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## Article

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## Article

# Organizational Culture and Corporate Performance in the Ecuadorian Environment

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**Abstract:** This study examines how organizational culture influences corporate performance in the Ecuadorian service sector. The study employs four organizational culture features and twelve concepts for corporate performance using a self-designed online questionnaire, which were supplied to postgraduate students from academic programs at Universidad de Las Américas (UDLA) in Quito, Ecuador. The respondents were working as managers or employees in small Ecuadorian service firms. The operational items of the questionnaire to measure organizational culture and corporate performance were designed using the Denison model. The findings reveal a statistically positive relationship between organizational culture and firm performance. Moreover, involvement, adaptability, consistency, and mission affect the non-financial performance of the Ecuadorian service sector. Involvement is the critical determinant of the influence of organizational culture on corporate performance, while training shows the strongest association with organizational culture. This study provides a perspective on long-term organizational strategies, vision, and performance. Future research should include the characteristics of the studied firms to increase the effectiveness of the proposed model.



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**Keywords:** organizational culture; organizational performance; model of Denison

## 1. Introduction

Organizational culture is viewed as the basis of knowledge management. It considers employees as the most vital asset of a firm because they directly contact customers and competitors. Therefore, employees might provide ideas for products and services that will be readily accepted by the market, generating high profits for companies (Mojibi et al. 2013). Generally, organizational culture is linked with the administrative area by developing models and theories according to strategic management to obtain better financial results (Deal and Kennedy 1982; O'Reilly and Chatman 1996; O'Reilly et al. 1991; Schein 1988). Cameron and Quinn (2006) argued that organizational culture is the main characteristic that distinguishes successful companies (Cameron and Quinn 2006), and when a firm shows a high level of culture, its organizational performance also increases (Denison 1990; Kirkman et al. 2016; Oberföll et al. 2018; Schein 1988).

Previous studies developed different models of organizational culture. Denison's model (1990) is based on the attitudes of employees. It suggests that an organization's culture reflects cultural traits and administrative behaviors based on the beliefs and assumptions of the organization and its environment (Denison 1990). Denison and Mishra (1995) demonstrated that the relationship between organizational culture and firm performance depends on effectiveness measures. Therefore, each firm must establish its own cultural characteristics to achieve a specific performance (Denison and Mishra 1995). Denison (2003) proposed financial indicators as measures of organizational performance, while current research includes non-financial indicators as proxies for non-financial firm performance (Triguero et al. 2012). The study analyzed the firm's non-financial performance, including

selection, training, evaluation, job stability, and others that have not been studied deeply in the Ecuadorian context.

Previous investigations demonstrated a positive relationship between organizational culture and firm performance based on (1) effective alignment between strategy, structure, and culture (Bennett et al. 1994; Deal and Kennedy 1982; Denison and Mishra 1995), (2) sustained competitive advantage (Zhao et al. 2018), (3) clarity of organizational processes, goals, and routines (Sørensen 2002), (4) involvement, consistency, adaptability, and mission (Denison 1984; Denison and Mishra 1995), and (5) innovative ideas and the ability to transform these ideas into possible successful products (Porter and Kramer 2006; Schuldt and Gomes 2020; Tulcanaza-Prieto and Morocho-Cayamcela 2018).

The purpose of this study was to identify the relationship between organizational culture and corporate performance in the Ecuadorian service sector, using four criteria for organizational culture: involvement, adaptability, consistency, and mission (Denison 1984; Denison and Mishra 1995), and twelve factors for corporate performance: selection, training, evaluation, flexible remuneration, job design, bidirectional communication, job stability, individual-level performance, group-level performance, and organizational-level performance (Triguero et al. 2012). The findings revealed a positive and significant relationship between organizational culture and firm performance. Moreover, involvement is the most important factor of the organizational culture that influences corporate performance, while training has the strongest association with the organizational culture.

This paper has several implications for employees, managers, and researchers. First, the non-financial performance model offers a link between what employees expect from and perceive about the organizational culture and what managers and stakeholders transmit as culture in a firm. Second, employees tend to be loyal to and satisfied with companies that demonstrate a cultural strategy; these firms invest more in cultural, social, and environmental activities. Therefore, managerial plans might strategically allocate financial and non-financial resources to promote organizational culture, which helps employees to feel protected by the firm, thereby potentially increasing profits.

The rest of the paper is composed as follows. Section 2 presents a literature review and describes the development of the hypothesis. Section 3 illustrates the empirical design. Section 4 defines the data collection procedure and presents the empirical findings. Section 5 presents the discussion part. Section 6 exhibits the results, highlights the conclusions, and offers recommendations for future research.

## 2. Literature Review and Hypothesis

### 2.1. Organizational Culture

Organizational culture is defined as the set of differentiated elements between organizations (Hofstede 1983; O'Reilly et al. 1991; Schein 1988), including customs, norms, rules, symbols, ideologies, beliefs, rituals, and myths (Gallivan and Srite 2005; Lee et al. 2016). Furthermore, it involves the collective mental programming of the members of a firm because it analyzes the members' identity as an integral, historical, and social phenomenon, which reflects the history of the firm (Hofstede et al. 2010), showing that organizational culture communicates the identity of the firm's members (Cheung et al. 2011; Marulanda and López 2018). Organizational culture is grounded in common practices, where employees adopt behaviors according to the symbols, heroes, and rituals that the firm represents, such as changes in the productivity and satisfaction of workers (Rossi et al. 2016). Therefore, organizational culture arises from the habitual practices shared by an organization's members (De Mooij and Hofstede 2011). Similarly, a firm's culture is the key to preserving its competitive advantage, which also integrates innovation, teamwork, response to the market, and the satisfaction of customers (Nazariana et al. 2017). Firm culture also includes company values, rules, and conduct with customers, business partners, suppliers, and stakeholders; thus, employees are conscious of their firm's values and rules of conduct during their business activities (Nadanyiova and Durana 2019).

Models for the study of organizational culture were designed by (1) Denison (1984, 1990, 1996, 2003); (Denison et al. 1995, 2006, 2015), including four dominant characteristics to measure the organizational culture, involvement, consistency, adaptability, and mission; (2) Schein (1988), using artifacts/signs/symbols, values, and basic assumptions (Schein 1988), (3) Hofstede (1983, 1999, 2011); Hofstede et al. (2010), identifying six dimensions of cultural grouping that affect the behavior of societies and organizations (Hofstede 1983, 2011; Hofstede et al. 2010; De Mooij and Hofstede 2011); (4) O'Reilly et al. (1991), measuring the association between the values of the worker and the values of the firm (O'Reilly et al. 1991); and (5) Cameron and Quinn (2006), introducing four dominant types of culture (clan, adhocracy, hierarchy, and market) that influence organizational performance (Cameron and Quinn 2006).

Fundamentally, Denison (1990) showed that cultural and administrative behavior arises from the beliefs and assumptions of the firm and its environment (Denison 1990), which are related to firm performance (Denison and Mishra 1995). Therefore, his model is represented by a circle, and its center denotes the firm's beliefs and assumptions, presenting the center as the company's heart (Hofstede 1999), and the area of the circle as the firm's environment and its financial and non-financial performance. Similarly, the dimensions established by Denison (1990) directly influence the firm through: (1) involvement, referring to the ability of employees to work as a team and develop capabilities within the internal environment of the firm (e.g., empowerment, team orientation, and capabilities development); (2) consistency, showing that the behavior of employees is grounded in values, which create agreements and coordinates activities in the firm (e.g., coordination, integration, agreements, and values); (3) adaptability, suggesting the ability of firms to face changes in the environment and act in accordance with new customer demands (e.g., organizational learning, customer focus, creation of change); and (4) mission, defining the strategic objectives by the sense of the firm's purpose and direction (e.g., direction, strategic intention, goals, objectives, and vision) (Denison 1996, 2003; Denison et al. 1995, 2015; Denison and Mishra 1995; Schein 1988). The Denison model (1990) diagnosed firms' profiles by identifying their cultural strengths and weakness, generating strategies that ensured effectiveness in the business world's global and dynamic market (Mojibi et al. 2013).

