Identifying dissimilarities among global teams while pursuing new product idea generation practices

Author(s): Kazmi, Syeda Asiya Zenab; Naaranoja, Marja; Kytolä, Juha

Title: Identifying dissimilarities among global teams while pursuing new product idea generation practices

Year: 2016

Version: Publisher's PDF

Copyright Elsevier, Creative Commons Attribution Non-Commercial No Derivatives License

Please cite the original version:

Identifying dissimilarities among global teams while pursuing new product idea generation practices

Syeda Asiya Zenab Kazmi a, Marja Naarananoja b, Juha Kytola Wartsila c, a

a,b University of Vaasa, Vaasa, 41400, Finland
c Wartsila, Ship Power, Poole, UK

Abstract

This study survey has attempted to explore assessment of a European multinational company’s new product idea generation potential linked to their industrial teams’ diversified capabilities as well as their work potential. The study is carried out by employing quantitative, supported through qualitative, research methodologies. The aim behind such an evaluation is to identify and compare the differences in work approaches as well as the specialization in each one of the three target global teams (i.e. Norway, Finland, the UK) of a European multi-national organization, linked to the new product idea generation operations.

The study results revealed that team working in Finland’s office is strong in ‘NPD team climate trends’ with the scores 3.6, the UK office displayed higher scores on ‘strategic thinking trends’ with the scores 3.6 while Norway office location is strong at ‘NPD idea support trends’ with the overall scores of 3.6.

1. Introduction

In today’s modern corporate scenario, the companies are exposed to risks such as social, economic, competitive and technical that are considered strong sources and force industrial leaders to continuously rethink, redesign and innovate their products as well as service styles for sustainability (Collerette et. al, 2002). The quest to implement lean, rapid and profitable new product development processes has never been greater. Multinational companies have to work

* Corresponding author.

Email address: asiyakazmi@hotmail.com
extensively harder to manage their global teams while working for collaboration yet competing with separate units for efficiency, profitability and sustainability.

In the light of above, this study survey has attempted to explore the subject company’s new product idea generation potential linked to the team member’s diversified capabilities as well as their work potential. This study is carried out by employing quantitative, supported through qualitative research methodologies (Kazmi, 2012; Kazmi, Kinnunen, 2012; Kazmi, Naarananoja, Kytola, 2015). The aim behind such an evaluation was to identify and compare the differences in work approaches as well as the specialization in each one of the three work groups or the global teams. In this context, the study starts with literature review of new product development idea generation and strategic thinking, transformational leadership etc., and later will go on to develop research questions for the study. The research methodology, analyses of results and research model formation will take place at the advanced level. Finally, the results of the current study will be analyzed in detail to answer the research questions posed in the study.

