Journal of Business and Digital Innovation (JBDI)
Volume 1, Issue 2, July 2026, PP 104-118
ISSN 2978-4522 (Print) & ISSN 2978-4530 (Online)
https://doi.org/10.19164/jbdi.v1i2.1882

Does Organizational Culture Drive Innovation in Non-profit Organizations? Testing the Applicability of ICEF Model at Qatar Charity

[1]Abdulaziz Hussain Al-Saadi, [2]Arshad Jamal, & [3]Syed Rizwan Shahid Pirzada
[1, 2 & 3]QFBA-Northumbria University, Qatar

Abstract
Innovation is a critical factor in determining long-term success of organizations, including non-profit organizations. Unlike commercial organizations, non-profit organizations (NPOs) are mission-driven, compliance heavy, and operate in resource constrained environments. This study investigates the applicability of the Innovative Culture Enhancement Framework (ICEF) within a large humanitarian non-profit organization, Qatar Charity. Utilizing a quantitative cross-sectional survey, based on the Competing Values Framework (CVF), and a modified Community Innovation Survey (CIS), this study assessed culture-innovation linkages in Qatar Charity. The findings of the study revealed Adhocracy Culture as a powerful predictor for all innovation types. Surprisingly, Hierarchy Culture, typically seen as antithetical to innovation, emerged as a significant positive predictor for all innovation typologies, suggesting a sector-specific form of structured innovation in compliance-intensive NPO environments. Market and Clan cultures had selective effects on innovation. From a policy standpoint, this study offers actionable insights for non-profit managers who foster innovation through culturally targeted strategies, emphasizing the complementary roles of creativity, collaboration, and procedural formalization.

Keywords: Innovation, ICEF, Non-profit Organizations, Organizational Culture, Competing Values Framework

Wordcount: 161

1.0 Introduction

Innovation is increasingly recognized as a critical factor in determining long-term success of organizations, including non-profit organizations (NPOs), that operate in fast changing complex business environments (Bendak et al., 2020; Bessant & Tidd, 2011; Mulgan, 2006). Innovation, conceptualized as transitioning away from existing knowledge, practices, policies, strategies, and beliefs to new methods of conducting businesses, enables organizations in possessing competitive advantages over their competitors (Afuah, 2003). Innovation can either be internally generated (within an organization) or adopted from external environments (Bendak et al., 2020). The implementation of innovation may be either radical or incremental. Radical innovation involves considerable risk because of the uncertainty and is harder to implement, however, it might be more suitable for long-term growth. Incremental innovation is more appropriate for making gradual improvements (Bendak et al., 2020; Dewar & Dutton, 1986; Giannopoulou et al., 2019; Revilla and Rodriguez-Prado, 2018). Unlike commercial organizations that are driven by the pursuit of profit maximization, non-profit organizations are largely mission-driven (Anheier, 2014). NPOs face increasing pressure from their donors, regulatory agencies, and communities to deliver social impact in a transparent, responsive, and efficient manner (Lewis, 2003; Salamon, 2010; DiMaggio & Powell, 1983). Resultantly, NPOs continuously need to adopt innovative practices in their management, finances, and organizational structure to achieve their institutional mission.

Several studies (Fisher &Wilmoth, 2018; Jaskyte and Kisieliene, 2006; Hutchison et al., 2019; Martins and Terblanche, 2003; Schein, 2004; Tellis et al., 2009) emphasize the role of organizational culture in determining organizational innovation capability. Organizational culture is defined as the shared values, norms, assumptions and practices that shape behaviour. Using archival data from 759 firms across 17 countries, Tellis et al. (2009) assessed the influence of corporate culture on radical innovation. The findings of the study indicate significant role of corporate culture in driving innovation across firms. Similarly, scholars (Jaskyte & Kisieliene, 2006; Schein, 2004) report that organizational culture that encourages collaboration, experimentation and adaptability has a higher chance of fostering innovation (Denison &

Mishra, 1995) as compared to formalism, strict hierarchy and risk aversion, which may suppress innovation (Jaskyte & Dressler, 2005). Although there is growing acceptance of this culture-innovation association, empirical studies and theoretical models to operationalize this association have been largely developed in corporate and profit-driven contexts (Cameron & Quinn, 2011; Quinn & Rohrbaugh, 1983). This is in contrast with a humanitarian or non-profit organization, where performance indicators, motivation systems, and accountability systems have a mission-focused approach as opposed to market-based orientations (Ebrahim & Rangan, 2010). Consequently, models that have been tested in the private for-profit organizations might not be applicable in the non-profit setting (Kaplan, 2001).

Qatar Charity (2022), one of the largest humanitarian organizations in the Gulf region, operates across 70 countries and deals with matters on health, education, livelihoods, and disaster relief. The organization must continuously adapt to address complex challenges. This study examines the impact of organizational culture on innovation in the context of non-profit organizations, using Qatar Charity as a case study. The compliance-heavy governance structure of Qatar Charity and regional cultural norms may present unique barriers or enablers to innovation (Renko et al., 2015; UN OCHA, 2021), making the study of internal culture and innovation both theoretically and practically significant. In the present study, the Innovative Culture Enhancement Framework (ICEF) has been used to provide an empirical evaluation of its transferability and predictive validity in a non-profit setting. Innovative Culture Enhancement Framework (ICEF) formulated by Bendak et al. (2020) offers a data-oriented, systematic method of organizational culture diagnostics, innovation outcome measurement, and integration of the two with the help of specific intervention (Bendak et al., 2020). ICEF allows statistical modeling of culture innovation relationships, through the combination of the Competing Values Framework (CVF) (operationalized using the organizational Culture Assessment Instrument (OCAI) (Cameron & Quinn, 2011)) with innovation typologies obtained by the Community Innovation Survey (CIS) (OECD/Eurostat, 2018). ICEF has been proven to be highly predictive and strategic in the context of corporations, however, it has not been empirically tested in the context of non-profit or mission-driven organizations that are fundamentally distinct in terms of operational logic, motivation structures and innovation dynamics (Ebrahim, 2005; Moore, 2000;). The study addresses this gap by empirically evaluating the predictive logic of ICEF in a non-profit humanitarian organization to find out whether these relationships between culture and innovation, as found in corporate settings, hold (Tschirhart & AbouAssi, 2025).

The study seeks to: First, attempt to diagnose the organizational culture profile of Qatar Charity using the OCAI based on the Competing Values Framework (CVF). Second, use a modified version of the Community Innovation Survey and measure the current levels and types of innovation at Qatar Charity. Third, utilize multiple regression techniques to analyze the statistical relationship between organizational culture types and innovation (Aboajela, 2015). Fourth, evaluates the validity of ICEF's predictive logic in a humanitarian non-profit context. This study is significant across theoretical, practical, and policy-making levels. Theoretically, it examines the generalizability of the Innovative Culture Enhancement Framework (ICEF), initially developed for the private sector, to a non-profit humanitarian setting, advancing the knowledge of how organizational culture predetermines innovation success in mission-driven organizations (Bendak et al., 2020; Brown & Osborne, 2013).

Beyond testing transferability, this study makes a specific theoretical contribution to the Competing Values Framework (CVF) literature. The dominant CVF-based finding in corporate settings is that Hierarchy culture is neutral or negative for innovation, while Adhocracy and Clan cultures are positive enablers (Büschgens et al., 2013; Hartnell et al., 2011). If this pattern does not hold in a compliance-intensive, donor-accountable non-profit context, this would suggest that the hierarchy-innovation relationship is not a universal property of CVF but is instead moderated by sectoral accountability structures. In this sense, the present study uses the non-profit humanitarian setting not merely as a new application context for ICEF, but as a boundary-condition test of one of CVF's more established assumptions.

