

EFFECT OF TRANSFORMATIONAL AND TRANSACTIONAL LEADERSHIP ON INNOVATION PERFORMANCE AMONG SMALL AND MEDIUM ENTERPRISE IN UASIN GISHU COUNTY, KENYA

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Abstract

The main purpose of the study was to determine effect of Transformational and Transactional leadership on SME innovation performance. The study was informed upper echelons theoretical perspective. Explanatory research design was employed while questionnaire was used to collect data from a sample size of 290 SMEs which was randomly selected. Findings from multiple regression model indicated that both hypothesis were rejected at 0.05 level of significance. This infers that transformational leadership and transactional leadership had significant and positive effect on SME innovation. In addition, results showed that all the two predictors (transformational and transactional leadership) explained 57.2 percent variation of SME innovation. Thus, transformational leadership and transactional leadership make it possible for SMEs to highly innovation achieve competitive advantage. It is therefore important for SMEs managers to focus on understanding a transformational leadership and transactional leadership.

Keywords: Transformational leadership, transactional leadership, SME innovation, strategic leadership

INTRODUCTION

Innovation is one of the key components for SME effectiveness and innovative firms are capable of creating or finding new ways of developing the edge needed for sustainability (Janssen, Van de Vliert, & West, 2004; Yuan & Woodman, 2010). The knowledge embedded in human capital enables firms to enhance distinctive competencies and discover innovation opportunities (Wright *et al.*, 2001). When SME develop new products and improve management

processes, they require the motivation and ability of human capital to produce creative ideas, develop innovative approaches, and exert new opportunities (Scarborough, 2003). Innovation requires a high level of involvement and participation from employees and managers orientations (Hurley and Hult, 1998). Firms may elicit employees' involvement and participation by granting them to solve problems and to participate in decision-making that affects their work (Damanpour, 1991; Glynn, 1996). A high level of strategic orientations would create the conditions to encourage employees to bring new ideas and exchange knowledge in the ongoing innovation process and, in turn, enhance innovative outcomes in SMEs (Jiménez-Jiménez and Sanz-Valle, 2005; Tsai, 2002). Jung et al (2003) argue that leaders have the ability to influence innovation in the firm by introducing new ideas, setting specific goals, and encouraging innovation initiatives from their subordinate. Strategic leaders who shape their companies to become extraordinary innovators are lauded in the popular press and practitioner journals (Ernst & Chfobot-Mason, 2011; Skarzynski & Gibson, 2008). Moreover, some studies find that executive pay is tied to inventive and innovative success (Makri, Lane, & Gomez-Mejia, 2006). Empirical studies, however, rarely link strategic leaders to fine-grained measures of inventive or innovative performance (Yadav, Prabhu, & Chandy, 2007). Instead, scholarly work tends to focus on leadership in teams, and on project outcomes rather than firm level innovative performance (Wu, Levitas, & Priem, 2005). Leaders' actions also convey the kinds of behaviors they value and wish to encourage. Those who display transformational behaviors encourage others to engage in creative processes, heightening their alertness to inventive opportunities (Jung, Wu, & Chow, 2008).

Strategic leadership is one leadership style, which is very noticeable and has an effective role in making competitive advantages (Yazdani, 2009). On the other hand, new goods are at the heart of economic growth. The link between innovation and performance at various levels of aggregation has been the focus of attention in a number of studies in recent decades. (Loof & Heshmati, 2002) Strategic leaders have been repeatedly recognized for their critical role in recognizing opportunities and making decisions that affect innovation process. Strategic leadership and innovation strategy are crucial for achieving and maintaining strategic competitiveness in the 21st century. (Elenkov & others, 2005).

Research points that most SMEs in Kenya are not innovative and this affects negatively on their growth. The Kenyan Business system has not fully integrated innovation to enhance competitiveness (Ministry of Science and Technology, 2008). As a result, key sectors such as manufacturing have not been able to become competitive. The contribution of SMEs has stagnated at 11 percent over the past 15 years. Kenya's industrial structure continues to display insufficient linkages between the various categories of firms especially SMEs where most

innovation takes place. In addition, most local firms have not been able to develop technological competencies to acquire and apply knowledge from foreign firms. However, some SMEs show some degree of innovativeness. Little is documented on SMEs innovation and its related impact on growth of SMEs in Kenya.

