

Transformational Leadership Effect on the Establishment of Innovation Program among Indonesian Private Higher Institution: A Structural Equation Modelling (SEM) Partial Least Square Approach

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ABSTRACT

Establishment of innovation program is a must on the dynamic and rapid competition among private higher institution in Indonesia. The innovation program ensures institutions to continue and survive in the rapid growth of the world market and creating the best updated products and services. The present study hypothesised a practice of transformational leadership among the top management of the university will bring a flying colour of the university performance specially on the innovation program. Bass and bass leadership theory configured detail foundation on the establishment of hypothesised model of innovation program among private higher institutions. The present study measured transformational leadership using four predictors such as charismatics, individual consideraton, intellectual stimulation and inspiration. Quantitative methodology using survey and data gathered among stakeholder and top management. Structural equation modelling (SEM) using partial least square approach was employed to established, examined and validate the hypothesised model. This study found an inspiration play a dominant role on the establishment of innovation program, and the re-specified model confirmed a significant effect of transformational leadership on the establishment of innovation program among private higher institution in Indonesia. A main guidance on the establishment of innovation program using transformational leadership as on of the success factors has contributed through a significant interaction of predictors and measurements in the structural model analysis.

Keywords: Transformational Leadership, Innovation Program, Structural Equation Modeling, Partial Least Square.

INTRODUCTION:

Transformational leadership is about how leaders implement their leadership formulation to the entire working system to increase and improve the quality of working performance (Jackson, 2000). It is more into operation of the formulation technique to continually improve the entire formulation so as to work perfectly in the institution operation system, it will consider as a discipline improvement at the institution in Indonesia. Transformational leaders will bring impact into the quality of relationship, or in another word, transformational leaders will produce the synergy from the relationship between leaders and employees. Transformational leaders bring positive impact into institutional working environment with more benefits, which include influence, inspiration and motivation. Transformational leaders will influence their employees and their employees will have the ability and capability to create better quality solutions. Transformational leaders will stimulate creativity in problem solving through which the entire employees will have the ability to manage, control and resolve the problems. Successful transformational leadership implementation will reduce problems in organisation through which any employee will be empower to resolve any issue and problem that they face in any single activity, it is proven that transformational leaders will bring great impact into the institutions, which produce more creativity

and innovation in working environment (Oster, 2010). The most fantastic research about transformational leadership is that the leaders will be able to build strong elements that will keep institution moving forward and provide full transformation to the entire working system. Those elements are charisma, inspiration, intellectual stimulation and individual consideration that bring changes (innovation program) into the quality of institutional working performance (Crawford, 2005). The present intended to configure the determinant of establishment of innovation program, and transformational leadership was hypothesised as a critical success factor (Figure 1).

CONCEPTUAL DEVELOPMENT:

Charismatics brings the strength of vision and mission in transformational leadership movement; it will help transformational leaders to become a strong successor in institutional business environment. Charismatic leaders are the icon of the institution. As an icon of the institution, charismatic leaders are the first ones to inspire others to have a better quality of working performance. Most of the institutional business movements are driven by charismatic leaders. It will influence the entire business growth, by having a better quality of improvement, including relationship in communication to enhance the quality in synergy of working together (Rengiah & Sentosa, 2016). Researchers also found that most of employees are depending on their charismatic leaders working performance. It will inspire them to work with a better quality of working performance. Charismatic leaders will fully transform a better quality of institution in working culture and business environment. Employees will notice every single movement of their leaders as their icon and example. Not only as the example of others, charismatic leaders also will promote their movement by positively influencing employees personality and attitude toward the execution of every single activity. The researchers also tried to finalise how charismatic leaders influence their employees' character and attitude. The answer is by showing the benefits to others, which other employees will have the encouragement to do the same and acquire the same benefits. Charismatic leaders will focus more into their employees' achievement to produce a better quality of products and services, which charismatic leaders will provide a better business development so employees will become more productive in business and innovation growth (Popper, 2002).

Hypothesis 1: Charismatics leadership has a positive significant influence on the establishment of innovation program.

