

# **Corporate Entrepreneurship And Customer Satisfaction: Studying The Paradox Concerning Government-Level Firms From Pakistan**

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## **Abstract**

Lack of research is directed towards the understanding of corporate entrepreneurship with respect to the government-level companies. This gap becomes serious point of concern when we observed corporate entrepreneurship with reference to the developing sides of the world. Moreover, very few studies tried to explore the association between corporate entrepreneurship and customer satisfaction. Hence, this study is purposively conducted to understand the impact of corporate entrepreneurship over customer satisfaction. Data for this study has been collected from managerial level employees of state owned firms and analysis has been made through using SMART-PLS. Findings of the study revealed that there is a substantial impact of corporate entrepreneurship on strategic entrepreneurship of government level companies. Hence, these state-owned companies may also be lure with this unique combination and foster the level of customer satisfaction.

**Keywords:** Corporate Entrepreneurship, Customer Satisfaction, Paradox, Government-Level Firms

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## **INTRODUCTION**

Entrepreneurship has now become a pivotal part of society. In recent times the importance of entrepreneurship cannot be ignored as it's now an integral part of individual and corporate businesses. Therefore, the race of today's world is to be more entrepreneurial in actions and strategies to outwit the competition and survive in this competitive world (Minafam, 2019). Therefore, researchers observed significant development in the topic of entrepreneurship. Significant development in the understanding of entrepreneurship and entrepreneurial behaviour brings massive change in the mindset of individuals which is making researchers concentrate more on the organisational perspective of entrepreneurship (Entebang & Harrison, 2019). Therefore, corporate entrepreneurship (CE) is perceived as one of the most important organisational strategies to increase organizational performance and manage le Entrepreneurship

now becomes a pivotal part of society. In recent times the importance of entrepreneurship cannot be ignored as it's now an integral part of individual and corporate businesses. Therefore, the race of today's world is to be more entrepreneurial in actions and strategies to outwit the competition and survive in this competitive world (Minafam, 2019). Therefore, researchers observed significant development in the topic of entrepreneurship. Significant development in the understanding of entrepreneurship and entrepreneurial behaviour brings massive change in the mindset of individuals that is making researchers concentrate more on the organisational perspective of entrepreneurship (Entebang & Harrison, 2019).

Therefore, corporate entrepreneurship (CE) is perceived as one of the most important organisational strategies to increase organisational performance and manage the level of customer loyalty (Hasanin, 2018). Therefore, the significance of corporate entrepreneurship is unquestionable and the use of this strategy is perceived as a guarantee for the increase of a firm's long-term performance (Umrani et al., 2016).

According to research firms are required to implement corporate entrepreneurship to match the pace of change and sustain in this highly competitive world. Corporate entrepreneurship may also optimise firm performance and provide a sustainable competitive edge to the firm (He et al., 2020). Research is also evidencing a significant change in the dynamics of corporate entrepreneurship. This point can be conceptualised by considering the evolution of corporate entrepreneurship in mind that came into limelight in 1980 due to a massive focus towards the area due to its ability to provide holistic benefits. However, there were some researchers who denied the claim that corporate entrepreneurship may work effectively for established and large-sized firms. However, most of the researchers are found to be aligned with the claim that corporate entrepreneurship is very important for the increase of firm performance and competitiveness (Minafam, 2019). He et al (2020) also mentioned that in recent government-level companies have leveraged to arrange required resources due to their ability to control market and pricing mechanisms. Hence, there is a need for systematic research in order to understand the use and significance of corporate entrepreneurship strategy for government-level firms.

### **Theoretical Framework**

Resource-Based View is one of the major theories that signifies the importance of corporate entrepreneurship to make a firm competitive enough to survive in society. Hence, established firms may pursue formal or informal methods to foster revenue growth, optimise business development and push revenue streams. Similarly, use of strategic entrepreneurship as the mediating variable is also based upon the resource-based theory that highlights the development of resources, actions and policies for the long-term orientation and growth of the organisation (Ziyae & Sadeghi, 2020) & level of customer loyalty (Hasanin, 2018).

