (2011), includes making conditions that fit human and environmental interests, addressing the necessities of present and people in the future. The Sustainable Development Goals (SDGs), established by the United Nations in 2017, address a wide range of global challenges, including inequality and poverty, climate change, environmental issues, justice, peace, and prosperity. Amazingly, associations adjusting their sustainable performance to UN SDGs have shown increased benefit.

Accomplishing sustainable performance notwithstanding an inexorably uncertain environment has become both a basic test and a convincing objective inside the domain of contemporary business (Batra, 2023; Ma & Kremer, 2015). This idea has risen above neighborhood worries to turn into a worldwide objective. The US Environmental Protection Agency (2011) characterizes sustainability as enveloping endeavors that "make and keep up with conditions under which people and environment can exist together as one, and that permit satisfying the social, monetary, and different prerequisites of present and people in the future." Along with this, the United Nations (2017) presented the worldwide Sustainable Development Goals (SDGs) to address worldwide difficulties, for example, imbalance, neediness, natural issues, environmental change, equity, harmony, and thriving. Prominently, associations that synchronize their sustainable performance with UN SDGs will generally show more noteworthy benefits (Jia et al., 2024; Yang et al., 2021).

Against this setting, this study tries to dive into the unpredictable elements of sustainable performance by looking at the mediating role of strategic ambidexterity in the context of process innovation. In particular, the attention is on the interplay between intellectual capital dimensions (Structural Capital, Relational Capital, Human Capital, Social Capital) and sustainable performance. The components of sustainable performance include financial sustainability, social sustainability, and environmental sustainability (Ahmad et al., 2023; Bananuka et al., 2023; Shakil et al., 2023; Floyd et al., 2017; Raji & Zualkernan, 2016; Vinodh & Swarnakar, 2015). Subsequently, the essential exploration question driving this study is the evaluation of the effect of intellectual capital on sustainable performance.

Expanding on March's (1991) ideas of exploration and exploitation, which have been related to innovative management practices on encouraging sustainable performance (Lu et al., 2023), this study likewise investigates the mediating role of strategic ambidexterity. Intellectual capital arises

as a pivotal variable impacting the formulation and execution of exploration and exploitation at the same time. The second research question of this study is to investigate this relationship.

Perceiving gaps in the existing literature, as well as the requirement for practical implications, our study tries to contribute empirically to the understanding of the mediating role of strategic ambidexterity in the connection between intellectual capital and sustainable performance. Tending to both the methodological concerns, frequently described by an emphasis on theoretical viewpoints, and the theoretical gaps connected with the implications of intellectual capital for sustainable performance, this study aims to offer additional extensive and significant perspectives on these basic aspects inside the setting of contemporary business elements (Belal & Momin, 2009; Girella et al., 2021; Gnanaweera & Kunori, 2018; Orazalin & Mahmood, 2020; Thuringian, 2021). Drawing on previous concepts of exploration and exploitation, related to innovative management practices fostering sustainable performance (Lu et al., 2023), this study additionally investigates the mediating role of strategic ambidexterity. Intellectual capital arises as a critical element impacting the synchronous formulation and execution of exploration and exploitation methodologies (Annamalah et al., 2023). This study suggests the second research question, diving into the complex connection between intellectual capital and strategic ambidexterity chasing after sustainable performance.

This study aims to empirically understand the mediating effect of strategic ambidexterity in the relationship between intellectual capital and sustainable performance. It does this by recognizing the need for practical implications, the need for addressing gaps, and the need for new research. Tending to methodological concerns, described by a tendency to focus on theoretical aspects related to the implications of intellectual capital for sustainable performance, this study plans to offer an additional thorough and essentially pertinent viewpoint on these basic aspects inside the setting of contemporary business elements (Asiaei et al., 2023; Girella et al., 2021; Orazalin & Mahmood, 2020). By examining the mediating role of strategic ambidexterity in the context of process innovation, the purpose of this study is to investigate the intricate dynamics of sustainable performance. Focused on the exchange between intellectual (Structural Capital, Social Capital, Human Capital, Relational Capital) and sustainable performance, the study delves into the complex parts of sustainability, including financial, social, and environmental aspects (Floyd et al., 2017). The essential research question driving this study is centered on assessing the effect of intellectual capital on sustainable performance.

