

## Do organizations really evolve? The critical link between organizational culture and organizational innovation toward organizational effectiveness: Pivotal role of organizational resistance



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### ABSTRACT

In today's global economy, organizational effectiveness and innovation have become top priorities, putting pressure on all businesses worldwide. Therefore, this study aims to explore the impact of organizational culture on effectiveness through organizational innovation. We analyzed organizational resistance as a boundary condition on the relation of organizational innovation and effectiveness to seek whether organizational resistance enhances the positive effect of organizational innovation on effectiveness and on the indirect effect of organizational culture on the effectiveness of organization via organizational effectiveness. Organizational resistance is important because it occurs when employees understand how they fit into the new way of doing things, such that organizational innovation has a positive impact on organizational effectiveness. The data were collected in two waves from 280 manager-employee dyads operating in Pakistan's banking industry. The outcomes indicated that organizational culture positively influences organizational effectiveness; therefore, this relationship is mediated by organizational innovation. The positive influence of organizational innovation on organizational effectiveness is greater among individuals who embraced improvements rapidly than among those who did not. Additionally, organizational resistance reinforces the relationship between organizational culture and effectiveness through organizational innovation, such that the relationship is greater for those who embrace compliant advancement. Thus, the theoretical and practical implications of this study are discussed.

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### Introduction

Early approaches to organizational effectiveness focused on organizational effectiveness by success. Organizational effectiveness is defined "as agility in decision-making, innovativeness, adaptability to the changing environment, competing with rivals, optimal utilization of resources and talent retention" (Quinn & Rohrbaugh, 1981, p. 131). Therefore, the workplace's primary goal is to operate an efficient organization. However, organizational culture develops over time as a result of the flow of time (Austin & Bartunek, 2003; Schein, 2010; Denison et al., 2012; Parke & Seo, 2017; Hartnell et al., 2019). Nevertheless, in the modern global economy, organizational effectiveness is of utmost importance for businesses, as numerous organizations face cultural challenges (Parke & Seo, 2017; Bustinza et al., 2019).

Therefore, to succeed, an organization should handle and sustain organizational behaviors that align with a dynamic global environment (Abatecola et al., 2020; Tehseen et al., 2020; Al Halbusi, 2022). At the core, the achievement of goals promoted in the organization's mission or vision can be described as organizational effectiveness statement (i.e., the higher the degree of congruence between the stated goals and objectives of the organization with observable and measured consequences, the higher the organization's effectiveness) (Bamel et al., 2013; Manoharan & Singal, 2019).

Researchers are interested in the elements that determine organizational effectiveness. Prior studies have established organizational culture as a crucial factor (Kim & Kim, 2015; Mathew, 2019). Misalignment of an organization's culture with its principles, beliefs, methods of accomplishing tasks, communications, and strategic direction can limit its effectiveness (Shao, 2019; Upadhyay & Kumar, 2020). Recognizing the archeology, cultural dimensions, and behaviors and thought processes that build and maintain organizational culture is critical to

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improving the target organization's effectiveness (Cameron & Quinn, 2011a; Moon et al., 2018). Furthermore, organizational culture influences how workers communicate at work. Workplace culture also encourages healthy competitiveness at the workplace (Kim & Kim, 2015; Al Halbusi et al., 2020; Hassani & Mosconi, 2022). Consequently, a supportive organizational culture encourages workers to form positive relationships (Chow, 2012; Meng & Berger, 2019). Therefore, an organization's culture extracts the best (or worst) out of each team member and increases its effectiveness individually and collectively (Hofstede, 1980; Aktas, et al, 2011; Taylor, 2014). Organizational culture is a product of the simultaneous contact between employees and managers (Cameron & Quinn, 2011a; Klammer et al., 2019).

An enormous literature exists on the relationship between organizational culture and organizational effectiveness. However, researchers have neglected the role of organizational innovation as a key mechanism in the relationship between organizational culture and effectiveness. Thus, this study examines the mediating role of organizational innovation in this relationship as organizational innovation is crucial for a firm or company to embrace new things, ideas, and attitudes toward innovation (Shahzad et al., 2017; Alexe & Alexe, 2018). An organization's ability to track and appraise its aims is the fundamental precept of strategic innovation. Moreover, strategic innovation looks at the organization as a whole and attempts to make it workable over time (Haned et al., 2014; Grillitsch et al., 2019). Furthermore, strategic innovation develops when a firm finds gaps in industry positioning and products, and employees' activities aid the innovation process in the hope of addressing these gaps (Duan et al., 2020). According to Khessina et al. (2018), low employee expectations may compromise organizational innovation. Thus, organizational innovation refers to the application of new thoughts or actions that increase organizational effectiveness (Jung & Lee, 2016; da Silva Lopes et al., 2019). Nevertheless, this is significant as the speed of technology and advances in the global business market display an essential need for organizations to adapt to the changing environment. The depth, breadth, and speed of change of trends, such as globalization, technological advancement, and the knowledge-based economy, have put increasing pressure organizations to adopt technological changes and upcoming innovations (Awasthi et al., 2019; Appio et al., 2019; Alnoor et al., 2022). Thus, to maintain competitive advantages and effectiveness, organizations should focus more on organizational innovation, such as innovation behavior and culture.

In this study, we have considered organizational resistance as a key variable because it is each organization's desire to achieve competitive advantages, but the changes in an organization are persistent because of the rapidity of changes in the external and internal environment (Pakdel, 2016; Lenka et al., 2018). Thus, all organizations desire and struggle to change positively to maintain their competitive advantage. Organizations must employ different strategies to ensure that they remain ahead of their competitors (Zhu, 2015; Lorenzo et al., 2018). Sometimes, top management requirements change to increase employees' innovation and efficiency. Therefore, organizations promote change, hoping that employees will perform better and develop their understanding (AlHrassi et al., 2016). However, employees might look at it differently (Kelly, 2008; Oreg, 2006; Perkov et al., 2014). Their attitude toward change may be positive or negative, and this change can affect the organization's performance and can cause the organizational change to fail (Eby et al., 2000; Vakola & Nikolaou, 2005; Maheshwari & Vohra, 2015). Thus, organizational resistance may play a contingent role in the relationship between organizational innovation and effectiveness, especially when employees accept and adapt to change. Therefore, this study also explores the moderating role of organizational resistance on the relationship between organizational innovation and effectiveness.

This study explores the impact of organizational culture on organizational effectiveness through organizational innovation as a key mechanism. Importantly, this study also analyzes organizational resistance as moderating role on the relation of organizational innovation and effectiveness to seek whether organizational resistance enhances the positive effect of organizational innovation on effectiveness and on the indirect effect of organizational culture on the effectiveness of organization via organizational innovation as shown in (Fig. 1).