In practice, it gives humanitarian entities evidence of whether profit-driven innovation systems can be adapted or require contextual modifications to implement innovation with the assistance of cultural interventions. To policymakers, the study can be used in designing innovation policy in the non-profit sector, especially in the Gulf by revealing how strategic planning and capacity-building is informed by framework like ICEF. The remainder of the paper is organized as follows: Following this is a section on literature review. Next section presents the data sources and research methodology utilized in this study.

Fourth section presents the findings of the study. The final section concludes the paper with policy recommendations.

2.0 Review of Literature

Organizational culture has been described as a pattern of shared basic assumptions that evolve as a group learns to deal with internal integration and external adaptation issues and is passed down to new members as the way to think, feel, and perceive things (Schein, 2010). This perspective views organizational culture as multi-layered: on the most superficial level are artefacts, which include the physical component like the dressing style, office architecture or observable rites. Under these are espoused values which are the declared norms and strategies such as mission statements and strategic plans which direct behaviour in an organization. The deepest layer is the level of basic assumptions, deep, unconscious beliefs that cannot be seen but have a significant impact on behavior. This stratification is important to innovation since the results of innovation can be contingent on not what organizations claim to hold dear to them, but whether innovation-promoting practices are practiced in routines, symbols, and everyday practice. In non-profit organizations, beliefs about the sanctity or compliance of the mission that are strongly held may deter experimentation or risk-taking and prevent an organisation to innovate (Lewis, 2003). Studies on culture-innovation linkages demonstrate the channels through which organizational culture influences innovation. First, it affects the readiness to offer and explore ideas. Second, it determines how much failure and conflict are perceived to be expensive. Third, it determines the extent of knowledge sharing and cross-boundary linkages. And finally, it determines the presence of, and legitimacy of resources allocated to exploration. Martins and Terblanche (2003) combine this reasoning into a model of strategy, structural arrangements, support mechanisms, and communication patterns, which are cultural determinants and facilitate creativity and innovation. Another related tradition is componential theory of creativity and innovation which predicts motivational and work-environment factors. The work of Amabile et al. (1996) operationalized the climate for creativity in the form of perceived stimulants (e.g., organizational encouragement, challenging work, supervisory support, freedom) and barriers (e.g., organizational impediments, workload pressure), which offers an invaluable measurement bridge between culture/climate and innovation results.

The Competing Values Framework (CVF), developed by Quinn and Rohrbaugh (1983) and later modified by Cameron & Quinn (2011), is one of the most commonly used models of diagnosing organizational culture. It is a two-axis model that combines flexibility and control and internal and external focus to come up with four different cultural archetypes, namely, adhocracy culture (AC), clan culture (CC), market culture (MC), and hierarchy culture (HC) (Cameron & Quinn, 2011). The Clan culture is focused on a team, participative, and collaborative working environment building a sense of belonging and purpose. Adhocracy culture on the other hand is entrepreneurial and dynamic, whereby adaptability, creativity, and risk-taking are considered important. Market culture is competitive, result-oriented and goal oriented, and high achievement externality is focused. The hierarchical culture is one that is bureaucratic, is rule-oriented, focused on order and stability and has well-defined control and authority. The Organizational Culture Assessment Instrument (OCAI), developed by Cameron and Quinn (2011), operationalizes the CVF through a six-dimensional survey. The OCAI is ipsative in nature and is effective in bringing out relative cultural dominance. However, it does not allow generation of independent score of each type of culture, which impacts statistical analysis. Empirical evidence indicates that adhocracy and clan cultures are linked with the increased rates of innovation. On the other hand, hierarchy tends to have a neutral or negative correlation to innovation, especially in radical or exploratory type (Büschgens et al., 2013; Hartnell et al., 2011). These findings underpin ICEF's predictive logic (Bendak et al., 2020). A similar trait-based model by Denison & Mishra (1995) identifies four cultural traits; involvement, consistency, adaptability, and mission that are often identified as especially helpful in predicting innovation capacity.

Hogan and Coote (2014) assessed the applicability of Schein's (2010) three-layer model. The authors found that more proximal norms, artifacts, and innovative behaviors are the results of deeper cultural values and the innovation pathway is connected with performance in a professional environment. The findings reinforce the argument that value statements do not motivate innovation but instead the practice of those value statements in routines and behavior expectations do. Jaskyte & Dressler (2005) evaluated the role of organizational culture in influencing innovation within the context of non-profit organizations. The authors discovered the significant role of cultural consensus and organizational values in predicting the organizational innovativeness (controlling leadership and size), indicating that innovation-supportive

culture works in the setting of non-profit as it does in for-profit. Other areas of interest to non-profit innovation scholarship include the view that innovation is often mission-directed and contingent on the stakeholder. McDonald (2007) provided evidence in favor of mission serving as an intervening force in the innovation process, indicating that it is not a limiting concept, at least, but can be an enabler in legitimizing change. At the same time, non-profit organizations are subjected to greater demands of accountability and transparency which may exert risk aversion and increased focus on compliance and stakeholder signaling rather than experimentation. Yasmin and Ghafran (2021) underscored the centrality of accountability expectations to the maintenance of trust and legitimacy, the nature of managerial discretion and organizational priorities, which can have a significant influence on innovation investment and tolerance of failure. Moreover, the donor expectation taking regulatory restrictions tends to be one of the key factors that can balance the willingness or possibility of an organization to take risks (Banks et al., 2015). Table 1 presents the key studies on organizational culture-innovation linkages.

Table 1:
Key Studies on Organizational culture-innovation linkages

Paper	Methodology	Summary of findings
Martins and Terblanche (2003)	Conceptual review of literature	Proposes a culture - innovation model identifying determinants that stimulate creativity: strategy, structure, support mechanisms, and open communication.
Amabile et al. (1996)	Survey-based scale development	Work environments that allow autonomy, challenging work, resources, and support have higher creativity.
Hogan and Coote (2014)	Structural Equation Modeling testing Schein's (2010) model	Supports a layered pathway: norms, artifacts, and innovative behaviors partially mediate effects of innovation-supporting values on performance.
Hartnell et al. (2011)	Meta analysis of 84 empirical studies	Clan, adhocracy, and market cultures show differential positive associations with effectiveness criteria (including operational performance such as innovation/quality).
Büschgens et al. (2013)	Meta-analytic review of culture-innovation link	Reports systematic difference by culture orientation, with innovation fitting best in externally oriented, flexibility based developmental/ adhocracy-like cultures, control/ stability- oriented cultures are generally less favorable to innovation.
Jaskyte and Dressler (2005)	Survey study of non-profit human service organizations	Organizational innovativeness is inversely related to cultural consensus and negatively related to stability values.
McDonald (2007)	Two studies among U.S. non-profit hospitals; tests mission's role in innovation process.	A clear, motivating mission focuses attention on mission-supporting innovations and creates a climate where innovations receive a fair chance; organizations with clearer missions tend to be more innovative.

