

Leading and innovating organisational performance: a cross-country comparative analysis of entrepreneurial SME ventures

Ali Iftikhar Choudhary

School of Management, RMIT University, Melbourne, Australia, and Department of Management Sciences, COMSATS University Islamabad – Lahore Campus, Lahore, Pakistan, and

Sehrish Shahid

School of Management, RMIT University, Melbourne, Australia

Abstract

Purpose – The purpose of this study is to understand how leaders of entrepreneurial small and medium-sized enterprises (SMEs) in Australia and Pakistan strategise and design their organisational environments to enable innovation and enhanced organisational performance.

Design/methodology/approach – Drawing from the resource-based view (RBV) theory, this study investigates the mediating role of workplace innovation between design leadership and organisational performance across entrepreneurial SMEs in Australia and Pakistan. Data were obtained from 367 top-level executives in Australia and 367 from Pakistan using paper-based and online surveys.

Findings – The results highlight significant cross-country differences, indicating that entrepreneurial SMEs in Pakistan tend to overlook the creation of an enabling work environment favourable for innovation, which reduces the positive impact on organisational performance. In contrast, Australian SMEs exhibit a stronger alignment between innovation and performance outcomes.

Research limitations/implications – The study makes a theoretical contribution by extending RBV theory within the contexts of design leadership, workplace innovation and SME performance, particularly in comparative international settings.

Practical implications – The findings offer actionable strategies for SME leaders, particularly in developing economies, highlighting the significance of encouraging internal abilities such as a conducive innovation culture. This could model strategic development and training schemes designed to achieve sustainable competitive advantage through improved organisational performance.

Originality/value – This study uniquely reveals the differential mediating effect of workplace innovation on the design leadership–performance nexus in developed versus developing countries. The absence of



significant mediation in Pakistan stresses the distinct entrepreneurial underlying forces and challenges faced by SMEs in developing economies.

The Bottom Line

Keywords Organisational performance, SMEs, Entrepreneurial ventures, Design leadership, Workplace innovation, Cross-country comparison

Paper type Research paper

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Introduction

Small- and medium-sized enterprises (SMEs) play a pivotal role in driving a nation's economic growth (Fernández-Serrano *et al.*, 2018). As hubs of innovation, adaptability and expansion, SMEs contribute significantly to the economy through their entrepreneurial activities (Tapan, 2001). These enterprises are sources of systemic novelty (Langlois, 2007) and typically using fewer than 200 workers in Australia (Le and Valadkhani, 2014) and 250 in Pakistan (Zou *et al.*, 2021), face unique challenges and opportunities, especially in resource-constrained environments. Despite these limitations, SMEs leverage market opportunities by focusing on technology start-ups and niche markets (Mayr *et al.*, 2021). Their ability to exploit such opportunities depends not only on external market conditions but also on internal resources, particularly leadership and entrepreneurial orientation, which have been identified as crucial drivers of success (Zaharuddin *et al.*, 2024, Van Vugt and von Rueden, 2020).

The role of leadership in these entrepreneurial ventures is not only critical but highly context-dependent. The influence of leadership styles and entrepreneurial orientation on innovation, adaptability and organisational performance varies significantly depending on the socio-economic and cultural landscapes in which SMEs operate (Van Vugt and von Rueden, 2020; Zaharuddin *et al.*, 2024). While leadership in Western contexts has been widely studied (Lam *et al.*, 2012), there remains a gap in understanding how leadership behaviours manifest and influence SME performance in different cultural and economic settings (Szczepańska-Woszczyna, 2015), particularly in non-Western contexts like Pakistan.

Australia and Pakistan, though geographically distant, share similarities in recognising the importance of SMEs in their economies. In Australia, SMEs contribute a substantial \$590bn, or nearly one-third of the nation's GDP, illustrating their critical role in sustaining the economy (Counts, 2024). Similarly, in Pakistan, SMEs make up over 99% of businesses, contributing to more than 40% of the GDP (Safdar *et al.*, 2024), underscoring their importance in economic development and employment generation. However, despite these shared contributions, SMEs in the two countries face distinct challenges. Australian SMEs benefit from advanced infrastructure, government support programs and a diversified business environment, focusing heavily on sectors like technology and services (Bank and Lewis, 2021). In contrast, Pakistani SMEs, often centred around industries like textiles, manufacturing and agriculture, struggle with limited financial resources, technological integration and regulatory hurdles (Kumar *et al.*, 2022; Arshad *et al.*, 2024).

These differences highlight the importance of context in shaping the internal resources SMEs rely on for competitive advantage. Leadership and entrepreneurial orientation, crucial in both settings, are influenced by each country's unique institutional environment (Balubaid, 2025). While Australian SMEs can harness advanced technologies and skilled labour to drive innovation, Pakistani SMEs are more focused on resource efficiency due to their reliance on unskilled labour and raw materials in a factor-driven economy (Alam and Adeyinka, 2021; Bagh *et al.*, 2017). Thus, understanding the impact of leadership in these contrasting environments offers valuable insights into the ways these SMEs leverage their internal resources, including leadership, to sustain innovation and performance (Harsono *et al.*, 2025).

The study of leadership in SMEs has predominantly focused on external factors like market conditions and economic threats (Aslan *et al.*, 2011; Joel and Oguanobi, 2024).

However, there is a notable gap in the literature regarding the role of internal resources, specifically leadership, in shaping innovation and driving organisational performance. Entrepreneurial orientation, which encompasses proactivity, innovation and risk-taking, is widely acknowledged as fundamental for SMEs to gain competitive advantages in resource-constrained settings (Desa and Basu, 2013; Bacq and Eddleston, 2018). Studies have yet to explore the influence of design-oriented leadership on innovation and organisational success, particularly within the SME context.

This study aims to fill this gap by investigating how design leadership, combined with entrepreneurial orientation, impacts the performance and innovation outcomes of SMEs. While prior research has established the importance of leadership in driving innovation (Zhu and Huang, 2023; Choudhary *et al.*, 2013), it has not adequately connected leadership behaviours with design thinking, which plays a crucial role in fostering innovation and competitive advantage in SMEs. Strategic leadership, particularly in virtual environments, is essential for nurturing a culture of creativity and innovation (Verma *et al.*, 2023; Elkington *et al.*, 2018). By understanding how design leadership and entrepreneurial orientation interact, this study seeks to provide new insights into the internal expertise driving SME success, highlighting the importance of design thinking and strategic leadership in fostering workplace innovation.

This research is grounded in the resource-based view (RBV) theory, which posits that competitive advantage is achieved when firms leverage unique and difficult-to-imitate internal resources (Barney, 2001; Rumelt, 2005). Design leaders, through their ability to foster a culture of creativity, play a key role in leveraging internal resources to promote innovation and improve organisational performance. By aligning design thinking with entrepreneurial orientation, SMEs can create a sustainable competitive advantage, enhancing their ability to adapt and thrive in diverse business environments.

This study makes significant theoretical and practical contributions. Theoretically, it enriches the RBV by understanding design leadership as a strategic internal resource that drives innovation and performance. It highlights how design leadership enhances adaptability and performance through the incorporation of design thinking into business strategies. Practically, the study provides valuable insights for policymakers and business managers, informing strategies that foster innovation and improve managerial practices in both Australia and Pakistan. It also contributes to the global conversation on cross-cultural leadership and innovation, offering insights into how leadership influences organisational success in diverse socio-economic contexts.

Australia ranked second globally for its entrepreneurial ecosystem, stands out for its innovation-driven economy (GEM, 2018). SMEs contribute significantly to the Australian economy, particularly in the tech and service sectors, benefitting from advanced technologies and government support. Pakistan, on the other hand, is an emerging economy where SMEs constitute 99% of businesses and contribute significantly to the GDP (Soomro and Shah, 2019). With a young population and rapid economic growth, Pakistan is poised to harness its entrepreneurial potential despite challenges such as resource constraints and market volatility (Syed, 2019).

The lack of empirical research examining the interplay between individual, team and organisational factors within the unique environment of Pakistani SMEs further hinders a comprehensive understanding of workplace innovation. This gap is particularly critical given the dynamic challenges faced by SMEs in Pakistan, such as resource constraints, market volatility and the need for continuous innovation to remain competitive (Khan *et al.*, 2024).

By comparing the entrepreneurial ecosystems of Australia and Pakistan, this study provides a unique opportunity to understand the role of leadership in fostering innovation and performance in both innovation-driven and factor-driven economies. This cross-cultural comparison will shed light on how leadership can be adapted to different economic contexts, offering insights into how SME leaders in both countries can leverage their internal

resources, such as design leadership and strategic thinking, to drive innovation and achieve sustainable competitive advantages (Choudhary *et al.*, 2021; Dwivedi and Pawsey, 2023).

The research question guiding this study is:

RQ1. To what extent does design leadership influence workplace innovation and organisational performance among entrepreneurial SMEs in Australia and Pakistan?

Literature review

Resource-based view theory

The RBV theory provides a foundational framework for understanding how entrepreneurial SMEs leverage internal resources to achieve competitive advantages and enhance organisational performance. According to RBV, resources are the key drivers of sustained competitive advantage, especially when they are valuable, rare, inimitable and non-substitutable (Barney, 2001). RBV emphasises that businesses must focus on identifying and cultivating these unique resources to improve performance, particularly in the face of external market changes and evolving customer needs (Kostopoulos *et al.*, 2002).

In the context of entrepreneurial SMEs, the RBV is particularly relevant as it helps identify the resources that are central to creating and sustaining a competitive edge. These resources are often socially complex in nature, such as human capital, organisational culture and leadership capabilities, which are difficult for competitors to replicate (Carpenter, 2002). Through the RBV lens, firms can build a supportive environment conducive to innovation, a crucial factor for SMEs to develop their competencies and attract investment (Bacq and Eddleston, 2018). Thus, RBV enables SMEs to align their internal strengths with innovative practices, positioning them for long-term success in an ever-evolving market landscape (Oeij and Dhondt, 2017).

