

# OPTIMIZING CORPORATE CULTURE DIMENSIONS AND OPERATIONAL PERFORMANCE IN THE CONTEXT OF MULTINATIONAL COMPANIES IN KENYA

## A VÁLLALATI KULTÚRA DIMENZIÓINAK ÉS MŰKÖDÉSI TELJESÍTMÉNYÉNEK OPTIMALIZÁLÁSA A KENYAI MULTINACIONÁLIS VÁLLALATOK KONTEXTUSÁBAN

The performance of multinational firms in Eastern Africa has raised concerns about their future sustainability. In this paper, the authors argue that optimal management of corporate culture is a way these firms could improve their operational performance. Edgar Schein's Model of Culture and the Contingency Theory served as the foundation for the research study. The study utilized the descriptive cross-sectional survey technique, in which structured questionnaires were administered to 150 foreign multinational companies in Kenya. Data were analysed for descriptive statistics, correlation, and multiple regression analysis using SPSS. The results showed that adhocracy and bureaucratic culture had a significant positive influence on operational performance. However, market and consensual culture had a positive influence that was not significant. Empirically, the study contributes to management practice by diagnosing corporate traits as a process factor, especially in instances where activities such as recruitment, onboarding, international management, and innovation are being carried out by an organization.

**Keywords:** corporate culture, market culture, consensual culture, bureaucratic culture, adhocracy culture, operational performance (OP), multinational companies (MNCs)

A kelet-afrikai multinacionális cégek teljesítménye aggályokat vet fel a jövőbeni fenntarthatóságukat illetően. Ebben a cikkben a szerzők azzal érvelnek, hogy a vállalati kultúra optimális menedzselése egy módja lehet annak, hogy ezek a cégek javítsák működési teljesítményüket. Edgar Schein kultúramodellje és a kontingenciaelmélet szolgált a kutatás alapjául. A tanulmány a leíró keresztmetszeti felmérés technikáját alkalmazta, amelyben strukturált kérdőíveket adtak ki Kenyában 150 külföldi multinacionális cégnek. Az adatokat leíró statisztikák, korreláció és többszörös regressziós elemzés céljából SPSS segítségével elemezték a szerzők. Az eredmények azt mutatták, hogy az adhokrácia és a bürokratikus kultúra jelentős pozitív hatással volt a működési teljesítményre. A piaci és a konszenzusos kultúra azonban olyan pozitív hatást gyakorolt, ami nem volt jelentős. Empirikusan a tanulmány hozzájárul a vezetési gyakorlathoz azáltal, hogy a vállalati jellemzőket folyamatényezőként diagnosztizálja, különösen olyan esetekben, amikor olyan tevékenységeket végeznek, mint a toborzás, a beépítés, a nemzetközi menedzsment és az innováció.

**Kulcsszavak:** szervezeti kultúra, piackultúra, konszenzusos kultúra, bürokratikus kultúra, adhokratikus kultúra, működési teljesítmény (OP), multinacionális vállalatok (MNCs)

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The global market environment is constantly evolving, and entities worldwide are pursuing financial, operational, and managerial strategies to attain competitive advantage (Kotabe & Helsen, 2022). As a result of the prevailing complexity of the global marketplace, corporate culture has been proposed by scholars as one of the strategic elements of corporate performance. Scholars argue that the operational performance (OP) of firms is dependent on both the external market environment and internal business factors (Hameed et al., 2021; Rokicki et al., 2022; Saini & Singh, 2020). To that end, companies pursue central operational aspects of production quality, service quality, customer preferences, market research, cost measures and employee productivity to achieve competitive advantage (Holub et al., 2021). With growing commercial and social opportunities, multinational companies (MNCs) struggling with optimizing their operations in different settings present one of the most questioned areas of corporate culture practices (Berti & Simpson, 2021; Fang et al., 2023).

Culture, a dominant concept in organizational behaviour and social psychology, remains an evolving source of research interest. Corporate culture has been studied through the lens of management practice, and existing studies reveal divergent arguments concerning the phenomenon. Guiso et al. (2015) argue that culture plays a profound role in influencing organizational behaviour, which can establish the difference between a company's strategic success in terms of both financial and OP and its failure. Consequently, organizations are investing heavily in building the right kind of work environment for their employees (Guiso et al., 2015). The ever-changing nature of international business, economic conditions, workforce preferences, and MNC host locations in developing countries have raised unique challenges that require cultural adaptation (Yousef, 2020).

## Research perspective and framework

### The conceptualization of corporate culture

There are multiple dimensions, values, and specialties that constitute culture (Yousef, 2020). According to Hofstede (2011), culture generally consists of the unwritten rules of the social game therefore distinguishing the members of a particular group from another; categorized into three dimensions: national culture, corporate culture and personality. On the other hand, Warrick (2017) defines corporate culture as unseen yet uniting themes that give a sense of direction and meaning to a company. Thus, culture to an organization, may be referred to as what personality is to an individual.

Putting together these definitions, this study adopted the definition derived from Andreas & Gumanti (2022), that corporate culture is a pattern of shared basic learned (lacuna) as groups solved their problems of external adaptation and internal integration; and therefore, worked well enough to be considered valid and taught to new members as the correct way you perceive, think, and feel in relation to those problems. We adopted market, adhocracy,

bureaucratic and consensual culture as the four dimensions of corporate culture, derived from Deshpandé et al.'s (1993) conceptualization. Other scholars who have used this classification are: Moonen (2017), Carlos Pinho et al. (2014), Quinn & Cameron (1999) in order to contribute to development of corporate culture knowledge in a changing organizational landscape. Table 1 breaks down the adopted dimensions of culture and the suggested strategy orientations from Quinn and Cameron (1999), cited in (Bukoye & Abdulrahman, 2023).

Table 1  
Dimensions of corporate culture & strategy orientation

Culture Dimension	Adopted Definitions	Conceptualized Strategy Orientation
Market	A goal-oriented culture that focusses on accomplishment of tasks and achievement of expected results and outcomes. It establishes a highly competitive environment for both the leaders and the employees.	Productivity and stakeholder satisfaction strategies.
Adhocracy	A dynamic, ever changing and creative work-environment that encourages experimentation and innovation backed up by the prominence and support of leadership.	Accountability, innovation, high degree of freedom & personal initiative, flexibility, openness and risk strategies.
Bureaucratic/hierarchical	A procedural, structured and formalized work environment with clear guidelines on what is generally acceptable and what is unacceptable.	Quality output, stability, efficiency, structured coordination strategies.
Consensual/Clan	A set of values that make up an internally oriented value system which focuses on tradition, loyalty and internally controlled mechanisms.	Commitment, people-involvement, loyalty, open communication and team-oriented strategies.

Source: own compilation based on Deshpandé et al. (1993)

### The conceptualization and classification of operational performance (OP)

Performance is a multi-dimensional concept, with two broad categories: financial and non-financial performance (Alatawi et al., 2023; Dalton et al., 1980; Lenz, 1981; Low & Siesfeld, 1998). Traditionally, organizations paid significant attention to financial performance as the only factor that determines success or failure of a business; leading to overreliance on financial indicators. Arguments on the goals of performance measurement, the process and its systems indicate the nexus between financial and non-financial aspects (Alatawi et al., 2023; Low & Siesfeld, 1998). Therefore, modern theories of performance have advanced

a mixed approach, that captures both qualitative and quantitative outcomes of a business (Kaplan & Norton 2001; Nguyen et al., 2020). Table 2 shows the adopted dimensions and definitions of operational performance proposed by Bhagwat & Sharma (2007) to measure the OP of MNCs in Kenya.