## Theory and hypothesis development

### Organizational culture and organizational effectiveness

In general, scholars have different interpretations and responses to the ideas and principles of organizational effectiveness (Hartnell et al., 2011; Denison et al., 2012; Grabowski et al., 2014). With the complexity of modernity, the idea of effectiveness continues to grow with organizational effectiveness being exchanged to increase organizational employee performance productivity. Thus, Quinn and

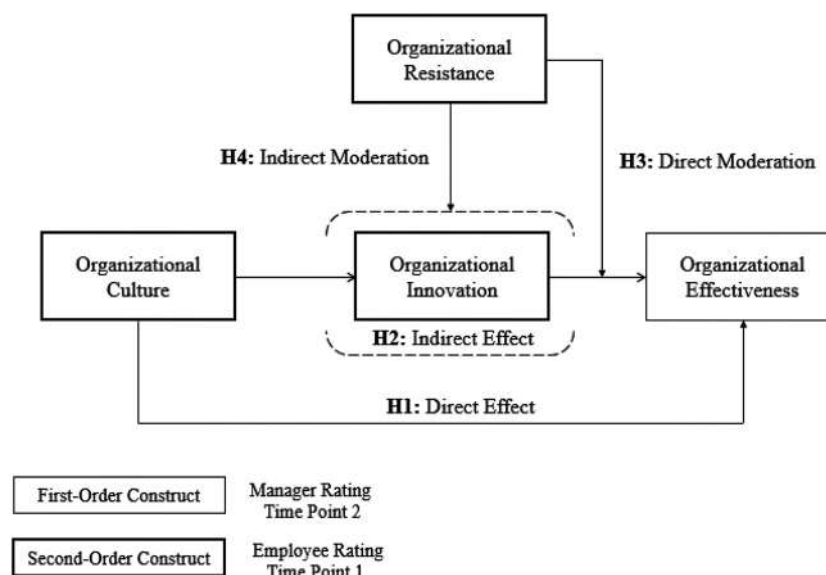


Fig. 1. Research model.

Rohrbaugh (1981, p. 131) have described organizational effectiveness “as agility in decision-making, innovativeness, adaptability to the changing environment, competing with rivals, optimal utilization of resources and talent retention”. Nevertheless, the literature has stressed that organizational culture is a critical factor in determining organizational effectiveness and efficiency (Heracleous, 2001; Denison et al., 2012; Hassan et al., 2021). Organizational culture is one of the most important features of effectiveness as it determines the standards and values of an organization. Furthermore, Denison et al. (2012) and Chatman and O'Reilly (2016) highlighted that organizational culture shapes organizations and provides a better understanding of their effectiveness. Therefore, organizational culture is related to organizational effectiveness. The competing values by Langer and LeRoux (2017) described that organizational culture is suggestively related to organizational effectiveness Gregory et al. (2009). and Zheng et al. (2010) also indicated a positive relationship between organizational culture and effectiveness. Furthermore, recent research has shown that organizational culture has a significant impact on organizational effectiveness (Baek et al., 2019; Adisa et al., 2020; Volkova & Chiker 2020). Thus, the following theory is developed based on the logical argument:

**Hypothesis 1.** Organizational culture has a positive effect on organizational effectiveness.

#### *Mediating effect of organizational innovation*

Organizational innovation is a crucial factor in an organization's development and growth (Cameron & Quinn, 2011a) Hult et al. (2004)., explore an organization's overall innovative capability of bringing new products to the market or opening up new markets by integrating strategic orientation with innovative behavior and procedures.

Therefore, employees' behavior at an individual level, team behaviors, and management behaviors are all examples of behaviors that can be experienced by management or decision-makers at different stages (Wang & Ahmed, 2004; Azar & Ciabuschi, 2017). Thus, behavioral innovation has a continuous impact on the culture of innovation. Furthermore, individual innovation is an employee's perception toward the innovation process, whereas organizational innovation is the behavior of a firm or company to embrace new things, ideas, and the company's attitude toward innovation (Shahzad et al., 2017; Alexe & Alexe, 2018). The central principle of strategic innovation is an organization's ability to track and evaluate its goals. Nonetheless, strategic innovation considers business as a whole and proceeds to make it workable over time (Haned et al., 2014; Grillitsch et al., 2019). Additionally, strategic innovation is formed when an organization identifies gaps in industry positioning and products, and employees' behaviors help the innovation process in the hope of filling the gaps (Duan et al., 2020; Ode & Ayavoo, 2020). Further, Khessina et al. (2018) stated that organizational innovation could be compromised due to low employee expectations. Therefore, the implementation of a new concept or behavior that improves organizational effectiveness is referred to as organizational innovation (Jung & Lee, 2016; da Silva Lopes et al., 2019; Ghazali et al., 2022).

Furthermore, owing to their need for competitive advantage and sustainability, companies place a high value on organizational innovation. Eventually, when considering a competing value framework (Ashraf & Khan 2013; Domínguez-Escrig et al., 2019), organizational culture is expected to be effective to the extent of organizational effectiveness. The influence of organizational culture on organizational innovation varies based on the required effectiveness of the organization. Thus, we predict that organizational culture forms the organizational innovation perceptions of employees, such that these employees perceive procedures and practices that require and reinforce innovation behaviors in the workplace (Szczepeńska-

Woszczyna, 2015; Shanker et al., 2017). Therefore, we propose the following hypothesis:

**Hypothesis 2.** Organizational innovation mediates the relationship between organizational culture and organizational effectiveness.

#### *Moderating role of organizational resistance*

Organizational culture contributes toward maintaining a positive workplace environment as well as organizational performance and effectiveness (Ahmad et al., 2009; Janicijevic, 2011; Taylor, 2014). Organizational culture and employee behavior are prime concerns in the workplace to achieve organizational effectiveness; therefore, cultural characteristics are essential for sustaining and enhancing organizational culture (Millett, 2000; Zhang & Zhu, 2012). Additionally, the biggest challenge in changing an organization is overcoming opposition to the number of organizational culture mechanisms to increase effectiveness (Rafferty & Jimmieson, 2016; Lenka et al., 2018). Generally, culture can both help and impede the transition process, thus it can be both a blessing and curse when it comes to enduring change successfully (Taylor, 2014; Berezhnoy, 2019; Hammood et al., 2020). Thus, employees will continue to work against a change initiative because they feel they have no stake in the process, do not want to take on the increased work that comes with change, are concerned about their lack of required skills to succeed in the organization after the change, or are concerned that they may lose their jobs (Starzyk & Sonnentag, 2019; Lashitew et al., 2020).

Moreover, according to Oreg (2006) and Cameron and Quinn (2011b), organizational resistance is concerned with how organizational principles and productivity are influenced by employees Oreg (2006). and Lenka et al. (2018) divided organizational resistance into three categories: affective, cognitive, and behavioral resistance. Affective resistance is a reaction that focuses on workers' negative feelings about organizational change (Szabla, 2007; Oreg et al., 2011). Employee emotions are represented by cognitive components of resistance. For instance, in cognitive resistance, employees have a strong desire to learn whether the change is mandatory or advantageous to them or the organization. Additionally, cognitive reactions involve employees' critical thinking about organizational change (Oreg, 2006; Oreg et al., 2011; Ming-Chu et al., 2015). Finally, the behavioral factor of resistance refers to workers' intentions, behaviors, or responses as top management tries to implement changes. Typically, employees would argue about the negative aspects and try to justify the negative consequences of organizational change, but when they feel they are at stake in the change process, they will respond positively (Oreg et al., 2011; Merhi & Ahluwalia, 2019).

Thus, we premise that organizational resistance is significantly contingent on the relationship between organizational innovation and organizational effectiveness with different supporting reasons. Employees' support for or resistance to new values is related to an organization's cultural innovation. Owing to the significance of organizational culture and resistance factors for the betterment of an organization, it is necessary to understand the relationship between resistance and culture (Pakdel, 2016; Merhi & Ahluwalia, 2019). Sometimes, change is unsuccessful because of resistance, either active or passive, from those within the organization. Hence, as stated earlier, people resist change for various reasons (Oreg et al., 2018). For example, employees may actively work against a change initiative because they feel that they have no stake in the change process, do not want to take on the increased workload, are concerned about their lack of needed skills to thrive in the organization after the change, or are worried that they might lose their jobs (Starzyk & Sonnentag, 2019; Alfes et al., 2019). Thus, true change in an organization may mean that job positions and titles also change, which means that roles and responsibilities may shift as well (Garcia-Lorenzo, 2020; Gillebaart & Kroese, 2020). Resistance occurs when

employees understand how they fit in with a new way of doing things, such that the positive impact of organizational innovation on effectiveness is stronger when employees understand how they may shift with a new change that would change their job and salary position, so they react differently. Thus, according to the above-mentioned argument, the following hypothesis is proposed:

**Hypothesis 3.** Organizational resistance moderates the relationship between organizational innovation and organizational effectiveness, such that the relationship is stronger when employees highly accept a change that is low.