Workplace innovation, driven by creative ideas, processes and systems, emerges from the interaction of unique organisational resources such as human capital (e.g. skilled workforce) and leadership capabilities. As such, workplace innovation serves as a key organisational capability that enables SMEs to create value, improve performance and achieve a competitive edge (Bacq and Eddleston, 2018). Leadership is viewed as a strategic resource that guides the organisation in effectively using its internal capabilities. Design leadership, in particular, emphasises creativity, problem-solving and the alignment of resources to drive innovation (Kostopoulos *et al.*, 2002). By aligning the firm's internal resources with design thinking and innovation strategies, design leadership acts as a resource that shapes organisational culture, encourages creative thinking and fosters innovation across various business functions. This unique resource is difficult for competitors to replicate, thus providing SMEs with a sustainable competitive advantage. In the RBV context, organisational performance reflects how well a firm can manage and deploy its resources to achieve its strategic objectives (Cruz *et al.*, 2012). These connections highlight the importance of aligning these variables with the RBV to understand how they contribute to the competitive advantage and performance of entrepreneurial SMEs.

Design leadership

Design Leadership, as defined by Reinmoeller (2002) involves leaders who blend vision and reality by empowering information processes and development through clear articulation of organisational values, competitive reality and vision (Muenjohn and McMurray, 2017; Roald, 2006; Verganti, 2003). Gloppen (2009) describe design leadership as operating at a strategic level by shaping the vision for how design could be used within an organisation to

achieve corporate goals. Modern leadership hinges on clarity and analytics, making design thinking crucial for innovation and competitiveness (Elkington *et al.*, 2018). Researchers identify four key characteristics of design leadership: envisioning the future, manifesting strategic intent, directing design investment and nurturing an innovative environment (Muenjohn and McMurray, 2016; Muenjohn *et al.*, 2013; Muenjohn and McMurray, 2015). Envisioning the future helps articulate a vision and mission for desired outcomes (Galli *et al.*, 2017), while manifesting strategic intent links strategic vision with practical application, involving all stakeholders (Muenjohn *et al.*, 2013). Directing design investment focuses on resource allocation for quality improvement (Topalian, 2002) and nurturing an innovative environment promotes continuous innovation crucial for SME growth (Muenjohn *et al.*, 2013). Design leaders should engage customers in co-creation to enhance products' social, economic and aesthetic value (Eisermann *et al.*, 2005; Dalrymple *et al.*, 2020). There are two types of design leaders: design pullers, who focus on feasibility, and design pushers, who use design solutions for strategy (Joziassse, 2011). Combining both types can maximise design leadership potential in entrepreneurial SME ventures (Turner, 2016).

Workplace innovation

Workplace innovation integrates new and old elements from work organisation, supportive technologies and human resource management (Frank, 2011). It is a process where new ideas are generated, and products or outcomes are developed or reinvented (Von Treuer and McMurray, 2012; Simmers and McMurray, 2019). It encompasses four dimensions: organisational, team and individual innovation and the environment for innovation (Frank, 2011; McMurray and Scott, 2013; Muenjohn and McMurray, 2017; Simmers and McMurray, 2019). Organisational innovation is linked to leadership, where motivated and committed employees excel in creativity (McMurray *et al.*, 2013), and refers to a venture's ability to stimulate and implement innovation (Laforet, 2011). Team innovation results from organisational and leadership processes leading to novel ideas (Tang *et al.*, 2020). Individual innovation involves introducing and implementing useful ideas intentionally (Gomes *et al.*, 2015). The climate for innovation is shaped by employees' perceptions of organisational support for innovation (Agnihotri *et al.*, 2019). Workplace innovation involves strategic changes in organisational behaviour to enrich employees' work-life and performance (Oeij *et al.*, 2011; Oeij *et al.*, 2014), ultimately improving the working environment and organisational performance (Frank *et al.*, 2020). It has also been linked to achieving a sustainable competitive edge (Muenjohn *et al.*, 2021). Research on workplace innovation should be conducted globally, including in both developed and developing countries (Oeij and Vaas, 2016).

Organisational performance

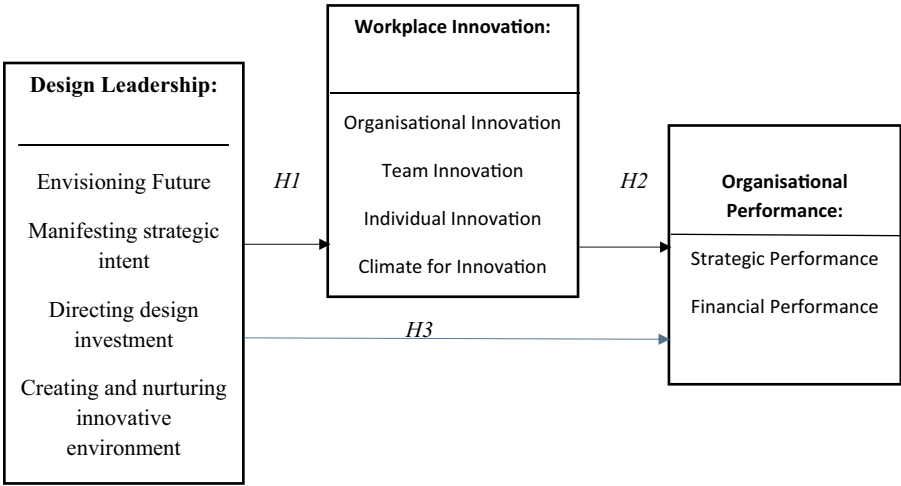
Organisational performance is the ability of a venture to maintain a competitive edge, achieve goals, increase market share and implement sustainable strategies (Reschka *et al.*, 2015). Constant improvement is pursued through differentiation strategies (Zhao *et al.*, 2016) and key performance indicators (KPIs) to track and assess performance (Oyemomi *et al.*, 2019). Evaluating individual, team and organisational performance against set criteria is crucial for high-performing ventures, which continuously refine KPIs for a sustainable competitive advantage (Oyemomi *et al.*, 2019). For entrepreneurial SMEs, organisational performance is vital for evaluating strategy (Nazarian *et al.*, 2017) and staying on track (Ho, 2008). Research in entrepreneurship often focuses on financial performance, such as profitability and return on investment (Lin *et al.*, 2019). Organisational performance also considers product and service innovation, quality and customer satisfaction (Tippins and Sohi, 2003).

Design leadership refers to the strategic ability to integrate the design processes to achieve goals. This process involves setting a compelling vision to foster creativity and innovation (Verganti, 2003; Roald, 2006; Muenjohn and McMurray, 2017; Iqbal *et al.*, 2021). Design leaders foster a creative culture to ensure employees are involved in the creativity process thereby enhancing the overall brand and customer experience through creative leadership (McMurray *et al.*, 2021; Koomans and Hilders, 2016). Workplace innovation, shaped by leadership, plays a significant role in enhancing both organisational performance and job quality (Gerlach *et al.*, 2020; Iqbal *et al.*, 2021; Borah *et al.*, 2022). In entrepreneurial SME ventures, leaders are tasked with motivating teams, articulating a vision, mobilising resources (Ouakouak *et al.*, 2020), foster an innovative culture (Nguyen, 2020) while also adopting design thinking approaches. Earlier research shows the relationship between various leadership behaviours with innovation such as transformational leadership (Jung *et al.*, 2003; Garcia-Morales *et al.*, 2008; Golden III and John, 2016; Mokhber *et al.*, 2018), inclusive leadership (Javed *et al.*, 2019), authentic leadership (Novitasari *et al.*, 2020) and servant leadership (Wang *et al.*, 2019). Design leadership has also been linked with health-care innovation (Koomans and Hilders, 2016), work value ethic and innovation in SMEs in Thailand and Vietnam (Muenjohn and McMurray, 2017).

Leaders establish a culture of innovation by developing employee skills and creativity (Schein, 1992). The relationship between leadership and innovation has been well documented in the literature, however, the relationship between design-driven leadership, innovation and organisational performance has received less attention (Koomans and Hilders, 2016). This is important because design leadership programs assist staff in articulating a facilitative work environment (Dopson *et al.*, 2019). Design leadership fosters innovation in small and medium enterprises, but the level of impact varies in different countries (Muenjohn and McMurray, 2017; Muenjohn and McMurray, 2016). Such leaders assist in creating a dynamic environment that fosters workplace innovation, especially in not-for-profit ventures where resource generation for meeting demands is imperative (McMurray *et al.*, 2013).

Hence, relying on the RBV theory, this study draws on a firm's unique resources and capabilities such as leadership to foster innovation and performance. Ultimately, by positioning design leadership with RBV philosophy, organisations can efficiently use their assets to drive innovation, yielding improved performance and sustained competitive advantage. Workplace innovation bridges the gap between leadership's strategic knowledge, employees' professional expertise and workplace culture, creating a win-win for all stakeholders and enhancing performance (Frank *et al.*, 2016). Phoosawad *et al.* (2014) argue that organisational innovation mediates the relationship between leadership and performance. Santos-Vijande *et al.* (2012) found that innovation directly improves organisational performance and fosters a sustainable competitive advantage. Similarly, Szczepańska-Woszczyna (2015) noted that culture and leadership significantly impact individual innovation, leading to higher productivity. Hence, we propose the following hypotheses as shown in Figure 1:

- H1. Design leadership positively influences workplace innovation in Australian and Pakistani entrepreneurial ventures.
- H2. Workplace innovation positively influences organisational performance in Australian and Pakistani entrepreneurial ventures.



Source(s): Figure by authors

Figure 1. Research model

H3. Workplace innovation mediates the relationship between design leadership and organisational performance in Australian and Pakistani entrepreneurial ventures.

Methodology

Procedure

To address the research question, this research uses quantitative methods to study the relationships between predetermined theoretical constructs of interest (Aguinis et al., 2021). Entrepreneurial SME ventures across Australia and Pakistan were used as the population for this study as they are the driving force enhancing economic growth (Perera and Baker, 2007) in developed and developing countries. In Pakistan, the contact details of entrepreneurial SME ventures were acquired through the Securities and Exchange Commission of Pakistan (SECP), Small and Medium Enterprise Development Authority (SMEDA) Pakistan, Federation Chamber of Commerce and Industry (FCCI) Pakistan, entrepreneurial associations and incubation centres (Roomi and Harrison, 2010) and have attended entrepreneurial expo conducted throughout the country. Top executives of these ventures (i.e. CEO, Director, Manager or the entrepreneur) were asked to fill out the online or hardcopy survey. The questionnaire added a question regarding their designation and role to identify if the respondent belongs to the executive level. In the case of the hardcopy survey, a ballot-type box was used to collect the responses and ensure anonymity.