2. Literature Review And Hypotheses

2.1. New product idea generation

Professional inadequacies, namely poor planning and financial judgement greatly hamper the process of the new product idea generation capability of an organization (Barber et al., 1989). Nooteboom (1994) suggests that the factors of insufficient delegation and high turnover of managerial staff are considered as managerial deficiencies. Excessive dependence on word-of-mouth sales without any real and well-coordinated marketing efforts are the causes of professional inadequacies that ultimately hinder the process of new idea generation which can either be for a new product, a new service or a unique idea related to organization’s working process (Oakey, 1991). In a general sense, the methods for ideation (i.e. new idea generation) have been broadly categorized into two groups: 1) Intuitive – e.g., brainstorming, role playing, metaphors, synaptic; and 2) Logical – e.g., TRIZ and forward steps (Shah, Vargas-Hernandez, and Smith, 2003). The need to generate new ideas is very critical to firms that want to satisfy their customers’ demands effectively and efficiently by offering desired and needed products to achieve considerable competitive advantage (Wheelwright and Clark 1992). Woodruff (1997) supports the notion by suggesting that in order to succeed, organizations must re-orient their strategies well on time to move towards superior customer value. According to Edgett and Parkinson (1994), real time market research plays a significant role in identifying customer needs and behavior patterns in relation to their choice making in addition to offering insights into generating new product ideas with the prospect of catching the attention and satisfying the demands of a diverse set of users. Lindman, (2002) proposes such factors as the ability to explore, reach the potential market, the fit between the market needs and firm’s resources, product planning from the inception, targeting the global market, span of market experience, pioneering attitude and understanding of customer needs and product user’s circumstances as the most critical factors that highlight the actual condition of a firm’s market positioning. In addition, Dougherty and Heller (1994) suggests that when product innovators do not understand their customer needs, they usually end up developing seriously flawed products and services. According to Hurley and Hult (1998), professional learning orientation, from an organizational stand point, is a hint of understanding and accepting the significance of new idea adaptability. The process of new idea generation is related to the creation of new products, services and processes and requires a more diverse set of skills and knowledge base compared to those one sufficient for routine manufacturing. Therefore, the potential of an organization’s new idea generation potential depends critically on an organization’s learning ability. Angle (1989) proposed that the new idea generation process is grounded in the organization’s creativeness in addition to its ability to foresee opportunities for innovation. When a firm is imposed by external forces to restrict competitive initiative, it in return enhances its strengths to win over the competition and consequently achieves profitability. This further offers the required financial resources to support research and development in addition, and a genuine drive towards innovation.

He further pointed out that the lack of external push caused by market competition kills the spirit and reason for innovation and the drive for new idea generation capabilities. According to Dasgupta and Stiglitz (1980) an organization’s desire to generate new ideas becomes unnecessary in the absence of competition. However, Kamien and Schwartz (1982) negate the above proposition by pointing out the difficulties of innovation under tough market competition due to which the tendencies of a company to innovate become seriously hampered and sometimes come to complete halt.
2.2. Transformational leadership

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 behavioural responses from their followers, namely due to the followers being highly satisfied with and respectful of their leaders (Bycio et al., 1995; Conger, 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 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).

2.4. Strategic thinking

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). 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).

Furthermore, these 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).

2.5. Strategic thinking, leadership and cultural impact

The ability to think strategically is critical for leaders and managers at multiple organizational levels. Specific work experience can contribute to the development of an individual’s strategic thinking ability. Culture, among other organizational factors, can either encourage or limit those contributions. Leaders, as culture constructors and transformers, can act to maximize the relationship between organizational culture and the process of learning to think strategically (Goldman and Casey, 2010). When taken seriously, strategic management can promote participatory decision making and adaptability. Yet, success in organization strategy depends more on the right mental outlook than on specific techniques that can themselves sometimes turn into an impediment to open, creative thinking. Strategic management works best when understood as a way to learn, not as a prescribed remedy to follow (Goldsmith, 1996).

The management of organizations must keep on aligning their strategies in order to manage organizational crises (Eren, Zehir and Özşahin, 2004) to support their teams to innovate especially in the area of new product development.
And to formally end the literature review on the study’s highlighted concepts, the author will share relevant literature on the concept of strategic leadership that can be considered somewhat the combination of leadership and strategy approach.

2.6. Development of Research Questions

Assessment of the subject company’s new product idea generation potential linked to the team member’s diversified capabilities as well as their work potential is carried out by employing quantitative, supported through qualitative research methodologies (Kazmi, 2012; Kazmi, Kinnunen, 2012; Kazmi, Naarananoja, Kytola, 2015). The aim behind such an evaluation was to identify and compare the differences in work approaches as well as the specialization in each one of the three work groups or the global teams.

The core aim of the research study was to investigate the following dimensions;

**Research Question: A:** How the work groups, representing three different work locations, differ in terms of NPD idea support vs. work roles?

**Research Question: B:** How the work groups, representing three different work locations differ in terms of work leadership vs. work roles?

**Research Question: C:** How the work groups, representing three different work locations differ in terms of NPD team Climate vs. work Roles?

**Research Question: D:** How the work groups, representing three different work locations differ in terms of strategic thinking vs. work roles?