## 2.2. Corporate Performance

Corporate performance evaluates organizational decisions' efficiency and effectiveness (Jones and Linderman 2014; Neely et al. 2005; Randhawa and Sethi 2017). Performance measurement is considered the most critical factor in a company (Koufopoulos et al. 2008; Tulcanaza-Prieto and Lee 2018). Performance management describes an integrated process between organization managers, employees, customers, the firm's administration policies, corporate and functional objectives, and its strategies and goals (Bititci et al. 1997; Short et al. 2007). Therefore, firm performance measurement is a mediator variable between business innovation and management (Wang and Kim 2018). Firm performance improvement requires measurements through which to identify the level of organizational resources and their effect on business performance over a certain period (Madu et al. 1996), including financial, market, and innovation indicators (Slater et al. 2010).

The measurement of a firm's performance helps to develop its strategy because it includes the organizational objectives and the methodology to compensate managers (Tulcanaza-Prieto et al. 2020a). Financial and non-financial indicators can be used to evaluate the performance of a firm. Financial firm performance is generally measured using the firm's value from the financial statements reported by a company, which describe the benefits stemming from the firm's shares by shareholders (Rouf 2015). The most common measures of financial firm performance are: return on assets (ROA), return on sales (ROS), return on equity (ROE), Tobin-Q, profit margin (PM), earnings per share (EPS), dividend yield (DY), price-earnings ratio (PE), sales-to-assets (STS), and expenses-to-sales (ETS) (Al-Matari et al. 2014). On the other hand, non-financial firm performance measures in-

clude combined indicators between individual, group, and organizational performance (Moyano-Fuentes et al. 2018). Moreover, non-financial performance involves increasing competitiveness through the promotion of sustainable competitive advantages over time (Alinejad and Anvari 2019) and employees' intellectual capital; both conditions raise the organization's performance (Barkat and Beh 2018). Non-financial metrics cannot be formulated in monetary units; instead, some measures are customer satisfaction, market share, category ownership, and new product adoption rate, among others (Atkinson 2000; Searcy 2012).

### 2.3. Organizational Culture and Corporate Performance

Organizational culture is one of the determinants used to model behavior and performance through the collective efforts of individual members (Joseph and Kibera 2019). Moreover, cultural organization stabilizes individual behavior (Cooper et al. 2001), pulls organizational behavior in the direction desired by management (Giberson et al. 2009), and provides social control of behavior and beliefs (O'Reilly et al. 1991). Cultural organization might include corporate social strategies, which promote employee motivation as a communication channel within the company, exerting a positive impact on the approach to employees, effective personal management, and a reduction of personnel risk (Rozsa et al. 2021). Therefore, a firm's success depends on the effective alignment between strategy, structure, and culture (Bennett et al. 1994).

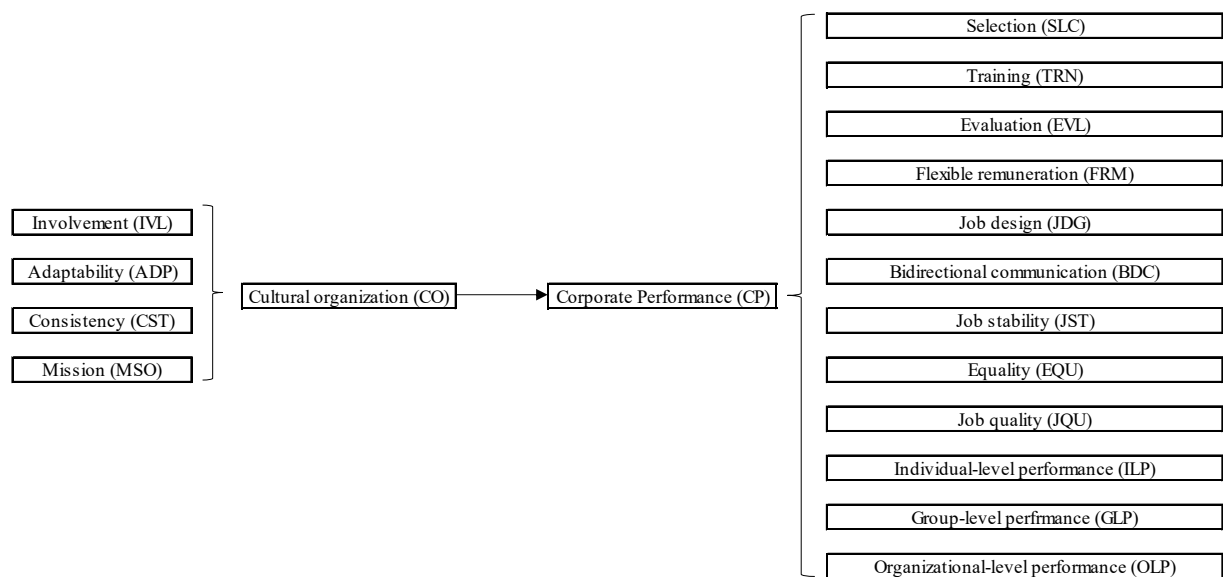
Empirical findings demonstrated a positive relationship between organizational culture and firm performance (Denison and Mishra 1995), meaning that there is consistency between strong culture and superior performance because it involves the alignment between strategy structure and other supportive organizational resources, suggesting that a strong culture involves the majority of an organization's members through the adherence to common values and beliefs, which are promoted by leaders of the firm (Deal and Kennedy 1982). Corporate culture generates a sustained competitive advantage and, thus, sustainable financial performance (Zhao et al. 2018). Sørensen (2002) studied the relationship between strong corporate culture and the variability of firm performance. His findings revealed that a solid organizational culture with clear goals and routines facilitates internal administrative processes (Sørensen 2002). Similarly, Denison (1984) and Denison and Mishra (1995) reported a positive relationship between organizational culture and company performance. These findings revealed a positive association between (a) effectiveness and firm performance, (b) mission, consistency, and profitability, (c) adaptability, mission, and growth in sales. The authors concluded that involvement, consistency, adaptability, and mission influence the effectiveness of firms, which is associated with product development, sales growth, and quality, generating a direct positive impact on firms' financial performance (Denison 1984; Denison and Mishra 1995). Moreover, Porter and Kramer (2006) reported the positive effect of culture on firm performance, given that this relationship is the response to innovative ideas and successful products (Porter and Kramer 2006). Previous studies concluded that organizational culture plays a key role in promoting organizational success (Denison 1996; Denison and Mishra 1995; Naranjo-Valencia et al. 2016; O'Reilly and Chatman 1996; Umrani et al. 2017).

Therefore, the hypothesis of this study is:

**Hypothesis 1.** *Corporate performance is positively affected by organizational culture.*

### 3. Research Model

The study analyzed the effect of organizational culture on the corporate performance of small Ecuadorian service companies. Specifically, the sample comprised postgraduate students from academic programs at Universidad de Las Americas (UDLA), located in Quito, Ecuador. The postgraduate students were working as managers or employees in small Ecuadorian service firms. Figure 1 displays the research model based on organizational culture and corporate performance.