In Australia, a third-party organisation (CINT) was used to collect the data. The third-party organisation (CINT) used its existing database of specific relevant population samples to collect data from respondents in entrepreneurial SME ventures operating in Australia. A screening question was used at the start of the survey to identify whether the respondent was an executive working in an entrepreneurial SME venture (Arnaudova et al., 2024). We have clarified the criteria by including the following description of SME. The definition for such

businesses includes those firms that prioritise entrepreneurship, and focus on innovation, adaptation and expansion (Tapan, 2001; Langlois, 2007) while using fewer than 250 workers (Zou *et al.*, 2021).

According to Sekaran (2016), 384 respondents in each country are a sound number to conduct structural equation modelling (SEM) analyses. The study aimed for a large sample size to generalise results and validate findings. Simple random sampling was used, providing extensive information (Patton, 2002; Tashakkori and Teddlie, 2010). Data was collected non-identifiably from Australia and Pakistan to ensure integrity and fairness. The data was collected from 367 respondents in Australia using an online web-based survey, while 396 respondents provided complete responses using a hard copy survey in Pakistan. The data was examined through the Statistical Package for Social Sciences (SPSS 25) and structural equation modelling (SEM) using Analysis of Moment Structures (AMOS 25) for reliability, validity, demographics, correlation and regression analysis. Given the line of inquiry in this research, SEM is appropriate for the analysis (Hoe, 2008).

Measures

An independent sample *t*-test was conducted and the results showed no significant difference between online and hardcopy survey data. A 64-item questionnaire gathered cross-sectional, firm-level data from entrepreneurs, leaders, managers, CEOs and top executives in Australia and Pakistan. SPSS 25 was used for basic and demographic analysis, and AMOS 25 for measurement and structural modelling.

The 24-item *Workplace Innovation Scale (WIS)* was used in this study, comprising the four sub-dimensions of organisational innovation, team innovation, individual innovation and climate for innovation (Muenjohn and McMurray, 2017). The 24-WIS also demonstrated high reliability ($\alpha = 0.913$) (McMurray and Dorai, 2003).

The seven-item *Organisational Performance Scale* was used in this study, consisting of the two dimensions of financial performance and strategic performance. A seven-item scale for organisational performance had consistent reliability ($\alpha = 0.84$) (Lin *et al.*, 2019; Sulaiman, 2016).

The 18-item *Design Leadership Questionnaire (DLQ)* was used in this study, which comprises four dimensions: envisioning the future, directing design investment, manifesting strategic intent and nurturing an innovative environment (Muenjohn and McMurray, 2017). The DLQ with 18 items showed high reliability ($\alpha = 0.911$) (Muenjohn and McMurray, 2017). The instruments were added in the Appendix.

Data analysis

Reliability, validity and method bias

Data was analysed for SEM assumptions, outliers, multicollinearity, normality and common method bias. Harman's single-factor test is one of the most used conventional methods to identify common method variance (Saunders *et al.*, 2016). It is particularly favoured by researchers in the entrepreneurship and leadership field to identify common method variance (Cheung and Wong, 2011). All the items are loaded into exploratory factor analysis (EFA), using the unrotated format, to identify how many factors were explaining the total variance. If the majority (more than 50%) of the variance was loaded on a single factor or general factor, then common method bias can be presumed (Podsakoff *et al.*, 2003). The researcher loaded all the factors into EFA, using the unrotated principal component analysis method, for all three data sets. In all three data sets, the results of the extraction sums of squared loadings and the first-factor percentages of variance were well below the threshold of 50% (Pakistan,

9.284; Australia, 27.591; Combined, 17.975). Hence, it is concluded that common method bias is not detected in these data sets.

Pre-tests and pilot tests were conducted to validate and ensure the reliability of the questionnaire (Podsakoff *et al.*, 2012). No missing values were identified, and outliers were excluded using the Mahalanobis-D test, removing three Australian and seven Pakistani responses. Data was normal, with skewness and kurtosis within the -1 to +1 range. Cronbach’s alpha scores indicated reliable scales, with all above $\alpha = 0.7$ (see Table 1) except for design leadership in Pakistan ($\alpha = 0.679$), still within an acceptable range (De Vaus and de Vaus, 2013). Multicollinearity was not an issue, as VIF values ranged from 1 to 4, and tolerance values were above 0.2 in both countries, meeting the criteria suggested by Hair *et al.* (2010).

Table 2 shows that for the Australian data set, the average variance extracted (AVE) exceeded the 0.5 threshold, and construct reliability for all variables was above 0.7. Mean values ranged from 3.64 to -3.91, indicating respondents generally agreed or strongly agreed on a five-point Likert scale. The standard deviation ranged from 0.53 to -0.61, showing slight dispersion from the mean. Pearson’s correlation was significant at the 0.01 level, indicating moderate correlations between variables.

For the Pakistani data set (Table 3), AVE for organisational performance and design leadership was above 0.5, while AVE for workplace innovation was slightly below 0.5. Construct reliability for all constructs was above 0.7, indicating reliability. Mean values

Table 1. Cronbach’s alpha

Reliability	PK (393)	AU (360)	No. of items
Dlead	0.679	0.910	18
WIscl	0.733	0.916	24
Oper	0.721	0.804	7

Source(s): Table by authors

Table 2. Validity, reliability and descriptive statistics – Australia

	CR	AVE	Mean	SD	Oper	Dlead	WIscl
Oper	0.916	0.846	3.6444	0.60148	1		
Dlead	0.986	0.948	3.9028	0.55862	0.598**	1	
WIscl	0.955	0.843	3.8073	0.53043	0.638**	0.815**	1

Note(s): **Correlation is significant at the 0.01 level (2-tailed)

Source(s): Table by authors

Table 3. Validity, reliability and descriptive statistics – Pakistan

	CR	AVE	Mean	SD	Oper	Dlead	WIscl
Oper	0.745	0.600	3.3599	0.62720	1		
Dlead	0.971	0.892	3.9596	0.31855	0.149**	1	
WIscl	0.780	0.480	3.8274	0.31776	0.166**	0.420**	1

Note(s): **correlation is significant at the 0.01 level (2-tailed)

Source(s): Table by authors

ranged from 3.35 to -3.96, and the standard deviation ranged from 0.31 to -0.62, indicating slight variation from the mean. Both data sets showed no issues with discriminant and convergent validity.

The Bottom Line

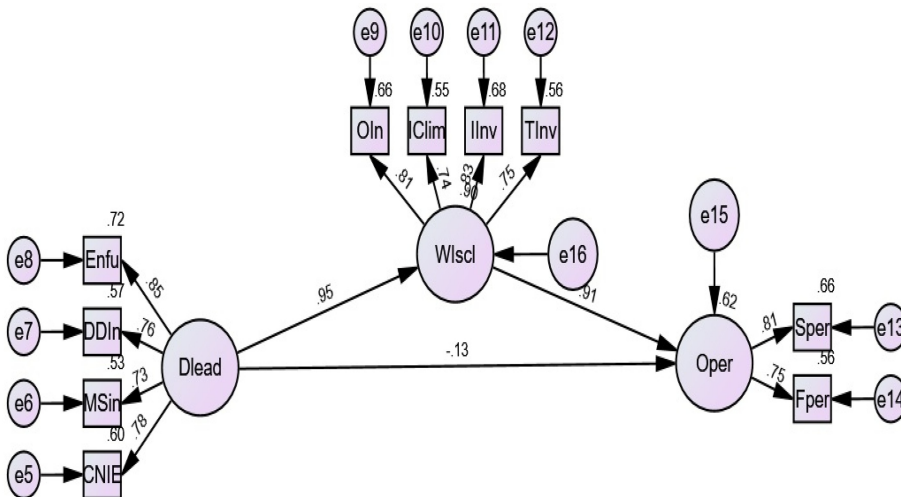
Descriptive statistics

The survey achieved an 18% response rate in both countries, with 2200 surveys distributed in Pakistan and 2030 in Australia, yielding 396 complete responses from Pakistan and 367 from Australia. Demographic analysis showed over 50% of Australian respondents were female, while 70% of Pakistani respondents were male. In Pakistan, over 65% of respondents were aged 18–35. The primary industries represented were manufacturing, IT and retail, with 80% of businesses in the private sector. About 79% of ventures had fewer than 200 employees. In Pakistan, 91% of respondents held a university degree, compared to 60% in Australia.

Factor analysis and hypotheses testing

A confirmatory factor analysis was conducted to determine how well-observed variables represented latent constructs (Hair *et al.*, 2010). Items with low standardised estimates, high modification indices and high standardised residual covariances were deleted to refine the measurement models. *H1* suggested a significant positive relationship between design leadership and workplace innovation. *H2* proposed that workplace innovation positively impacts organisational performance. *H3* anticipated that workplace innovation mediates the relationship between design leadership and organisational performance in Australian and Pakistani entrepreneurial ventures. These hypotheses were tested using structural modelling in AMOS 25, with the refined measurement model converted into a structural model to explore these relationships.

