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Integrating strategic thinking and transformational leadership for NPD idea support process

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Abstract

Contemporary businesses implement tactical approaches to support their corporate interests. Based on such logic, the current study presents an attempt to connect the concept of transformational leadership with strategic thinking capability to formulate a diagnostic approach to harness new product idea generation potential in industrial work teams. The idea behind formulating such a research framework is to offer industrial leaders, a mechanism for connectivity among various aspects of operations linked to leadership, corporate strategy and new product idea generation process, of their teams for corporate harmony and effectiveness. The research survey is conducted on 30 team member's representing new product development (NPD) operations at three selected work locations of a European multinational company (Finland, Norway and the UK). The results of our study identified scientifically, the proposed theoretical connection among three industrial operational areas i.e., transformational leadership, strategy thinking and new product idea generation process.

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1. Introduction

The quest to implement lean, rapid and profitable new product development processes has never been greater. To deal better with shorter product life cycles (Griffin, 1997), intense market competition and more demanding customers, companies are struggling to innovate knowing that market failure is not an option and winning with new products is not easy. According to surveys conducted in 1997 (Griffin, 1997; Ozer, 1997), new products introduced during the period of five years from 1992 to 1997, contributed as much as 50% of the total revenues and profits, though at the same time, the new product failure rate remained high. To be more specific, an estimated 46% of the

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resources that companies devote to the conception, development and launch of new products go to projects that do not succeed and either fail in the market place or never make it to the market (Ottum, and Moore, 1997).

The search for new product ideas to design and manufacture unique products initiates with an in-depth understanding about the customers' needs and wishes. In addition, the traditional NPD framework, in which companies are exclusively responsible for coming up with new product ideas or manufacturing decisions linked to product innovativeness, is gradually being challenged by innovation management academics and practitioners (Fuchs and Schreier, 2011; Cone, 2006; Lakhani, 2006; Pitt et al., 1996; Chesbrough, 2003; Von Hippel and Katz, 2002). It is strongly desired that a new product or service must hold a "wow" factor or 'aha moment' (Dorst, and Cross 2001) by proposing something which is currently missing from the range of available products in the market. The above necessitates the involvement of the entire new product development teams - technical, marketing, in addition to the organization's operational workforce to strategically collaborate, design and lead the new product development strategic plan internally while additionally interacting with real customers/users, and learn their desires, problem areas, needs as well as challenges, instead of merely relying on sales and marketing teams' output.

Keeping in view of above, this study holds evaluative information on a research survey that attempted to explore the significance of transformational leadership and strategic thinking capacity building initiatives in a Finnish energy sector multinational company. This transformational process was evaluated through the feedback received from the subject company's product development teams or associated operational workforce with reference to new product development idea generation process.

The current research study is an effort to formulate the interconnection between the concepts of transformational leadership and strategic thinking to harnessing new product idea generation capability of the workforce in modern enterprises.

Following the research theme of developing a diagnostic framework on strategic transformational leadership to support NPD idea generations capability in work teams, our study commences by a literature review of strategic thinking, transformational leadership style, new product development, then will proceed to the development of study hypotheses. Later, the paper will through light on selected research methodology and proposed theoretical model. The study will be concluded with an in-depth analyses and discussion on the study results, in addition to the recommendations for industrial managers and researchers.

2. Literature Review And Hypotheses

2.1. Strategic thinking and new product idea generation

Several theorists consider strategic thinking as an umbrella term (Bonn, 2001). Employing strategic thinking enables analysis, exploration, understanding and defining a complex situation and then developing planning actions to achieve the greatest possible positive impact towards a pre-defined goal. According to Bonn (2005), strategy theorists have consensus on the notion that strategic thinking is needed at multiple organizational levels.

Thomas and Carroll (1979) stressed the significance of human cognition and linked their definition of product design thinking to the mental approach or the intent of the product designer, supporting the notion that design occurs when a problem-solver tries to solve the problem or acts as there is some indecision in the aims, initial conditions or allowable transformation. To utilize corporate opportunities, offered by challenging external forces, it is essential for organizational leaders to comprehend and interpret the future goals by using a systematic and cognitive approach to enforce strategic thinking by relying less on mere experience and intuitive guesswork (Oelkers, Elsey, 2004) while perusing new product idea generation process. In addition, corporate planning is a mere segment of the comprehensive process of strategic thinking (Goldman and Casey 2010). It does not come as expected since most of us are static thinkers who tend to make decisions merely for a known or particular period, while strategic thinking (Kazmi, Naraanoja, 2015) skills have to be learnt, cultivated, practiced, and then applied (Bonn, 2005).