2. LITERATURE REVIEW

2.1. Supporting Theory

Resource-based view theory argues that tangible and intangible assets can lead to the performance of a business, and this is more likely than in a knowledge economy, where intellectual resources become the paramount source of competitive advantage (Bontis et al., 2015; Zhang et al., 2018). In more detail, focusing on intellectual capital, Bontis et al. (1999) describe four principal dimensions: social capital, relational capital, human capital, and structural capital. Firstly, relational capital signifies the capacity to acquire knowledge through interactions with external stakeholders, suppliers, organizations, customers, and within the tourism sector, as explained by Denizci et al. (2010). Secondly, human capital encompasses the knowledge, skills, abilities, and

experience possessed by individuals within an organization, along with the potential value they bring to enhance the organization's productivity, innovation, and overall performance, as articulated by Denizci and Tasci (2010). Third, structural capital includes the organizational intangible assets that are not affected by employees leaving the organization, these assets are organizational culture, organizational image, databases, knowledge systems, software, hardware, trademarks, patents, and copyrights (Wang et al., 2014). Finally, social capital encompasses the relationships, networks, and trust that an organization cultivates with its stakeholders, both internal and external. Strong social capital facilitates knowledge sharing, collaboration, and innovation within and across organizations (Denizci et al., 2010).

2.2. Intellectual Capital and Strategic Ambidexterity in Process Innovation

Intellectual capital is thought of as one of the most persuasive components for planning and executing exploration and exploitation strategies at the same time. The elements of intellectual capital can help in fostering a comprehension of peculiarity (Pereira et al., 2024; Turner et al., 2015). As per Kang et al. (2012), the execution of the strategies necessitates high-quality intellectual capital, which includes employees who are skilled and knowledgeable. A capable and gifted representative can deal with numerous errands, and jobs and can act distinctively at various undertakings, which eventually makes the chance of carrying out exploration and exploitation (Dai, 2023; Kostopoulos, 2015). Qualified representatives relate to different assignments and allot assets as needed (Bozionelos & Kostopoulos, 2011). According to Bontis et al. (2015) intellectual capital has three main dimensions: human capital, structural capital, and relational capital.

2.2.1. Human Capital

Human Capital refers to the experience, skills, knowledge, and training of the organizational members (Rudez & Mihalic, 2007). The knowledge absorption capacity of an organization is positively influenced by human capital, as individuals can develop knowledge absorption capacity through the utilization of their current knowledge and skills (Huang & Wu, 2010; Khraishi et al., 2023). The participation of employees in skill-based training expands their skill set, and consequently, they more effectively achieve their targets (Engeman et al., 2017). The knowledge base of an organization can be expanded by inducting employees from diverse knowledge areas and skill sets (Daghfous, 2004). A well-qualified and knowledgeable employee can facilitate the development of novel knowledge that can not only be integrated with the existing knowledge base of the organization but can also be applied in improving organization processes. In this regard, human capital positively relates to the organizations' capacity to assimilate knowledge (Ahmed et al., 2019; Vătămănescu et al., 2023).

H1: Human Capital can positively influence the strategic ambidexterity in process innovation.

2.2.2. Relational Capital

The networking of an organization with environmental stakeholders is considered the relational capital of an organization, interactions with environmental stakeholders; increase knowledge sharing, knowledge integration, and knowledge transfer among different organizations. Moreover, it helps in the utilization of collective as well as individual knowledge (Alghamdi et al., 2023; Reiche et al., 2009). Social ties and close relationships among the environment and organizations can facilitate the process of knowledge transfer (Soo et al., 2017). Organizations can gain access

to useful knowledge by developing close relationships with external stakeholders and through socialization skills (Jansen et al., 2005; Tajpour et al., 2023). According to Seleim and Khalil (2011), organizations with effective relational capital can not only develop a new knowledge base but positively relate to integrate organizational processes accordingly.

H2: Relational Capital can positively influence strategic ambidexterity in process innovation.

2.2.3. Structural Capital

The structural capital of an organization consists of knowledge systems, procedures data bases, routines, software, and hardware (Shakil et al., 2023; Fu et al., 2016; Yaseen et al., 2023). The knowledge about organizations' existing infrastructure is rooted in the structural capital of the organization, which not only facilitates the process of knowledge utilization but also facilitates in integration of new knowledge (O' Reilly & Tushman, 2013). Moreover, organizations can design their culture in such a way that it can support learning activities, a learning-oriented culture enables employees to acquire, transform, apply, and share knowledge (Ahsan, 2024; Hsu & Fang, 2009). According to Lakshman et al. (2017), structural capital positively relates to simultaneously support the implementation of both exploration and exploitation.

H3: Structural Capital can positively influence the strategic ambidexterity in process innovation.

2.2.4. Social Capital

Social capital refers to the resources and benefits that individuals and organizations gain through their social networks and relationships (Khan et al., 2021). Within a network, the flow of information is made easier by social capital. People and groups with areas of strength with ties are bound to share knowledge and insights (Lefebvre et al., 2016; Peng, 2024). Social capital improves cooperation and coordination among various pieces of an association or with outer accomplices. Powerful cooperation is pivotal for coordinating assorted information and aptitude expected for both exploration and exploitation in the process innovation (Klar et al., 2018). Adaptable and versatile associations are better prepared to respond to environmental changes and carry out innovative processes effectively (Khan et al., 2021).