Table 2  
Dimensions of operational performance

Dimensions of OP	Adopted Definition	Conceptualized Strategy Orientation
Quality Performance	Evaluated gap between expected and delivered good and service.	Client expectations, durability and specification driven strategies.
Flexibility Performance	Processes, designs, volume, product development and product/marketing mix actions of the firm.	Involves action like adoption of new systems, decisions on new product development, alteration of processes.
Cost Performance	Cost per unit of product produced or service offered, constituting: manufacturing cost, operational cost, service charges, transaction cost and value-added cost.	Unit cost reduction strategies translate to superior performance.
Service Performance	Customer interaction, point of sale and after sale performance.	Feedback evaluation and score strategies.

Source: own compilation based on Bhagwat & Sharma (2007)

### Corporate culture and operational performance of MNCs in Kenya

The significance of the efficiencies and inefficiencies of the dimensions of corporate culture and their influence on operational performance in the context of MNCs remain under explored thus hindering its optimum utilization. Therefore, our objective was to determine the antecedent relationship between the contributions of the various dimensions of cul-

Table 3  
Research questions

Main Objective	
To determine the influence of corporate culture on operational performance (OP) of multinational companies (MNCs) in Kenya by aiming to answer the following research questions:	
Research Questions	
RQ 1	What is the effect of market culture on operational performance of MNCs in Kenya?
RQ 2	What is the influence of adhocracy culture on operational performance of MNCs in Kenya?
RQ 3	What is the influence of bureaucratic culture on operational performance of MNCs in Kenya?
RQ 4	What is the effect of consensual culture on operational performance of MNCs in Kenya?

Source: own compilation

ture on operational performance by focusing on the multinational sector in Kenya. We posit that pursuing optimal management of corporate culture dimensions is a way for the entities to improve their operational performance. To our knowledge, this is among the few organizational level studies to empirically determine relationships between the adopted classification of corporate culture and operational performance of these firms in Kenya. Table 3 outlines the research questions.

### Theoretical background

The discourse on the existence of organizations as distinct entities with peculiar traits is embedded in strategy and policy publications. Literature has captured culture as a unique element in studying organizations and their complex ecosystems. In 1958, Fred Fiedler, during his research on the effectiveness and fit of organizational characteristics, emphasized the role of leadership and management in delivering the corporate vision and desired performance outcomes (Fiedler, 1964).

The contingency theory on different leadership and organizational structures and designs perceives culture as an imminent and varying characteristic that can be optimized if understood (Fiedler, 2015; Wadongo & Abdel-Kader, 2014). The theory posits that there is no defined way of leading an organization that will automatically result in success and increased performance (Fiedler, 2015; Wadongo & Abdel-Kader, 2014). Therefore, unique organizational circumstances would call for the adoption of varied strategic orientations. The theory (!) points to the pre-eminent dissonance/incongruence of evolutionary organizational processes. We formulated the research questions based on the dimensions of culture (market, adhocracy, bureaucratic and consensual), which we evaluated against a set of distinct elements: organizational traditions, leadership styles, priorities and origin.

We used the Schein Model developed in 1980 as a diagnostic tool for the various dimensions of culture. The model is premised on the ability of employees to realize goals on the basis of deep cultural alignment, which leads to motivation, satisfaction, and performance (Schein, 2010). In addition, we used the four culture types proposed by Deshpandé et al. (1993): market, adhocracy, bureaucratic, and consensual cultures to analyze behavior, espoused values, and cultural alignment to strategic goals.

### Empirical review

Though the rationale for studying corporate culture is based on its influence on terminal outcomes (Fang et al., 2023; Striteska & Zapletal, 2020), to a large extent, empirical studies so far available on corporate culture and OP reveal mixed results. For example, some scholars have underscored the critical role of corporate culture in performance, while others introducing leadership as a mediating variable to the impact of market culture on performance (Krizanova & Michulek, 2022; Li et al., 2001; Nguyen et al., 2020). Similarly, in Kenya, studies have found that culture has a significant positive influence on employee per-

formance (Wambugu, 2014; Wanjiku & Agusioma, 2014). Therefore, we identified a gap in employee performance and firm operational performance metrics.

Opoku et al. (2022) studied the effect of the dominance of entrepreneurial culture on employee performance. Using a descriptive survey, the study assessed the interactive effects of culture and its influence on employee performance at GCB Bank in Ghana. The study found that entrepreneurial/adhocracy, bureaucratic, and consensual culture had a statistically significant relationship with employee performance. The multiple regression output showed that corporate culture (consensual, bureaucratic, adhocracy) significantly improves employee performance, with adhocracy culture demonstrating the highest influence.

However, challenging growth patterns have been attributed to strong cultures that lead to operational difficulties/inefficiencies; depending on the culture dimensions, especially in highly volatile business environments and crisis situations which require practical adaptation of changes in corporate culture to business practice (Hofstede, 2011; Holub et al., 2021; Quinn & Cameron, 1999; Saini & Singh, 2020; Zakari et al., 2013). In an attempt to correlate the frequency and prominence of culture patterns, Guiso et al. (2015) observed no significant correlation and, therefore, concluded that advertised values are possibly not as important and suggest alternative measures of cultural patterns. Therefore, in as much as existing correlations do not prove causation, the importance corporations have attached to culture could be justified, as has been proven by management (Guiso et al., 2015).

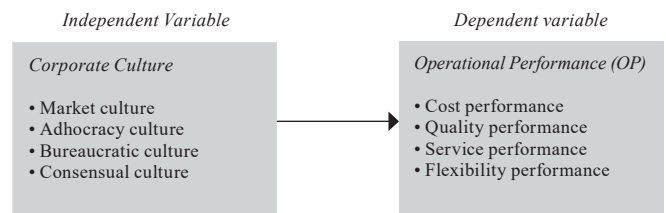
Onyango & Ondiek (2021) studied the digitalization and integration of sustainable development goals (SDGs) in public organizations in Kenya. The study evaluated organizational culture practices and found that cultures that pre-disposed the entities to change resistance hindered the integration and performance of SDGs. Other scholars have measured culture quantitatively through the use of surveys (Scott et al., 2003; Weech-Maldonado et al., 2023). Empirical studies have supported little evidence to prove the influence of corporate culture on both financial and OP (Joseph & Kibera, 2019; San Park & Kim, 2009; Soomro & Shah, 2019; Tuan, 2010). This study, therefore, sought to demystify the susceptibility of OP of firms to various cultural dimensions.

### Hypothesis development

We came up with four hypotheses arising from the literature review (Figure 1). The first one postulates a significant positive influence of market culture on OP. That is, MNCs in which market culture traits dominate exemplify high OP. The second hypothesis posits a significant negative influence of adhocracy culture on OP. That is, MNCs in which adhocracy culture traits dominate exemplify low OP. The third one also posits a significant negative influence of bureaucratic culture OP. That is, MNCs in which bureaucratic culture traits dominate exemplify low OP. The fourth hypothesis also posits a significant positive influence of consensual culture on OP.

