

Statistical Model of Field Executive Leadership Technique at Medium and Large Contractors in Enhancing Workforce Performance on Low Motivation Conditions

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Abstract: This study aims to explain the moderating role of work motivation in the relationship between leadership and workforce performance in medium and large companies. This study presents a comparison of models in which workforce performance is determined by the way the executive leadership manages the workforce with different work motivation conditions. This study aims to prove that contractor companies must have good ability in determining a field executive in each project. This study chose a descriptive study by examining the comparison of two structural models of leadership relationships of field executives on workforce performance that is moderated by work motivation. The data were obtained from 100 respondents of foremen, skilled workers and workers of 48 medium and large companies. The hypothetical model was tested using structural equation modeling with a partial least square approach. This study will require a change in the workforce performance will increase if the company can place a proper field executive. For medium companies, people-oriented leadership is more appropriately applied to low-motivation conditions and task-oriented leadership is more appropriately applied to high-motivation conditions. Meanwhile, for large companies, people-oriented leadership is more appropriately applied to high-motivation conditions and task-oriented leadership is more appropriately applied to low-motivation conditions. This study has implications for the development of the company regarding determining the appropriate leadership style for field executives following the company level. Errors in this case will have an impact on the nonconformity of leadership required in the project.

Key words: Executive leadership, work motivation, workforce performance, nonconformity, executives, company

INTRODUCTION

There are some leadership styles required for successful future projects, including honesty, supportive behavior having good relationships with subordinates interacting with each other effectively. Leadership is divided into two roles, i.e., roles in management and roles in leadership (Pinto, 2000). The management role relates to resource control and management, planning and cost control. Whereas the leadership role is concerned with directing the vision, motivating, coordinating and individual development. In the project context, the implementation of either management or leadership must be relatively balanced. The leadership challenge is to stay alive and maintain sustainability, meet the standards set by stakeholders and satisfy partners (i.e., clients, supervisors and consultants), maintain high motivation within the group and take action according to project objectives (Kaulio, 2008). Whereas the task of leadership in the project not only carry out tasks related to the project but also must ensure unity of the group and its

integrity, protecting resources from competition among them. The role of field managers in construction projects has a significant role (PPKDPK., 2012). The role of leadership plays a significant role in project implementation (Dafid *et al.*, 2012). Foster and Karen (2001) argue that the cause of poor quality/performance of a workforce is the lack of knowledge and skills in performing the job tasks assigned to him, the lack of motivation to work better and the lack of self-confidence of a workforce in actualizing the ability to work.

Literatur review

Leadership: Leadership complexity theory suggest that the complexity of behavior is an essential concept for learning in the field of managerial leadership. More effective leaders display the different behaviors that are needed to overcome or react to different situations. The leadership complexity theory is a model incorporating cognitive and behavioral complexities as well as integrated social complexities which are used as leadership effectiveness approaches. Components of

social complexity address the importance of a leader's ability to recognize and manage emotions within him/herself and others (Dansereau, 1995). Organizational change activities that have been planned are affected by three key activities: communicating the need for change, mobilizing others to support change and evaluating the implementation of change (Battilana *et al.*, 2010).

Task-oriented leadership behaviors and people-oriented leadership behaviors place different emphases on each of the three implementation activities of change. People-oriented leaders are more effective and focus on communication and mobilization activities rather than focus on evaluating activities whereas task-oriented leaders are more likely to focus on mobilizing and evaluating activities rather than focusing on communicating activities.

People-oriented leaders show consideration for others and are good at managing the feelings of others and their emotions, valuing communication as a means to encourage individual and group participation and explicitly request contributions from different members of the management level. People-oriented leadership is also expressed by Vera and Crossan (2004). Regarding the role of communication, Egri and Herman (2000) add that effective communicators can make a commitment to the company vision and inspire members of the organization to work towards the target.

