

Ambidextrous Leadership Influences on Team Creativity, Team Innovation and Team Performance

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Abstract

Innovation is widely regarded as a key factor for creating both societal and economic progress. Studies show that innovation is one of key factor for firms' survival, success and sustainable competitive advantages. Leadership is reported to be one of the most important predictors of innovation. Transformational Leadership style is considered as the most suitable type of leadership which can influence innovation. However, the impact of transformational leadership to innovation is not consistent. Recognizing that innovation is a complex concept which requires to both explore and exploit in a non-linear sequence, therefore it is not enough for leader to have only one specific leadership style. Ambidextrous leadership style, which has both opening and closing leadership behaviours, is considered to be more effective in the work of innovation. This study aims to provide further empirical evidence of the link between ambidextrous leadership style with team creativity and innovation as well as relationship between team creativity and team innovation and how team innovation influences team performance. Quantitative descriptive study was conducted to 144 senior staff and managers from various industry in several cities in Indonesia. Structured questionnaire was designed for respondent to rate their leaders leadership style, team creativity, team innovation and team performance. Data was analysed was using SEM-AMOS. The result of the study showed that there were positive links between ambidextrous leadership to team creativity and to team innovation. Positive relationship was also confirmed between team creativity and team innovation. This study also confirm the influence of team innovation to team performance. This study contribute to ambidextrous leadership theory as well as leadership to innovation literature, especially in Indonesia context. The managerial contribution is giving insight to organization how important for leader to be able to explore and exploit in the work of innovation.

Keywords: *Ambidextrous Leadership, Team Creativity, Team Innovation, Leadership Style*

1. Introduction

Innovation is widely regarded as a key factor for creating both societal and economic progress. On the level of the firm, innovation has been considered to be crucial for the firm's competitive survival [1]. Studies claim that innovation is one of key factor for firms' survival, success and sustainable competitive advantages [2].

Innovation is influenced by both individual factors (e.g. cognitive abilities, personality, and motivation) and contextual factors (e.g. work characteristics and leadership) [3]. The role of leadership to innovation has been extensively studied and gained increasing attention in the literature. Some researchers proposed that leadership is one of the most important predictors of innovation [2]–[5].

Various leadership styles and their influence to innovation have been reviewed. So far Transformational Leadership style is considered as the most suitable type of leadership which can influence innovation [6]–[9]. Transformational leadership has been claimed to be effective in turbulent and uncertain environment [10].

However, the impact of Transformational Leadership to innovation is not consistent. The meta-analysis study which integrated 31 studies on the relationship between transformational leadership and innovation show that there is a broad range of results varying from -0.31 to 0.84 [4].

Innovation is complex. It involves a variety of conflicting activities that leaders need to engage in [5]. At the same time leaders need to have and engage with mindsets and activities which are not compatible. Therefore, leaders need to have a flexibility to adapt their leadership approach and alternate between different behaviours to adjust with the task demands of innovation [5].

Howel and Avolio (1993) and Bass (1998) in [11] proposed the concept of blended leadership style. Effective leaders must be capable of utilizing either transformational or transactional leadership style [10], [11]. Because innovation requires both exploration and exploitation, therefore different leadership styles should not only vary across time but also across context [5].

Ambidextrous leadership concept was first introduced by Rosing et al. (2011). They argue that based on the meta-analysis from 31 studies of leadership style to innovation show that there was substantial variability in the relationship between transformational leadership and innovation. Therefore, they suggest that different leadership behaviours may be important for the innovation process.

In innovation process, ambidexter is required. Individuals who are working in innovation need to both exploit and explore and switch between those. Therefore, effective leader for innovation process needs to have both exploitation and exploration. Rosing et al. (2011) proposed that ambidextrous leadership consists of three elements “(1) opening leader behaviours to foster exploration, (2) closing leader behaviours to foster exploitation, (3) and the temporal flexibility to switch between both as the situation requires”.