H4: Social Capital can positively influence the strategic ambidexterity in process innovation.

2.3. Strategic Ambidexterity in Process Innovation and Sustainable Performance

The ability to use a bi-dimensional peculiarity of associations' capacity to explore and exploit, was at first presented by Tushman (1996) and O'Reilly (1997). During the last ten years, scientists have exhibited a profoundly critical effect of organizational ambidexterity to use both hands in the present moment as well as in long-term organizational performance. Organizational ambidexterity ensures the organizational ability to explore and exploit simultaneously (Cao et al., 2009; He & Wong, 2004; Junni et al., 2013; Shi et al., 2024). Over the period, literature has considerably evolved and has reached the position where it dominates literature on innovative practices, organizational learning, and strategy (Abdollahi et al., 2023; Jansen et al., 2009; March, 1991; Vera & Crossan, 2004). However, the literature is unable to answer under what circumstances the ambidexterity in process innovation relates to the impact on sustainable performance.

2.3.1. Strategic Ambidexterity in Process Innovation and Economic Performance

Process innovation aims at improving the efficiency of existing operations. The exploitation aspect of ambidexterity focuses on refining and optimizing current processes, leading to cost reductions and resource efficiency (Annamalah et al., 2023; Bunduchi et al., 2011). Streamlined processes can contribute to lower production costs, improved resource allocation, and overall operational efficiency (Sanders, 2014). Strategic ambidexterity allows organizations to adapt to changing market conditions. While exploiting existing processes ensures stability, exploring new processes helps the organization stay ahead of market trends and respond effectively to shifts in customer preferences or competitive landscapes (Kafetzopoulos et al., 2023; Josephson et al., 2016).

H5: Strategic Ambidexterity in process innovation is positively associated with economic performance.

2.3.2. Strategic Ambidexterity in Process Innovation and Social Performance

Ambidextrous organizations partake in both exploratory and exploitative activities, permitting them to update their processes (Waseel et al., 2024). According to Khan et al. (2021), process innovation can be planned to determine environmental and social issues, overhauling supportable and socially mindful strategic policies. Ambidextrous associations are normally more versatile and adaptable. This versatility empowers them to answer effectively to social changes and create suppositions, orchestrating the relationship as socially proficient and responsive to social necessities (Mardi et al., 2018). An organization's overall social performance positively relates improved through socially responsible initiatives and positive workplace practices (Fosu et al., 2024; Ortas et al., 2015).

H6: Strategic Ambidexterity in process innovation is positively associated with social performance.

2.3.3. Strategic Ambidexterity in Process Innovation and Environmental Performance

The exploitation aspect of ambidexterity focuses on working on existing processes and operations. This can prompt proficiency gains, lessening asset utilization and waste age. Smoothing out tasks through exploitation can add to an all-the-more environmentally sustainable use of resources (Peters & Buijs, 2022). The exploration aspect of ambidexterity includes looking for novel thoughts and approaches. Associations can investigate and embrace creative environmental practices that decrease their biological impression. This could include the presentation of cleaner innovations, energy-productive cycles, or supportable obtaining rehearses (Mardi et al., 2018). Exploration might prompt the distinguishing proof of new materials or cycles that are more effectively recyclable, adding to a rounder economy (Hannon & Zaman, 2018).

H7: Strategic Ambidexterity in process innovation is positively associated with environmental performance.

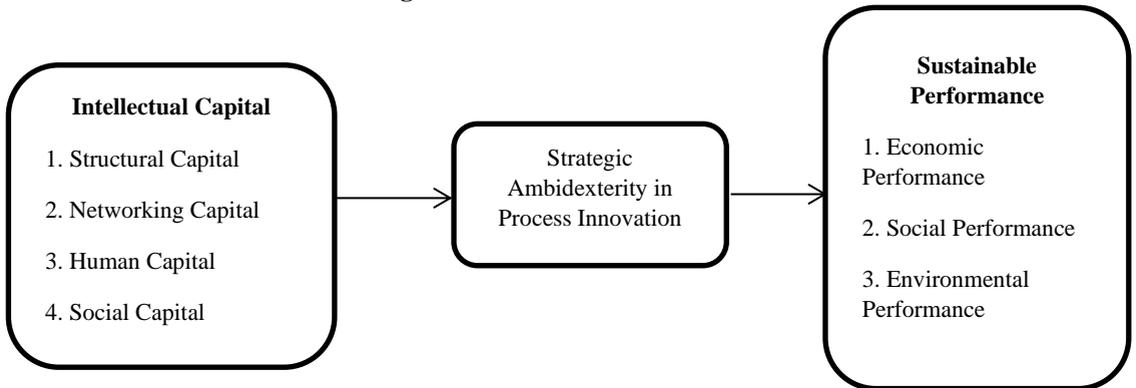
2.4. Mediating Role of Strategic Ambidexterity in Process Innovation Between Intellectual Capital and Sustainable Performance

