

# Organizational culture, innovation and performance: a study from a non-western context

Organizational  
culture

437

Mohammed Aboramadan

*Department of Economics, Management and Statistics, University of Milano–Bicocca,  
Milano, Italy*

Belal Albashiti

*Department of Business and Management, Al Azhar University – Gaza,  
Gaza, Palestine*

Hatem Alharazin

*Department of Statistics, Catholic University of Louvain, Louvain-la-Neuve, Belgium, and*

Souhaila Zaidoune

*School of Business Administration, Laval University, Québec City, Canada*

Received 20 June 2019  
Revised 3 September 2019  
Accepted 31 October 2019

## Abstract

**Purpose** – The purpose of this paper is to examine the links between organizational culture, innovation and banks' performance in Palestine.

**Design/methodology/approach** – Data were gathered from 186 employees working in the Palestinian banking sector. The data gathered were analyzed using the PLS-SEM approach.

**Findings** – The findings of the study show that organizational culture and marketing innovation have a positive impact on banks' performance. Moreover, it was found that marketing performance partially mediates the relationship between organizational culture and banks' performance.

**Practical implications** – The paper may be of use for banks managers to create an organizational culture, which fosters both innovation and performance.

**Originality/value** – The paper is unique as it examines organizational culture, innovation and performance links in a non-western context.

**Keywords** Performance, Innovation, Technological innovation, Organizational culture, Banks, Palestine, Marketing innovation

**Paper type** Research paper

## Introduction

Nowadays, organizations need to operate in business environments, which are characterized by fast technological changes, intensive international competition and continuous changing client's preferences (Droge *et al.*, 2008). Given these complexities, innovation is seen as one of the critical factors for achieving organizational success and sustaining competitive advantage (Damanpour and Gopalakrishnan, 2001). It is well documented in the literature that innovative organizations have more flexibility and can respond quickly to changes, in order to take advantage of business opportunities (Drucker, 1985). Innovation is considered as a competitive mechanism for organizations' performance and success, and is regarded as an important instrument to adapt to a continuously changing business environment (Blackwell, 2006). Furthermore, previous studies provide evidence that innovation can



© Mohammed Aboramadan, Belal Albashiti, Hatem Alharazin and Souhaila Zaidoune. Published by Emerald Publishing Limited. This article is published under the Creative Commons Attribution (CC BY 4.0) licence. Anyone may reproduce, distribute, translate and create derivative works of this article (for both commercial and non-commercial purposes), subject to full attribution to the original publication and authors. The full terms of this licence may be seen at <http://creativecommons.org/licenses/by/4.0/legalcode>

Journal of Management  
Development  
Vol. 39 No. 4, 2020  
pp. 437-451  
Emerald Publishing Limited  
0262-1711  
DOI 10.1108/JMD-06-2019-0253

positively affect performance (e.g. Baker and Sinkula, 2002; Damanpour and Gopalakrishnan, 2001; Luk *et al.*, 2008; Naranjo-Valencia *et al.*, 2016; Uz Kurt *et al.*, 2013).

Because of the critical role innovation plays in different organizational settings, several scholars have attempted to determine the factors that are associated with influencing innovation (Koc and Ceylan, 2007). One of the factors that seems to have an impact on innovation is the organizational culture (Büschgens *et al.*, 2013; Lin *et al.*, 2013; Martins and Terblanche, 2003; Tushman and O'Reilly, 1997).

On the other hand, organizational culture has been studied in terms of definitions, theoretical scopes, conceptualizations, characteristics and types (e.g. Lavine, 2014; Schein, 1996). Although organizational culture was argued to contribute to achieving common values promotion (Naranjo-Valencia *et al.*, 2016), competitive advantage (Calcilari *et al.*, 2018) desirables employees' behaviors (Nazarian *et al.*, 2017; Zhang and Li, 2016) and innovation (Lin *et al.*, 2013), empirical support is still limited (Hartnell *et al.*, 2011; Kim and Chang, 2019).

Regardless of the important role organizational culture plays in promoting innovation, most of the studies were carried out in western contexts. Moreover, a very limited number of studies examined the association between organizational culture and performance through the intervening mechanisms such as innovation (e.g. Martins and Terblanche, 2003; Naranjo-Valencia *et al.*, 2016; Uz Kurt *et al.*, 2013).

Our study contributes to the literature in several ways. First, we attempt to investigate the "black box" of the organizational culture-performance relationship through the mediating effects of marketing and technology innovation. Based on a critical review of previous empirical studies, very limited research (e.g. Naranjo-Valencia *et al.*, 2016; Tseng *et al.*, 2008; Uz Kurt *et al.*, 2013) examined the role of innovation as a mediator between organizational culture and performance. Second, our study responds to the different scholarly calls to advance empirical research on innovation and organizational culture (McLaughlin *et al.*, 2008; Nakata and DiBenedetto, 2012; Tellis *et al.*, 2009). Finally, most of the studies examining organizational culture and performance were carried out in western setting. For instance, Budhwar *et al.* (2019) suggested that there is a need to enrich the literature of HRM and organizational behavior research in the Middle Eastern region. Among the suggestions made by Budhwar *et al.* (2019) was to investigate the mechanisms which govern the relationship between OB, HR factors and organizational performance. Given this discussion and to respond the scholarly calls to advance the organizational behavior and HR research in the Middle East, our study aims at investigating the relationship between organizational culture and banks performance via the mediating role of innovation. Moreover, we argue that more studies are needed in diverse non-western settings, in order to better understand the relationship between organizational culture and performance.

## Theory and hypotheses

### *Organizational culture, definitions and models*

Chang and Lin (2007) consider culture as one of the vital factors for organizations and their activities. In literature, many definitions were given to organizational culture, each from a different perspective. Overall, organizational culture commonly represents the routine activities taking place in an organization (Lundy and Cowling, 1996). More specifically, it refers to the shared set of values and behaviors inside an organization (Deshpande and Webster, 1989). It is also used to describe the set of assumptions and behaviors employees within an organization have adopted (Martins and Terblanche, 2003). Many researchers were interested in the field of organizational culture assuming it is a driving factor to the organization's innovation, productivity and financial performance (Blackwell, 2006).