There has been limited research on ambidextrous leadership [3], [10]. The purpose of this paper is to add empirical evidence of ambidexterity theory of leadership for innovation by Rosing et al. (2011). This theory proposes that the interaction between two complementary leadership behaviours – opening and closing – predicts team innovation, such that team innovation is highest when both opening and closing leadership behaviours (ambidexter) are high. This study also aims to see the influence of ambidextrous leadership to team creativity, team creativity to team innovation and team innovation to team performance.

2. Literature Review and Hypothesis Development

Leadership and Innovation

Innovation is used to change the organization as a response to internal or external environment changes or anticipation to influence environment [12]. Innovation is defined as the generation and application of new ideas, or the translation of ideas into actual outcomes [13]. Therefore, it is not always about a new product, service or process, but it also can be in the manifestation of a new way of thinking about a problem or issue.

Innovation is not only about to come up with an idea, but it also about its application, its integration to the system process, and also the monitoring of the results in long term. West and Farr (1990) in [14] define innovation as: "... *the intentional introduction and application within a role, group or organization of ideas, processes, products or procedures, new to the relevant unit of adoption, designed to significantly benefit the individual, the group, the organization or wider society*". OECD (2005) defined innovation as the implementation of a new and significant improved product (good or service) or process, a new marketing method or a new organizational method in business practices, workplace organization or external relations. Innovation, therefore, involves intentional introduction and implementation of new and improved ways of doing things. It is distinguished from creativity which only involves only the idea generation [14]. Innovation is both a process and an outcome [13].

Innovation creates wealth and drives economic development [1]. Innovation is widely regarded as a key factor for creating both societal and economic progress. On the level of the firm, innovation has been argued to be crucial for the firm's competitive survival [2]. The rapid change of the environment has caused a situation in which economic and social success is strongly dependent to the structural reform and innovating ability. Innovation has been known to link to the improvement of productivity and quality [16]. Innovation has been seen as the key to go beyond quality improvement. It is a step change to the overall efficiency, effectiveness and responsiveness [17]. Innovation is also considered as competitive advantage over one's competitors [12], [17]. Evidences support that innovation contributes to companies' performance, growth and survival [3].

Leadership is considered as one of the most important factor influencing the success of innovation [3]–[5], [18]. Studies have argued that innovation is influenced by both individual factors (e.g. cognitive abilities, personality, and motivation) and contextual factors (e.g. work characteristics and leadership) [3]. Therefore, leadership will play important role in the innovation works. The role of leadership to innovation has been extensively studied and gained increasing attention in the literature. Some researchers proposed that leadership is one of the most important predictors of innovation [2]–[5].

Various leadership styles and their influence to innovation have been reviewed. Zhang, Ou, Tsui, & Wang (2017) claim that leaders who have both humble and narcissistic are likely to foster an innovative culture, and to achieve innovative performance. The positive relationship between shared leadership and team effectiveness is concluded meta-analysis study from 42 studies [20]. Cerne, Jaklic, & Skerlavaj (2013) claim that authentic leadership, which involves behaviours such as ability to effectively process information, ability to adjust own behaviour and harmonize their preference and society preference, has a positive relationship with innovation performance.

At present, transformational leadership is the most established leadership theory [22]. Transformational Leadership style is considered as the most suitable type of leadership which can influence innovation [6]–[9]. It is a leadership style which foster, motivate and inspire change and innovation. Transformational leadership has been claimed to be effective in turbulent and uncertain environment [10].

However, the impact of Transformational Leadership to innovation is not consistent [4]. Transformational leadership has been hypothesized to be a positive force in the innovation context. The meta-analysis study which integrated 31 studies on the relationship between transformational leadership and innovation show that there is a broad range of results varying from -0.31 to 0.84 [4].

Innovation is a complex concept. It involves a variety of conflicting activities that leaders need to engage in [5]. Innovation is a non-linear, disjunctive, cyclical and a stressful process either in the initiation phase as well as implementation phase (Anderson, 2004). Innovation involves both exploitation and exploration [5], [12]. Leaders need to maintain effective balance between continuous and radical innovation (Teece, 2014). Therefore, it is not enough for leader to have one specific leadership style. It is suggested that leader needs to have a flexibility to adapt their leadership approach and alternate between different behaviours to adjust with the task demands of innovation [5].