Numerous researchers have featured the integration of ambidexterity explicitly in the process of decision-making (Armenia et al., 2024; Shepherd et al., 2023; Slater et al., 2006). In addition, researchers have emphasized the significance of simultaneously implementing strategies for exploitation and exploration for long-term performance (Ou et al., 2018). Strategically handling the peculiarity of exploration and exploitation can save associations from over-underscoring exploration which might prompt a disappointment trap (Walk, 1991). Researchers have likewise

demonstrated that associations can accomplish sustainable performance on the off chance that associations can develop ambidextrous orientations strategically (Heavey & Simsek, 2017; Zahoor et al., 2024; Zhou et al., 2018). Associations should focus on sustaining strategic foresight, which will uphold in figuring out and carrying out ambidextrous strategy (Amniattalab & Ansari, 2016; Doz & Kosonen, 2010; George, 2024). Intellectual capital is thought of as one of the most persuasive components for planning and implementing exploration and exploitation strategies simultaneously. Intellectual capital dimensions can help develop an understanding of the phenomenon (Turner et al., 2015).

H8: Strategic Ambidexterity in process innovation can mediate between Intellectual Capital and Sustainable performance.

Figure 1: Theoretical Framework



Source: Authors' Own Work

3. METHODOLOGY

3.1. Sample and Data Collection

The main concern of this study is to investigate the impact of intellectual capital on the sustainable performance of green hotels in Pakistan. Therefore, the hotels were selected based on their star ranking and the study has selected two stars and above hotels in Pakistan for data collection. The unit of analysis was the two-star or above-ranking hotels in Pakistan and having at least two years of working experience. Convenience sampling technique was used to collect the data because questionnaires were also distributed to managers working in hotels through online sources such as WhatsApp, QR codes, and email, where 427 out of 500 questionnaires were returned, and due to missing data, only 385 were chosen for applying the structural equation modeling through smart PLS. According to Ali et al. (2018), for the Hotel industry, Smart PLS has been considered as a credible estimation technique for data analysis, so following the trend current study has also used Smart PLS for data analysis. This was also selected because, according to Rasoolimanesh and Ali (2018), the intelligent PLS is one of the most standard estimation techniques in hotel industry data analysis. In line with this industry trend, the present study also utilized smart PLS for data analysis.

Additionally, according to Krejcie and Morgan (1970), a minimum of 380 sample sizes was enough to test the concern hypothesis.

3.2. Measures

The measurement instruments employed in this survey were constructed based on constructs and scales drawn from previous research studies. To assess intellectual capital, an adapted 20-item scale from (Ahmed & Wang, 2019; Akintimehin et al., 2019; Cai et al., 2019; Duan et al., 2022) was utilized as the independent variable. This scale was further subdivided into four sub-scales: human capital (consisting of 4 items), relational capital (comprising 6 items), structural capital (consisting of 6 items), and social capital (comprising 4 items). Respondents provided their responses using a 5-point Likert scale, ranging from 1= Strongly Agree to 5= Strongly Disagree. Secondly, to gauge the strategic ambidexterity in process innovation, a 6-item scale adapted from Peters and Buijs (2022) was employed. The responses were averaged to generate an overall measure of impact. Lastly, to assess sustainable performance, a 12-item scale adapted from Khan et al. (2021); Khan et al. (2022); Úbeda-García et al. (2022) was used as a measurement tool in the study. This scale was further subdivided into three sub-scales: economic performance (consisting of 4 items), social performance (comprising 4 items), and environmental performance (comprising 4 items).

4. RESULTS AND DISCUSSION

The validity was assessed because of reliability, factor loading, and average variance. Except for a few factors, almost all the factor loading values exceeded the recommended value of 0.60, as shown in table 1 and figure 2. Then again, the composite reliability value has likewise been according to the suggested worth of 0.70. The analysis likewise showed that every one of the upsides of the average variance extract is additionally in the scope of 0.50 (Hair et al., 2016).