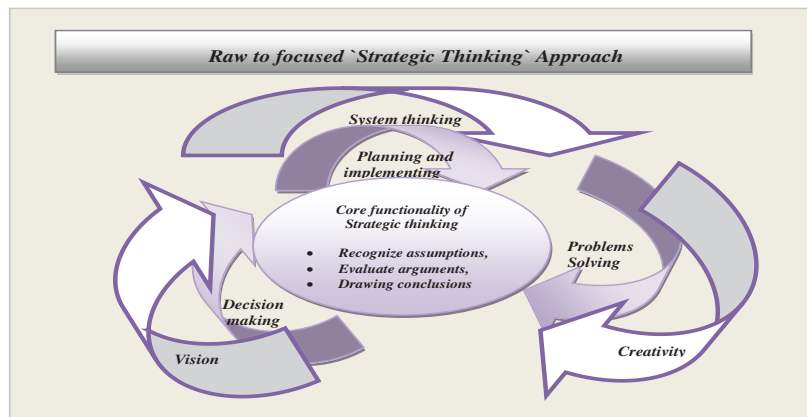


Figure 1. Strategic thinking process progression from basic to advanced level

Figure 1 displays a simplified cycle involving systematic thinking, creativity and vision which progresses to a relatively focused strategic thinking approach based on planning and implementation, problem solving and decision making approach (Goldman, 2007). Whether one takes the simplified approach or the focused one, the aim in selecting either of them is usually to utilize the core functionality of strategic thinking i.e. recognizing assumptions, to evaluate argument and finally to draw conclusions. Batty and Quinn (2010) define strategic thinking as a process that involves collection, combination and filtration of information to generate new, relevant, focused and feasible ideas and strategies. Corporate planning is defined as simply the tip of the iceberg or the part of the greater process of strategic thinking (Essery, 2002). According to Wheatley (2006), the requirement for information and thinking skills which were once considered the key skills for top leaders is now moving deeper into organizations, since currently it is the requirement of every employee to be able to interpret complex information and explore their own realities. In fact, the cognitive mechanisms connected to the (i.e. product idea related) design process are usually considered a precedent-based type of reasoning (Oxman and Oxman, 1992), where knowledge is continuously transformed to generate new knowledge.

During the product idea generation process, designers refer to their background experiences and skills, in addition to connecting such exposures with different types of internal and external stimuli they might have access to. For instance, in the process of inspiration, designers tend to combine physical and/or mental visual samples to support inspirational purposes (Keller et al., 2009).

Modern theorists emphasize the significance of (Pisapia et al. 2005) three main cognitive processes, namely systems thinking (Senge, 1990), reframing (Morgan, 1986; Bolman and Deal, 1994), and reflection (Dewey 1933; Argyris and Schön, 1978; Schön, 1983) as the success factors for organizational leaders in dealing with situational complexity. Information gathered through the process of system thinking and reframing is used as a significant tool by management leaders during the process of reflection to make sense of the situation (Pisapia et al., 2005).

These three processes support leaders in (a) understanding the situation through the process of reframing; (b) formulating theories of practice to guide actions through the process of reflecting and; (c) using systems thinking in a holistic manner (Parsons, 1960; Senge, 1990; Capra, 2002; Pisapia et al., 2005).

These three processes support leaders in visualizing events and understanding problems in terms of concepts to combat them effectively (Pisapia et al., 2005).

Systems thinking propagates the logic that the unified whole is superior to its individual parts. Modern theorists emphasize that in systems thinking the whole is primary while the parts are secondary (Capra, 2002; Pisapia et al., 2005). However, the traditional approach to systems thinking (analytic/linear/reductionist thinking) proposes that the parts are crucial and primary while the whole is secondary (Senge, 1990; Capra, 2002; Pisapia et al., 2005). This reverse of the mindset from parts to whole is of great significance for modern theorists and management experts to understand living organisms (Parsons, 1960; Senge, 1990; Capra, 2002; Pisapia et al., 2005). Capra (2002) further defines that in order to understand an object or a phenomena one initiates the cognitive process by visualizing it from a larger context rather than dividing it into parts. In addition, modern systems thinkers agree that it is not viable to isolate the organization from its environment (Pisapia et al., 2005) to understand its processes. 'Reframing' is defined as a cognitive tool or skill to collect and arrange the information or knowledge set to define the situational realities

(Morgan, 1986; Bolman and Deal, 1994; Pisapia et al. 2005). 'Reflecting' is explained as a skill to process information or the knowledge set to apply it according to the situational requirements (Schön, 1983; Pisapia et al. 2005) through practice. As a whole, the cognitive processes require understanding by taking leads from the surroundings and day to day events for enhancement of the skill level to effectively apply strategic thinking.

2.2. Transformational leadership and corporate goals

In the research literature, transformational leadership refers to the desirable characteristics of an organization's leadership support practices. In our survey, this concept refers to an organization's capacity to offer its work teams a supportive leadership (Bass and Avolio, 1992; Zaccaro, 1996) environment to harness new product development idea generation.

Burns (1978) was the first to introduce the concept of transformational leadership and highlighted the difference between transactional and transformational leadership. Transformational leadership (Bass, 1985; Taylor, 2014; Kazmi, Naarananoja, 2014; Kazmi, Naarananoja, 2015; Kazmi, Naarananoja, 2015; Kazmi, 2012; Kazmi, Takala, Naarananoja, 2015; Kazmi, Naarananoja, Takala, 2013; Kazmi, Naarananoja, 2013; Kazmi, Takala, Naarananoja, 2014; Kazmi, Takala, Naarananoja, 2015; Kazmi, 2012; Kazmi, Naarananoja, 2013; Kazmi, Naarananoja, 2015; Kazmi, Takala, 2011; Kazmi, Takala, 2012; Ozsahin, Zehir, Acar, 2011.) is considered the most suitable by organizational management theorists and researchers, who truly encourage (Judge and Piccolo, 2004) and develop their employees to perform beyond expectations. This leadership style stimulates (Bass 1985; Bass, Avolio, 1993) the process of thought (i.e. beliefs and values) and cognitive behavior (i.e. attitudes and attributes) of the followers. The transformational leadership model is superior to the transactional leadership model on the basis of several factors, namely intellectual stimulation, inspiration motivation and charisma (Judge, Piccolo, 2004; Gardner, Avolio, 1998; Conger and Kanungo, 1998) in contrast to mere dependence on contingent reinforcement and management-by-exception and exploitation (Howell, Avolio, 1992; O'Connor et al., 1995). According to (Bass and Avolio, 1990), transformational leadership is considered a potential source of team performance enhancement through several factors, namely intellectual stimulation, individualized consideration, inspirational motivation and idealized influence. This style of leadership requires spending one's own capabilities (De Cremer, and Van Knippenberg, 2004; Van Knippenberg and Van Knippenberg, 2005) to foster leadership potential in others (Judge and Piccolo, 2004). This leadership style has emerged as a central model for understanding how leaders achieve effective and desired behavioral responses from their followers, namely due to the followers being highly satisfied with and respectful of their leaders (Bycio et al., 1995; Conger and Kanungo, 1998; Thompson, 2012). It combines four sub-categories commonly known as the four I's, to constitute a whole. The four I's are detailed below;