**Research Question: E:** How the work groups, representing three different work locations differ in terms of Pseudo-transformational leadership vs. work roles?

**Research Question: F:** What tendencies the combined comparative results analysis display with regards to the teams working at three different work locations?

3. Methodology

The highlighted approach in this study is to analyze, study respondents' responses, linked to the main research questions through multi-methodological approaches i.e., qualitative and qualitative research questions. The referred approach is applied by putting together this organizational case through in person and email based interview questionnaires.

The study involves total 30 selected professionals i.e., 10 each from its three international locations: Finland, the UK, and Norway on the basis of their professional expertise and operational relevance. In addition, all the three work locations are engaged in producing separate nature of products or service offerings; i.e. Finland- Power engine, Norway- Marine-shipyard support and solutions and the UK- Environment sustainability solutions respectively.

The questionnaires were distributed among the study sample, to evaluate the new product development idea generation process, with respect to the employee’s freedom to implement his or her knowledge in their work. The selected study respondents represented new product development work operations.

3.1. Mixed mode survey tool (Quantitative and Qualitative)

The quantitative questionnaire included 50 fixed ended question items covering the following area of study;

i. New product idea generation potential,

ii. Transformational leadership,

iii. Strategic thinking approach

The qualitative questions broadly covered the investigative areas of the research study (i.e. new product development idea generation approach with reference to effective corporate communication process.

The question items for the above categories were especially devised for qualitative feedback analysis through four sub-categories of study areas that are as follows:

i. New product development and customer value,

ii. Company’s knowledge creation potential,

iii. Company’s innovative potential,
iv. Company’s potential to celebrate new idea creation process.

The interview questionnaire (qualitative) having 10 questions was administered to selected personnel of the subject company.

3.2. Research Goal

In this survey we aim to identify the differences in trends, approaches and capabilities etc., among the groups of employees working in different geographical locations; i.e., Finland, Norway and UK, of one multinational company to support new product idea generation potential. To test the research propositions, a field survey using quantitative as well as qualitative questionnaires were piloted.

2.3. Sample and Data Collection

The study involves the lengthy procedure of implementing a specialized quantitative research tool, supported through a qualitative tool on 30 selected professionals of one European multinational company’s three international work locations: Finland, the UK, and Norway, on the basis of their professional expertise and operational relevance. The researchers remained successful in collecting 100% feedback from the respondents with the process of one and a half months’ time.

3. Study Results and analysis

This section presents an operational category / work role specific analysis with respect to the new product development related organizational practices that affect teamwork linked to the new idea generation support process. In addition, as examined in the previous section, an additional evaluation will be conducted to observe if there are gaps among various operational or work roles in terms of new product development related areas that can be improved further.

3.1 Response to research question: A: How the work groups, representing three different work locations, differ in terms of NPD idea support vs. work roles?

![Figure 1. Comparative analysis NPD idea support vs. work roles](image)

The study participants were divided into five categories on the basis of the departments or the work roles they are officially reporting to. Figure 1 above presents a relational trend between the new product developments – idea support related indicators, mentioned in the study questionnaire (i.e. question items 1 to 16) and the five work roles or operational categories.

According to the figure 1 above, the study recipients working in technical management related operations reflected the highest level of agreement (i.e. exceeding the level of 3.5). The study sample related to the ‘design’ and ‘general
management’ operational categories average scores touched the 3.4 level, which safely falls in the agreement level. Though the study participants linked to project management, research and development and product and sales related work operations were thought to reflect higher, the reality presented the opposite trend, i.e. slightly higher than the neutral score range (i.e. 3.3 and 3.2 respectively). This trend further suggests that if given more facilities, freedom and training based on the themes of transformational leadership and key strategic thinking factors, the company can sharpen the cognitive skill base of their workforce related to the new product development operations.

3.2 **Response to research question: B:** How the work groups, representing three different work locations differ in terms of work leadership vs. work roles?