Therefore, the significance of corporate entrepreneurship is unquestionable and the use of this strategy is perceived as a guarantee for the increase in a firm's long-term performance (Umrani et al., 2016)

### **Statement of Problem**

Ziyae and Sadeghi (2020) highlighted that it is optimal to study corporate entrepreneurship with reference to the developing sides of the world. On the other hand, most of the previous studies do not explore the mediating role of strategic entrepreneurship. Hence, the use of strategic entrepreneurship as the mediator of corporate entrepreneurship must be used to assess new avenues

and research dimensions. One of which is customer satisfaction that was reflected by Hasanin (2018) but the dimension has not been explored in an appropriate manner. Customer satisfaction is also required to be explored effectively, especially in a post-pandemic world in which evidence from developing markets would be substantial (Lanke & Varsha Paul, 2022). The requirement of study may become substantial when we consider Abu Raya et al (2023) and Ferrentino and Boniello (2020) who highlighted that corporate entrepreneurship may not cause an increase in the level of customer satisfaction. Hence, conducting the study on the indirect relationship of corporate entrepreneurship with customer satisfaction may address multiple research gaps.

### **Research Model & Significance of the Study**

The model of this study is a combination of multiple studies i.e., Minafm (2019); Hasanin (2018) and Ziyae and Sadeghi (2020). Hence, uses corporate entrepreneurship as the only predicting variable, strategic entrepreneurship as the mediator and customer satisfaction as the outcome variable. Previously studies e.g., Guth and Gisberg (1990) and Ziyae & Sadeghi (2020) use strategic entrepreneurship as the mediating variable. However, none of these use strategic entrepreneurship as the mediator between corporate entrepreneurship and customer satisfaction which is one of the main outcome variables of corporate entrepreneurship as indicated by Hasanin (2018). Therefore, this study is the foundation study that has been conducted to understand the indirect impact of corporate entrepreneurship on customer satisfaction. Hence, this study must be treated as pervasive research as it has the ability to contribute effectively in flourishing research work, improvement of understanding and provide means for better policy making.

### **Major Research Questions**

**RQ1:** What is Corporate Entrepreneurship?

**RQ2:** What is Customer Satisfaction?

**RQ3:** What is the reason for the association between Corporate Entrepreneurship and Strategic Entrepreneurship?

**RQ4:** How to measure the relationship between corporate entrepreneurship and customer satisfaction?

## **LITERATURE REVIEW**

Corporate Entrepreneurship termed as the creative ability of individuals and teams associated with any organisation to facilitate change, innovation or renewal within the organisation. According to the literature, there are two major but complementary features of corporate entrepreneurship i.e., strategic entrepreneurship and new business venturing. Strategic Entrepreneurship is defined as the recognition of creative actions in organisational work processes while new venturing is associated with the formation of entirely new firms (Abdissa et al., 2021). Hence, associating this study with customer satisfaction means that this study is trying to explore the difference between customers' expectations and customers' perceptions of the firm's performance. In short, customers will never be satisfied with the firm's offerings until or unless the products or services are better than the competition (Ratnasari et al., 2018). Therefore, in line with the indications of Hasanin (2018) level of customer satisfaction is one of the valid dimensions to be evaluated as the result of corporate entrepreneurship.

### **Corporate Entrepreneurship and Strategic Entrepreneurship:**

Johanna de Villiers-Scheepers (2012) indicated that firms are required to relate corporate entrepreneurship and pertaining tactics effectively with the strategic entrepreneurship to yield optimal outcomes. Hence, small and large companies are required to integrate strategic entrepreneurship in the corporate-level strategies (Ketchen et al., 2007). Similarly, Franco and Verde (2022) also indicated that firms are required to adapt and reconfigure resources to position themselves with a sustainable competitive advantage. However, the achievement of sustainable competitive advantage is not possible without relating corporate entrepreneurship strategy to strategic entrepreneurship.