Leadership strategic may allow firms to discover and utilize knowledge and expertise in the enterprise innovation (Scarborough, 2003). Motivating innovation through strategic leadership, however, remains a challenge for most firms (Ismail, 2010). Although SMEs in Kenya have access to the knowledge, skills and expertise of employees, they do not possess good capacities in managing strategic orientations in place to ensure effective utilization of the resources in the development of SME expertise for innovation (Ngugi, 2013).

In Kenya, despite the critical role played by the SME in the county, most of the business startups are faced with many challenges where over 90% of the businesses fail at their third year (Njoroge and Gathungu, 2013). Mullei & Bokea, as cited in Wambugu, (2005) stated that in Kenya, very few enterprises have grown into large formal organizations, an adverse scenario that is apparently common among youth owned business enterprises, raising questions if SMEs in Kenya have leaders who are strategically oriented. In addition, very few studies have done linking strategic leadership with SME innovation, hence creating a gap on how transactional, transformational and inspiration leadership affect SME innovation. Thus, this study hypothesis that:

H₀₁: Transformational leadership has no significant effect on SME innovation performance

H₀₂: Transactional leadership has no significant effect on SME innovation performance

LITERATURE REVIEW

Theoretical Perspective

In response to the scepticism about the impact of leaders, three streams of leadership research emerged (Elenkov, Judge & Wright, 2005: 667). First, Hambrick articulated an ambitious research agenda set out to provide a stronger argument for leadership in the strategic management literature (Hambrick & Mason, 1984) and labelled this the “upper echelons perspective”. According to Finkelstein and Hambrick (1996), this had a profound impact on our understanding of organizational processes and outcomes. While the upper echelons perspective expanded understanding of strategic leadership, it has been criticised for not directly studying actual strategic leadership behavior. Instead, it used demographic proxies and inferred strategic leadership behaviours. Most of these studies have been conducted in Western developed (predominantly the United States) economies. As such, the way in which strategic leadership behaviours vary throughout the world is unknown and relatively unexplored (Elenkov

et al.,2005: 667). according to Elenkov et al. (2005), the upper echelons perspective has provided sound theoretical and a number of empirical arguments for the central role of strategic leadership.

Empirical Review

Transformational Leadership and SME Innovation Performance

Transformational leaders are defined as leaders, who positively envision the future scenarios for the organizations, engage primarily in improving employees' self-confidence by helping them to realize their potential, communicate an achievable mission and vision of the organizations to employees, and participate with employees to identify their needs and working out collaboratively to satisfy their needs (Peterson, Walumbwa, Byron, & Myrowitz,2009)

Several reasons support the expectation that transformational leadership would enhance employee creativity and innovation. First, transformational leaders go beyond exchanging contractual agreements for desired performance by actively engaging followers' personal value systems (Jung & Avolio, 2000). They provide ideological explanations that link followers' identities to the collective identity of their organization, thereby increasing followers' intrinsic motivation rather than just providing extrinsic motivation to perform their job. By articulating an important vision and mission for the organization, transformational leaders increase followers' understanding of the importance and values associated with desired outcomes, raise their performance expectations, and increase their willingness to transcend their self-interests for the sake of the collective entity. A number of studies have found that intrinsic motivation leads to creativity because intrinsically motivated people tend to prefer novel approaches to problem solving. Followers' identification with the organization's vision, mission, and culture also has been linked to heightened levels of motivation toward higher levels of performance.