Many studies were conducted to determine the different categories of organizational culture (Blackwell, 2006; Martins and Terblanche, 2003). Some of them have considered that organizational culture can be divided into four categories, namely, clan, hierarchy, adhocracy

and market (Cameron and Freeman, 1991; Deshpande *et al.*, 1993; Quinn, 1988). Quinn and Spreitzer (1991) have suggested that organizational culture is composed of four different cultures: development culture, group culture, rational culture and hierarchal culture. Similarly, Chang and Lin (2007) believe that organizational culture follows the four concepts of innovativeness, cooperativeness, effectiveness and consistency. In addition, Wallach (1983) suggested a simpler classification of the organizational culture following its functions: bureaucratic, innovative and supportive perspectives. A further classification for the culture was presented in the organizational culture profile suggesting that it is related to seven main values: innovation, aggressiveness, result orientation, stability, people orientation, team oriented and a detail focus culture. The organization's culture can be also classified according to being a: service culture organization that focuses on providing the highest value to its customers, or a safety culture that focuses on having strong work-place standards, or both (O'Reilly III *et al.*, 1991). Moreover, according to Robbins (2001), characteristics like leadership, risk aversion, amount of detail, result focus, people focus, team focus, hostility and stability are the main characteristics of organizational culture.

*Organizational culture and performance.* In the literature, several studies were interested in analyzing the association between organizational culture and organizations' performance (Chan *et al.*, 2004; Glisson, 2007; Lau and Ngo, 1996; Ngo and Loi, 2008; Wilderom *et al.*, 2000). Most of the previous empirical studies have found an existing relationship between performance and culture (e.g. Daft, 2007; Denison and Mishra, 1995; Fey and Denison, 2003; Gordon and DiTomaso, 1992; Kotter and Heskett, 1992; Ngo and Loi, 2008) and that culture has a direct influence on performance, because it affects the conduct of the people (Galves and Garcia, 2011; Hofstede, 1988; Martins and Terblanche, 2003). For instance, Kim and Chang (2019) found that adhocracy, clan and market cultures are positively associated with performance. Salimi and Aveh (2016) found that culture predicts performance in the Iranian context, while Kraśnicka *et al.* (2018) found a positive relationship between organizational culture and enterprise performance in Polish firms. This suggests enough evidence to relate culture to performance (Chan *et al.*, 2004) and that it is a significant predictor of market related performance (Ngo and Loi, 2008). In addition, organizational culture might be seen as a source for competitive advantage for the company, especially since it is hard to copy (Coyne, 1986). Furthermore, Denison and Mishra (1995) developed a model that presents four traits ("involvement, adaptability, mission and consistency") that are in fact positively linked to a set of subjective measures including: "quality, satisfaction of employee, and the performance of the organization." Based on the previous discussion we posit the following hypothesis:

*H1.* Organizational culture has a significant impact on banks' performance.

### *Innovation*

Innovation, on the other hand, is used to refer to new products, services, processes or technologies that require acceptance and eventually adoption and implementation (Damanpour, 1991; Thompson, 1965; Zaltman *et al.*, 1973). Innovation is the factor that enables the innovative processes to produce new products and services, new technologies and new concepts (Sutanto, 2017).

According to Padilla-Meléndez and Garrido-Moreno (2012), knowledge of innovation needs more communication, and interaction between not only researchers, but also stakeholders affected by this, as well as, leaders. This way new ideas, processes and interactions can have an economic and commercial benefit. Hence, leaders, managers and researchers in organizations and universities should be aware of the different ways of innovation.

Innovation, in the literature, can be divided into different types. The most popular typology of innovation divides it into three types: "administrative vs technical," "product vs process" and "radical vs incremental" (Gopalakrishnan and Damanpour, 1997). Another classification of the

typologies of innovation was developed by Jensen *et al.* (2007). According to this classification, innovation can be classified as: “Science, Technology and Innovation” (STI) that is based on analytical knowledge and “Doing, Using, and Interaction” that is subject to knowledge retrieved from the engineering field (Coenen and Asheim, 2006; Lorenz and Lundvall, 2006). Innovation can be divided into three groups: product-related, technology-related and behavior-related perspectives. The technology-related innovation is related to the readiness to adopt current technologies and processes and the tendency of the organization to adopt new technologies and processes internally (Kitchell, 1995). Behavior-related innovation relates to the speed, at which the organizational system is ready to adopt new ideas relative to competitors (Rogers, 1995). Lastly, product-related innovation is about the ability of an organization to generate new ideas, products, services and processes, or to buy them (Stalk *et al.*, 1992). Moreover, as innovation is responsible for implementing totally new or ameliorated versions of products, services or processes within the organization, or in the external relations (OECD and EUROSTAT, 2005), innovation can be classified into four categories. First, product innovation, which refers to the radical changes or ameliorations done to products and services. Second, process innovation, which refers to the major changes done to the production system or to the delivery mode. Third, organizational innovation, which refers to the adoption of new business processes that affect the business process within the organization and or on external relations. And fourth, marketing innovation, which refers to any change made to one of the four marketing Ps (product, price, placement and position) (OECD and EUROSTAT, 2005).

*Organizational culture and innovation.* As innovation plays a significant role in determining an organization’s success, several studies attempted to examine its antecedences (Crossan and Apaydin, 2010). Different studies found that organizational culture and organizational design are the most influential determinants (Mumford, 2000).

Organizational culture can affect the innovative attitude in two ways. The socialization process teaches individuals how to behave and act toward one another. Moreover, the organization’s structure, policy system, procedure and management orientation can be affected by the basic “values, beliefs and assumptions” (Martins and Terblanche, 2003). Hence, culture can encourage innovation among employees, because it drives them toward accepting innovation as a philosophy of the organization (Hartmann, 2006). Different values of culture were regarded as means to foster innovation. Examples of these cultural values were creativity and initiative (Jamrog *et al.*, 2006), entrepreneurial mindset (McLean, 2005), freedom and autonomy (Ahmed, 1998), risk taking (Wallach, 1983), teamwork (Arad *et al.*, 1997), marketing orientation and flexibility (Martins and Terblanche, 2003).

Research has given enough evidence for an existing relationship between organizational culture and innovation (Büschgens *et al.*, 2013; Chang and Lee, 2007; Lau and Ngo, 2004; Lin *et al.*, 2013; Miron *et al.*, 2004; Naranjo-Valencia *et al.*, 2016; Rezaei *et al.*, 2018; Tseng *et al.*, 2008; Uzkurt *et al.*, 2013). Given this discussion, we can posit the following two hypotheses:

H2. Organizational culture has a significant impact on marketing innovation.

