ORIGINAL RESEARCH

Mediating Role of Change Capability in the Relationship Between Transformational Leadership and Organizational Performance: An Empirical Research

Trung Thanh Le¹ Ba Phong Le ²

¹National Economics University, Hanoi, Vietnam; ²Hanoi University of Industry, Hanoi, Vietnam **Background:** Improving organizational performance for firms in developing countries like Vietnam by huge investments in technological innovation is not feasible, because the majority of firms in these nations are small and medium size, with a lack of capital, resources, and R&D capabilities. Given the important role of change capability for organizational performance, the purpose of this paper is to investigate the impacts of transformational leadership (TL) on organizational performance via the mediating role of organizational change capability in cases of Vietnamese enterprise.

Methods: Based on the cross-sectional design method and empirical data, this study applied analysis of moment structures (AMOS) and structural equation modeling (SEM) to inspect the link between the latent variables in the proposal research model through the empirical data gathered from 302 participators in 125 Vietnamese firms.

Results: The findings of this study show the significant and positive influences of TL on organizational change capability and organizational performance. Importantly, organizational change capability significantly mediates the influence of TL on operational and financial performance.

Conclusion: This study contributes to filling the gaps in the literature and advancing the insights of how TL fosters specific aspects of change capability for improving two crucial components of organizational performance, namely operational and financial performance.

Keywords: transformational leadership, organizational performance, innovative culture, capable champions, operation performance, financial performance

Introduction

Before the rapid technological progress and fierce competition of the business environment, scholars highlighted the important role of improving organizational performance and viability based on promoting the leadership effect and effectively using their potential resources such as human capital.^{4,6} Improving organizational performance is considered a critical solution for firms to survive and develop in a sustainable way.⁷ Among various factors affecting organizational performance, previous studies highlighted the important influences of leadership^{8,9} and organizational change capability (OCC)^{6,10} on organizational performance. Consequently, this study will focus on exploring how transformational leadership (TL) predicts

Correspondence: Ba Phong Le Email lebaphong@haui.edu.vn

Received: 25 August 2021 Accepted: 7 October 2021 Published: 27 October 2021 © 2021 Le and Le. This work is published and licensed by Dove Medical Press Limited. The full terms of this license are available at https://www.dovepress.com/terms.php you hereby accept the Terms. Non-commercial use of the work are permitted without any further permission for Dove Medical Press Limited, provided the work is properly attributed. For permission for commercial use of this work, please see paragraphs 4.2 and 5 of our Terms (https://www.dovepress.com/terms.php). change capability to improve organizational performance. These issues are new, urgent, and very essential for firms in the context of change by following grounds.

Business environments are rapidly changing and unpredictable, with increasing speeds and complexity.^{9,11} Consequently, leaders and their organizations are attempting to diagnose effective ways for responding to the changes of business environment and initiating to implement changes. Even so, they sometime still fail due to poor change initiatives and dearth of change leadership practices.^{8,9} To successfully improve organizational capability for change, Lei et al9 indicated that CEOs and managers need to be aware of the necessity for change, improve their ability to adapt to change, and practice an appropriate leadership style to enhance the organization's ability to change because they act as a key agent in change efforts of an organization. Prior researchers asserted that, among dominant leadership styles, transformational leadership is considered the most effective one that brought firms many key benefits and various important outcomes (Son et al. 2020).¹² TL is particularly appropriate for firms in developing countries to nurture innovative behavior among employees and bring about sustainable economic growth before the changes of economic and business circumstance.^{13,14} However, the mechanism of how TL affects change capability is still limited.⁹ So, examining the correlation between TL and OCC can increase more insight on the new approach to foster organization capability for change.

Transformational leaders not only induce a positive effect on change capability, they also inspire and arouse working motivation of employees to fulfill their duties more than expected, thereby helping the organization improve organizational performance (Son et al. 2020).¹⁻³ Transformational leaders have the capacity to develop and utilize all available resources effectively over short- and long-term periods to help firms increase organizational performance and achieve sustainability (Son et al, 2020; Le & Le, 2021).¹⁵ In particular, note Son et al (2020) supposed that transformational leaders inspire their employees to achieve the highest degrees of achievement and managerial for organizational performance. Nevertheless, there has been a dearth of research investigating the connection between TL and certain aspects of firm performance in terms of operational and financial performance (Son et al, 2021).^{6,16} To address this problem, our study is conducted to clarify the different effects of transformational leadership on particular parts of

organizational performance, namely operational performance and financial performance. The findings of paper are, therefore, expected to generate more valuable understanding which can better explain the differences in several aspects of performance among enterprises.

Prior academic studies suggested the notable impacts of TL on change capability, 9,17,18 which in turn creates an appropriate climate for stimulating organizational performance.^{6,19} Especially, Yasir et al¹⁴ noted that it is necessary to continuously investigate more processes to help transformational leaders manage changes effectively. However, according to author knowledge, there is a lack of studies investigating the possible mediating mechanism of change capability, especially in terms of capable champions and innovative culture in the TL-OCC relationship. This restricts our knowledge of the diverse methods or approaches by which transformational leaders can produce a positive culture or establish a strong OCC for enhancing organizational performance. Such a situation requires a more theoretical basis and practical confirmation to explain and confirm the relationship among the structures. Therefore, this study is undertaken to clarify impacts of TL on organizational performance via the intermediating effects of change capability.

The above argument raises the following three research questions (RQ):

RQ1. Does TL significantly predict change capability?

RQ2. Does TL induce different impacts on operational and financial performance?

RQ3. Does change capability serve as a mediator in the relationship between TL and organizational performance or not?

To shed light on the three research questions above, the paper utilizes Structural Equations Modeling (SEM) to evaluate the influence and relationship among the latent research factors by surveying 302 respondents of 125 service and manufacturing companies in Vietnam. This paper is expected to offer valuable and useful initiatives for enterprises in the context of developing countries like Vietnam to successfully foster their change capability and organizational performance.