Figure 1

### Conceptual framework



Source: own compilation based on Bhagwat & Sharma (2007) and Quinn & Cameron (1999)

### Research methodology

The research design was quantitative methodology, specifically a cross-sectional survey (Michulek et al., 2023; Scott et al., 2003; Weech-Maldonado et al., 2023). The study population was 238 foreign MNCs, as listed by the Kenya National Bureau of Statistics (KNBS, 2016). As a result of the COVID-19 pandemic, the country was under prolonged lockdown; most employees were working from home, and many MNCs were shut down. Using the list from KNBS, we identified the companies in operation and ended up with a sample size of 150 operational MNCs. We used Yamane's formula for sample size determination. This parametric measure accommodates a stipulated level of precision, confidence, and hence, margin of error to verify the representativeness of this sample (Adam, 2020). Due to the unique circumstances, the study used a non-probability sampling approach at two different levels. At stage one, the quota sampling Field (Jung, 2022; Khosravani et al., 2020) was used to generate the sampling distribution, illustrated in Table 4.

Consequently, we purposively selected organizational representatives on the basis of the level of management. The researchers, therefore, reached out to the most knowledgeable company representatives who were available and at work at the time of the study (Bagga et al., 2023). Senior managers are the vision and strategy bearers who set the overarching corporate values. Middle managers translate the vision into actionable tasks, foster adoption, and reinforce set corporate traits, operational managers, fully cascade assigned corporate value priorities, monitor and encourage daily practice (Behie et al., 2023; Carvalho et al., 2023). Therefore, collaboratively, the selected representatives play formidable roles in culture alignment.

Table 4

### Quota distribution

Headquarters	Number of Companies (N)	% of Population (N)	Sample distribution (n)
Africa	17	7.14%	11
Asia	56	23.53%	35
Europe	122	51.26%	77
Oceania	1	0.42%	1
America	42	17.65%	26
<b>Total</b>	<b>238</b>	<b>100%</b>	<b>150</b>

Source: own compilation based on KNBS (2016)

The questionnaire (Annex 1) comprised closed ended questions to gather useful information that contributed to the study findings (Hancock et al., 2021). The quantitative data was measured using a five-point Likert scale (Joseph & Kibera, 2019; Tuan, 2010). The tool was divided into three main sections, the first section sought the bio profile of the organization, the second addressed the independent variable and the last section covered OP. Data was collected within the period February 2020 and May 2020.

**Demographic profile**

The study targeted three managers of each of the 150 operational MNCs. However, 80 MNCs responded to the survey. The results in Table 5 show that the majority of the respondents were female (50.3%) and most of the respondents were aged between 36-40 years (36.72%). Of these respondents, a majority (44.96%) had worked for the MNCs for a period ranging between 6-9 years. The findings suggest that employees aged between 36-45 years are structurally in charge of driving cultural practice in the organization. Therefore, they are more likely to be concerned with promoting corporate culture. Consequently, they are keen on both positive and negative changes in menial aspects affect their work. Of the responses, 46.09% were from MNCs which are headquartered in Europe.

**Descriptive statistics**

Respondents were requested to indicate the extent to which they agreed or disagreed with statements drawn from the variables on a scale of 1 to 5 where 1 is strongly disagree, 2 is disagree, 3 is somewhat agree, 4 is agree, and 5 is strongly agree (Table 6).

Table 5

Demographic data

Demographic Characteristics		Frequency	%
Gender	Male	148	49.66%
	Female	150	50.34%
	<b>Total</b>	<b>298</b>	<b>100%</b>
Age	25 & below	4	1.56%
	26- 35 years	60	15.63%
	36 – 40 years	93	36.72%
	41 – 45 years	81	27.34%
	46 – 50 years	48	12.5%
	51 years & above	12	6.25%
<b>Total</b>	<b>298</b>	<b>100%</b>	
Management Level	Senior	73	24.50%
	Middle	128	42.95%
	Operational	97	32.56%
	<b>Total</b>	<b>298</b>	<b>100%</b>
Work Duration	1 year & below	14	4.70%
	2-5 years	95	31.88%
	6-9 years	134	44.96%
	10 years & above	55	18.46%
	<b>Total</b>	<b>298</b>	<b>100%</b>
Company Headquarters	Africa	40	13.42%
	Asia	67	22.48%
	Europe	134	44.97%
	Oceania	3	1.01%
	America	54	18.12%
<b>Total</b>	<b>298</b>	<b>100%</b>	

Source: own compilation

Table 6

Statistical summary

Descriptive Statistics			
Key Variables	N	Mean	Std. Deviation
Market Culture	298	4.25	0.704
Adhocracy Culture	298	4.17	0.761
Bureaucratic Culture	298	4.34	0.618
Consensual Culture	298	4.22	0.674

Source: Survey Data (2020)

Table 7

Results of the Correlation Analysis Model

PEARSON'S CORRELATION		MC	AC	BC	CC	OP
Market Culture (MC)	Pearson Correlation	1	.443**	.350**	.361**	.274**
	Sig. (2-tailed)		0.000	0.000	0.000	0.000
	N	298	298	298	298	298
Adhocracy Culture (AC)	Pearson Correlation	.443**	1	.307**	.563**	.441**
	Sig. (2-tailed)	0.000		0.000	0.000	0.000
	N	298	298	298	298	298
Bureaucratic Culture (BC)	Pearson Correlation	.350**	.307**	1	.360**	.313**
	Sig. (2-tailed)	0.000	0.000		0.000	0.000
	N	298	298	298	298	298
Consensual Culture (CC)	Pearson Correlation	.361**	.563**	.360**	1	.307**
	Sig. (2-tailed)	0.000	0.000	0.000		0.000
	N	298	298	298	298	298
Operational Performance (OP)	Pearson Correlation	.274**	.441**	.313**	.307**	1
	Sig. (2-tailed)	0.000	0.000	0.000	0.000	
	N	298	298	298	298	298

\*\* statistical significance at 90% level of confidence i.e..  $p < 0.01$

Source: own compilation

The results indicate a slight average difference in cultural practice dimensions in MNCs in Kenya; market (M=4.25, SD= .704); adhocracy (M=4.17, SD= .761); bureaucratic (M=4.34, SD= .618) and consensual (M=4.22, SD= .674). While bureaucratic culture registered the least standard deviation and adhocracy culture registered the highest standard deviation of all the corporate culture variables, all the standard deviations were within the spread range of ± 2, therefore were considered acceptable in this study.

**Correlation matrix**

Table 7 presents the results obtained from the correlation analysis model.

The results illustrate that the correlation coefficient between all the dimensions of corporate culture and OP is significant (<.001) but to varied degrees. Market culture demonstrated a weak positive correlation with OP (r= .274, p< 0.01). Therefore, adhocracy culture (r= 0.441, p<0.01) has a moderate positive correlation, followed by bureaucratic culture and OP (r=.313, p<0.01) and consensual culture and OP (r= .307, p< 0.01). Hence, adhocracy culture has a significant moderate positive correlation the OP, while the other three culture types have a weak positive correlation with OP.

**Results of the regression**

The output of the model equation for the regression model is on Table 8.