![Figure 2](image)

Figure 2. Comparative analysis work leadership vs. work roles

Figure 2 above, presents a relational trend between the current work practices related to leadership indicators, mentioned in the study questionnaire (i.e. question items 17 to 24) with the five operational categories. According to the Figure 2 above, once again the study recipients working in technical management related operations reflected the highest level of agreement (i.e. touching the level of 3.7). The study sample related to the ‘design’, ‘product and sales’ in addition to the ‘general management’ operational categories average scores touched 3.6 which safely falls in the agreement level. Here again the study participants linked to project management and research and development related work operations reflected marginally higher than the neutral score range (i.e. 3.4) as compared to other operations.

This suggests that more support from the organizational policy makers can enhance the skill base of their workforce related to the new product development operations especially related to the project management and research and development.

3.3 **Response to research question: C:** How the work groups, representing three different work locations differ in terms of NPD team Climate vs. work Roles?


Figure 3. Comparative analysis NPD team climate vs. work roles

Figure 3 above presents a relational trend between the current work practices related to new product development team climate indicators, as mentioned in the study questionnaire (i.e. question items 25 to 34) with the five operational categories.

According to the Figure 3 above, the study recipients working in Technical Management, and product and sales related operations reflected the highest level of agreement (i.e. touching the level of 3.8). Second place went to employees related to product ‘design’ related work operation. Third place went to those study participants linked to ‘project management and research and development’.

The study participants linked to the ‘general management’ related operational categories average scores touched 3.5 level, which safely falls within the range of agreement level but reflect the lowest agreement ratio as compared to the study participants related to the other work categories. The comparative tabulation in this response category reflected an obvious gap wherein the general management related study participants displayed lower response scores, since they are considered to be the motivators as well as the team climate builders. Hence, by focusing more on the skill levels, intelligent resource utilization techniques and advanced capacity building approach through general management’s enhanced level of involvement; the target organization can easily achieve a high level of productivity in the field of new product development operations and output.

3.4 **Response to research question: D:** How the work groups, representing three different work locations differ in terms of strategic thinking vs. work roles?

Figure 4. Comparative analysis strategic thinking vs. work roles

Figure 4 above presents a relational trend between the current work practices related to leadership indicators, mentioned in the study questionnaire (i.e. question items 35 to 46) with the five operational categories.

According to the above Figure 4, the study recipients working in project management and research and development related operations reflected the highest level of agreement (i.e. touching the level of 3.8). The study sample related to the ‘design’ related operational category achieved an average score exceeding 3.6. The ‘general management operations’ related study participants achieved third place on strategic thinking related inventory items.

However, the study participants linked to the ‘product and sales’ and ‘technical management’ related work operations showed the lowest score averages i.e. 3.3 and 3.4, respectively. This suggests an obvious gap since the work teams linked with the product and sales and technical management are quite related to new product development practices and they ought to be equipped with strategic thinking capability for organizational productivity.
3.5. **Response to research question: E:** How the work groups, representing three different work locations differ in terms of Pseudo-transformational leadership vs. work roles?

![Figure 5. Comparative analysis pseudo-transformational leadership vs. work roles](image)

Figure 5 above presents a relational trend between the current work practices providing insights into pseudo transformational leadership as mentioned in the study questionnaire (i.e. question items 47 to 50) with the five operational categories. According to figure 5 displayed above, the study recipients working in ‘design’, ‘technical management’, ‘product and sales’ and ‘general management’ related operations reflected a similar and comparatively higher level of agreement (i.e. slightly exceeding the level of 3), which is a faulty trend. The study participants associated with ‘project management’ and ‘research and development’ reflected the right approach in scoring within the range of (‘2’ that is disagreement) since this category measures a faulty leadership approach if present with in any work environment. Therefore, the analytical suggestion for the targeted company’s management to combat this trend by implementing the right leadership pattern is by focusing less on an ‘I’ or ‘Me’ approach to leadership and sharing power among the team members.