Work motivation on workforce: Work motivation has been examined in the basic motivation theory through Maslow's researches including satisfaction, security needs, affiliation and recognition. McClelland added that motivation is influenced by the nature of work, salary, collegiality and autonomy. The understanding of the work motivation concept then leads the work characteristic model (Hackman and Oldham, 1980).

High work motivation can be formed through the process of developing a project scope that includes developing details of the Work Breakdown Structure (WBS). The WBS identifies the main point of the product/service to be undertaken as part of the project. Then, the WBS is divided into work packages (tasks to be done) by each team members or overall teamwork for efficient task completion including motivating the project researchers (Kerzner, 2000; Pinto, 2000). Without motivation even the most talented people will not be able to show or give their potential.

Colquitt (2001), Rose and Manley (2011) consider that some factors drive the formation of good motivation. These factors consist of the existence of justice and equity in resources distribution, the existence of justice in the procedural, the existence of justice to compliance with rules and fairness in process and equity of decision which

lead to results and interactional justice. The project manager must be self-motivated and capable of being a motivator for project team members (Sharp *et al.*, 2007; Tampoe and Thurloway, 1993). Project managers must be self-motivated and able to be motivators for project team members in cooperation and task efficiency, so that, they have high capabilities (Sharp *et al.*, 2007; Tampoe and Thurloway, 1993).

Workforce performance: Problems related to productivity are issues that are typically associated with workforce performance. Workforce performance is influenced by many factors and usually associated with cost and quality time performance (Soekiman *et al.*, 2011). Three components of the decisive factor in project success, namely managerial performance, financial performance and workforce performance (Ng and Tang, 2010).

The project's success is defined as to what extent the project objectives and expectations are met. This success is closely linked to the organizational effectiveness and the success in managing its workforce and resources. For contractors, they need new thinking about management such as downsizing of construction, reducing variability in workforce productivity. The more accurate workforce productivity results, the construction service company should establish a more detailed records system of all production activities and take into account all the elements that affect workforce productivity at each of the construction steps and take into account the variations in the types of research handled.

Motivation can maintain or increase employee productivity while simultaneously preparing staff to change the organization. If the workforce is productive, motivation must be supportive. Moreover, companies train their workforce to have the necessary knowledge and skills, so that, each workforce can contribute to the project implementation.

MATERIALS AND METHODS

The research uses a quantitative approach for data analyzes. This approach is selected because the data obtained and the survey results are primary data sourced from the respondents. The research populations are field executives, foremen, skilled workers and workers of the medium and large class contractors or having a grade of 5-7, located in Malang, Surabaya, Blitar and Kota Probolinggo. Considerations on those companies are because at those levels people-oriented leadership and tasks are often applied. The respondents were foremen, skilled workers and workers. The total sample was 100 respondents from 48 surveyed companies. The survey

Table 1: Research variable and indicator

Variables	Items
People Oriented Leadership	POL1
	POL2
	POL3
	POL4
	POL5
Task Oriented Leadership	TOL1
	TOL2
	TOL3
	TOL4
	TOL5
	TOL6
	TOL7
	TOL8
Work Motivation	WM1
	WM2
	WM3
	WM4
Workforce Performance	WP1
	WP2
	WP3
	WP4

locations were Malang, Surabaya, Blitar and Probolinggo where these cities have quite rapid growth. Some variables used in this research are leadership as the exogenous variable, workforce performance as the endogen variable and work motivation as the moderation variable. Table 1 presents the variables and indicators that exist in the hypothetical model.

The study used a hypothesis testing for the final analysis. The analysis tool used for hypothesis testing is Structural Equation Model (SEM). AMOS Software Version 20 is used for the analysis calculation.

RESULTS AND DISCUSSION

Structural relationships in the three variables, i.e., leadership, workforce performance and work motivation are separated into two parts: the measurement model and the structural model. In the measurement model, load factor, composite reliability and Average Variance Extracted (AVE) will be calculated as a measure of the validity and reliability of the construct. Loading factor on all indicators ranging from 0.525-0.833 in medium companies and 0.573-0.981 in large companies in which indicators value more than 0.50 explains the validity of proper construct (Table 2).