H3. Organizational culture has a significant impact on technology innovation.

*Innovation and performance.* Research has found that innovation plays a significant role in organization performance (Higgins, 1995; Hult *et al.*, 2004). Organizations able to innovate are more capable to deliver new products and services, improve processes in a faster way to fit the market’s needs and capitalize on opportunities better than non-innovative organizations (Jiménez-Jiménez *et al.*, 2008). Moreover, innovation has been associated with higher levels of growth and profitability (Li and Atuahene-Gima, 2001).

In the literature, several studies have been conducted to confirm the positive relationship between innovation and performance (Afcha, 2011; Artz *et al.*, 2010; Baker and Sinkula, 2002; Chen *et al.*, 2009; Damanpour, 1991; Damanpour and Gopalakrishnan, 2001; De Clercq *et al.*,

2011; Droge *et al.*, 2008; Eisingerich *et al.*, 2009; Farley *et al.*, 2008; Gálvez and García, 2012; Jimenez-Jimenez and Sanz-Valle, 2011; Luk *et al.*, 2008; Prajogo, 2006; Roberts and Amit, 2003; Rosenbusch *et al.*, 2011; Subramanian and Nilakanta, 1996; Tseng *et al.*, 2008). Therefore, the following two hypotheses can be posited:

*H4.* Marketing innovation has a significant impact on banks performance.

*H5.* Technology innovation has a significant impact on banks performance.

## Methods

The present study is a quantitative study applied to the Palestinian banking sector with the purpose of examining the hypothesized positive relationships between organizational culture, marketing innovation, technological innovation and banks' performance. Data were gathered using a self-administered questionnaire distributed to the employees of banking sector located in Gaza strip. The distribution and collection method were the drop-off and pick up approach. A total of 320 employees were invited to fill the questionnaire. A total of 186 filled and usable questionnaires were gathered and valid for statistical analysis. The response rate in our study is 58 percent.

## Respondents' profile

Most of the respondents were male (70 percent). In total, 25.8 percent of the respondents were aged higher than 44 years, 25.8 percent were aged less than 30 years, 38.7 percent were aged from 30 to 38 years and 9.7 percent were aged from 38 to 44 years. Regarding experience, 32.3 percent had 5–10 years of experience, 16.1 percent had 10–15 years of experience, 22.6 percent had an experience of more than 15 years and 29 percent had less than 5 years of experience. Concerning education, most of the respondents had a bachelor's degree (87.1 percent).

## Measures

### *Organizational culture*

This scale is measured using 22 items adopted from previous studies, such as Claver *et al.* (1998), Denison and Mishra (1995), Jamrog *et al.* (2006), McLean (2005) and Wallach (1983). These items were "teamwork, communication, openness, work autonomy, commitment, employee's involvement, flexibility, creativity, responsibility, objective orientation, customer focus, continuous learning, risk taking, adaptability, entrepreneurial mindset, performance incentives, excitement, work engagement, decision making, marketing orientation, and high standards and values." The internal consistency was 0.956. A five-point Likert scale was used to assess the items of this construct.

### *Marketing and technology innovation*

Marketing innovation and technological innovation were measured by a three-item scale for each. Both scales were adopted from Hogan *et al.* (2011). A sample item for marketing innovation is "Our bank develops, revolutionary for the industry, marketing programs for our services/products" and a sample item for technology innovation is "Our bank adopts the latest technology in the industry." The values of internal consistency for marketing and technological innovation were 0.848 and 0.765, respectively. A five-point Likert scale was used to assess the items of these two constructs.

### *Banks' performance*

Respondents assessed this measure using a seven-item scale adopted from Agbényiga (2011). Examples of this self-reported assessment were "effective services, customer satisfaction, organizational reputation, quality of the service." The internal consistency value was 0.921. A five-point Likert scale was used to assess the items of this construct.

**Initial analysis**

Table I shows correlations and descriptive statistics of the research variables. The means and SDs for the examined variables were (Mean: 4.15, SD: 0.55) for organizational culture, (Mean: 4.44, SD: 0.48) for marketing innovation, (Mean: 4.56, SD: 0.45) for technology innovation, and (Mean: 4.30, SD: 0.60) for banks' performance. According to the results, correlations were significant between marketing innovation, organizational culture and performance.

**Assessing the measurement model**

For the purpose of checking the internal consistency of the items, factor loading was calculated for each variable. Three items of organizational culture were removed from the model due to their low loading. All other items loadings were retained as their factor loading was higher than 0.5 as presented in Figure 1. Furthermore, we have checked for the variables' reliability by calculating the average variance extracted and composite reliability (Hulland, 1999). As presented in Table II, AVE values for all variables were higher than 0.5 and CR values were higher than 0.7 (Hulland, 1999). Hence, all variables in the model can be regarded as internally reliable and consistent.

For the purpose of examining discriminant validity, two approaches were utilized. First, the heterotrait–monotrait (HTMT) method was used, in which the results (Table III) show that HTMT values are lower than the value of 0.90, as suggested by Henseler et al. (2015). The second method was the Fornell and Larcker (1981) technique by estimating the square root of the AVE and comparing it with the correlations between latent variables. The results in Table IV show that all square roots of the AVE are higher than the correlations between the examined variables. Hence, the discriminant validity condition was met.

**Assessing the structural model**

Table V shows that the R<sup>2</sup> values for banks' performance and marketing innovation exceed the acceptable moderate ratio as suggested by Chin (1998). Banks performance has an R<sup>2</sup> value of 0.561, marketing innovation an R<sup>2</sup> value of 0.112. Technological innovation had a weak value of R<sup>2</sup> of 0.055. On the other hand, the effect size f<sup>2</sup> for the research variables was also calculated. Results of f<sup>2</sup> values presented in Table VI showed medium effects for the following relationships: organizational culture on performance, organizational culture on marketing innovation and marketing innovation on performance. On the contrary, the effect was weak for the technological innovation and performance link.