**Figure 1.** Model based on organizational culture and corporate performance.

#### *Measurement of Concepts*

A survey was designed to identify the effect of organizational culture on corporate performance in the Ecuadorian service sector. The study measured sixteen concepts: involvement, adaptability, consistency, mission, selection, training, evaluation, flexible remuneration, job design, two-way communication, job stability, equality, job quality, performance at the individual level, performance at group level, and performance at the organizational level. The concepts of organizational culture and corporate performance were measured by multiple items. Each item employs a five-point and seven-point Likert scale: 1 for strongly disagree and 5 or 7 for strongly agree, respectively. The study adapted the items from prior research to warrant content validity. The item's operational definition was based in organizational culture and corporate performance aligned with the Denison model (Bonavia et al. 2009; Denison 1996; Denison and Mishra 1995; Triguero et al. 2012). Powell (1992) suggested using subjunctive measures to include confidential information of firm performance (Luo and Bhattacharya 2006; Powell 1992). Thus, special items were selected and designed for each concept to achieve the research objective (Table 1).

Denison's organizational culture model might be applied to evaluate management approaches and might serve as measure of business competitiveness (Wahyuningsih et al. 2019). The advantages of the constructs designed in the Denison model include (1) the link between external and internal assessment, (2) the dual balance challenges of external adaptation and internal integration, (3) a balanced firm profile with cultural strengths, and (4) the motivation of leadership to support business performance improvement (Denison and Mishra 1995; Denison and Neale 1994; Denison et al. 2015). However, the Denison model excludes other variables that are antecedents and consequences of organizational culture. Culture is a controllable aspect in any organization; therefore, it is susceptible to manipulation in order to improve profitability, sales growth, market share, product quality, and overall performance, suggesting that culture needs to be permanently monitored (Roldán and Bray 2009).

**Table 1.** Scale items for constructs.

Constructs	Items	Label	Related Literature
Demographic information	Academic program, job, tenure, and gender		Nominal scale
Involvement (IVL)	Most workers are highly involved in their work.	IVL1	(Bonavia et al. 2009; Denison 1990; Denison and Mishra 1995; Denison and Neale 1994; Denison et al. 2015)
	Information is shared with everyone when he or she needs it.	IVL2	
	Work is organized so that everyone sees the relationship between his or her job and the goals of the firm.	IVL3	
	Authority is delegated; therefore, people act on their own.	IVL4	
	The capacity of people is constantly improving.	IVL5	
	Problems decrease because people have enough skills to do their job.	IVL6	
Adaptability (ADP)	The firm's procedures are very flexible and easy to change.	ADP1	
	The firm's response to competitors and other changes in the business environment is adequate.	ADP2	
	Changes are generated using customer comments and recommendations.	ADP3	
	Decisions are made using customer input.	ADP4	
	Failure is an opportunity for learning and improvement.	ADP5	
	Innovation and risk are tools to improve firm performance.	ADP6	
Consistency (CST)	Leaders and managers are aligned with what they preach.	CST1	
	The firm has a consistent set of values.	CST2	
	Consensus is easy to reach.	CST3	
	Key issues are solved by reaching an agreement.	CST4	
	Working in teams with colleagues from different departments is easy.	CST5	
	There is a good alignment of goals and levels.	CST6	
Mission (MSO)	The firm has a long-term purpose and direction.	MSO1	
	The progress of stated goals is tracked permanently.	MSO2	
	Employees and managers understand what needs to be done for them to succeed in the long run.	MSO3	
	There is a shared vision of the firm in the long run.	MSO4	
	Leaders have a long-term viewpoint.	MSO5	
	Short-term and long-term thinking are aligned in the firm.	MSO6	
Selection (SLC)	The firm has processes of recruitment and selection to fill vacancies.	SLC1	
	Applicants are informed about negative aspects of the job in the selection process.	SLC2	
	The firm has developed its systems to select its staff, in addition to interviews and/or curriculum analysis.	SLC3	
Training (TRN)	"Key positions" have special training offered by the firm.	TRN1	(Denison 2003; Denison et al. 2006, 2015; Triguero et al. 2012)
	All employees receive training for their job.	TRN2	
	The performance of employees improves when they receive training.	TRN3	
	Job promotions take into account employees' training.	TRN4	
Evaluation (EVL)	Non-management employees are measured by a performance appraisal.	EVL1	
	Third parties (e.g., superiors, customers, and suppliers) provide information to non-management employees about their performance.	EVL2	

Table 1. Cont.

Constructs	Items	Label	Related Literature
Flexible remuneration (FRM)	The individual performance of non-management employees involves extra remuneration.	FRM1	(Denison 2003; Denison et al. 2006, 2015; Triguero et al. 2012)
	The group performance of non-management employees involves extra remuneration.	FRM2	
Job design (JDG)	The firm shows a strong implementation of self-managed or self-directed teams.	JDG1	
	The firm shows a strong presence of project-based teams.	JDG2	
	The firm shows a strong implementation of flexi-jobs (e.g., flexi-time, online work, and videoconferencing).	JDG3	
	Employees are well qualified and develop their new skills.	JDG4	
	Employees have the opportunity to change jobs.	JDG5	
Bidirectional communication (BDC)	Employees have access to information about the business operations and business behavior of the firm.	BDC1	
	The views and opinions of employees are taken into account by the firm.	BDC2	
	Employees access information about the business plan regularly.	BDC3	
Job stability (JST)	Vacancies that require experience are filled by internal promotion.	JST1	
	Internal promotion is allowed by the firm.	JST2	
	The firm is committed to securing job stability.	JST3	
	Employees are often made redundant.	JST4	
Equality (EQU)	The firm generates actions to ensure that all employees have equal job opportunities.	EQU1	
Job quality (JQU)	Problem-solving situations are managed by employees.	JQU1	
	The firm has a strong presence of quality circles.	JQU2	
	The firm facilitates the involvement of its employees through teamwork.	JQU3	
	Employees feel committed when assured of the quality of their work.	JQU4	
Individual-level performance (ILP)	Employees are satisfied working in the firm.	ILP1	
	Employees are happy working in the firm.	ILP2	
	Employees are satisfied with their performance.	ILP3	
Group-level performance (GLP)	Employee groups make a strong contribution to the organization.	GLP1	
	Employee groups performs well as a team.	GLP2	
	Employee groups meet their performance targets.	GLP3	
Organizational-level performance (OLP)	The firm is successful.	OLP1	
	The firm meets its clients' needs.	OLP2	
	The firm is well represented within the industry.	OLP3	



## 4. Empirical Results

The online questionnaire was distributed and collected by Google Forms, while IBM SPSS Statistics 26 was employed to process all the data. A total of 240 questionnaires were prepared. However, the response rate was 64%. This percentage is in line with the optimal response rate for electronic surveys (between 45% to 60%) (Malhotra et al. 2013). Duplicated data and invalid responses were dropped from the database. Hence, a total of 154 observations was used for the analysis. Furthermore, the study required selected participants to fill in the questionnaire based on the researchers' judgment, given that their expertise areas are business administration, quality management, and human resources. This criterion helped to reduce the error margin in the selection of respondents, providing high sample representativeness.

### 4.1. Demographic Analysis

In the statistical characteristics of this study, 82% of the respondents were men and 18% were women. Postgraduate students of Strategic Management in Projects represented 21% of the total respondents, while 79% were students of the Operations and Industrial Safety Management Program. Most of the surveyed (90%) were employees in the service sector, and 10% were managers. The tenure of respondents was three years or more. Finally, there was an insignificant relationship between managers' and employees' responses, demonstrating that the study does not suffer from sampling biases.

### 4.2. Descriptive Statistics and Exploratory Factor Analysis

A principal components analysis with Oblimin was used as the rotation method. The component correlation matrix revealed values higher than 0.3. The factor loading values were determined based on 0.5. Twenty-one items were removed and omitted in the subsequent analysis because they presented lower internal consistency and discriminant validity. The initial number of items was 61, and we reduced it to 40 items. The descriptive statistics and Exploratory Factor Analysis (EFA) are presented in Table 2. The EFA components showed that the Kaiser–Meyer–Olkin (KMO) was 0.727 (KMO > 0.5), and the Bartlett's sphericity test significance was 0.000 (Sig. < 0.05).