3.6. **Response to research question: F:** What tendencies the combined comparative results analysis display with regards to the teams working at three different work locations?

This section displays a location specific feedback analysis with respect to new product development work practices which significantly affect the work team distributed at three global locations. In the current study, 10 survey participants each from three targeted work locations of the subject company (i.e. Finland, the UK, and Norway) were selected to offer their feedback on a set of specialized survey questionnaires (i.e. a - Questionnaire having 50 closed ended items to finalize quantitative analysis and b – Questionnaire having 10 open ended items to perform qualitative feedback analysis).
3.6.1. Subject company’s work location in Finland

The survey received 100% contribution through the feedback from the selected study participants in the targeted office in Finland. According to figure 6 above, comparative data analysis revealed that the study participants representing Finland’s office displayed higher levels of scores on items related to new product development (NPD) team climate trends, i.e. overall average score of 3.6, as compared to the other two work locations (i.e. the UK and Norway). In addition, the group scored significantly higher on new product development (NPD) idea support, Work Leadership categories and strategic thinking (i.e. overall averages of 3.4, 3.7 and 3.6 respectively). In addition, the group’s higher average score on pseudo transformational leadership reveal that there are obvious gaps in the work leadership practices that require immediate attention through suitable management measures.

3.6.2 The subject company’s work location in the UK

The contribution from the UK office was 100% feedback received from the participants. On the basis of comparative data analysis (i.e. Figure 6 above) the group displayed higher levels of scores on items related to strategic thinking trends, i.e. an overall average score of 3.6, higher than the group in Norway but similar to the group in Finland. In addition, the group scored lower on new product development (NPD) idea support and team climate in addition to work leadership categories (i.e. overall averages of 3.2, 3.6 and 3.4, respectively) as compared to the other two work locations (i.e. Finland and Norway). However, this work location reflected a positive trend by reflecting lower group average scores on pseudo-transformational leadership (i.e. 2.9) as compared to the two targeted work groups (i.e. Norway and Finland). Since modern leadership puts more focus on an unbiased leadership approach, therefore stronger and more effective work leadership patterns can be achieved when the work groups score lower on the highlighted trends included in our survey on the section – pseudo-transformational leadership.

3.5.3. Subject company’s work location in Norway

The contribution from the Norway office was also 100% feedback received. Comparative data analysis (i.e. Figure 6 above) revealed that the study participants from the Norway office displayed higher levels of scores on items related to new product development (NPD) idea support, i.e. an overall average score 3.6 as compared to the lower scores of the other two work locations.

In addition, the group scored significantly higher on new product development (NPD) team climate and work leadership categories (i.e. group’s average scores of 3.7 and 3.6, respectively) as compared to the group working at the UK office. In addition, the group’s higher average score on pseudo transformational leadership reveals that there are obvious gaps in the work leadership practices. Further improvements can be suggested in the areas of strategic thinking related key dimensions, since the group scored lower as compared with other work locations i.e. overall average scores of 3.5. The response pattern of the group suggested that there is ample margin for refinement with reference to strategic thinking related skill base to lead and support new product idea generation areas for organizational new product development process up-grading.
4. Conclusion

This study is significant in terms of identifying differences in the capabilities and potentials of global teams working for one multi-national company (at three sites - Finland, the UK, and Norway) to harness new product idea generation potential. The paper presented in detail, data analysis and results cross comparisons against the selected study areas i.e. the collected employee feedback was analyzed in the following ways to maximize possible recommendations for an effective NPD system upgrade in line with the study’s research questions.

- Analysis 1 – Construct/Item orientation
- Analysis 2 – Work operation wise
- Analysis 3 – Location orientation.

In a summarized way, the research revealed that the Finland’s office is strong in NPD team climate trends with the scores 3.6, UK office displayed higher scores on strategic thinking trends with the scores 3.6 while Norway office location is strong in NPD idea support trends with the overall scores of 3.6.

References


De Cremer, and Van Knippenberg, 2004;