Literature Review and Hypotheses Development

The Effects of TL on Change Capability

Change capability plays an increasingly important role towards the sustainable development of firms due to its

decisive influence on firm competitive advantage during the fast change of business environment.9,20 According to Lei et al,⁹ change capability manifests "the organization's ability to produce and implement successful solutions aiming to respond to environmental and organizational evolution." Judge and Elenkov²¹ considered change capability as one of the most important and dynamic competences that allow organizations to convert or/and make old capabilities suitable for the new opportunities and threats, and contributes to generating new capabilities for firms to achieve competitive advantage. In the same vein, Stouten et al²⁰ highlighted change capability as a dynamic force of bringing organizations core benefits at some decisive point of time. It is widely acknowledged as a "meta-capability" allowed firms to succeed in a fiercely competitive environment and achieve sustainable development over the long term.^{9,22}

Lei et al⁹ have recognized and considered the capable champions and innovative culture as two dominants reflecting the change capability of an organization. Wherein, innovative culture reflects a firm's capability to set up norms of innovation/change as well as significant supports for innovative behaviors and activities.^{9,23} Innovative culture helps firms to perceive what are changes in the business environment and how to prepare and manage it effectively. Capable champions allude to the individuals' superior capabilities in challenging the status quo and bringing positive changes for an organization based on possessing good thinking ability and interpersonal expertise to communicate and bring positive changes into existence.^{9,23}

In general, innovative culture can be seen as a prerequisite for an organization to raise awareness and prepare for change activities; while capable champion is a sufficient condition to implement changes smoothly.⁹

This study is particularly attentive to these ingredients in assessing the organizational capability for change because they reflect the root of change capability and core competence to implement positive changes in a complex environment. Scholars identified OCC as one of the most crucial competences for firms to successfully implement change and innovation.^{9,10} However, change capability is also the capacity that organizations are lacking most today.¹⁷ So, this study attempts to explore a suitable mechanism for improving this capability by examining the TL's effects.

Leadership plays a key role in nurturing OCC. Indeed, prior studies underlined the direct and positive effects of leaders on innovation and change capability by constituting appropriate conditions and climate within an organization assisting for the generation and implementation of innovative activities.^{17,20,24} They were also directly involved in promoting capabilities of change and innovation by developing a conducive climate for processes of sharing knowledge among individuals,⁴ or by bringing about significant supports that stimulate activities of experimenting and introducing new ideas, procedures, and processes.²⁵ Transformational leadership is utilized to depict leaders characterizing by four features: (1) idealized influence reflects a leader's ability in providing a vision and mission, inspiring pride, and obtaining trust and respect from followers; (2) intellectual stimulation expresses the ability of leaders in promoting intelligence, creative problem-solving, and rationality; (3) inspirational motivation manifests the concerns of transformational leaders in using symbols to focus employees' efforts, exhibiting high expectations and important goals in simple and attractive ways; and (4) individualized consideration reflects attentiveness of leaders in satisfying employees' needs, advising, and coaching each employee severally.^{4,26}

Leadership is a decisive factor for the success of the organization that is closely related to a diversity of key outcomes such as innovation and change capability.^{8,9,27} According to Lei et al⁹ "leadership plays a central role in both the process of change and change implementation". Especially, Lutz Allen et al²⁸ argued that by strengthening TL practices, leaders can improve firm ability in managing and implementing organizational change. Importantly, transformational leaders can create positive impacts on capable champions and innovative culture based on its ability of transforming employees' values, attitudes, and beliefs, as well as inspiring them to overcome difficult situations and challenges for pursuing and achieving intended goals.^{17,29} Transformational leaders bring about an atmosphere of positive change to the organization by instilling confidence in the events of change and establishing an attractive vision towards changes (Oreg & Berson, 2011).³³ In a similar vein, Connelly et al³⁰ supposed that transformational leadership generates shared values and probable commitment to the events of change by initiating an explicit vision for inspiring employees' optimism, hope, and belief. TL is considered the most relevant leadership style that acts as a main agent for implementing and effectively managing the change processes.¹¹ As expected, transformational leaders can

establish and sustain the norms for changes, promote change initiatives, and foster the willingness of employees toward the necessary changes by making them aware of the benefits and the need for change on both individual and organizational level.⁹ TL also significantly arouse the employees' motivation to fulfil their duties for innovation and change by persuading them to transcend self-interest and obstacles to achieve the intended change plans.⁹ Recently, Ha and Le¹⁷ argued that transformational leaders care a lot about developing new skills for employees, unendingly spotting new chances for organizational development, and providing a clear vision for change. Empirical findings of Ha and Le¹⁷ revealed that TL is positively and significantly associated with capable champions and innovative culture.

The above arguments support the positive impact of TL on aspects of OCC; however, according to Lei et al,⁹ more evidence on effects of TL on specific components of change capacity, namely capable champions and innovative culture, are necessary. So, we proposed that (see Figure 1):

H1a: TL is positively associated with innovative culture.

H1b: TL is positively associated with capable champions.

The Influence of TL on Organizational Performance

Scholars see organizational performance as having many different meanings and approaches because organizational performance is measured and expressed in many ways, stemming from the different concerns of stakeholders about social responsibility, economic outcomes, and the environmental impacts of firms or organizations (Son et al, 2020).⁶ For example, Madella et al³¹ considered organizational performance as the ability to obtain and handle appropriately key resources of organization such as human, finance, and the

other physical assets. Lee³² examined organizational performance as the result of the operational process and implementation of the business strategy of the enterprises. It reflects the achievement or outcomes of an organization in the correlation to its intended objectives and set goals. Tsai and Yen³⁶ emphasized the important role of financial and market performance and used these aspects to measure organizational performance of organizations. However, most prior studies considered and investigated operational and financial performance as two main components which reflected organizational performance and directly related to the economic value of organizations (Son et al, 2020).⁷ Accordingly, this study applies the indicators of financial and operational performance to measure organizational performance because they not only reflect accurately the performance or achievement, but are also crucial factors which directly affect the existence and development of an organization. Specifically, operational performance manifests the degree of effectiveness in the processes of cost management, quality development, responsive capability, productivity, and customer satisfaction achievement. Financial performance reflects the level of success of using organizational assets or properties to result in revenues that is shown through the financial statements of organizations (Son et al, 2020).⁷

As one of the powerful leadership styles, TL is positively associated with the managerial performance and organizational performance of organizations.³⁵ Numerous prior studies have explained the positive TL-organizational performance relationship (eg, Garcia-Morales et al³⁶, Tushman and Nadler³⁷, Nguyen et al, 2017; Son et al, 2020). Indeed, as claimed by Bass,²⁹ organizational performance is supported and enhanced by capabilities of inspiring and persuading of transformational leaders toward employees. This stimulates employees to work hard achieve goals beyond expectations. and Transformational leaders also attempt to build the systems