On the five-point Likert scale, the composite score of ADP was 3.889, which was the highest value compared to the remaining organizational culture factors ( $\mu = 3.679$ – $3.759$ ). This result reflects that Ecuadorian service firms include adaptability as a key factor in their cultural structure. Fundamentally, service firms use customers' comments and recommendations (customer input) to make changes.

On the seven-point Likert scale, the OLP composite score was 5.593, the highest corporate performance component. This finding is supported because service firms meet their clients' needs ( $\mu = 5.648$ ) and firms are well-represented within the industry ( $\mu = 5.537$ ). The respondents displayed a condensed sensitivity for FRM ( $\mu = 3.176$ ), indicating that employees and managers of service firms did not receive extra remuneration according to their individual and group performance. The composite score for GLP was 5.241, meaning that the respondents distinguished high group-level performance in their service firms. The strong contribution of employee groups and their performance targets were the most agreed-to statements more by employees and managers in the Ecuadorian service sector ( $\mu = 5.463$  and  $\mu = 5.019$ , respectively). The composite score for JQU was 5.037. Employees and managers perceived the strong presence of service firms in quality circles ( $\mu = 5.296$ ), the involvement of employees through teamwork ( $\mu = 4.796$ ), and their commitment when the firm assured them of the quality of their work ( $\mu = 5.019$ ).

**Table 2.** Descriptive statistics and exploratory factor analysis.

Constructs	Label	Mean	Std. Deviation	Variance	Composite Mean	Factor Loadings
Involvement (IVL)	IVL2	3.648	0.935	0.874	3.722	0.714
	IVL3	3.704	1.143	1.307		0.827
	IVL4	3.815	1.117	1.248		0.697
Adaptability (ADP)	ADP2	3.796	0.786	0.618	3.889	0.666
	ADP3	3.944	0.856	0.733		0.785
	ADP4	3.926	0.968	0.938		0.874
Consistency (CST)	CST2	3.907	0.976	0.954	3.679	0.844
	CST3	3.537	0.818	0.668		0.731
	CST6	3.593	1.019	1.038		0.723
Mission (MSO)	MSO2	3.889	1.058	1.119	3.759	0.663
	MSO3	3.630	1.087	1.181		0.840
	MSO4	3.759	0.989	0.979		0.863
Selection (SLC)	SLC1	5.185	2.066	4.267	4.778	0.914
	SLC2	4.370	2.301	5.294		0.625
Training (TRN)	TRN1	4.611	2.013	4.053	4.747	0.662
	TRN2	4.667	1.716	2.943		0.788
	TRN4	4.963	1.659	2.753		0.807
Evaluation (EVL)	EVL1	5.185	1.924	3.701	4.944	0.786
	EVL2	4.704	1.968	3.873		0.717
Flexible remuneration (FRM)	FRM1	3.315	1.970	3.880	3.176	0.914
	FRM2	3.037	2.046	4.187		0.847
Job design (JDG)	JDG2	3.704	2.089	4.363	4.043	0.865
	JDG3	3.611	2.252	5.072		0.803
	JDG4	4.815	1.749	3.059		0.657
Bidirectional communication (BDC)	BDC1	4.796	1.763	3.109	4.309	0.732
	BDC2	4.259	1.793	3.215		0.887
	BDC3	3.870	1.637	2.681		0.780
Job stability (JST)	JST1	4.481	2.016	4.066	4.660	0.793
	JST2	4.722	2.193	4.808		0.868
	JST3	4.778	2.203	4.855		0.753
Equality (EQU)	EQU1	4.648	2.001	4.006	4.648	0.954
Job quality (JQU)	JQU2	5.296	1.787	3.194	5.037	0.864
	JQU3	4.796	1.522	2.316		0.706
	JQU4	5.019	1.619	2.622		0.832
Individual-level performance (ILP)	ILP2	4.685	1.851	3.427	4.917	0.744
	ILP3	5.148	1.352	1.827		0.810
Group-level performance (GLP)	GLP1	5.463	1.656	2.744	5.241	0.858
	GLP3	5.019	1.631	2.660		0.741
Organizational-level performance (OLP)	OLP2	5.648	1.348	1.817	5.593	0.759
	OLP3	5.537	1.634	2.668		0.825

Note: N = 154. Kaiser–Meyer–Olkin (KMO) = 0.727. Significance of Bartlett’s test of sphericity = 0.000. Extraction Sums of Squared Leading (Cumulative Variance %) = 78.942%. Extraction method: Principal Component Analysis. Rotation method: Oblimin. Factor extraction criteria: Eigenvalue (1.0).

#### 4.3. Reliability Analysis

The recommended score for Cronbach’s alpha is 0.6 (Hair et al. 2010). Its level in the study was between 0.660 and 0.926. The Cronbach’s alpha score for EQU is not shown because EQU comprises one item; therefore, there are too few component variables in the analysis scale. However, the rest of the statistical measures were calculated. The composite reliability ranged from 0.722 to 0.910, which was higher than the suggested level of 0.7. The proposed average variance extracted (AVE) value was 0.5; the study presents levels from 0.560 to 0.910. There were no multicollinearity problems between the variables because the correlation coefficients were lower than 0.7. The AVE’s square root for each construct (Table 3) was larger than the correlation between the concepts in the proposed model (Chin 1998).

**Table 3.** Descriptive statistics and correlation matrix.

Var.	Items	CA	CR	AVE	Correlations															
					IVL	ADP	CST	MSO	SLC	TRN	EVL	FRM	JDG	BDC	JST	EQU	JQU	ILP	GLP	OLP
IVL	3	0.742	0.791	0.560	(0.748)															
ADP	3	0.816	0.821	0.608	0.456 ***	(0.780)														
CST	3	0.660	0.811	0.589	0.627 ***	0.563 ***	(0.768)													
MSO	3	0.859	0.834	0.630	0.528 ***	0.514 ***	0.542 ***	(0.794)												
SLC	2	0.812	0.754	0.613	0.159	0.189	0.239	0.285 **	(0.783)											
TRN	3	0.809	0.798	0.570	0.319 **	0.326 **	0.407 ***	0.412 ***	0.538 ***	(0.755)										
EVL	2	0.822	0.722	0.566	0.154	0.303 **	0.351 ***	0.231	0.546 ***	0.602 ***	(0.752)									
FRM	2	0.921	0.874	0.777	0.193	0.280 **	0.162	0.140	0.086	0.223	0.204	(0.881)								
JDG	3	0.702	0.821	0.608	0.279 **	0.414 ***	0.332 **	0.343 **	0.468 ***	0.582 ***	0.449 ***	0.622 ***	(0.780)							
BDC	3	0.885	0.843	0.644	0.329 **	0.395 ***	0.394 ***	0.387 ***	0.583 ***	0.612 ***	0.448 ***	0.506 ***	0.438 ***	(0.802)						
JST	3	0.926	0.847	0.650	0.317 **	0.181	0.341 **	0.398 ***	0.460 ***	0.447 ***	0.580 ***	0.218	0.522 ***	0.692 ***	(0.806)					
EQU	1		0.910	0.910	0.214	0.293 **	0.250	0.202	0.391 ***	0.397 ***	0.497 ***	0.277 **	0.361 ***	0.425 ***	0.526 ***	(0.954)				
JQU	3	0.803	0.845	0.646	0.324 **	0.368 ***	0.337 **	0.272 **	0.616 ***	0.679 ***	0.596 ***	0.297 **	0.547 ***	0.476 ***	0.411 ***	0.594 ***	(0.804)			
ILP	2	0.824	0.753	0.604	0.319 **	0.296 **	0.398 ***	0.384 ***	0.500 ***	0.370 ***	0.553 ***	0.506 ***	0.327 ***	0.433 ***	0.383 ***	0.460 ***	0.546 ***	(0.777)		
GLP	2	0.918	0.781	0.643	0.258	0.151	0.323 **	0.383 ***	0.658 ***	0.466 ***	0.598 ***	0.156	0.483 ***	0.476 ***	0.537 ***	0.287 **	0.622 ***	0.568 ***	(0.802)	
OLP	2	0.852	0.772	0.629	0.353 ***	0.137	0.247	0.264	0.652 ***	0.620 ***	0.454 ***	0.206	0.401 ***	0.484 ***	0.552 ***	0.339 **	0.539 ***	0.625 ***	0.597 ***	(0.793)

Note: CA = Cronbach’s Alpha. CR = composite reliability. AVE = average variance extracted. Values in parenthesis are root AVE. \*\*\* and \*\* indicate statistical significance at the 1% and 5% level, respectively.