The Oslo manual defines innovation as the implementation of a new or significantly improved product (good or service), process, marketing method or organizational method. This definition encapsulates a multidimensional view of innovation, transcending beyond a narrow focus on technology or Research and Development (R&D) to include changes in strategy, governance, and service delivery (OECD/Eurostat, 2018). This extensiveness is particularly crucial to non-profit organizations, in which the unfolding of innovation is not in the form of physical goods but as a new model of service, an approach to outreach, or a more effective internal process (Mulgan, 2006; Phills et al., 2008). The Oslo Manual also divides innovation into incremental and radical innovation. Non-profit organizations have more often incremental and end-focused innovation, which makes such innovation less disruptive to markets and paradigms (Osborne & Brown, 2011). Community Innovation Survey (CIS), designed by Eurostat, is a widely used instrument for national-level assessments of innovation activities. The CIS categorizes innovation into four types. Product innovation refers to introducing new or significantly improved goods or services. Process innovation entails the alteration of internal production or service delivery modes. Organizational Innovation refers to management structure, workflow or workplace innovation. Marketing innovation

refers to new methods of advertising, reaching out or branding strategy. Although the CIS was originally intended to be used for for-profit organizations, its typologies can be applied in any organizational context. Bendak et al. (2020) substituted numerous binary (yes/no) CIS items with a 10-point Likert scale to increase the accuracy of measurements, asking respondents to rate 12 items on a 1 (very weak) to 10 (very strong) scale.

The conceptual framework of this study is based on the multidimensional perspective on innovation as presented by the Oslo Manual (OECD/Eurostat, 2018) and the CIS (Arundel and Smith, 2013). Bendak et al. (2020) presented the Innovative Culture Enhancement Framework (ICEF) as a methodical model aimed at connecting organizational culture diagnostics (using the CVF/OCAI) with the outcomes of innovation (measured using a modified CIS). This study addresses four key gaps identified in the literature. First, the ICEF model has not been empirically investigated in non-profit or humanitarian settings even though it is useful in for-profit scenarios. Second, currently available culture-innovation literature is heavily corporate-centered, not paying much attention to the mission-driven dynamics imperatives of non-profit making organizations (Hartnell et al., 2011). Lastly, there is an apparent paucity of research that utilizes rigorous quantitative modelling as a tool to test the association between organizational culture and innovation in the non-profit context (Jaskyte & Dressler, 2005).

2.1. Hypothesis Development and Conceptual Framework

Building on the CVF-based evidence reviewed above and on ICEF's predictive logic (Bendak et al., 2020), the following hypotheses are proposed. Consistent with meta-analytic evidence that flexibility-oriented cultures are more conducive to innovation than control-oriented cultures (Büschgens et al., 2013; Hartnell et al., 2011), Adhocracy and Clan cultures are expected to be positive predictors of innovation outcomes, Market culture is expected to have a selective, efficiency-linked positive association, and Hierarchy culture, reflecting rule-orientation and control, is expected to be negatively associated with innovation. Formally:

H1: Adhocracy culture is positively associated with innovation outcomes (Program/Service, Process, Organizational, and Marketing innovation) in Qatar Charity.
H2: Clan culture is positively associated with innovation outcomes in Qatar Charity.
H3: Market culture is positively associated with innovation outcomes in Qatar Charity.
H4: Hierarchy culture is negatively associated with innovation outcomes in Qatar Charity.

Figure 1 summarizes these relationships as a conceptual framework, linking the four independent culture variables (Adhocracy, Clan, Market, and Hierarchy, operationalized via the OCAI) to the four dependent innovation variables (Program/Service, Process, Organizational, and Marketing innovation, operationalized via the modified CIS), with H1-H4 denoting the hypothesized direction of each relationship.

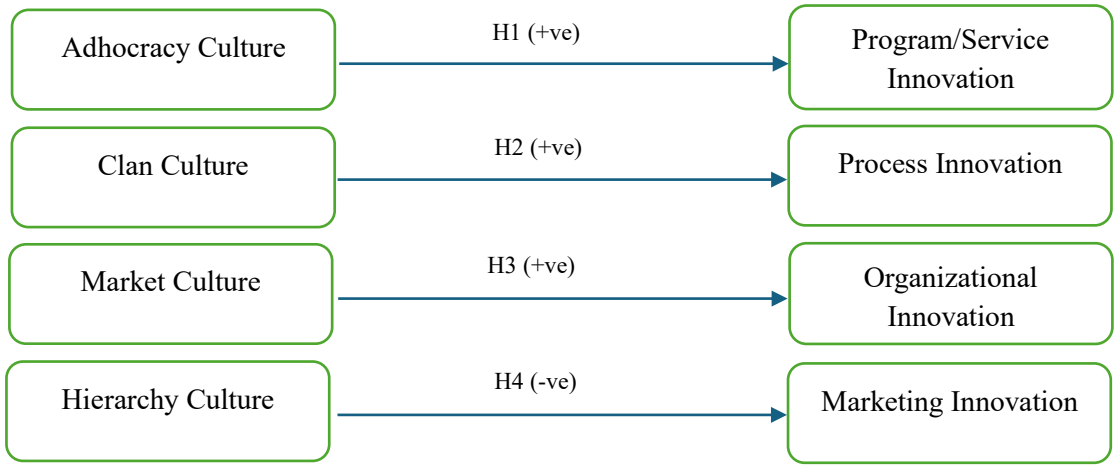

Figure 1. Conceptual Framework: Hypothesized relationships between organizational culture and innovation types. Source: Authors' construction, adapted from Bendak et al. (2020) and Cameron & Quinn (2011)

3.0 Data Sources and Research Methodology

3.1. Data Sources

This study employed a quantitative cross-sectional survey to understand employee's perceptions of organizational culture and innovation in Qatar Charity (Bryman, 2016; Saunders et al., 2019). Survey method is consistent with ICEF, which also employed cross-sectional surveys to estimate the statistical relationships between the cultural dimensions and innovation performances (Bendak et al., 2020) and can be used to test its predictive power within a non-profit context (Creswell & Creswell, 2018; Christensen et al., 2006). The diversification of Qatar Charity's operations, the institutional maturity and regional influence render it the appropriate context for testing the applicability of ICEF in structured non-profit organizational environment. A stratified convenience sampling method was used for data collection (Teddlie & Yu, 2007; Punch, 2013). The target population comprised the diversified workforce, employed across programmatic, administrative, financial, and logistics and support services, of Qatar Charity. Major departments, such as Programs, Finance, Human Resources, Logistics, and Communications are designated as strata, ensuring that the sample includes a proportional cross-section of functional perspectives. Convenience-based selection of the respondents within each stratum was done based on their availability and access, facilitated through the internal communication channels, coordinated with the Human Resources of Qatar Charity. Even though convenience sampling limits generalizability, stratification enhances the representation of functional units. The recommended sample size for model testing multiple predictors is determined by the formula: $N \geq 50 + 8m$, where 'm' is the number of independent variables (Cohen, 1992; Tabachnick & Fidell, 2013). With four explanatory variables, the minimum required sample size was 82. Hair et al. (2010) finds that a sample size of 100 or more enhances the statistical power and reduces the effects of non-response, incomplete data or bias. The sample size of the present study is 104. Table 2 presents the distribution of responses among the five sectors of Qatar Charity.

Table 2:
Distribution of responses among the five sectors of Qatar Charity

Name of Sector	Number of Responses	Relative Frequency
Support Services	20	19.2%
Resources Development and Communication	28	26.9%
International Operations	26	25%
Programs and Community Development	18	17.3%
Governance and External Relations	12	11.5%
Total	**104**	**100%**

To test the relevance of the instrument and its clarity in a context-specific situation, a pilot study was carried out (n=40) among staff members at Qatar Charity. It was revealed through feedback that certain terms and assumptions within the original OCAI and CIS schemes, which were effectively applicable to a private sector environment, did not entirely apply in a humanitarian non-profit context. Consequently, some major changes were done. The equivalent translation of the survey tools into Arabic was also done through expert review and back-translation. The face and content validity of the ultimate survey were improved by the pilot survey. The research plan and the execution were done according to the ethics provided by the institutional review boards (IRBs) of the sponsoring university and the institutional policy of Qatar Charity. The key aspects considered are informed consent, voluntary participation, anonymity and data security were highly adhered to. All the raw data gathered were stored safely in the encrypted cloud storage services, accessible to the primary researcher only, ensuring data security (Resnik, 2018).