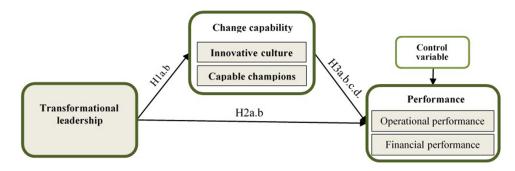


Figure I Proposed research model.

of governance and support to elicit energy, enthusiasm, and activities of learning, knowledge sharing, and innovation of employees in the organization for boosting organizational performance (Son et al, 2020).^{5,37} According to Garcia-Morales et al,³⁶ high organizational performance is driven by an organizational environment operated by the proper application and practice of TL leadership style. Wang et al's³⁸ meta-analytic work indicated that TL practices positively predict the organizational performance of firms. Similarly, Nguyen et al (2016) found that TL induces positive impacts on organizational performance by encouraging the significant contributions of employees through performance improvement initiatives and innovation activities. Empirical research of Masa'deh et al³⁹ showed that TL is positively related to both job performance and firm performance. Li et al⁴⁰ justified that TL is more likely to cultivate innovative behavior and positively affect job performance of employees. Recently, Son et al (2020) argued that TL is positively related to job performance of managers and organizational performance because transformational leaders tend to prompt employees toward the attainment of the desired result with or without the rewards. Their findings revealed that TL is significantly associated with financial and operational performance. From these arguments, this study proposes hypotheses as follows:

H2a: TL significantly affects operational performance.

H2b: TL significantly affects financial performance.

Change Capability Mediates TL's Effect on Organization Performance

The early approaches on theories of change management supposed that if firms were constantly changing, they might not be effective or improve performance because employees require routines to work effectively for improving performance.⁴¹ Especially, before the rapid change of business environment, the capability to adjust effectively and quickly towards change events are now becoming critical concerns of leaders and managers. As a result, nowadays, scholars have widely acknowledged that a vital importance for firms is that they are able to undergo continuous change.^{42,43} The ability of firms to be constantly changing can become a good and dynamic habit in its own right. It is a normal and natural response to unforeseeable business environments and markets.^{42,43}

Consequently, change capability is a decisive factor for firms to attain continued success.

The relationship between change capability and organizational performance has not had much attention from many authors, however current literature also showed the evidence for this relation. Specifically, scholars proposed that the higher the organizational capability for change, the higher the firm performance.⁴⁴ Judge et al⁴⁵ used multi-source data from 86 service and manufacturing firms in Russia and indicated that change capability is significantly and positively related to organizational performance. Ramezan et al⁶ highlighted that high percentage of change in organizational performance can be explainable and predictable with change capability. It means that change capability can be an important antecedent that significantly and positively affects organizational performance of firms. In the same vein, Judge et al¹⁰ indicated that change capability has the positive and strong impacts on organizational performance. In particular note, previous studies have reported the significant influences of OCC on both operational performance and financial performance. Specifically, Shipton et al⁴⁶ proposed that organizational capability for change enhanced organizational performance in terms of the success of financial results. Ramezan et al⁶ indicated the significant effects of change capability on organizational performance in terms of strategic performance and organizational growth. These authors found that change capability allows firms a high profit opportunity in comparison with its main rivals and being regarded as a leading firm in its industry. Highlighting change capability as an important dynamic resource of organizations, previous works pointed out that change capability significantly predicts operational performance and financial performance.^{21,47}

The above arguments support the significant impacts of change capability on organizational performance. Yet, there has been a scarcity of empirical research about the link between key aspects of OCC and specific elements of organizational performance, namely performance and financial performance.⁶ Thus, to provide further understanding of how innovative culture and capable champions contribute to financial and operational performance, this study proposes that:

H3a, b: Innovative culture significantly affects operational and financial performance.

H3c, d: Capable champions significantly affect operational and financial performance.

The above argument shows that TL is associated with change capability, which in turn positively influences two forms of organizational performance. Specifically, Cai et al⁴⁸ indicated that based on creating high trust of employees in leadership, transformational leaders can successfully increase change capability, which is the key antecedent and driving force of improving organizational performance.⁶ Similarly, Katsaros et al⁴⁹ indicated that leadership is a primary driver for organizational success, including organizational changes and organizational performance results. According to Katsaros et al⁴⁹ firms need to improve change capability to facilitate performance outcomes. Their empirical finding reported that change capability of employees significantly mediates the effects of different leadership styles on organizational performance. Consequently, by concentrating on TL practices, this study argued that transformational leaders can build up a positive climate for encouraging innovative culture and capable champions, since fostering both operational and financial performance. Hence, the following hypotheses are tested:

H4a: Change capability mediates TL's effects on operational performance.

H4b: Change capability mediates TL's effects on financial performance.

Methodology Sample and Procedures

In summer 2019, empirical data were collected through a survey of 125 manufacturing and service firms through using a convenient sampling method in some major cities in Vietnam such as Hanoi, Danang, and Hochiminh. The authors have made contact with representative persons of enterprises by telephone or paying visits to interpret the motive of this study and look for their support for gathering data. To meet the research goals, the participants should be directors/managers, head/deputy head, and key staffs working in major departments of firms to warrant they have a thorough knowledge of the organization's critical information and issues. This study used 23 observed variables adapted from existing scales in the literature to develop the initial list of items to measure five latent factors. Then this study applied backward translation to confirm the consistency between the English questionnaire and Vietnamese questionnaire. After that this study implemented the pilot through in-depth interviews/queries with five excellent academics at three major universities in Vietnam and 50 respondents from six companies to define the suitability of the question sheet before collecting the formal data. This study allocated 500 question sheets, and got 399 ones in return, among which were 302 complete ones (60.4% validity rate). According to Hair et al.⁵⁰ the minimum sample size must be greater than 5-times the total of 23 observed variables used in this study, respectively 5*23=115. Therefore, with 302 valid questionnaires, this study has ensured the standard of sample size used to test the multivariate linear regression model. This study tested potential non-response bias using the method suggested by Armstrong and Overton.⁵¹ In addition, this study utilized independent sample t-test and Chi-square to contrast the earlier 85 participants and the last 85 participants through the number of employees, business type, and revenue and capital. The results showed that there has no significant difference among two groups of responses (p>0.05). In other words, it indicated that common method bias is not a concern.