#### 4.4. Regression Analysis

Table 4 presents the results of individual linear regressions to test organizational culture's effect on corporate performance in the Ecuadorian service sector. The hypothesis of the study is supported, demonstrating that corporate performance is positively affected by organizational culture ( $\beta = 0.798$ ,  $p < 0.01$ ). These results are consistent with the positive effect of the development and motivation of certain cultural characteristics on firm performance improvement (Denison 1990; Denison and Mishra 1995). Furthermore, involvement, adaptability, consistency, and mission each presented a significant positive relationship with corporate performance. Therefore, the four intangible human resources (involvement, adaptability, consistency, and mission) were identified as key developers of the positive relationship between employees and company performance in the Ecuadorian service sector. The adjusted value of R-Square in the main model was 0.368; thus, 36.8% of changes in corporate performance are explained by changes in organizational culture. The low value of the adjusted R-Square explained the real relationship between the significant predictors and the response variable. Corporate performance (dependent variable) was integrated by financial and non-financial firm performance (Tulcanaza-Prieto et al. 2020a). The proposed model only includes most of the significant non-financial factors that influence corporate performance; however, it does not directly introduce measures of financial performance.

Table 4. Multiple regression results.

Regression	Prop Effect	Adj. R <sup>2</sup>	Durbin Watson	F	Constant	$\beta$	Test Results
CO→CP	+	0.368	2.045	11.739 ***	1.704 * (1.933)	0.789 *** (3.426)	Supported
IVL→CP	+	0.291	2.074	6.292 ***	2.845 *** (3.800)	0.494 ** (2.508)	Supported
ADP→CP	+	0.212	2.015	7.653 ***	2.252 ** (2.526)	0.623 *** (2.766)	Supported
CST→CP	+	0.247	2.156	10.139 ***	2.018 ** (2.375)	0.722 *** (3.184)	Supported
MISO→CP	+	0.241	2.037	9.675 ***	2.580 *** (3.724)	0.557 *** (3.110)	Supported
CO→SLC	+	0.164	2.094	6.567 ***	3.336 *** (13.656)	0.089 ** (2.089)	Supported
CO→TRN	+	0.180	2.037	11.400 ***	2.836 *** (9.839)	0.195 *** (3.376)	Supported
CO→EVL	+	0.168	2.188	4.886 **	3.192 *** (11.633)	0.115 ** (2.211)	Supported
CO→FRM	+	0.018	2.204	1.951	3.542 *** (19.206)	0.069 (1.397)	Not supported
CO→JDG	+	0.154	2.061	9.496 ***	3.068 *** (12.654)	0.172 *** (3.082)	Supported
CO→BDC	+	0.172	2.009	12.014 ***	2.919 *** (11.283)	0.190 *** (3.466)	Supported
CO→JST	+	0.115	2.061	7.899 ***	3.164 *** (13.682)	0.128 *** (2.811)	Supported
CO→EQU	+	0.057	2.018	4.204 **	3.314 *** (13.936)	0.096 ** (2.050)	Supported
CO→JQU	+	0.122	2.014	8.389 ***	2.812 *** (8.261)	0.189 *** (2.896)	Supported
CO→ILP	+	0.147	2.097	10.146	2.824 *** (9.176)	0.191 *** (3.185)	Supported
CO→GLP	+	0.090	2.088	6.257 **	2.995 *** (9.355)	0.146 ** (2.501)	Supported
CO→OLP	+	0.069	2.052	4.933 **	2.931 *** (7.598)	0.149 ** (2.221)	Supported

Note: Beta corresponds to unstandardized coefficients. Numbers inside the parenthesis are *t*-statistics. \*\*\*, \*\*, and \* indicate statistical significance at the 1%, 5%, and 10% level, respectively.

Moreover, 11 concepts of corporate performance defined by [Triguero et al. \(2012\)](#) were positively affected by organizational culture. The exception was the item “flexible remuneration”, whose influence was positive but not significant. Hence, organizational culture plays a fundamental role in understanding a firm’s behavior and performance through the cooperative efforts of individual members of the firm.

Involvement is an essential characteristic of organizational culture, which positively influences corporate performance in the Ecuadorian service sector, with the highest adjusted R-Square of 29.1%. According to the study, corporate performance increases when (1) information is shared with employees, (2) the work is organized to pursue a better relationship between employees’ jobs and the goals of the firm, and (3) authority is delegated, and workers act on their own. These findings are corroborated by [Jones and Kato \(2003\)](#), who demonstrated that employee involvement improves enterprise performance through the discretionary effort of employees, changes in organizational designs (teams and formal education), and the introduction of high-performance workplace practices (learning effects) ([Jones and Kato 2003](#)). On the other hand, the organizational culture presented the highest significantly positive relationship (at 1% level) with training, with an adjustment of 18%. The results revealed that training is influenced by organizational culture when employees receive permanent training for their jobs, job promotions take into account employee training, and “key positions” feature special training offered by the firm. [Mcguire and Bagher \(2010\)](#) suggested that diversity training promotes inclusivity, equality, and fairness in organizations, which is necessary to develop the human resource community and increase firm performance in the long term because employees and managers trust the company’s goals ([Mcguire and Bagher 2010](#)).

## 5. Discussion

The Denison model facilitated the measurement and evaluation of behavior patterns that expressed the cultural characters presented in the Ecuadorian environment. The Denison model holds that an ideal organizational culture reflects a balanced internal and external focus that might lead to effective business strategy and performance ([Wahyuningsih et al. 2019](#)). The online questionnaire allowed a comparison between the cultural profiles of service firms. The research results signaled how the robustness of cultural profiles was associated with better perceptions of performance by organizations’ members. The findings of this research are aligned with those of previous studies. Joseph and Kibera demonstrated that organizational culture significantly influences non-market performance in microfinance institutions in Kenya, concluding that organizational culture, in concordance with the organizational strategy and structure, is one of the most important sources of sustainable competitive advantage in microfinance ([Joseph and Kibera 2019](#)). Moreover, the positive relationship between organizational culture and firm performance is more evident when a firm promotes a strong culture, which is characterized by (1) social control, which influences the employee’s decisions and behavior, (2) social glue between employees, who feel like strong components of the corporate experience and perform at their best, and (3) sense-making processes, which help employees to understand the corporate events and objectives to increase their efficiency and effectiveness ([Shahzad et al. 2012](#)). Organizational culture was considered as helpful for achieving high performance in a study conducted in Indonesian manufacturing firms. However, organizational culture explained only 20% of the firm performance’s variance. Therefore, managers might consider additional factors, such as management practices in quality, supply chain, and business strategy ([Wahjudi et al. 2016](#)).