The first 'I' is for idealized influence. It refers to the leader's capacity to lead his or her followers by setting an example (Bono and Judge, 2003) based on high moral and ethical grounds (Podsakoff, Mackenzie and Bommer, 1996; Whitener, 1997; Bass and Steidlmeier, 1999; Dirks and Ferrin 2002). The second 'I' is for individualized consideration. It elucidates that a leader must achieve his or her followers' maximum potential through coaching or mentoring, during a process of helping and refining their skill potential. The third 'I' is for inspirational motivation. It refers to the leader's ability to install a desire in their followers for a cause. The fourth 'I' is for intellectual stimulation. It refers to the leader's capacity to encourage his or her team members or followers to think out of the box and generate new ideas (Bono and Judge, 2003; Jung and Avolio, 1999; Kirkpatrick and Locke, 1996).

Furthermore, Raelin (2003) defined the concept of 'team' as the creation or development of 'leaderful' communities where leadership actually embraces the basis for followers to flourish. Explicitly, research studies (Bass, Avolio, 1994) have shown that transformational leadership is positively linked to: subordinate work attitudes (e.g. loyalty and commitment, job satisfaction); subordinate work performance (e.g. sales); employee creativity; employee well-being (mental and physical health, occupational safety); and financial performance.

2.3. Strategic transformational leadership verses strategic leadership to support idea generation potential

The strategic leader operates with a comprehensive plan, integrating short-term results in addition to the long-term focus. Furthermore, such a leader is generally considered driving force for organizational change. The influence of such leader's effort cascades across the whole organization. Hence, the who, the what, and the how of strategic leadership mostly revolves around the position's like CEOs, top executives or the middle management.

The above elucidates that in strategic leadership role, the process of strategic decision making or its implementation revolves around the initiatives of either the top management, the middle management or just a few critical lower

positions. Additionally, such process does not propose a hint whether there is any role of the elements like ‘idealized influence’ or ‘individualized consideration’ from the very top to the extreme bottom of the line and the followers’(ordinary staff members) empowerment to suggest strategic ways and tactics to be incorporated in the overall corporate strategy. Moreover, there is no obvious support of elements like intellectual stimulation, inspirational motivation or charisma in building leadership capabilities and individual decision making capacity in the lower staff or followers (Bass, Avolio, 1990; 1992). This leaves a hole in the strategic leadership and makes the concept more of a technical process rather than a humanly act of power sharing till the very end of the loop (top management till the ordinary staff members) since anybody can come with a brilliant idea.

In the light of above, the fusion of transformational leadership with strategic thinking is proposed in the current research instead of any ordinary leadership style (i.e. that can be of any form or type of leadership- e.g. authoritative, transactional leadership or laissez-faire leadership) with strategy to build strategic leadership. Hence the crux of current research idea was to attempt for combining process of deeper level of ‘strategic thinking’, having the elements of reframing, system thinking, reflection (Pisapia, 2006; 2011) with the specialized form of ‘transformation leadership’ having the elements of idealized influence, intellectual stimulation, individual consideration and inspirational motivation (Bass, Avolio, 1985; 1993, Barling, Christie, and Turner, 2008; Sun et al. 2012). Following figure 3 presents the visual description.



Figure 3. Concept of strategic transformational leadership

By doing so, the author has actually tried to replace the earlier process of combining ‘strategy’ involving the elements of thinking, acting and influencing (having weaker theoretical grounding) and ‘leadership’, with no specific reference of the style or reflecting the ingredients resembling more to the authoritative, transactional or laissez-faire leadership. Following figure 4 presents the visual description.



Figure 4. Elements of strategic transformational leadership

Moreover, the authors would like to pinpoint the basic logic of initiating the current research, here. The authors have realized that whenever the text related to strategic leadership is explored, one usually finds the material revolving around the concepts supporting strategic management operations, with very little focus on NPD idea generation aspect.

2.4. Development of Hypotheses

The study endeavoured to examine NPD practices in an organization from the perspectives of strategic transformational leadership, keeping in view the competitive nature of multinational businesses of today, combating against social, economic and cultural factors. Thus to evaluate the success of an organization’s new product development efforts through innovation will present limitations in a scenario where various work teams as well as work systems are operating together while either being controlled from different hierarchal levels or being operated upon by individuals having entirely different skill sets. To support such limitations and to equip the theoretical framework of new product development with strategic maneuvering capability, the researchers proposed the integration of the findings of various research studies done in the field of transformational leadership (Bass and Avolio, 1990; 1992) and strategic thinking (Pisapia, et. al., 2005; 2006; 2009; 2011). The framework of the subject case study is a combination of two established models (i.e. transformational leadership and strategic thinking) developed in relation to the new product idea generation capability of an organization by harnessing NPD teams on the basis of transformational leadership and strategic thinking.