Figure 2 shows the structural model for the Australian data set, with goodness-of-fit (GOF) statistics in Table 4. The X^2/df was less than 3, and RMSEA and SRMR were below



Source(s): Figure by authors

Figure 2. Structural model for Australia

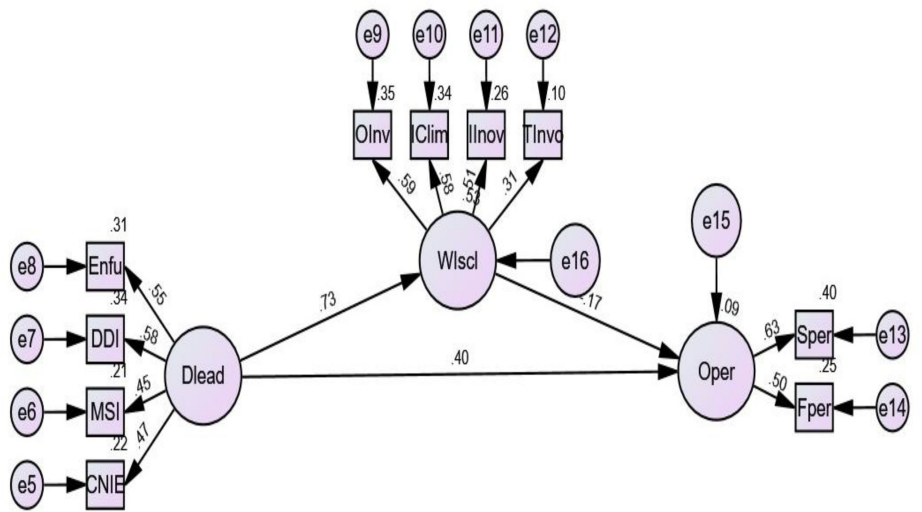
Table 4. GOF Statistics for Australian and Pakistani data sets

Goodness of fit	GOF statistics	Level of acceptance	Australia	Pakistan
Chi-Square	χ^2/df	Between 1–5	2.970	1.533
Absolute fit indices	RMSEA	< 0.1	0.074	0.037
	SRMR	< 0.09 (if CFI > 0.92)	0.013	0.012
	GFI	> 0.90 or > 0.80	0.951	0.975
Incremental fit indices	CFI	> 0.90	0.970	0.957
	IFI	> 0.90	0.970	0.959
	TLI	> 0.90	0.958	0.940
Parsimony fit indices	PCFI	> 0.50	0.834	0.869
	PNFI	> 0.50	0.742	0.647

Source(s): Table by authors

0.08. GFI exceeded 0.9, indicating an acceptable fit (Thadani and Cheung, 2011). Incremental and parsimony fit indices were within acceptable limits. Figure 3 presents the structural model for the Pakistani data, with GOF statistics also in Table 4. All fit indices, absolute, incremental and parsimony were within acceptable ranges, indicating a good model fit. The X^2/df value was 1.533, well below the threshold of 5. The second-order construct was leading to a better fit compared to treating it as first-order, it demonstrates a more parsimonious approach. A more streamlined model can be easier to interpret and can reveal clearer relationships among variables (Hair et al., 2017).

Tables 5 and 6 present regression estimates for the Australian and Pakistani data sets. For the relationship between design leadership and workplace innovation, the regression estimate was $\beta = 0.95$ in Australia and $\beta = 0.73$ in Pakistan, both with p-values of 0.001. For



Source(s): Figure by authors

Figure 3. Structural model for Pakistan

Table 5. Regression estimates – Australia

Hypotheses	Std Est.	S.E.	C.R.	p-value	Status
H1: Dlead → WIscl	0.95	0.061	15.345	***	Significant
H2: WIscl → Oper	0.91	0.324	2.786	0.005**	Significant
H3: Dlead → Oper (Direct)	-0.13	0.315	-0.403	0.687	Non-significant
H3: Dlead → Oper (Indirect)	0.86	0.390	(Indirect)	0.015*	Full mediation
<i>Dimension wise effect</i>					
Dlead → fper	0.55	0.038	(Indirect)	0.008**	Effect
Dlead → sper	0.60	0.039	(Indirect)	0.012*	Effect
Dlead → tinvo	0.71	0.028	(Indirect)	0.014*	Effect
Dlead → IInvo	0.79	0.023	(Indirect)	0.012*	Effect
Dlead → iclim	0.71	0.035	(Indirect)	0.007**	Effect
Dlead → OInvo	0.77	0.031	(Indirect)	0.013*	Effect
WIscl → fper	0.68	0.286	(Indirect)	0.016*	Effect
WIscl → sper	0.74	0.317	(Indirect)	0.022*	Effect

Notes(s): Sig level ***=0.001, **=0.01, *=0.05

Source(s): Table by authors

Table 6. Regression estimates – Pakistan

Hypotheses	Std Est.	S.E.	C.R.	p-value	Status
H1: Dlead → WIscl	0.73	0.172	5.565	***	Significant
H2: WIscl → Oper	-0.17	0.379	-0.882	0.378	Non-significant
H3: Dlead → Oper (Direct)	0.40	0.536	1.918	0.055	Non-significant
H3: Dlead → Oper (Indirect)	-0.13	0.183	(Indirect)	0.481	No mediation
<i>Dimension wise effect</i>					
Dlead → fper	0.14	0.071	(Indirect)	0.009**	Effect
Dlead → sper	0.17	0.071	(Indirect)	0.010**	Effect
Dlead → tinvo	0.23	0.052	(Indirect)	0.006**	Effect
Dlead → IInvo	0.37	0.051	(Indirect)	0.010**	Effect
Dlead → iclim	0.42	0.064	(Indirect)	0.006**	Effect
Dlead → OInvo	0.43	0.057	(Indirect)	0.007**	Effect
WIscl → fper	-0.09	0.139	(Indirect)	0.434	No effect
WIscl → sper	-0.11	0.143	(Indirect)	0.351	No effect

Notes(s): Sig level ***=0.001, **=0.01, *=0.05

Source(s): Table by authors

workplace innovation's relationship with organisational performance, the estimate was $\beta = 0.91$ in Australia (p -value = 0.005) and $\beta = -0.17$ in Pakistan (p -value = 0.378). Thus, only the Australian data supported the positive relationship between workplace innovation and organisational performance.

The direct relationship between design leadership and organisational performance was non-significant in both data sets. The indirect relationship was significant only in the Australian data set, with an indirect effect value of $\beta = 0.86$ (p -value = 0.015). In Pakistan, the indirect effect was $\beta = -0.13$ (p -value = 0.481). Thus, workplace innovation fully mediates the relationship between design leadership and organisational performance in Australia, supporting H3. However, in Pakistan, workplace innovation did not mediate this relationship, leading to the rejection of H3.

The indirect effect of design leadership on workplace innovation and organisational performance dimensions was examined. Results indicated that design leadership positively influences all four dimensions of workplace innovation and two dimensions of organisational performance in both data sets. In Australia, design leadership significantly affects individual innovation, while in Pakistan, it impacts organisational innovation more. Design leadership also has a significant positive relationship with organisational performance in both data sets.

H1 was supported by both Australian and Pakistani data, showing that design leadership positively impacts workplace innovation. *H2* was supported only by the Australian data, indicating that workplace innovation improves organisational performance. *H3* was also supported only by the Australian data, demonstrating that workplace innovation mediates the relationship between design leadership and organisational performance.

Discussion

The impact of human capital and technology on innovation capabilities varies culturally, as shown by differing results from Australian and Pakistani SME ventures (Ramadani *et al.*, 2019). In Australian SMEs, design leadership significantly enhances individual innovation and organisational performance, reflecting the country's individualistic culture (Muenjohn and McMurray, 2017). The integration of advanced technologies facilitates individual innovation by providing tools and resources that employees can leverage to enhance their creative outputs (Sawyer and Henriksen, 2024). The alignment of individual and organisational goals creates a fertile environment for innovation, with employees feeling motivated to experiment and pursue novel ideas (Koivula *et al.*, 2023).

On the other hand, Pakistani SMEs, which operate in a collectivist society, see greater effects of design leadership on organisational innovation and organisational performance. Additionally, while workplace innovation boosts organisational performance in Australian SMEs, it negatively impacts Pakistani SMEs' organisational performance (Dibrell *et al.*, 2014). The negative impact of workplace innovation on organisational performance in Pakistani entrepreneurial SMEs suggests a more complex interplay between innovation practices and organisational dynamics. Factors such as limited access to resources, and potential misalignment of innovation initiatives with broader organisational goals may hinder the expected benefits of workplace innovation (Choudhary *et al.*, 2021). Pakistani SMEs benefit from leadership that emphasises teamwork, shared goals and collective problem-solving. The impact of design leadership on workplace innovation reflects a cultural preference for collaborative approaches, where success is measured by the group's achievements.

Envisioning the future correlates strongly with individual innovation and organisational performance in Australia, whereas directing design investment is more influential in Pakistan. These findings challenge Muenjohn and McMurray (2017) conclusions, highlighting the cultural context's role in the relationship between leadership, innovation and performance in SME ventures. Leaders who cultivate a forward-thinking mindset empower employees to explore new ideas and embrace change. This approach aligns with Australia's individualistic culture, where personal initiative and creativity are highly valued (Volery and Tarabashkina, 2021). Employees are encouraged to think beyond conventional boundaries, leading to innovative solutions that not only benefit their personal growth but also enhance the organisational performance of the organisation. The strong correlation between future-oriented visioning and individual innovation suggests that Australian SMEs thrive when leaders articulate clear, ambitious goals that inspire and motivate their teams (Vettorello and Burke, 2021).

Conversely, in the context of Pakistani SMEs, the emphasis on directing design investment takes precedence. In a collectivist culture, where group harmony and collaboration are prioritised, the allocation of resources towards design and innovation becomes a strategic imperative for fostering workplace innovation (Choudhary *et al.*, 2021). Leaders in Pakistan are more effective when they focus on channelling investments into collaborative projects and initiatives that leverage the collective skills and talents of their workforce. This approach not only enhances workplace innovation but also strengthens the overall organisational performance by ensuring that innovations are aligned with the needs and capabilities of the entire team. The divergent impacts of future visioning and design investment illustrate that leadership strategies cannot be universally applied, rather, they must be tailored to fit the unique cultural and operational landscapes of the organisations (Shipman *et al.*, 2010).

The results unexpectedly indicate that leaders in entrepreneurial ventures in Pakistan do not grasp the importance of strategic and design thinking in creating a conducive workplace to foster innovation at various levels, ultimately improving performance. The role of innovative entrepreneurial ventures in a country's economy is well-recognised (González-Pernía *et al.*, 2015). However, the finding presents the novelty that entrepreneurial SME ventures differ significantly between developed and developing countries. In a developing country, entrepreneurial SME ventures do not view workplace innovation as a crucial tool for enhancing organisational performance. These findings are significant as no previous study has established the link between workplace innovation and organisational performance in the context of a developing country.