Measurements

All the latent factors were estimated based on applying multiple items which are measured through five-point Likert-type scales, ranging from "1" (not at all) to "5" (frequently); or "1" (strongly disagree) to "5" (strongly agree).

Transformational Leadership

This study utilized four items adjusted from the Chen et al⁵² study to estimate the perceptions of participants about TL behaviors of their leaders. A sample items is "Leaders in our company are capable of motivating and guiding their colleagues on the job"; and "Leaders in our company always acts as the organization's leading force."

Organizational Capability for Change

This study applied eight items adjusted from the work of Judge and Elenkov²¹ to estimate two aspects of change capability of firms. Specifically, capable champions are estimated using four items to measure the ability of firms in attracting, retaining, and empowering the change leaders. A sample item is "Our company has change champion(s) who are willing and able to challenge the status quo?". Innovative culture is estimated by using four items to reflect the ability of firms in establishing norms of innovation and encouraging the change and

innovative activities. A sample item is "Our company has an organizational culture that values innovation and change".

Organizational Performance

This study applied 11 items derived from the research of Wang et al⁷ to measure financial and operational performance. Wherein, operational performance is measured using five items reflecting the effective degree of firms in attaining the customer satisfaction, quality evolution, cost management, and productivity and responsiveness. A sample item is "Customer satisfaction of our company is better than that of key competitors". Financial performance is measured using six items to reflect the capability of firms in utilizing their assets to generate revenues reflected by the firm's financial statements. A sample item is "Return on investment of our company is better than that of key competitors".

Control Variables

This study used the indicator of number of employees (firm size) as a control variable to account for variance among organizations due to their potential impacts on aspects of organizational performance.

Data Analysis Methods

This study used AMOS software (Analysis of Moment Structures) to measure the validation and test the structural model using the data collected from the 302 participants of 125 service and manufacturing Vietnamese firms. This study applied Confirmatory factor analysis (CFA) to inspect the reliability and validity of the latent variables. We have used Structural Equation Modeling (SEM) to estimate the correlations among the latent constructs. Finally, this study conducted a bootstrapping procedure to test for the significances of the proposal research hypotheses.

Data Analysis and Results Measurement Model

We first tested the reliability of the measures for the constructs by examining the separate Cronbach's alpha coefficients (C α). The statistics findings range from 0.82–0.95 that are greater than Nunnally and Bernstein⁵³ recommended level of 0.7. This study then implemented CFA to evaluate the overall measurement model for assessing the discriminant and convergent validities. For evaluating the convergent validity, this study follows the procedures of Hair et al⁵⁰ by calculating the factor loadings of the indicators, the values of composite reliability (CR), and the values of average variance extracted (AVE). Table 1 indicated that all factor loadings are greater than 0.6 (p<0.001); CR values exceed 0.7; and AVE values are higher than 0.5. These findings showed that all the measures meet the criteria of convergent validity.

For measuring the discriminant validity, this study followed the procedures of Fornell and Larcker⁵⁴ through the average variance extracted (AVE) to test the discriminant validity among the constructs. As shown in Table 2, the discriminant validity is evaluated by likening the square root of the AVE with the Correlation coefficients among the latent factors.

Table 2 indicates that AVE's square root of each latent variable (diagonal constituents in bold) is higher than the correlation coefficients among the variables in the proposal model. In other words, this has confirmed the latent variables' reliability, and discriminant and convergent of scales. Then this study examines the fit of measurement model by calculating key indicators such as CMIN/df, GFI, RMSEA, NFI, and CFI. Table 3 shows the proposal model is suitable for the data and can be used to explain the research proposal hypotheses because the fit index meets the criteria of satisfactory levels.

Structural Model

This part will present the major findings of testing the research hypotheses in the Structural Equation Modeling (Figure 2, Tables 4 and 5).

Direct Effect Analysis

The findings in Figure 2 and Table 4 indicate that all the direct influences of independent factors on dependent factor are statistically significant. So hypotheses H1-H3 are supported. Specifically:

Regarding H1a and H1b, the findings in Table 4 have provided support for the significant influences of TL on two components of OCC. Specifically, the findings revealed that TL has a greater effect on capable champions (β =0.665; p<0.001) compared to the impacts of TL on innovative culture (β =0.646; p<0.001).

The findings also support H2a and H2b. Specifically, they showthat the effects of TL on organizational performance in terms of financial performance (β =0.413; *p*<0.001) are larger than TL's influence on operational performance (β =0.277; *p*<0.001).

Construct	ltem	Loading	t-value	CR	AVE	Cα
Transformational leadership (TL)	4	-	_	0.82	0.53	0.82
	TLI	0.75***	12.5			
	TL2	0.71***	11.7			
	TL3	0.68***	11.2			
	TL4	0.77***	12.6			
Innovative culture (IC)	4	-	_	0.91	0.73	0.91
	ICI	0.88***	22.5			
	IC2	0.80***	18.9			
	IC3	0.91***	22.6			
	IC4	0.81***	19.0			
Capable champions (CC)	4	-	_	0.93	0.77	0.93
	CCI	0.82***	20.2			
	CC2	0.91***	26.1			
	CC3	0.82***	26.2			
	CC4	0.86***	22.3			
Operational performance (OP)	5	-	_	0.95	0.79	0.95
	OPI	0.85***	26.6			
	OP2	0.89***	19.3			
	OP3	0.94***	23.9			
	OP4	0.85***	26.7			
	OP5	0.94***	24.0			
Financial performance (FP)	6	-	_	0.94	0.76	0.94
	FPI	0.93***	28.3			
	FP2	0.82***	18.1			
	FP3	0.81***	21.1			
	FP4	0.81***	20.9			
	FP5	0.90***	23.5			
	FP6	0.91***	28.2			

Table I The Standard Loading and Reliabilities of Measurement Models

Notes: $C\alpha \ge 0.7$; composite reliability ≥ 0.7 ; average variances extracted ≥ 0.5 ; ***p < 0.001.