Bain, (2001) asserts that by providing intellectual stimulation transformational leaders encourage followers to think 'out of the box and to adopt generative and exploratory thinking processes. Transformational leaders stimulate their followers to think about old problems in new ways and encourage them to challenge their own values, traditions, and beliefs. Oftentimes, transformational leaders are able to accomplish this shift in perspective by serving as role models. By showing high expectations and confidence in followers' capabilities, transformational leaders also help to develop followers' commitment to long-term goals, missions, and vision and to shift their focus from short-term and immediate solutions and objectives to long-term and fundamental solutions and objectives.

Indeed, in a study of Austrian branch bank managers, Dess, (2000) reported a stronger positive relationship between these managers' extent of transformational leadership and long-

term as compared with short-term performance. Because creativity in organizations often requires trade-offs across time, this finding provides a basis for expecting that transformational leadership would enhance creativity

Several studies have examined this relationship more directly and found positive results. Dess and Picken, (2000) found that transformational leadership increased followers' creativity in a computer-mediated brainstorming exercise. In this study, the followers' performance was assessed in part based on the number of creative ideas generated. In a study of 78 managers, Dess and Picken, (2000) found a positive relationship between the intellectual stimulation provided by the leader and unit performance when there was a climate of support for innovation within the leader's unit. However, when support for innovation was absent, the positive relationship became insignificant. This pair of findings provides indirect support for the leader's role in inducing creativity.

Mumford et al. (2002) also found that transformational leadership positively influenced performance of research and development (R&D) project teams in a large R&D organization. Performance was measured based on superiors' ratings of subordinate innovativeness and the extent to which their innovative orientation added unique value to the projects that they finished. Taken as a whole, these prior studies have provided a strong theoretical basis for expecting that transformational leadership would enhance creativity among followers. However, as can be inferred from our summaries of prior empirical research, these have tended to focus on the role of leadership at the individual level and mainly with subjective performance measures such as self-reported and supervisory ratings of creativity.

Mumford et al. (2002) have argued that the use of a vision-based motivational process by transformational leaders should enhance creativity at the organizational level. This is because "by framing vision in terms of work goals and articulating this vision through project selection and project evaluation rather than overt affective appeals, a work-focused vision or mission may be promulgated that will enhance people's creative efforts. They also have suggested that by influencing the nature of the work environment and organizational culture, leaders can affect Organizational members' work attitudes and motivation in their interactions, thereby affecting their collective organizational achievement. Despite the reasonableness of expecting that transformational leadership would enhance organizational innovation, little empirical research has investigated the existence and nature of this link (Mumford et al., 2002).

Jaussi and Dionne (2003), did an experiment to test the direct relation between transformational leadership and employee creativity and found no correlation. In their experiment, 364 subjects were randomly assigned to four conditions and were asked to develop and present arguments in groups about a social relevant topic in one hour. Individuals kept their

own idea logs of their own thoughts and arguments, which were used as creativity measures rated by two trained graders. They used a two-by-two experimental design i.e., high transformational vs. low transformational leadership and conventionally behaving leader vs. unconventionally behaving leader. The manipulations of transformational leadership were based on the MLQ 5X (Jausssi & Dionne, 2003). First, individuals with a high transformational leader were rated slightly less creative than individuals with a low transformational leader and this effect was found regardless of conventionality. Second, role modeling behavior was highly correlated with transformational leadership and was positively related to creative performance.

Si and Wei (2011) showed that the relationship between transformational leadership and subordinates' creative performance was moderated by team empowerment climate, in such a way that the relationship is stronger when empowerment climate is low than when it is high. Thus, when empowering climate was low, transformational leadership enhanced employee creative performance and when empowering climate was high transformational leadership reduced employee creative performance.