Howel and Avolio (1993) and Bass (1998) in [11] proposed the concept of blended leadership style. Effective leaders must be capable of utilizing either transformational or transactional leadership style [10], [11]. Because innovation requires both exploration and exploitation, therefore different leadership styles should not only vary across time but also across context [5].

Ambidextrous Leadership

Ambidexterity literally defines as the ability to use both hands easily equally. In the science of management ambidexterity is defined as balancing the explorative and exploitative organizational strategies. Those are the ability to engage both exploration and exploitation exceptionally well. The firms who can balance the both activities are most likely to be more successful than those that do not achieve that balancing acts [4], [10].

Ambidextrous leadership is defined as the ability to foster both explorative and exploitative behaviours by increasing or reducing variance in their behaviours and flexibility switching between those behaviours. Ambidextrous leadership concept is suggested by [4]. In innovation process ambidexter is required based on the fact that people working in innovation need to both explore and exploit. Thus, effective leaders in innovations need to have a flexibility to adapt their leadership approach and alternate between different behaviours to adjust with the task demands of innovation [5].

The requirement of ambidexterity in the innovation process implies that individuals working in an innovation context need to both explore and exploit, and switch between those two activities. Therefore, an effective leader of an innovative workforce needs to foster both (1) opening leader behaviours to foster exploration, (2) closing leader behaviours to foster exploitation, (3) and the temporal flexibility to switch between both as the situation requires [4].

Rosing et al. (2011) further describe Opening leader behaviours such as (1)Allowing different ways of accomplishing a task; (2) Encouraging experimentation with different ideas; (3) Motivating to take risks; (4) Giving possibilities for independent thinking and acting; (5) Giving room for own ideas; (6) Allowing errors and (7) Encouraging error learning. As for Closing leaders behaviours includes (1) Monitoring and controlling goal attainment; (2) Establishing routines; (3) Taking corrective action; (4) Controlling adherence to rules; (5) Paying attention to uniform task accomplishment; (6) Sanctioning errors and (7) Sticking to plans.

Hypothesis Development

Creativity is defined as the development of novel and potentially useful ideas, products, practices, services, or procedures [3]. Creativity is distinguished from innovation in the idea implementation. If innovation consists of idea generation and implementation, creativity can refer only for idea generation alone. Creativity is important factor in achieving successful innovation (Tung, 2014). Creativity is the

single most important determinant of innovation (Amabile, 1988) in [21]. Creative thinking of the team member is as important part of the innovation process [21].

Studies show that certain leadership styles influence creativity. Cerne et al. (2013) claim that authentic leadership directly influence team member creativity and team innovation. Tung (2016) refers to Sacramento et al (2013) argue that there is a strong relationship between transformational leadership to employees' creativity. Herrmann and Felfe (2013) in (Tung 2014) propose that transformational leadership will enhance employee creativity. Henker et al. (2014) found that transformational leadership has a positive relationship to employee creativity (Tung 2014). Relationship between creativity and transformational leadership is also reported by Bai, Lin, & Ping (2016). Rosing et al. (2011) claim that ambidextrous leadership has a positive relationship to employee creativity. Moriano & Molero (2014) found that transactional leadership has a negative relationship to employee creativity.

The opening part of ambidextrous leadership, just like in transformational leadership, is fostering the team creativity. Allowing different ways of accomplishing a task, encouraging experimentation with different ideas, motivating to take risks, giving possibilities for independent thinking and acting, giving room for own ideas, allowing errors and encouraging error learning leadership activities will enable team member to explore and come up with new idea. Therefore, it can be hypothesized that:

H1: Ambidextrous Leadership positively influences team member creativity.

H2: Team member creativity positively influences team innovation

Innovation involves intentional introduction and implementation of new and improved ways of doing things. It is distinguished from creativity which only involves only the idea generation [14]. Innovation is both a process and an outcome [13].

Innovation is one of key factor for firms' survival, success and sustainable competitive advantages [2]. Leadership is considered as one of the most important factor influencing the success of innovation [3]–[5], [18]. The role of leadership to innovation has been extensively studied and gained increasing attention in the literature.