**Testing the hypotheses: direct and mediating effects**

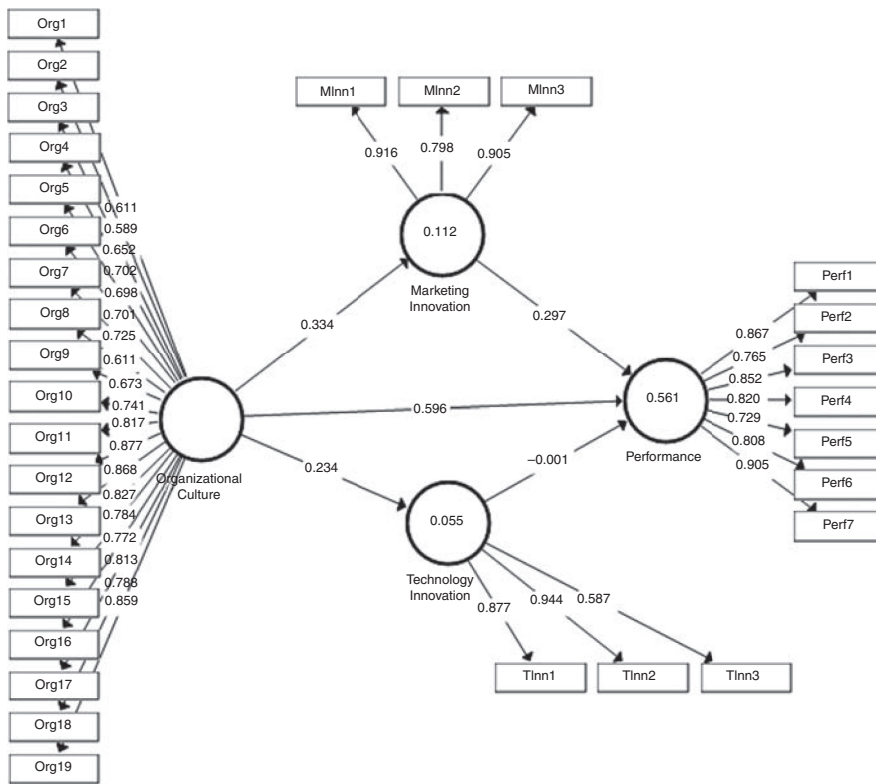
For the purpose of testing the research hypotheses H1–H5, we have calculated the direct effects. Table VII shows all the hypotheses were supported except for H5. Organizational culture is positively related to banks' performance (β=0.596, p=0.000). Organizational

**Table I.**  
Means, standard deviation and correlation matrix

	Mean	SD	1	2	3	4	5	6	7
Age	2.35	1.13	1						
Experience	2.32	1.12	0.782**	1					
Education	2.06	0.35	0.105	-0.053	1				
Organizational culture	4.15	0.55	-0.079	-0.052	0.106	1			
Marketing innovation	4.44	0.48	0.029	0.095	0.212**	0.278**	1		
Technology innovation	4.56	0.45	0.033	0.090	0.111	0.141	0.597**	1	
Performance	4.30	0.60	-0.010	0.135	0.297**	0.634**	0.485**	0.233**	1

**Note:** \*\*Correlation is significant at the 0.01 level (two-tailed)





**Figure 1.** PLS measurement model analysis

	Composite reliability	Average variance extracted (AVE)
Organizational Culture	0.960	0.559
Marketing innovation	0.907	0.765
Technology innovation	0.854	0.669
Performance	0.936	0.677

**Table II.** AVEs and CRs for the research variables

	Marketing innovation	Organizational culture	Performance	Technology innovation
<i>Marketing innovation</i>				
Organizational culture	0.325			
Performance	0.543	0.671		
Technology innovation	0.724	0.278	0.305	

**Table III.** Heterotrait–monotrait ratio for the research variables

culture is positively related to both marketing innovation ( $\beta=0.334, p=0.000$ ) and technology innovation and ( $\beta=0.234, p=0.000$ ). Marketing innovation was found to exert a positive effect on performance ( $\beta=0.297, p=0.000$ ). The relationship between technology innovation and performance was not significant ( $\beta = -0.001, p=0.982$ ).

For the purpose of testing the mediating effects of both marketing and technology innovation, we have calculated the indirect effects. The results show that marketing innovation mediates the relationship between organizational culture and banks performance ( $P=0.007$ ,  $t=2.698^{***}$ ). Technology innovation did not exert a significant mediating effect between organizational culture and performance.

**Discussion and implications**

The purpose of our study was to examine the links between organizational culture, innovation and banks' performance in a non-western context (Palestinian context). The

**Table IV.**  
Fornell-Larcker  
criterion for the  
research variables

	Marketing innovation	Organizational culture	Performance	Technology innovation
Marketing innovation	0.875			
Organizational culture	0.334	0.748		
Performance	0.496	0.695	0.823	
Technology innovation	0.523	0.234	0.294	0.818

**Table V.**  
 $R^2$  values

	$R^2$	$R^2$ adjusted
Marketing innovation	0.112	0.107
Performance	0.561	0.554
Technology innovation	0.055	0.050

**Table VI.**  
 $f^2$  values

	Marketing innovation	Organizational culture	Performance	Technology innovation
Marketing innovation			0.136	
Organizational culture	0.126		0.715	0.058
Performance				
Technology innovation			0.011	

**Table VII.**  
Direct and mediating  
effects analysis

	Path coefficient	T-statistics	p-values	
<i>Direct effects</i>				
Organizational culture → performance	0.596	9.943	0.000	Supported
Organizational culture → marketing innovation	0.334	4.738	0.000	Supported
Organizational culture → technology innovation	0.234	3.621	0.000	Supported
Marketing innovation → performance	0.297	4.463	0.000	Supported
Technology innovation → performance	-0.001	0.023	0.982	Non-supported
<i>Mediating effects</i>				
Organizational culture → marketing innovation → performance	0.099	2.698	0.007	Partial mediation
Organizational culture → technology innovation → performance	0.000	0.021	0.983	No mediation



findings of our study provide evidence for the relationship between organizational culture and banks performance, supporting *H1*. The results of our study are in line with previous studies demonstrating a positive relationship between organizational culture and performance (e.g. [Daft, 2007](#); [Fey and Denison, 2003](#); [Kim and Chang, 2019](#); [Krašnicka et al., 2018](#); [Ngo and Loi, 2008](#); [Salimi and Aveh, 2016](#)). The results imply that the values and philosophy adopted within Palestinian banks contribute positively to the banks performance.

