LEADERSHIP STYLES AND SKILLS OF OPERATIONAL AND MIDDLE MANAGERS IN KNOWLEDGE INTENSIVE CONTEXT

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Abstract- In today's fast moving and globalized world, innovation and creativity have become the primary focus of organizations. The knowledge intensive sectors have started to gain much power and attention for the competing economies. This has consequently led to the rise of new form of organizations called as "knowledge intensive firms (KIFs)" and new type of employee referred as "knowledge worker." New service and product developments, finding creative solutions to complex problems and dealing with uncertainty of new knowledge creation is the main responsibility of these knowledgeable workers. The human capital is the most valuable asset of these knowledge intensive organizations and their core capabilities are rooted in the expertise and skills of knowledge workers. Having been so important for an organization gives the control power to the hands and brains of these workers and traditional roles and leadership styles of managers are questioned and not welcomed in these contexts. Hence, the changing focus and the nature of these contemporary organizations unrevealed new leadership styles and roles for managers. Interviews with both knowledge workers and managers show that different managerial skills and leadership styles are favored depending on the positional levels of managers doing leadership in knowledge intensive context.

Index Terms- leadership, managers, knowledge workers, and knowledge intensive work.

I. INTRODUCTION

This paper focuses on the roles and leadership competencies of managers toward knowledge workers (engineers and experts) in a knowledge intensive context. It, thus, tries to understand, how managerial roles and leadership styles differs between operational (project) levels and middle levels in a knowledge intensive organization and how the leadership of managers perceived by both knowledge workers and managers themselves.

The context is seen as important and has a crucial impact on leadership Bryman, Stephens and Campo [9]. Existing research on leadership of managers in knowledge intensive organizations has contradictory findings in operational and project level leadership. One side underlined the facilitator role of managers argued that the leadership of managers consist of mundane acts such as listening and informal chatting, and even questioned whether leadership is useful in knowledge intensive context Alvesson and Sveningson [4] On the other hand, other researchers stressed that, managers need to understand technical aspects of the knowledge work and participate in to the operational processes without having directive control on knowledge workers to foster knowledge sharing and gain credibility for leading. Monsted [23]; Trevalyan [31] Additionally, there is not much investigation in the literature in terms of the managerial roles and leadership styles of middle level managers and how these roles and styles diverges from project levels in knowledge intensive context.

In this research, perceptions of participants deemed crucial, a qualitative approach is taken into account Bryman et.al [9] Hence, in present research through using semi-structured interviews, it is aimed to explore imperatives of managerial leadership and gain rich understanding about its importance in knowledge intensive context Bryman, [9]; Bryman, [34] Hence, the findings can be contributed to the existing contradictory debate in leadership in operational levels as well as addressing the gap in middle levels.

II. LITERATURE REVIEW

2.1 Leadership, Management and Managerial Leadership

The leadership domain has become a contradictory concept Clegg, Kornberger and Pitsis [31], Hughes and his associates argue that these contradictions occur because of the complexity of the concept of leadership including a leader, followers and a situation Hughes, Ginnett and Curphy [35] There are numerous definitions of leadership and it is argued by researchers that these definitions will grow Yukl [44] However, according to Stodgill influence is a consistent pattern of many definitions Stodgill [44] Beside influence there other components, which can also be, seem as central: leadership is a process, occurs in a group context and involves goal achievement. As a result, accepting leadership as a slippery concept, it can basically be defined as a process whereby an individual influences a group of people to achieve shared goals Northhouse [40]

What is more, it is also essential to underline the tendency to distinguish the terms of leadership and management. While leadership is more about countering the old patterns and creating and/or thriving for the new beliefs and actions, management is named as responsible for maintaining stability Alvesson and Sveningson [6] As a result, it can easily be inferred that according to these views a leader becomes an inspirational while a manager is a

ponderous bureaucrat. However, it is crucial to understand the importance of management and acknowledge the truth of effective leaders as individuals who are also good managers.

2.2 KIFs, Knowledge Work and Knowledge Workers

The new technological developments, the coming of postmodern society and increasing need for new knowledge creation in highly competing sectors signalize the change in core dynamics of competition towards innovation and creativeness James [43] Furthermore, competing for innovation in highly developed technological environments and knowledge intensive sectors require a different type of agencies called knowledge intensive firms and skilfull experts named knowledge workers Drucker [33] ; Donelly [10]

Knowledge intensive firms are companies, where most of the work are performed by well educated, qualified employees Alvesson [3] The main intention of these firms is to produce qualified products and/or services through generating and using new knowledge Karreman, Sveningsson, Alvesson [16]; Blackler [7] In addition, the nature of work in these firms is different and includes theoretical knowledge, creativity and use of analytical skills defined as knowledge work Frenkel, Korczynski, Donoghue and Shire, 1995 [13]