Individual consideration is a leadership movement when leaders inspire and motivate their employees by a great characteristic, for example, leaders inspire their employees to have positive attitudes towards their work. Individual consideration also supports leaders to easily organize a great and potential candidate in institution which is important for leaders to build the potential candidates before preparing them with the great skills in leadership and innovation. It will help the institution to have a better quality of employees and great working environment (Bass & Avolio, 1990). Individual consideration influence employees to work in an effective and efficient manner. Individual consideration is also a part of transformational leadership that will bring more value and powerful influence into the emotion and behavior of employees. It shows us that individual consideration will bring great influence into institution working system and performance, when leaders can bring positive influence into their employees working system and use individual consideration as a great motivational to the entire employees working system. Individual consideration is the biggest influence in leadership model/transformational leadership. Individual consideration in transformational leadership movement becomes the turning point of employees understanding about how they can increase the quality of institutional working performance. This turning point of a better understanding in how to increase the quality of institution working performance started from the positive influences of the individual consideration, it produce the characterisation of employees behavior. Employees behavior determine the quality of institution working performance (Rengiah & Sentosa, 2016).

Hypothesis 2: Individual consideration has a positive significant influence on the establishment of innovation program.

Intellectual stimulation is about leaders behavior and how leaders can provide the awareness of problem and challenge their employees to recognize and view their problem from new perspective. These transformational behaviors are relate, support and motivate others and enhanceeffectiveness of leadership program and high quality of working performance in the institution working system (Dvir, Eden, Avolio, & Shamir, 2002). Intellectual stimulation helps employees to increase the abilities to conceptualize, comprehend; analyse problem

and improving the quality of solution. Intellectual stimulation is not only creating awareness but also train employees in creating a better quality of solution in any situation. Intellectual stimulation is giving a better quality of solution by motivating employees to think more innovative in creating a solution in any single issues and problems. It is very clear intellectual stimulation will bring a great influence in transformational leadership to promote more creativity and innovation. Intellectual stimulation is where leaders try to encourage their employees ability and capability to think positively in any situation that they might face in their working system and process. Leaders will guide their employees to find solution in their working system from different point of view and perspective. Intellectual stimulation is more into helping employees and encouraging them to have many different angles in solving and finding solution in their working progress to get a better solution and maintain the quality of working performance. Intellectual stimulation as a variable in transformational leadership, which leaders behavior will totally change institution business environment (Spreitzer & Quinn, 1996). By great influence of leaders behavior, institution will create the structure base on a new purpose, the purpose to build their institution working performance by gaining more strength to solve the entire issues that they might face in future. And also will increase the possibility for leaders to bring a full range of transformational behavior to the entire institution working structure in any single level position of employees (Kark, Shamir, & Chen, 2003).

Hypothesis 3: Intellectual stimulation has a positive significant influence on the establishment of innovation program.

Inspiration is a part of transformational leadership that brought new strategy into institution working performance, also guide leaders and employees for working together and get a better result in their achievement. Inspiration also creates a variety model of leadership strategy. Inspiration also bring new perspective in leadership strategy, which will support and help leaders to transform leadership strategy into institution business environments and market places. Inspiration used by leaders to motivate and communicate with their employees, including direct and indirect communication. At the stage of leadership strategy movement, employees will experience the inspirational leadership movement from their leaders in direct relationship, thru the communication in working places. It is also include positive influence on the motivational leadership that employees will get from their leaders directly, which consider as a direct movement of inspirational leadership, in purpose to make sure that employees will follow the proper order and improve a better quality of product and services. Inspiration is a part of transformational leadership where leaders must be able to inspire their employees to have a better quality of self development. It is the most important function of transformational leaders to inspire and guide their employees to have improvements continually.

Hypothesis 4: Inspiration has a positive significant influence on the establishment of innovation program.