Dynamic capabilities are crucial for performance outcomes (Baía and Ferreira, 2024). This study further extends the notion of dynamic capabilities within the RBV theory by examining and emphasising the role of design leadership in fostering innovation and performance. The findings corroborate past studies by establishing individual links between design leadership and workplace innovation (Muenjohn and McMurray, 2017) and between workplace innovation and organisational performance. However, this study is significant in establishing the mediating role of workplace innovation between design leadership and organisational performance. This finding extends the literature on workplace innovation and design leadership, as discussed by Muenjohn and McMurray (2017), while further linking it with organisational performance. On the other hand, the findings for Pakistani entrepreneurial SME ventures significantly contradict past studies, highlighting differences between entrepreneurial SME ventures in developed and developing countries.

Theoretical implications

This study extends the RBV theory (Barney, 1991; Grant, 1991) by investigating the role of design leadership in influencing workplace innovation and its mediating influence on organisational performance. A crucial contribution lies in emphasising how contextual differentiation influences the application of RBV assumptions. In particular, the study shows that workplace innovation mediates the relationship between design leadership and organisational performance in Australian SME ventures but not in the Pakistani context. This underscores the important role of context (cultural, social, economic and structural) in understanding the applicability of resource base theory.

These findings support the view of earlier studies (vom Brocke *et al.*, 2016; Wintersteiner, 2024) that highlights the importance of context in management research where the processes could not be fully understood without effectively considering the social, cultural and structural factors that comes into play. This aligns with the findings of our study where the unique factors that shape Australian and Pakistani contexts significantly impacts the relationship between key variables, design leadership, workplace innovation and organisational performance, demonstrating the significance of contextual awareness in management research and practise.

The research supplements the work on design leadership (Khan, 2021) by signifying how cultural alignments, such as individualism in Australia versus collectivism in Pakistan, influence the key processes through which leadership influence workplace innovation and organisational performance. The comparative analysis of entrepreneurial SME ventures in these two different contexts expands the knowledge of internal resources and their influence on organisational outcomes.

By positioning the findings within the unique settings of a developed (Australia) and a developing (Pakistan) economy, the study identifies empirical evidence of the conditional adaptability of RBV across diverse settings. This inclusion of theory and context provides valued insights into the adaptableness of leadership and innovation procedures, stressing the need for contextually informed theoretical models.

Practical implications

The practical implications of this study accentuate the significance of adapting leadership approaches to the peculiar cultural and organisational settings of SME enterprises. The findings emphasise how tailored methods to design leadership can efficiently nurture workplace innovation and improve organisational performance, positioning with the unique needs of distinct settings.

In Australia, where individualism and independence/autonomy are valued culturally, organisations should rely on improving individual abilities to lead self-self-reliant creativity. Leadership policies that foster autonomy, experimentation and risk-taking can foster a culture of innovation, contributing to competitive advantages. Australian leaders may adopt visionary leadership approaches that stimulate and encourage workers to take lead, allying with the cultural inclination for autonomy and innovation-determined work surroundings (Muenjohn and McMurray, 2017).

In Pakistan, where collectivism is more obvious, leadership approaches should highlight building collaborative arrangements that fosters team capacity. Practical approaches might include team-building activities, enhancing communication networks and providing formal support for combined innovation designs. Leadership approaches should exhibit local cultural values by promoting shared objectives and resource division to improve group creativity (Choudhary *et al.*, 2021).

This integration of theory and practice shows how leadership methods embedded in global theoretical experiences, such as RBV, can be effectively adapted to local work contexts. By positioning leadership methods with cultural and structural experiences, organisations can augment the significance and influence of their initiatives. This context-sensitive application not only improves innovation and performance but also confirms that leadership approaches resound with the unique underlying forces of distinct entrepreneurial settings. The study underlines the interconnection of theoretical models and practical relevance, demonstrating that contextual understanding is important to achieving both academic and real-world influence. By bridging theory and practice through a contextual lens, the research provides a robust base for future research studies and actionable approaches tailored to particular organisational and cultural work settings.

Conclusion, limitations and future research directions

Comparative studies are few and far between where data is collected simultaneously across two countries to make empirical comparisons in similar contexts. For example, Australia and Pakistan are culturally very different, particularly if we consider GLOBE and Hofstede's model of national culture, yet this study considers similar issues faced by entrepreneurial SME ventures in both countries. Cultural differences may impact an organisation's resource capabilities and performance, yet this could be considered a possible agenda for future research and a limitation of this research. This comparative study empirically establishes workplace

innovation as a mediating link between design leadership and organisational performance in a developed country yet denies this in a developing country's context, signifying the differences between developed and developing countries' entrepreneurial SME ventures.

The key finding is that workplace innovation does not mediate performance in SME ventures in developing countries, highlighting the need for further investigation of this relationship in such contexts. The study underscores the importance of design thinking and leadership in fostering innovation within entrepreneurial SME ventures in developing countries. Policymakers and entrepreneurs in both developed and developing countries are encouraged to view workplace innovation as more than a productivity tool. It can enhance the overall workplace environment and improve employees' work-life balance (Frank *et al.*, 2020), which may ultimately lead to better organisational performance.

Furthermore, the donor and government agencies should provide more resources to those ventures with a designed mechanism to cultivate innovation (Wolf *et al.*, 2012). Such cultivation of workplace innovation and better use of strategic and design capabilities will assist ventures in surviving and thriving during any crisis such as COVID-19. Continuous creativity and innovation is an integral part of successful ventures. The government and private ventures and universities should collaborate and focus on developing strong internal capabilities, promoting an entrepreneurial culture and providing a favourable working environment for sustainable and innovative growth (Wolf *et al.*, 2012). One of the important managerial implications is that the leaders in entrepreneurial SME ventures should use activities such as brainstorming, idea pitching, the idea of the month and training on stimulating creativity and design strategies, which could establish maker's space to cultivate innovative and design solutions.

This study collected cross-sectional data from entrepreneurial ventures of two countries only, which could be viewed as a possible limitation of this study. Future studies could collect longitudinal data from multiple countries, contexts and sectors. In addition, future studies could investigate how the cultural context and other internal resource capabilities of the ventures such as organisational culture, work value ethics and employee commitment or engagement may impact these relationships. This study contributes to the RBV theory, design leadership, workplace innovation and organisational performance literature. Practically, this study is significant as it may assist entrepreneurial ventures, leaders and managers in exploring and identifying different internal resource competencies, which may assist in improving their organisational performance and in turn achieving a sustainable competitive advantage for their ventures.

References

- Agnihotri, R., Yang, Z. and Briggs, E. (2019), "Salesperson time perspectives and customer willingness to pay more: roles of intraorganizational employee navigation, customer satisfaction, and firm innovation climate", *Journal of Personal Selling and Sales Management*, Vol. 39 No. 2, pp. 138-158.
- Aguinis, H., Hill, N.S. and Bailey, J.R. (2021), "Best practices in data collection and preparation: recommendations for reviewers, editors, and authors", *Organizational Research Methods*, Vol. 24 No. 4, pp. 678-693.
- Alam, K. and Adeyinka, A.A. (2021), "Does innovation stimulate performance? The case of small and medium enterprises in regional Australia", *Australian Economic Papers*, Vol. 60 No. 3, pp. 496-519.
- Arnaudova, R., Viza, E. and Cano, M. (2024), "Rethinking risk management in times of crisis: the effect of COVID-19 on small and medium-sized enterprises in Scotland", *The TQM Journal*, Vol. 37 No. 2.
- Arshad, M.H., Sulaiman, Y. and Yusr, M.M. (2024), "Influence of innovation on the relationship between market orientation, entrepreneurial orientation, and SME performance in Pakistan", *Multidisciplinary Science Journal*, Vol. 6 No. 5.

- Aslan, Ş., Diken, A. and Şendoğdu, A.A. (2011), "Investigation of the effects of strategic leadership on strategic change and innovativeness of SMEs in a perceived environmental uncertainty", *Procedia - Social and Behavioral Sciences*, Vol. 24, pp. 627-642.
- Bacq, S. and Eddleston, K.A. (2018), "A resource-based view of social entrepreneurship: how stewardship culture benefits scale of social impact", *Journal of Business Ethics*, Vol. 152 No. 3, pp. 589-611.
- Bagh, T., Arif, M., Liaqat, I. and Razzaq, S. (2017), "Impact of financial constraints on growth and development of small and medium enterprises in Sialkot Pakistan", *International Journal of Financial Markets*, Vol. 2 No. 4, pp. 131-141.
- Baía, E.P. and Ferreira, J.J. (2024), "Dynamic capabilities and performance: how has the relationship been assessed?", *Journal of Management and Organization*, Vol. 30 No. 1, pp. 188-217.
- Balubaid, M. (2025), "Systematic literature review: exploring the influence of innovation on competitive advantage in entrepreneurial ventures", *Journal of Business and Environmental Sciences*, Vol. 4 No. 2, pp. 165-191.
- Bank, J. and Lewis, M. (2021), "Australia's economic recovery and access to small business finance| bulletin-march 2021".
- Barney, J. (1991), "Firm resources and sustained competitive advantage. (the resource-based model of the firm: origins, implications, and prospects)", *Journal of Management*, Vol. 17 No. 1, p. 99.
- Barney, J.B. (2001), "Resource-based theories of competitive advantage: a ten-year retrospective on the resource-based view", *Journal of Management*, Vol. 27 No. 6, pp. 643-650.
- Borah, P.S., Iqbal, S. and Akhtar, S. (2022), "Linking social media usage and SME's sustainable performance: the role of digital leadership and innovation capabilities", *Technology in Society*, Vol. 68, p. 101900.
- Carpenter, M.A. (2002), "The implications of strategy and social context for the relationship between top management team heterogeneity and firm performance", *Strategic Management Journal*, Vol. 23 No. 3, pp. 275-284.
- Cheung, M.F. and Wong, C.S. (2011), "Transformational leadership, leader support, and employee creativity", *Leadership and Organization Development Journal*, Vol. 32 No. 7, pp. 656-672.
- Choudhary, A.I., Akhtar, S.A. and Zaheer, A. (2013), "Impact of transformational and servant leadership on organizational performance: a comparative analysis", *Journal of Business Ethics*, Vol. 116 No. 2, pp. 433-440.
- Choudhary, A.I., McMurray, A. and Muenjohn, N. (2021), "Impact of workplace innovation on organisational performance: a cross country comparative analysis of entrepreneurial ventures", *The Palgrave Handbook of Workplace Innovation*, pp. 445-460.
- Counts, S.B. (2024), *Contribution to Australian Gross Domestic Product*, in Ombudsman, A. S. B. a. F. E. (Ed.)
- Cruz, A.D., Hamilton, E. and Jack, S.L. (2012), "Understanding entrepreneurial cultures in family businesses: a study of family entrepreneurial teams in Honduras", *Journal of Family Business Strategy*, Vol. 3 No. 3, pp. 147-161.
- Dalrymple, M., Pickover, S. and Sheppard, B. (2020), "Are you asking enough from your design leaders?", *The McKinsey Quarterly*.
- De Vaus, D. and de Vaus, D. (2013), *Surveys in Social Research*, Routledge.
- Desa, G. and Basu, S. (2013), "Optimization or bricolage? Overcoming resource constraints in global social entrepreneurship", *Strategic Entrepreneurship Journal*, Vol. 7 No. 1, pp. 26-49.
- Dibrell, C., Craig, J.B. and Neubaum, D.O. (2014), "Linking the formal strategic planning process, planning flexibility, and innovativeness to firm performance", *Journal of Business Research*, Vol. 67 No. 9, pp. 2000-2007.
- Dopson, S., Ferlie, E., McGivern, G., Fischer, M.D., Mitra, M., Ledger, J. and Behrens, S. (2019), "Leadership development in higher education: a literature review and implications for programme redesign", *Higher Education Quarterly*, Vol. 73 No. 2, pp. 218-234.