The results of the individual linear regressions proved the hypothesis, demonstrating the positive relationship between corporate performance and organizational culture. Moreover, the most significant components of organizational culture were involvement, adaptability, consistency, and mission. These intangible human resources can be considered as a conjunction of the cooperative efforts of individual members of an organization, which help to improve corporate performance. Specifically, the study showed that employ-

ees and managers collaborate with a firm when they trust the company's goals and can access the firm's information; and thus, transparent information and collaboration between teams create the optimal conditions in which to improve the direct relationship between organizational culture and firm performance in the Ecuadorian context.

This study focused on the Ecuadorian service sector. This sector is known as the tertiary sector in the economy and includes all those activities that satisfy the needs of customers. It is composed of financial services, tourism, communications, commerce, education, transportation, professional activities, and others. According to the Ecuadorian Central Bank, the Gross Value Added (GVA) of the Ecuadorian service sector represented 65.6% of Ecuador's GDP during 2018. The importance of the tertiary sector in the country's economy is also evidenced by the fact that 68% of jobs are generated in firms that provide services, according to the Superintendency of Companies ([Dirección Nacional de Investigación y Estudios 2018](#)). The implications of the study might be generalized for firms with similar characteristics because organizational culture is a transversal factor in the increase of the quality of corporate performance ([Joseph and Kibera 2019](#)). Specifically, the findings referring to corporate performance can be postulated for firms with comparable features to the sample disaggregation, taking into account the national financial and accounting regulations. The implementation of the International Financial Reporting Standards (IFRS) has upgraded the affinity of financial statements between national and international firms, whose primary purpose is to increase transparency in accounting information ([Lee 2019](#); [Lee et al. 2015](#)).

## 6. Conclusions

This study analyzed the relationship between organizational culture and corporate performance in a sample of service firms from Ecuador, using an online questionnaire with concepts from the Denison model (1990) and [Triguero et al. \(2012\)](#) to measure the components of organizational culture and corporate performance, respectively. The findings revealed that corporate performance is positively affected by organizational culture in Ecuadorian service firms. Previous studies also support these findings ([Denison 1990](#); [Denison and Mishra 1995](#); [Jones and Kato 2003](#); [Joseph and Kibera 2019](#)). The results showed that the effectiveness of firm performance might be increased by cultural characteristics that motivate employees and managers. Moreover, all the organizational culture determinants and corporate performance concepts were significantly positively associated with corporate performance and cultural organization. Finally, involvement was the critical factor in organizational culture that influences corporate performance, while organizational cultures presented the highest positive relationship with training.

Organizational culture's substantive element is intangible human resources, measured by involvement, adaptability, consistency, and mission. These factors significantly positively affected the labor relations between managers, employees, and firm performance. Therefore, there was an interdependent relationship between work environment and productivity results in firms, suggesting that strong organizational climates achieve efficiency and effectiveness in the use of firm resources, such as a reduction in conflicts, better relationships between employees and employers, motivation, empathy, flexibility, innovation, and a pyramidal or matrix structure in the firm. Moreover, a better understanding of culture's effect can only be gained by designing measures and programs to promote desired cultural values that contribute to firms' sustainability.

The findings of this study demonstrate the positive impact of organizational culture on corporate performance. This is mainly evidenced by the finding that adaptability and organizational-level performance are essential factors in service companies. Thus, this relationship is more evident when a strong culture, characterized by social control and biases in employee's decisions, is promoted. Therefore, corporate performance improves when managers clearer connections between their employees and their business goals ([Koo and Yang 2018](#)).

The relationship between the organizational culture and firm performance is grounded in the determinants discussed in this study and other factors, such as management commitment, alignment with strategy, the planning and redesign of business values and goals, innovation and the redesign of services, and a collaborative economy. Furthermore, a strong culture is a crucial factor that influences firm performance improvement because when culture is collectivist, it is easier to obtain a customer-focused orientation and learning. Therefore, firm performance and organizational culture are demonstrated through rewarding innovation and orientation, suggesting that joint access to the development of a sustainable business life cycle requires a change in management processes according to each firm's principles and values (Cheung et al. 2012). The convergence between business strategy and organizational culture might offer better conditions to achieve firm sustainability in the long-term.

On the other hand, the study's main limitation is the number of respondents to the questionnaire. The data were collected for nine months. However, the number of postgraduate students did not increase in the Business School, and the questionnaire's design contained several questions. Therefore, the students did not fill all the blanks, creating the possibility of invalid observations. Another limitation was that the relationship between cultural organization and firm performance is subject to the firm's environment, which is difficult to measure in the Ecuadorian case because the statistical system does not provide an industry index.

Corporate performance is influenced by organizational culture components, and political, economic, and social factors (Denison 1996). Therefore, we suggest that external and internal factors that influence firm performance should be excluded in order to increase the model's power. Moreover, it is necessary to include the characteristics of the studied firms, such as age, property (public or private), degree of corporate governance (Tulcanaza-Prieto et al. 2020b), and social environment in future analysis, in order to evidence the relationship between organizational culture, firm performance, and the specific features of firms. Finally, although the study's purpose was to analyze organizational performance from non-financial indicators, it is important to test the model using financial performance measures (return on assets, return on equity, sales growth, Tobin's Q), since the study only includes non-financial performance proxies.

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## References

- Alinejad, Saeed, and Alireza Anvari. 2019. The Mediating Effect of Collaborative Structure and Competitive Intensity on the Relationship between Process Management and Organizational Performance. *Iranian Journal of Management Studies* 12: 149–74.
- Al-Matari, Ebrahim Mohammed, Abdullah Kaid Al-Swidi, and Faudziah Hanim Bt Fadzil. 2014. The Measurements of Firm Performance's Dimensions. *Asian Journal of Finance & Accounting* 6: 24.
- Atkinson, Giles. 2000. Measuring Corporate Sustainability. *Journal of Environmental Planning and Management* 43: 235–52. [CrossRef]
- Barkat, Waseem, and Loo-See Beh. 2018. Impact of Intellectual Capital on Organizational Performance: Evidence from Developing Country. *Academy of Strategic Management Journal* 17: 1–8.
- Bennett, Robert, Paul Fadil, and Robin Greenwood. 1994. Cultural Alignment in Response to Strategic Organizational Change: New Considerations for a Change Framework. *Journal of Managerial Issues* 6: 474–90.