Transactional Leadership and SME Innovation Performance

Two of the four studies discussed in this paragraph show a direct negative relation between transactional leadership and innovativeness (Lee, 2008; Si & Wei, 2012). This is in line with the transactional leadership theory. In his study, Lee (2008) used 201 research and development (R&D) professionals from two organizations. Innovativeness was measured with Kirton's (1976) Adaptive Innovation inventory (KAI), which distinguishes two cognitive styles i.e. adaptive and innovative in problem solving on a continuum ranging from adaptive to innovative. With the negative relation found, Lee (2008) concluded that transactional leadership has a negative impact on employee innovativeness

Whereas Lee (2008) investigated transactional leadership as a whole construct, Moss and Ritossa (2007) focused on transactional leadership's different facets separately. For their study, they used 263 leader-follower dyads from 38 governmental organizations in Australia. To measure employee innovativeness, leaders completed the 13-item measure that was developed by George and Zhou (2001), which is a general measure of creative behavior in the workplace and assesses the extent to which employees suggest and implement novel and effective solutions, processes, and procedures. Interestingly, they 11 found no significant relation between transactional leadership and employee creativity. This is contrary to the expectations of transactional leadership theory and prior research. However, the results of all different facets pointed in the negative direction, which indicate that there was a small decrease in employee innovativeness when transactional leadership was present

Although all research findings pointing in the negative direction, Moss and Ritossa's (2007) findings failed to show a significant relation. Hence, there might be factors that influence the relation between transactional leadership and employee innovativeness. Two moderators that affect this relationship are psychological empowerment and empowering climate, both related to empowerment theory. Empowerment theory states that psychologically empowered individuals see themselves as self-determined and competent and that their work has organizational impact and is meaningful (Sun, Zhang, Qi & Chen, 2011). This would enhance employees' motivation and results in an energized state to engage in innovative behavior. Pieterse, Van Knippenberg, Schippers and Stam (2010) studied the effect of psychological empowerment in the relation between transactional leadership and employee innovativeness. They used 230 employees and their immediate supervisors of a government agency in The Netherlands combining multisource ratings for innovativeness. Innovative behavior was measured by supervisor ratings on a creativity scale used by Janssen et al. (1997). Psychological empowerment was found to have an interaction effect in the transactional leadership-employee creativity relationship. Psychological empowerment moderated the relationship such that the relationship is negative with high psychological empowerment and weaker with low psychological empowerment. Thus, transactional leadership is more detrimental for employees high in psychological empowerment than for employees low in psychological empowerment. In practical terms this could mean that in contrast to low empowered employees, highly empowered employees might view transactional leadership as restrictive, controlling and demotivating and therefore causing less innovative behavior (Pieterse et al., 2010).

Si and Wei (2011) conducted a study to test how transactional leadership influences employee creative performance when an empowering climate was present. In a high empowering climate there is a higher level of trust among employees, more frequent flow of information, more open team goals, and less supervisory control from the managers. The result is greater feelings of respect, 13 more self-determination, more sense of common values, and more harmonious work climate, leading to more intrinsic motivation and more innovative behavior (Si & Wei, 2011). For their study, they used 465 employees of a large multinational company in China, working together in 93 teams, with every team having a supervisor. Employee creative performance was measured by supervisor ratings on George and Zhou's (2001) 7-point scale for creativity. They found that an empowering climate moderates the relationship between transactional leadership and employee creative performance in such a way that the relationship is positive when empowerment climate is high, whereas it is negative when empowerment climate is low (see Figure 2). They concluded that transactional leadership

has positive effects on employee creativity when a high empowering climate is present, and has negative effects when a low empowering climate is present.

When comparing Si and Wei's (2011) findings to Pieterse's et al. (2010) findings they seem to contradict each other. Because in an high empowering climate it is likely for employees to feel psychologically empowered, according to the findings of Pieterse et al. (2010) one would expect that high transactional leadership would demotivate people because highly empowered employees would perceive it as controlling and demotivating. However, Si and Wei (2011) hypothesized and found the opposite; high transactional leadership has positive effects on employee innovativeness when empowering climate is high and negative effects when empowering climate is low. They argued that because of the high-level empowering climate, the enthusiasm and self-determination of employees will supply a gap or remedy to the negative effect of transactional 14 leaders on the subordinates' creative performance. Although the findings seem to contradict each other, both hypotheses are plausible.