Although transformational leadership is considered as leadership style that has a strong relationship to innovation, however Rosing et al. (2011) argue that the relationship is varied with correlation from -0.34 to 0.84. Innovation has duality, exploration and exploitation. Therefore, leaders who involve with innovation need to have a flexibility to adapt their leadership approach and alternate between different behaviours to adjust with the task demands of innovation [5]. In innovation, leaders need to inspire and encourage team to search for new ideas. However, on the other hand leaders also need to structure role and procedures and controls team to adhere with the agreed specification. Therefore, a single leadership style is not enough to ensure innovation [25].

Rosing et al. (2011) claim that if interaction between two styles of leadership which are opening and closing behaviours are owned by leaders, it can predicts team innovation. They further argue that team innovation is highest when both opening and closing leadership behaviours are high. Yang, Jinlian, & Jing (2016) confirm Rosing et al.'s argument and show that ambidextrous leadership positively influences on team innovation performance and its positive effects significantly stronger than single leadership [26]. The roles of ambidextrous leadership in influencing radical innovation success is also identified by Alexander & Knippenberg (2014).

The relationship between ambidextrous leadership and team innovation can be hypothesized as:

H3: Ambidextrous Leadership positively influences team innovation

Innovation is considered as a key factor for creating both societal and economic progress. On the level of the firm, innovation has been argued to be crucial for the firm's competitive survival [2]. Innovation has been known to link to the improvement of productivity and quality [16]. Innovation has been seen as the key to go beyond quality improvement. It is a step change to the overall efficiency, effectiveness and responsiveness [17]. Palm et al. (2015) also states that innovation is also considered as competitive advantage over one's competitors.

Evidences support that innovation contributes to companies' performance, growth and survival [3]. Chen, Zheng, Yang, & Bai (2016) report the relationship between transformational leadership to innovation and innovation leads to organizational performance. Evidence how technology innovation (product and process innovation) has a significant positive impact on the performance of the firm is also reported by Atalay et al. (2013). Giniuniene & Jurksiene (2015) report that organizational learning and innovation are two important processes that mediate the dynamic capabilities and firm performance relation.

H4: Team innovation positively influences team performance

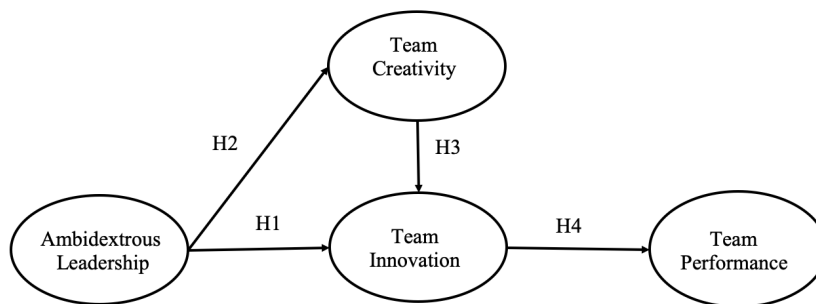


Figure 1. Research Framework

3. Methodology

The purpose of this study is to add empirical evidence of ambidexterity theory of leadership for innovation by . Rosing et al. (2011). This theory proposes that the interaction between two complementary leadership behaviours – opening and closing – predicts team innovation, such that team innovation is highest when both opening and closing leadership behaviours (ambidexter) are high. This study was a descriptive quantitative study.

3.1. Data collection

This study was carried out in senior manager, manager and senior staff in various industries (tourism, telecommunication, healthcare, retail, banking, education, manufacturing) in Jakarta, Surabaya, Palembang and Medan Indonesia. Unit analysis of this study is individual. Due time and resources constraints the data collection was done with convenience sampling data collection method.

Structured questionnaires were sent through email for respondents to fill in. Respondents were asked to make a stand for 24 statements with 6 Likert's scale (1 for

strongly disagree to 6 for strongly agree). Six-point Likert's scale was used for respondent rate their opinion. With 6-point Likert scale, mid-point is omitted to avoid social desirability bias [30].