**H1A:** A Positive Linkage exists between corporate entrepreneurship of government-level firms and Strategic entrepreneurship of government-level firms

### **Strategic Entrepreneurship and Customer Satisfaction:**

Hitt et al. (2012) indicated that a linkage among the innovative practices within the framework of strategic management is one of the major sources behind the customer engagement and customer engagement. Other studies also signify the importance of customer satisfaction that makes researchers to consider the requirement of strategic entrepreneurship for the optimisation of customer satisfaction (Kantur, 2016). A similar point is valid for the large-sized firms that are always trying to increase the level of customer satisfaction. Hence, using strategic entrepreneurship is one of the most important factors to foster the level of customer satisfaction. (Tsai & Lei, 2016). These findings are also supported by one of the latest studies Ihochukwu et al (2024) that strategic entrepreneurship is a vital tool for the optimisation of a firm's performance that ultimately results in improved customer satisfaction.

**H2A:** A Positive Linkage exists between the Strategic entrepreneurship of government-level firms and customer satisfaction in government-level firms

### **Corporate Entrepreneurship and Customer Satisfaction**

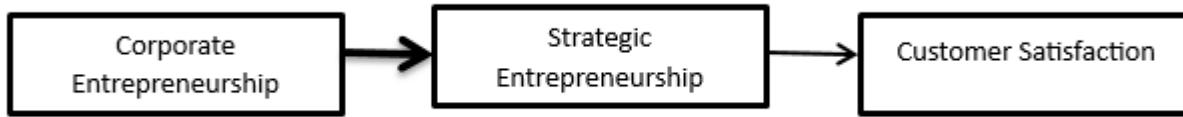
Organisations are always in search of methods through which they may be able to optimise customer satisfaction. Hence, it would be better to devise a customer-focused strategy that is derived through corporate entrepreneurship in order to increase the level of customer satisfaction in an optimal manner (Hidayat et al., 2025). Similar has also been reflected through the study of Nusantari et al. (2024) that the level of organisational innovation will always result in the optimisation of a firm's offerings that will ultimately result in an increase in customer satisfaction.

### **Corporate Entrepreneurship, Strategic Entrepreneurship and Customer Satisfaction:**

Corporate Entrepreneurship is helpful for the optimisation of operational performance and adaptability which ultimately results in the increase of customer satisfaction (Nadhiva et al., 2024). However, it is better to use corporate entrepreneurship in association with strategic entrepreneurship in order to foster firm performance and its competitive advantage. Similarly, it is also legitimate to believe that the combination of corporate entrepreneurship with strategic entrepreneurship will also result in better customer experience (Hidayat et al., 2025)

**H3A:** Strategic Entrepreneurship mediates between corporate entrepreneurship in government-level firms and customer satisfaction in government-level firms.

### Schematic Model



**Figure 1:** Schematic Model

## RESEARCH METHODOLOGY

Research Methodology is the section of research that has multiple functions as this section is purposively developed to highlight the parameters and points that are used to develop a study along with the reason and importance to use specific parameters in the study (Kothari, 2004). Hence, research methodology must be divided into two separate sections i.e., research design and sampling design as indicated by Sekaran and Bougie (2016). Hence, it is optimal to discuss the research methodology of this study in two separate sections.

### Research Design:

Research Design is the section of research methodology that ensures all research processes are gelled together in an efficient manner for conducting research in a thorough manner. Hence, the appropriate design choices would be taken to induce significance of the research (Brown, 2022). However, it is better to consider Saunders et al (2007) and Saunders et al (2015) to discuss research design most efficiently. Saunders et al (2007) mentioned that epistemology is the most suited research philosophy which is perceived as the philosophy of knowledge is used to conduct research in less or underexplored areas, arenas and locations. The philosophical stance related to research is post-positivism (Saunders et al., 2015) which is mostly associated with quantitative research designs (Ryan, 2006). The research approach used in this study is deductive, the research strategy is a survey and the methodological choice is mono-method quantitative as indicated by Saunders et al (2017).