Organizational resistance, the expected indirect impact of organizational culture on effectiveness through organizational innovation, may have interaction factors. Organizational culture is regarded as one of the most significant factors in assessing an organization's effectiveness as well as one of the most powerful components of an organization that forms norms and values (Felipe et al., 2017). Thus, organizations that pay attention to their employees' perceptions to increase their effectiveness, developed through social relationships of employees with managers and colleagues, contribute to shared perceptions of the cultural content of workplace procedures and practices (Rafferty & Jimmieson, 2017; Metwally et al., 2019). Therefore, it is no surprise that organizational resistance might moderate and strengthen the positive indirect impact of organizational culture on effectiveness, which can maximize the effectiveness of the organization. Consequently, organizational resistance can be a powerful influence because the organization creates an environment that leads to positive effectiveness via innovation within the organization, especially when employees have a positive perspective to accept the change in the organization (Stanley et al., 2005; Lenka et al., 2018). Thus, we predict the following:

**Hypothesis 4.** Organizational resistance moderates the indirect effect of organizational culture on organizational effectiveness through organizational innovation, such that the indirect effect is stronger for followers who are higher in accepting the change than lower.

## Methodology

### Research design, sample size and procedure

This study followed the deductive approach using a non-probabilistic purposive sampling technique (Hulland et al., 2018). Therefore, managers and employees working in the commercial banking industry in Pakistan are this study's target population.

To reduce the probability of common method variance (CMV), the surveys were sent to 15 banks. Thus, we gathered data from a variety of sources, including managers and their subordinates, over two time periods (Podsakoff et al., 2003; 2012). We distributed surveys to 310 employees and 135 managers. In the first wave of data gathering, employees provided their demographic data and assessed organizational culture, organizational innovation, and organizational resistance. One week later, in the second wave, managers evaluated the organizational effectiveness. In these two waves of employee surveys, a total of 280 participants completed the survey (response rate =90%). One week later (second wave), we distributed questionnaires to 135 managers, out of which only 124 responses were returned (response rate =91%). Thus, across the two waves of data collection, we obtained 280 matched dyad surveys. Furthermore, senior human resource personnel in each bank were contacted prior to conducting the survey to obtain the approval for the study; the survey was administered after the permission was given. Survey packets containing the questionnaire, a pre-stamped envelope, and a cover letter were sent to respondents. The cover letter clarified the survey's aim, informed participants that their responses would be kept private, and asked them to return the completed questionnaire using the pre-stamped envelope. We also prepared the questionnaire to make the

variables appear in a way that increased the psychological distance between the predictors and criterion variable (Afthanorhan et al., 2021).

### Variables measurement

All variables were measured by self-reporting on multi-item scales derived from previous studies. Therefore, all measures were evaluated using a seven-point Likert-type scale, with 1 representing strongly disagree and 7 representing strongly agree. All the items are presented in Appendix 1.

When examining a latent construct, the distinction between reflective and formative indicators should be carefully considered (Becker et al., 2012; Sarstedt et al., 2019). Reflective measures are strongly correlated indicators (interchangeable) assumed to be caused by a targeted latent construct, and are generally suggested when personality and attitudinal variables are modeled. However, formative measures encompass indicators that may govern the construct without necessarily being highly correlated (uninterchangeable) such that traditional reliability and validity criteria may be inappropriate and irrelevant (Cheah et al., 2019; Sarstedt et al., 2019).

We used the above-mentioned parameters to differentiate between reflective and formative constructs (i.e., the direction of causality, interchangeability, covariation and antecedents/consequences of indicators or dimensions) (Sarstedt et al., 2019). Hence, our study encompassed two types of reflective and formative variables, which are composed of multiple first-order constructions, each representing an important aspect of the targeted construct second-order constructs. Given its complexity, organizational culture, organizational innovation, and organizational resistance were modeled as a second-order formative construct. Therefore, the type of formative construct is sensitive as dropping any of the dimensions would alter the conceptual domain (e.g., Becker et al., 2012; Cheah et al., 2019; Sarstedt et al., 2019).

**Organizational Culture:** 24-items were adapted from previous studies to measure organizational culture (Cameron & Quinn, 2011a), which encompasses four dimensions: clan, adhocracy, market, and hierarchy (6-items) for each dimension, which were measured reflectively as first-order constructs. Therefore, in the next stage, the four dimensions form the second-order construct of organizational culture, such that higher scores indicate a stronger organizational culture.

**Organizational Innovation:** 8-items were adapted from (Wang & Ahmed, 2004) which comprises both behavioral (4-items) and strategic innovation (4-items), these two dimensions were measured reflectively as first-order constructs and later these two dimensions established organizational innovation formatively where the high scores of these dimensions indicate a stronger organizational innovation.

**Organizational Resistance:** We measured organizational resistance using three dimensions: effective, cognitive, and behavioral (6-items) for each dimension, which were slightly adapted from prior studies (Oreg, 2006). Nevertheless, these three dimensions—effective, cognitive, and behavioral—were treated reflectively as first-order constructs, and these dimensions formatively established the higher-order construct, which is organizational resistance.

**Organizational Effectiveness:** Organizational effectiveness was measured using 13-items taken from Gold, Malhotra, and Segars (2001). Thus, we combined these responses for each participant to form a Mode A first-order composite variable, for which higher scores indicated stronger organizational effectiveness among respondents.

**Control Variables:** Finally, we used firm size and age as control variables for their potential relationship with organizational effectiveness. Firm size was measured as the number of full-time employees, and age was measured by the number of years in business.



## Data analysis and results

We used Smart PLS 3.2.8 software to apply structural equation modeling (SEM) with partial least squares (PLS) to evaluate the hypotheses (Ringle et al., 2015). This is a robust and comprehensive statistical method (Henseler et al., 2009) and is suitable for complex causal studies of both first- and second-order structures and does not require strict assumptions regarding the variables (Hair et al., 2017; 2019a). To test the statistical significance of the path coefficients, the PLS analysis used 5,000 subsamples to generate bootstrap t-statistics with  $n-1$  degrees of freedom (where  $n$  is the number of subsamples).

### Demographic profiles of the respondents

Our data included demographic data such as gender, age, education, job experience, and banks' name. A total of 75.4% of the respondents were male and 24.6% female, 22.1% were under 30 years old, 42.5% were aged between 31 and 40, 21.1% were aged between 41 and 50, and 8.6% were aged above 50. Regarding education, 14.6% had completed high school, 16.1% had a diploma, 56.8% had a bachelor's degree, 5.7% had a master's degree, 4.6% had a Ph.D. Regarding experience, 5.7% had less than two years of experience, 18.6% had 3–5 years, 38.9% had 6–10 years, 10.4% had 11–15 years, and 26.4% had more than 16 years. Finally, with regard to the bank's names, 17.9% of our data came from MCB Bank Ltd, 13.6% from National Bank of Pakistan, 13.7% from Allied Bank Ltd, 17.1% received from Habib Bank Ltd, 16.5% from Bank Alfalah Ltd, and 10.6% from United Bank Ltd. The details are presented in Table 1.