Innovation program is the most powerful tool for the institution to have a successful business environment (Mannheim & Halamish, 2008). Innovation program also supports transformational leaders to create a creative working system which will encourage employees to have a better quality of product and services. In fact, creativity produce innovation and innovation produce new idea. It is clear enough for us to know that innovation program is critically important for any institution to have in their working system. It is clear as well that it is impossible for the entire institution to have creative solution in their business operation system without having a good quality of innovation program in their working system. (Oster, 2010) innovation is occurring when people think up new ideas; accept these new ideas and work together to realize these ideas. This process is the circulation of innovation program process for a better quality of achievement. Innovation is not just a process or achievement to have a success strategy but it also acts as a constant search to challenge the creativity that will continually growth and expanding (Gin, Arputhan, & Sentosa, 2016). Those aspect will not be working or proceed without the innovation program, because innovation program is the only answer for the institution to grow and create many success story in market places. By the innovation program, transformational leaders will be able to launch new products that will become the trending product in market places. And by the innovation program the institution will produce a unique product and services which could sustain longer in market places. Further, an interaction of charismatics leadership, individual consideration, intellectual stimulation and inspiration were hypothesised in the structural model of innovation program establishment (Osman & Sentosa, 2013); Figure 1).

METHODOLOGY:

Quantitative approach was employed to examine the predictors (Sentosa, Ming, Soebyakto, & Nik Mat, 2012) to the endogenous variable (Innovation Program). There were 4 exogenous variables (Charismatics Leadership, Individual Consideration, Intellectual Stimulation, Inspiration) and establishment of innovation program as endogenous variable (Table 3). There were 17 items under the measurement of exogenous variables and 4 items as indicator of innovation program (Figure 1). Stratified random sampling technique was employed to execute the survey among University’s stakeholders (Hadi, Abdullah, & Sentosa, 2016). There were 875 respondents involved on the data gathering process. Questionnaire using likert scale determine the detail option of respondent’s perception to the items measurements (Table 3). Data screening for multivariate outliers, normality and multicollinearity test were conducted to confirm the goodness of gathered data (Hadi, Abdullah and Sentosa, 2016; Osman and Sentosa, 2013). Structural equation modeling (SEM) partial least square succeed to established, examined and validate a transformational leadership and innovation program model (Figure 2). Goodness of model fit measured with a series of multivariate data analysis indicator (Table 1) and results of pathway were analysed to conclude the real and current trends as hypothesised (Table 2).