- Dwivedi, A. and Pawsey, N. (2023), "Examining the drivers of marketing innovation in SMEs", *Journal of Business Research*, Vol. 155, p. 113409.
- Eisermann, R., Gloppen, J., Eikhaug, O. and White, P. (2005), "Responsible design leadership: the initiatives of professional organizations in Europe and the US", *Design Management Review*, Vol. 16 No. 3, pp. 19-22.
- Elkington, R., van der Steege, M., Glick-Smith, J.L. and Breen, J.M. (2018), *Exceptional Leadership by Design: How Design in Great Organizations Produces Great Leadership*, Emerald Publishing Limited, Bingley.
- Fernández-Serrano, J., Berbegal, V., Velasco, F. and Expósito, A. (2018), "Efficient entrepreneurial culture: a cross-country analysis of developed countries", *International Entrepreneurship and Management Journal*, Vol. 14 No. 1, pp. 105-127.
- Frank, P. (2011), "Workplace innovation for better jobs and performance", *International Journal of Productivity and Performance Management*, Vol. 60 No. 4, pp. 404-415.
- Frank, P., Peter, T. and Steven, D. (2016), "Workplace innovation: European policy and theoretical foundation", *World Review of Entrepreneurship, Management and Sustainable Development*, Vol. 12 No. 1, pp. 13-32.
- Frank, P., Peter, T. and Steven, D. (2020), "Workplace innovation supports implementation of european pillar of social rights", *European Journal of Workplace Innovation*, Vol. 5 No. 2, pp. 173-185.
- Galli, F., Pino, B. and Suteu, I. (2017), "Adaptive thinking for design leadership. Coaching adaptive capabilities to empower next visionary leaders", *The Design Journal*, Vol. 20 No. sup1, pp. 4183-4196.
- García-Morales, V., Lloréns-Montes, F. and Verdú-Jover, A. (2008), "The effects of transformational leadership on organizational performance through knowledge and innovation", *British Journal of Management*, Vol. 19 No. 4, pp. 299-319.
- GEM (2018), "Global Entrepreneurship Monitor- Gem Report 2017/18".
- Gerlach, F., Hundeling, M. and Rosing, K. (2020), "Ambidextrous leadership and innovation performance: a longitudinal study", *Leadership and Organization Development Journal*, Vol. 41 No. 3, pp. 383-398.
- Gloppen, J. (2009), "Perspectives on design leadership and design thinking and how they relate to European service industries", *Design Management Journal*, Vol. 4 No. 1,
- Golden III and John (2016), *Examining Relationships between Transformational Leadership and Employee Creativity and Innovation Performance: The Moderator Effects of Organizational Culture*, Northcentral University.
- Gomes, C., Curral, L., Caetano, A. and Marques-Quinteiro, P. (2015), "Better off together: a cluster analysis of self-leadership and its relationship to individual innovation in hospital nurses, Revista", *PSICOLOGIA*, Vol. 29 No. 1, pp. 45-58.
- González-Pernía, J., Jung, A. and Peña, I. (2015), "Innovation-driven entrepreneurship in developing economies", *Entrepreneurship and Regional Development*, Vol. 27 Nos 9/10, pp. 555-573.
- Grant, R.M. (1991), "The resource-based theory of competitive advantage: implications for strategy formulation", *California Management Review*, Vol. 33 No. 3, pp. 114-135.
- Hair, J., Black, W., Babin, B., Anderson, R. and Tatham, R. (2010), *Multivariate Data Analysis. A Global Perspective*, Pearson Prentice Hall.
- Hair, J., Hollingsworth, C.L., Randolph, A.B. and Chong, A.Y.L. (2017), "An updated and expanded assessment of PLS-SEM in information systems research", *Industrial Management and Data Systems*, Vol. 117 No. 3, pp. 442-458.
- Harsono, T.W., Hidayat, K., Iqbal, M. and Abdillah, Y. (2025), "Exploring the effect of transformational leadership and knowledge management in enhancing innovative performance: a mediating role of innovation capability", *Journal of Manufacturing Technology Management*, Vol. 36 No. 1, pp. 227-250.

- Ho, L.-A. (2008), "What affects organizational performance? The linking of learning and knowledge management", *Industrial Management and Data Systems*, Vol. 108 No. 9, pp. 1234-1254.
- Hoe, S.L. (2008), "Issues and procedures in adopting structural equation modelling technique", *Journal of Quantitative Methods*, Vol. 3 No. 1, p. 76.
- Iqbal, Q., Ahmad, N.H. and Ahmad, B. (2021), "Enhancing sustainable performance through job characteristics via workplace spirituality: a study on SMEs", *Journal of Science and Technology Policy Management*, Vol. 12 No. 3, pp. 463-490.
- Javed, B., Abdullah, I., Zaffar, M.A., U., Haque, A. and Rubab, U. (2019), "Inclusive leadership and innovative work behavior: the role of psychological empowerment", *Journal of Management and Organization*, Vol. 25 No. 04, pp. 554-571.
- Joel, O.T. and Oguanobi, V.U. (2024), "Entrepreneurial leadership in startups and SMEs: critical lessons from building and sustaining growth", *International Journal of Management and Entrepreneurship Research*, Vol. 6 No. 5, pp. 1441-1456.
- Joziasse, F. (2011), "The soul of design leadership", *Design Management Review*, Vol. 22 No. 3, pp. 34-42.
- Jung, D., Chow, C. and Wu, A. (2003), "The role of transformational leadership in enhancing organizational innovation: Hypotheses and some preliminary findings", *The Leadership Quarterly*, Vol. 14 Nos 4/5, pp. 525-544.
- Khan, S. (2021), "Exploring the firm's influential determinants pertinent to workplace innovation", *Problems and Perspectives in Management*, Vol. 19 No. 1, pp. 272-280.
- Khan, N.R., Gul, I., Khan, M.R., Khan, I. and Umar, M. (2024), "A comprehensive framework for optimizing workplace innovation in small and medium-sized enterprises: an emerging economy perspective", *Journal of Small Business and Enterprise Development*, Vol. 32 No. 1.
- Koivula, M., Villi, M. and Sivunen, A. (2023), "Creativity and innovation in technology-mediated journalistic work: mapping out enablers and constraints", *Digital Journalism*, Vol. 11 No. 6, pp. 906-923.
- Koomans, M. and Hilders, C. (2016), "Design-driven leadership for value innovation in healthcare", *Design Management Journal*, Vol. 11 No. 1, pp. 43-57.
- Kostopoulos, K.C., Spanos, Y.E. and Prastacos, G.P. (2002), "The resource-based view of the firm and innovation: identification of critical linkages", *The 2nd European Academy of Management Conference*, pp. 1-19.
- Kumar, L., Nadeem, F., Sloan, M., Restle-Steinert, J., Deitch, M.J., Ali Naqvi, S., Kumar, A. and Sassanelli, C. (2022), "Fostering green finance for sustainable development: a focus on textile and leather small medium enterprises in Pakistan", *Sustainability*, Vol. 14 No. 19, p. 11908.
- Laforet, S. (2011), "A framework of organisational innovation and outcomes in SMEs", *International Journal of Entrepreneurial Behavior and Research*, Vol. 17 No. 4, pp. 380-408.
- Lam, L., Huang, X. and Lau, D. (2012), "Leadership research in Asia: taking the road less traveled?", *Asia Pacific Journal of Management*, Vol. 29 No. 2, pp. 195-204.
- Langlois, R.N. (2007), "The entrepreneurial theory of the firm and the theory of the entrepreneurial firm", *Journal of Management Studies*, Vol. 44 No. 7, pp. 1107-1124.
- Le, V. and Valadkhani, A. (2014), "Are exporting manufacturing SMEs more efficient than non-exporting ones? Evidence from Australia's business longitudinal database", *Economic Analysis and Policy*, Vol. 44 No. 3, pp. 310-317.
- Lin, D., Zheng, W., Lu, J., Liu, X. and Wright, M. (2019), "Forgotten or not? Home country embeddedness and returnee entrepreneurship", *Journal of World Business*, Vol. 54 No. 1, pp. 1-13.
- McMurray, A. and Scott, D. (2013), "Work values ethic, GNP per capita and country of birth relationships", *Journal of Business Ethics*, Vol. 116 No. 3, pp. 655-666.