4.1. Convergent Validity

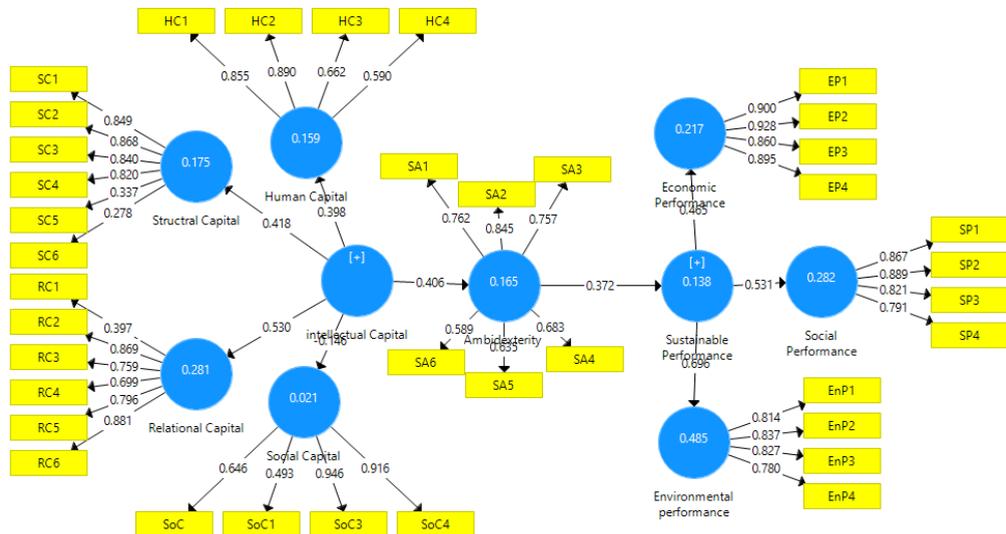
The evaluation of the structural and measurement models was done utilizing statistical software known as Smart Partial Least Squares (Smart-PLS). In PLS, the factor loadings related to each construct are used to check the reliability of these constructs. Following data collection, an assessment of the study's variables was directed to determine their reliability and consistency. The reliability analysis yielded good outcomes, as shown in table 1, where all constructs displayed composite reliability values surpassing 0.7 and Cronbach's alpha values surpassing 0.6 (Hair et al., 2019). Moreover, factor loadings were utilized to measure the extent of fluctuation of variables on their separate element. Composite reliability and average variance extract (AVE) were used to evaluate it further. The AVE edge, as shown in table 1 and figure 1, was set at 0.500. The AVE values of all items, which ranged from 0.503 to 0.740, were notable for exceeding this threshold. As a result, the current research has demonstrated sufficient convergent validity.

Table 1: Cronbach’s Alpha

Variable	Dimensions	Items	Loading	Alpha	CR	AVE
Sustainable Performance	Economic Performance	EP1	0.900	0.918	0.942	0.803
		EP2	0.928			
		EP3	0.860			
		EP4	0.895			
	Environmental Performance	EnP1	0.814	0.831	0.888	0.664
		EnP2	0.837			
		EnP3	0.827			
		EnP4	0.780			
	Social Performance	SP1	0.867	0.865	0.907	0.711
		SP2	0.889			
		SP3	0.821			
		SP4	0.791			
Human Capital	HC1	0.855	0.773	0.841	0.577	
	HC2	0.890				
	HC3	0.662				
	HC4	0.590				
Intellectual Capital	Relational Capital	RC1	0.397	0.833	0.881	0.565
		RC2	0.869			
		RC3	0.759			
	RC4	0.699				
	RC5	0.796				
	RC6	0.881				
Structural Capital	SC1	0.849	0.790	0.844	0.507	
	SC2	0.868				
	SC3	0.840				
	SC4	0.820				

		SC5	0.837			
		SC6	0.778			
		SoC1	0.646			
	Social Capital	SoC2	0.493	0.799	0.849	0.598
		SoC3	0.946			
		SoC4	0.916			
		SA1	0.762			
		SA2	0.845			
	Strategic	SA3	0.757			
	Ambidexterity	SA4	0.683	0.824	0.862	0.514
		SA5	0.635			
		SA6	0.589			

Figure 2: Measurement Model Assessment



Source: Authors' Own Work

4.2. Discriminant Validity

An advanced technique was proposed by Henseler et al. (2015) HTMT ratio to assess the discriminant validity and the Fornell Larcker criterion was considered as a credible source of checking discriminant validity. Table 3 indicates that all the values of the HTMT ratio are under 0.90 which is an acceptable range as indicated by Dayan et al. (2017). Therefore, the study claims that it has established the discriminant validity for all the constructs.