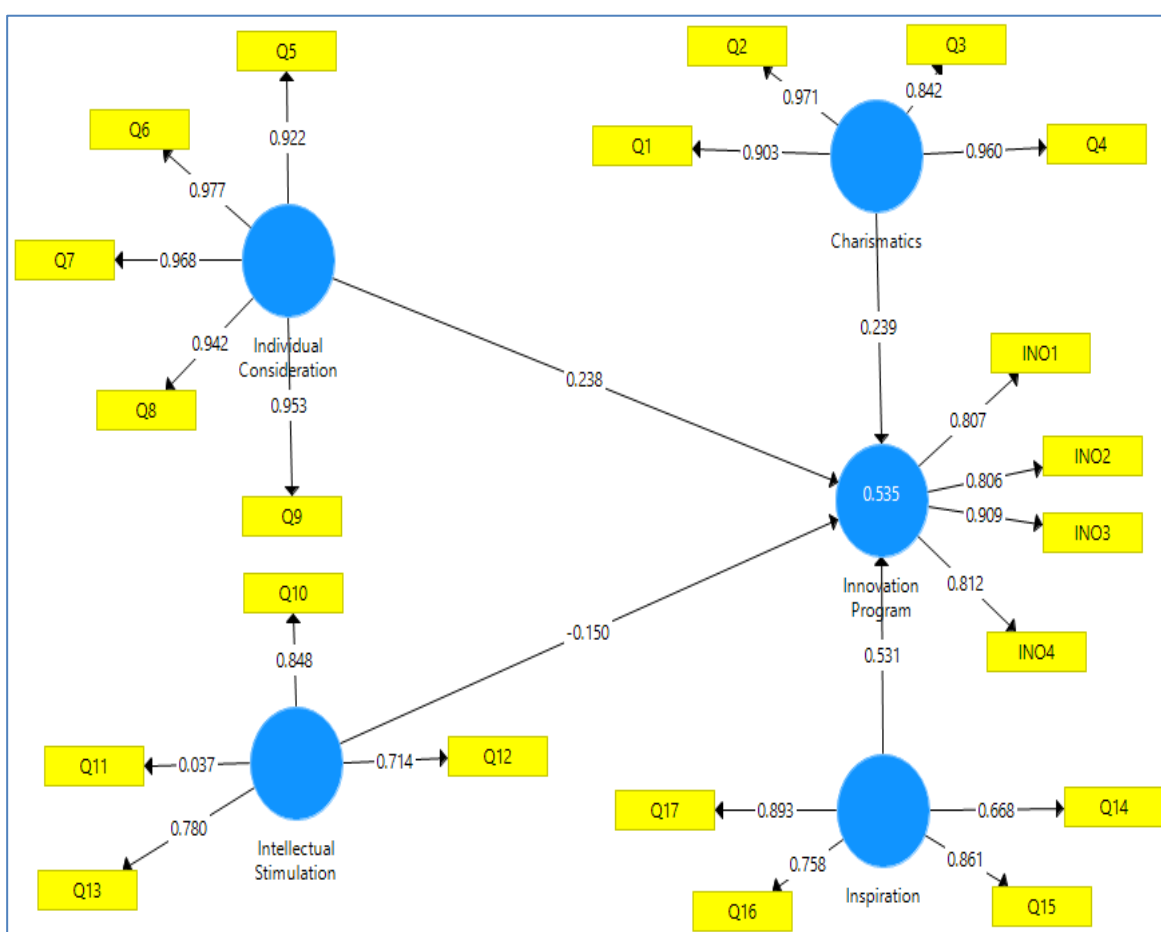


Figure 1: Hypothesised Model

FINDINGS:

A structural model analysis using Smart PLS succeed to established and validate the transformational leadership and innovation program model (Khan, Sentosa, & Salman, 2018). Hypothesised model configured 17 items as measurement for exogenous variables and based on the standardised regression weight (> 0.05), factor loading for item number 11 (0.037 < 0.5) under intellectual stimulation variable was eliminated to fulfill the convergent validity criteria (Table 3). Re-Specified model (Figure 2) confirmed remaining 16 items with detail range from 0.668 to 0.977 as a valid and significant measurements of exogenous variables. The present study also confirmed 4 remaining items of innovation program as endogenous variable (Sentosa, et al., 2012).

Goodness of model fit criteria using Cronbach’s Alpha of variables, Composite Reliability and Average Variance Extracted validate the Re-Specified model (Figure 2). Further, hypothesis testing results also confirmed a positive direct significant effect of charismatics leadership ($\beta = 0.240$), individual consideration ($\beta=0.241$) and inspiration ($\beta=0.532$) on the establishment of innovation program. A negative and non-significant impact of intellectual stimulation ($\beta=-0.156$) on the establishment of innovation program must reject the 3rd hypothesis pathway (Table 2). Overall, the re-specified model contributes to the square multiple correlation for 53.5% using transformational leadership as predictors (Figure 2).