On the basis of above, following study variables were selected for empirical investigation;

Table 1. The study variables along with their theoretical base

<i>Theoretical origin</i>	<i>Variables</i>
Transformational leadership	Affiliation with leader
NPD idea support	Management initiatives
Transformational leadership	Leader’s competence to empower,
Strategic thinking	Work situation
NPD idea support,	Customer value
Strategic thinking	Communication

In the light of the literature and the selected study variables, we have proposed following hypotheses:

H1: “Management initiatives” (NPD idea support) is significantly linked to the team’s sense of “Affiliation with leader” (Transformational leadership).

H2: “Customer value” (NPD idea support) is significantly linked to effective “Communication” (Strategic thinking).

H3: “Leader’s competence to empower” (Transformational leadership) is significantly linked to “Work situation” (Strategic thinking).

3. Methodology

3.1. Sample and Data Collection

The scope of this study takes into account specialized groups of total 30 professionals (i.e. representing new product development related work operations and roles) from three international locations of a European multinational company : Finland, the UK and Norway on the basis of their professional expertise and operational relevance. A specialized feature of the selected work locations is that each one of the unit is engaged in different types of product manufacturing i.e., Finland – Power engines, The United Kingdom – Green energy solutions, Norway- Marine products and service solutions. The selected quantitative approach is the survey methodology which is performed through an email based questionnaire having 50 fixed ended items. Evaluation of the subject company’s new product development culture is carried out by combining quantitative and qualitative research methodologies. The qualitative approach, on the other hand, is involved with putting together an organizational case study through in person and

email based interview questionnaire. Feedback obtained from those 30 respondents were analyzed by using statistical analyses.

3.2. Results and analysis

The chosen theoretical framework use prior studies that are as below:

i. To study the concept of ‘strategic thinking’, the researchers have focused on the theoretical framework by Pisapia, et. al., (2011) involving three cognitive factors, i.e. system thinking (Pisapia, et al., 2009; Senge, 1990), reflecting (Pisapia, et. al., 2009; Argyris and Schön, 1978) and reframing (Pisapia, et al., 2009; Bolman and Deal, 1994).

ii. In addition, ‘transformational leadership’, the model introduced by Bass and Avolio (1992) was adopted wherein the concept of transformational leadership is measured through seven factors i.e. idealized influence, inspirational motivation, intellectual stimulation, individualized consideration, contingent reward, management -by-exception and laissez-faire leadership. However, we have adopted only four factors in our study which are idealized influence, inspirational motivation and intellectual stimulation in order to judge the level of transformational leadership.

Overall, 50 items using 5 Likert-type scale are used to measure transformational leadership style, and strategic thinking to support new product idea generation potential. 100 % of feedback was achieved to support the survey findings. Furthermore, the Cronbach’s Alpha values for each question item exceeds 0,70, which indicates the reliability of the study scale used formulated and implemented in the survey.

The results on the three study hypothesis are as follows;

Hypothesis 1- Relationship between 2 variables – management initiatives (NPD idea support) and affiliation with leader (Transformational leadership)

The correlation calculation to assess the relationship between the above referred variables yielded the r value of 0.51. Therefore, technically proving a positive but weak correlation between the two study variables (i.e. management initiatives (NPD idea support) and affiliation with leader (transformational leadership), since the nearer the value is to zero, the weaker the relationship. Furthermore, the value of R², the coefficient of determination, is 0.25.

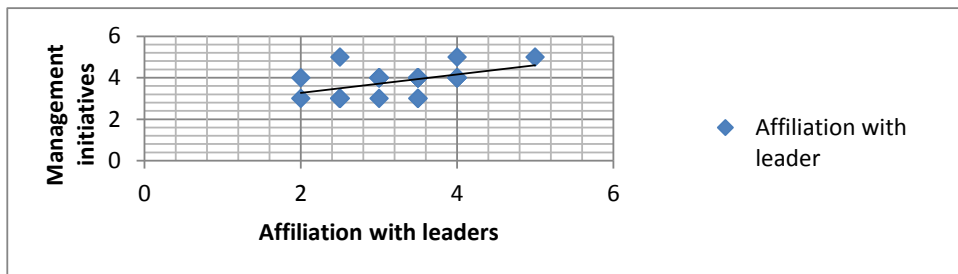


Figure 5. Scatter plot to display regression trend of the variables of study’s H1

According to Figure 5, the regression details reveal the following data facts with reference to the study variables of hypothesis (H1):

- i. Sample size: 30
- ii. Mean x (\bar{x}): 3.28
- iii. Mean y (\bar{y}): 3.83
- iv. Intercept (a): 2.38
- v. Slope (b): 0.44
- vi. Regression line equation: $y=2.38+0.44x$

The P-Value calculated on the basis of R value is 0.004 and significant at 5%. Therefore, the study hypothesis; H-1: “Management initiatives” (NPD idea support) is significantly linked to team’s sense of “affiliation with leader” (transformational leadership) is accepted.