These are the ways used by multiple studies on the topic of corporate entrepreneurship i.e., Hasanin (2018), Sultan et al (2021); Umrani et al (2018) and Umrani et al (2022) etc. However, the data has been collected with the convenience of the respondent through using Google Docs which can be filled out by an appropriate candidate from anywhere. Thus, the study setting is non-contrived, the unit of analysis was individual, the time horizon was cross-section and the research instrument used in the study is a structured closed-ended questionnaire.

### Sampling Design

The sampling type used in this study is non-probability and the method of sampling is Quota Sampling. Similar techniques and methods are employed by previous studies on the topic of

corporate entrepreneurship, i.e., Sultan et al., (2023); Sultan et al (2021); Umrani et al (2018) and Umrani et al (2022) etc. However, the sample size of the study is based upon Malhotra (2007) who claims that sample size must be achieved by multiplying indicators related to every construct of research by at least five. Therefore, the workable sample size of this study is  $15 \times 5 = 75$ . However, in order to proceed effectively we extended the sample size up to 120 middle and senior-level managers working in government-level companies i.e., Pakistan International Airlines, Pakistan Customs and State-Life Insurance Corporation of Pakistan.

### **Research Instrument**

Research Instrument used in this study is a closed-ended structured questionnaire. A similar strategy is used to collect data by most of the researchers who conduct their investigation concerning asian countries e.g., Hasanin (2018); Umrani et al (2016); Umrani et al (2019); Ziyae and Sadeghi (2020) and Rehman et al (2023) etc. However, most of the parameters are adapted from Umrani et al (2016); Umrani et al (2019) and Ziyae and Sadeghi (2020). The research instrument used in this study is based upon a five-point Likert scale that was also transformed into a Google document (Google Docs) in order to collect responses in a cost-effective manner.

## **STATISTICAL TESTING AND ANALYSIS**

The study of He et al (2020) related to corporate entrepreneurship strategies of government-level companies uses SPSS to apply regression on the basis of secondary data. However, in Pakistan, it is very difficult to retrieve financial data of government-level companies (Saxena & Muhamad, 2018). However, conducting a study using the reference of Ziyae and Sadeghi (2020) would be substantially better not only because it uses strategic entrepreneurship as the mediating variable but also due to the use of structural equation modelling through SMART-PLS to assess results in an adequate and better manner. SMART-PLS is one of the modern software programs that is developed to execute complex statistical operations in an effective and easy manner. SMART-PLS takes the support of structural equation modelling (SEM) to solve complex research models (Chidambaram, 2021). SMART-PLS uses two different models i.e., outer (structural) model and inner (measurement) model for effective and efficient assessment (Wong, 2013). Assessment is initiated with the outer model and ends with the understanding of the association associated with the inner model. The purpose of the outer model is to make readers understand the association between latent variables and their observed indicators (Ab Hamid et al., 2017). The assessment of inner models is about the relationship between latent variables (Wong, 2013). Hence, the software becomes able to highlight all the essential paths and associations in the research model (Vijaybanu & Arunkumar, 2018).

Table 1 reflects some of the important measures of descriptive statistics e.g., outer loading, Cronbach's Alpha, Goldstein rho and Average Variance Extracted (AVE). Afthanorhan (2013) and Sultan et al (2024) highlighted that outer loading values lie between 0 and 1. The value of every indicator is the reflection of the reliability and authenticity of the indicator. Hence, the minimum acceptable value for the authenticity of an indicator is 0.70 and indicators below the value of 0.70 may be deleted to increase overall convergent validity. On the other side the range of all the measures related to internal consistency i.e., Cronbach's Alpha, Goldstein rho and Average Variance Extracted is also between 0 & 1 (Ab Hamid et al., 2017).