3.2. Research Methodology

To begin with, the prevalent cultural types in Qatar Charity was diagnosed using the Organizational Cultural Assessment Instrument (OCAI). The OCAI systematically assesses organizational culture across six key dimensions: Dominant Characteristics, Organizational Leadership, Management of Employees, Organizational Glue, Strategic Emphases, and Criteria for Success. The respondents were to distribute 100 points among the four different culture types such as Clan, Adhocracy, Market, and Hierarchy, which disclosed each type of culture strength on the organizational level. Cameron & Quinn (2011) demonstrated the strength of OCAI, including its global validation, conciseness, and interpretability. However, the OCAI due to its ipsative design, inhibits the independent statistical treatment of the variables, that is, it does not

have any statistical significance of the classical correlational analysis of the variables themselves (Hartnell et al., 2011). The Market Culture dimension was specifically considered in the process of adapting the OCAI framework to the non-profit setting. Feedback from the pilot phase indicated that its emphasis on competitiveness and market share was misaligned with mission-driven realities. It was reworded so as to focus more on results-orientation, competition over donor funding and stakeholder accountability, thus making it easy to understand by respondents. Other types of cultures such as adhocracy (innovation), clan (collaboration) and hierarchy (structure) were generally harmonious to non-profit values and required minimal adjustment. The conceptual framework guiding this study, linking the four OCAI culture types to the four CIS innovation types via hypotheses H1–H4, is presented below in Figure 2.

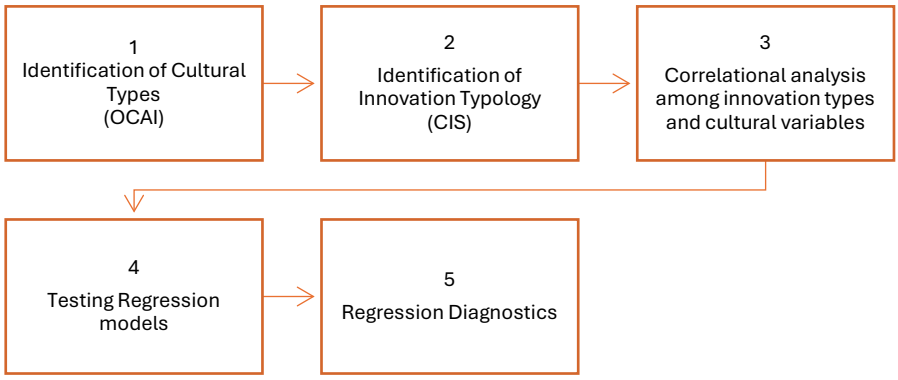

Figure 2. Research Schema used in this study
Source: Authors' construction, adapted from Bendak et al. (2020) and Cameron & Quinn (2011)

In this study, a self-adapted tool on the Community Innovation Survey (CIS) was applied to determine the outcome of innovation in Qatar Charity. The instrument is based on Bendak et al. (2020), the original yes/no items with the Likert scale. Feedback from pilot survey revealed that a 5-point scale was more understandable and less burdensome to respond to; therefore, it was applied. The content and terms of the survey were put into context concerning the humanitarian and non-profit field in a systematic way:

- Commercial language (e.g., "products") to language appropriate for the humanitarian sector (e.g., "humanitarian Programs and services").
- Stakeholder focus shifted from a "customer" to "donor and beneficiary."
- NPO-specific goals, including public engagement and social impact were explicitly included.

The innovation domains had 4-6 items that were used to capture innovation practices in the last 12-36 months, which is in line with innovation survey best practices (Arundel & Smith, 2013). The content validity for Organizational Culture Assessment Instrument (OCAI) is based on the Competing Values Framework (Cameron & Quinn, 2011; Kennedy et al., 2020), and the Modified Community Innovation Survey (CIS) on the Oslo Manual (OECD/Eurostat, 2018). Both instruments are extensively researched, and their validity has been demonstrated in numerous studies (Büschgens et al., 2013). Construct validity of modified CIS measure was evaluated through the Exploratory Factor Analysis (EFA) with the help of SPSS (Pallant, 2020; Field, 2018). Items with factor loadings below 0.40 were flagged for elimination or revision (Fabrigar et al., 1999). The factor structure was investigated in terms of dimensional clarity, and the significant cross-loadings were evaluated in terms of whether they indicate redundancy or ambiguity. Internal consistency of the Modified CIS was evaluated on the basis of Cronbach alpha of each subscale of innovations with alpha values of 0.70 and above being acceptable (Nunnally and Bernstein, 1994). The ipsative nature of OCAI the respondents were required to generate a predetermined number of points and distribute them among the choices rendered Cronbach to be an inappropriate measure of internal reliability (Hartnell et al., 2011). The results of OCAI were treated descriptively, paying attention to the relative cultural dominance within the organization and not on the independent scales scores (Cameron & Quinn, 2011).

4.0 Results and Discussions

An initial descriptive analysis was conducted to establish a foundational understanding of Qatar Charity's internal environment by calculating the mean scores and distribution percentages for the organizational culture archetypes and innovation types. Table 3 presents a summary of descriptive statistics of variables used in this study.

Table 3.
Descriptive Statistics of variables used in this study

Variable	Number	Minimum	Maximum	Mean	Standard Deviation
Clan Culture Score	104	.00	43.06	23.1036	7.71496
Adhocracy Culture Score	104	.00	44.44	19.497	9.14741
Market Culture Score	104	.00	47.22	25.587	8.77278
Hierarchy Culture Score	104	.00	52.78	26.5224	7.81256
Program/Service Innovation	104	1.13	4.75	2.9222	.68956
Process Innovation	104	1.00	3.50	2.4523	.49598
Organizational Innovation	104	.71	3.40	2.2219	.64262
Marketing Innovation	104	1.00	5.00	3.4712	.97996

Source: Author's Calculation

The descriptive statistics for the study variables (N = 104) indicate that among the four types of organizational culture, Hierarchy culture had the highest mean score (M = 26.52, SD = 7.81), followed by Market (M = 25.59, SD = 8.77), Clan (M = 23.10, SD = 7.71) and Adhocracy (M = 19.50, SD = 9.15). This suggests Hierarchy and Market-oriented characteristics were relatively more dominant than Clan and Adhocracy elements. Marketing innovation showed the highest mean (M = 3.47, SD = .98), followed by program/service innovation (M = 2.92, SD = .69), process innovation (M = 2.45, SD = .50) and organizational innovation (M = 2.22, SD = .64). The cultural landscape of Qatar Charity was mapped using a framework identifying four archetypes: Clan, Adhocracy, Market, and Hierarchy. The distribution of these types, representing their perceived dominance within the organization, is presented below in Figure 3 and indicates a complex, composite culture rather than a single monolithic one.