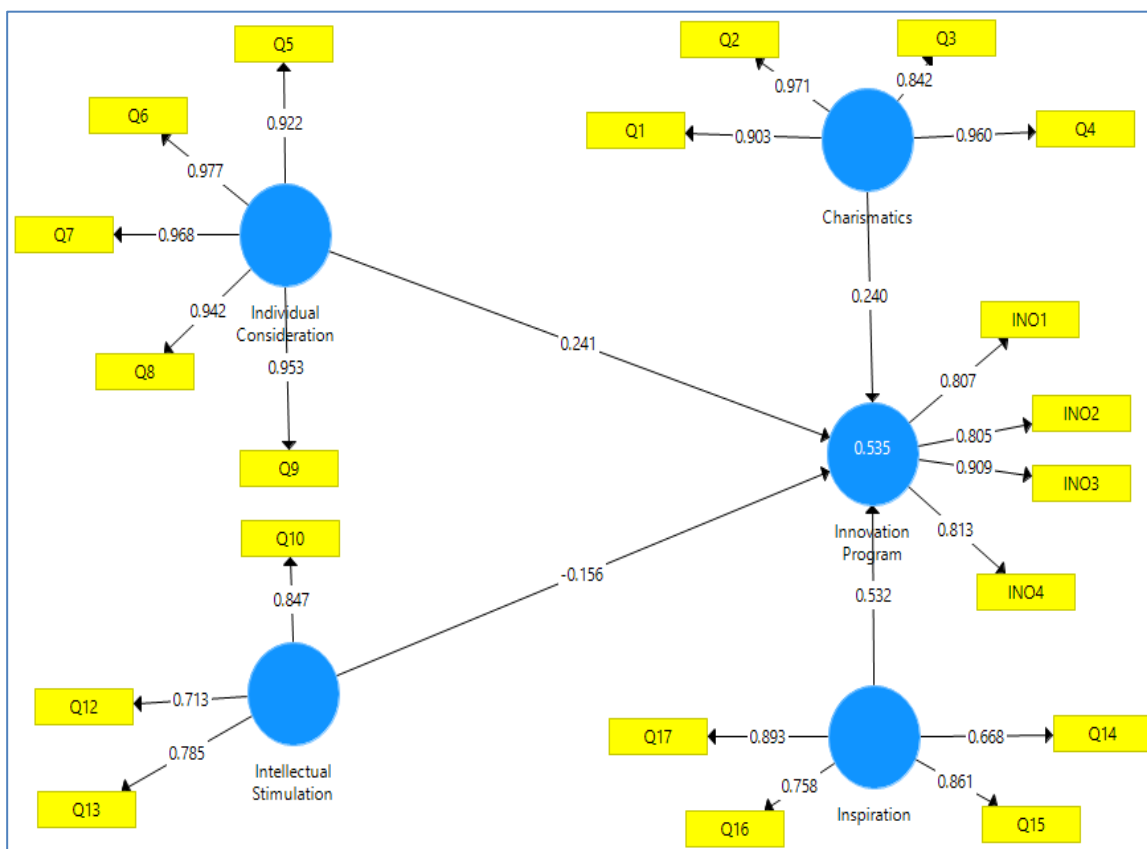


Figure 2: Re-Specified Model of Transformational Leadership & Innovation Program

Table 1: Validation of Variables and Measurements

Exogenous Variables	Pathway	Rho_A	Cronbach’s Alpha (> 0.7)	Composite Reliability (> 0.7)	Average Variance Extracted (AVE > 0.5)
Charismatics Leadership	0.240	0.961	0.940	0.975	0.847
Individual Consideration	0.241	0.977	0.974	0.980	0.907
Intellectual Stimulation	-0.156	0.826	0.707	0.826	0.697
Inspiration	0.532	0.827	0.808	0.875	0.640
Innovation Program	-	0.865	0.854	0.902	0.697

Table 2: Results of Hypothesis Testing

Exogenous Variables	Pathway	Hypothesis	Remark
Charismatics Leadership	0.240	Hy.1	Asserted
Individual Consideration	0.241	Hy.2	Asserted
Intellectual Stimulation	-0.156	Hy.3	Rejected
Inspiration	0.532	Hy.4	Asserted

Note: Endogenous Variable: Innovation Program: SMC = 54%

Table 3: Standardised Regressions Weight of Measurements

Variable	Items	Statement	Factor Loading
Charismatics Leadership	Q1	Leaders has demonstrated unusual competence in your company	0.903
	Q2	Leaders celebrates followers’ achievements in your institution	0.971
	Q3	Leaders addresses crises “ head on ” in your working place	0.842
	Q4	Leaders uses power for positive gain in your company	0.960
Individual Consideration	Q5	Leaders recognizes differences among people in their strength and weaknesses, likes and dislikes in your company	0.922
	Q6	Leaders is an “active” listener in your institution	0.977
	Q7	Leaders assigns projects based on individual ability and needs in your working place	0.968
	Q8	Leaders encourages a two-way exchange of views in your company	0.942
	Q9	Leaders promote self-development in your working place	0.953
Intellectual Stimulation	Q10	Leaders re-examines assumptions on any issues and problems in your working place	0.847
	Q11	Leaders recognizes patterns that are difficult to imagine in your company	<i>Eliminated</i>
	Q12	Leaders are willing to put forth or entertain seemingly foolish ideas in your institution	0.713
	Q13	Leaders encourages followers to revisit problems in your working place	0.785
Inspiration	Q14	Leaders presents an optimistic and attainable view of the future in your company	0.668
	Q15	Leaders moulds expectations and shapes meaning in your institution	0.861
	Q16	Leaders reduces complex matters to key issues using simple language in your working place	0.758
	Q17	Leaders create a sense of priorities and purpose in your working place	0.893
Establishment of Innovation Program	INO1	Innovation has become the key-goal of organization in your company	0.807
	INO2	Innovation potentially bring the significant impact into organizational performance in your company	0.805
	INO3	Innovator will seek and integrate diverse information in your working place	0.909
	INO4	Innovator accept problems as defined and generate ideas consistent with accepted norms in your institution	0.813