The tasks of knowledgeable employees involve dealing with complexity and uncertainty Donnelly [10] Therefore, the basic difference between KIFs and other firms is the intellectual nature of work, which draws on mental abilities, embrained knowledge and underlines complex problem solving rather than physical skills, and embodied knowledge Karreman et al. [16]; Robertson and Swan [22] Management, computer and engineering consultancy companies, accountancy firms, law firms, R & D units, high tech companies and advertising agencies can be given as an example of knowledge intensive firms Alvesson [28]

Knowledge workers are highly educated and have esoteric expertise in one or more specific area Donnelly [10]; Robertson and Swan [22] Moreover, their skills, knowledge and expertise are hard to attain, thus knowledge workers are seen as most valuable assets particularly by employers of KIFs Reed [25].

Moreover, in the literature, it has been argued that because knowledge workers generally work in uncertain conditions and cope with ambiguity, controlling knowledge workers through traditional ways such as procedures or performance measurements can cause damaging results for organizations Alvesson [29]; Robertson and Swan [22] Thus, it can be understood that knowledge workers have considerable autonomy and freedom in their tasks Robertson and Swan [24]; Clegg et al. [31]

2.3 The Importance of Knowledge Sharing and the Rhetoric

Facilitating and encouraging knowledge sharing is one of the most critical task of managers in knowledge intensive organizations because of the creation of knowledge Edwards [12] What is more managers need to focus their attention on the knowledge workers` tendency of keeping best ideas secret. Knowledge means power and it is not easy to share it yet there should be an effective flow of knowledge in organizations to foster knowledge creation and innovation Monsted [20]; Edwards [12] Thus leaders need to manage this tension smoothly. What is more, it is also essential to ensure effectivity of physical and virtual channels. Face-to-face knowledge sharing is more effective than entering ideas into a database. Thus, besides providing necessary technological conditions leaders of the knowledge workers need to find ways to increase knowledge sharing through personal and informal channels Dubrin [33]

Moreover, besides knowledge sharing, particularly in service oriented businesses rhetoric is also seen as essential in knowledge work. According to Alvesson [2] “The notion of rhetoric does not simply mean persuasive talk and being in some kind of an opposition to “reality” or “truth”, but refers to elements of argument and persuasion which may, or may not be backed up by “facts”. Knowledge work involves complexity, chaos and uncertainty on the other hand clients may not be ready to appreciate the uncertainty and look for solid outcomes. However, it is often difficult to measure the value of outcomes and value of knowledge work. Therefore, rhetorical skills of both managers and knowledge workers can be crucial for the accomplishment of knowledge work and maintaining relationships with clients Alvesson, 1993 [1]

2.4 Managers Roles and Leadership Styles in Project Settings

Existing research on leadership in knowledge intensive operational settings includes contradictory findings of leadership. One side mainly argue that the role of managers is more about being facilitator and providing the right conditions for knowledge workers to perform to gain competitive advantage and reach determined targets Newell et al. [39] The other side, on the other hand, underline the importance of involvement of managers on knowledge work processes when it is needed Trevelyan [27] Below these contradictory findings in literature will be discussed.

2.4.1 Managerial Roles and Competencies

In a study conducted in knowledge based research and development unit of an organization, the researcher come up with an idea that managers roles are fairly mundane. Further they claimed that being sympathetic, listening and engaging in informal talks

are the central managerial competencies Alvesson and Sveningsson [4] However, in contrast with the arguments above, some other researchers argued that managers of knowledge workers can go beyond just being a listener or informal chatter. In fact in some knowledge creation focused settings managers` understanding the technical aspects of the knowledge work and involvement in the operational processes can be really crucial Davenport et al. [9]

More to the point, the essence of managers` communicative abilities were underlined so that managers can foster knowledge sharing through using their social capabilities. Otherwise, the tacit knowledge may not be transformed into explicit knowledge and the management deliberately may be kept in the dark by knowledge workers and may turn into just a barrier for the organization Monsted [20]

2.4.2 Laissez-faire (hands-off) vs Participative (Hands-on) Leadership

The facilitator role of managers can be correlated with a laissez-faire style of leadership in leadership literature Davenport et al., [9] The laissez-faire view supports that knowledge workers should be allowed to design and lead their own work. In other words, this view suggests managing knowledge work processes in a hands-off manner Davenport et al. [9]; Scarbrough [21] Hence, the leadership in KIFs is not seen as salient Alvesson [29]