Table 2: Discriminant Validity

Variable	Strategic Ambidexterity	Economic Performance	Environmental performance	Human Capital	Relational Capital	Social Capital	Social Performance
Strategic Ambidexterity							
Economic Performance	0.446						
Environmental performance	0.478	0.563					
Human Capital	0.634	0.828	0.449				
Relational Capital	0.43	0.578	0.686	0.487			
Social Capital	0.131	0.139	0.192	0.189	0.255		
Social Performance	0.396	0.553	0.786	0.491	0.607	0.160	
Structural Capital	0.993	0.585	0.516	0.747	0.525	0.179	0.522

4.3. Structural Model Assessment

The researcher utilized regression analysis to research the connection between variables. This analytical approach, frequently alluded to as predictive analysis, uses the broadly involved technique for linear regression in research. The point was to survey the immediate effect of the independent variable on the dependent variable. In the underlying period of this segment, linear regression analysis was led to prove the exploration speculation. Accordingly, in the subsequent stage, intercession analysis was directed utilizing PLS-SEM. Riggle et al. (2005) introduced Smart

PLS's bootstrapping procedure for hypothesis testing, the table below indicates that all the hypotheses were supported. Table 3 and figure 3 reveal that the variable's significance level is less than .005, indicating its statistical significance in predicting the outcome variable. For structural model assessment, the significance of the model is measured through *t* value, standard errors, and coefficient.

Table 3: Summary of Hypothesis Testing

Hypothesis	Relationship	Beta	SD	t-value	P-values	Decision
H1	Human Capital -> Strategic Ambidexterity	0.398	0.024	16.757	0.000	Supported
H2	Relational Capital -> Strategic Ambidexterity	0.530	0.023	23.105	0.001	Supported
H3	Structural Capital -> Strategic Ambidexterity	0.418	0.021	19.979	0.000	Supported
H4	Social Capital -> Strategic Ambidexterity	0.146	0.023	16.345	0.000	Supported
H5	Strategic Ambidexterity -> Economic Performance	0.465	0.024	19.222	0.002	Supported
H6	Strategic Ambidexterity -> Social Performance	0.531	0.026	20.202	0.001	Supported
H7	Strategic Ambidexterity -> Environmental Performance	0.696	0.018	38.942	0.000	Supported
H8	Intellectual Capital -> Ambidexterity -> Sustainable Performance	0.151	0.014	10.418	0.003	Supported

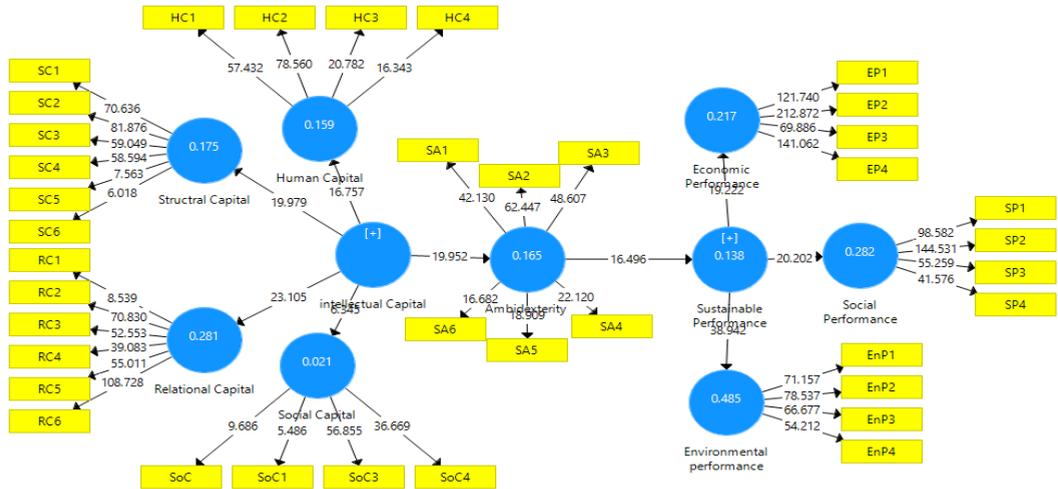
As table 3 illustrates and figure 3, all direct relationships are statistically significant, meeting the prerequisites for conducting the test, except for one condition. Table 3 provides an overview of the findings related to H1-H8. The findings illustrate a notably positive influence of intellectual capital on strategic ambidexterity in process innovation, as evidenced by the substantial direct effect of human capital on strategic ambidexterity ($\beta = 0.398$, $t = 16.757$, $p > .005$), the significant direct effect of relational capital on strategic ambidexterity ($\beta = 0.530$, $t = 23.105$, $p > .005$), the positive and significant effect of structural capital on strategic ambidexterity ($\beta = 0.418$, $t = 19.979$, $p < .005$), and the significant direct effect of social capital on strategic ambidexterity ($\beta = 0.146$, $t = 16.345$, $p > .005$). Consequently, H1, H2, H3, and H4 are supported. The results are supported by existing research (Kostopoulos, 2015), indicating that a well-qualified workforce can contribute to the assimilation of knowledge, supporting the proposed hypothesis (H1). Secondly, existing research on the importance of relationships with external stakeholders supports hypothesis (H2) (Seleim & Khalil, 2011), reinforcing the idea that effective relational capital contributes to the development of a new knowledge base and the integration of organizational processes. Third, structural capital is considered essential for supporting the implementation of both exploration and exploitation. This research (Lakshman et al., 2017) supports H3, highlighting the importance of organizational infrastructure in facilitating knowledge utilization and integration. Fourth, results

