





The role of organizational culture in the performance of SMEs in Vietnam during the economic crisis

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ABSTRACT

Article History

Received: 21 November 2023

Revised: 23 January 2024

Accepted: 9 February 2024

Published: 26 April 2024

Keywords

Accounting information system

Organizational culture

Performance

SMEs

COVID-19

Vietnam.

This study examines whether the financial crisis caused by the COVID-19 pandemic and the economic downturn will affect the role of organizational culture in the performance of SMEs in Vietnam. Specifically, the study aims to evaluate changes in the OC of SMEs during and after the crisis. Survey data used for analysis includes 202 SMEs in Vietnam. It was collected from January 2023 to March 2023. The research used the Denison culture model. SmartPLS 4.9.0.2 software was used to test the research model and compare cultural changes before and during the crisis. The findings suggest that organizational culture has a positive relationship with both accounting information systems (AIS) and organizational performance, but only adaptability affects corporate performance. Furthermore, AIS is positively related to the corporate performance of SMEs. The study shows that organizational culture, including involvement, consistency, and mission, is eroded during a crisis, supporting the theory that economic crises hurt corporate culture. Additionally, repeated research confirms that organizational culture positively affects AIS and that AIS positively affects organizational performance regardless of economic crisis. The results provide indicators for managers on how to promote sustainable business development. It is important for SMEs to establish a cultural identity that aligns with their goals and strategies to minimize conflicts of interest and improve competitiveness.

Contribution/Originality: This study contributes to the existing literature on the value of organizational culture for the success of a company. The findings of this study show that during times of uncertainty, maintaining consistency, involvement, and mission within the organization is key to sustainable development.

1. INTRODUCTION

Organizational culture (OC) is usually set in place by a company's founder (such as in the case of Disney or Microsoft). It could also be developed by managers who systematically decide to improve organizational performance (e.g., McDonald's). Pettigrew (1979) is considered to be the first to introduce the term “organizational culture” in academic research. Since then, various definitions of OC have been recognized (Alvesson & Sveningsson, 2015). However, according to Kwarteng and Aveh (2018) the concept of OC has the following common features: (i) OC has various elements with different subclasses; (ii) the core elements of OC are fundamental assumptions; and (iii) company values vary across organizations, which company employees widely accept. OC plays a vital role in organizations because it contributes directly to the organization's financial performance (Kwarteng & Aveh, 2018).

Several studies have confirmed the influence of organizational culture on organizational performance. Some of those studies added different intermediate variables, like accounting information systems (AIS) and innovation.

Research results have demonstrated that OC has a positive impact on performance. Others have found that OC has a positive impact on environmental innovation (Liao, 2018; Zheng, Zhao, Sun, & Khan, 2021) or AIS (Kwarteng & Aveh, 2018) thereby having a positive impact on a firm's financial performance. Studying in China during the COVID-19 pandemic, Zheng et al. (2021) discovered that a positive OC reduced the negative impact of the COVID-19 pandemic on financial performance. Kotter (2008) showed that businesses with strong OC demonstrate better performance in terms of average revenue growth, stock price growth, and net profit compared to companies with weak cultures. However, OC and long-term performance are weakly correlated. In contrast, the research results of Rousseau (1990) in the United States and Yesil and Kaya (2013) in Turkey pointed out that there was no significant positive correlation between performance and OC. Empirical evidence on the relationship between OC and corporate performance has so far been inconsistent (Ha, 2020). In addition, although many studies have indicated the value of OC to the success of a company, additional research is still needed to be able to generalize OC into a theory in order to fully and comprehensively explain how OC contributes to current organizational performance (Huynh, 2021) especially in small and medium enterprises (SMEs) and start-ups.

In Vietnam, there are few studies on the influence of OC on corporate performance, along with the intermediate variable. Intermediate variables, such as AIS (Ha, 2020) quality of the AIS (Huynh, 2021) and management accounting information (Le, Nguyen, & Hoang, 2020) are used to explain the relationship between the OC and corporate performance. Existing studies were conducted before the COVID-19 pandemic, when the economic outlook was positive and managers' confidence in the developmental prospects of the business was high. The context of this study is the emergence of the COVID-19 pandemic, a contrasting context. In the report of the Viet Nam Chamber of Commerce and Industry (VCCI, 2020) it stated that SMEs faced the biggest challenges due to the pandemic, including (i) internal communication inefficiencies due to remote-working policies, (ii) difficulties related to completing business procedures, (iii) managing employees' work, (iv) maintaining jobs, and (v) complying with the rule. Although the epidemic has been under control since 2023, the global economic slowdown has nevertheless harmed the business activities of SMEs in Vietnam. In the first half of 2023, over 500 SMEs ceased operations, and 14 enterprises ceased or went bankrupt, whereas 10 enterprises were newly established per day. According to the Vietnam Private Economic Development Research Board, more than 80% of the SMEs surveyed said that they would downsize or cease business by the end of 2023. Up to 81.4% of surveyed enterprises have negative or very negative outlooks about Vietnam's economic prospects in the second half of 2023. The biggest challenges faced by businesses include difficulties in receiving orders (59%), difficulties in accessing loans (51%), limitations in carrying out administrative procedures and complying with the law (45%), and the risk of criminalizing economic transactions (31%).