Table 1 also contains outer loading, convergent validity and AVE that are used to highlight convergent validity (Adeleke et al., 2015). However, if the values of AVE are found to be 0.50 or

**Corporate Entrepreneurship And Customer Satisfaction: Studying The Paradox Concerning Government-Level Firms From Pakistan**

higher than these values are substantial to reflect convergent validity (Ab Hamid et al., 2017). Therefore, in line with these indications, it is appropriate to believe that Table 1 substantially indicates internal consistency, composite reliability and convergent validity.

**Table 1: Outer Loading, Construct Reliability & Convergent Validity**

Variable	Outer Loading	Cronbach's Alpha	Goldstein rho	Composite Reliability	AVE
Corporate Entrepreneurship	0.763	0.871	0.921	0.903	0.653
	0.888				
	0.848				
	0.718				
	0.811				
Strategic Entrepreneurship	0.979	0.994	0.995	0.995	0.976
	0.987				
	0.995				
	0.987				
	0.991				
Customer Satisfaction	0.970	0.983	0.991	0.987	0.938
	0.973				
	0.956				
	0.963				
	0.980				

**Figure 2: Outer Loading and CFA**

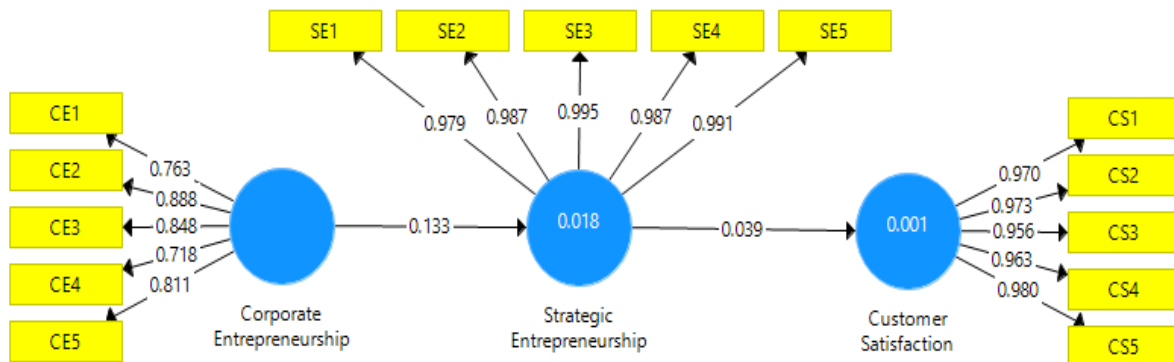


Table 2 is the reflection of the Heterotrait-Monotrait Ratio. According to research Heterotrait-Monotrait ratio is the indication that variables used in the study are mutually exclusive not only concerning quantitative dimensions but also concerning theoretical dimensions (Malik et al., 2021). Research highlighted Heterotrait-Monotrait ratio as the best measure to indicate discriminant validity if the values do not exceed 0.85 (Hair et al., 2019). Therefore, considering Table 2 it is optimal to believe that Table 2 is substantially fulfilling the criteria required for the

Heterotrait-Monotrait ratio which means the model assures the discriminant validity required for the effective descriptive analysis.

**Table 2: Heterotrait-Monotrait Ratio**

	<b>Corporate Entrepreneurship</b>	<b>Customer Satisfaction</b>	<b>Strategic Entrepreneurship</b>
<b>Corporate Entrepreneurship</b>			
<b>Customer Satisfaction</b>	<b>0.163</b>		
<b>Strategic Entrepreneurship</b>	<b>0.128</b>	<b>0.039</b>	

**R-Square**

Table 3 indicates values for the coefficient of determination, also termed as predictive accuracy. The purpose of using this measure is to highlight the validity of the structural (outer) mode and measurement (inner) model (Purwanto et al., 2020 and Rehman et al 2023). The purpose of the coefficient of determination is to highlight the change that has been produced in the values of the dependent variable due to 1% change in the independent variable (Hahn, 1973). However, there is a defined criterion to accept the change in the dependent variable to ensure the coefficient of determination. The lowest value that may substantiate the change in the dependent variable is 0.25 while 0.50 and 0.75 are termed as moderate and substantial change (Sarstedt et al., 2014). Hence, in light of these measures, it is optimal to believe that Table 3 is successfully fulfilling the quality criteria for the coefficient of determination.