for H4 align with existing research (Khan et al., 2021), supporting the idea that social capital enhances collaboration and coordination, positively impacting strategic ambidexterity.

Moreover, table 3 also provides insights into the impact of strategic ambidexterity on sustainable performance. The results reveal a positive influence of strategic ambidexterity in process innovation on sustainable performance, as evidenced by the substantial direct effect of strategic ambidexterity on economic performance ($\beta = 0.465$, $t = 19.222$, $p > .005$), the significant direct effect of strategic ambidexterity on social performance ($\beta = 0.531$, $t = 20.202$, $p > .005$), and the positive and significant effect of strategic ambidexterity on environmental performance ($\beta = 0.696$, $t = 38.942$, $p < .005$). Consequently, H5, H6, and H7 are supported. The results also agreed with existing literature such as the exploration and exploitation of processes contribute to efficiency gains, cost reductions, and improved resource allocation. This lines up with existing research (Josephson et al., 2016), supporting the hypothesis (H5) that strategic ambidexterity positively influences economic performance. Also, ambidextrous associations are viewed as more versatile and adaptable, permitting them to answer social changes and assumptions. This lines up with existing research (Mardi et al., 2018), supporting the hypothesis (H6) that strategic ambidexterity decidedly impacts social performance. Third, the exploration and exploitation of processes can prompt productivity gains, waste decrease, and the reception of environmentally sustainable practices. This lines up with existing research (Hannon & Zaman, 2018), supporting the hypothesis (H7) that strategic ambidexterity positively influences environmental performance.

Furthermore, to evaluate the significance of the mediating effect, the outcomes accordingly affirm the meaning of these mediating impacts. As depicted in table 3, strategic ambidexterity in process innovation applies to a mediating role in the connection between intellectual capital and sustainable performance. All the more explicitly, strategic ambidexterity to use in process innovation decidedly improves the connection between intellectual capital and strategic ambidexterity ($\beta = 0.151$, $t = 10.418$, $p < .005$). Finally, H8 is supported, and these results are consistent with previous research (Zhou et al., 2018).

Figure 3: Structural Model Assessment



Source: Authors' Own Work

5. CONCLUSION

The findings of this study offer significant help for the proposed hypothesis, revealing insight into the complicated connections between intellectual capital, strategic ambidexterity in process innovation, and sustainable performance. The immediate connections investigated in this examination uncover critical positive effects, adding to the comprehension of how explicit elements of intellectual capital influence strategic ambidexterity, and how strategic ambidexterity subsequently affects economic, social, and environmental performance. The findings show that intellectual capital has a significant impact on the development of strategic ambidexterity in process innovation. Human capital, with its complement of capacities and data, basically adds to the organization's ability to research and take advantage simultaneously. Furthermore, social capital, relational capital, and structural capital show huge productive results on strategic ambidexterity. These results line up with existing research, supporting the possibility that a capable workforce, reasonable relationship with external accomplices, a commendable progressive system, and an association of strong social ties are principal parts of achieving strategic ambidexterity. The study adds to the collection of data by offering precise assistance for these associations and complementing their significance in process innovation. An organization of strong social ties, a robust hierarchical structure, and powerful relationships with outside partners all play important roles in improving cooperation, information combination, and coordination.

Besides, the study concerning the impact of strategic ambidexterity on sustainable performance uncovers a positive connection. The immediate effects of strategic ambidexterity on economic, social, and environmental performance feature its part in updating efficiency, adaptability, and environmentally sustainable practices. These findings line up with existing literature, supporting the hypothesis that strategic ambidexterity positively influences economic, social, and

environmental performance. The study's findings give strong proof to the positive impact of strategic ambidexterity in process innovation on sustainable performance. The exploration and exploitation of processes positively impact economic, social, and environmental dimensions of performance.