Table 3 presents the results of the path coefficient test. The path coefficient of the people-oriented leadership variable to workforce performance variable gives no significant difference (difference = -0.022; $p = 0.942$) on both company levels. The coefficient of the path from the task-oriented leadership variable to the workforce performance variable gives no significant difference decision (difference = 0.046; $p = 0.875$) at both company levels.

The path coefficient from the work motivation variable to the workforce performance variable gives the decision of no significant difference (difference = 0.093;

$p = 0.689$) at both company levels. Path coefficients of the interaction variable of people-oriented leadership and work motivation on workforce performance give a significant difference (difference = 0.951; $p = 0.040$) at both company levels. Path coefficient of interaction variable of task-oriented leadership and work motivation to workforce performance gives the decision of significant difference (difference = -1.017; $p = 0.023$). This analysis proves that work motivation moderate the relationship of people-oriented leadership and task-oriented leadership to workforce performance. In medium companies, people-oriented leadership is more appropriately applied to low work motivation conditions whereas task-oriented leadership is applied to high work motivation conditions. Conversely in large companies, people-oriented leadership is more appropriately applied to high work motivation conditions whereas task-oriented leadership is applied to low work motivation conditions. The coefficient direction in the interaction section is mutually opposite between medium and large companies.

The leadership plays a significant role in project implementation (Thite, 2000; Wang *et al.*, 2005; Yang *et al.*, 2011; Dafid *et al.*, 2012). The workforce should be viewed as an investment if developed and managed effectively, rewarding the contractor with higher productivity. The workforce management of the contracting companies, especially the medium and large classes is generally less qualified, so, often the process and the result of the project implementation deviates from the planning (Dafid *et al.*, 2012). Sophisticated construction technology is often used in large infrastructure projects whereas local construction as a whole is heavily reliant on the intensive workforce (Table 2 and 3, Fig. 1 and 2).

People-oriented leadership is an essential choice for the executive (Vera and Crossan, 2004; DuBrin, 2004; Dansereau, 1995). People-oriented leaders show consideration for others and are good at managing the feelings of others and their emotions, valuing communication as a means to encourage individual and group participation and explicitly request contributions from different members of the management level. In large companies there are more qualified human resources and also support more advanced or modern equipment, so that, task-oriented leadership is more appropriately used for workers with low motivation conditions. However, different ways should be done in medium companies; when workers are in low motivation conditions, then, field executive must take decisions to implement people-oriented leadership. For medium companies, effective communication roles can build commitment to the company's vision and inspire organizational members to work toward its realization (Egri and Herman, 2000). Leadership roles are required to focus on communication-related activities, focus on

Table 2: Construct validity and reliability

	Medium company			Large company		
Variable/Items	Loading factor	Composite Reliability (CR)	Average Variance Extracted (AVE)	Loading factor	Composite Reliability (CR)	Average Variance Extracted (AVE)
People Oriented Leadership						
POL1	0.766	0.838	0.514	0.784	0.881	0.598
POL2	0.811			0.739		
POL3	0.774			0.734		
POL4	0.525			0.739		
POL5	0.672			0.862		
Task Oriented People						
TOL1	0.783	0.916	0.577	0.804	0.895	0.518
TOL2	0.691			0.705		
TOL3	0.724			0.808		
TOL4	0.799			0.691		
TOL5	0.765			0.719		
TOL6	0.813			0.800		
TOL7	0.747			0.621		
TOL8	0.744			0.573		
Work Motivation						
WM1	0.703	0.836	0.562	0.864	0.913	0.727
WM2	0.790			0.981		
WM3	0.774			0.832		
WM4	0.728			0.711		
Workforce Performance						
WP1	0.593	0.834	0.561	0.691	0.856	0.598
WP2	0.740			0.844		
WP3	0.806			0.759		
WP4	0.833			0.792		