This study investigates how the COVID-19 pandemic-related economic crisis and the subsequent economic downturn will affect the contribution of OC to the success of SMEs. Specifically, the study aims to evaluate changes in the OC of SMEs before and during the crisis.

First, the study surveys SMEs experiencing financial difficulties due to the economic crisis to examine how the challenges affected their OC. Second, it evaluates the impact of managers' approaches to OC during a crisis, providing empirical evidence for the literature. Third, the study shows that while certain traits in the cultural model impact corporate performance, these traits rarely have a simultaneous impact; traits of the OC such as mission, involvement, and consistency erode during a crisis while individual adaptation increases. Fourth, the study shows that OC positively impacts AIS, which in turn positively affects corporate performance regardless of crisis or economic factors. However, the influence of OC on corporate performance differed between the two periods before and during the crisis. The remainder of this study is structured as follows: Section 2 provides the literature review and hypothesis. Section 3 proposes the research model, and Section 4 presents the research results and discussion. Conclusions are presented in Section 5. Finally, some limitations and future research suggestions are outlined.

2. LITERATURE REVIEW AND HYPOTHESIS DEVELOPMENT

2.1. Organizational Culture

Culture plays an essential role in shaping the growth of a country or organization. Organizational culture (OC) has been variously defined across studies. Pettigrew (1979) suggests that OC includes dimensions that differentiate between organizations, including customs, norms, rules, symbols, ideology, beliefs, rituals, and mythology. Denison (1990) defines OC as the collective beliefs, rituals, discourses, and emotional nuances that an organization's members accept. Culture is expressed through visible forms such as signs, symbols, slogans, language, behavior, history, stories, dress, heroes, legends, and rituals. However, OC also includes unique characteristics that customers, business partners, suppliers, and other stakeholders can recognize, accept, and share. The core values, beliefs, and assumptions shared by employees are deeply embedded within cultural expression which, in turn, contributes to the corporate culture. These values must be integrated into the business codes and principles of conduct in all business activities. In essence, a company's structure and design constitute the body, while the culture is the soul. The characteristics associated with OC differ primarily because of the cultural approach and context of the studies (Alqarni, 2022). For effective OC analysis, the Denison culture model is considered ideal (Kokina & Ostrovska, 2013). The Denison culture model was introduced in 1990 to study OC and performance. This model was further developed to study the effectiveness of OC and performance at different times across countries (Denison, 2000; Denison & Mishra, 1995; Fey & Denison, 2003).

Denison's OC pattern shows contrasting strategies between internal integration and external adaptation and between flexibility and stability. Denison (1990) showed that involvement and consistency focus on integration within the organization, while mission and adaptability dictate the dynamics of external adaptability. In addition, involvement and adaptability describe the dominant characteristics associated with an organization's ability to change, whereas consistency refers to organizational systems and processes that promote alignment and efficiency over time. *Consistency* focuses on a common set of management principles to achieve consensus on what is right and wrong and maintain coordination and integration throughout the organization. *Involvement* is used to generate potential ideas and solutions, which are then refined into a more precise set of principles. *Adaptability* suggests the ability of companies to face environmental changes and act in accordance with new customer needs. *Mission* refers to defining strategic goals based on a company's sense of purpose and direction (Denison, 1990; Denison & Mishra, 1995). Effective organizations pursue a mission that includes economic and non-economic goals that give meaning and direction to employees (Denison & Mishra, 1995).