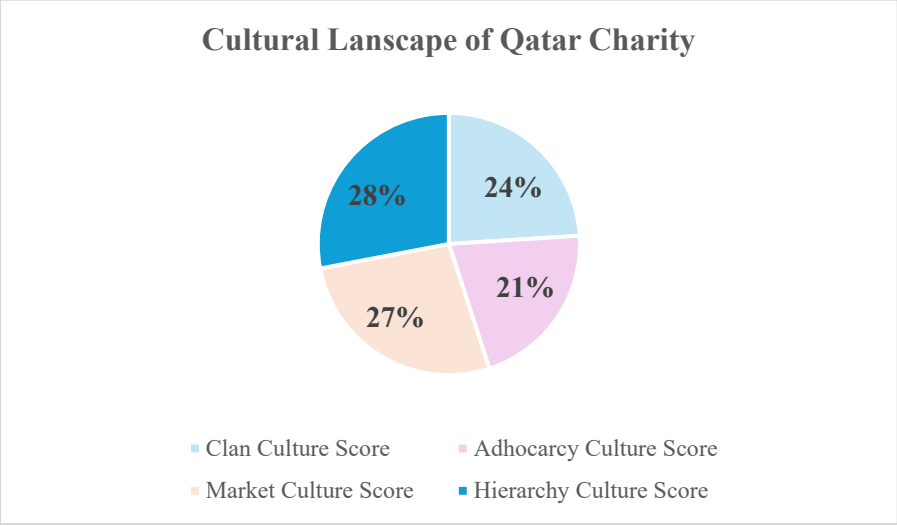

Figure 3. Cultural Landscape of Qatar Charity
Source: Survey response

The cultural profile indicates a composite structure, with Hierarchy Culture (28%) and Market (27%) cultures most dominant, followed by Clan (24%) and Adhocracy (21%). This reflects that Qatar Charity's cultural profile is not dominated by a single archetype but a balanced blend, with a discernible orientation towards Hierarchy and Market cultures. The organization's innovation activities were evenly distributed across four distinct categories. Organizational Innovation accounted for the largest share (25.98%), closely followed by Marketing (25.60%) and Program/Service Innovation (25.55%), indicating balanced efforts in internal restructuring, stakeholder engagement, and service development. Process Innovation (21.95%), the least emphasized area, is pertaining to improvements in service delivery methods and internal operational workflows. Figure 4 presents the innovation landscape of Qatar Charity.

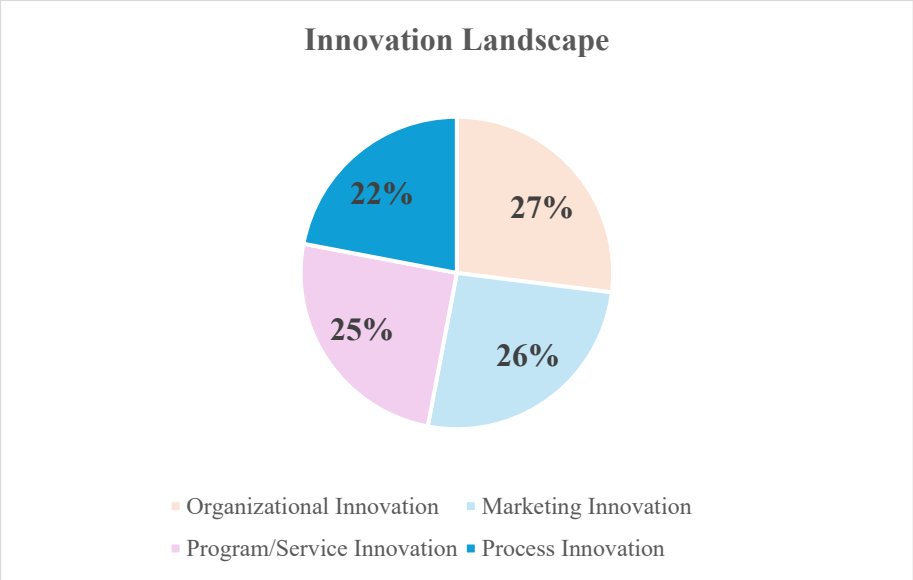

Figure 4. Innovation Landscape of Qatar Charity
Source: Survey response

The correlation analysis revealed several significant associations among organizational culture types and innovation dimensions. Adhocracy culture was negatively correlated with hierarchy culture ($r = .333$, $p = .001$), suggesting that organizations emphasizing adhocracy characteristics tend to report lower levels of hierarchical orientation. No other significant relationships were observed among the culture types. For culture-innovation links, clan culture was positively correlated with program/service innovation ($r = .213$, $p = .030$) and organizational innovation ($r = .244$, $p = .012$). Adhocracy culture was positively associated with marketing innovation ($r = .281$, $p = .004$). Hierarchy culture positively correlated with program/service innovation ($r = .252$, $p = .010$) and organizational innovation ($r = .196$, $p = .046$). Market culture exhibited a significant positive relationship with process innovation ($r = .220$, $p = .025$). Innovation dimensions were strongly intercorrelated among innovation types. Process innovation correlated highly with organizational innovation ($r = .754$, $p < .001$) and marketing innovation ($r = .622$, $p < .001$), while organizational innovation showed a strong relationship with marketing innovation ($r = .652$, $p < .001$). Table 4 presents the results of correlation analysis.

Table 4.
Pearson's correlation coefficients between culture and innovation types

	CC	AC	MC	HC	PSI	PROC	ORG	MKT
Clan Culture	---							
Adhocracy Culture	-0.044	---						
Market Culture	-0.153	.069						
Hierarchy Culture	.074	-0.333**	0.127	---				
Program/Service Innovation	0.213*	0.157	0.181	0.252**	---			
Process Innovation	0.15	0.19	0.22*	0.176	0.74**	---		
Organizational Innovation	0.24*	0.13	0.17	0.196*	0.75**	0.75**	---	
Marketing Innovation	0.07	0.28**	0.19	0.13	0.64**	0.62**	0.65**	---

Notes: The * and ** denote significance level at 5% and 1% respectively. CC, AC, MC, and HC are clan, adhocracy, market, and hierarchy cultures. PSI = Program/Service; PROC = Process; ORG = organizational; MKT = Marketing Innovation.

A series of multiple regression analyses were conducted to move beyond description and test the core hypotheses of this study (Cohen et al., 2003; Easterby-Smith et al., 2015). For each analysis, one of the four innovation types was set as the dependent variable, while the scores for the four cultural archetypes were used as the independent (predictor) variables. The standard alpha level of $p < 0.05$ was adopted as the criterion for statistical significance. Table 5 presents the regression models tested for the present study.

Table 5:
Regression Models

Model	Dependent Variable	Independent Variables
1	Program/Service Innovation	Clan, Adhocracy, Market, Hierarchy
2	Process Innovation	Clan, Adhocracy, Market, Hierarchy
3	Organizational Innovation	Clan, Adhocracy, Market, Hierarchy
4	Marketing Innovation	Clan, Adhocracy, Market, Hierarchy

The general regression model tested was:
$Innovation\ Score = \beta_0 + \beta_1\ (Adhocracy\ Score) + \beta_2\ (Clan\ Score) + \beta_3\ (Market\ Score) + \beta_4\ (Hierarchy\ Score) + \varepsilon$:
where β_0 is the slope parameter and β_i are coefficient parameters. ε is white noise error term.
The results of the regression models are presented in Table 6.

Table 6.
Results of the regression models

Independent Variables	Model 1 Program Innovation	Model 2 Process Innovation	Model 3 Organizational Innovation	Model 4 Marketing Innovation
AC	0.255***	0.256**	0.203**	0.347***
CC	0.227**	0.176	0.262***	0.093
MC	0.159	0.201**	0.164	0.154
HC	0.300***	0.223**	0.223**	0.217**
R-squared	0.193	0.158	0.161	0.161
Adj. R-squared	0.160	0.124	0.127	0.127
F-statistic	5.909***	4.657***	4.754***	4.755***

Notes: The ** and *** denote significance level at 5% and 1% respectively. CC, AC, MC, and HC are clan, adhocracy, market, and hierarchy cultures.