- Bititci, Umit S., Allan S. Carrie, and Liam McDevitt. 1997. Integrated Performance Measurement Systems: A Development Guide. *International Journal of Operations & Production Management* 17: 522–34.
- Bonavia, Tomás, Vicente Prado, and David Tomás. 2009. Adaptación Al Castellano y Estructura Factorial Del Denison Organizational Culture Survey. *Psicothema* 21: 633–38. [PubMed]
- Cameron, Kim, and Robert Quinn. 2006. *Diagnosing and Changing Organizational Culture: Based on the Competing Values Framework*. New York: Addison-Wesley.
- Cheung, Sai On, Peter Wong, and Ada Wu. 2011. Towards an Organizational Culture Framework in Construction. *International Journal of Project Management* 29: 33–44. [CrossRef]
- Cheung, Sai On, Peter Wong, and Anna Lam. 2012. An Investigation of the Relationship between Organizational Culture and the Performance of Construction Organizations. *Journal of Business Economics and Management* 13: 688–704. [CrossRef]
- Chin, Wynne. 1998. The Partial Least Squares Approach to Structural Equation Modeling. In *Modern Methods for Business Research*. Edited by George A. Marcoulides. London: Lawrence Erlbaum Associates, pp. 295–336.
- Cooper, Cary, Sue Cartwright, and Christopher Earley. 2001. *The International Handbook of Organizational Culture and Climate*, 1st ed. Hoboken: Wiley.
- De Mooij, Marieke, and Geert Hofstede. 2011. Cross-Cultural Consumer Behavior: A Review of Research Findings. *Journal of International Consumer Marketing* 23: 181–92.
- Deal, Terrence, and Allan Kennedy. 1982. *Corporate Cultures: The Rites and Rituals of Corporate Life*. Reading: Addison-Wesley.
- Denison, Daniel, and Anil Mishra. 1995. Toward a Theory of Organizational Culture and Effectiveness. *Organization Science* 6: 204–23. [CrossRef]
- Denison, Daniel, and William Neale. 1994. *Denison Organizational Culture Survey*. Ann Arbor: Aviat.
- Denison, Daniel, Jay Janovics, Joana Young, and Hee Cho. 2006. Diagnosing Organizational Cultures: Validating a Model and Method. *International Institute for Management Development* 304: 1–36.
- Denison, Daniel, Levi Nieminen, and Lindsey Kotrba. 2015. Diagnosing Organizational Cultures: A Conceptual and Empirical Review of Culture Effectiveness Surveys. *European Journal of Work and Organizational Psychology* 23: 145–61. [CrossRef]
- Denison, Daniel, Robert Hooijberg, and Robert Quinn. 1995. Paradox and Performance: Toward a Theory of Behavioral Complexity in Managerial Leadership. *Organization Science* 6: 524–40. [CrossRef]
- Denison, Daniel. 1984. Bringing Corporate Culture to the Bottom Line. *Organizational Dynamics* 13: 5–22. [CrossRef]
- Denison, Daniel. 1990. *Corporate Culture and Organizational Effectiveness*. New York: John Wiley & Sons, Inc.
- Denison, Daniel. 1996. What Is the Difference between Organizational Culture and Organizational Climate? A Native's Point of View on a Decade of Paradigm Wars. *Academy of Management Review* 21: 619–54. [CrossRef]
- Denison, Daniel. 2003. Corporate Culture and Organizational Effectiveness: Is There a Similar Pattern around the World? *Advances in Global Leadership* 3: 205–27.
- Dirección Nacional de Investigación y Estudios. 2018. Estudio Sectorial: Panorama de las Actividades de Servicios en El Ecuador. Available online: <https://investigacionyestudios.supercias.gob.ec/wp-content/uploads/2019/01/PANORAMA-DE-LAS-ACTIVIDADES-DE-SERVICIOS-EN-EL-ECUADOR-2013-2017.pdf> (accessed on 27 February 2021).
- Gallivan, Michael, and Mark Srite. 2005. Information Technology and Culture: Identifying Fragmentary and Holistic Perspectives of Culture. *Information and Organization* 15: 295–338. [CrossRef]
- Giberson, Tomas, Christian J. Resick, Marcus W. Dickson, Jacqueline K. Mitchelson, Kenneth R. Randall, and Malissa A. Clark. 2009. Leadership and Organizational Culture: Linking CEO Characteristics to Cultural Values. *Journal of Business Psychology* 24: 123–37. [CrossRef]
- Hair, Joseph, William Black, Barry Babin, and Rolph Anderson. 2010. *Multivariate Data Analysis*, 7th ed. New Jersey: Prentice-Hall.
- Hofstede, Geert, Gert Jan Hofstede, and Michael Minkov. 2010. *Cultures and Organizations. Software of the Mind. Intercultural Cooperation and Its Importance for Survival*. New York: Mc Graw Hil.
- Hofstede, Geert. 1983. National Cultures in Four Dimensions. A Research-Based Theory of Cultural Differences among Nations. *International Studies of Management & Organization* 13: 46–74.
- Hofstede, Geert. 1999. *Culturas y Organizaciones. El Software Mental. La Cooperación Internacional y Su Importancia Para La Supervivencia*. España: Alianza Editorial.
- Hofstede, Geert. 2011. Dimensionalizing Cultures: The Hofstede Model in Context. *Online Readings in Psychology and Culture* 2: 1–26. [CrossRef]
- Jones, Derek, and Takao Kato. 2003. The Effects of Employee Involvement on Firm Performance: Evidence from an Econometric Case Study. *SSRN Electronic Journal*. [CrossRef]
- Jones, Janine, and Kevin Linderman. 2014. Process Management, Innovation and Efficiency Performance: The Moderating Effect of Competitive Intensity. *Business Process Management Journal* 20: 335–58. [CrossRef]
- Joseph, Owino, and Francis Kibera. 2019. Organizational Culture and Performance: Evidence from Microfinance Institutions in Kenya. *SAGE Journals* 9: 1–11. [CrossRef]
- Kirkman, Bradley, Kevin Lowe, and Cristina Gibson. 2016. A Retrospective on Culture's Consequences: The 35-Year Journey. *Journal of International Business Studies* 48: 12–29. [CrossRef]
- Koo, Jeong Ho, and Daechon Yang. 2018. Managerial Overconfidence, Self-Attribution Bias, and Downwardly Sticky Investment: Evidence from Korea. *Emerging Markets Finance and Trade* 54: 144–61. [CrossRef]