Concerning the relationship between organizational culture and innovation, our results show that organizational culture is a significant predictor of both marketing and technology innovation at Palestinian banks, lending a support for *H2* and *H3*. The results are consistent with previous studies, which investigate organizational culture-innovation links ([Büschgens et al., 2013](#); [Chang and Lee, 2007](#); [Lau and Ngo, 2004](#); [Lin et al., 2013](#); [Miron et al., 2004](#); [Naranjo-Valencia et al., 2016](#); [Rezaei et al., 2018](#); [Tseng et al., 2008](#); [Uzkurt et al., 2013](#)). The results imply that organizational culture fosters both marketing and technology innovation.

Although our results provide empirical evidence on the links between marketing innovation and banks' performance (*H4*) and are in line with previous empirical support ([Afcha, 2011](#); [Artz et al., 2010](#); [Baker and Sinkula, 2002](#); [Damanpour, 1991](#); [Farley et al., 2008](#); [Luk et al., 2008](#); [Tseng et al., 2008](#)), technology innovation did not exert any significant effect on banks performance, lending no support for *H5*. These results can be justified by the fact that in a developing country like Palestine, technology-related innovation might not attract customers, due to the lack of culture and trust in using different technologies (ATM machines, online banking, etc.). This means that innovating at the technological level does not necessarily contribute to higher performance in the Palestinian banking sector.

Finally, our results show that marketing innovation plays an intervening role in the relationship between organizational culture and banks performance. Marketing innovation partially mediates this relationship, suggesting that organizational culture affects marketing innovation and marketing innovation, in turn, generates higher performance.

### *Implications*

Our results contribute both to the theory and practice. Theoretically, the study is one of the very few studies conducted in a non-western context in the banking sector. In Middle Eastern region and specifically in Palestine, there is a lack of research on the culture-innovation-performance relationships.

Practically, our results provide useful recommendations to banks' senior management on the significance of organizational culture and innovation and their contribution to performance. Our findings provide fertile grounds for the banking sector in Palestine on the importance of organizational culture as a tool for encouraging innovation and banks performance. The presence of a strong culture that is characterized by teamwork, communication, openness, work autonomy, commitment, employee's involvement, flexibility, creativity, responsibility, etc., will positively contribute to innovation and firm performance alike. The existence of a climate that is characterized by objective orientation, customer focus, continuous learning, risk taking, adaptability, entrepreneurial mindset, performance incentives, excitement, work engagement, decision making, marketing orientation, and high standards and values, is of extreme importance to the firm success at different levels. Moreover, the results provide insights to the banking sector which is striving to be responsive to challenging environments through successfully adopting innovation.

The Palestinian banking sector encountered several environmental complexities in the last years, hence, innovation can be very useful in order to sustain competitive advantage. Managers in Palestinian banks should encourage their staff members to create innovative ideas and provide them the right reward to establish an innovative culture in the

organization. Furthermore, communication between banks' employees at the horizontal and vertical level can be very beneficial to find the best ways to implement innovation at different levels.

### Limitations and future research

Like any other study, our study has some limitations. First, marketing innovation, technology innovation and banks' performance were assessed by subjective measures. Future research might consider using more objective measures of innovation. Second, data were collected only from the Palestinian banking sector and this might restrict the generalizability of the results to other sectors. Hence, future research might replicate and extend this study to other sectors in Palestine and similar national contexts in the region such as Jordan and Lebanon. Future research using larger data and across different sectors will give more insights on the association between organizational culture and performance through innovation. Third, our research design does not allow the researchers to establish cause and effect links between the examined variables, hence, longitudinal research is recommended for future devours. In general, organizational culture research conducted using only quantities techniques provide restricted understanding. Hence, future studies might consider using qualitative methods to provide better explanation of the organizational culture, innovation and performance associations. Finally, our research analyzed only the role of marketing and technology innovation in the banking sector. Future studies might consider examining the role of other forms of innovation. Finally, it would be also interesting for future studies to investigate the different types of organizational culture and their impact on innovation and performance in the Middle Eastern region.

### References

- Afcha, S. (2011), "Innovaciones organizacionales y su efecto sobre el desempeño empresarial", *Revista Venezolana de Gerencia*, Vol. 16 No. 56, pp. 544-563.
- Agbényiga, D.L. (2011), "Organizational culture influences on service delivery: a mixed methods inquiry in a human services setting", *Children and Youth Services Review*, Vol. 33 No. 10, pp. 1767-1778.
- Ahmed, P. (1998), "Culture and climate for innovation", *European Journal of Innovation Management*, Vol. 1 No. 1, pp. 30-43.
- Arad, S., Hanson, M. and Schneider, R. (1997), "A framework for the study of relationships between organizational characteristics and organizational innovation", *Journal of Creative Behavior*, Vol. 1 No. 1, pp. 42-58.
- Artz, K.W., Norman, P.M., Hatfield, D.E. and Cardinal, L.B. (2010), "A longitudinal study of the impact of R&D, patents, and product innovation on firm performance", *Journal of Product Innovation Management*, Vol. 27 No. 5, pp. 725-740.
- Baker, W. and Sinkula, J. (2002), "Market orientation, learning orientation and product innovation: delving into the organization's black box", *Journal of Market: Focused Management*, Vol. 5 No. 1, pp. 5-23.
- Blackwell, S.S. (2006), "The influence of perception of organizational structure and culture on leadership role requirements: the moderating impact of locus of control and self-monitoring", *Journal of Leadership & Organizational Studies*, Vol. 12 No. 4, pp. 27-49.
- Budhwar, P., Pereira, V., Mellahi, K. and Singh, K.S. (2019), "The state of HRM in the Middle East: challenges and future research agenda", *Asia Pacific Journal of Management*, Vol. 36 No. 4, pp. 905-933.
- Büschgens, T., Bausch, A. and Balkin, D. (2013), "Organizational culture and innovation: a meta-analytic review", *Journal of Product Innovation Management*, Vol. 30 No. 4, pp. 1-19, available at: <http://dx.doi.org/10.1111/jpim.12021>.