The coefficients were used to come up with the following equation:

$$Y = 2.554 + 0.037X_1 + 0.200X_2 + 0.141X_3 + 0.023X_4 + e$$

where:  $X_1$  is market culture;  $X_2$  is adhocracy culture;  $X_3$  is bureaucratic culture;  $X_4$  is consensual culture and Y is operational performance (OP); e – error term.

Table 9

**Interpretation of model findings**

Interpretation of Model Results			
Hypothesis	Coefficients Outcome (ceteris paribus)		Decision
H1	Market Culture	Every unit increase in the value of market culture, increases the value of OP by 0.037	H1 not rejected
H2	Adhocracy Culture	Every unit increase in the value of adhocracy culture, increases the value of OP by 0.200	H2 rejected
H3	Bureaucratic Culture	A unit increase in the value of bureaucratic culture, increases the value of by 0.141 ceteris	H3 rejected
H4	Consensual Culture	A unit increase in the value of consensual culture, increases the value of OP by 0.023	H4 not rejected

Source: own compilation

Table 8

**Regression model**

Model Summary <sup>b</sup>						
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson	
	.481a	0.232	0.221	0.26665	1.704	
a. Predictors: (Constant), Consensual Culture, Bureaucratic Culture, Market Culture, Adhocracy Culture						
b. Dependent Variable: Operational Performance (OP)						
ANOVA <sup>a</sup>						
Model	Sum of Squares	Df	Mean Square	F	Sig. P-value	
Regression	6.281	4	1.570	22.084	.000b	
Residual	20.833	293	0.071			
Total	27.114	297				
a. Dependent Variable: Operational Performance (OP)						
a. Predictors: (Constant), Consensual Culture, Bureaucratic Culture, Market Culture, Adhocracy Culture						
Model B	Unstandardized Coefficients	Standardized Coefficients	T	Sig. Pvalue	VIF	
	Std. Error	Beta				
(Constant)	2.554	0.230	11.110	0.000		
Market Culture	0.037	0.048	0.766	0.445	1.340	
Adhocracy Culture	0.200	0.037	5.349	0.000	1.629	
Bureaucratic Culture	0.141	0.045	3.146	0.002	1.232	
Consensual Culture	0.023	0.050	0.460	0.646	1.568	

Source: own compilation

Based on the model summary output,  $R$  (0.481) exhibits a moderate strength of positive linear relationship between corporate culture and OP. Consequently, the coefficient of multiple determination ( $R$ -squared) illustrates the extent to which the independent variables (market, adhocracy, bureaucratic and consensual culture) explained OP. Thus, the degree of variation explained by the model is only 23.2%. For ANOVA, a significance level of  $< 0.05$  was interpreted as significant, otherwise not significant. The  $p$  value was 0.000 which is less than 0.05 hence the model is significant. The values of each of the independent variables and their intercepts are also described in the multiple regression model. At 95% level of confidence (5% margin of error), only adhocracy culture and bureaucratic culture were found to be significant (Table 9).

## Discussion

The study sought to determine the influence of market, adhocracy, bureaucratic and consensual culture on OP of MNCs in Kenya.

### Influence of market culture on OP

Results show that market culture has an insignificant positive influence on OP. This finding is surprising considering that existing literature shows that the adoption of market culture helps organizations to adopt strategies that build on market orientation in terms of customer and competitor orientation (Newman et al., 2016). The strategies include continuous modules of process and product innovation, which we consider a means of achieving efficiency and flexibility. Modern day strategies and appropriate departmental competition and recognition of performance have been found to be effective in converting personal goals and boosting individual efficiency levels into desired levels of firm OP (Guiso et al., 2015; Harris & Ogbonna, 2011; Moonen, 2017). The findings in this study are supported by the argument that market culture is susceptible to unforeseen scenarios in the business environment (Guiso et al., 2015; Harris & Ogbonna, 2011). Additionally, organizations possess different culture types but these traits do not contribute to significant differences in innovation and performance (Zakari, 2013). Past scholars contended that in as much as existing correlations between culture and performance do not prove causation, the importance corporates have attached to culture could be justified (Guiso et al., 2015; Zakari, 2013).

### Influence of adhocracy culture on OP

Results indicate that adhocracy culture has a significant positive influence on OP. According to Joseph and Kibera (2019), Mihajlovski (2023), Tuan (2010) adhocracy culture promotes organizational learning. The corporate trait improves the acquisition of knowledge, skills, competencies and other capabilities that promote innovativeness in the company, with which scholars have viewed individuals in organizations as instigators of entrepreneurship (Lorincová et al., 2022; Szabó & Aranyossy, 2022).

A high degree of freedom and personal initiative result in proactiveness, resilience, determination and a sense of responsibility in an organization (Hetzner et al., 2012). In this context, MNCs operate in a highly competitive and dynamic global environment that demands consistent innovation and creation of better products, processes and procedures as a means of a consumer-based approach to achieving competitive advantage (Graham et al., 2022; Wei et al., 2014). In conclusion, the influence of adhocracy culture on performance is optimized within the limits of volatile operations characterized by risk, creativity, spontaneity and dynamism since the dimension leans towards adapting to and even creating change.

### Influence of bureaucratic culture on OP

Results indicate that bureaucratic culture has a significant positive influence on OP. According to Tekachi et al. (2007), companies with structured/well spelled out tasks have more influence on their employees than companies with unstructured ad hoc tasks. Bureaucratic culture creates constitutional order and, as a result, supports employees in mastering their tasks more efficiently. To increase productivity and reduce costs, division of labour and specialization can be used as effective strategies. The bureaucratic culture encourages building expertise and proficiency, which are prerequisites to productivity (Chao et al., 2017). Consequently, skills are sharpened and product quality can be improved in the case of manufacturing and production facilities (Nauffal & Nader, 2022). Leaders exercise control over subordinates using laid down rules and regulations, hence breeding consistency in performance (Nauffal & Nader, 2022).

Therefore, the study emphasizes the role of bureaucratic factor efficiencies such as rules, policies, company guidelines, shared/common goals, and clear instructions on duties & tasks in ensuring operational success and preserving the value for stability.

### Influence of consensual culture on OP

The output shows that consensual culture has an insignificant positive influence on OP. This insignificant result could be attributed to the effect of the construct on quality and cost. According to Dosoglu-Guner (2001) and Opoku et al. (2022), considerably, elements of consensual culture are one of the most effective approaches to motivating employees and maximizing the value of people in a company. The trait is characterized by high levels of people involvement, participation, and teamwork that promote employee development and commitment. However, its dominance might have effects on firm outcomes if not managed.

The findings are supported by the argument that organizations exhibit different cultural traits or dimensions, but these traits do not contribute to significant differences in innovation and performance (Cherian, 2021; Zakari, 2013). Therefore, consensual culture does not significantly influence operational performance as a factor on its own. This is supported by the findings of the studies done by Odhiambo (2014), Odhiambo (2015), and García-Morales

et al. (2008), which found that there exists a non-significant linear relationship between corporate culture and operating expense.

## Conclusion

In conclusion, market and consensual culture traits do not independently have a significant influence on the OP of MNCs in Kenya. Extensionally, dominant bureaucratic and adhocracy culture traits have a significant influence on the OP of MNCs. Our findings are consistent with Lund (2003), who found that each culture type affects the level of job satisfaction differently, and Berson et al. (2008) who also found that different cultural dimensions (bureaucratic, supportive, and innovation-oriented cultures) constituted different associations with firm outcomes including sales growth, firm efficiency and job satisfaction (Gorton & Zentefis, 2023).

