Academic Journal of Management and Social Sciences
ISSN: 2958-4396 | Vol. 5, No. 2, 2023

Research on the Influence of Transactional Leaders on the Implementation of University Management Innovation

Delin Yan [1, 2]

[1] School of Business and Economics, University of San Carlos, Cebu City, 6000 Cebu, Philippines
[2] Jiangxi University of Engineering, Xinyu Jiangxi 338000, China

Abstract: According to the basic theory of power change leadership, self-control and resource ability, cross-department integration is introduced to explore the dual effect of "incentive" and "control" of transactional leaders on the implementation performance of university management innovation. In the process of "incentive" and "control" effect, the relationship of "diminishing marginal effect" and "too much of a good thing", and the cross-departmental integration plays a nonlinear role in the relationship between transactional leadership and the implementation performance of university management innovation.

Keywords: Cross-departmental Integration; Management Innovation; Transactional Leaders.

1. Research Background

In the current fierce market competition environment, "management innovation can effectively enhance the competitiveness of the organization" has become the consensus of more and more scholars [1,2]. However, the organization and implementation of management innovation is faced with a high risk of failure. Some studies show that about 30% ~70% of the organization and implementation of management innovation failed [3], how to improve the implementation performance of management innovation has become an important issue of concern to the theoretical circle and the industry. In particular, due to the disadvantages of the organization [4] in technology accumulation, capital, talent and other aspects, its technological innovation ability is insufficient, and the successful implementation of management innovation is particularly important for the continuous growth of the organization. According to the leadership theory of power change, the leadership style can achieve better leadership effect [5] when matching with the subordinate maturity, task characteristics and situational factors. This means that different types of leadership styles may have a differentiated impact on the performance of organizational management innovation.

The positive impact of transformational leadership on innovation has been tested in [6] by many institutes; existing studies on the impact of transactional leadership on innovation are positive, negative and not affected [5,7]. Therefore, the possible reasons why there are many different views on the relationship between transactional leaders and innovation are that most of these studies only consider the single effect [8] of transactional leaders [8], and ignore the dual effects of transactional leaders having "incentive" and "control" over subordinates. In other words, the influence of transactional leaders on the implementation performance of university management innovation may not be a purely linear relationship. So, what is the relationship between the two? This study plans to introduce cross-department integration according to the theory of power change leadership, self-decision, and the basic view of resource ability, so as to answer the influence mechanism, internal mechanism and situational effect of transactional leaders on the implementation performance of university management innovation.

2. Study Assumptions

2.1. Implementation Performance of Transactional Leadership and Management Innovation

At the same time, transactional leaders implement more instructions and requirements, emphasizing the strict implementation of the stipulated management innovation implementation tasks, which increases the obedience of subordinates, resulting in their lack of self-decision right. Moreover, the high intensity of punishment measures, easy to form a "high pressure" environment, resulting in excessive pressure on subordinates.

Considering the dual superposition effect, the influence of transactional leaders on the implementation performance of university management innovation depends on the difference between the perceived incentive effect and the sense of control. Under the moderate transactional leadership, the perceived motivation over the control; due to the "marginal and diminishing effect" and the increasing sense of control, the sense of control when the transactional leadership is too high.

Based on this, the following assumptions:

Hypothesis 1 There is an inverted U-shaped relationship between transactional leadership and the implementation performance of university management innovation.

2.2. Transaction Leadership and Cross-Departmental Integration

Cross-departmental integration refers to the degree of cooperation among various departments of universities to achieve the organizational goals [15]. According to the logic of the leadership theory of power change [12]: management innovation changes the positions of employees and the adjustment of profit distribution pattern [4], which leads to the incomprehension of management innovation scheme in various departments in colleges and universities, resulting in

the fuzzy role of department cooperation [16]. Transaction leaders can clarify the responsibilities of each department and inform the corresponding reward and punishment measures. This leadership style can encourage various departments to increase their understanding of the relationship between their own goals and the overall goals of the organization when implementing management innovation, transform the competitive position between departments into cooperation positions, enhance the willingness and motivation of cross-department integration [16], and improve the efficiency of cross-department integration. However, for the contingency reward and exception management of transactional leaders, the subordinates of different departments have adaptive power. With the intensity of transactional leaders, the frequency increases, which increases, and the original incentive effect of rewards and punishments decreases [14], leading to the weaker influence of transactional leaders on cross-department integration.

The influence of transactional leaders on the cross-department integration of universities also depends on the difference between the incentive effect and the sense of control. Because the incentive effect of moderate trading leaders is greater than the control effect, and the control effect of excessive trading leaders is greater than the incentive effect, the integration of trading leaders and cross-departments presents "diminishing marginal effect" and "too much" effect.

Based on this, the following assumptions are proposed:

Hypothesis e 2 There is an inverted U-shaped relationship between transactional leadership and cross-departmental integration.