2.2. Hypothesis Development

2.2.1. Organizational Culture and Organizational Performance

A successful organization often has a dominant culture (Brown, 2013) contributing to organizational performance (AlShehhi, AlZaabi, Alnahhal, Sakhrieh, & Tabash, 2021; Metaxas & Fotopoulos, 2022). This can help direct and align business trajectories, create opportunities to share organizational values and goals, promote the participation of stakeholders in a way that is consistent with the overall values of the organization (Flamholtz & Randle, 2012), increase employee job satisfaction, and ensure high-quality products and services (AlShehhi et al., 2021). Empowering employees to become involved in decision-making, making them aware of their rights and obligations, and showing respect (Engelen, Kube, Schmidt, & Flatten, 2014); building loyalty and commitment (Nwibere, 2013) and enhancing the ability to coordinate and support each other, thereby making an important contribution to improving business results (Miguel, 2015). Contrarily, a weak OC could jeopardize the existence of the organization, since members may have different values and beliefs and may work against management priorities or act inconsistently with organizational goals (Childress, 2013). Thus, a weak OC can significantly affect business profitability.

The adaptability, mission, consistency, and involvement dimensions are four essential characteristics to establish and maintain effective OC (Kotrba et al., 2012). Some studies have shown evidence of a positive influence between effective OC and corporate performance (Ha, 2020; Kwarteng & Aveh, 2018; Le et al., 2020). Hacker (2015) found a positive relationship between involvement and organizational performance. Givens (2012) identified consistency as one of the key factors in creating effective OC and improving organizational performance. Nongo and Ikyanyon (2012) found a positive relationship between adaptability and commitment to improving organizational performance. Additionally, several studies have provided empirical evidence of a positive relationship between the mission and corporate performance (Mousavi, Hosseni, & Hassanpour, 2015). However, a few studies presented conflicting evidence. Specifically, Givens (2012) showed that high levels of involvement in multiple activities lead to a lack of specialization and difficulty identifying the individuals responsible for specific tasks (Givens, 2012). Nongo and Ikyanyon (2012) argue that a high degree of organizational consistency does not directly affect employee commitment or organizational performance.

Kwarteng and Aveh (2018) studied the impact of OC and its dimensions on AIS and the corporate performance of a group of organizations in Ghana and found that OC significantly influences AIS and corporate performance; however, besides involvement, there is no impact on performance. Building on the research of Kwarteng and Aveh (2018) and Ha (2020) they surveyed SMEs in Vietnam in 2019 and confirmed that four aspects of OC have a significant impact on AIS and corporate performance, consistent with the studies of Denison (1990); Denison and Mishra (1995); Fey and Denison (2003) and Kwarteng and Aveh (2018).

From the previous discussion, we have proposed the following hypotheses:

H_{1a}: Organizational culture positively affects (involvement) the corporate performance of SMEs in Vietnam.

H_{1b}: Organizational culture positively affects (consistency) the corporate performance of SMEs in Vietnam.

H_{1c}: Organizational culture positively affects (adaptability) the corporate performance of SMEs in Vietnam.

H_{1d}: Organizational culture positively affects (mission) and the corporate performance of SMEs in Vietnam.

2.2.2. Organizational Culture and Accounting Information System

AIS has a significant influence on the existence and development of organizations. If the organization is the body, the culture is the spirit, and the AIS comprises the blood vessel that nourishes the body (i.e., the organization) to become physically and mentally healthy (i.e., culture). The AIS collects and processes data to convey information to decision-makers (Weygandt, Kimmel, Kieso, & Elias, 2010). People are at the organization's heart, and designing and operating an effective AIS is vital for management and users to make decisions (Romney & Steinbart, 2015). Culture also develops in each individual in the organization and can positively impact the successful development of information systems. OC is positively related to AIS and is considered to be the basis for the optimum performance of AIS (Kwarteng & Aveh, 2018). For example, culture influences the accounting principles and practices that underlie the design of the financial reporting framework of a company.

Several empirical studies indicate that OC significantly and directly impacts AIS (Ha, 2020; Kwarteng & Aveh, 2018; Silwal, 2022) the quality of AIS (Binh, Tran, & Vu, 2022; Nuriyani, Darma, & Ikhsan, 2020), and the outcome of AIS (Qatawneh, 2023). Thus, the majority of empirical studies provide evidence that OC has a significant influence on information systems in organizations. This consistent finding adds to the existing literature on the role of culture in the design and operation of a consistent and transparent AIS within an organization.

From the above discussion, we propose the following hypothesis:

H_{2a}: Organizational culture positively affects (involvement) the AIS of SMEs in Vietnam.

H_{2b}: Organizational culture positively affects (consistency) the AIS of SMEs in Vietnam.

H_{2c}: Organizational culture positively affects (adaptability) the AIS of SMEs in Vietnam.

H_{2d}: Organizational culture positively affects (mission) the AIS of SMEs in Vietnam.