### Measurement model evaluation

Appendix 1 contains the indications for individual reliability, construct reliability, and convergent validity of all reflective latent variables. Additionally, Appendix 1 contains indices that aid in the accurate calculation of second-order formative constructs.

As shown in Appendix 1, the reliability of individual items encompassing the reflective constructs (clan, adhocracy, market, hierarchy, behavioral innovation, strategic innovation, effective resistance,

cognitive resistance, behavioral resistance, and organizational effectiveness) was considered good because their standardized loadings were higher than the minimally acceptable value of 0.7 (Hair et al., 2017). Furthermore, the construct reliability was supported in that the composite reliabilities (CR) for all the reflective constructs were 0.7 or better (Hair et al., 2017). Finally, the average variance extracted (AVE) also exceeded 0.50, supporting convergent validity (Henseler et al. 2009; Hair et al., 2017). Formative variables revealed minimal collinearity, as the respective variance inflation factors (VIF) ranged between 1.426 and 2.270 (see Appendix 1), far below the common cutoff threshold of 5 (Hair et al., 2017). Therefore, it can be concluded that collinearity does not reach critical levels in any formative construct. Finally, the significance and relevance of the outer weights and t-values of the formative constructs are examined. Thus, as Appendix 1 shows, all the formative indicators are significant (Hair et al., 2017). Therefore, we can also conclude that the formative measurement model was achieved.

Regarding discriminant validity of reflective measures, Table 2 presents evidence that the AVE for each of the reflective constructs is greater than the variance shared with the remaining constructs (Henseler et al., 2009). Discriminant validity was also supported in that an additional alternative analysis (e.g., cross-loading matrix) reflected that all the indicators of measures loaded more heavily on their intended constructs than in others (Fornell & Larcker, 1981; Henseler et al. 2009). In addition, the heterotrait-monotrait (HTMT) ratio values were analyzed to assess discriminant validity. HTMT is defined as the ratio of the average heterotrait-heteromethod correlation to the average monotrait-heteromethod correlation, according to Henseler et al. (2015). The results of the HTMT ratios in Table 3 reveal that they are below the 0.85 threshold recommended by Kline (2015). Thus, the results of this study validated the second-order formative construct, including organizational culture (clan, adhocracy, market, and hierarchy) and organizational innovation (behavioral and strategic) for organizational resistance (effective, cognitive, and behavioral).

### Structural model evaluation

The control variables aid in determining whether there are any possible reasons for our results, as well as in reducing errors. Thus, none of our control variables, such as size or age, had a significant effect on organizational effectiveness (see Fig. 2).

Table 4 and Fig. 2 present the direct, indirect, and interaction effects of  $H_1-H_3$ . In support of  $H_1$ , organizational culture was significantly related to organizational effectiveness ( $\beta = 0.311$ ,  $t = 4.811$ ,  $p < 0.000$ ). Regarding  $H_2$ , we predicted that the positive influence of organizational culture on organizational effectiveness is significantly mediated by organizational innovation. Therefore, we employed a bootstrapping technique with 5,000 subsamples, which revealed a significant indirect effect of organizational culture on organizational effectiveness through organizational innovation (indirect effect = 0.176,  $t = 3.957$ ,  $p < 0.000$ ). So, as Preacher and Hayes (2004, 2008) mentioned when the 95% CI does not include 0 (lower limit = 0.069, upper limit = 0.283), this indicates that there is mediation. Therefore, this study confirms the mediating effect of organizational innovation on the relationship between organizational culture and organizational effectiveness; hence,  $H_2$  is supported.

Additionally, we examined  $H_3$  as a simple model. Based on the results presented in Table 4 and Fig. 2, the interaction between organizational innovation and resistance has a significant effect toward organizational effectiveness ( $\beta = 0.197$ ,  $t = 2.167$ ,  $p < 0.001$ ). Therefore, the moderation of organizational resistance,  $H_3$ , is supported. Thus, for the purpose of interoperability, we followed Dawson's (2014) method, where we plotted high versus low organizational resistance regression lines (+1 and -1 standard deviation from the mean). This step indicates that the positive relationship between organizational

**Table 1**  
Respondents profile.

Demographic Item	Categories	Frequency	Percentage
Gender:	Male	211	75.4
	Female	69	24.6
	Total	280	100
Age:	Under 30	62	22.1
	31–40	119	42.5
	41–50	59	21.1
	Above 50	24	8.6
	Total	280	100
Education Level:	High School	41	14.6
	Diploma	55	16.1
	Bachelor's Degree	153	56.8
	Master's Degree	18	5.7
	Doctorate Degree	13	4.6
	Total	280	100
Job Experience:	2 Years or Less	16	5.7
	3–5 Years	52	18.6
	6–10 Years	109	38.9
	11–15 Years	29	10.4
	16 Years or More	74	26.4
	Total	280	100
Banks	MCB Bank Ltd	49	17.9
	National Bank of Pakistan	46	13.6
	Allied Bank Ltd.	44	13.7
	Habib Bank Ltd.	54	17.1
	Bank Alfalah Ltd.	48	16.5
	United Bank Ltd	39	10.6
	Total	280	100

**Table 2**

Descriptive statistics, correlation matrix, and discriminant validity.

Constructs	Mean	SD	Organizational Culture	Organizational Innovation	Organizational Resistance	Organizational Effectiveness
1. Organizational Culture	4.021	0.561	0.744			
2. Organizational Innovation	3.921	0.443	0.317	0.767		
3. Organizational Resistance	4.207	0.708	0.338	0.165	0.865	
4. Organizational Effectiveness	4.015	0.522	0.553	0.293	0.245	0.731

Notes: SD = standard deviation. Bold values on the diagonal are the square roots of the average variance extracted, shared between the constructs and their respective measures. Off-diagonal elements below the diagonal are correlations among the constructs, where values between 0.12 and 0.15 are significant at  $p < 0.05$ , and values of or higher than 0.16 are significant at  $p < 0.01$  (two-tailed test).

innovation and organizational effectiveness is stronger (the slope is more pronounced) when organizational resistance is high rather than low (see Fig. 3). Thus, organizational resistance is a positive moderation.

Finally, we examined moderated mediation ( $H_4$ ) (Hayes, 2015), which suggests that the indirect effect of organizational culture on organizational effectiveness through organizational innovation is strengthened by the level of organizational effectiveness. We followed the recommendations of (Preacher et al., 2007; Hayes, 2013, 2015), and the bootstrapping procedure with 5,000 subsamples was run. Thus, according to the results shown in Table 4, the positive indirect effect of organizational culture changes at distinct levels of organizational resistance acts as a moderator (Preacher et al., 2007; Hayes, 2013). Also, Table 5 indicates that the positive indirect effect matches our prediction when organizational resistance levels are higher: at -1 standard deviation below the mean (low organizational resistance), the positive effect is weaker ( $B = 0.310$ ,  $SE = 0.054$ , 95%  $CI = 0.321, 0.511$ ) than at +1 standard deviation above it (high organizational resistance) ( $B = 0.518$ ,  $SE = 0.054$ , 95%  $CI = 0.421, 0.612$ ). Finally, the index of moderated mediation did not include 0 (index = 0.182,  $SE = 0.053$ , 95%  $CI = 0.158, 0.244$ ), which meets the condition and provides evidence of moderated mediation (Hayes, 2015, 2017). Thus, organizational resistance strengthens the positive indirect effect of organizational culture on organizational effectiveness (Table 5).