Crucially, the study introduces and substantiates the mediating role of strategic ambidexterity in the relationship between intellectual capital and sustainable performance. The positive mediating effect highlights that strategic ambidexterity serves as a critical link between the intellectual capital of an organization and its overall sustainable performance. This research significantly contributes to the existing body of knowledge by providing empirical evidence supporting the proposed relationships.

The study not only approves the theoretical framework linking intellectual capital, strategic ambidexterity, and sustainable performance but also offers viable experiences for associations trying to upgrade their innovative capacities and manageability. These discoveries underline the essential significance of scholarly capital aspects and the cultivating of the ability to use directions in getting through progress in the present dynamic and competitive business environment.

5.1. Theoretical Implications

First, the study underscores the influential role of intellectual capital, including human, relational, structural, and social capital, in shaping the strategic ambidexterity of green hotels. This emphasizes the theoretical importance of intellectual capital for RBV as a strategic driver for organizations operating in the sustainable hospitality sector.

Secondly, the findings feature the interconnectedness of various components of intellectual capital. As described by RBV, an organization's capacity to simultaneously explore and exploit processes is aided by its social capital, relational capital, structural capital, and human capital. This emphasizes the necessity of a comprehensive comprehension of intellectual capital when developing green hotel strategies theoretically.

Third, the study establishes that the strategic ambidexterity in process innovation positively influences economic, social, and environmental dimensions of sustainable performance. This knowledge recommends that adopting an RBV and ambidextrous orientation can go about as an impetus for sustainability in the neighborliness business, encouraging long-term achievement.

Fourth, the presentation and approval of the mediating role of strategic ambidexterity in the relationship between intellectual capital and sustainable performance add to discussions on the pathways through which intellectual capital impacts results. This features the dynamic and complex nature of the connection between organizational capabilities and overall sustainability.

Fifth, the theoretical framework approved by the study offers useful experiences. It recommends that interest in intellectual capital, along with a strategic focus on ambidextrous processes, can bring about economic, social, and environmental performance. This gives a guide to green hotel practitioners to adjust their essential drives to feasible practices.

5.2. Practical Implications

First, associations holding sustainable performance at green hotels ought to perceive the worth of intellectual capital. This suggests putting resources into the turn of events and maintenance of a very capable workforce, cultivating associations with outer partners, keeping up with the vigorous hierarchical framework, and supporting social ties inside and outside the association.

Second, embracing process innovations that are adaptable and versatile is essential for green hotels. This includes empowering vital dexterity inside the association, permitting it to answer changing conditions successfully. Furthermore, executing situation arranging and possibility techniques empower fast arrangement with arising open doors or dangers, adding to sustained performance.

Third, to improve sustainable performance, associations ought to cultivate a culture that values both development and productivity at green hotels. Representatives ought to be urged to embrace change and adjust to new difficulties. Assembling and supporting associations with outside partners is vital, adding to the advancement of social capital, which can decidedly influence development and in general authoritative execution.

Fourth, for valuable tacit and explicit knowledge to be captured and disseminated within the organization, robust knowledge management systems must be developed and maintained. Empowering workers to effectively share their insights and encounters establishes a climate helpful for persistent learning and development.

5.3. Limitations and Future Research Directions

Like other research, the current study has some limitations that should be taken into consideration in the future. In the first place, the review focused on two-star or more positioning hotels in Pakistan, possibly restricting the generalizability of study's findings to more modest or lower-positioned foundations. A more extensive strategy, enveloping a more extensive scope of hotels, could offer a more complete comprehension of the connection between intellectual capital and sustainable performance in the green hotels business. Furthermore, the data collection technique depended on self-responded responses from hotel supervisors, presenting the chance of reaction inclination. Future research could benefit from consolidating different data collection tools, like employee perspectives or performance metrics, to upgrade the unwavering quality and legitimacy of the findings. Third, the study is based on a cross-sectional survey, catching a depiction of the connection between intellectual capital and sustainable performance. A longitudinal methodology could give experiences into the elements of this relationship after some time, offering a more nuanced comprehension of the effect of intellectual capital on sustainable performance. Future analysts are urged to examine potential intervening variables that could impact the connection between intellectual capital and sustainable performance in green hotels. For instance, organizational culture, innovation climate, or specific sustainability practices could be investigated as middle people to give a more exhaustive comprehension of the components. Moreover, conducting study across various businesses or areas to survey varieties in the effect of intellectual capital on sustainable performance. Strategies and best practices specific to an industry could be influenced by gaining an understanding of the various contexts in which intellectual capital contributes to sustainability. Furthermore, stretch out the exploration to envelop a worldwide viewpoint, contrasting the effect of intellectual capital on sustainable performance in hotels across

various districts. This could add to a more exhaustive comprehension of the elements impacting supportability rehearses in the worldwide neighborliness industry.

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