Hypothesis II- Relationship between 2 variables – customer value (NPD idea support) and communication (Strategic thinking)

The correlation calculation to assess the relationship between the above variables yielded the r value of 0.39, therefore technically proving a positive but weak correlation between the two study variables (i.e. customer value (NPD idea support) and communication (Strategic thinking) since the nearer the value is to zero, the weaker the relationship. In addition, the value of R2, the coefficient of determination, is 0.15.

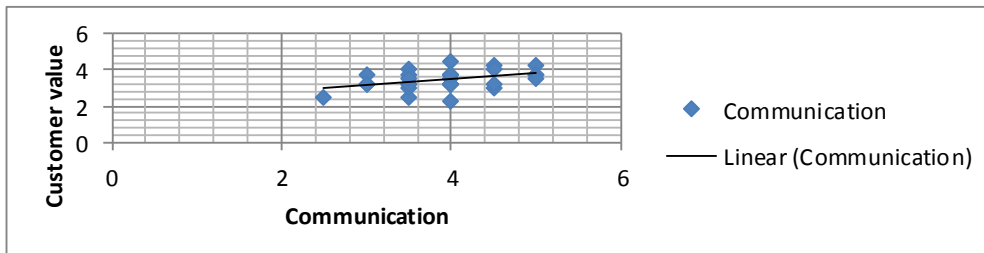


Figure 6: Scatter plot to display regression trend of the variables of study’s H2

According to Figure 6, the regression details reveal the following data facts with reference to the study variables of hypothesis (H2):

- i. Sample size: 30
- ii. Mean x (\bar{x}): 3.93
- iii. Mean y (\bar{y}): 3.45
- iv. Intercept (a): 2.2
- v. Slope (b): 0.32
- vi. Regression line equation: $\hat{y}=2.19+0.32x$

The P-Value calculated on the basis of R value is 0.039 proving the result as significant at 5%. Therefore, the study hypothesis; H-2: “Customer value” (NPD idea support) is significantly linked to “communication” (Strategic thinking) is accepted.

Hypothesis III - Relationship between 2 variables – Team empowerment (Transformational leadership) and work situation (Strategic thinking)

The correlation calculation to assess the relationship between the above variables yielded the r value of 0.02, thus, technically proving a positive but weak correlation between the two study variables (i.e. team empowerment (transformational leadership) and work situation (Strategic thinking) since the nearer the value is to zero, the weaker the relationship. In addition, the value of R2, the coefficient of determination, is 0.0004.

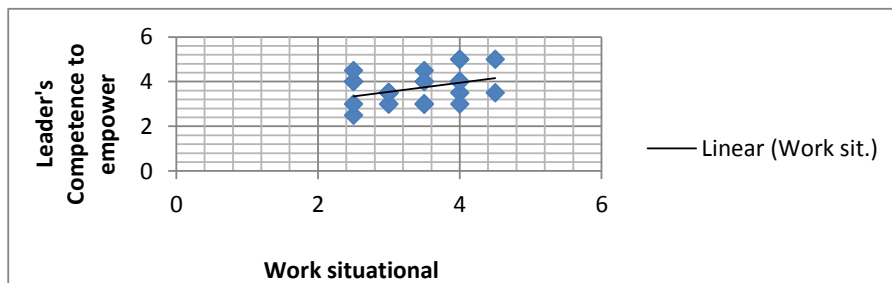


Figure 7. Scatter plot to display regression trend of the variables of study’s H3

According to Figure 7, the regression details reveal the following data facts with reference to the study variables of hypothesis (H3):

- i. Sample size: 30
- ii. Mean x (\bar{x}): 3.4
- iii. Mean y (\bar{y}): 3.7
- iv. Intercept (a): 2.31
- v. Slope (b): 0.41
- vi. Regression line equation: $\hat{y}=2.31+0.41x$

The P-Value calculated on the basis of R value is 0.04 and is significant at 5%. Therefore, the study hypothesis; H-3: “Leader’s competence to empower” (transformational leadership) is significantly linked to “work situation” (Strategic thinking) is accepted.

Hence the regression analysis results support H1, H2 and H3 hypotheses.

The study results confirms positive linking of all the theoretical concepts and support the proposed framework as displayed in the following Figure 8:

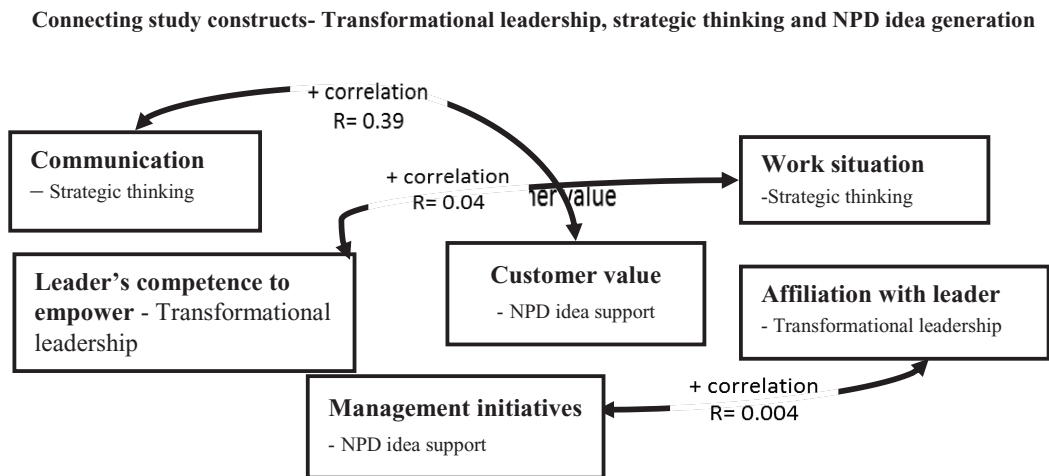


Figure 8. Formulated theoretical framework based on study results

4. Conclusion

The study results confirmed the proposed theoretical extension of strategic thinking and transformational leadership to support new product idea generation potential of industrial teams. The subject study attempted to offer transformational leadership as the core management style in work utilizing the directional approach of strategic thinking to harness new product team dynamics in support of organizational innovative initiatives. The reason to fuse transformational leadership with the above constructs are the numerous research studies that have confirmed the positive role of this leadership style across samples and cultures (e.g., Birasnav, Rangnekar and Dalpati; 2010, Menguc, Auh and Shih, 2007; Bycio, Hackett, and Allen, 1995; Howell and Avolio, 1993; Koh, steers and Terborg, 1995; Wofford, Goodwin, and Whittington, 1998) and confirmed this leadership style’s universal theoretical support. Furthermore, a study conducted on 13 innovative companies by Zein and Buckler (1997), found that these companies valued their employees and had an environment that was conducive to high personal motivation.

References

Argyris, C. & Schön, D. (1978). Organizational learning: A theory of action perspective. Reading, Massachusetts: Addison Wesley.
 Barling, J., Christie, A., & Turner, N. (2008). Pseudo-transformational leadership: Towards the development and test of a model. Journal of Business Ethics, 81, 851-861.