2.2.3. Accounting Information System and Organizational Performance

AIS plays an important role in providing information to support business management, operations, and development. Latifah, Setiawan, Aryani, and Rahmawati (2021) stated that “AIS is part of management control to reduce risk by identifying standards and directing organizational goals.”

Several studies have provided empirical evidence of the positive impact of AIS on corporate performance (e.g., Trabulsi (2018) in Saudi Arabia; Latifah et al. (2021) and Budiarto et al. (2018) in Indonesia; Kwarteng and Aveh (2018) in Ghana; Al-Waeli, Hanoon, Ageeb, and Idan (2020) in Malaysia; Ha (2020) in Vietnam; and Al-Hattami, Senan, Al-Hakimi, and Azharuddin (2022) in Yemen).

Trabulsi (2018) provided evidence of the positive impact of AIS on corporate performance, including cost reduction, improved quality, and effective decision-making. It concluded that AIS is a tool for better organizational performance and gaining competitive advantage in a highly competitive environment. Therefore, firms should pay more attention to AIS, and the continuous improvement of AIS is significant in the face of the rapid development of information technology. Budiarto et al. (2018) indicated that AIS alignment has a positive impact on non-financial performance, an important metric that helps predict the long-term performance of a business and determines an organization’s success. Latifah et al. (2021) found that AIS has a positive influence on performance. Al-Hattami et al. (2022) studied the success of AIS among SMEs in Yemen during the COVID-19 pandemic. They found that the success of AIS has a significant impact on net benefits, including gaining a competitive advantage, improving productivity, and saving time and costs. This indicates that adopting and using AIS is vital for SMEs to achieve success, competitiveness, and survival. This became even more vital in the context of the pandemic due to the benefits of AIS. Kwarteng and Aveh (2018) and Ha (2020) also demonstrated the relationship between AIS and performance. However, there is a difference in the measurement of the performance variable.

From the above discussion, we propose the following hypothesis:

H₁: Accounting information systems positively affect the corporate performance of SMEs.

Each of the hypotheses is inferred from the research model (Figure 1).

2.3. Research Model

To achieve research goals about whether the financial crisis caused by the COVID-19 pandemic and the economic downturn will affect the role of organizational culture in the performance of SMEs in Vietnam, we used a research model similar to the research models of Kwarteng and Aveh (2018) and Ha (2020). This helps ensure compatibility when comparing and assessing their research results with ours. Kwarteng and Aveh (2018) and Ha (2020) studied before COVID-19 appeared, and we researched after COVID-19.

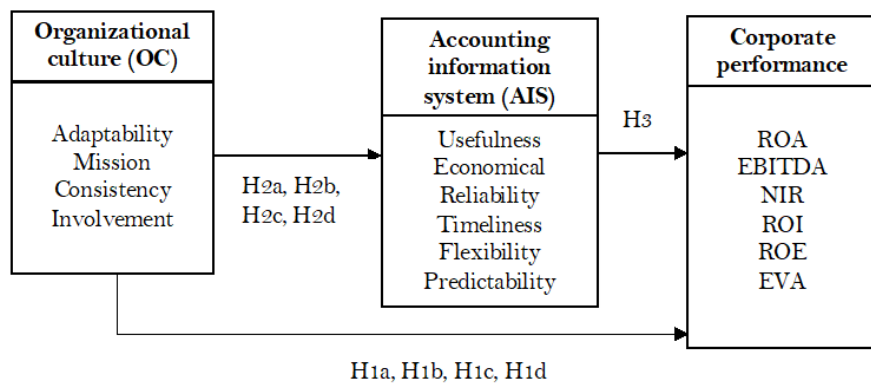


Figure 1. Proposed research model.

3. RESEARCH METHODS

3.1. Measurements

Our research used the Denison culture model to analyze effective OC. Therefore, the OC model adopted in this study included four dimensions proposed in the Denison culture model—mission, adaptability, consistency, and involvement. We collected data from SMEs in Vietnam to ensure data homogeneity for comparison with other research. In order to collect samples, we first obtained a list of SMEs that have disclosed information on the website (infodoanhnghiep.com). We then selected a sample of 500 businesses with complete email addresses to share the survey with. The survey was conducted from January 2023 to March 2023 and received 232 responses, of which only 202 provided valid votes and complete information, resulting in a 40% valid response rate. The data was encrypted, entered, and processed using SPSS 29 and SmartPLS 4.0.9.2 to test the measurement model and the linear structural model PLS-SEM to measure the influence of OC on SMEs' AIS and corporate performance.