Conversely, the findings of our study differ from the arguments of Kerr and Slocum (2005), who found that market culture linked with reward systems was crucial to the growth of firms in the United States of America. Odhiambo (2014), Odhiambo et al. (2015) also found that there exists a non-significant linear relationship between corporate culture and operating expense among microfinance institutions in Kenya.

According to Chao et al. (2017) and Odhiambo (2014), the balance between bureaucratic efficiencies and bureaucratic inefficiencies is hard to achieve. In turn, making it difficult to establish concretely if bureaucratic culture affects OP positively or negatively (Nauffal & Nader, 2022). This study established that among foreign MNCs in Kenya, bureaucratic efficiencies outweigh bureaucratic inefficiencies. This finding could be justified by the complexities and diversity in the business environment that they operate in.

According to Yousef (2020), some aspects of corporate culture may generate superior performance in specific settings and contexts while resulting in highly dysfunctional or inefficient performance in others especially when there exists significant regional differences and consumption patterns. This is consistent with Petheó et al. (2023), who studied high-potential gazelle multinational companies to underscore the maximization of the benefits of pre-qualified firms' corporate dimensions. Therefore, we contend that the nature of the relationship between corporate culture and operational performance is a function of culture types, various firm activities, and allocated resources (Kosiciarova et al., 2021).

## Implications of research

Stakeholder groups can derive significant practices from the study findings and use them in exercising judgment depending on their areas of need.

## Contribution to management and organizational policy

Management can base practice decisions on the arguments presented in this paper. Further, they can clas-

sify individual actions of management and employees guided by the potential influences derived from the study. Diagnosing traits, Chau et al. (2021) is the first step to managing them effectively. Activities such as recruitment, onboarding, performance management, and innovation in companies will call for this nature of engagements. The findings also inform organizational policy development encompassing issues: reward systems, compliance, customer engagement, performance appraisals, and employee development.

## Contribution to knowledge

Our study findings contribute to the understanding of the influence of the various dimensions of corporate culture on the OP of MNCs. We have highlighted potential areas for further study in cases where our findings contradicted the findings of other scholars therefore arousing scholarly debate. Additionally, this study fills contextual gaps that arose in the empirical review by focusing on both MNCs and Kenya. By adopting a quantitative approach, the study has addressed concerns raised by scholars Berson et al. (2008) on the importance of studying culture from a quantitative approach other than the dominant qualitative approach.

## Limitations of the study

The study was carried out with empirical conceptual limitations. First, corporate culture was conceptualized based on the classification put forward by Deshpandé et al. (1993), Quinn and Cameron (1999): market, adhocracy, bureaucratic and consensual culture hence other aspects of corporate culture were not covered in this study. The measurement of OP was also limited to four metrics: flexibility, quality, service and cost performance yet there are other financial measures of performance as well as convenience and efficiency which have been adopted by other scholars to make up comprise five metrics. The study was also limited to data collected using a cross-sectional survey. Corporate culture may be affected by time, unprecedented occurrences, and technological advancements that may warrant disruptions in the manner in which a business carries out its day-to-day activities. Lastly, the study was limited by the COVID-19 pandemic, which limited our interaction with the respondents and also slowed down the speed of obtaining responses. Future studies could address these limitations.

## Areas of further studies

The study recommends further research on the influence of corporate culture on the OP of other firms since this study only focused on foreign MNCs. Progressive investigation on the potential of existing moderating variables when studying the influence of corporate culture and OP since some variables that displayed correlation proved to be insignificant when multiple regression was run. Variables such as marketing capabilities, market orientation, job satisfaction, and employee productivity could be introduced in the relationship, to build a more explanatory model.



## Ethical consideration

We carried out this study with the approval of the Strathmore University Ethics Review Committee (SU-IERC0669/20). Additionally, we were issued with the National Commission for Science, Technology and Innovation (NACOSTI) permit ref no. NACOSTI/P/20/4595, a license authorizing data collection for the study.

## References

- Adam, A.M. (2020). Sample size determination in survey research. *Journal of Scientific Research and Reports*, 26(5), 90-97.  
<https://doi.org/10.9734/jsrr/2020/v26i530263>
- Alatawi, I.A., Ntim, C.G., Zras, A., & Elmagrhi, M.H. (2023). CSR, financial and non-financial performance in the tourism sector: A systematic literature review and future research agenda. *International Review of Financial Analysis*, 89, 102734.  
<https://doi.org/10.1016/j.irfa.2023.102734>
- Andreas, A., & Gumanti, T.A. (2022). Organizational culture and company values: a cross-sectional study on public companies in Indonesia. *Jurnal Siasat Bisnis*, 27(1), 76-85.  
<https://doi.org/10.20885/jsb.vol27.iss1.art6>
- Annosi, M.C., Martini, A., Brunetta, F., & Marchegiani, L. (2020). Learning in an agile setting: A multilevel research study on the evolution of organizational routines. *Journal of Business Research*, 110, 554-566.  
<https://doi.org/10.1016/j.jbusres.2018.05.011>
- Bagga, S.K., Gera, S., & Haque, S.N. (2023). The mediating role of organizational culture: Transformational leadership and change management in virtual teams. *Asia Pacific Management Review*, 28(2), 120-131.  
<https://doi.org/10.1016/j.apmr.2022.07.003>
- Behie, S.W., Pasman, H.J., Khan, F.I., Shell, K., Alarfaj, A., El-Kady, A.H., & Hernandez, M. (2023). Leadership 4.0: The changing landscape of industry management in the smart digital era. *Process Safety and Environmental Protection*, 172, 317-328.  
<https://doi.org/10.1016/j.psep.2023.02.014>
- Berson, Y., Oreg, S., & Dvir, T. (2008). CEO values, organizational culture and firm outcomes. *Journal of Organizational Behavior: The International Journal of Industrial, Occupational and Organizational Psychology and Behavior*, 29(5), 615-633.  
<https://doi.org/10.1002/job.499>
- Berti, M., & Simpson, A.V. (2021). The dark side of organizational paradoxes: The dynamics of disempowerment. *The Academy of Management Review*, 46(2), 252-274.  
<https://doi.org/10.5465/amr.2017.0208>
- Bhagwat, R., & Sharma, M.K. (2007). Performance measurement of supply chain management: A balanced scorecard approach. *Computers & Industrial Engineering*, 53(1), 43-62.  
<https://doi.org/10.1016/j.cie.2007.04.001>
- Billings, M.B., Klein, A., & Shi, Y.C. (2022). Investors' response to the #MeToo movement: does corporate culture matter? *Review of Accounting Studies*, 27(3), 897-937.  
<https://doi.org/10.1007/s11442-022-09695-z>
- Blumberg, B., Cooper, D., & Schindler, P. (2014). *Business research methods*. McGraw Hill.
- Bukoye, O.T., & Abdulrahman, A.H. (2023). Organizational culture typologies and strategy implementation: Lessons from nigerian local government. *Policy Studies*, 44(3), 316-335.  
<https://doi.org/10.1080/01442872.2022.2051467>
- Calciolari, S., & Prenestini, A. (2022). *Values-based methods for measuring organizational culture: logic, evidence and critique*. Edward Elgar Publishing Limited. <http://dx.doi.org/10.4337/9781788976268>
- Carlos Pinho, J., Paula Rodrigues, A., & Dibb, S. (2014). The role of corporate culture, market orientation and organisational commitment in organisational performance: The case of non-profit organisations. *Journal of Management Development*, 33(4), 374-398.  
<https://doi.org/10.1108/JMD-03-2013-0036>
- Carvalho, A.M., Sampaio, P., Rebentisch, E., McManus, H., Carvalho, J.Á., & Saraiva, P. (2023). Operational excellence, organizational culture, and agility: Bridging the gap between quality and adaptability. *Total Quality Management & Business Excellence*, 34(11-12), 1598-1628.  
<https://doi.org/10.1080/14783363.2023.2191844>
- Chao, M.M., Takeuchi, R., & Farh, J. (2017). Enhancing cultural intelligence: The roles of implicit culture beliefs and adjustment. *Personnel Psychology*, 70(1), 257-292.  
<https://doi.org/10.1111/peps.12142>
- Chau, T.L.D., Thach, K.S.R., Nguyễn, Q.T., Nguyen, T.N.H., & Nguyen, P.T.A. (2021). Study on corporate culture of Vietnamese enterprises: An approach of denison's model. *Can Tho University Journal of Science*, 13(2), 12-19.  
<https://doi.org/10.22144/ctu.jen.2021.025>
- Cherian, J., Gaikar, V., Paul, R., & Pech, R. (2021). Corporate culture and its impact on employees' attitude, performance, productivity, and behavior: An investigative analysis from selected organizations of the United Arab Emirates (UAE). *Journal of Open Innovation*, 7(1), 1-27.  
<https://doi.org/10.3390/joitmc7010045>
- Dalton, D.R., Todor, W.D., Spendolini, M.J., Fielding, G.J., & Porter, L.W. (1980). Organization structure and performance: A critical review. *Academy of Management Review*, 5(1), 49-64.  
<https://doi.org/10.5465/amr.1980.4288881>
- De Toni, A., & Tonchia, S. (2001). Performance measurement systems-models, characteristics and measures. *International Journal of Operations & Production Management*, 21(1/2), 46-71.  
<https://doi.org/10.1108/01443570110358459>
- Deshpandé, R., Farley, J.U., & Webster Jr, F.E. (1993). Corporate culture, customer orientation, and innovativeness in Japanese firms: a quadrad analysis. *Journal*