**Table 3: Coefficient of Determination**

	<b>R Square</b>	<b>R Square Adjusted</b>
<b>Customer Satisfaction</b>	0.601	0.593
<b>Strategic Entrepreneurship</b>	0.678	0.659

**Figure 3: Path Coefficient**

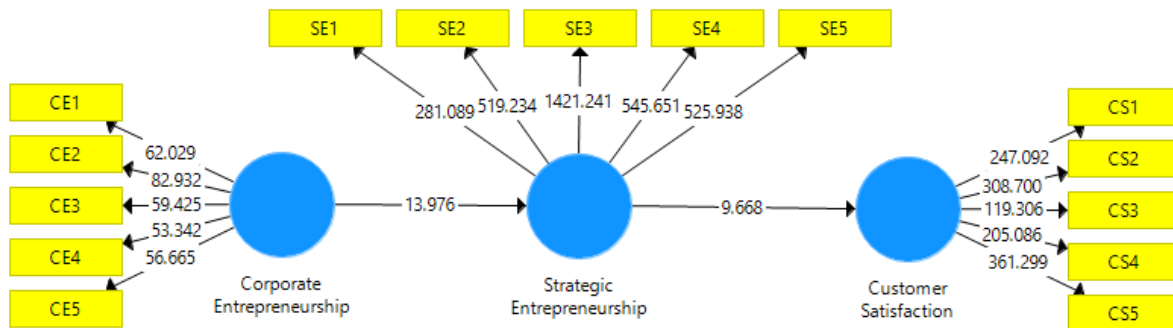


Table 4 highlights the path coefficient and the purpose of this tool is to understand the relationship between the variables used in the study. Hence, Table 4 highlights all the valid paths and relationships required to be related to research questions and research hypotheses. Path coefficient is associated with inferential statistical techniques as indicated by Silaparasetti et al (2017) and Rehman et al (2023). These associations are evaluated by using t-statistics and p-values as mentioned by Hair et al (2017) and Hair et al (2019) that p-values must be less than or equal to 0.05 and t-statistical values must be greater than or equal to 1.97.

**Table 4: Path Coefficient**

	<b>Original Sample (O)</b>	<b>Sample Mean (M)</b>	<b>Standard Deviation (STDEV)</b>	<b>T Statistics ( O/STDEV )</b>	<b>P Values</b>
<b>Corporate Entrepreneurship -&gt; Strategic Entrepreneurship</b>	0.484	0.487	0.035	13.976	<b>0.000</b>
<b>Strategic Entrepreneurship -&gt; Customer Satisfaction</b>	0.378	0.383	0.039	9.668	<b>0.000</b>

Moreover, fulfilment of both of these criteria is required in order to assure the path coefficient and relationship between the variables. Therefore, in line with the indications of Table 4, it is optimal to reject H1O and H2O which means corporate entrepreneurship in government-level firms is effectively correlated with strategic entrepreneurship. Similarly, strategic entrepreneurship in government-level firms is positively related to customer satisfaction.

**Table 5: Specific Indirect Effect**

	<b>Original Sample (O)</b>	<b>Sample Mean (M)</b>	<b>Standard Deviation (STD-Dev)</b>	<b>T Statistics ( O/STDEV )</b>	<b>p-values</b>
<b>Corporate Entrepreneurship -&gt; Strategic Entrepreneurship -&gt; Customer Satisfaction</b>	0.183	0.187	0.027	6.802	<b>0.000</b>

Table 5 is a specific indirect effect that is used to indicate mediation analysis which is also a part of inferential statistical analysis. Therefore, it is optimal to use parameters indicated by Hair et al (2017) and Hair et al (2019) to evaluate the indirect (mediation) relationships. Therefore, in line with the parameters indicated by Hair et al (2017) and Hair et al (2019), it is optimal to reject H3O which means strategic entrepreneurship in government-level firms is mediating between corporate entrepreneurship and customer satisfaction.