2.3. Implementation Performance of Cross-Department Integration and Management Innovation

Resource capacity theory holds that the ability to integrate resources is the key for organizations to respond to change. Compared with technological innovation, management innovation involves a wider range and needs the cooperation of various departments of small and medium-sized enterprises. Due to the wide range of involvement, the implementation of management innovation requires all departments to integrate resources and transmit information to [10]. Cross-departmental integration helps different departments to enhance understanding, eliminate conflicts and conflicts, build trust and reciprocity, form a common vision to share knowledge and resources, and promote collaboration to implement management innovation solutions [15].

Based on this, the following assumptions:

Hypothesis 3 Cross-departmental integration is positively correlated with management innovation implementation performance.

Based on the above assumptions, the following research framework is proposed (see Figure 1).

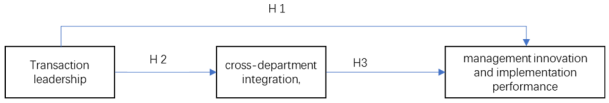

Figure 1. The study framework

3. Study Design

3.1. Data Collection

In this study, questionnaire survey measured variables. Collect the performance of cross-department integration and management innovation in universities. The universities surveyed in this study mainly collect data by universities in Jiangxi.

3.2. Variables and Measurements

The measurement items of the implementation performance of management innovation came from the research of Zhang Zhengang et al [4]; the measurement items of the trading leaders came from the research of WALDMAN et al [18]; the measurement items for cross-departments integration refer to the study of BRETTEL et al [15]; the variables were measured using 7-point scale Likert scale (1= completely disagree; 7= complete consent).

4. Empirical Results

4.1. Test of the Reliability and Validity of the Questionnaire

The confirmatory factor analysis of this study is shown in Table 1. Table 1 shows that the Cronbach's α of each surface is greater than the proposed standard; the standardized factor load value of each item is greater than the proposed standard of 0.6; the composition reliability (CR) and average variance extraction (AVE) of each surface also reach the standard of above 0.7 and 0.5. In this study, the control and identification of common method bias were conducted through pre-event control and post-hoc statistical test. Prior control refers to the fact of the questionnaire; the Harman single factor method of post-statistical test shows that the first factor explains 33.2% and 69.1% of the total variance, indicating that the common method bias of this study is well controlled.

Table 1. Validation factor analysis

Variable	Cronbach's Alpha(a)	CR	AVE
Management innovation and implementation performance	0.886	0.889	0.613
Transaction leadership	0.896	0.897	0.631
Cross-department integration	0.899	0.887	0.603

4.2. Inverted U Curve and Direct Action Test

Table 2. The hierarchical regression analysis

Category	Cross-department integration			Management innovation and implementation performance	
	Model1	Model2	Model3	Model4	Model5
TL	0.286***	0.266***		0.343***	0.247***
TL^2	-0.075*	-0.047		-0.159***	-0.135***
CI					0.319***
constant	5.018***	4.912***	5.043***	5.067***	3.466***
R^2	0.149	0.214	0.008	0.205	0.278
ΔR^2	0.121***	0.062***		0.199***	0.076***
F	8.198***	8.796***	0.589	12.300***	16.398***
ΔF	23.335***	10.699***		41.877***	35.789***
VIF	1.015≤VIF≤1.267				

First, this study is tested according to the inverted U-shaped relationship test standard proposed by HAANS and [17]: the regression coefficient of the quadratic term of the independent variable is negative and significant; when the slope is positive at the lower value, and the slope is negative when the higher value is taken. The results of data regression analysis are

shown in Table 2. From Table 2, Model 4 and Model 1 represent the performance of transactional leader secondary item on management innovation, and the regression coefficient of cross-departmental integration was negative and significant (β = -0.159, p <0.001; β = -0.075, p <0.05), which met the criteria.

Secondly, according to the results of the analysis, the regression equation for the performance of management innovation is y1=-0.159X2+0.343X+5.067. To test the slope, this study obtains the slope equation: S=-0.318X+0.343. Since X is standardized, the value range of X is [-2,2], when the lowest value of X, the slope S is positive; when X takes the highest value of X, the slope S is negative, meeting the standard. Following the same method, the slope test of the transactional leader and cross-departmental integration regression equation also meets the conditional criteria.

Moreover, to test the inflection point of the curve equation, the slope equation S=-0.318X+0.343 of the implementation performance of transactional leadership and management innovation is zero, and X is 1.078, which falls within the value range of [-2,2]; and when the slope equation of transactional leadership and cross-departmental integration is zero, the X obtained does not exceed the value range. In conclusion, hypothesis 1 holds hypothesis 2. Furthermore, model 5 indicates that cross-departmental integration has a significant positive impact on the implementation performance of management innovation (β =0.319, p <0.001), and hypothesis 3 holds.