- of Marketing*, 57(1), 23-37.  
<https://doi.org/10.1177/002224299305700102>
- Dosoglu-Guner, B. (2001). Can organizational behavior explain the export intention of firms? The effects of organizational culture and ownership type. *International Business Review*, 10(1), 71-89.  
[https://doi.org/10.1016/S0969-5931\(00\)00040-8](https://doi.org/10.1016/S0969-5931(00)00040-8)
- Fang, Y., Fiordelisi, F., Hasan, I., Leung, W.S., & Wong, G. (2023). Corporate culture and firm value: Evidence from crisis. *Journal of Banking & Finance*, 146, 106710.  
<https://doi.org/10.1016/j.jbankfin.2022.106710>
- Fiedler, F.E. (1964). A contingency model of leadership effectiveness. *Advances in Experimental Social Psychology*, 1, 149-190.  
[https://doi.org/10.1016/S0065-2601\(08\)60051-9](https://doi.org/10.1016/S0065-2601(08)60051-9)
- Fiedler, F. (2015). *Contingency theory of leadership*. Routledge.
- García-Morales, V.J., Lloréns-Montes, F.J., & Verdú-Jover, A.J. (2008). The effects of transformational leadership on organizational performance through knowledge and innovation. *British Journal of Management*, 19(4), 299-319.  
<https://doi.org/10.1111/j.1467-8551.2007.00547.x>
- Gorton, G.B., & Zentefis, A.K. (2023). Social progress and corporate culture. *Industrial and Corporate Change*, 32(3), 733-754.  
<https://doi.org/10.1093/icc/dtac042>
- Graham, J.R., Grennan, J.A., Harvey, C.R., & Rajgopal, S. (2022). Corporate culture: The interview evidence. *Journal of Applied Corporate Finance*, 34(4), 22-41.  
<https://doi.org/10.1111/jacf.12528>
- Guiso, L., Sapienza, P., & Zingales, L. (2015). The value of corporate culture. *Journal of Financial Economics*, 117(1), 60-76.  
<https://doi.org/10.1016/j.jfineco.2014.05.010>
- Gupta, A.K., & Gupta, N. (2020). Effect of corporate environmental sustainability on dimensions of firm performance –Towards sustainable development: Evidence from India. *Journal of Cleaner Production*, 253, 119948.  
<https://doi.org/10.1016/j.jclepro.2019.119948>
- Hameed, W.U., Nisar, Q.A., & Wu, H. (2021). Relationships between external knowledge, internal innovation, firms' open innovation performance, service innovation and business performance in the Pakistani hotel industry. *International Journal of Hospitality Management*, 92, 102745.  
<https://doi.org/10.1016/j.ijhm.2020.102745>
- Hancock, D.R., Algozzine, B., & Lim, J.H. (2021). *Doing case study research: A practical guide for beginning researchers*. Teachers College Press.
- Harris, L.C., & Ogbonna, E. (2011). Antecedents and consequences of management-espoused organizational cultural control. *Journal of Business Research*, 64(5), 437-445.  
<https://doi.org/10.1016/j.jbusres.2010.03.002>
- Hetzner, S., Heid, H., & Gruber, H. (2012). Change at work and professional learning: How readiness to change, self-determination and personal initiative affect individual learning through reflection. *European Journal of Psychology of Education*, 27, 539-555.  
<https://doi.org/10.1007/s10212-011-0094-1>
- Hofstede, G. (2011). Dimensionalizing cultures: The Hofstede model in context. *Online Readings in Psychology and Culture*, 2(1), 8.  
<https://doi.org/10.9707/2307-0919.1014>
- Holub, R., Ignatieva, I., Serbenivska, A., & Sydorenko, T. (2021). Corporate culture of companies in the conditions of transformations. *Finansovo-Kreditna Diáln'nist': Problemi Teorii Ta Praktiki (Online)*, 4(39), 541-549.  
<https://doi.org/10.18371/fcapt.v4i39.241441>
- Joseph, O.O., & Kibera, F. (2019). Organizational culture and performance: Evidence from microfinance institutions in Kenya. *SAGE Open*, 9(1), 2158244019835934.  
<https://doi.org/10.1177/2158244019835934>
- Jung, J. (2022). The effect of authentic leadership of deans and directors on sustainable organizational commitment at universities: Mediated by organizational culture and trust. *Sustainability*, 14(17), 11051.  
<https://doi.org/10.3390/su141711051>
- Kaplan, R.S., & Norton, D.P. (2001). Transforming the balanced scorecard from performance measurement to strategic management: Part I. *Accounting Horizons*, 15(1), 87-104.  
<https://doi.org/10.2308/acch.2001.15.1.87>
- Kerr, J., & Slocum Jr, J.W. (2005). Managing corporate culture through reward systems. *Academy of Management Perspectives*, 19(4), 130-138.  
<https://doi.org/10.5465/ame.2005.19417915>
- Khosravani, M., Khosravani, M., Borhani, F., & Mohsenpour, M. (2020). The relationship between moral intelligence and organizational commitment of nurses. *Clinical Ethics*, 15(3), 126-131.  
<https://doi.org/10.1177/1477750920908008>
- Kosciarova, I., Kadekova, Z., & Starchon, P. (2021). Leadership and motivation as important aspects of the international company's corporate culture. *Sustainability*, 13(7), 3916.  
<https://doi.org/10.3390/su13073916>
- Kotabe, M.M., & Helsen, K. (2022). *Global marketing management*. John Wiley & Sons.
- Krizanova, A., & Michulek, J. (2022). Does corporate culture and leadership influence employee work performance? Evidence from the Slovak Republic. *Economic and Managerial Spectrum*, 16(2), 37-48.  
<https://doi.org/10.26552/ems.2022.2.37-48>
- Lenz, R.T. (1981). 'Determinants' of organizational performance: An interdisciplinary review. *Strategic Management Journal*, 2(2), 131-154.  
<https://doi.org/10.1002/smj.4250020204>
- Li, J., Lam, K., & Qian, G. (2001). Does culture affect behavior and performance of firms? The case of joint ventures in China. *Journal of International Business Studies*, 32, 115-131.  
<https://doi.org/10.1057/palgrave.jibs.8490941>