## **CONCLUSION**

In the light of detailed statistical testing, it is valid to indicate that the model developed in line with the indications of Hasanin (2018); Minafm (2019) and Ziyae and Sadeghi (2020) is optimal to

understand the relationship between corporate entrepreneurship and customer satisfaction. Hence, all the postulates, Research Questions and Hypotheses developed for this study are found to be true.

Thus, significance testing also found that the model and its implications can be used by other researchers to explore more about the relationship between corporate entrepreneurship and customer satisfaction.

## **DISCUSSION**

Detailed Analysis through SMART-PLS highlighted that strategic entrepreneurship plays a mediating role between corporate entrepreneurship and customer satisfaction. Hence, the initial element that has been proved through this study is the use of RBV which is used by Ziyae and Sadeghi (2020) to clarify the importance of strategic entrepreneurship for implementing corporate entrepreneurship in an effective manner. Therefore, it is valid to relate corporate entrepreneurship with the improvement in the level of customer satisfaction as indicated by Hasanin (2018). That means the use of RBV to study the indirect association between corporate entrepreneurship and customer satisfaction also addresses the need for research on customer satisfaction as demanded by Lanke and Varsha Paul (2022) and the findings of the study are also sufficient to clear speculations on the impact of corporate entrepreneurship on customer satisfaction. Therefore, the findings of this study strongly refute the postulates developed by Abu Raya et al (2023) and Ferrentino and Boniello (2020).

Thus, the claim made by the researchers about the multifold significance of this study seems to be appropriate and the study seems to be significant for students, researchers, academicians and policy makers. Discussing specifically with respect to various associations discussed in this study it has been observed that the outcomes of this study are in line with Johanna de Villiers-Scheepers (2012) who claimed that firms must relate corporate entrepreneurship with strategic entrepreneurship. Similarly, the findings are also found to be in line with Ketchen et al. (2007) who believe corporate entrepreneurship is the prime weapon for large-sized firms to take sustainable competitive advantage through relating corporate entrepreneurship strategy with strategic entrepreneurship (Franco & Verde, 2022).

On the other side findings of this study clarify the relationship between strategic entrepreneurship and customer satisfaction that is consistent with the assumptions of Hitt et al (2012); Kantur (2016) and Tasi and Lei (2016). There is a latest study that is also found to be associated with the findings of this study i.e., the study of Ihochukwu et al (2024) who mentioned that strategic entrepreneurship is a vital tool for optimising the firm's performance which ultimately resulted in improved customer satisfaction. Lastly, the findings of this study also prove the mediation effect of strategic entrepreneurship. That means the findings of this study are consistent with Nadhiva et al (2024) who believe in the positive association between corporate entrepreneurship and customer satisfaction. Similar is valid for Ziyae and Sadeghi (2020) who highlighted the mediating role of strategic entrepreneurship. However, the discussion on the findings of this study would remain incomplete if we don't discuss Hidayat et al (2025) who mentioned the mediating role of strategic entrepreneurship between corporate entrepreneurship and customer satisfaction.

### **Areas for Future Research**

This study is one of the initial studies to explore the relationship between corporate entrepreneurship and customer satisfaction. Therefore, the model of this study is not very complex.

- i. However, future studies may use serial and parallel mediation analysis to find out more associations, implications and applications of corporate entrepreneurship strategy for inducing customer satisfaction.
- ii. Further studies may also compare different state-owned and private sector firms to improve understanding and practices.
- iii. Moreover, future studies may also use longitude data to better relate the construct of corporate entrepreneurship with the construct of customer satisfaction. Lastly, future research may also use control variables in order to examine the application of corporate entrepreneurship in different areas, regions or cities etc.

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**Corporate Entrepreneurship And Customer Satisfaction: Studying The Paradox Concerning Government-Level Firms From Pakistan**

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**Corporate Entrepreneurship And Customer Satisfaction: Studying The Paradox Concerning Government-Level Firms From Pakistan**

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