Before interpreting the coefficients, two modelling issues merit discussion. First, the explanatory power of the four models is modest (R^2 ranging from 0.158 to 0.193; adjusted R^2 from 0.124 to 0.160), meaning that organizational culture alone accounts for roughly 12–16% of the variance in innovation outcomes after adjusting for the number of predictors. This is broadly consistent with the magnitude of culture-innovation associations reported in prior meta-analytic work (Büschgens et al., 2013), and should not be read as undermining the directional findings; rather, it indicates that culture is one of several drivers of innovation in Qatar Charity, alongside factors not modelled here, such as leadership style, resource availability, and donor or regulatory pressure, which the literature review identifies as relevant to non-profit innovation (Amabile et al., 1996; Banks et al., 2015; Yasmin and Ghafran, 2021). Second, because the OCAI is ipsative, the four culture scores are partly interdependent by construction, raising the possibility of multicollinearity among predictors. Variance Inflation Factors (VIFs) were therefore examined for each model; all VIF values remained below 1.2, indicating that multicollinearity did not materially distort the coefficient estimates. Residual diagnostics (visual inspection of Q-Q plots) were also conducted for each model to assess the normality assumption underlying OLS estimation; residuals showed minor deviations from normality, which is not uncommon in survey-based organizational research and was not judged to materially affect inference. These diagnostics support the validity of the regression estimates reported in Table 6.

The study investigated whether differential innovation results exist, as proposed by the culture-to-innovation mapping of ICEF, in Qatar Charity. The findings present clear positive evidence of these sorts of predictive relationships in a non-profit humanitarian organization: types of cultures do explain the variance in all areas of innovation. The trend of strong predictors was subtly similar to the CVF and the Oslo/CIS classifications of innovation (Salamon & Sokolowski, 2018). For Program/Service Innovation, the significant predictors were Clan, Adhocracy and Hierarchy: program development needs to be cross-functional (Clan), risk-taking (Adhocracy), and backed by procedural support (Hierarchy). Process Innovation was strongly associated with Adhocracy, Market, and Hierarchy, reflecting how improvement is guided by internal flexibility (Adhocracy) and external efficiency measures (Market), as well as the procedural underpinnings of innovation in donor-facing NGOs (Salamon & Sokolowski, 2018). The significant predictors of the organizational innovation were also Clan, Adhocracy and Hierarchy, which is

consistent with the literature where social glue (Clan), experimentation (Adhocracy) and formalization (Hierarchy) should be balanced (Del Giudice et al., 2023). Most powerful in driving marketing innovation was Adhocracy, and Hierarchy had another positive influence, which agree with the results that outreach innovation is a product of entrepreneurial thinking but relies on compliance systems. The positive impact of Adhocracy is consistent with an extensive coverage of CVF-based innovation literature (Aichouche et al., 2022). Subsequent to this, individuals' contribution to Clan is selected by discoveries that collaborative climates in particular, drive innovation in service-based, people-based settings. The main conclusion, though, is the departure of the traditional CVF reasoning. Hierarchy showed a serious positive impact, which is not usually identified with innovation. The role of structure in compliance-intensive NPOs is that of an innovation enabler, and numerous recent studies back this conclusion (Del Giudice et al., 2023). The fact that Market culture significantly predicts only Process innovation, and not Program/Service, Organisational, or Marketing innovation, implies that outside performance pressure affects efficiency gains but has less bearing on more strategic or creative areas of innovation (Salamon & Sokolowski, 2018).

In non-profit humanitarian, the outcomes validate this predictive utility and alter the theoretical position to Hierarchy. Unlike meta-analyses usually warning that hierarchy limits exploration in the corporate sector, the data appears to indicate that in a high-stakes NGO environment, hierarchical formalization can also co-produce the innovation process by providing procedural and compliance rails (Del Giudice et al., 2023). The combination of Adhocracy and Hierarchy in all models implies some sort of structure ambidexterity. Exploration, through new Programs or marketing ideas, thrives when paired with exploitation mechanisms such as SOPs and budget controls that codify and scale change.

This positive Hierarchy effect sits in direct tension with the corporate-sector meta-analytic consensus, in which control-oriented, stability-seeking cultures are consistently the weakest or negative predictors of innovation (Büschgens et al., 2013; Hartnell et al., 2011). Rather than treating this as an anomaly to be explained away, it is more productive to ask what is structurally different about a compliance-intensive humanitarian NPO that would reverse this relationship. Three explanations are plausible and merit future disentangling. First, in donor-funded humanitarian work, formal procedures may function less as bureaucratic inertia and more as a legitimacy mechanism: donors and regulators require auditable, standardized processes before they will fund or scale a new programme or service, meaning Hierarchy may be a precondition for innovation reaching implementation rather than an obstacle to its generation. Second, the CVF/OCAI's forced-choice, ipsative structure means Hierarchy is measured relative to the other three cultures rather than as an absolute score; a moderate Hierarchy orientation observed alongside a moderate Adhocracy orientation, as found in Qatar Charity's composite cultural profile, is conceptually distinct from the high-control, low-flexibility profile typically implicated in corporate studies of innovation suppression. Third, it is possible that respondents in a compliance-heavy environment interpret "structure" and "procedure" items on the OCAI and CIS instruments as descriptive of how legitimate change happens, rather than as a constraint on it, which would itself be a finding about how CVF constructs travel across sectors rather than a straightforward reversal of the CVF-innovation relationship. Distinguishing between these explanations is not possible with the present cross-sectional design, but the finding itself indicates that ICEF and CVF-based innovation models may need sector-specific recalibration when applied to accountability-bound organizations, rather than being assumed to generalize unmodified from the corporate contexts in which they were developed.

The study empirically demonstrates that ICEF's proposition, that culture types can predict innovation profiles, applies in a domain where it has not been tested yet (Aichouche et al., 2022; Del Giudice et al., 2023). ICEF is prescriptive. The cultural levers are available to organizations that strive to achieve particular innovation objectives, which is aligned with Step 5 of the framework: cultural adjustments. In order to improve Program/Service innovation, managers may toughen clan culture by using cross-functional teams, investing in adhocracy using innovation labs and institutionalizing success using hierarchy by having compliance toolkits. Increasing process innovation requires the creation of Adhocracy with continuous improvement events, mobilizing market pressures through KPIs, and codifying improvements through Hierarchy. In the case of organization innovation, it is advisable to use Clan to mobilize participation redesign and Adhocracy to mobilize design sprints with the results integrated through Hierarchy in the governance mechanisms. Finally, marketing innovation should be empowered by creating a creative freedom through adhocracy and scaling through brand governance which is achieved through hierarchy.

The intercorrelations between the types of innovation are high, which would imply that the success of innovation in one domain could be transferred to another, positively reinforcing the idea of the portfolio-based approach to innovation and the so-called innovation value chain model, which argues that the effective implementation of generated ideas into practice is achieved through the combination of the mentioned elements (Salamon & Sokolowski, 2018).

The study shows that formalization (Hierarchy) has the potential of facilitating innovation in non-profits in case it is properly structured. The policies of internal governance must evolve to be less formalistic in their procedures and move towards more flexible purposes of formalization. The findings support the idea of making funding policies of donor agencies and other external regulators more innovation-friendly. The existing compliance-intensive grant systems might be counterproductive towards risk-taking and innovation. The uniformity in the use of Adhocracy in all areas of innovation in this study is an indicator that policy mechanisms should be rewarding the adaptive experimentation. On the sectoral level, the results encourage change in evidence-based innovation policy in global humanitarian governance. The integration of such frameworks into policy toolkits (capacity development, performance benchmarking, organizational assessment) should be considered by policy makers in umbrella bodies (e.g. UN agencies, international NGO alliances).