- Calciolari, S., Prenestini, A. and Lega, F. (2018), "An organizational culture for all seasons? How cultural type dominance and strength influence different performance goals", *Public Management Review*, Vol. 20 No. 9, pp. 1400-1422.
- Cameron, K.S. and Freeman, S.J. (1991), "Cultural congruence, strength, and type: relationships to effectiveness", *Research in Organizational Development*, Vol. 5 No. 2, pp. 23-58.
- Chan, L.L.M., Shaffer, M.A. and Snape, E. (2004), "In search of sustained competitive advantage: the impact of organizational culture, competitive strategy and human resource management practices on firm performance", *International Journal of Human Resource Management*, Vol. 15 No. 1, pp. 17-35.
- Chang, S. and Lin, C. (2007), "Exploring organizational culture for information security", *Industrial Management and Data Systems*, Vol. 107 No. 3, pp. 438-458.
- Chang, S.-C. and Lee, M.-S. (2007), "The effects of organizational culture and knowledge management mechanisms on organizational innovation: an empirical study in Taiwan", *The Business Review*, Vol. 7 No. 1, pp. 295-301.
- Chen, J.S., Tsou, H.T. and Huang, A.Y.H. (2009), "Service delivery innovation: antecedents and impact on firm performance", *Journal of Service Research*, Vol. 12 No. 1, pp. 36-55.
- Chin, W.W. (1998), "The partial least squares approach for structural equation modeling", in Marcoulides, G.A. (Ed.), *Modern Methods for Business Research*, Lawrence Erlbaum Associates, New York, NY, pp. 295-336.
- Claver, E., Llopis, J., Garcia, D. and Molina, H. (1998), "Organizational culture for innovation and new technological behavior", *Journal of High Technology Management Research*, Vol. 9 No. 1, pp. 55-69.
- Coenen, L. and Asheim, B.T. (2006), "Constructing regional advantage at the Northern Edge", in Cooke, P. and Piccoluga, A. (Eds), *Regional Development in the Knowledge Economy*, Routledge, London, pp. 84-110.
- Coyne, K. (1986), "Sustainable competitive advantage: what it is and what it isn't", *Business Horizons*, Vol. 29 No. 1, pp. 54-61.
- Crossan, M. and Apaydin, M. (2010), "A multi-dimensional framework of organizational innovation: a systematic review of the literature", *Journal of Management Studies*, Vol. 47 No. 6, pp. 1154-1191, available at: <http://dx.doi.org/10.1111/j.1467-6486.2009.00880.x>.
- Daft, R.L. (2007), *Organization theory and Design*, 9th ed., Thomson South-Western, Mason, OH.
- Damanpour, F. (1991), "Organizational innovation: a meta-analysis of effects of determinants and moderators", *Academy of Management Journal*, Vol. 34 No. 3, pp. 555-590.
- Damanpour, F. and Gopalakrishnan, S. (2001), "The dynamics of the adoption of products and process innovations in organizations", *Journal of Management Studies*, Vol. 38 No. 1, pp. 45-65.
- De Clercq, D., Thongpapanl, N. and Dimov, D. (2011), "The moderating role of organizational context on the relationship between innovation and firm performance", *IEEE Transactions on Engineering Management*, Vol. 58 No. 3, pp. 431-444.
- Denison, D. and Mishra, A. (1995), "Toward a theory of organizational culture and effectiveness", *Organization Science*, Vol. 6 No. 2, pp. 204-223.
- Deshpande, R. and Webster, F.E. (1989), "Organizational culture and marketing: defining the research agenda", *Journal of Marketing*, Vol. 53 No. 1, pp. 3-15.
- Deshpande, R., Farley, J. and Webster, F. (1993), "Corporate culture, customer orientation and innovativeness in Japanese firms: a quadrad analysis", *Journal of Marketing*, Vol. 57 No. 1, pp. 23-37.
- Droge, C., Calantone, R. and Harmancioglu, N. (2008), "New product success: is it really controllable by managers in highly turbulent environments?", *Journal of Product Innovation Management*, Vol. 25 No. 3, pp. 272-286.

- Drucker, P. (1985), "The discipline of innovation", *Harvard Business Review*, Vol. 63 No. 3, pp. 67-72.
- Eisingerich, A.B., Rubera, G. and Seifert, M. (2009), "Managing service innovation and interorganizational relationships for firm performance: to or commit diversity?", *Journal of Service Research*, Vol. 11 No. 4, pp. 344-356.
- Farley, J.U., Hoenig, S. and Ismail, Z. (2008), "Organizational culture, innovativeness, market orientation and firm performance in South Africa: an interdisciplinary perspective", *Journal of African Business*, Vol. 9 No. 1, pp. 59-76.
- Fey, C. and Denison, D. (2003), "Organizational culture and effective-ness: can American theory be applied in Russia?", *Organization Science*, Vol. 14 No. 6, pp. 686-706.
- Fornell, C. and Larcker, D.F. (1981), "Evaluating structural equation models with unobservable variables and measurement error", *Journal of Marketing Research*, Vol. 18 No. 1, pp. 39-50.
- Galves, E. and Garcia, D. (2011), "Cultura organizacional y rendimiento de las Mipymes de mediana y alta tecnologia: un estudio empírico en Cali, Colombia", *Cuadernos de Administración*, Vol. 24 No. 42, pp. 125-145.
- Gálvez, E. and García, D. (2012), "Impacto de la innovación sobre el rendimiento de la MIPYME: un estudio empírico en Colombia", *Estudios Gerenciales*, Vol. 28 No. 122, pp. 11-27.
- Glisson, C. (2007), "Assessing and changing organizational culture and climate for effective services", *Research on Social Work Practice*, Vol. 17 No. 6, pp. 736-747.
- Gopalakrishnan, S. and Damanpour, F. (1997), "A review of innovation research in economics, sociology and technology management", *Omega*, Vol. 25 No. 1, pp. 15-28.
- Gordon, G.G. and DiTomaso, N. (1992), "Predicting corporate performance from organizational culture", *Journal of Management Studies*, Vol. 29 No. 6, pp. 783-798.
- Hartmann, A. (2006), "The role of organizational culture in motivating innovative behavior in construction firms", *Construction Innovation*, Vol. 6 No. 3, pp. 159-172.
- Hartnell, C.A., Ou, A.Y. and Kinicki, A. (2011), "Organizational culture and organizational effectiveness: a meta-analytic investigation of the competing values framework's theoretical suppositions", *Journal of Applied Psychology*, Vol. 96 No. 4, pp. 677-694.
- Henseler, J., Ringle, C.M. and Sarstedt, M. (2015), "A new criterion for assessing discriminant validity in variance-based structural equation modeling", *Journal of the Academy of Marketing Science*, Vol. 43 No. 1, pp. 115-135.
- Higgins, J.M. (1995), "How effective companies operate: lessons from Japanese strategy", *Creativity and Innovation Management*, Vol. 4 No. 2, pp. 110-119.
- Hofstede, G. (1988), "The Confucius connection: from cultural roots to economic growth", *Organizational Dynamics*, Vol. 16 No. 4, pp. 4-22.
- Hogan, S.J., Soutar, G.N., McColl-Kennedy, J.R. and Sweeney, J.C. (2011), "Reconceptualizing professional service firm innovation capability: scale development", *Industrial Marketing Management*, Vol. 40 No. 8, pp. 1264-1273.
- Hulland, J.S. (1999), "Use of partial least squares (PLS) in strategic management research: a review of four recent studies", *Strategic Management Journal*, Vol. 20 No. 4, pp. 195-204.
- Hult, G.T.M., Hurley, R.F. and Knight, G.A. (2004), "Innovativeness: its antecedents and impact on business performance", *Industrial Marketing Management*, Vol. 33 No. 5, pp. 429-438.
- Jamrog, J., Vickers, M. and Bear, D. (2006), "Building and sustaining a culture that supports innovation", *Human Resource Planning*, Vol. 29 No. 3, pp. 9-19.
- Jensen, M.B., Johnson, B., Lorenz, E. and Lundvall, B.A. (2007), "Forms of knowledge and models of innovations", *Research Policy*, Vol. 36 No. 5, pp. 680-693.
- Jimenez-Jimenez, D. and Sanz-Valle, R. (2011), "Innovation, organizational learning, and performance", *Journal of Business Research*, Vol. 64 No. 4, pp. 408-417.