For the Hypotheses H3a, H3b, H3c, and H3d, the findings indicate that innovative culture significantly affects operational performance (β =0.254; p<0.001), and financial performance (β =0.195; p<0.001). Capable champions are significantly associated with operational

performance (β =0.377; p<0.001), and financial performance (β =0.277; p<0.001). These results show that both innovative culture and capable champions induce greater effects on operational performance compared to their effects on financial performance.

Constructs	TL	IC	сс	ОР	FP
Transformational leadership (TL)	0.73				
Innovation culture (IC)	0.62***	0.85			
Capable champions (CC)	0.64***	0.51***	0.88		
Operational performance (OP)	0.66***	0.61***	0.68***	0.89	
Financial performance (FP)	0.69***	0.59***	0.64***	0.63***	0.87
Mean	3.44	3.54	3.52	3.70	3.76
Standard deviation (SD)	0.52	0.59	0.66	0.62	0.58

Notes: $C\alpha \ge 0.7$; $CR \ge 0.7$; $AVE \ge 0.5$; ****p<0.001; Diagonal elements (in bold) are the square root of the AVE.

Table 3 Overall Fit Index of the CFA Me	odel
---	------

Fit Index	Scores	Recommended Threshold Value
Absolute fit measures:		
Chi-square/df (CMIN/df)	1.568	≤2 ^a ; ≤5 ^b
Goodness of fit index (GFI)	0.911	≥0.90 ^a ; ≥0.80 ^b
Root mean square error of	0.044	≤0.08 ^a ; ≤0.10 ^b
approximation (RMSEA)		
Incremental fit measures:		
Normed fit index (NFI)	0.949	≥0.90 ^a
Adjusted goodness of fit index (AGFI)	0.886	≥0.90ª; ≥0.80 ^b
Comparative fit index (CFI)	0.981	≥0.90 ^a

Note: ^aAcceptability: acceptable; ^bAcceptability: marginal.

The findings of examining the proposal hypotheses are acquired after evaluating the control effects of firm size. Table 4 shows that the impacts of firm size on aspects of organizational performance are not statistically significant. So this study did not confirm the control role of firm size in the relationship with organizational performance.

Indirect and Total Effect Analysis

Besides showing the evidence about the TL's effect on organizational performance, this paper also indicates how TL is connected with organizational performance through the change capability of organization. To show the proof on the mediating effects of OCC in the TL-organizational performance relationship, we have applied the procedures of bootstrapping to examine the significant levels of indirect effects as the recommendation of Preacher and Hayes.⁵⁵ As shown in Table 5, this study utilized a 95% bias correct confidence interval with the 3000 bootstrapping sample to examine the significance of indirect influences.

The results in Table 5 have demonstrated the indirect impacts of TL on financial and operational performance through key components of OCC. TL's indirect effects on operational performance (β =0.415; p<0.001) and financial performance (β =0.310; p<0.001) are significant, with p-values less than 0.001 and in the confidence interval. In other words, Table 5 firstly provides evidence for the mediating effects of innovative culture and capable champions in the connections between TL and organizational performance. The findings also manifest that total effects of TL on financial performance (β =0.723; p<0.001) are very impressive compared with its effects on operational performance (β =0.692; p<0.001).

Discussions and Implications

Organizational performance generally manifests effective degrees and the success of an organization in the competitive environment (Son et al, 2020).⁷ However, the greatest constant of modern times is change. Change capability to adapt effectively and quickly toward the change events armed to use effectively available resources of firms are becoming a critical matter for all organizations.⁶ In such a context, by developing a proposal research model and research hypotheses to predict the influences of TL and aspects of change competence on organizational performance, this paper has significantly contributed to both practical and theoretical initiatives on organizational performance to attain sustainable development goals for organizations by the following reasons.

First, firm sustainability manifests its capability to address the aspects of performance over short- and long-term periods.⁵⁶ So it is very important for firms to attain sustainable development by improving their performance

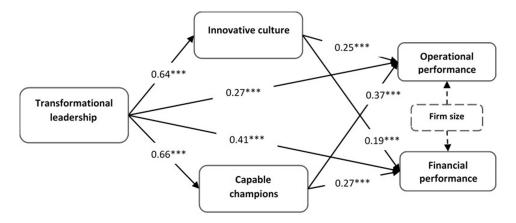


Figure 2 The findings of the hypotheses in the structural model. Note: ***p<0.001.

Hypotheses	Effects	Estimate	t-value	Results
H1a: Transformational leadership \rightarrow Innovation culture	+	0.646***	9.83	Supported
H1b: Transformational leadership \rightarrow Capable champions	+	0.665***	11.1	Supported
H2a: Transformational leadership \rightarrow Operational performance	+	0.277***	3.35	Supported
H2b: Transformational leadership \rightarrow Financial performance	+	0.413***	4.82	Supported
H3a: Innovation culture \rightarrow Operational performance	+	0.254***	4.18	Supported
H3b: Innovation culture \rightarrow Financial performance	+	0.195***	3.21	Supported
H3c: CC \rightarrow Operational performance	+	0.377***	5.98	Supported
H3d: CC \rightarrow Financial performance	+	0.277***	4.43	Supported
Control variables	Effect	Estimate	<i>t</i> -value	Results
Firm size \rightarrow Operational performance	-	-0.009	-0.22	Unsupported
Firm size \rightarrow Financial performance	-	-0.023	-0.56	Unsupported
				1

Table 4 Structural Model Results

Note: ***p<0.001 level.

 Table 5 The Confidence Intervals of Indirect Influences

Path	Direct Effects	Indirect Effects	Total Effects	Bias-Corrected Confidence Intervals	
				LLCI	ULCI
TL \rightarrow IC, CC \rightarrow OP TL \rightarrow IC, CC \rightarrow FP	0.277*** 0.413***	0.415*** 0.310***	0.692*** 0.723***	0.311 0.197	0.535 0.435

Note: ****p<0.001 level.

before the rapid change of business environment through enhancing change capability. Although organizations are paying out tens of millions of dollars to increase its change capacity such as organizational restructuring and information technology installations, this seems to be not effectual (Son et al, 2020).⁶ The main reasons to explain such failures may be that leaders have not yet recognized and promoted organizational capability for change. As a result, by investigating the relationship between two specific components of OCC and the other potential factors in the proposal research model, this study has contributed to advancing the knowledge and initiatives on change capability for firms. Indeed, innovative culture and capable champions reflect two essential and different elements of change capability. Where innovative culture "creates the material foundation and spirit perfectly that promotes the change", capable champions will "turn innovative culture/change into a successful reality".9 Such an approach is more feasible for directors/managers to perceive the simple and effective way to develop their firm capability for change.