One-fifty-five questionnaires were distributed and 144 questionnaires were returned (92%). Missing data was managed in such way. If missing data was occurred for all indicators of one variable, data will be omitted. If missing data was only occurred for one indicator of a variable, data was replaced with mean value.

3.2. Measurement

Ambidextrous Leadership measured by 14 items of opening and closing behaviour of ambidextrous leadership from Zacher & Rosing (2015). Team creativity measures were adopted from Baer & Oldham (2006). Measurements for team innovation were modified from Zacher & Rosing (2015). Team performance measured by items from Zacher & Rosing (2015). All measurements are in table 1.

Table 1. Measures

Variable	Dimension	CODE	Indicator
Ambidextrous Leadership Zacher and Rosing (2015)	Opening Leadership	OPL1	My Boss allows different ways of accomplishing a task
		OPL2	My Boss encourages experimentation with different ideas
		OPL3	My Boss motivates to take risks
		OPL4	My Boss gives possibilities for independent thinking and acting
		OPL5	My Boss gives room for own ideas
		OPL6	My Boss Allow error
		OPL7	My Boss encourages error learning
	Closing Leadership	CLL1	My Boss monitors and controls goal attainment
		CLL2	My Boss established routines
		CLL3	My Boss takes corrective action
		CLL4	My Boss controls adherence to rules
		CLL5	My Boss pays attention to uniform task accomplishment
		CLL6	My Boss sanctions errors
		CLL7	My Boss sticks to plans.
Team Creativity Baer, M., & Oldham, G. R. (2006)	TCR1	Almost every one in my team member suggests many fresh ideas that might improve working conditions at [organization]	
	TCR2	Almost every one often comes up with novel solutions to problems at work	
	TCR3	Almost every one suggests new ways of performing work tasks	
	TCR4	Almost every one is a good source of unique ideas.	
Team Innovation Zacher and Rosing (2015)	TINV1	Most of the time my team is attempting to implement new ideas	
	TINV2	Most of the time my team is attempting to improve ways to do things	
	TINV3	Most of the time my team is attempting to create better process and routines	
Team Performance Zacher and Rosing (2015)	TPER1	My team is more successful in comparison to other teams in the sale line of industry and of about the same size	
	TPER2	My team most of the time successfully achieve the team target	
	TPER3	My team achieve growth higher than industry growth	

3.3. Data Analysis

This study used SEM with AMOS software for assessing its statistical analysis. SEM was chosen because for the past several decades, social science has widely used SEM as the preferred data analysis method for confirming or rejecting theories through testing of hypothesis.

This study data analysis used two stages approach. First, we run measurement evaluation then follow with structural evaluation. The result of statistical significance test of path coefficient will be used as the based for hypotheses testing and to draw conclusion whether research hypotheses are accepted or rejected.

4. Result

From 144 respondents, 63% was male and 38% was female. Most of them were in the managerial position (90%) and only 10% was in senior staff position. Twenty-five percent was in the managerial position less than 5year, 31% was between 5-10 years and 26% was more than 10 years, the remaining did not give any answers.

The descriptive statistic for 2 dimensions of Ambidextrous Leadership, opening and closing leadership, all respondents agree to the statements in the questionnaires related to those two dimensions with mean for closing leadership 4,73 and mean for opening leadership 4,53. The mean of variables of Team Creativity, Team Innovation and Team Performance also yield more than 4. It means that most of the respondents agreed with statement related to those variables. Team performance had the lowest mean and closing leadership had the highest mean (Table 2)

Table 2. Descriptive Analysis

	N	Min	Max	Mean	Std. Deviation
Opening Leadership	144	2	6	4,53	0,71
Closing Leadership	144	1	6	4,73	0,69
Team Creativity	144	1	6	4,37	0,88
Team Innovation	144	1	6	4,38	0,88
Team Performance	144	2	6	4,35	0,92

Validity test showed (Table 3) that indicators OPL1, OPL6, CCL2 and CCL6 had loading factor <0.5. Therefore, those indicators were omitted. The validity and reliability test showed in table 3. The result confirmed that the measures used in for this model were valid and reliable. Standard loading for all indicators are >0,5, CR>0,7 and VE≥0,5 [32].