#### Assessment of explanatory power and predictive validity using PLSpredict

First, to evaluate the model's in-sample fit, we consider  $R^2$ . Thus, we find that the endogenous constructs (Organizational Effectiveness) gain  $R^2$  values of around ( $R^2=0.415$ ) which can be considered to have a moderate to substantial effect (Hair et al., 2017).

Second, we consider out-of-sample predictive power, using PLSpredict with 10 folds and one repetition to mimic how the PLS model will eventually be used to predict a new observation, rather than using the average across multiple models (Shmueli et al., 2019; Hair et al., 2019b). However, we concentrate our research on the model's main target construct to demonstrate the interpretation (organizational effectiveness) but also state the predictor estimation

statistics for all other endogenous constructs. Therefore, in the first step, we find that all the endogenous constructs' indicators outperform the most naïve benchmark (i.e., the training sample's indicator means), as all indicators yield  $Q^2$  prediction values above 0 (see Table 6). Next, the linear regression model (LM) approach regresses all exogenous indicators on each endogenous indicator to generate predictions. In comparison with the LM outcomes, the PLS-SEM results should have a lower prediction error (e.g., in terms of RMSE or MAE) and greater  $Q^2$  values. This means that a theoretically defined path model enhances (or at the very least does not worsen) the statistical output of available indicator data. This is the case with our model. All RMSE and MAE values for the PLS model are lower than those for the LM model. Additionally, the  $Q^2$  values for the indicators of the PLS model are larger than those generated for the LM model (Table 6). Therefore, we can assume that our model has a high level of predictability. (Hair et al., 2019b),

#### Discussion and implications

This study scrutinizes the relationship between organizational culture and organizational effectiveness, using organizational innovation as a mediator, while also analyzing the contingent factor of organizational resistance on the relationship between organizational innovation and effectiveness, as well as the indirect effect of organizational culture on organizational innovation. Therefore, our study reveals that organizational culture positively influences organizational effectiveness by enhancing perceptions of organizational innovation within the organization. Significantly, the findings also reveal that employees' acceptance of change in the workplace can amplify the positive effects of organizational culture and innovation on organizational effectiveness. Therefore, this outcome leads to several vital arguments. First, organizational culture may be considered a powerful factor that rests on employees' expectations of productivity and organizational innovation within the organization. Second, employee acceptance of change is needed for the organizational culture to be the most successful. It is a positive sign when employees consider improvements more readily and see a reasonable environment and a positive sense of organizational innovation. Consequently, the degree of organizational effectiveness increases.

**Table 3**

Discriminant validity Via HTMT.

Constructs	Clan	Adhocracy	Market	Hierarchy	Behavioural	Strategic	Effective	Cognitive	Behavioral
Clan									
Adhocracy	0.454								
Market	0.399	0.679							
Hierarchy	0.527	0.604	0.529						
Behavioral	0.189	0.264	0.359	0.558					
Strategic	0.784	0.633	0.667	0.593	0.199				
Effective	0.511	0.771	0.652	0.623	0.521	0.345			
Cognitive	0.418	0.622	0.456	0.423	0.631	0.523	0.563		
Behavioral	0.517	0.564	0.551	0.711	0.441	0.412	0.641	0.632	

Notes: HTMT should be lower than 0.85.

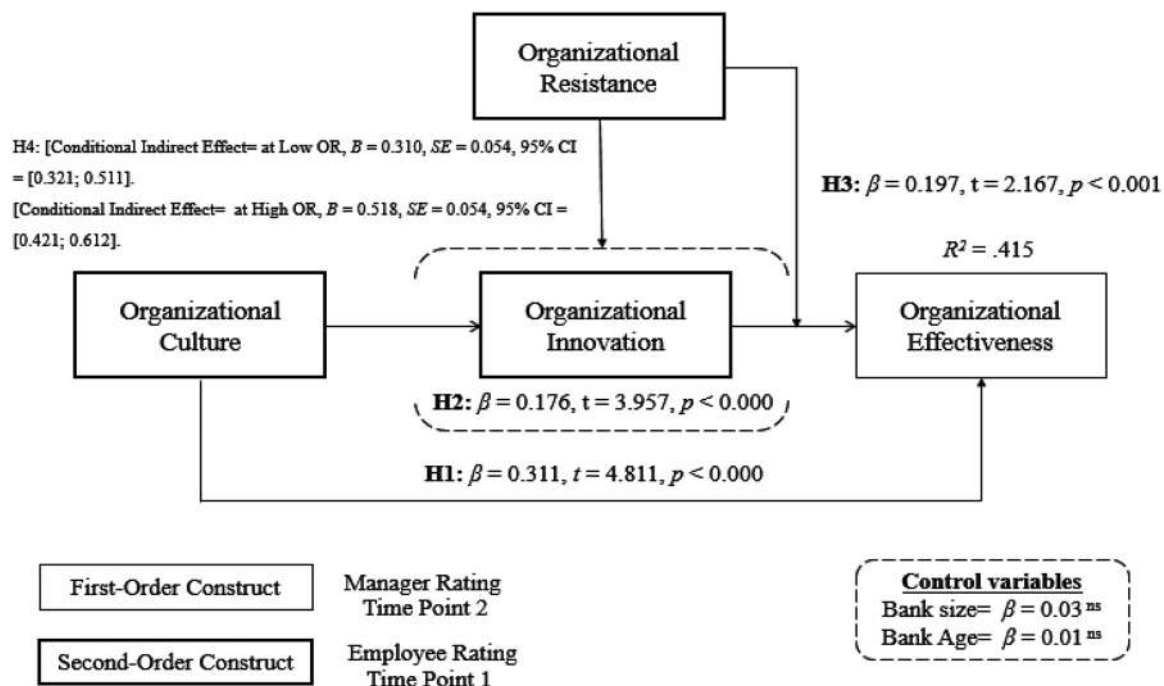


Fig. 2. Research model: hypotheses testing.

### Theoretical implications

This study makes vital contributions to the literature by expanding the competing value framework, which explains the relationship between organizational culture and effectiveness in the banking sector. The competing values framework is a specific theory that provides empirical evidence regarding organizational culture and effectiveness. Previous studies have revealed a positive and significant relationship between organizational culture and organizational effectiveness (Gochhayat et al., 2017; Meng & Berger, 2019). However, this study verifies and re-establishes this relationship in the context of the Pakistani banking sector. Consequently, by investigating how organizational resistance influences organizational effectiveness in an underdeveloped country like Pakistan, this study will contribute significantly in confidently generalizing the findings to different cultures and sectors. Second, this study contributes to the extant literature on the relationship between organizational culture and effectiveness through a mechanism such as organizational innovation. To the best of our knowledge, previous studies have overlooked the link between this relationship and the underlying mechanism. This study makes a significant contribution by expanding this limited stream of research.

Importantly, this study argues that organizational culture and innovation have a positive effect on organizational effectiveness. Thus, clarifying that these effects may be contingent on the situation and, particularly, on follower-related variables, such as adapting to

changes. We identify organizational resistance as an important boundary condition for the effect of organizational culture on organizational effectiveness through organizational innovation. Thus, this study proves that adapting to changes embedded in workplace procedures and positive perception (i.e., organizational culture and innovation) prompts the effectiveness of the organization to survive in a competitive advantage in this rapid change of technology and market. Thus, organizational resistance acts as a moderator.