5. Conclusions and Future Areas of Research

This paper investigated a central challenge in the non-profit sector: how organizational culture shapes the capacity for innovation in mission-driven, resource-constrained environments, focusing on Qatar Charity and testing the Innovative Culture Enhancement Framework (ICEF) within this context. The study was based on the Competing Values Framework (CVF), and innovation typologies presented within the Oslo Manual and Community Innovation Survey (CIS), to identify how four different cultural archetypes, namely Clan, Adhocracy, Market and Hierarchy, predict four different types of innovation, including Program/Service, Process, organizational and Marketing. The hypotheses of the study were that Adhocracy and Clan cultures would be positive innovation enablers. Market culture would assist in terms of competitiveness, whereas Hierarchy culture would restrict the outcome of innovation. The survey was conducted with the help of quantitative and cross-sectional survey as data were collected with the employees of various departments of Qatar Charity. Descriptive statistics, correlation analysis and multiple regression modelling were used in analysis of the data. The culture of adhocracy became the most predictable indicator of innovation. It was the core facilitator of innovation in the non-profit environment because of its focus on creativity, flexibility, and experimentation.

Hierarchy culture, unlike the traditional theory also exhibited a robust and consistently positive role in its prediction of innovation outcomes, predicting Program/Service, Process, organizational and marketing innovations which indicates that structure and formalization might not be drawbacks of innovation but rather facilitators of responsible and scalable innovation in highly regulated and donor-accountable non-profit settings. One of the few but important impacts exhibited by clan culture was on the program/service and organizational innovation. This implies that co-design and internal governance changes require collaboration and mutual values. The impact of market culture was small yet significant, with process innovation only being statistically significant. This implies that competitive forces and performance responsibility might be more effective in stimulating efficiency gains but not strategic or creative innovations in the non-profit setting. Qatar Charity reflects the features of an ambidextrous organization, where Adhocracy and Hierarchy cultures co-operate and complement each other. Adhocracy gives an opportunity to generate and experiment new solutions with the ideological flexibility required and Hierarchy gives the institutional scaffolding, which maintains accountability, regulatory compliance and scalability. It is the interactions between cultural dimensions that result in innovative capacity in non-profits. Increasing innovation will lead to innovation and innovativeness in the formal system that encourages integrity, transparency and operational excellence.

Despite its strengths, this study has some limitations. The stratified convenience sample limits extrinsic extrapolation to other non-profits of humanitarian nature. The use of perception-based survey tools can bring self-report bias, and the cross-sectional study can result in causal conclusions (Salamon & Sokolowski, 2018). The forced-choice format of the OCAI is ipsative, which restricts the independence of the dimensions of culture, and the low turnout of the field staff, which influences the understanding of the

phenomenon of decentralized innovation. The modification of CIS and OCAI instruments to be applied in the non-profit organizations was concerned with construct equivalence. Contextual fit also increased, but adaptations could have caused construct drift, which constrained cross cross-study comparability. Based on these findings, future studies need to employ longitudinal and mixed methods designs in order to triple data. The objective innovation measures, including the count of pilots launched or discontinued, could also be used by the researchers and the strength of results could be analyzed with the help of non-ipsative CVF tools. It is recommended to gather more data on the various types of NGOs using cross-organizational studies. Potential profitable lines involve application of multilevel modelling to characterize departmental subcultures, studies of intervention provided in line with ICEF, distinction between radical and incremental innovation and exploration on the boundary conditions of Market culture in non-profits.

References

Aboajela, S. M. (2015). The influence of organisational culture on performance measurement systems in Libyan higher education. Doctoral thesis, University of Huddersfield.

Afuah, A. (2003). Innovation Management. Oxford University Press.

Aichouche, R., Chergui, K., Brika, S. K. M., Mezher, M. E., Musa, A., & Laamari, A. (2022). Exploring the relationship between organizational culture types and knowledge management processes: A Meta-Analytic Path Analysis. *Frontiers in Psychology*, *13*, 856234. https://doi.org/10.3389/fpsyg.2022.856234

Amabile, T.M., Conti, R., Coon, H., Lazenby, J. and Herron, M. (1996) 'Assessing the work environment for creativity', Academy of Management Journal, 39(5), pp. 1154–1184.

Anheier, H. K. (2014). Non-profit organizations: Theory, management, policy (2nd ed.). Routledge.

Arundel, A., & Smith, K. (2013). Measuring innovation in the public sector: An overview In V. Gault (Ed.), Handbook of innovation indicators and measurement (pp. 311-339). Edward Elgar.

Banks, N., Hulme, D., & Edwards, M. (2015). NGOs, states, and donors revisited: Still too close for comfort? World Development, 66, 707-718. https://doi.org/10.1016/j.worlddev.2014.09.028

Bendak, S., Shikhli, A. M., & Abdel-Razek, R. H. (2020). How changing organisational culture can enhance innovation: Development of the innovative culture enhancement framework. International Journal of Innovation Studies, 4(4), 101-114. https://doi.org/10.1016/j.ijis.2020.09.001

Bessant, J., & Tidd, J. (2011). Innovation and entrepreneurship (2nd ed.). Wiley.

Brown, L., & Osborne, S. P. (2013). Risk and innovation: towards a framework for risk governance in public services. Public Management Review, 15(2), 186-208. https://doi.org/10.1080/14719037.2012.707681

Bryman, A. (2016). Social research methods (5th ed.). Oxford University Press.

Büschgens, T., Bausch, A., & Balkin, D. B. (2013). Organisational culture and innovation: A meta-analytic review. Journal of Product Innovation Management, 30(4), 763-781. https://doi.org/10.1111/jpim.12021

Cameron, K. S., & Quinn, R. E. (2011). Diagnosing and changing organisational culture: Based on the competing values framework (3rd ed.). Jossey-Bass.

Christensen, C. M., Baumann, H., Ruggles, R., & Sadtler, T. M. (2006). Disruptive innovation for social change. Harvard Business Review, 84(12), 94-101.

Cohen, J. (1992). A power primer. Psychological Bulletin, 112(1), 155-159.

Cohen, J., Cohen, P., West, S. G., & Aiken, L. S. (2003). Applied multiple regression/correlation analysis for the behavioural sciences (3rd ed.). Lawrence Erlbaum Associates.

Creswell, J. W., & Creswell, J. D. (2018). Research design: Qualitative, quantitative, and mixed methods approaches (5th ed.). Sage.

Del Giudice, M., Maggioni, V., Peruta, M. R. D., & Carayannis, E. G. (2023). Digital transformation and innovation ecosystems: A research agenda. Journal of the Knowledge Economy, 14(2), 1049-1072. https://doi.org/10.1007/s13132-021-00839-3

Denison, D. R., & Mishra, A. K. (1995). Toward a theory of organizational culture and effectiveness. Organization Science, 6(2), 204–223. https://doi.org/10.1287/orsc.6.2.204
Dewar, R. D., & Dutton, J. E. (1986). The adoption of radical and incremental innovations: An empirical analysis. *Management Science, 32(11)*, 1422-1433. https://www.jstor.org/stable/2631501.

DiMaggio, P. J., & Powell, W. W. (1983). The iron cage revisited: Institutional isomorphism and collective rationality in organisational fields. American Sociological Review, 48(2), 147-160. https://doi.org/10.2307/2095101

Easterby-Smith, M., Thorpe, R., & Jackson, P. R. (2015). Management and business research (5th ed.). Sage.

Ebrahim, A. (2005). Accountability myopia: Losing sight of organisational learning. Nonprofit and Voluntary Sector Quarterly, 34(1), 56-87. https://doi.org/10.1177/0899764004269430

Ebrahim, A., & Rangan, V. K. (2010). The limits of non-profit impact: A contingency framework for measuring social performance (Working Paper No. 10-099). Harvard Business School. https://www.hbs.edu/faculty/Pages/item.aspx?num = 38480

Fabrigar, L. R., Wegener, D. T., MacCallum, R. C., & Strahan, E. J. (1999). Evaluating the use of exploratory factor analysis in psychological research Psychological Methods, 4(3), 272-299. https://doi.org/10.1037/1082-989X.4.3.272

Field, A. (2018). Discovering statistics using IBM SPSS statistics (5th ed.). Sage.