3.2. Data Analysis

The study data was analyzed using PLS-SEM. For models with multiple constructs, several items, and no distributional assumptions, PLS-SEM works well even when the sample size is small (Hair, Risher, Sarstedt, & Ringle, 2019). Therefore, PLS-SEM is widely applied in many social science disciplines, including the field of management (Ali, Rasoolimanesh, Sarstedt, Ringle, & Ryu, 2018; Hair et al., 2019). Analyzing the output results on SmartPLS 4.0.9.2 comprised two main steps, namely, the evaluation of measurement models and the evaluation of the structural model (Hair, Sarstedt, Ringle, & Gudergan, 2018).

4. RESEARCH RESULTS AND DISCUSSION

4.1. Descriptive Statistics

Of the 202 responses received, 8% (16 individuals) had less than five years of related work experience. 63.8% of respondents (129 individuals) had between five and ten years of relevant work experience, whereas 28.2% (57 individuals) had over ten years of related work experience. Among those surveyed, 63.4% (128 individuals) were department heads, 18.8% (38 individuals) were executive directors, and 17.8% (36 individuals) were finance directors (refer to Table 1).

Table 1. Respondents' characteristics.

Demographic	Valid	Frequency	Percent	Cumulative percent
Experience	Over 2 years	16	8.0	8.0
	5 years to 10 years	129	63.8	71.8
	Over 10 years	57	28.2	100.0
	Total	202	100.0	100.0
Position	Accounting manager	128	63.4	63.4
	Managing director	38	18.8	82.2
	Finance director	36	17.8	100.0
	Total	202	100.0	100.0

4.2. Evaluation of Measurement Models

The first step was examining the fit of the measurement model—convergent validity, internal consistency reliability, and discriminant validity. The proposed research model (Figure 1) includes six factors, namely, four dimensions of OC, accounting information system (AIS), and corporate performance (CP). However, the variables measuring cultural factors are unique across studies. To check if the measurement model was right, we looked at (i) composite reliability equal to or greater than 0.7 to show that the variables were related (Henseler, Ringle, & Sarstedt, 2015) (ii) the convergent value of the scale, with average variance extracted (AVE) greater than 0.5 (Hair et al., 2018) and (iii) discriminant value, with HTMT index less than 0.9 (Henseler et al., 2015).

Table 2 shows that the factor loading of each indicator is higher than 0.7, with the smallest value being 0.769 (AIS1). Therefore, the reliability of the indicators is guaranteed. On the other hand, the composite reliability (CR) of all factors is greater than 0.9, indicating that the scales have good internal consistency and reliability. All variables have an average variance extracted shrinking more than 0.5; thus, each construct exhibits a good convergence value. Table 3 indicates that the heterotrait-monotrait ratio (HTMT) for all variables is less than 0.9, and therefore, the scales achieve discriminant value in the measurement model. From the above results, it becomes clear that the scales used in the study have reliability, convergent value, and discriminant value. Therefore, these scales are used analytically in structural modelling.

Table 2. Construct reliability and convergent validity.

Variable	Constructs	Items	Factors loading	Cronbach's alpha value (CRA)	Composite reliability (CR)	Average variance extracted (AVE)
Organizational culture	Adaptability	AD1	0.904	0.897	0.936	0.829
		AD2	0.923			
		AD3	0.905			
	Consistency	CO1	0.870	0.882	0.927	0.809
		CO2	0.916			
		CO3	0.912			
	Involvement	IN1	0.847	0.859	0.914	0.780
		IN2	0.896			
		IN3	0.906			
	Mission	MS1	0.857	0.848	0.908	0.768
		MS2	0.929			
		MS3	0.840			
Accounting information system		AIS1	0.769	0.909	0.930	0.690
		AIS2	0.846			
		AIS3	0.857			
		AIS4	0.891			
		AIS5	0.829			
Business performance	Earnings before interest, taxes, depreciation and amortization	EBTIDA	0.858	0.916	0.935	0.705
	Economic value added	EVA	0.846			
	Net income/Revenues	NIR	0.844			
	Return on assets	ROA	0.769			
	Return on equity	ROE	0.825			
	Return on investment	ROI	0.890			

Table 3. Discriminant validity.

Variable/Constructs	AD	AIS	CO	CP	IN	MS
AD						
AIS	0.800					
CO	0.859	0.648				
CP	0.679	0.689	0.565			
IN	0.662	0.681	0.695	0.496		
MS	0.858	0.853	0.764	0.635	0.662	

4.3. Evaluation of the Structural Model

According to Hair et al. (2018) when examining the structural model, the first issue is multicollinearity. The next step involves the evaluation of the structural model to test if the proposed causal relationships are consistent with the available data. Variance Inflation Factor (VIF) values of 5 or above indicate collinearity issues among the

predictor constructs (Hair et al., 2018). The output Table 4 shows that multicollinearity does not exist in all the indicators of the measurement models, with VIF values that are less than the benchmark five.