### Managerial implications

This study has several practical implications. Usually, the banking sector in Pakistan plays a vital role in the country's economy (Asrar-ul-Haq & Kuchinke, 2016). However, most bankers, banking leaders, and executives focus on financial aspects such as how to increase sales, improve profitability, and maintain credit limits. Unfortunately, non-financial aspects that concentrate on organizational culture and major changes in banks regarding structure or employees' attitude toward change have been ignored. This is a common problem in eastern and developing countries (Aibar-Guzmán et al., 2022). They do not focus on and invest in behaviors and changes. The present study recommends to the Pakistani banking sector that they should consider banking culture as an "asset" like the assets of banks. Organizational culture can be an intangible asset of banks that can help improve banking effectiveness. Bank managers, change management practitioners, organizational development practitioners, business

**Table 4**  
Structural path analysis: direct, indirect and simple interaction effect.

Hypothesis	Relationship	Std Beta	Std Error	t-value	p-value	Bias and Corrected Bootstrap 95% CI LL 95% CI	UL 95% CI	Decision
H1	OC→OEF	0.311	0.061	4.811	0.000	0.186	0.397	Supported
H2	OC→OIN→OEF	0.176	0.047	3.957	0.000	0.069	0.283	Supported
H3	OIN × ORS→OEF	0.197	0.045	2.167	0.001	0.028	0.167	Supported

Notes: N=280. Bootstrap sample size = 5,000. SE=standard error; LL=lower limit; CI=confidence interval; UL=upper limit 95% bias-correlated CI

Notes: OC→OEF=Organizational Culture→Organizational Effectiveness; OC→OIN→OEF=Organizational Culture→Organizational Innovation→Organizational Effectiveness; OIN×ORS→OEF=Organizational Innovation × Organizational Resistance→Organizational Effectiveness.

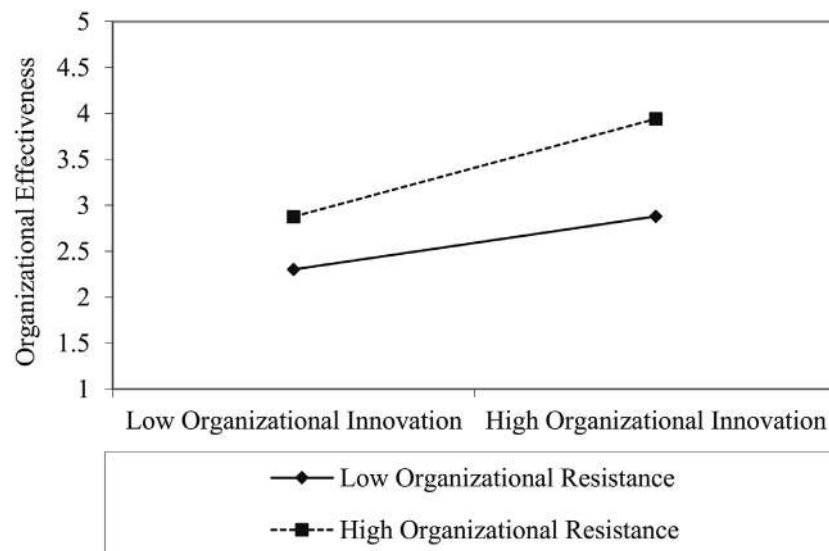


Fig. 3. Interaction plot of organizational innovation  $\times$  organizational resistance on organizational effectiveness.

leaders, and change agents are beginning to raise their awareness of the importance of organizational culture. The current study hopes that awareness regarding organizational culture will be extensively increased because it has implications for the Pakistani banking sector. The Pakistani banking sector can enhance banking effectiveness by giving due attention to organizational culture, as it is an integral part of their organizations.

In addition, this study advises that the banking sector in Pakistan focus more on building organizational culture because this value is related to the organization. Practically, this culture can be viewed by both employees and customers. For instance, adapting innovation aspects that can help develop new products and services helps explore new markets and strategies. The top management of organizations always tries to improve innovation habits among employees (Wang & Ahmed, 2004). Therefore, shaping and organizational innovation with a proper introduction of innovation and a better understanding of change dynamics could be shared among employees, that leads to positive outcomes such as organizational effectiveness.

Finally, the current study suggests that Pakistan's banking sector focuses more on building organizational culture because this value is related to the organization. However, the banking sector should differentiate between change and innovation. Resistance is a hidden factor influencing development. This study shows that the Pakistani banking sector does not have any specific culture, but uses the four cultures simultaneously. Thus, our results reveal that organizational culture, innovation, and resistance are important predictors of organizational effectiveness. Therefore, bankers and banking

management in Pakistan must recognize the importance of these factors. In addition, bankers in Pakistan need to focus on resistance practically to improve their effectiveness. Most importantly, bankers should know what kind of resistance (affective, cognitive, or behavioral) is present. By controlling for the resistance factor among employees, culture, change, and innovation can provide positive results. The current study adds new knowledge regarding organizational culture, innovation, and resistance in South Asian countries, such as Pakistan, in the banking sector.

#### Limitations and future research

While this study has some implications, it also has some limitations that leave an area for future research. The first drawback of this study is that it is based on cross-sectional results, which means that a causal inference cannot be drawn, making it difficult to draw conclusive conclusions about causality. Nevertheless, analyzing critical issues such as organizational culture, innovation, and effectiveness requires total anonymity, making longitudinal research difficult (e.g., Podsakoff et al., 2003). This opens the path for additional investigations into formulas for longitudinal or experimental designs that can help improve the causality of the results. The second limitation is that the sample of this study is from the banking industry in Pakistan. The cultural context in the banking industry is unlike other organization policies. Thus, future work can choose to concentrate on a different sector to validate and generalize recent evidence. Third, we gain a better understanding of the links between organizational culture and effectiveness in the banking industry. Nevertheless, other

Table 5

Conditional indirect effect of organizational culture on organizational effectiveness at values of organizational resistance.

Moderator: Organizational Resistance	Indirect effect	Boot SE	Bias and Corrected Bootstrap 95% CI	
			LL 95% CI	UL 95% CI
−1 standard deviation (−0.414)	0.310	0.054	0.321	0.511
at the mean (0.00)	0.461	0.036	0.393	0.415
+1 standard deviation (0.414)	0.518	0.054	0.421	0.612
Index of Moderated Mediation		SE	Bias and Corrected Bootstrap 95% CI	
			LL 95% CI	UL 95% CI
0.182		0.053	0.158	0.244

Notes: N=280. Bootstrap sample size = 5,000. SE=standard error; LL=lower limit; CI=confidence interval; UL=upper limit 95% bias-correlated CI