Second, the current business and economic changes in the developing countries recommend directors or business leadership to apply the TL style for stimulating innovative behavior among employees and bringing about sustainable economic development.14,57 However, the knowledge and mechanism of how transformational leaders affect firms' capability of innovation and change is still insufficient (Son et al, 2020).⁶ Consequently, the paper has contributed to advancing the insights of the correlation between TL and organization's change capability and innovation by implementing an adequate review of existing studies of OCC, and indicated TL's significant impacts on firms' innovative culture and capable champions. The main justification for such results may be that TL style is seen as one of the most successful and appropriate leadership styles for firms in the context of developing countries like Vietnam.^{14,57} TL has great impacts on change capability and employees' innovative work behavior through inspiration and intellectual stimulation (Le & Le, 2021).¹⁴ The empirical findings revealed that the positive features of transformational leaders are the root that act as the key driver of stimulating the willingness and positive behaviors of employees for change and innovation. Accordingly, the managers and directors should apply TL practice to increase change capability by caring for communicating about the goals and purposes of organization, acting as the leading force in organization, and unceasingly attempting to explore new chances for developing their organization.

Third, the empirical findings affirmed the mediating effects of two elements of OCC, and highlight that by practicing TL styles leaders can induce positive influences on organizational performance directly or indirectly via its impacts on two components of change capability. Moreover, relating to the direct links between TL, change capability and two elements of organizational performance, the finding pointed out that TL creates a greater effect on financial performance compared to its impacts on operational performance. In contrast, the empirical findings revealed that the impacts of both innovative culture and capable champions on operational performance are greater than their impacts on financial performance. These findings help to clearly identify the connections among latent variables that provide better understanding and valuables guides for CEOs/managers to pursue and achieve the desired goals of organizational performance. From the findings, this study proposes an important practical implication. Specifically, by focusing on the TL style practices, the directors/managers not only bring a positive impact on operational performance but also create strong impacts on financial performance. Besides, to achieve the strategic goals of a firm (such as quality development, customer satisfaction, cost management, productivity, and responsiveness) and surpass their main competitors, CEOs/managers are compelled to increase awareness of the importance of change capability by positively improving the innovative culture along with enhancing to attract, retain, and empower change leaders (Son et al, 2020).⁹

Limitations and Directions for Future Research

Beside the significant contributions to theory of leadership and change management for organizational development, this study also has some certain limitations. First, this study investigates the correlations among the latent variables using the cross-sectional design. This, therefore, may emerge situations by which the estimated relationships may alter in the long time due to the trust and emotion of employees trend to be variance in case of appearing changes.⁵⁸ Accordingly, a longitudinal study in future is necessary to address this constraint and affirm the findings. Second, the findings and the ideals of this study are harshly appropriate mostly for firms in Vietnam. Future works should be conducted in new contexts to supply a full understanding and transparent picture about the relationship among the latent factors in the proposed research model of this study. Besides, two key components of change capability are shown to significantly contribute to elements of organizational performance. Thus, further studies are needed to clarify the impacts of change capacity on the other ingredient of organizational performance such as performance of team collaboration and strategic performance of firms.⁶ It will be very useful to bring more insight on how innovative culture and capable champions can create superior capacity for firms to sustainable development.

Conclusions

On the whole, the findings of this study have provided the theoretical initiatives on organizational performance and change leadership practices. By spotlighting the importance of TL and change capability in promoting organizational performance, the study brings more insight for directors/managers about the necessary factors to promote organizational performance. We expected that TL practices by conducting the positive impacts on the followers' perception of the positive characteristics of their direct leaders and supervisors such as thinking about employees as the organization's valuable resource; constructing emotional links with individuals/employees and inspiring them to pursue higher values; serving as an organization's leading force; unendingly seeking new opportunities for organizational development, transformational leaders can significantly create a positive climate to develop firm's change capability and organizational performance for sustainable development.

Data Sharing Statement

Data and other materials related to this research will be provided to qualified researchers on request.

Ethics Statement

This study complied with the Helsinki Declaration with regard to informed consent and human rights, and following the correct procedures relating to treatment of humans in research. We confirm that all participants provided informed consent. In addition, the Research Ethics Committee of the National Economics University has accepted and approved the ethical standards used in this study.

Acknowledgments

We would like to thank all participants of the study and their organizations for their assistance and time response during the investigation process.

Funding

No funding for this Study.

Disclosure

In this study, there was no conflict of interest.