Fisher, E. M., & Wilmoth, M. C. (2018). Do I take the job?: Assessing fit with the organization. *Journal of Professional Nursing*, 10.1016/j.profnurs.2017.08.003.

Giannopoulou, E., Barlatier, P. J., & Pénin, J. (2019). Same but different? Research and technology organizations, universities and the innovation activities of firms. *Research Policy, 48(1)*, 223-233. doi:10.1016/j.respol.2018.08.008.

Hair, J. F., Black, W. C., Babin, B. J., & Anderson, R. E. (2010). Multivariate data analysis (7th ed.). Pearson.

Hartnell, C. A., Ou, A. Y., & Kinicki, A. (2011). Organisational culture and organisational effectiveness: A meta-analytic investigation of the competing values framework's theoretical suppositions. Journal of Applied Psychology, 96(4), 677-694. https://doi.org/10.1037/a0021987

Hogan, S. J., & Coote, L. V. (2014). Organisational culture, innovation, and performance: A test of Schein's model. Journal of Business Research, 67(8), 1609-1621. https://doi.org/10.1016/j.jbusres.2013.09.007

Hutchison, N., Burke, P., See Tao, H. Y., Kothari, S. J., Makwana, D., & Luna, S. (2019). The influence of organization alignment on the effectiveness of systems engineers. *Procedia Computer Science, 153*, 80-90. doi:10.1016/j.procs.2019.05.058.

Jaskyte, K., & Dressler, W. W. (2005). Organisational culture and innovation in non-profit human service organisations. Administration in Social Work, 29(2), 23-41. https://doi.org/10.1300/J147v29n02_03

Jaskyte, K., & Kisieliene, A. (2006). Organizational innovation a comparison of nonprofit human-service organizations in Lithuania and the United States. *International Social Work, 49(2)*, 76-165. doi:10.1177/0020872806061220.

Kaplan, R. S. (2001). Strategic performance measurement and management in non-profit organisations. non-profit Management & Leadership, 11(3), 353-370. https://doi.org/10.1002/nml.11308

Kennedy, G., Shirvani, F., Scott, W., & Campbell, A. (2020). Towards the integration of organisational culture models into model-based systems engineering approaches for enterprise systems transformation. *Australian Journal of Multi-Disciplinary Engineering, 16*(1), 80-92. https://doi.org/10.1080/14488388.2020.1804184

Lewis, D. (2003). Theorising the organisation and management of NGOs: towards a composite approach. Public Management Review, 5(3), 325-344. https://doi.org/10.1080/1471903032000146943

Martins, E. C., & Terblanche, F. (2003). Building an organisational culture that stimulates creativity and innovation. European Journal of Innovation Management, 6(1), 64-74. https://doi.org/10.1108/14601060310456337

McDonald, R.E. (2007) 'An investigation of innovation in nonprofit organizations: the role of organizational mission', Nonprofit and Voluntary Sector Quarterly, 36(2), pp. 256–281.

Moore, M. H. (2000). Managing for value: organisational strategy in for-profit, non-profit, and government organisations. Nonprofit and Voluntary Sector Quarterly, 29(1_suppl), 183-204. https://doi.org/10.1177/089976400773746391

Mulgan, G. (2006). The process of social innovation. Innovations: Technology, Governance, Globalisation, 1(2), 145-162. https://doi.org/10.1162/itgg.2006.1.2.145

Nunnally, J. C., & Bernstein, I. H. (1994). Psychometric theory (3rd ed.). McGraw-Hill.

OECD/Eurostat. (2018). Oslo Manual 2018: Guidelines for collecting, reporting and using innovation data (4th ed.). OECD Publishing. https://doi.org/10.1787/9789264304604-en

Osborne, S. P., & Brown, L. (2011). Innovation, public policy and public services delivery in the UK. Public Administration, 89(4), 1335-1350. https://doi.org/10.1111/j.1467-9299.2011.01932.x

Pallant, J. (2020). SPSS survival manual (7th ed.). McGraw-Hill Education.

Phills, J. A., Deiglmeier, K., & Miller, D. T. (2008). Rediscovering social innovation. Stanford Social Innovation Review, 6(4), 34-43.

Punch, K. F. (2013). Introduction to social research: Quantitative and qualitative approaches (3rd ed.). Sage.

Qatar Charity. (2022). Annual report 2022. Qatar Charity. https://www.qcharity.org/en/qa/aboutus/reports

Quinn, R. E., & Rohrbaugh, J. (1983). A spatial model of effectiveness criteria: towards a competing values approach to organisational analysis. Management Science, 29(3), 363-377.

Renko, M., El Tarabishy, A., Carsrud, A. L., & Brännback, M. (2015). Understanding and Measuring Entrepreneurial Leadership Style. *Journal of Small Business Management*, *53*(1), 54-74. https://doi.org/10.1111/jsbm.12086

Revilla, E., & Rodríguez-Prado, B. (2018). Building ambidexterity through creativity mechanisms: Contextual drivers of innovation success. *Research Policy, 47(9)*, 1611-1625. doi:10.1016/j.respol.2018.05.009.

Resnik, D. B. (2018). The ethics of research with human subjects: Protecting people, advancing science, promoting trust. Springer. https://doi.org/10.1007/978-3-319-93820-5

Salamon, L. M. (2010). Putting the civil society sector on the economic map of the world. Annals of Public and Cooperative Economics, 81(2), 167-210. https://doi.org/10.1111/j.1467-8292.2010.00409.x

Salamon, L.M., Sokolowski, W. (2018). Beyond Nonprofits: In Search of the Third Sector. In: The Third Sector as a Renewable Resource for Europe. Palgrave Macmillan, Cham. https://doi.org/10.1007/978-3-319-71473-8_2

Saunders, M., Lewis, P., & Thornhill, A. (2019). Research methods for business students (8th ed.). Pearson.

Schein, E. (2004). *Organizational culture and leadership (3rd ed.).* San Francisco, United States: Jossey-Bass.

Schein, E. H. (2010). Organisational culture and leadership (4th ed.). Jossey-Bass.

Tabachnick, B. G., & Fidell, L. S. (2013). Using multivariate statistics (6th ed.). Pearson.

Teddlie, C., & Yu, F. (2007). Mixed methods sampling: A typology with examples. Journal of Mixed Methods Research, 1(1), 77-100. https://doi.org/10.1177/2345678906292430

Tellis, G. J., Prabhu, J. C., & Chandy, R. K. (2009). Radical innovation across nations: The preeminence of corporate culture. *Journal of Marketing, 73*, 3-23. doi:10.1509/jmkg.73.1.003.

Tschirhart, M., & AbouAssi, K. (2025). Why and How Change? An Introduction to a Special Issue on Advancing Nonprofit Management: Innovations, Challenges and Best Practices. *Administrative Sciences*, *15*(9), 357. https://doi.org/10.3390/admsci15090357

UN OCHA. (2021). Global humanitarian overview 2021. United Nations Office for the Coordination of Humanitarian Affairs. https://gho.unocha.org/

Yasmin, S. and Ghafran, C. (2021) 'Accountability and legitimacy of non-profit organisations: challenging the current status quo and identifying avenues for future research', *Financial Accountability & Management*, 37(4), pp. 399–418. Available at: https://doi.org/10.1111/faam.12280