Table 4. Results of the hypothesis test.

Hypotheses	Relation	R2	VIF	Influence dimension (f)	β	P-value	Results
Model 1							
H1a	IN -> CP	45.5%	1.876	0.000	0.007	0.934	Not supported
H1b	CO -> CP		2.778	0.002	0.048	0.626	Not supported
H1c	AD -> CP		3.684	0.041	0.286	0.008	Supported
H1d	MS -> CP		3.068	0.001	0.049	0.667	Not supported
H3	AIS -> CP		2.904	0.079	0.353	0.002	Supported
Model 2							
H2a	IN -> AIS	65.6%	1.741	0.077	0.215	0.007	Supported
H2b	CO -> AIS		2.739	0.014	-0.116	0.138	Not supported
H2c	AD -> AIS		3.312	0.113	0.358	0.000	Supported
H2d	MS -> AIS		2.507	0.224	0.440	0.000	Supported

The bootstrapping method was used to find the path coefficient (β) of the structural model and figure out how important the t-statistic was for that part coefficient (Wong, 2013). The PLS-SEM analysis results indicate that out of 9 hypotheses, 5 are supported with a 1% level of significance. The largest β coefficient is found in the relationship between MS -> AIS at 0.440 (H2d), followed by the relationship between AD -> AIS at 0.358 (H2c), AIS -> CP at 0.353 (H3), AD -> CP at 0.286 (H1c), and IN -> AIS at 0.215 (H2a). Regarding the predictive power of the model, the composite structural model combines two different models. Model 1, with the dependent variable being corporate performance (CP), has a relatively high adjusted R2 of 45.5%. Model 2, with the dependent variable as the AIS, has the highest R2 at 65.6% Table 4. The suitability of the resulting structural model is evaluated using the influence size index (Cohen, 1988) and commonality index (Tenenhaus, Vinzi, Chatelin, & Lauro, 2005). The communality metric, similar to AVE, ensures a degree of relevance. The f-index of the influence dimension index (f) ranges from 0.041 to 0.224, with the largest influence size of MS -> AIS at 0.224. Thus, the evaluation of these two criteria indicates that the resulting structural model is quite suitable for Table 4.

The proposed model has a good fit because the root mean square error of approximation (RMSEA) value for the estimated model and the saturated model is 0.060, as its value does not exceed 0.08 (Henseler et al., 2015).

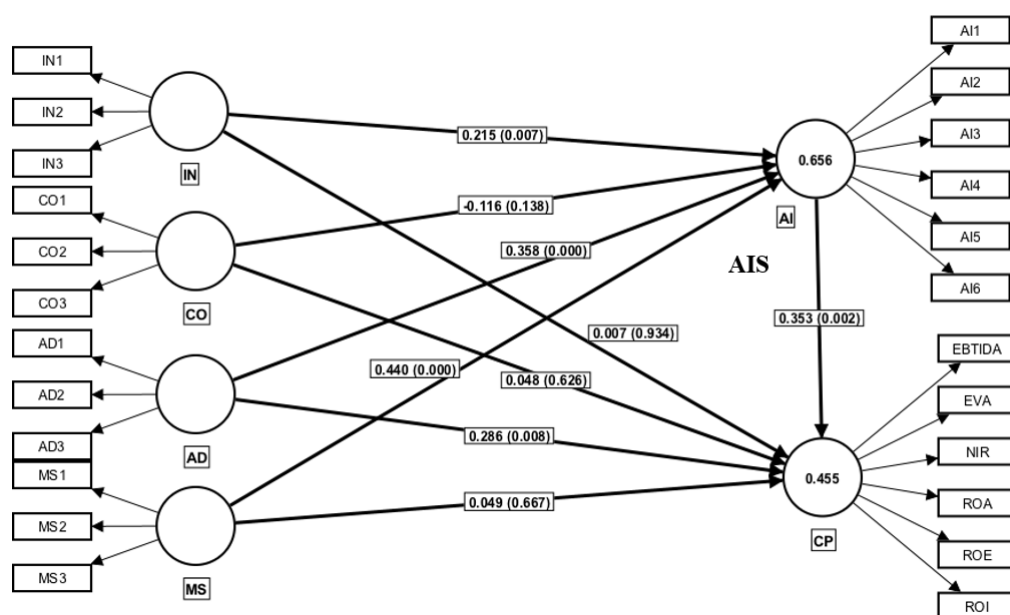


Figure 2. Structured model.