RESEARCH METHOD

This study adopts an explanatory research. The basic idea behind explanatory research is to measure variables using data collected from a representative sample and then to examine relationships among the variables. The population of study comprised of 1053 registered SMEs where owners/managers in Uasin Gishu County. From the target population of 1053 SMEs, Taro Yamane (1973) sample size formula was used to select a sample size of 290 SMEs. Simple random sampling technique was used to select sampled employees. The research utilized both primary and secondary data. The primary data on the other hand is to be obtained from questionnaires. Cronbach's alpha was used to determine reliability, where Cronbach's coefficient, having a value of more than 0.6 is considered adequate for such explanatory work (Heir *et al*, 2006). Descriptive methods were employed in analyzing qualitative data where frequencies and proportions were used in interpreting the respondent's perception of issues that was raised in the questionnaires so as to answer the research questions. Inferential statistics were be used to draw implications from the data with regard to the regression model and person correlation.

FINDINGS AND DISCUSSION

Descriptive statistics

Table 1 presents the results on transformational, transactional leadership and SME innovation. The findings on transformational leadership revealed that the supervisors can understand the respondents' situation and gives them encouragement and assistance (mean=3.54, SD=

1.155).Supervisors encouraged project managers to take challenges (mean = 3.47, SD = 0.964), make efforts (mean = 3.53,SD = 0.794) and think about problems from a new perspective(mean = 4.01,SD = 2.186).Moreover, the supervisors encouraged the respondents' to rethink opinions that have never been doubted in the past (mean= 3.65, SD= 1.126) and believe they can complete their work under the leadership of the supervisor(mean=3.61,SD= 1.042).Also, the supervisors spend time to understand their needs(mean =3.54,SD =0.805).As such, the respondents believe the supervisor can overcome any challenge at work (mean= 3.52,SD = 0.786).

The results on transactional leadership revealed that the respondents are reprimanded in case they are unable to complete their work (mean = 3.54, SD = 0.805). Besides, supervisor precisely records any of their mistakes (mean = 3.47, SD = 0.964) and give them what they want to exchange for their hard work (mean = 3.53, SD = 0.794). Moreover, the supervisors tell them that they can get special rewards when they show good work performance (mean = 4.01, SD = 2.186). Finally, factor analysis for data use was conducted to ensure that all of the constructs used are valid and reliable before proceeding for further analysis. The study requested that all loading less than 0.5 be suppressed in the output, hence providing blank spaces for many of the loadings. All the factors were more than 0.5 hence were retained for further data analysis.

Table 1. Transformational leadership on SME innovation

		Mean	Std. Deviation	Loading
Transformational Leadership	The supervisor can understand my situation and gives me encouragement and assistance.	3.54	1.155	0.695
	The supervisor encourages me to take challenges.	3.47	0.964	0.787
	The supervisor encourages me to make efforts towards fulfilling the company vision	3.53	0.794	0.842
	The supervisor encourages me to think about problems from a new perspective.	4.01	2.186	0.665
	The supervisor encourages me to rethink opinions that have never been doubted in the past.	3.65	1.126	0.769
	believe I can complete my work under the leadership of the supervisor.	3.61	1.042	0.809
	The supervisor spends time to understand my needs	3.54	0.805	0.939
	I believe the supervisor can overcome any challenge at work.	3.52	0.786	0.755

Transactional Leadership				
	When I am unable to complete my work, the supervisor reprimands me.	3.54	1.155	0.845
	The supervisor precisely records any of my mistakes.	3.47	0.964	0.713
	The supervisor gives me what I want to exchange for my hard work.	3.53	0.794	0.655
	The supervisor tells me that I can get special rewards when I show good work performance	4.01	2.186	0.648

Table 1...

Correlation Results

The study used Pearson Product Moment correlation analysis to assess the nature of the relationship between the independent variables and the dependent variable as well as the relationships among the independent variables (Wong & Hiew, 2005; Jahangir & Begum 2008). Wong and Hiew (2005) further posit that the correlation coefficient value (r) ranging from 0.10 to 0.29 is considered weak; from 0.30 to 0.49 is considered medium, and from 0.50 to 1.0 is considered strong. There was a strong relationship between transformational leadership with SME innovation ($r = 0.683$, p -value $< .01$). Also, the study exhibited a strong relationship between transactional leadership and SME innovation ($r = 0.712$, p -value $< .01$) (See table 4.2).