- Bass, B. M. & Avolio, B. J. (1992). "Multifactor Leadership Questionnaire--Short Form 6S. Binghamton, NY: Center for Leadership Studies", In B. M. Bass's Measures for Leadership Development Multifactor Leadership Questionnaire (MLQ). Retrieved December 12, 2011, <http://www.uwec.edu/Ssow/Meares/Leadership-MLQ.htm>
- Bass, B. M. & Avolio, B. J. (1993) 'Transformational leadership: A response to critiques', In M. M. Chemers and R. Ayman (eds.), *Leadership theory and research: Perspectives and directions*, San Diego, CA, Academic Press, 49-80.
- Bass, B. M. & Steidlmeier, P. (1999). Ethics, character, and authentic transformational leadership behavior. *Leadership Quarterly*, 10(2): 181-217.
- Bass, B. M. (1985). *Leadership and performance beyond expectations*. New York: Free Press.
- Bass, B.M., & Avolio B.J. (1990). The implications of transactional and transformational leadership for individual, team, and organizational development. *Research in Organizational Change and Development*, (4), 231–272.
- Beatty, K., Quinn, L. (2010). Strategic Command Taking the Long View for Organizational Success. *Leadership In Action*, 30(1), 3-7.
- Birasnav, M., Rangnekar, S., & Dalpati, A., (2010), Transformational leadership, interim leadership, and employee human capital benefits: an empirical study. *Procedia Social and Behavioral Sciences*. (5), 1037–497
- Bolman, L. G. & Deal, T. E. (1994). Looking for leadership: Another search party's report. *Educational Administration Quarterly*, 30(1), 77-96.
- Bonn, I. (2001). Developing strategic thinking as a core competency. *Management Decision*, 39, 63-71.
- Bonn, I. (2005). Improving strategic thinking: A multilevel approach. *Leadership and Organizational Development Journal*, 26, 336-354.
- Bono, J. E., & Judge, T. A. (2003). Self-concordance at work: Toward understanding the motivational effects of transformational leaders. *Academy of Management Journal*, 46, 554-571
- Burns J. M (1978). *Leadership*. Newyork. Harper and Row.
- Bycio, P., Hackett, R. D., & Allen, J. S. (1995). Further assessments of Bass's (1985) conceptualization of transactional and transformational leadership. *Journal of Applied Psychology*, 80, 468-478.
- Capra, F. (2002). *The Hidden Connections*, Doubleday, New York, NY.
- Chesbrough, H. (2003). *Open Innovation: The New Imperative for Creating and Profiting from Technology*, Boston: Harvard Business School Press.
- Cone, Edward. (2006). With a Little Help of My Friends. *CIO Insight* 74(11):84-92.
- Conger, J. A., & Kanungo, R. N. (1998). *Charismatic leadership in organizations*. Thousand Oaks, CA: Sage.
- Dewey, J., (1933). *How we think*. Chicago: Henry Regnery.
- Dirks, K. T., & Ferrin, D. L. (2002). Trust in leadership: Meta-analytic findings and implications for research and practice. *Journal of Applied Psychology*, 87, 611- 628.
- Dorst, K., & Cross, N., (2001). Creativity in the design process: co-evolution of problem-solution. *Design Studies*, 22, Pp. 425-437.
- Essery, E. (2002). Reflecting on leadership. *Works Management*, 54-57.
- Fuchs, C. & Schreiber, M. (2011), Customer empowerment in new product development. *Journal of Product Innovation Management*, 28: 17–32. doi: 10.1111/j.1540-5885.2010.00778.x
- Gardner, W. L., & Avolio, B. J., (1998). The charismatic relationship: a dramaturgical perspective. *Academy of Management Review*, 23(1), 32-58.
- Goldman E.F., & Casey. A (2010). Building a culture that encourages strategic thinking, *Journal of Leadership and Organizational Studies*, Sage .17(2) 119–128.
- Goldman, E. F. (2007). Strategic thinking at the top. *MIT Sloan Management Review*, 48, 75-81.
- Griffin, Abbie (1997). PDMA Research on new product development practices: updating trends and benchmarking best practices. *Journal of Product Innovation Management*. 14, pp. 429-458.
- Howell, J. M., & Avolio, B. J. (1992). The ethics of charismatic leadership: Submission or liberation. *Academy of Management Executive*, 6, 43–54.
- Howell, J.M., & Avolio, B.J. (1993). Transformational leadership, transactional leadership, locus of control, and support for innovation: Key predictors of consolidated business unit performance. *Journal of Applied Psychology*, 78, 891–902.
- Judge, T. A., Piccolo, R. F. (2004). Transformational and transactional leadership: A meta-analytic test of their relative validity. *Journal of Applied Psychology*, 89, 755–768.
- Jung, D. I., Avolio, B. J. (1999). Effects of leadership style and followers' cultural orientation on performance in group and individual task conditions. *Academy of Management Journal*, 42, 208–218.
- Kazmi, S. A. Z., & Kinnunen, T. (2012). Deep leadership coaching effectiveness in a corporate scenario, constitutes proactive leadership solution for 'Optimal Team formation', *European Journal of Social Science (EJSS)*. Vol. 31, Issue 2, June 2012. pp 166-189 - ISSN: 1450-2267
- Kazmi, S. A. Z., & Naarananoja, M. (2014). Overpowering Environmental Inconsistencies during NPD Activity Ensures Sustainability-Part of courage is simple consistency. Peggy Noonan. *Journal of Engineering Technology (JET)*, 2(2). <http://dl6.globalstf.org/index.php/jet/article/viewFile/787/807>
- Kazmi, S. A. Z., & Naaranoja, M. (2015). Cultivating Strategic Thinking in Organizational Leaders by Designing Supportive Work Environment! *Procedia-Social and Behavioral Sciences*, 181, 43-52.
- Kazmi, S. A. Z., & Naaranoja, M. (2015). Fusion of Strengths: T-style Thinkers are the Soul Savers for Organizational Innovative Drives and the Allied Change Processes. *Procedia-Social and Behavioral Sciences*, 181, 276-285.
- Kazmi, S. A. Z., & Naaranoja, M. (2015). Innovative Drives Get Fuel from Transformational Leadership's Pied Pipers' Effect for Effective Organizational Transformation! *Procedia-Social and Behavioral Sciences*, 181, 53-61.
- Kazmi, S. A. Z., & Takala, J. (2011). Aiming for effective Industrial Operational Management through Transformational Leadership-Quest for the best fit as an Optimal Team!, proceedings of the 10th International Conference of the Academy of HRD (Asia Chapter), Malaysia.
- Kazmi, S. A. Z., & Takala, J. (2012). Entrenching Strategic Competitive Advantage through Transformational Leadership! in proceedings of the 3rd International Conference on Industrial Engineering and Operational Management (IEOM-2012), July 3-6, Istanbul, Turkey. Pp.2517-2526.
- Kazmi, S. A. Z., (2012). Conquering environmental inconsistencies during the New Product Development (NPD) activity lead to corporate sustainable success', in proceedings of the 3rd International Conference on Industrial Engineering and Operational Management (IEOM-2012), July 3-6, Istanbul, Turkey. pp 2552-2559.
- Kazmi, S. A. Z., Naaranoja, M., & Takala, J. (2013). Diverse workforce supported through transformational leadership ensures higher operational responsiveness. *Global Business Review*, 2(4). (Print ISSN: 2010-4804, E-periodical: 2251-2888) DOI: 10.5176/2010-4804_2.4.253