**Table 6**  
PLS-predict assessment.

PLS-SEM				LM				PLS-LM		
Indicators	RMSE	MAE	Q <sup>2</sup>	Indicators	RMSE	MAE	Q <sup>2</sup>	RMSE	MAE	Q <sup>2</sup>
CLN1	0.577	0.470	0.373	CLN1	0.608	0.517	0.303	-0.031	-0.047	0.070
CLN2	0.579	0.483	0.257	CLN2	0.591	0.496	0.224	-0.012	-0.013	0.033
CLN3	0.519	0.437	0.404	CLN3	0.598	0.518	0.210	-0.079	-0.081	0.194
CLN4	0.626	0.516	0.318	CLN4	0.649	0.552	0.269	-0.023	-0.036	0.049
CLN5	0.610	0.510	0.260	CLN5	0.634	0.546	0.199	-0.024	-0.036	0.061
CLN6	0.614	0.521	0.248	CLN6	0.649	0.556	0.159	-0.035	-0.035	0.089
HRC1	0.679	0.552	0.176	HRC1	0.718	0.583	0.079	-0.039	-0.031	0.097
HRC2	0.673	0.554	0.220	HRC2	0.705	0.574	0.144	-0.032	-0.020	0.076
HRC3	0.772	0.591	0.157	HRC3	0.809	0.619	0.074	-0.037	-0.028	0.083
HRC4	0.686	0.575	0.146	HRC4	0.692	0.581	0.132	-0.006	-0.006	0.014
HRC5	0.538	0.436	0.310	HRC5	0.556	0.477	0.264	-0.018	-0.041	0.046
HRC6	0.601	0.496	0.355	HRC6	0.644	0.537	0.260	-0.043	-0.041	0.095
ADH1	0.592	0.486	0.282	ADH1	0.621	0.525	0.210	-0.029	-0.039	0.072
ADH2	0.618	0.515	0.247	ADH2	0.649	0.562	0.169	-0.031	-0.047	0.078
ADH3	0.602	0.487	0.348	ADH3	0.632	0.515	0.282	-0.030	-0.028	0.066
ADH4	0.675	0.523	0.207	ADH4	0.711	0.542	0.118	-0.036	-0.019	0.089
ADH5	0.552	0.447	0.209	ADH5	0.569	0.482	0.158	-0.017	-0.035	0.051
ADH6	0.610	0.505	0.383	ADH6	0.669	0.562	0.259	-0.059	-0.057	0.124
MKT1	0.664	0.558	0.241	MKT1	0.728	0.620	0.088	-0.064	-0.062	0.153
MKT2	0.626	0.522	0.233	MKT2	0.632	0.525	0.219	-0.006	-0.003	0.014
MKT3	0.740	0.598	0.263	MKT3	0.774	0.641	0.194	-0.034	-0.043	0.069
MKT4	0.609	0.508	0.342	MKT4	0.646	0.547	0.260	-0.037	-0.039	0.082
MKT5	0.711	0.563	0.368	MKT5	0.740	0.592	0.316	-0.029	-0.029	0.052
MKT6	0.624	0.508	0.296	MKT6	0.633	0.521	0.277	-0.009	-0.013	0.019
BHR1	0.687	0.528	0.328	BHR1	0.752	0.584	0.196	-0.065	-0.056	0.132
BHR2	0.612	0.514	0.341	BHR2	0.644	0.523	0.271	-0.032	-0.009	0.070
BHR3	0.519	0.437	0.404	BHR3	0.598	0.518	0.210	-0.079	-0.081	0.194
BHR4	0.954	0.778	0.248	BHR4	1.055	0.878	0.081	-0.101	-0.100	0.167
STG1	0.672	0.535	0.285	STG1	0.687	0.545	0.253	-0.015	-0.010	0.032
STG2	0.584	0.466	0.301	STG2	0.630	0.528	0.186	-0.046	-0.062	0.115
STG3	0.622	0.513	0.352	STG3	0.644	0.548	0.305	-0.022	-0.035	0.047
STG4	0.614	0.521	0.248	STG4	0.648	0.555	0.160	-0.034	-0.034	0.088
PLS				LM				PLS-LM		
Indicators	RMSE	MAE	Q <sup>2</sup>	Indicators	RMSE	MAE	Q <sup>2</sup>	RMSE	MAE	Q <sup>2</sup>
EFF1	0.982	0.795	0.169	EFF1	1.042	0.875	0.065	-0.060	-0.080	0.104
EFF2	0.632	0.513	0.148	EFF2	0.664	0.550	0.060	-0.032	-0.037	0.088
EFF3	0.577	0.470	0.373	EFF3	0.609	0.518	0.301	-0.032	-0.048	0.072
EFF4	0.610	0.510	0.260	EFF4	0.635	0.546	0.198	-0.025	-0.036	0.062
EFF5	0.579	0.483	0.257	EFF5	0.591	0.496	0.223	-0.012	-0.013	0.034
EFF6	0.983	0.829	0.173	EFF6	1.049	0.880	0.060	-0.066	-0.051	0.113
COG1	0.626	0.516	0.318	COG1	0.649	0.552	0.268	-0.023	-0.036	0.050
COG2	0.685	0.569	0.183	COG2	0.748	0.639	0.027	-0.063	-0.070	0.156
COG3	0.632	0.513	0.148	COG3	0.664	0.551	0.059	-0.032	-0.038	0.089
COG4	0.584	0.466	0.301	COG4	0.630	0.528	0.186	-0.046	-0.062	0.115
COG5	0.982	0.795	0.169	COG5	1.036	0.863	0.074	-0.054	-0.068	0.095
COG6	0.697	0.571	0.249	COG6	0.760	0.639	0.107	-0.063	-0.068	0.142
BEH1	0.562	0.442	0.370	BEH1	0.607	0.512	0.267	-0.045	-0.070	0.103
BEH2	0.604	0.482	0.342	BEH2	0.687	0.591	0.147	-0.083	-0.109	0.195
BEH3	0.589	0.488	0.407	BEH3	0.649	0.557	0.279	-0.060	-0.069	0.128
BEH4	0.660	0.543	0.271	BEH4	0.728	0.619	0.114	-0.068	-0.076	0.157
BEH5	0.672	0.535	0.285	BEH5	0.696	0.546	0.233	-0.024	-0.011	0.052
BEH6	0.983	0.829	0.173	BEH6	1.050	0.868	0.058	-0.067	-0.039	0.115
ORE1	0.954	0.778	0.248	ORE1	1.056	0.876	0.079	-0.102	-0.098	0.169
ORE2	0.626	0.516	0.318	ORE2	0.656	0.558	0.252	-0.030	-0.042	0.066
ORE3	0.614	0.521	0.248	ORE3	0.647	0.553	0.165	-0.033	-0.032	0.083
ORE4	0.632	0.513	0.148	ORE4	0.660	0.543	0.072	-0.028	-0.030	0.076
ORE5	0.579	0.483	0.257	ORE5	0.594	0.494	0.216	-0.015	-0.011	0.041
ORE6	0.711	0.563	0.368	ORE6	0.741	0.593	0.313	-0.030	-0.030	0.055
ORE7	0.612	0.514	0.341	ORE7	0.644	0.523	0.271	-0.032	-0.009	0.070
ORE8	0.602	0.487	0.348	ORE8	0.632	0.515	0.283	-0.030	-0.028	0.065
ORE9	0.740	0.598	0.263	ORE9	0.773	0.641	0.194	-0.033	-0.043	0.069
ORE10	0.675	0.523	0.207	ORE10	0.712	0.544	0.117	-0.037	-0.021	0.090
ORE11	0.626	0.522	0.233	ORE11	0.632	0.525	0.219	-0.006	0.003	0.014
ORE12	0.687	0.528	0.328	ORE12	0.752	0.584	0.196	-0.065	-0.056	0.132
ORE13	0.618	0.515	0.247	ORE13	0.649	0.562	0.169	-0.031	-0.047	0.078

Notes: PLS-SEM= Partial Least Squares Structural Equation Modeling, LM= Linear Regression Model, RMSE= Root Mean Squared Error, MAE= Mean Absolute Error, Q<sup>2</sup>= Q<sup>2</sup> Predict.

additional variables, such as knowledge management, organizational learning, employee performance, and corporate suitability, should also be analyzed in future research to explain the mediating role of organizational resistance. Furthermore, there should be more

integration and a different set of values to measure aspects of organizational culture. Therefore, it is necessary to incorporate a broader set of culture types (Hartnell et al., 2011). Finally, as mentioned previously, this study was conducted in Pakistan. As it is limited to the

Pakistani context, the results cannot be generalized to other South Asian countries due to geographical, political, cultural, and other differences.