Table 2. Correlation Results

	Mean	Std. Deviation	SME innovation	Transformational Leadership	Transactional Leadership
SME innovation	3.7872	0.79811	1		
Transformational Leadership	3.5638	1.20914	.683**	1	
Transactional Leadership	4.0709	0.58125	.712**	.704**	1

** Correlation is significant at the 0.01 level (2-tailed).

Hypothesis Testing

The findings showed that transformational leadership had coefficients of estimate which was significant basing on $\beta_1 = 0.361$ (p -value = 0.013 which is less than $\alpha = 0.05$) implying that we reject the null hypothesis stating that there is no significant relationship between transformational leadership and SME innovation. This indicates that for each unit increase in transformational leadership, there is 0.361 units increase in SME innovation. Furthermore, the effect of transformational leadership was stated by the t-test value = 2.603 which implies that the

standard error associated with the parameter is less than the effect of the parameter. Consistently, also, the research findings showed that transactional leadership had coefficients of estimate which was significant basing on $\beta_2 = 0.457$ (p-value = 0.002 which was less than $\alpha = 0.05$) hence the null hypothesis was rejected. This indicated that for each unit increase in transactional leadership, there was 0.457 units increase in SME innovation.

Besides, the results showed that all the two predictors (transformational and transactional leadership) explained 57.2 percent variation of SME innovation. This showed that considering the two study independent variables, there is a probability of predicting SME innovation by 57.2% (R squared =0.572).

Table 3. Coefficient of Estimate

	Unstandardized		Standardized			Collinearity	
	Coefficients		Coefficients			Statistics	
	B	Std. Error	Beta	T	Sig.	Tolerance	VIF
(Constant)	0.381	0.598		0.637	0.527		
Transformational Leadership	0.238	0.092	0.361	2.603	0.013	0.504	1.983
Transactional Leadership	0.628	0.191	0.457	3.294	0.002	0.504	1.983
R Square	0.572						
Adjusted R Square	0.553						
F	29.43						
Sig.	.000						
Durbin-Watson	1.79						

a Dependent Variable: SME innovation

CONCLUSION AND RECOMMENDATIONS

In conclusion, transformational leadership and transactional leadership makes it possible for SMEs to highly innovation achieve competitive advantage. This implies that the supervisor understanding employees situation and giving them encouragement and assistance on fulfilling the company vision, think about problems from a new perspective, rethink opinions that have never been doubted in the past and also giving them what they want to exchange for their hard work increase employee innovativeness. This is further enhanced by commonality of purpose and investment in learning. Eventually, employee innovation is enhanced.

Firms with high levels of transformational leadership and transactional leadership exhibit superior innovation. Such firms are able to scan and operate their environment in an attempt to find new opportunities and strengthen their competitive positions. However, minimal efforts have been made on product research and development as well as technological leadership and

innovation. In light of this, change in product and service lines has been mostly of a minor nature compared to being quite dramatic.

It is therefore important for SMEs managers to focus on understanding transformational leadership and transactional leadership. This way, SMEs will be able to develop new products and services based on customer preferences thereby leading to superior growth and competitive advantage in the market place. Besides, it is utmost necessary for the SMEs to learn within the organization rather than copying the ideas of others so as to create superior value and developing competitive advantage.

Based on this research and literature review, it is still perceived that all the factors are equivalently related to improvement of SME innovation. Since the current research was limited to SMEs in Uasin Gishu County, there was a limited sample available from the population. A larger sample and a more specific instrument might be desirable and might validate the uncertainty among the respondents in regards to entrepreneurial orientation. Further, this study based its findings on perceptions of owner/ entrepreneur about transformational leadership and transactional leadership, future research in this area should consider a longitudinal study where SMEs are asked to operationalize certain Orientations over a period of time and then the SME innovation is measured before and after such a trial period.

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