References

- Ha ATL, Le PB, Lei H. Leadership and organizational learning: the determinants of innovation speed and innovation quality in Vietnamese firms. *J Manag Strategy*. 2019;10(1):29–37. doi:10.5430/jms.v10n1p29
- Le PB, Lei H. How transformational leadership supports knowledge sharing: evidence from Chinese manufacturing and service firms. *Chin Manag Stud.* 2017;11(3):479–497. doi:10.1108/CMS-02-2017-0039
- Le PB, Lei H. The mediating role of trust in stimulating the relationship between transformational leadership and knowledge sharing processes. *J Knowl Manag.* 2018;22(3):521–537. doi:10.1108/JKM-10-2016-0463
- Le PB, Lei H. Determinants of innovation capability: the roles of transformational leadership, knowledge sharing and perceived organizational support. J Knowl Manag. 2019;23(3):527–547. doi:10.1108/JKM-09-2018-0568
- Phong LB, Hui L, Son TT. How leadership and trust in leaders forster employees' behavior toward knowledge sharing. *Soc Behav Pers*. 2018;46(5):705–720. doi:10.2224/sbp.6711
- Ramezan M, Sanjaghi ME, Rahimian Kalateh Baly H. Organizational change capacity and organizational performance: an empirical analysis on an innovative industry. *J Knowl Based Innov China*. 2013;5 (3):188–212. doi:10.1108/JKIC-07-2013-0012
- Wang Z, Sharma PN, Cao J. From knowledge sharing to firm performance: a predictive model comparison. J Bus Res. 2016;69 (10):4650–4658. doi:10.1016/j.jbusres.2016.03.055
- 8. Judge WQ. Building Organizational Capacity for Change: The Leader's New Mandate. Business Expert Press; 2011.
- Lei H, Phouvong S, Le PB. How to foster innovative culture and capable champions for Chinese firms: an empirical research. *Chin Manag Stud.* 2019;13(1):51–69. doi:10.1108/CMS-05-2018-0502
- Judge WQ, Hu HW, Gabrielsson J, et al. Configurations of capacity for change in entrepreneurial threshold firms: imprinting and strategic choice perspectives. *J Manag Stud.* 2015;52(4):506–530. doi:10.1111/joms.12121
- Yasir M, Imran R, Irshad MK, Mohamad NA, Khan MM. Leadership styles in relation to employees' trust and organizational change capacity: evidence from non-profit organizations. SAGE Open. 2016;6(4):2158244016675396. doi:10.1177/2158244016675396
- Son TT, Phong LB, Loan BTT. Transformational Leadership and Knowledge Sharing: Determinants of Firm's Operational and Financial Performance. *Sage Open.* 2020;10(2):1–13. doi:10.1177/ 2158244020927426.
- Le PB. How transformational leadership facilitates radical and incremental innovation: the mediating role of individual psychological capital. Asia Pac J Bus Adm. 2020;12(3/4):205–222. doi:10.1108/ APJBA-04-2020-0129
- 14. Yi L, Uddin M, Das AK, Mahmood M, Sohel SM. Do transformational leaders engage employees in sustainable innovative work behaviour? Perspective from a developing country. *Sustainability*. 2019;11(9):2485. doi:10.3390/su11092485
- Le LTK, Le PB. Improving the Innovation Performance for Vietnamese Firm Based on Practices of Idealized Influence and Individualized Consideration: The Mediating Role of Knowledge Sharing. *International Journal of Business Administration*. 2021;2 (3): 75–85. doi:10.5430/ijba.v12n3p75

- Nguyen TT, Mia L, Winata L, Chong VK. Effect of transformational-leadership style and management control system on managerial performance. J Bus Res. 2017;70:202–213. doi:10.1016/j.jbusres.2016.08.018
- Ha TT, Le PB. What are the sources of organizational change capability? The role of transformational leadership and organizational justice. *Int J Bus Adm.* 2021;12(2):76. doi:10.5430/ijba.v12n2p76
- 18. Long L, Mao M. Impact of leadership style on organizational change: an empirical study in China. Paper presented at the Wireless Communications, Networking and Mobile Computing, 2008. WiCOM'08. 4th International Conference on; 2008.
- Le BP, Tran QT. Leadership Practice for Building Trust of Followers: decisive Factors of Organizational Performance. *SEISENSE J Manag.* 2020;3(2):45–57. doi:10.33215/sjom.v3i2.308
- Stouten J, Rousseau DM, De Cremer D. Successful organizational change: integrating the management practice and scholarly literatures. *Acad Manag Ann.* 2018;12(2):752–788. doi:10.5465/annals.2016.0095
- Judge WQ, Elenkov D. Organizational capacity for change and environmental performance: an empirical assessment of Bulgarian firms. *J Bus Res.* 2005;58(7):893–901. doi:10.1016/j.jbusres.2004.01.009
- 22. Kok RA, Driessen PH. Antecedents of market orientation in semi-public service organizations: a study of Dutch housing associations. Serv Ind J. 2012;32(12):1901–1921. doi:10.1080/ 02642069.2011.574281
- Judge W, Douglas T. Organizational change capacity: the systematic development of a scale. J Organ Chang Manag. 2009;22(6):635–649. doi:10.1108/09534810910997041
- 24. Jia X, Chen J, Mei L, Wu Q. How leadership matters in organizational innovation: a perspective of openness. *Manag Decis*. 2018;56 (1):6–25. doi:10.1108/MD-04-2017-0415
- Yang Z, Nguyen VT, Le PB. Knowledge sharing serves as a mediator between collaborative culture and innovation capability: an empirical research. J Bus Ind Mark. 2018;33(7):958–969. doi:10.1108/JBIM-10-2017-0245
- 26. Bass BM. From transactional to transformational leadership: learning to share the vision. Organ Dyn. 1990;18(3):19–31. doi:10.1016/0090-2616(90)90061-S
- Yasir M, Mohamad NA. Ethics and morality: comparing ethical leadership with servant, authentic and transformational leadership styles. *Int Rev Manag Mark*. 2016;6(4S):310–316.
- Lutz Allen S, Smith JE, Da Silva N. Leadership style in relation to organizational change and organizational creativity: perceptions from nonprofit organizational members. *Nonprofit Manag Leadersh.* 2013;24(1):23–42. doi:10.1002/nml.21078
- 29. Bass BM. *Leadership and Performance Beyond Expectations*. Free Press; Collier Macmillan; 1985.
- 30. Connelly S, Gaddis B, Helton-Fauth W. A closer look at the role of emotions in transformational and charismatic leadership. In: *Transformational and Charismatic Leadership: The Road Ahead 10th Anniversary Edition*. Emerald Group Publishing Limited; 2013:299–327.
- 31. Madella A, Bayle E, Tome J. The organisational performance of national swimming federations in Mediterranean countries: a comparative approach. *Europ J Sport Sci.* 2005;5(4):207–220. doi:10.1080/17461390500344644
- 32. Lee IA. Relationship Between the Use of Information Technology (It) and Performances of Human Resources Management (Hrm). San Diego: Alliant International University; 2008.
- 33. Oreg S, Berson Y. Leadership and employees' reactions to change: The role of leaders' personal attributes and transformational leadership style. *Personnel psychology*. 2011;64(3): 627–659. doi:10.1111/ j.1744-6570.2011.01221.x
- 34. Tsai CF, Yen YF. A model to explore the mystery between organizations' downsizing strategies and firm performance: integrating the perspectives of organizational change, strategy and strategic human resource management. *J Organ Chang Manag.* 2008;21(3):367–384. doi:10.1108/09534810810874831