- Lorincová, S., Miklošik, A., & Hitka, M. (2022). The role of corporate culture in economic development of small and medium-sized enterprises. *Technological and Economic Development of Economy*, 28(1), 220-238. <https://doi.org/10.3846/tede.2021.15983>
- Low, J., & Siesfeld, T. (1998). Measures that matter: Non-financial performance. *Strategy & Leadership*, 26(2), 24-38. <https://doi.org/10.1108/eb054615>
- Lund, D.B. (2003). Organizational culture and job satisfaction. *Journal of Business & Industrial Marketing*, 18(3), 219-236. <https://doi.org/10.1108/0885862031047313>
- Michulek, J., Gajanova, L., Krizanova, A., & Nadanyiova, M. (2023). Determinants of improving the relationship between corporate culture and work performance: Illusion or reality of serial mediation of leadership and work engagement in a crisis period? *Frontiers in Psychology*, 14, 1135199. <https://doi.org/10.3389/fpsyg.2023.1135199>
- Mihajlovski, G. (2023). Human resource management in unprofitable companies. *International Journal of Scholarly Research and Reviews*, 2(2), 118-121. <https://doi.org/10.56781/ijssr.2023.2.2.0050>
- Moonen, P. (2017). The impact of culture on the innovative strength of nations: A comprehensive review of the theories of Hofstede, Schwartz, Boisot and Cameron and Quinn. *Journal of Organizational Change Management*, 30(7), 1149-1183. <https://doi.org/10.1108/JOCM-08-2017-0311>
- Nauffal, D., & Nader, J. (2022). Organizational cultures of higher education institutions operating amid turbulence and an unstable environment: The Lebanese case. *Higher Education*, 84(2), 343-371. <https://doi.org/10.1007/s10734-021-00771-y>
- Newman, A., Prajogo, D., & Atherton, A. (2016). The influence of market orientation on innovation strategies. *Journal of Service Theory and Practice*, 26(1), 72-90. <https://doi.org/10.1108/JSTP-02-2015-0044>
- Nguyen, T.H.H., Ntim, C.G., & Malagila, J.K. (2020). Women on corporate boards and corporate financial and non-financial performance: A systematic literature review and future research agenda. *International Review of Financial Analysis*, 71, 101554. <https://doi.org/10.1016/j.irfa.2020.101554>
- Odhiambo, J.O. (2014). *Organizational culture, marketing capabilities, market orientation, industry competition and performance of microfinance institutions in Kenya* [Ph.D. Thesis]. University of Nairobi. [http://erepository.uonbi.ac.ke/bitstream/handle/11295/76112/Odhiambo\\_Organizational%20culture,%20marketing%20capabilities.pdf?sequence=2](http://erepository.uonbi.ac.ke/bitstream/handle/11295/76112/Odhiambo_Organizational%20culture,%20marketing%20capabilities.pdf?sequence=2)
- Odhiambo, O.J., Kibera, F., & Musyoka, R. (2015). Organizational culture, industry competition and performance of microfinance institutions in Kenya. *DBA Africa Management Review*, 5(2). <http://journals.uonbi.ac.ke/damr/article/view/1300/1099>
- Onyango, G., Ondiek, J.O. (2021) Digitalization and Integration of Sustainable Development Goals (SGDs) in Public Organizations in Kenya. *Public Organization Review*, 21, 511-526. <https://doi.org/10.1007/s11115-020-00504-2>
- Opoku, E.O., Hongqin, C., & Aram, S.A. (2022). The influence of organizational culture on employee performance in the banking sector: Evidence from GCB Bank, Ghana. *European Journal of Business and Management Research*, 7(2), 168-175. <https://doi.org/10.24018/ejbm.2022.7.2.1345>
- Petheő, A., Szabó, K., & Nagy, K. Á. (2023). Second-round entrants and winners of the 'Future Hungarian Multinationals' in terms of financial, regional and organizational culture. *Vezetéstudomány/Budapest Management Review*, 54(12), 66-78. <https://doi.org/10.14267/VEZTUD.2023.12.06>
- Quinn, R., & Cameron, K. (1999). *Diagnosing and changing organizational culture*. Wiley Online Library.
- Rokicki, T., Bórawski, P., Bedycka-Bórawska, A., Szeberényi, A., & Perkowska, A. (2022). Changes in logistics activities in Poland as a result of the COVID-19 pandemic. *Sustainability*, 14(16), 10303. <https://doi.org/10.3390/su141610303>
- Saini, S., & Singh, D. (2020). Impact of implementing lean practices on firm performance: a study of Northern India SMEs. *International Journal of Lean Six Sigma*, 11(6), 1005-1034. <https://doi.org/10.1108/IJLSS-06-2019-0069>
- San Park, J., & Kim, T.H. (2009). Do types of organizational culture matter in nurse job satisfaction and turnover intention? *Leadership in Health Services*, 22(1), 20-38. <https://doi.org/10.1108/17511870910928001>
- Schein, E. H. (2010). *Organizational culture and leadership*. John Wiley & Sons.
- Scott, T., Mannion, R., Davies, H., & Marshall, M. (2003). The quantitative measurement of organizational culture in health care: a review of the available instruments. *Health Services Research*, 38(3), 923-945. <https://doi.org/10.1111/1475-6773.00154>
- Soomro, B.A., & Shah, N. (2019). Determining the impact of entrepreneurial orientation and organizational culture on job satisfaction, organizational commitment, and employee's performance. *South Asian Journal of Business Studies*, 8(3), 266-282. <https://doi.org/10.1108/SAJBS-12-2018-0142>
- Striteska, M.K., & Zapletal, D. (2020). The role of corporate culture in performance measurement and management systems. *International Journal of Financial Studies*, 8(4), 1-12. <https://doi.org/10.3390/ijfs8040075>
- Szabó, K., & Aranyosy, M. (2022). Nascent entrepreneurship: A bibliometric analysis and systematic literature review. *Vezetéstudomány/Budapest Management Review*, 53(11), 29-42. <https://doi.org/10.14267/VEZTUD.2022.11.03>
- Szász, L., Demeter, K., Rác, B., & Losonci, D. (2021). Industry 4.0: A review and analysis of contingency and performance effects. *Journal of Manufacturing Tech-*