- Koufopoulos, Dimitrios, Vassilios Zoumbos, Maria Argyropoulou, and Jaideep Motwani. 2008. Top Management Team and Corporate Performance: A Study of Greek Firms. *Team Performance Management: An International Journal* 14: 340–63. [\[CrossRef\]](#)
- Lee, Jung-Chieh, Yih-Chearnng Shiue, and Chung-Yang Chen. 2016. Computers in Human Behavior Examining the Impacts of Organizational Culture and Top Management Support of Knowledge Sharing on the Success of Software Process Improvement. *Computers in Human Behavior* 54: 462–74. [\[CrossRef\]](#)
- Lee, Woo Jae. 2019. Toward Sustainable Accounting Information: Evidence from IFRS Adoption in Korea. *Sustainability* 11: 1154. [\[CrossRef\]](#)
- Lee, Young Hwan, Sun A. Kang, and Sang Min Cho. 2015. The Effect of Voluntary IFRS Adoption by Unlisted Firms on Earnings Quality and the Cost of Debt: Empirical Evidenced from Korea. *Journal of Business Economics and Management* 16: 931–48. [\[CrossRef\]](#)
- Luo, Xueming, and Chinmoy Bhattacharya. 2006. Corporate Social Responsibility, Customer Satisfaction, and Market Value. *Journal of Marketing* 70: 1–18. [\[CrossRef\]](#)
- Madu, Christian N., John Aheto, Chu-Hua Kuei, and Dena Winokur. 1996. Adoption of Strategic Total Quality Management Philosophies Multi-criteria Decision Analysis Model. *International Journal of Quality & Reliability Management* 13: 57–72.
- Malhotra, Naresh, Imad Baalbaki, and Nada Nasr Bechwati. 2013. *Marketing Research: An Applied Orientation Arab World Edition*, 6th ed. Indianapolis: Pearson Education.
- Marulanda, Carlos, and Luis López. 2018. La Cultura Organizacional, Factor Clave Para La Transferencia de Conocimiento En Los Centros de Investigación Del Triángulo Del Café de Colombia. *Información Tecnológica* 29: 245–52. [\[CrossRef\]](#)
- Mcguire, David, and Mammed Bagher. 2010. Diversity Training in Organizations: An Introduction. *Journal of European Industrial Training* 34: 493–505. [\[CrossRef\]](#)
- Mojibi, Toraj, Somayeh Hosseinzadeh, and Yacob Khojasteh. 2013. Organizational Culture and Its Relationship with Knowledge Management Strategy: A Case Study. *Knowledge Management Research & Practice* 13: 281–88.
- Moyano-Fuentes, José, Juan Maqueira-Marín, and Sebastián Bruque-Cámara. 2018. Process Innovation and Environmental Sustainability Engagement: An Application on Technological Firms. *Journal of Cleaner Production* 171: 844–56. [\[CrossRef\]](#)
- Nadanyiova, Margareta, and Poriaki Durana. 2019. Corporate Social Responsibility as a Brand Value-Enhancing Tool. Paper presented at the 8th International Scientific Symposium Economy of Eastern Croatia–Vision and Growth, Zagreb, Croatia, May 30–31; pp. 1225–37.
- Naranjo-Valencia, Julia, Daniel Jiménez-Jiménez, and Raquel Sanz-Valle. 2016. Studying the Links between Organizational Culture, Innovation, and Performance in Spanish Companies. *Revista Latinoamericana de Psicología* 48: 30–41. [\[CrossRef\]](#)
- Nazariana, Alireza, Peter Atkinsonb, and Pantea Foroudic. 2017. Influence of National Culture and Balanced Organizational Culture on the Hotel Industry's Performance. *International Journal of Hospitality Management* 63: 22–32. [\[CrossRef\]](#)
- Neely, Andy, Mike Gregory, and Ken Platts. 2005. Performance Measurement System Design: A Literature Review and Research Agenda. *International Journal of Operations & Production Management* 25: 1228–63.
- O'Reilly, Charles, and Jennifer Chatman. 1996. Culture as Social Control: Corporations, Cults, and Commitment. *Research in Organizational Behavior* 18: 157–200.
- O'Reilly, Charles, Jennifer Chatman, and Dennis Caldwell. 1991. People and Organizational Culture: A Profile Comparison Approach to Assessing Person-Organization Fit. *Academy of Management Journal* 34: 487–516.
- Oberföll, Kathrin, María Elena Camarena, and María Luisa Saavedra. 2018. Relationship between Organizational Culture and Performance among German Multinational Companies in Mexico. *Journal of Business* 10: 24–47. [\[CrossRef\]](#)
- Porter, Michael, and Mark Kramer. 2006. Strategy and Society: The Link between Competitive Advantage and Corporate Social Responsibility. *Harvard Business Review* 84: 78–90. [\[PubMed\]](#)
- Powell, Thomas. 1992. Organizational Alignment as Competitive Advantage. *Strategic Management Journal* 13: 119–34. [\[CrossRef\]](#)
- Randhawa, Jaspreet, and Amanpreet Sethi. 2017. An Empirical Study to Examine the Role Smart Manufacturing in Improving Productivity and Accelerating Innovation. *International Journal of Engineering and Management Research* 7: 607–15.
- Roldán, Ignacio, and Rafael Bray. 2009. Similarities and Differences Existing in Cultural Profiles of Colombian Organizations of Higher and Lower Performance. *Revista Facultad de Ciencias Económicas* 17: 9–24.
- Rossi, Fernanda, Silvia Camelo, Vivian Mininel, and Thamiris Vegro. 2016. Organizational Culture of a Psychiatric Hospital and Resilience of Nursing Workers. *Revista Brasileira de Enfermeria* 69: 20–35.
- Rouf, Md Abdour. 2015. Capital Structure and Firm Performance of Listed Non-Financial Companies in Bangladesh. *The International Journal of Applied Economics and Finance* 9: 25–32.
- Rozsa, Zoltan, Jaroslav Belas, Khurram Khan, and Katarina Zvarikova. 2021. Corporate Social Responsibility and Essential Factors of Personnel Risk Management in SMEs. *Polish Journal of Management Studies* 23: 449–83. [\[CrossRef\]](#)
- Schein, Edgar. 1988. *The Role of the Founder in Creating Organizational Culture. Modern Classics on Leadership*, 1st ed. Barcelona: Plaza&Janes Editores.
- Schuldt, Klaus, and Giancarlo Gomes. 2020. Influence of Organizational Culture on the Environments of Innovation and Organizational Performance. *Gestão & Produção* 27. [\[CrossRef\]](#)
- Searcy, Cory. 2012. Corporate Sustainability Performance Measurement Systems: A Review and Research Agenda. *Journal of Business Ethics* 107: 239–53. [\[CrossRef\]](#)

- Shahzad, Fakhar, Adeel Luqman, Ayesha Khan, and Lalarukh Shabbir. 2012. Impact of Organizational Culture on Organizational Performance: An Overview. *Interdisciplinary Journal of Contemporary Research in Business* 3: 975–85.
- Short, Jeremy, David Ketchen, Timonthy Palmer, and Tomas Hult. 2007. Firm, Strategic Group, and Industry Influences on Performance. *Strategic Management Journal* 28: 147–67. [CrossRef]
- Slater, Slater, Tomas Hult, and Eric Olson. 2010. Factors Influencing the Relative Importance of Marketing Strategy Creativity and Marketing Strategy Implementation Effectiveness. *Industrial Marketing Management* 39: 551–59. [CrossRef]
- Sørensen, Jesper. 2002. The Strength of Corporate Culture and the Reliability of Firm Performance. *Administrative Science Quarterly* 47: 70–91. [CrossRef]
- Triguero, Rafael, Jesús Peña-Vinces, Manuel González-Rendon, and Mercedes Sánchez-Apellaniz. 2012. Human Resource Management Practices Aimed at Seeking the Commitment of Employees on Financial and Non-Financial (Subjective Performance in Spanish Firms: An Empirical Contribution. *Journal of Economics, Finance and Administrative Science* 17: 17–31.
- Tulcanaza-Prieto, Ana Belen, and Manuel Eugenio Morocho-Cayamcela. 2018. Elasticity of Total Production Measured by the Investment in Information and Communication Technologies: Evidence from the Ecuadorian Manufacturing Companies. *X-Pendientes Económicos Superintendencia de Compañías, Valores y Seguros del Ecuador* 2: 6–27. Available online: [https://ojs.supercias.gob.ec/index.php/X-pendientes\\_Economicos/article/view/20](https://ojs.supercias.gob.ec/index.php/X-pendientes_Economicos/article/view/20) (accessed on 25 August 2021).
- Tulcanaza-Prieto, Ana Belen, and Younghwan Lee. 2018. Factors Associated with the Financial Performance of Commercial Firms in Ecuador. *Global Business Administration Review* 15: 1–26. [CrossRef]
- Tulcanaza-Prieto, Ana Belen, HoKyun Shin, Younghwan Lee, and Chhang Won Lee. 2020a. Relationship among CSR Initiatives and Financial and Non-Financial Corporate Performance in the Ecuadorian Banking Environment. *Sustainability* 12: 1621. [CrossRef]
- Tulcanaza-Prieto, Ana Belen, Younghwan Lee, and Jeong-Ho Koo. 2020b. Leverage, Corporate Governance and Real Earnings Management: Evidence from Korean Market. *Global Business & Finance Review* 25: 51–72.
- Umrani, Waheed, Syed Shah, Pervaiz Memon, and Altaf Hussain. 2017. Organizational Culture and Business Performance: An Empirical Investigation in the Pakistani Context. *International Journal of Academic Research in Economics and Management Sciences* 6: 2226–3624. [CrossRef]
- Wahjudi, Didik, Moses Singgih, Patdono Suwignjo, and Iman Baihaqui. 2016. The Relationship between Organizational Culture and Firm Performance: An Empirical Study on Indonesian Manufacturing Firms. *International of Productivity and Quality Management* 18: 1–18. [CrossRef]
- Wahyuningsih, Sri Handari, Achmad Sudiro, Eka Afran Troena, and Dodi Irawanto. 2019. Analysis of Organizational Culture with Deninson's Model Approach for International Business Competitiveness. *Problemas and Perspectives in Management* 17: 142–52. [CrossRef]
- Wang, De Wei, and Won Bae Kim. 2018. An Exploratory Study on the Influence of the Fairness of the Performance Measurement System and Business Reform Force on the Business Performance: Based Chinese Manufacturing Enterprises as the Research Object. *Academic Society of Global Business Administration* 15: 1–29. [CrossRef]
- Zhao, Hailin, Haimeng Teng, and Qiang Wu. 2018. The Effect of Corporate Culture on Firm Performance: Evidence from China. *China Journal of Accounting Research* 11: 1–19. [CrossRef]