4.4. Discussion

This research used the Denison culture model to examine the relationship between OC, AIS, and the corporate performance of SMEs in Vietnam during the economic crisis. The only statistically significant hypothesis regarding SMEs' OC and corporate performance is H1c, which states that *adaptability (AD)* plays a crucial role. The other dimensions, namely, *involvement (IN)*, *consistency (CO)*, and *mission (MS)*, were not statistically significant, which contradicts previous studies by Denison (1990); Ha (2020) and Kwarteng and Aveh (2018). Studies by Denison (1990) and Ha (2020) confirmed that OC constructs (*mission, adaptability, involvement, and consistency*) have a strong influence on corporate effectiveness, particularly the mission dimension of culture, whereas research by Kwarteng and Aveh (2018) indicated that OC (*mission, adaptability, and consistency*) has a strong influence on corporate performance.

The findings of this study suggest that cultural factors are crucial for SMEs in Vietnam to succeed, just like larger enterprises or FDI enterprises. However, the lower stability and shorter operating time of SMEs pose a challenge to managers' efforts to build a cultural identity for the businesses. Additionally, it is difficult for SME managers to control employees and encourage them to stay committed and involved. The statistics show that SMEs in Vietnam require more capital; at present, only 25% of enterprises have access to credit. Moreover, digital transformation and market expansion pose difficulties for businesses, particularly SMEs, leading to limited competitiveness. The survey results indicate that SMEs in Vietnam suffer from a weak culture, especially concerning aspects such as employee involvement in the strategy and goal-setting process, limited promotion of creativity and employee capacity, and communication and coordination issues within the team, which can negatively impact business efficiency.

Three components of OC have been found to have a positive correlation with AIS—*involvement, adaptability, and mission*. These results were obtained through the statistical support of hypotheses H2a, H2c, and H2d, which is consistent with the studies of Kwarteng and Aveh (2018) and Ha (2020). However, the consistency component did not significantly impact the AIS, which also aligns with the findings of Kwarteng and Aveh (2018). This is understandable since AIS is primarily a technical function that does not require significant involvement from people in the design phase (Kwarteng & Aveh, 2018). Involvement positively affects AIS, contrary to the findings of Kwarteng and Aveh (2018). This finding indicates that, although SMEs in Vietnam are yet to focus on business development towards sustainable development, culture is already part of the management activities of enterprises.

The AIS is designed to align with the enterprise's development strategy (mission), adapt to internal and external information needs, and allow employee participation in its design and use. The path coefficient between mission and AIS is the highest compared to other relationships, suggesting that SME managers appreciate the importance of AIS and are willing to innovate in order to adapt to the technology revolution. Furthermore, the AIS has a positive and significant effect on the corporate performance of SMEs. This finding is consistent with that of Trabulsi (2018) in Saudi Arabia; Budiarto et al. (2018) and Latifah et al. (2021) in Indonesia; Kwarteng and Aveh (2018) in Ghana; Al-Waeli et al. (2020) in Malaysia; Ha (2020) in Vietnam; Al-Hattami et al. (2022) in Yemen. Therefore, hypothesis H3 is supported statistically.

The structure model (Figure 2) shows that OC has an impact on corporate performance, although it is indirect and occurs through the AIS. Among the four cultural dimensions, adaptability directly impacts the corporate performance of SMEs in Vietnam. This highlights the importance of the OC factor in emerging economies such as Indonesia and Ghana. Since SMEs are small and face stiff competition, managers are preoccupied with material factors such as capital, facilities, personnel, and management methods to develop their businesses. Regardless of whether an organization has a strong or weak culture or faces financial and operational challenges during a crisis, the AIS significantly and positively affects corporate performance. This is because AIS plays an essential role in any organization.

Table 5. Comparison of study results.

Relationship between OC and corporate performance (CP)	Before the crisis		After the crisis
	Result of Kwarteng and Aveh (2018)	Result of Ha (2020)	Result of authors year 2023
Involvement -> CP	0.022	0.21**	0.007
Consistency -> CP	0.200**	0.09**	0.048
Adaptability -> CP	0.191*	0.12**	0.286**
Mission -> CP	0.175**	0.17**	0.049
The relationship between OC and accounting information system (AIS)	Year 2018	Year 2019	Result of authors year 2023
Involvement -> AIS	0.098	0.010**	0.215***
Consistency -> AIS	0.093	0.03**	-0.116
Adaptability -> AIS	0.274**	-0.05	0.358***
Mission -> AIS	0.258**	0.09**	0.440***

Note: *p < 0.1; **p < 0.05; ***p < 0.01.