- 35. Le BP, Lei H, Phouvong S, Than TS, Nguyen TMA, Gong J. Selfefficacy and optimism mediate the relationship between transformational leadership and knowledge sharing. *Soc Behav Pers.* 2018;46 (11):1833–1846. doi:10.2224/sbp.7242
- 36. Garcia-Morales VJ, Llorens-Montes FJ, Verdu-Jover AJ. The effects of transformational leadership on organizational performance through knowledge and innovation. *Br J Manag.* 2008;19(4):299–319. doi:10.1111/j.1467-8551.2007.00547.x
- Tushman M, Nadler D. Organizing for innovation. *Calif Manage Rev.* 1986;28(3):74–92. doi:10.2307/41165203
- Wang G, Oh I-S, Courtright SH, Colbert AE. Transformational leadership and performance across criteria and levels: a meta-analytic review of 25 years of research. *Group Organ Manag.* 2011;36 (2):223–270. doi:10.1177/1059601111401017
- 39. Masa'deh R, Obeidat BY, Tarhini A. A Jordanian empirical study of the associations among transformational leadership, transactional leadership, knowledge sharing, job performance, and firm performance: a structural equation modelling approach. J Manag Dev. 2016;35 (5):681–705. doi:10.1108/JMD-09-2015-0134
- 40. Li H, Sajjad N, Wang Q, Muhammad Ali A, Khaqan Z, Amina S. Influence of transformational leadership on employees' innovative work behavior in sustainable organizations: test of mediation and moderation processes. *Sustainability*. 2019;11(6):1594. doi:10.3390/ su11061594
- Rieley J, Clarkson I. The impact of change on performance. J Chang Manag. 2001;2(2):160–172. doi:10.1080/714042499
- 42. Chen M, Yang Z, Dou W, Wang F. Flying or dying? Organizational change, customer participation, and innovation ambidexterity in emerging economies. *Asia Pac J Manag.* 2018;35(1):97–119. doi:10.1007/s10490-017-9520-5
- 43. Tayal R, Kumar Upadhya R, Yadav M, Rangnekar S, Singh R. The impact of transformational leadership on employees' acceptance to change: mediating effects of innovative behaviour and moderating effect of the use of information technology. *VINE J Inf Knowl Manag Syst.* 2018;48(4):559–578. doi:10.1108/VJIKMS-05-2018-0039
- 44. Siggelkow N, Levinthal DA. Temporarily divide to conquer: centralized, decentralized, and reintegrated organizational approaches to exploration and adaptation. *Organ Sci.* 2003;14(6):650–669. doi:10.1287/orsc.14.6.650.24840
- Judge WQ, Naoumova I, Douglas T. Organizational capacity for change and firm performance in a transition economy. *Int J Hum Resour Manag.* 2009;20(8):1737–1752. doi:10.1080/09585190 903087107
- 46. Shipton H, Budhwar PS, Crawshaw J. HRM, organizational capacity for change, and performance: a global perspective. *Thunderbird Int Bus Rev.* 2012;54(6):777–790. doi:10.1002/tie.21503

47. Hsu LC, Wang CH. Clarifying the effect of intellectual capital on

Le and Le

- performance: the mediating role of dynamic capability. *Br J Manag.* 2012;23(2):179–205. doi:10.1111/j.1467-8551.2010.00718.x 48. Cai WJ, Loon M, Wong PHK. Leadership, trust in management and
- Cal WJ, Loon M, Wong PHK. Leadersnip, trust in management and acceptance of change in Hong Kong's Civil Service Bureau. J Organ Chang Manag. 2018;31(5):1054–1070. doi:10.1108/JOCM-10-2016-0215
- Katsaros KK, Tsirikas AN, Kosta G. The impact of leadership on firm financial performance: the mediating role of employees' readiness to change. *Leadersh Organ Dev J.* 2020;41(3):333–347. doi:10.1108/ LODJ-02-2019-0088
- 50. Hair JF, Black WC, Babin BJ, Anderson RE, Tatham RL. *Multivariate Data Analysis 6th Edition*. New Jersey: Pearson Education; 2006.
- Armstrong JS, Overton TS. Estimating nonresponse bias in mail surveys. J Mark Res. 1977;14(3):396–402. doi:10.1177/ 002224377701400320
- Chen MYC, Lin CYY, Lin HE, McDonough EF III. Does transformational leadership facilitate technological innovation? The moderating roles of innovative culture and incentive compensation. *Asia Pac J Manag.* 2012;29(2):239–264. doi:10.1007/s10490-012-9285-9
- 53. Nunnally JC, Bernstein I. *Elements of Statistical Description and Estimation*. Psychometric Theory 3 Edition. New York: McGraw-Hill; 1994.
- 54. Fornell C, Larcker DF. Evaluating structural equation models with unobservable variables and measurement error. *J Mark Res.* 1981;18 (1):39–50. doi:10.1177/002224378101800104
- Preacher KJ, Hayes AF. Asymptotic and resampling strategies for assessing and comparing indirect effects in multiple mediator models. *Behav Res Methods*. 2008;40(3):879–891. doi:10.3758/ BRM.40.3.879
- Al Mamun A, Ibrahim M, Yusoff M, Fazal S. Entrepreneurial leadership, performance, and sustainability of micro-enterprises in Malaysia. *Sustainability*. 2018;10(5):1591. doi:10.3390/su10051591
- 57. Lei H, Gui L, Le PB. Linking transformational leadership and frugal innovation: the mediating role of tacit and explicit knowledge sharing. *J Knowl Manag.* 2021;25(7):1832–1852. doi:10.1108/JKM-04-2020-0247
- Smollan RK, Schiavone F. Trust in change managers: the role of affect. J Organ Chang Manag. 2013;26(4):725–747. doi:10.1108/ JOCM-May-2012-0070

Psychology Research and Behavior Management

Dovepress

DovePress

Publish your work in this journal

Psychology Research and Behavior Management is an international, peer-reviewed, open access journal focusing on the science of psychology and its application in behavior management to develop improved outcomes in the clinical, educational, sports and business arenas. Specific topics covered in the journal include: Neuroscience, memory and decision making; Behavior modification and management; Clinical applications; Business and sports performance management; Social and developmental studies; Animal studies. The manuscript management system is completely online and includes a very quick and fair peer-review system, which is all easy to use. Visit http://www. dovepress.com/testimonials.php to read real quotes from published authors.

Submit your manuscript here: https://www.dovepress.com/psychology-research-and-behavior-management-journal

f 🔰 in 🗖

1759