### Ethical approval

Researchers conduct studies involving human participants per institutional and national research committee's ethical standards and the 1964 Helsinki declaration and its later amendments or comparable ethical standards.

### Informed consent

We obtained informed consent from participants.

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We thank the sponsor of this research.

### Declaration of Competing Interest

All authors declare no conflict of interest.

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### Appendix 1. Measurement model: item loading and weight, construct reliability and convergent validity

1st-Order Constructs	2nd- Order Constructs	Items	Scale	Loading/weight	CR/VIF	AVE/t-value
Clan		CLN1: My Bank is the very personal place, it is like an extended family, people seem to share a lot of themselves.	Reflective	0.865	0.946	0.744
		CLN2: My Bank is a dynamic and entrepreneurial place; people are willing to stick their necks out and take risks.		0.863		
		CLN3: My Bank is very result oriented; a major concern is with getting the job done, people are very competitive and achievement oriented.		0.850		
		CLN4: My Bank is a very controlled and structured place; formal procedure generally governs what people do.		0.867		
		CLN5: The manager in my bank is generally considered to exemplify mentoring, facilitating, or nurturing.		0.850		
		CLN6: The manager in my bank is generally considered to exemplify entrepreneurship, innovation, or risk taking.		0.879		
Hierarchy		HRC1: The manager in my bank is generally considered to exemplify a no nonsense, aggressive, result oriented focus.	Reflective	0.866	0.946	0.745
		HRC2: The manger in my bank is generally considered to exemplify coordinating, organizing, or smooth-running efficiency.		0.849		
		HRC3: The management style in my bank is characterized by teamwork, consensus, and participation.		0.854		
		HRC4: The management style in my bank is characterized by individual risk taking, innovation, freedom, and uniqueness.		0.869		
		HRC5: The management style in my bank is characterized by hard-driving competitiveness, high demands, and achievement.		0.866		
		HRC6: The management style in my bank is characterized by security of employment, conformity, predictability, and stability in relationship.		0.874		
Adhocracy		ADH1: The glue that holds my bank together is loyalty and mutual trust, commitment to this organization runs high.	Reflective	0.877	0.946	0.746
		ADH2: The glue that holds my bank together is commitment to innovation and development. There is an emphasis on begin on the cutting edge.		0.867		
		ADH3: The glue that holds my bank together is the emphasis on the achievement and goal accomplishment.		0.859		
		ADH4: The glue that holds my bank together is formal rules and policies, maintaining a smoothly running organization is important.		0.846		
		ADH5: My bank emphasizes human development, high trust, openness, and participation persist.		0.871		
		ADH6: My Bank emphasizes acquiring new resources and creating new challenges. Trying new things and prospecting for opportunities are valued.		0.862		
Market			Reflective	0.865	0.946	0.743

(continued)

Behavioral	Organizational Culture	MKT1: My bank emphasizes competitive actions and achievement. Hitting stretch targets and winning in the marketplace and dominant.				
		MKT2: My bank emphasizes permanence and stability, efficiency, control and smooth operations are important.		0.838		
		MKT3: My bank defines success on the basis of the development of human resources, teamwork, employee's commitment, and concern for people.		0.865		
		MKT4: My bank defines success on the basis of having unique or the newest products. It is a product leader and innovator.		0.866		
		MKT6: My bank defines success on the basis of winning the marketplace and outpacing competition. Competitive market leadership is key.		0.870		
		MKT6: My bank defines success on the basis of efficiency. Dependable delivery, smooth scheduling, and low-cost production are critical.		0.873		
		Clan	Formative	0.334	1.462	3.491
		Adhocracy		0.321	1.468	3.896
		Market		0.325	1.426	4.200
		Hierarchy		0.330	1.496	2.175
Strategical	Organizational Innovation	BHR1: We get a lot of support from top management if we want to try new ways of doing things.		0.859	0.930	0.768
		BHR2: In our Bank, we tolerate individuals who do things in a different way.		0.875		
		BHR3: We are willing to try new ways of doing things and seek unusual, novel solutions.		0.882		
		BHR4: Top management encourage people to think and behave in original and novel ways.		0.890		
		STG1: Our Bank's R&D or product development resources are not adequate to handle the development need of new products and services.	Reflective	0.871	0.911	0.782
		STG2: Key executives of the Bank are willing to take risks to seize and explore "chancy" growth opportunities.		0.873		
		STG3: Senior executives constantly seek unusual, novel solutions to problems via the use of "Idea men".		0.882		
		STG4: When we see new ways of doing things, we are last at adopting them.		0.881		
		Behavioral	Formative	0.594	1.492	4.169
		Strategical		0.600	1.558	3.761
1st-Order Constructs Effective	2nd- Order Constructs	Items	Scale	Loading/weight	CR/VIF	AVE/t-value
		EFF1: I believed that the change will have a negative effect on the manner in which work is performed by the division.	Reflective	0.858	0.946	0.743
		EFF2: I thought it's good that the change is taking place.		0.845		
		EFF3: I was open to consider and try out the change.		0.870		
		EFF4: I believed that the change will make my job harder.		0.879		
		EFF5: I believed that the change will benefit the division.		0.864		
		EFF6: I thought the change will benefit me personally.		0.857		
		COG1: I was afraid of the change.	Reflective	0.865	0.950	0.760
		COG2: I had a bad feeling regarding the change.		0.874		
		COG3: I was enthusiastic towards the change.		0.863		
Cognitive	Organizational Resistance	COG4: The change made me angry.		0.887		
		COG5: The change stressed me out.		0.873		
		COG6: I tended to oppose the change.		0.868		
		BEH1: I was thinking of going along with the change.	Reflective	0.857	0.947	0.749
		BEH2: I was looking for ways to prevent the change.		0.870		
		BEH3: I protested against the change.		0.867		
		BEH4: I complained about the change to my friends.		0.870		
		BEH5: I expressed my objections of the change to members of management.		0.860		
		BEH6: I spoke for the change.		0.870		
		Effective	Formative	0.384	2.469	1.734
1st-Order Constructs Organizational Effectiveness	2nd- Order Constructs	Cognitive		0.370	2.270	1.903
		Behavioral		0.363	2.438	4.980
		Items	Scale	Loading/weight	CR/VIF	AVE/t-value
		ORE1: My Bank improve its ability to identify new business opportunities.	Reflective	0.849	0.971	0.718
		ORE2: My Bank improve its ability to coordinate the development efforts of different units.		0.844		
				0.743		

(continued)

<b>ORE3:</b> My Bank improve its ability to anticipate potential market opportunities for new Products/ Services.	
<b>ORE4:</b> My Bank improve its ability to adapt quickly to unanticipated changes.	0.841
<b>ORE5:</b> My Bank improve its ability to anticipate surprise and crises.	0.844
<b>ORE6:</b> My Bank improve its ability to quickly adapt its goal and objectives to industry or market.	0.745
<b>ORE7:</b> My Bank improve its ability to decrease market response time.	0.850
<b>ORE8:</b> My Bank improve its ability to react to new information about banking industry.	0.911
<b>ORE9:</b> My Bank improve its ability to be responsive to new market demands.	0.849
<b>ORE10:</b> My Bank improve its ability to avoid overlapping development of corporate initiatives.	0.853
<b>ORE11:</b> My Bank improve its ability to streamlines its internal processes.	0.846
<b>ORE12:</b> My Bank improve its ability to reduce redundancy of information and knowledge.	0.854
<b>ORE13:</b> My Bank improve its ability to identify new business opportunities.	0.850

Notes: CR= Composite Reliability, VIF= Variance Inflation Factor, AVE= Average Variance Extracted.

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