Table 3: Path coefficient test results

Relation	Path coefficient			
	Medium company	Large company	Difference	p-value
People oriented leadership \Rightarrow workforce performance	0.270	0.248	-0.022	0.942
Task oriented leadership \Rightarrow workforce performance	0.280	0.326	0.046	0.875
Work motivation \Rightarrow workforce performance	0.303	0.396	0.093	0.689
People oriented leadership x work motivation \Rightarrow Workforce performance	-0.445	0.506	0.951	0.040
Task oriented leadership x work motivation \Rightarrow workforce performance	0.496	-0.521	-1.017	0.023

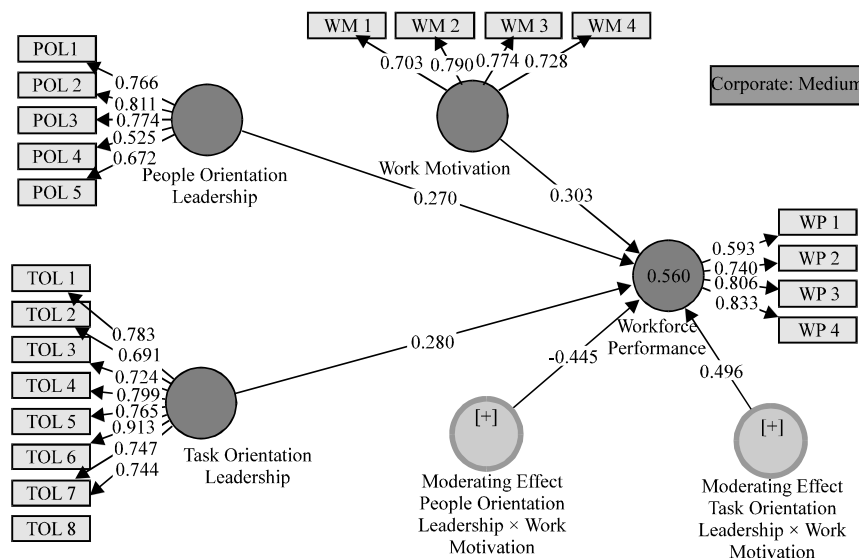


Fig. 1: Medium company enterprise model

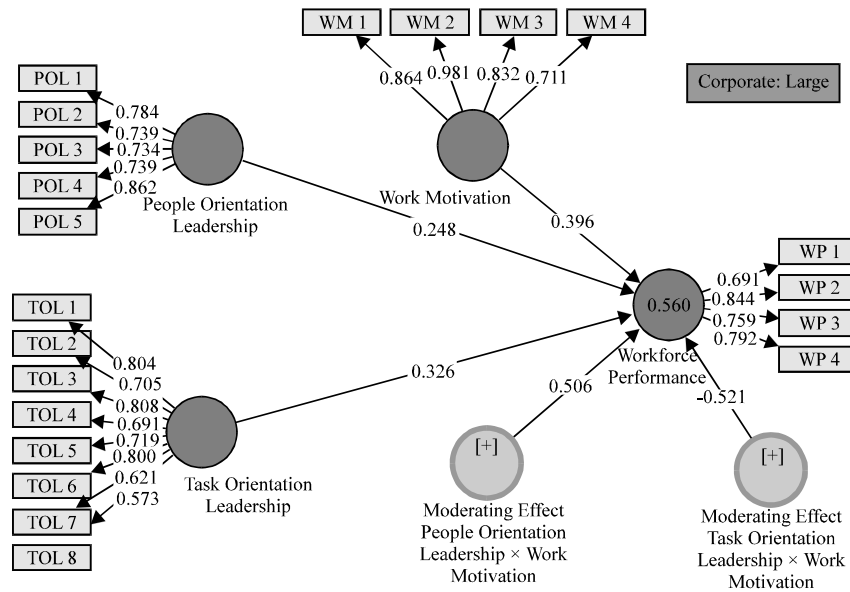


Fig. 2: Large company model

activities related to mobilizing the organization members, focus on evaluation activities related to the implementation of the planned organizational change (Battilanaa *et al.*, 2010). People-oriented leadership requires reliable communication skills. The success of change is influenced by the strong relationship between the four components of people, processes, technology and communication (Cowan-Satradath, 2010; Battilanaa *et al.*, 2010). The primary role of the executive leadership is increasing the work motivation of the workforce. Kaulio (2008) reminds the leadership issues where the executive must be capable of solving the problem in the field. These problems include motivating someone, training a competent person to focus on something important that is part of the job. The choice of task-oriented leadership and behaviour-oriented relationships (people) is a behavior-based approach to leadership (Northouse, 2004; Nauman and Iqbal, 2005; Nauman *et al.*, 2010).

Relation to the workforces having such status requires special treatment. Problems related to productivity are issues that are usually associated with workforce performance (Soekiman *et al.*, 2011). Workforce performance is influenced by many factors and is usually associated with time, cost and quality performance. The causes of poor quality/performance are the lack of knowledge and skills in performing the job tasks assigned to them the lack of motivation to work better and the lack of confidence of a worker in actualizing the ability to work (Foster and Karen, 2001).

The work motivation has an important role in which low motivation is the most frequent cause of project failure. Motivation is seen as a significant factor in the success of project management. Less motivated managers and workers tend to perform poorly, even though they have proper management, technical and project skills.