Table 3. Validity and Reliability

Indikator	Variabel	Standard Loading	Error	CR	VE
OPL2	<i>Opening Leadership</i>	0,869	0,755	0,83	0,5
OPL3		0,613	0,376		
OPL4		0,606	0,368		
OPL5		0,710	0,504		
OPL7		0,563	0,317		
CLL1	<i>Closing Leadership</i>	0,640	0,410	0,83	0,5
CLL3		0,532	0,283		
CLL4		0,688	0,474		
CLL5		0,708	0,501		
CLL7		0,716	0,512		
TCR1	<i>Team Creativity</i>	0,792	0,628	0,80	0,5
TCR2		0,810	0,656		
TCR3		0,909	0,827		
TCR4		0,819	0,671		
TINV1	<i>Team Innovation</i>	0,857	0,734	0,75	0,5
TINV2		0,747	0,558		
TINV3		0,696	0,485		
TPER1	<i>Team Performance</i>	0,821	0,674	0,75	0,5
TPER2		0,760	0,578		
TPER3		0,853	0,727		

Structural model analysis was conducted to see the relationship among dependent variables and independent variable. The first analysis showed that the model was only marginal fit. Therefore, then the model was modified following the modification indices. The result of analysis after modification was showed in figure 1. Nine criteria of good fit were met.

Table 4. Goodness of Fit after Modified

No.	Goodness of Fit Index	Cut off Value	Result	Model Evaluation
1	X ² – Chi Square	Sekecil mungkin	82.966	Good fit
2	Probabilitas	≥ 0.05	0,31180556	Good fit
3	CMIN/DF	< 2.0	1.012	Good fit
4	RMSEA	≤ 0.08	0.009	Good fit
5	GFI	≥ 0.90	0,64652778	Good fit
6	AGFI	≥ 0.90	0,625	Good fit
8	TLI	≥ 0.90	0,69375	Good fit
9	CFI	≥ 0.90	0,69375	Good fit

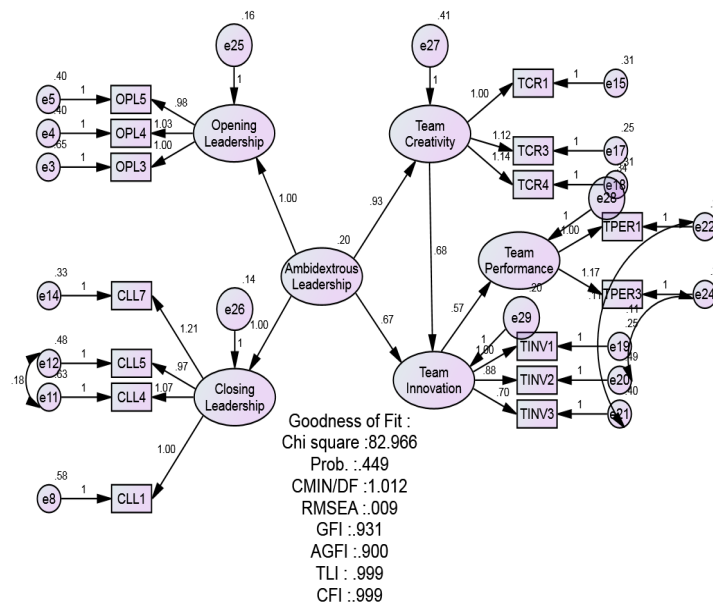


Figure 2. Structural Model Analysis after modified

The hypothesis testing showed that CR was $\geq 1,196$ and p-value $<0,05$ for 4 relationships (Table 4). The result showed that Ambidextrous Leadership positively influence Team Innovation, Ambidextrous Leadership positively influence Team Creativity, Team Creativity positively influence Team Innovation and Team Innovation positively influence Team Performance.