- McMurray, A., Islam, M., Sarros, J.C. and Pirola-Merlo, A. (2013), "Workplace innovation in a nonprofit organization", *Nonprofit Management and Leadership*, Vol. 23 No. 3, pp. 367-388.
- McMurray, A., Muenjohn, N. and Weerakoon, C. (2021), *The Palgrave Handbook of Workplace Innovation*, Springer.
- Mayr, S., Mitter, C., Kücher, A. and Duller, C. (2021), "Entrepreneur characteristics and differences in reasons for business failure: evidence from bankrupt Austrian SMEs", *Journal of Small Business and Entrepreneurship*, Vol. 33 No. 5, pp. 539-558.
- McMurray, A. and Dorai, R. (2003), "Workplace innovation scale: a new method for measuring innovation in the workplace", *The 5th European Conference on Organizational Knowledge, Learning and Capabilities (OKLC 2003)*.
- Mokhber, M., Khairuzzaman, W. and Vakilbashi, A. (2018), "Leadership and innovation: the moderator role of organization support for innovative behaviors", *Journal of Management and Organization*, Vol. 24 No. 1, pp. 108-128.
- Muenjohn, N. and McMurray, A. (2015), "Leadership, work values ethic and workplace innovation: a comparative study between Thai and Vietnamese SME's", *Asia Pacific Conference on Business and Social Sciences*, Kuala Lumpur.
- Muenjohn, N. and McMurray, A. (2016), "The impact of leadership on workplace innovation in Thai and Vietnamese SMEs", *The Journal of Developing Areas*, Vol. 50 No. 5, pp. 479-486.
- Muenjohn, N. and McMurray, A. (2017), "Design leadership, work values ethic and workplace innovation: an investigation of SMEs in Thailand and Vietnam", *Asia Pacific Business Review*, Vol. 23 No. 2, pp. 192-204.
- Muenjohn, N., Chhetri, P., Hoare, L., As-Saber, S. and Suzumura, Y. (2013), "Design leadership: a conceptual framework of leadership, design and team performance", *International Proceedings of Economics Development and Research*, Vol. 60, p. 157.
- Muenjohn, N., Ishikawa, J., Kongsamutr, N., Muenjohn, P., Montague, A. and Suzumura, Y. (2021), "Comparing perceptions of leadership, innovation and performance in Asian SMEs", *Asia Pacific Business Review*, Vol. 27 No. 4, pp. 513-527.
- Nazarian, A., Atkinson, P. and Foroudi, P. (2017), "Influence of national culture and balanced organizational culture on the hotel industry's performance", *International Journal of Hospitality Management*, Vol. 63, pp. 22-32.
- Nguyen, N.T. (2020), *Relationships between Leadership Styles and Organisational Innovation in Vietnamese Public Enterprises: The Mediating Role of Employee Creativity*, University of Nottingham.
- Novitasari, D., Siswanto, E., Purwanto, A. and Fahmi, K. (2020), "Authentic leadership and innovation: what is the role of psychological capital?", *International Journal of Social and Management Studies*, Vol. 1 No. 1, pp. 1-21.
- Oeij, P.R. and Dhondt, S. (2017), "Theoretical approaches supporting workplace innovation", *Workplace Innovation: Theory, Research and Practice*, pp. 63-78.
- Oeij, P.R. and Vaas, F. (2016), "Effect of workplace innovation on organisational performance and sickness absence", *World Review of Entrepreneurship, Management and Sustainable Development*, Vol. 12 No. 1, pp. 101-129.
- Oeij, P.R.A., Dhondt, S. and Korver, T. (2011), "Workplace innovation, social innovation, and social quality", p. 31.
- Oeij, P., de Vroome, E., Bolland, A., Grundemann, R. and van Teeffelen, L. (2014), "Investing in workplace innovation pays off for SMEs: a regional innovation initiative from the Netherlands", *International Journal of Social Quality*, Vol. 4 No. 2, p. 86.
- Ouakouak, M.L., Zaitouni, M.G. and Arya, B. (2020), "Ethical leadership, emotional leadership, and quitting intentions in public organizations", *Leadership and Organization Development Journal*, Vol. 41 No. 2.

- Oyemomi, O., Liu, S., Neaga, I., Chen, H. and Nakpodia, F. (2019), "How cultural impact on knowledge sharing contributes to organizational performance: using the fsQCA approach", *Journal of Business Research*, Vol. 94, pp. 313-319.
- Patton, M.Q. (2002), "Two decades of developments in qualitative inquiry: a personal, experiential perspective", *Qualitative Social Work*, Vol. 1 No. 3, pp. 261-283.
- Perera, S. and Baker, P. (2007), "Performance measurement practices in small and medium size manufacturing enterprises in Australia", *Small Enterprise Research*, Vol. 15 No. 2, pp. 10-30.
- Phoosawad, S., Fongsuwan, W. and Trimetsoontorn, J. (2014), "Leadership, management skill and organization innovation affecting auto parts organization performance", *Research Journal of Business Management*, Vol. 8 No. 2, pp. 70-88.
- Podsakoff, P.M., MacKenzie, S.B. and Podsakoff, N.P. (2012), "Sources of method bias in social science research and recommendations on how to control it", *Annual Review of Psychology*, Vol. 63 No. 1, pp. 539-569.
- Podsakoff, P.M., MacKenzie, S.B., Lee, J.-Y. and Podsakoff, N.P. (2003), "Common method biases in behavioral research: a critical review of the literature and recommended remedies", *Journal of Applied Psychology*, Vol. 88 No. 5, p. 879.
- Ramadani, V., Hisrich, R.D., Abazi-Alili, H., Dana, L.-P., Panthi, L. and Abazi-Bexheti, L. (2019), "Product innovation and firm performance in transition economies: a multi-stage estimation approach", *Technological Forecasting and Social Change*, Vol. 140, pp. 271-280.
- Reinmoeller, P. (2002), "Design with markets! Leveraging knowledge for innovation", *Design Management Journal (Former Series)*, Vol. 13 No. 2, pp. 38-46.
- Reschka, A., Bagschik, G., Ulbrich, S., Nolte, M. and Maurer, M. (2015), "Ability and skill graphs for system modeling, online monitoring, and decision support for vehicle guidance systems", *Intelligent Vehicles Symposium (IV)*, pp. 933-939.
- Roald, J.E. (2006), "Design leadership", *5th NordCode Seminar: "Connecting Fields"*, Oslo.
- Roomi, M.A. and Harrison, P. (2010), "Behind the veil: women-only entrepreneurship training in Pakistan", *International Journal of Gender and Entrepreneurship*, Vol. 2 No. 2, pp. 150-172.
- Rumelt, R.P. (2005), "Theory, strategy, and entrepreneurship", *Handbook of Entrepreneurship Research: Interdisciplinary Perspectives*, Springer, pp. 11-32.
- Safdar, N., Moazzam, M., Ahmed, W., Khan, A.S., Manzoor, W. and Raziq, M.M. (2024), "The impact of adopting green procurement practices on the competitiveness of small and medium enterprises: a dual-mediation model", *Benchmarking: An International Journal*.
- Santos-Vijande, M.L., López-Sánchez, J.Á. and González-Mieres, C. (2012), "Organizational learning, innovation, and performance in KIBS", *Journal of Management and Organization*, Vol. 18 No. 6, p. 870.
- Saunders, M., Lewis, P. and Thornhill, A. (2016), *Research Methods for Business Students (8. utgave)*, Pearson Education Limited, Harlow.
- Sawyer, R.K. and Henriksen, D. (2024), *Explaining Creativity: The Science of Human Innovation*, Oxford university press.
- Schein, E.H. (1992), *How Can Organizations Learn Faster?: the Problem of Entering the Green Room*, Alfred P. Sloan School of Management, MA Institute of Technology.
- Sekaran, U. (2016), *Research Methods for Business: A Skill Building Approach*, John Wiley and Sons.
- Shipman, A.S., Byrne, C.L. and Mumford, M.D. (2010), "Leader vision formation and forecasting: the effects of forecasting extent, resources, and timeframe", *The Leadership Quarterly*, Vol. 21 No. 3, pp. 439-456.
- Simmers, C.A. and McMurray, A. (2019), "Organisational justice and managing workplace innovation: How important are formal procedures?", *International Journal of Innovation Management*, Vol. 23 No. 03, p. 1950026.

- Soomro, B.A. and Shah, N. (2019), "Determining the impact of entrepreneurial orientation and organizational culture on job satisfaction, organizational commitment, and employee's performance", *South Asian Journal of Business Studies*, Vol. 8 No. 3, pp. 266-282.
- Sulaiman, N. (2016), *The Impact of Financial Knowledge and Capabilities on SME Firm Performance in Australia*, RMIT University.
- Syed, A. (2019), *Pakistan's Start-up Landscape: Three Ways to Energize Entrepreneurship*, Mckensey and Comapny.
- Szczepańska-Woszczyzna, K. (2015), "Leadership and organizational culture as the normative influence of top management on employee's behaviour in the innovation process", *Procedia Economics and Finance*, Vol. 34, pp. 396-402.
- Tang, G., Chen, Y., van Knippenberg, D. and Yu, B. (2020), "Antecedents and consequences of empowering leadership: Leader power distance, leader perception of team capability, and team innovation", *Journal of Organizational Behavior*, Vol. 41 No. 6, pp. 551-566.
- Tapan, S.S. (2001), "Entrepreneurial ventures and small business", *Journal of Research in Marketing and Entrepreneurship*, Vol. 3 No. 3, pp. 123-138.
- Tashakkori, A. and Teddlie, C. (2010), "Putting the human back in 'human research methodology': the researcher in mixed methods research", sage publications sage CA: Los angeles, CA", pp. 271-277.
- Thadani, D.R. and Cheung, C.M. (2011), "Online social network dependency: theoretical development and testing of competing models", *In 2011 44th Hawaii International Conference on System Sciences*, IEEE, pp. 1-9.
- Tippins, M.J. and Sohi, R.S. (2003), "IT competency and firm performance: is organizational learning a missing link?", *Strategic Management Journal*, Vol. 24 No. 8, pp. 745-761.
- Topalian, A. (2002), "Promoting design leadership through skills development programs", *Design Management Journal (Former Series)*, Vol. 13 No. 3, pp. 10-18.
- Turner, R. (2016), *Design Leadership: securing the Strategic Value of Design*, Routledge.
- Van Vugt, M. and von Rueden, C.R. (2020), "From genes to minds to cultures: evolutionary approaches to leadership", *The Leadership Quarterly*, Vol. 31 No. 2, p. 101404.
- Verganti, R. (2003), "Design as brokering of languages: Innovation strategies in italian firms", *Design Management Journal (Former Series)*, Vol. 14 No. 3, pp. 34-42.
- Verma, P., Kumar, V., Daim, T. and Sharma, N.K. (2023), "Design thinking framework toward management control system in environmental dynamism: an innovation perspective", *IEEE Transactions on Engineering Management*, Vol. 71.
- Vettorello, M. and Burke, J. (2021), "Anticipatory leadership: an invitation to Be more creative", *Leadership for the Future: Lessons from the Past, Current Approaches, and Future Insights*, ed. Mengel, Thomas, pp. 170-191.
- Volery, T. and Tarabashkina, L. (2021), "The impact of organisational support, employee creativity and work centrality on innovative work behaviour", *Journal of Business Research*, Vol. 129, pp. 295-303.
- Vom Brocke, J., Zelt, S. and Schmiedel, T. (2016), "On the role of context in business process management", *International Journal of Information Management*, Vol. 36 No. 3, pp. 486-495.
- Von Treuer, K. and McMurray, A.J. (2012), "The role of organisational climate factors in facilitating workplace innovation", *International Journal of Entrepreneurship and Innovation Management*, Vol. 15 No. 4, pp. 292-309.
- Wang, Z., Meng, L. and Cai, S. (2019), "Servant leadership and innovative behavior: a moderated mediation", *Journal of Managerial Psychology*, Vol. 34 No. 8, pp. 505-518.
- Wintersteiner, W. (2024), "'Conceptualising change in the world system': towards a more complex and comprehensive understanding of peace and conflict research", *Shifting Protracted Conflict Systems Through Local Interactions*, Routledge, pp. 57-78.