- Kazmi, S. A. Z., Naaranoja, M., (2013). Comparative approaches of key change management models – a fine assortment to pick from as per situational needs! Presented in the 3rd Annual International Conference(s) organized by Business Strategy and Organizational Behavior (BizStrategy 2013), Print ISSN: 2251-1970, E-Periodical ISSN: 2251-1989 : DOI: 10.5176/2251-1970_BizStrategy13.41.
- Kazmi, S. A. Z., Takala, J., & Naaranoja, M., (2014). Creating optimal teams through transformational leadership! 4th International Conference on Industrial Engineering and Operations Management, Bali, Indonesia.
- Kazmi, S. A. Z., Takala, J., & Naaranoja, M., (2015). Sustainable solution for competitive team formation. *Journal of Global Strategic Management*, 9(1), 5-16.
- Kazmi, S. A., Naaranoja, M., & Kytola, J. (2015). Fusing theory to practice: A case of executing analytical strategic leadership tool. *International Journal of Strategic Decision Sciences (IJSDS)*, 6(4).
- Kazmi, S. A., Naaranoja, M., & Kytola, J. (2015). Harnessing New Product Development Processes through Strategic Thinking Initiatives. *International Journal of Strategic Decision Sciences (IJSDS)*, 6(3), 28-48. doi:10.4018/ijds.2015070103.
- Keller, A.I., Sleswijk Visser, F., Lugt, R. van der, & Stappers, P.J (2009). Collecting with cabinet: Or how designers collect visual material, researched through an experiential prototype. *Design Studies*, 30 (1), 69-86.
- Kirkpatrick, S. A., & Locke, E. A. (1996). Direct and indirect effects of three core charismatic leadership components on performance and attitudes. *Journal of Applied Psychology*, 81: 36-55.
- Koh, W. L., Steers, R. M., & Terborg, J. R. (1995). The effects of transformation leadership on teacher attitudes and student performance in Singapore. *Journal of Organizational Behavior*, 16, 319–333.
- Lakhani, K. (2006). Broadcast search in problem solving: Attracting solutions from the periphery. MIT Working Paper 2006.
- Mengue, B., Auh, S. & Shih, E., (2007). Transformational leadership and market orientation: Implications for the implementation of competitive strategies and business unit performance. Elsevier, Science direct, *Journal of business research* 60 (2007) p.p. 314-321. Ref. *Military Leadership* (1993). FM 22-100. San Francisco, CA: W. H. Freeman.
- Morgan, G. (1986). *Images of Organization*, Sage, Beverly Hills, CA.
- O'Connor et al., 1995
- Oelkers, G. & Eelsey, B (2004). The Strategic Magnifier – A cognitive tool for strategic thinking problems and perspectives in management, 3. 196-209.
- Ottum, B. D. & Moore, W. L., (1997). The Role of Market Information in New Product Success/Failure. *Journal of Product Innovation Management*, 14, pp. 258-273.
- Oxman, R. & Oxman, R.M., (1992) "Refinement and adaptation in design cognition". *Design Studies*, Vol. 13 No. 2 pp. 117-134
- Ozsahin, M., Zehir, C., & Acar, A. Z., (2011). Linking leadership style to firm performance: The mediating effect of the learning orientation. *Procedia - Social and Behavioral Sciences*, 24, 1546–1559. <http://dx.doi.org/10.1016/j.sbspro.2011.09.089>
- Ozer, M., (1997). A survey of new product evaluation models. *Journal of Product Innovation Management*, 16, 1997, pp. 77-94.
- Pisapia, J., Morris, J., Cavanaugh, G., & Ellington, L., (2011). The strategic thinking questionnaire: Validation and confirmation of constructs. The 31st SMS Annual International Conference, Miami, Florida November 6-9, 2011.
- Pisapia, J., Pang, N.S.K., Hee, T. H. Lin, Ying, & Morris, J.D. (2009). A comparison of the use of strategic thinking skills of aspiring school leaders in Hong Kong, Malaysia, Shanghai, and the United States: An exploratory study. *International Journal of Educational Studies*, 2(2), 48-58.
- Pisapia, J., Reyes-Guerra, D. & Yasin, M., (2006). Strategic thinking and leader success. Annual Meeting of the International conference on advances in management, Lisbon Portugal, July 19-22, 2006.
- Pisapia, J., Reyes-Guerra, D., & Coukos-Semmel, E. (2005). Developing a strategic mindset: Constructing the measures. *Leadership Review*. Kravis Leadership Institute, *Leadership Review*, 1 (5), pp. 41-68 - cited in Scopus; questionnaire response as an element of a previously tested method." *Journal of Applied Psychology*, 59(3): 297-301.
- Pitt, Leyland, Albert Caruana, & Pierre R. Berthon (1996). Market orientation and business performance: Some European evidence. *International Marketing Review*, 13 (1), 5–19.
- Podsakoff, P. M., MacKenzie, S. B., & Bommer, W. H. (1996). Transformational leader behaviors and substitutes for leadership as determinants of employee satisfaction, commitment, trust, and organizational citizen. *Journal of Management*, 22(2), 259-298.
- Raelin, J.A. (2003). Creating leaderful organizations. *Innovative Leader*, 12 (6).
- Schön, D.A. (1983). *The reflective practitioner: How professionals think in action*. New York: Basic Books.
- Senge, P. (1990). *The fifth discipline: The art and practice of the learning organization*. New York: Doubleday.
- Taylor, C. M. (2014). Transformational leadership in a nonprofit organization: A Case study of a Filipino nonprofit in diverse communities, Doctoral dissertation, Temple University).
- Thomas, J. C., & Carroll, J. M. (1979). The psychological study of design. *Design Studies*, 1, 5-11.
- Thompson, J. (2012). Transformational leadership can improve work- force competencies. *Nursing Management—UK*, 18, 21-24. <http://dx.doi.org/10.7748/nm2012.03.18.10.21.c8958>
- Van Knippenberg, B., & Van Knippenberg, D. (2005). Leader self-sacrifice and leadership effectiveness: The moderator role of leadership prototypicality. *Journal of Applied Psychology*, 90, 25-37.
- Von Hippel, E. & Katz, R. (2002). Shifting innovation to users via toolkits. *Management Science*, 48(7), 821-833.
- Wheatley, M. J. (2006). *Leadership and the new science: Discovering order in a chaotic world* (3rd ed.). San Francisco, CA: Berrett-Koehler.
- Whitener, E. M. (1997). The impact of human resource activities on employee trust. *Human Resource Management Review*, 7, 389–404.
- Wofford, J. C., Goodwin, V. L., & Whittington, J. L. (1998). A field study of a cognitive approach to understanding transformational and transactional leadership. *Leadership Quarterly*, 9, 55–84.
- Zien, K.A. and Buckler, S.A (1997). From experience dreams to market: crafting a culture of innovation. *Journal of Product Innovation Management*, 14 : 274 -287.