There are various components of motivation. Oyedele (2010, 2013) identified four empirical factors of motivation that should get more attention; including the organizational support, the successful implementation of the design and the effort on recognition. The magnitude of the role of manpower as a reflection of high motivation is also found in the research (Kooij *et al.*, 2010). The motivations for its impact depend on individual personal factors such as the age of education level, gender, culture, experience, occupation and occupational level and others. Understanding work motivation is then led to a model of work characteristics (Hackman and Oldham, 1980).

Leaders must be able to possess specific characteristics or personality traits that distinguish between leaders and non-leaders (Judge *et al.*, 2002; Kozlowski and Ilgen, 2006; Kerzner, 2000). Teamwork in a positive emotional state will affect better cooperative levels be able to reduce conflict and have perceptions of higher task performance (Barsade, 2002; Pescosolido, 2002). Interdependence which is part of the task implementation is influenced the emotional of group members (Barsade, 2002; Bartel and Saavedra, 2000; Tiedens *et al.*, 2004). The experience and level of education of the executive will help to explain what workforce needs to be done on the task (Avolio *et al.*, 2000).

CONCLUSION

The leadership of both field-oriented and task-oriented people have a significant effect on the improvement of workforce performance. Appropriate leadership in construction projects will be the determining factor of good workforce performance. The leadership advocated in the construction project is people-oriented leadership or people-task-oriented leadership. Work motivation will moderate the influence of leadership on improving workforce performance. Changes in work motivation determine what leadership should be taken by the field executive. Leadership by executives will use many types of leadership. At the medium company level, people-oriented leadership is more appropriately applied to low work motivation conditions and task-oriented leadership is applied to high work motivation conditions. Meanwhile, at large companies, people-oriented leadership is more appropriately applied to high work motivation conditions and task-oriented leadership is applied to low work motivation conditions.

IMPLEMENTATIONS

Implementation of the contractor's research requires proper leadership of the executive, so that, team collaboration can be established and adequately maintained. The selection of the project executives takes precedence over resources having skills of task-oriented leadership and people-oriented leadership. The executive must have responsibility for all technical activities in the field and must be able to raise the work motivation spirit of the workforces. Project work is inseparable from conflict. So, the ability of executives to control their emotions and feelings is a must-have element which the executives must be able to explain this situation. The experience and level of field education will help in deciding what leadership to use.

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