- Wolf, P., Kaudela-Baum, S. and Meissner, J.O. (2012), "Exploring innovating cultures in small and medium-sized enterprises: findings from Central Switzerland", *International Small Business Journal: Researching Entrepreneurship*, Vol. 30 No. 3, pp. 242-274.
- Zaharuddin, Z., Wahyuningsih, S., Sutarman, A. and Hikam, I.N. (2024), "Understanding purposeful leadership in entrepreneurial contexts: a bibliometric analysis", *Aptisi Transactions on Technopreneurship (ATT)*, Vol. 6 No. 2, pp. 213-230.
- Zhao, X., Chen, S. and Xiong, C. (2016), "Organizational attention to corporate social responsibility and corporate social performance: the moderating effects of corporate governance", *Business Ethics: A European Review*, Vol. 25 No. 4, pp. 386-399.
- Zhu, J. and Huang, F. (2023), "Transformational leadership, organizational innovation, and ESG performance: evidence from SMEs in China", *Sustainability*, Vol. 15 No. 7, p. 5756.
- Zou, Z., Liu, Y., Ahmad, N., Sial, M.S., Badulescu, A., Zia-Ud-Din, M. and Badulescu, D. (2021), "What prompts small and medium enterprises to implement CSR? A qualitative insight from an emerging economy", *Sustainability*, Vol. 13 No. 2, p. 952.

QUESTIONNAIRE

Screening Question:

Are you an executive working in an entrepreneurial SME venture that actively seeks to innovate while employing less than 250 employees?

1-Yes (Section-1)

2- No (Terminate)

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Section-I

Please indicate the extent to which you agree or disagree regarding practices of internal capabilities, i.e. work values ethic, organisational culture, leadership styles, workplace innovation and organisational performance in the present company by selecting a number from 1 to 5, representing 1 for strongly disagree, and 5 for strongly agree.

1- Strongly Disagree	2- Disagree	3- Neutral	4- Agree	5- Strongly Agree
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Sr. No	Items	Rating				
Design Leadership						
1	I have a clear understanding of my company's goals and objectives.	1	2	3	4	5
2	I am able to align staff, work, and allocate resources to achieve goals.	1	2	3	4	5
3	I am effective at diffusing developed ideas across departments.	1	2	3	4	5
4	I provide coaching to induce creative thinking.	1	2	3	4	5
5	I have a clear sense of where my company is heading and will be in the next 5 years	1	2	3	4	5
6	I carefully assess the feasibility of a particular project before making any financial commitment to it.	1	2	3	4	5
7	I encourage my staff to transfer new ideas into innovative product.	1	2	3	4	5
8	I encourage my staff to generate creative ideas.	1	2	3	4	5
9	I communicate to my staff a clear idea where our company is going	1	2	3	4	5
10	I understand the importance of the value added by innovation in the context of costs, profits and markets	1	2	3	4	5
11	I am good at turning ideas into viable products and/or business practices.	1	2	3	4	5
12	I welcome every new idea that people would like to share.	1	2	3	4	5
13	I provide clear guidelines to my staff on how to reach our goals	1	2	3	4	5
14	I emphasise the importance of company's investment in innovation.	1	2	3	4	5
15	I help my staff to understand the strategic direction that our company is heading.	1	2	3	4	5
16	I am willing to try new ways of doing things and seek unusual and novel solutions	1	2	3	4	5
17	I have a clear picture of what needs to be done in my organisation to achieve a higher standard of excellence.	1	2	3	4	5
18	I quickly become aware of competitors' innovations and imitations.	1	2	3	4	5
Workplace Innovation						
19	Our workplace has a vision that is made very clear to the employees.	1	2	3	4	5
20	The vision of my workplace often helps the employees in setting their goals.	1	2	3	4	5
21	Innovation in my workplace is linked to its business goals.	1	2	3	4	5
22	In our workplace opportunities to learn are created through systems and procedures.	1	2	3	4	5
23	Our workplace rewards innovative ideas regularly.	1	2	3	4	5
24	My boss is our role model in creative thinking.	1	2	3	4	5

25	I discuss with my boss regularly, on how to get ahead.	1	2	3	4	5
26	I am always given opportunities to try new ideas and approaches to problems.	1	2	3	4	5
27	My boss gives me useful feedback regarding my creative ideas.	1	2	3	4	5
28	My boss gives me an opportunity to learn from my mistakes.	1	2	3	4	5
29	My boss and my colleagues perceive me to be a creative problem solver.	1	2	3	4	5
30	In my workplace, performance measurement of an individual is related to his or her own creativity.	1	2	3	4	5
31	At work, I sometimes demonstrate originality.	1	2	3	4	5
32	My work requires me to make innovative decisions.	1	2	3	4	5
33	I make time to pursue my own ideas or projects.	1	2	3	4	5
34	I am constantly thinking of new ideas to improve my workplace.	1	2	3	4	5
35	I express myself frankly in staff meetings.	1	2	3	4	5
36	I work in teams to solve complex problems.	1	2	3	4	5
37	In our workplace performance measurement is related to one's initiative to solve problems.	1	2	3	4	5
38	We work in teams to solve complex problems.	1	2	3	4	5
39	In our workplace teams have freedom to make decisions and act on them without needing to ask for permission.	1	2	3	4	5
40	In my company, people feel a strong sense of membership and support.	1	2	3	4	5
41	My colleagues welcome uncertainty and unusual circumstances related to our work.	1	2	3	4	5
42	Amongst my colleagues, I am the first one to try new ideas and methods.	1	2	3	4	5
Organisational Performance (In last three years)						
43	Our return on investment (ROI) is higher than that of our major competitors.	1	2	3	4	5
44	Compared to major competitors, sales of our organisation have been Increasing rapidly.	1	2	3	4	5
45	The operations of our organisation are very profitable relative to our major Competitors.	1	2	3	4	5
46	The strategic position of our organisation in the market is very strong.	1	2	3	4	5
47	Relative to our major competitors, our organisation is very competitive in the market.	1	2	3	4	5
48	Our market share is very high relative to our major competitors.	1	2	3	4	5
49	We have been able to build a leadership position in our industry.	1	2	3	4	5

Source(s): Table by author

Section-II: Respondent demographics

The Bottom Line

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Q1: How many employees does the present company have?

- 1) 1-50 employees
- 2) 51-200 employees
- 3) 200 above employees

Q2: In which Country company's head office located?

- 1) Australia
- 2) Pakistan
- 3) Other (Please Specify) _____

Q3: The present company operates:

- 1) Locally (only in one state/Province)
- 2) Nationally (more than one state/Province)
- 3) Locally and Internationally
- 4) Nationally and Internationally

Q4: How long has the present company been in business?

- 1) Less than a year
- 2) 1-5 years
- 3) 6-10 years
- 4) 11-20 years
- 5) More than 20 years

Q5: Please specify in what industry the present company is operating?

- 1) Agriculture, Forestry and Fishing
- 2) Mining
- 3) Manufacturing
- 4) Electricity, Gas, Water and Waste Services
- 5) Construction
- 6) Wholesale Trade
- 7) Retail Trade
- 8) Accommodation and Food Services
- 9) Transport, Postal and Warehousing
- 10) Information Media and Telecommunications
- 11) Financial and Insurance Services
- 12) Rental, Hiring and Real Estate Services
- 13) Professional, Scientific and Technical Services
- 14) Administrative and Support Services
- 15) Public Administration and Safety
- 16) Education and Training
- 17) Health Care and Social Assistance
- 18) Arts and Recreation Services
- 19) Other Services (please specify) _____

Q6: In which sector is the present company operating?

- 1) Private sector
- 2) Public sector

Q7: Which category best describes the business ownership in the present company?

- 1) Family Business
- 2) Non-family Business

Q8: What is your gender?

- 1) Male
- 2) Female

Q9: What is your current marital status?

- 1) Single
- 2) Married
- 3) Other (Please Specify) _____

Q10: Please indicate your age category:

- 1) Between 18-35
- 2) Between 36-50
- 3) Between 51-65
- 4) Over 65 years old

Q11: What is your position in the present company? (Please tick as many as appropriate)

- 1) Founder
- 2) Owner
- 3) CEO
- 4) Managing Director
- 5) Director
- 6) Manager
- 7) Supervisor
- 8) Employee

Q12: Please specify your employment status in the present company?

- 1) Full-time
- 2) Part-time
- 3) Casual
- 4) Volunteer

Q13: How long have you been with the present company?

- 1) 4 years and less
- 2) 5-10 years
- 3) 11-15 years
- 4) 16 years and above

Q14: What is the highest level of education that you achieved?

- 1) High School or Lower
- 2) TAFE Qualification or college
- 3) Bachelor's degree
- 4) Postgraduate Qualification (please specify) _____

Corresponding author

Ali Iftikhar Choudhary can be contacted at: ali.choudhary@rmit.edu.au