Our research reveals a clear shift in the OC and corporate performance of SMEs during the pandemic and the economic downturn, in contrast to previous studies by Kwarteng and Aveh (2018) and Ha (2020) before the crisis. Our study (Table 5) found that OC attributes such as *mission*, *adaptability*, and *consistency* had a significant impact on SMEs' performance in 2018 and 2019, but by 2023, only *adaptability* remained a significant factor. Additionally, the relationship between adaptability and corporate performance had a significantly higher path coefficient than in Van Dung's study. This suggests that, during a crisis, managers prioritize enhancing adaptability to mitigate uncertainties, while other aspects of OC, such as mission and consistency, are given less emphasis. Moreover, the cultural attributes that affect AIS did not change significantly before and during the crisis. This indicates that SMEs have established an OC at levels 2 and 3 in terms of shared values and tangible expression, according to the cultural model by Schein (2010). However, the core factor that drives innovation and creativity, i.e., implicit belief or basic assumption, is yet to be formed in SMEs. This serves as a weakness for SMEs that need greater motivation and innovation to expand their business activities.

It is increasingly difficult for managers to control resources, especially people, during periods of increasing instability, which results in increasing difficulties in elevating OC. Accordingly, the results of this study suggest that, in order to promote sustainable business development, it is necessary to improve the direct contribution of cultural factors to organizational performance, such as allocating more resources to motivate employees. It is important for managers to attract good human resources and maintain this team long enough to develop a distinctive culture for the organization and promote confidence in the development prospects of SMEs. Only in this way will the new organization improve its competitiveness and develop sustainably.

5. CONCLUSION

Our study aimed to analyze the impact of OC on AIS and corporate performance based on established theories and research models. We conducted a survey that assessed four aspects of OC—mission, involvement, adaptability, and consistency—with AIS—and their influence on corporate performance. Our research revealed that organizational adaptability has a positive effect on both AIS and corporate performance. Additionally, involvement, mission, and adaptability are all positively correlated with AIS. It is important to note that our study was conducted during a crisis, when SMEs were facing financial and operational difficulties and several businesses had to downsize or stop operations altogether. As a result, attributes that were found to contribute to corporate performance in pre-crisis studies, such as mission, involvement, and consistency, did not have the same impact on corporate performance during the crisis. However, the influence of OC on AIS and its impact on corporate performance remained consistent between the two periods.

Our study contributes to existing literature by highlighting the importance of OC in crisis contexts, specifically the need to prioritize factors such as mission, involvement, and consistency. Additionally, supplementing empirical evidence in the corporate culture literature, our findings indicate that, when organizations lack one or all of the cultural factors, such as involvement, mission, and consistency, it can cause damage to business results since businesses may ignore employee development (involvement) and the long-term future of the organization (mission) and lack coordination and consensus (consistency). When establishing a cultural identity that aligns with the company's goals and strategies, disagreements and conflicts of interest should be minimized that may otherwise threaten the achievement of the organization's goals.

Additionally, our research found that AIS is affected by OC, which, in turn, affects overall enterprise performance in different contexts. We also found that adaptability has a positive impact on SMEs' performance, which is particularly important in challenging environments such as those experienced by Vietnamese SMEs due to policy instability and market transparency issues.

Overall, it is important for SMEs to establish a cultural identity that aligns with their goals and strategies to minimize conflicts of interest and improve competitiveness. While this can be challenging during times of uncertainty, maintaining consistency, involvement, and mission within the organization is key to sustainable development.

6. LIMITATIONS AND FUTURE RESEARCH SUGGESTIONS

This study also has some limitations. While it evaluates corporate performance using financial ratios, it has not examined other factors such as sales growth, market share, and customer satisfaction, which are also significant indicators of a company's success. To comprehensively assess a company's corporate performance, future research should incorporate as many of these measurements as possible. Additionally, research should examine the changing relationships between components in the cultural structure of various organizations during times of crisis.

Funding: This study received no specific financial support.

Institutional Review Board Statement: The Ethical Committee of the Industrial University of Ho Chi Minh City, Vietnam has granted approval for this study (Ref. No. 20.2/IUH-SMIA).

Transparency: The authors state that the manuscript is honest, truthful, and transparent, that no key aspects of the investigation have been omitted, and that any differences from the study as planned have been clarified. This study followed all writing ethics.

Competing Interests: The authors declare that they have no competing interests.

Authors' Contributions: Both authors contributed equally to the conception and design of the study. Both authors have read and agreed to the published version of the manuscript.

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