- Jiménez-Jiménez, D., Sanz-Valle, R. and Rodríguez-Espallardo, M. (2008), "Fostering innovation: the role of market orientation and organizational learning", *European Journal of Innovation Management*, Vol. 11 No. 3, pp. 389-412.
- Kitchell, S. (1995), "Corporate culture, environmental adaptation, and innovation adoption: a qualitative/quantitative approach", *Journal of the Academy of Marketing Science*, Vol. 23 No. 3, pp. 195-205.
- Kim, T. and Chang, J. (2019), "Organizational culture and performance: a macro-level longitudinal study", *Leadership & Organization Development Journal*, Vol. 40 No. 1, pp. 65-84.
- Koc, T. and Ceylan, C. (2007), "Factors impacting the innovative capacity in large-scale companies", *Technovation*, Vol. 27 No. 3, pp. 105-114.
- Kotter, J.P. and Heskett, J.L. (1992), *Corporate Culture and Performance*, Free Press, New York, NY.
- Kraśnicka, T., Głód, W. and Wronka-Pośpiech, M. (2018), "Management innovation, pro-innovation organisational culture and enterprise performance: testing the mediation effect", *Review of Managerial Science*, Vol. 12 No. 3, pp. 737-769.
- Lau, C.M. and Ngo, H.Y. (1996), "One country many cultures: organizational cultures of firms of different country origins", *International Business Review*, Vol. 5 No. 5, pp. 469-486.
- Lau, C.-M. and Ngo, H.-Y. (2004), "The HR system, organizational culture, and product innovation", *International Business Review*, Vol. 13 No. 6, pp. 685-703.
- Lavine, M. (2014), "Paradoxical leadership and the competing values framework", *The Journal of Applied Behavioral Science*, Vol. 50 No. 2, pp. 189-205.
- Li, H. and Atuahene-Gima, K. (2001), "Product innovation strategy and the performance of new technology ventures in China", *Academy of Management Journal*, Vol. 44 No. 6, pp. 1123-1134.
- Lin, H.-E., McDonough, E., Lin, S.-J. and Lin, C. (2013), "Managing the exploitation/exploration paradox: the role of a learning capability and innovation ambidexterity", *Journal of Product Innovation Management*, Vol. 30 No. 2, pp. 262-278.
- Lorenz, E. and Lundvall, B.A. (2006), *How Europe's Economies Learn: Coordinating Competing Models*, Oxford University Press, Oxford.
- Luk, C., Yau, O., Sin, L., Tse, A., Chow, R. and Lee, J. (2008), "The effects of social capital and organizational innovativeness in different institutional contexts", *Journal of International Business Studies*, Vol. 39 No. 4, pp. 589-612.
- Lundy, O. and Cowling, A. (1996), *Strategic Human Resource Management*, Routledge, London.
- McLaughlin, P., Bessant, J. and Smart, P. (2008), "Developing an organizational culture that facilitates radical innovation", *International Journal of Technology Management*, Vol. 44 Nos 3-4, pp. 298-323.
- McLean, L.D. (2005), "Organizational culture's influence on creativity and innovation: a review of the literature and implications for human resource development", *Advances in Developing Human Resources*, Vol. 7 No. 2, pp. 226-246.
- Martins, E.C. and Terblanche, F. (2003), "Building organizational culture that stimulates creativity and innovation", *European Journal of Innovation Management*, Vol. 6 No. 1, pp. 64-74.
- Miron, E., Erez, M. and Naveh, E. (2004), "Do personal characteristics and cultural values that promote innovation, quality, and efficiency compete or complement each other?", *Journal of Organizational Behavior*, Vol. 25 No. 2, pp. 175-199.
- Mumford, M. (2000), "Managing creative people: strategies and tactics for innovation", *Human Resource Management Review*, Vol. 10 No. 3, pp. 313-351.
- Nakata, C. and Di Benedetto, C.A. (2012), "Forward to the future: the new knowledge needed to advance NPD-innovation theory and practice", *Journal of Product Innovation Management*, Vol. 29 No. 3, pp. 341-343, available at: <http://dx.doi.org/10.1111/j.1540-5885.2012.00903.x>.