CONCLUSIONS AND RECOMMENDATIONS:

The present study confirmed a significant effect of charismatics leadership, individual consideration and inspiration on the establishment of innovation program (Figure 2, Table 4). Intellectual stimulation found as a non-significant impact on the endogenous variable, and strongly recommend further researcher to investigate more detail on the mentioned variable and its measurements. This study came out with a fundamental empirical model transformational leadership and establishment of innovation program (Figure 3). Mentioned model contribute to the enhancement to the body of knowledge of leadership and bring a significant impact to the practitioners through detail validation of measurements in the structural model.

Overall, this study conclude, transformational leadership is a proses of interaction between leader and followers in managing the institution needs. Institution needs more leadership skills to make sure that the institution able to manage the crisis and minimize the risk (Vardarlier, 2017). To establish an innovation program and able to manage potential crisis and minimize risk, transformational leaders must encourage their followers to think creatively and innovatively (Kuswandi, Sundjoto, Noor, & Purwanto, 2015). Transformational leader affects the intelligence, imagination, diligence and emotional stability of their followers. It will enhance the ability of followers to have social interaction and become decision maker in their institution (Dieronitou, 2014).

Transformational Leaders focus on emotional intelligence of their followers to increase job performance and job satisfaction (Shahhosseini et al.2013). By focusing on emotional intelligence of their followers, transformational leaders affect their follower’s behavior to develop the vision and transform into a mission by a comprehensive strategy (Khan et al.2013), and Figure 3 has determined the detail, including measurements as a main guidance on the implementation of transformational leadership on the setting of private higher institution.

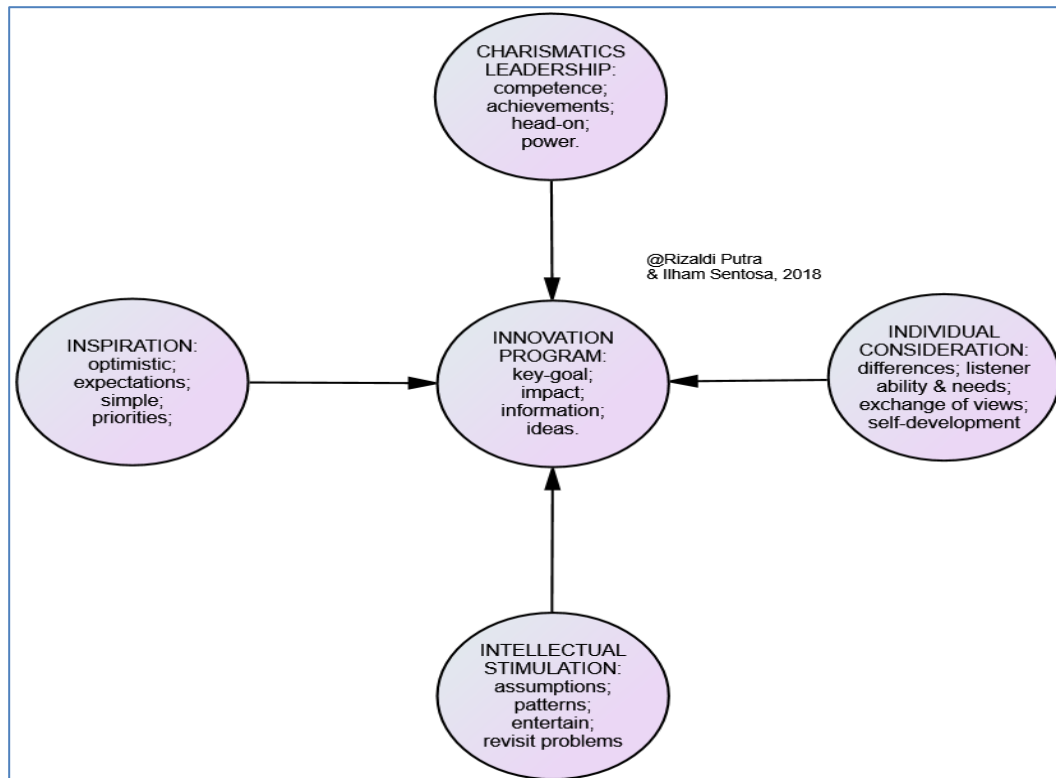


Figure 3: Empirical Model of Transformational Leadership and Innovation Program

REFERENCES:

Bass, B. M., & Avolio, B. J. (1990). The implications of transactional and transformational leadership for individual, team, organizational development. *Research in Organizational Change and Development*, 4, 231–272.

Crawford, C. (2005). Effects of transformational leadership and organizational position on knowledge management. *Journal of knowledge management*, 9(6), 6-16.

Dieronitou, I. (2014). Unveiling the restricted and extended possibilities of distributed leadership. 5(1), 37-43.

Dvir, T., Eden, D., Avolio, B. J., & Shamir, B. (2002). Impact of transformational leadership on follower development and performance: A field experiment. *Academy of Management Journal*, 45(4), 735-744.

Gin, L. J., Arputhan, S., & Sentosa, I. (2016). Developing A Framework For Enhancing Project Performances Through The Adoption Of The Industrialized Building System In The Malaysian Construction Sector. *The International Journal of Social Sciences and Humanities Invention*, 3(9), 2538-2548.

Hadi, N. I., Abdullah, N., & Sentosa, I. (2016). An Easy Approach to Exploratory Factor Analysis: Marketing Perspective. *Journal of Educational and Social Research MCSER Publishing, Rome-Italy*, 6(1). Retrieved January 2016

Jackson, S. (2000). Theoretical paper a qualitative evaluation of shared leadership barriers, drivers and recommendations. *Journal of Management in Medicine*, 14(3), 166-178.

Kark, R., Shamir, B., & Chen, G. (2003). The two faces of transformational leadership: empowerment and dependency. *Journal of Applied Psychology*, 88(2), 246-255.

Khan, M. S., Sentosa, I., & Salman, F. (2018). Exploring the Role of Transformational Leadership in Human Capital Effectiveness: Empirical Evidence from the Malaysian Healthcare Sector. *World Journal of Entrepreneurship, Management and Sustainable Development*. Retrieved from <http://doi.org/10.1108/WJEMSD-10-2017-0075>

Kuswandi, Sundjoto, Noor, A., & Purwanto. (2015). Effects of transformational leadership, personal value, job

- satisfaction on lecturer performance. *6(2)*, 84-92.
- Mannheim, B., & Halamish, H. (2008). Transformational leadership as related to team outcomes and contextual moderation. *Leadership & Organization Development Journal*, *29(7)*, 617-630.
- Osman, Z., & Sentosa, I. (2013). Service Quality and Customer Loyalty in Malaysian Rural Tourism: A Mediating Effect of Trust. *International Journal of Marketing Practices – IJMP*, *1(1)*, 31-42. Retrieved January 2013
- Oster. (2010). Characteristics of emergent Innovation. *Journal of Management Development*, *29(6)*, 565-574.
- Popper, M. (2002). Narcissism and attachment patterns of personalized and socialized charismatic leaders. *Journal of Social and Personal Relations*, *19(6)*, 796-808.
- Rengiah, P., & Sentosa, I. (2016). An Empirical Study on the Effectiveness of Entrepreneurship Education in Developing Entrepreneurial Intention Among Malaysian University Students. *Education Journal*, *5(4)*, 53-61.
- Sentosa, I., Ming, W., Soebyakto, B., & Nik Mat, N. (2012). A Structural Equation Modeling of Internet Banking Usage in Malaysia. *International Journal of Peace and Conflict Studies (IJPCS)*, *1(1)*, 52-71. doi:RCMSS/IJPCS/12005
- Spreitzer, G., & Quinn, R. (1996). Empowering middle managers to be transformational leaders. *Journal of Applied Behavioral Science*, *32(3)*, 237-61.
- Vardarlier, P. (2017). Learning from catastrophes and leadership thought. *Journal of Arts, Science & Commerce*, *8(3)*, 160-168.