Table 5. Hypothesis testing

	Estimate	S.E.	C.R.	P Value	
TINV ← AL	0,670	0,237	2,822	0,005	Significant
TCR ← AL	0,926	0,232	3,990	***	Significant
TINV ← TCR	0,676	0,118	5,715	***	Significant
TPER ← TCR	0,573	0,090	6,363	***	Significant

5. Discussion

There are studies on various leadership style to innovation. The most established leadership style for innovation is transformational leadership [22]. However, Rosing et al.

(2011) and Bledow et al. (2015) argue that considering the degree of complexity of innovation, therefore, single set behaviour of leadership is not enough.

This study confirms, that ambidextrous leadership positively influences creativity. Confirming the result of Zacher & Rosing (2015) study, this study show that to build an environment of creativity both opening leadership and closing leadership style is needed. Opening leadership style foster the activity of new idea generation. Opening leadership style enables team member to generate and experiment thing new way doing things. It supports the risk taking and independent activities. It also give team member room for own idea. However, at the same time creativity needs to be stimulated and needs to meet certain criteria and timeline. For that exploitation activity such as training, formalization, standardization and control should be possessed by leader. As literature state that the process of exploration and exploitation in creative thinking are not linear, therefore having leader who have ambidextrous style and can switch flexibly can improve the team creativity [5].

The result of the study showed that Ambidextrous leadership positively influences team innovation. Innovation involves intentional introduction of new and improved ways of doing things and their implementation. Innovation is distinguished from creativity which only involves the idea generation [14]. Innovation is both a process and an outcome [13].

During the idea generation and introduction of new ideas, opening leadership style will be effective. It will foster the mindset and activities which are risk taking, creatively things of new and improved ways. However, during the implementation part, activities such as high degree of coordination among team member, attention to detail, institutionalize the new ideas, set a new rule and procedure, reinforcement of the new knowledge will occur. In this part, closing leadership style will be more effective. Since the exploration and exploitation activities are not happening in linear way, therefore leader who has both style is more suitable for innovation.

Leadership has known to have a strong link creativity and innovation. This study confirms previous study on how leadership style will influence team creativity and team innovation. This study also confirms how having both opening and closing leadership behaviours will positively influence both team creativity and team innovation.

The result of this study strengthen the argument by Amabile (1998) in [21] that creativity is the important determinant of innovation. Team member creativity enable firms to come up with new idea which will be the base for innovation. Therefore, having creative team member will influence how innovative the team be. This study also further confirms the result from [29] and [11] that there is a positive link between innovation and performance. Since with innovation, organization can respond to internal and external challenge and survive. With innovation, organization even more might influence the environment.

6. CONCLUSION

Empirical research has claimed that leadership plays key role to stimulate and ensure the innovation success. However the complexity of innovation showed that a single leadership style is not enough to ensure innovation [12]. Innovation involves a variety of partly conflicting activities leaders need to engage in. Innovation consists of exploration and exploitation activities which are occurred in the linear timeline. Leaders need to stimulate creativity among their followers and at the same time deliver the performance [5].

Ambidextrous leadership was introduced by Rosing et al. (2011). Ambidexter literally means can use both hands effectively. Ambidextrous leadership required both opening and closing leaders behaviours. Since in the work of innovation switching between exploitation and exploration activities, therefore in the work of creativity and innovation, ambidextrous leadership will be effective [4], [5], [12] This study confirms the previous studies which show that ambidextrous leadership has a positive and significant relationship with team creativity and team innovation. It is also concluded that team creativity positively influences team innovation. Confirming other studies, this study also show that team innovation influences team performance.

The limitation of this study is that all measurement done with single level or all measurements were done by individual. Leadership style, team creativity, team innovation and team performance were rate by one individuals. To have multi levels rating, such as leadership style as individual measure and team creativity, team innovation and team measurement as team measured might give a better insight.

Further research can be done by multi-levels (Individual-Team/Organization level). Research focus to specific innovation (product innovation, process innovation, marketing innovation and organizational) will give more evidence to ambidextrous leadership and innovation literature.

This study gives contribution to adding the empirical evidence to ambidextrous leadership theory. To managerial, this study give insight about the effective leadership style in the work of innovation.

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