- Naranjo-Valencia, J.C., Jiménez-Jiménez, D. and Sanz-Valle, R. (2016), "Studying the links between organizational culture, innovation, and performance in Spanish companies", *Revista Latinoamericana de Psicología*, Vol. 48 No. 1, pp. 30-41.
- Nazarian, A., Atkinson, P. and Foroudi, P. (2017), "Influence of national culture and balanced organizational culture on the hotel industry's performance", *International Journal of Hospitality Management*, Vol. 63, pp. 22-32.
- Ngo, H.Y. and Loi, R. (2008), "Human resource flexibility, organizational culture and firm performance: an investigation of multinational firms in Hong Kong", *The International Journal of Human Resource Management*, Vol. 19 No. 9, pp. 1654-1666.
- O'Reilly, C.A. III, Chatman, J.A. and Caldwell, D.F. (1991), "People and organization culture: a profile comparison approach to assessing person-organization fit", *Academy of Management Journal*, Vol. 34 No. 3, pp. 487-516.
- OECD and EUROSTAT (2005), *Guidelines for Collecting and Interpreting Innovation Data: Oslo Manual*, 3rd ed., Organization for Economic Co-operation and Development and Statistical Office of the European Communities, Paris.
- Padilla-Meléndez, A. and Garrido-Moreno, A. (2012), "Open innovation in universities: what motivates researchers to engage in knowledge transfer exchanges?", *International Journal of Entrepreneurial Behaviour & Research*, Vol. 18 No. 4, pp. 417-439.
- Prajogo, D. (2006), "The relationship between innovation and business performance: a comparative study between manufacturing and service firms", *Knowledge and Process Management*, Vol. 13 No. 3, pp. 218-225.
- Quinn, R.E. (1988), *Beyond Rational Management*, Jossey-Bass management series, San Francisco, CA.
- Quinn, R.E. and Spreitzer, G.M. (1991), "The psychometrics of the competing values culture instrument and an analysis of the impact of organizational culture on quality of life", in Woodiman, R.W. and Pasmore, W.A. (Eds), *Research in Organizational Change and Development*, Vol. 5, JAI Press, Greenwich, pp. 115-142.
- Rezaei, G., Mardani, A., Senin, A.A., Wong, K.Y., Sadeghi, L., Najmi, M. and Shaharoun, A.M. (2018), "Relationship between culture of excellence and organizational performance in Iranian manufacturing companies", *Total Quality Management & Business Excellence*, Vol. 29 No. 12, pp. 94-115.
- Robbins, S.P. (2001), *Organizational Behavior*, 9th ed., Prentice Hall, New Delhi.
- Roberts, P. and Amit, R. (2003), "The dynamics of innovative activity and competitive advantage: the case of Australian retail banking (1981-1995)", *Academy of Management Journal*, Vol. 27 No. 1, pp. 25-41.
- Rogers, E.M. (1995), *Diffusion of Innovations*, The Free Press, New York, NY.
- Rosenbusch, N., Brinckmann, J. and Bausch, A. (2011), "Is innovation always beneficial? A meta-analysis of the relationship between innovation and performance in SMEs", *Journal of Business Venturing*, Vol. 26 No. 4, pp. 441-457.
- Salimi, H.A. and Aveh, M.C. (2016), "Relationship between organizational culture and innovation with the mediation of job enrichment in the Fars governor's staff", *Indian Journal of Positive Psychology*, Vol. 7 No. 1, pp. 21-25.
- Schein, E.H. (1996), "Culture: the missing concept in organization studies", *Administrative Science Quarterly*, Vol. 41 No. 2, pp. 229-240.
- Stalk, G., Evans, P. and Shulman, L.E. (1992), "Competing on capabilities: the new rules of corporate strategy", *Harvard Business Review*, Vol. 70 No. 3, pp. 57-69.
- Subramanian, A. and Nilakanta, S. (1996), "Organizational innovativeness: exploring the relationship between organizational determinants of innovation, types of innovations, and measures of organizational performance", *Omega*, Vol. 24 No. 6, pp. 631-647.

- 
- Sutanto, E.M. (2017), "The influence of organizational learning capability and organizational creativity on organizational innovation of universities in East Java, Indonesia", *Asia Pacific Management Review*, Vol. 22 No. 3, pp. 128-135.
- Tellis, G.J., Prabhu, J.C. and Chandy, R.K. (2009), "Radical innovation across nations: the preeminence of corporate culture", *Journal of Marketing*, Vol. 73 No. 1, pp. 3-23.
- Thompson, V.A. (1965), "Bureaucracy and innovation", *Administrative Science Quarterly*, Vol. 10 No. 1, pp. 1-20.
- Tseng, C.Y., Kuo, H.Y. and Chou, S.S. (2008), "Configuration of innovation and performance in the service industry: evidence from the Taiwanese hotel industry", *The Service Industries Journal*, Vol. 28 No. 7, pp. 1015-1028.
- Tushman, M.L. and O'Reilly, C.A. (1997), *Winning Through Innovation: A Practical Guide to Leading Organizational Change and Renewal*, Harvard Business School Press, Boston, MA.
- Uzkurt, C., Kumar, R., Semih Kimzan, H. and Eminoglu, G. (2013), "Role of innovation in the relationship between organizational culture and firm performance", *European Journal of Innovation Management*, Vol. 16 No. 1, pp. 92-117.
- Wallach, E.J. (1983), "Individuals and organizations: the cultural match", *Training and Development Journal*, Vol. 37 No. 2, pp. 28-36.
- Wilderom, C., Glunk, U. and Maslowski, R. (2000), "Organizational culture as a predictor of organizational performance", in Ashkanasy, N., Wilderom, C. and Peterson, M. (Eds), *Handbook of Organizational Culture and Climate*, Sage Publications, Thousand Oaks, CA, pp. 193-209.
- Zaltman, G., Duncan, R. and Holbek, J. (1973), *Innovations & Organizations*, R.E. Krieger Publication, Malabar, FL.
- Zhang, X. and Li, B. (2016), "Organizational culture and organizational performance: a brief review", *Journal of Advances in Social Science and Humanities*, Vol. 2 No. 5, pp. 16-21.

**Corresponding author**

Mohammed Aboramadan can be contacted at: [mohammed.aboramadan@unimib.it](mailto:mohammed.aboramadan@unimib.it)

---

For instructions on how to order reprints of this article, please visit our website:

[www.emeraldgrouppublishing.com/licensing/reprints.htm](http://www.emeraldgrouppublishing.com/licensing/reprints.htm)

Or contact us for further details: [permissions@emeraldinsight.com](mailto:permissions@emeraldinsight.com)