- nology Management*, 32(3), 667-694.  
<https://doi.org/10.1108/JMTM-10-2019-0371>
- Takeuchi, R., Lepak, D.P., Wang, H., & Takeuchi, K. (2007). An empirical examination of the mechanisms mediating between high-performance work systems and the performance of Japanese organizations. *Journal of Applied Psychology*, 92(4), 1069.  
<https://psycnet.apa.org/doi/10.1037/0021-9010.92.4.1069>
- Tuan, L.T. (2010). Organisational culture, leadership and performance measurement integratedness. *International Journal of Management and Enterprise Development*, 9(3), 251-275.  
<https://doi.org/10.1504/IJMED.2010.037066>
- Van den Berg, P.T., & Wilderom, C.P. (2004). Defining, measuring, and comparing organisational cultures. *Applied Psychology*, 53(4), 570-582.  
<https://doi.org/10.1111/j.1464-0597.2004.00189.x>
- Wadongo, B., & Abdel-Kader, M. (2014). Contingency theory, performance management and organisational effectiveness in the third sector: A theoretical framework. *International Journal of Productivity and Performance Management*, 63(6), 680-703.  
<https://doi.org/10.1108/IJPPM-09-2013-0161>
- Wambugu, L.W. (2014). Effects of organizational culture on employee performance (case study of Wartsila-Kipevu Ii Power Plant). *European Journal of Business and Management*, 6(32), 80-92. <https://citeseerx.ist.psu.edu/document?repid=rep1&type=pdf&doi=4c37b36f-225cdc99a34189d9a109989f14d95a4a>
- Wanjiku, N.A., & Agusioma, N.L. (2014). Effect of organisation culture on employee performance in non governmental organizations. *International Journal of Scientific and Research Publications*, 4(11), 1-12. <https://www.ijsrp.org/research-paper-1114/ijsrp-p3503.pdf>
- Warrick, D.D. (2017). What leaders need to know about organizational culture. *Business Horizons*, 60(3), 395-404.  
<https://doi.org/10.1016/j.bushor.2017.01.011>
- Weech-Maldonado, R., Ghiasi, A., Lord, J., Davlyatov, G., Hearld, L., Zengul, F. D., & Rondeau, K. (2023). Organizational Culture, Human Resource Management Practices, and Blue and Gray Collar Workers' Turnover: The Case of Underresourced Nursing Homes in the USA. In Paliszkievicz, J. & Varoğlu, D. (Eds.), *Management and Organizational Studies on Blue-and Gray-collar Workers: Diversity of Collars* (pp. 181-195). Emerald Publishing Limited.  
<https://doi.org/10.1108/S2051-233320230000008017>
- Wei, Y., Samiee, S., & Lee, R.P. (2014). The influence of organic organizational cultures, market responsiveness, and product strategy on firm performance in an emerging market. *Journal of the Academy of Marketing Science*, 42, 49-70.  
<https://doi.org/10.1007/s11747-013-0337-6>
- Xie, J., Su, R.L.G., & Song, J. (2022). An analytical study of employee loyalty and corporate culture satisfaction assessment based on sentiment analysis. *Frontiers in Psychology*, 13, 971569. <https://10.3389/fpsyg.2022.971569>
- Yousef, K. (2020). Four pillars of cross-cultural management: A systematic literature review. *Vezetéstudomány/Budapest Management Review*, 51(5), 27-38.  
<https://doi.org/10.14267/VEZTUD.2020.05.03>
- Zakari, M., Poku, K., & Owusu-Ansah, W. (2013). Organizational culture and organisational performance: Empirical evidence from the banking industry in Ghana. *International Journal of Business, Humanities and Technology*, 3(1), 95-107. [https://www.ijbhtnet.com/journals/Vol\\_3\\_No\\_1\\_January\\_2013/12.pdf](https://www.ijbhtnet.com/journals/Vol_3_No_1_January_2013/12.pdf)

## Operationalization of variables/questionnaire proxies

Construct	Questionnaire Proxies	Source
Section A: Questions 1 to 6, related to study participants' socio-demographic information. These questions were asked to enable us to place the respondent within the organization. We assigned codify/assign unique IDs to each participant.		
<b>Section B: Questions on Corporate Culture: On a scale of 1-5 where: 1 - Strongly Disagree, 2- Disagree, 3- Somewhat Agree 4- Agree, 5- Strongly Agree, kindly answer the questions below:</b>		
Market Culture	Individual performance; Leadership expectations; Reputation; Goals; Progress Reports; Cross-unit competition; Achievement recognition	(Calciolari & Prenestini, 2022; Joseph & Kibera, 2019; Tuan, 2010)
Adhocracy Culture	Leadership support for new ideas; Innovations; Experimentation, risk taking and dynamism; Encouraging failure; Reward systems for new projects; Work environment design (color, graphics, music, breakout rooms)	(Calciolari & Prenestini, 2022; Joseph & Kibera, 2019; Tuan, 2010)
Bureaucratic Culture	Rules, policies & company guidelines; Shared/common goals; Procedural, structured and formal work environment; Clear instructions on duties & tasks; Basis of success is smooth functionality/operations; Value for consistent and stability	(Calciolari & Prenestini, 2022; Joseph & Kibera, 2019; Tuan, 2010)
Consensual Culture	Open information sharing; employee development prioritization; Investment in relationship with the company; Employee interaction; Company's mission towards social welfare; Collection of employees towards operations; Social interaction events (seminars, games, cocktails and parties)	(Calciolari & Prenestini, 2022; Joseph & Kibera, 2019; Tuan, 2010)
<b>Section C: Questions on Operational Performance: On a scale of 1-5 where: 1 - Strongly Disagree, 2- Disagree, 3- Somewhat Agree 4- Agree, 5- Strongly Agree, kindly answer the questions below:</b>		
Quality Performance	Goods/services (customized, durable, superior); Fees an elasticity; Referrals; Employee Competence; Robust Quality Management Systems; Conformity to national, industrial and corporate specifications	(Bhagwat & Sharma, 2007; De Toni & Tonchia, 2001; Gupta & Gupta, 2020)
Flexibility Performance	Response to Demand; Product variety; New product development; Adaptive decision making; Systems and technology; Employees reaction to change	(Bhagwat & Sharma, 2007; De Toni & Tonchia, 2001; Gupta & Gupta, 2020)
Cost Performance	Selling price; Variable cost; Affordability; Financial goals; Sales and marketing costs	(Bhagwat & Sharma, 2007; De Toni & Tonchia, 2001; Gupta & Gupta, 2020)
Service Performance	Product & service availability; Customer preference; Delivery cycle; Customer feedback/complaint resolution duration; Market research; Senior management interaction with customers	(Bhagwat & Sharma, 2007; De Toni & Tonchia, 2001; Gupta & Gupta, 2020)

Source: own compilation