5. Study Conclusion and Discussion

The conclusion of this study shows that the transactional leadership of subordinates "incentive" and "control" double superposition effect, contributed to the transactional leadership influence small and medium-sized enterprise management innovation implementation performance of "diminishing marginal effect" and "too much" effect, namely the transactional leadership and small and medium-sized enterprise management innovation implementation performance curve relationship. In the relationship between transactional leadership influencing the implementation performance of management innovation of smes, cross-departmental integration plays a nonlinear role in transmission, which contributes to the "diminishing marginal" and "too much" effect of transactional leadership on the implementation performance of management innovation. When in a moderate degree, the transactional leader can influence the implementation performance of management innovation through the transmission effect of cross-department integration, while the excessive transactional leader cannot improve the implementation performance of management innovation through the role of cross-department integration. The above research conclusions show that in the process of implementing management innovation, the transactional leadership style needs to be maintained at a medium level. At the same time, smes need to think about how to better promote the interaction and cooperation between various departments.

References

[1] ROBERT M,GIULIANI P,GUILLOTON A,et al.Management innovation: a dynamic analysis of theimplementation phase over timelJ]. Production Planning Control,2019,30(15): 1219-1238.

[2] HEYDEN M L,SIDHU J S,VOLBERDA H WThe conjoint influence of top and middle managementcharacteristics on management innovation]]. Journa!of Management,2018,44(4): 1505-1529.

[3] YUE C A,MEN L R,FERGUSON M A. Bridging transformational leadership, transparent communication, and employee openness to change: the mediatingrole of trust]7. Public Relations Review,2019, 45(3):1017-1079.

[4] Zhang Zhengang, Yao Cong, Yu Chuanpeng. The role of "double-edged sword" of management innovation on the growth of small and medium-sized enterprises [J]. Scientific Research, 2018,36 (7): 1325-1333.

[5] HULBERT B,GILMORE A,CARSON D. Opportunity recognition by growing SMEs: a managerial orentrepreneurial function? [J]. Journal of StrategicMarketing,2015,23(7): 616-642.67.

[6] Zhang Haitao, Long Lirong, research on the internal mechanism of the influence of leadership Style and enterprise Strategy synergy on innovation atmosphere [], Science and Technology Management, 2015,36 (6): 114-1257.

[7] JIANG L,BOHLE S L,ROCHE M. Contingent reward transactional leaders as “good parents”: examining the mediation role of attachment insecurity andthe moderation role of meaningful work[J]. Journalof Business Psychology, 2019, 34(4): 519-537.

[8] Huang Qiufeng, Tang Ningyu. Meta-analysis of the influence of transformational leaders and transactional leaders on employee innovation behavior]. Soft Science, 2016,30 (3): 60-64.

[9] GIULIANI P,ROBERT M,LE ROY F. Reinvention of management innovation for successful implementation[J]. International Journal of Entrepreneurship Small Business, 2018 ,35(3) : 343-361.

[10] SU Z,CHEN J,WANG D. Organisational structure and managerial innovation: the mediating effectof cross-functional integration [J]. Technology Analysis Strategic Management, 2019,31 (3): 253265.

[11] BASS B M,AVOLIO B J,JUNG D I,et al. Predicting unit performance by assessing transformational and transactional leadership [J]. Journal ofApplied Psychology,2003,88(2): 207-218.

[12] FIEDLER F E.Reading 20 the contingency model;atheory of leadership effectiveness[M]// LEVINE JM,MORELAND R L. Small groups: key readingsLondon: Taylor and Francis Group, 2006.

[13] Feng Cailing, Zhang Lihua. Cross-level impact of change / transactional leadership on employee innovation behavior [J]. Science and Science and Technology Management, 2014,35 (8): 172-180.

[14] DAHLMANN F,BRANICKI L, BRAMMER SCarrots for corporate sustainability: impacts of incentive inclusiveness and variety on environmentalperformance J]. Business Strategy the Environment,2017,26(8): 1110-1131.

[15] BRETTEL M,HEINEMANN F,ENGELEN A,etal. Cross functional integration of R&.D, marketing, and manufacturing in radical and incrementalproduct innovations and its effects on project effectiveness and efficiency[J]. Journal of Product Innovation Management,2011,28(2): 251-269.

[16] Shang Navigation AIDS, Li Weining, Huang Peilun. Behavioral mechanism of cross-departmental Collaborative innovation [J], Journal of Management, 2016,13 (1): 93-99.

[17] HAANS R F,PIETERS C,HE Z L. Thinking about U: theorizing and testing U- and inverted Ushaped relationships in strategy research[J]. Strategic Management Journal,2016, 37 (7): 1177-1195.

[18] WALDMAN D A,RAMIREZ G G,HOUSE R J.et al. Does leadership matter? CEO leadership attributes and profitability under conditions of perceived environmental uncertainty J]. Academy ofManagement Journal, 2001,44(1) : 134-143.