It is argued that managers` role is about providing sufficient environment and preparing the right conditions for knowledge workers for attracting them to work in their organization and help them to increase their performance to survive and strengthen competency Newell et al., [39] In this type of context some researchers even question whether there is a need for management and its leadership Alvesson and Sveningsson, [4]; Alvesson and Sveningsson, 2003 [5]

In contrast, other researchers have stressed on the importance of managers` involvement in operational knowledge work by other researchers Trevalyan [27]; Mintzberg [19] In her research on academic research scientists and their managers, Trevalyan [27] found that although scientists as knowledge workers do not want a directive style of leadership from their managers, they also do not favour passive facilitator type laissez-faire leadership Lewin et al. in Travelyan [27]

In other words, according to the Trevalyan`s survey knowledge workers want participation from their leaders but not for giving direction and lowering their autonomy instead for knowledge sharing, discussion. This, participative style of managerial leadership necessitates diffusion of knowledge and providing help to knowledge workers if necessary Trevalyan [27]; Hughes et al. [35]

2.5 The Roles and Leadership Styles of Middle Managers

In knowledge focused organizations distinct from operational levels, managers in middle levels have less expertise on the specific processes of project oriented knowledge work. These managers often find themselves in a position of leading people who knows more than themselves. In these situations the roles that managers play and leadership styles that work may likely to be different.

2.5.1 The Key Roles and Skills of Middle Managers

It is argued that, managing on a larger scale and going up the ladder of the knowledge driven organization requires focusing on the relationships with knowledge workers and project leaders rather than mastering the different dynamics of complex projects Beever, Petterson, Rotz and Vlak [45] Because in knowledge intensive context it is not easy for managers to gain credibility through expertise and it may take prolonged time and excessive effort to master the details of each project Monsted [20] Thus, middle level managers need to find other ways such as practicing executive image and project confidence, develop abilities to see the big picture and mastering ways to enabling things happen through people Wallace [26]; Wallace and Creelman [46]

2.5.2 Transforming from Specialist to Generalist leadership

As aforementioned above there is a contradiction in literature in terms of appropriate leadership style in knowledge based project work and some researchers argue that participation into operational knowledge work processes may bring value to the projects. What is more, it is stressed that specialist styles and helpful expertise may help managers to gain credibility towards knowledge workers Trevelyan [27] However, in middle levels it is too difficult to advance the technical issues in larger bunch of projects. Therefore, it is advised that in middle levels the leadership style needs to transform into a more generalist style. Generalist leaders give weight to build trustworthy and sincere relationships with their subordinates so that they can gain credibility and inspire people to find the answer themselves Wallace and Creelman [46]; Wallace [26]

III. RESEARCH PROBLEM

The previous research on leadership role and competencies has focused upon the science life sector and the academic research scientist; therefore suggestions have been made for further research to undertake the subject of leadership role of managers in different contexts Alvesson and Sveningson [5], [6] Trevalyan [27] Thus, as a different context,

engineers as highly skilled and educated knowledge workers and their managers can be investigated for the aim of understanding the how knowledge workers and managers themselves perceive the leadership roles and competencies of managers in both project (operational) and middle levels. In this respect, this research aims to examine the following aspect: What are the central leadership competencies and styles in operational and middle levels from both knowledge workers and managers perspective?

IV. METHODOLOGY

3.1 Research Design and Methods

A single exploratory case of an engineering company is chosen for this research. This research involves in-depth and detailed analysis of a single case. Semi structured interviews were used in the case study research to gain rich understanding about the phenomenon investigated Yin [41]. In this research, the interviews were face-to-face and useful to obtain information, feelings and opinions Hair, Money, Samouel and Page [34]; Mathews and Ross [36] Nine interviews were conducted in total. Three of them (1 manager and 2 design engineers) were working in department A, five of them in department B including and one middle level manager.

4.1.1 Case Selection

This case organization (XYZ) is an affiliated company of Turkish army forces. In present research the focus was on two knowledge intensive departments (A&B) of the XYZ. Department A was a wiring harness design unit of the XYZ. There were 3 people (1 manager and 2 design engineer) working in this department and their job was mainly consisting of deskwork.

In Department B, there were 8 people working, including the manager, electrical and electronic engineers, and support unit experts. In addition, with technicians the total number of workers was more than ten. This unit was responsible for electronic security system applications for the customers and business partners of the company. What is more compared to department A, department B was more customer focused and the engineers were working in the clients` fields.

XYZ also have a middle manager who bridges the knowledge intensive departments with top management. Middle manager is also responsible for coordination of multi level projects.

V. DATA PRESENTATION

There are two section in this part. The first section involves presentation of the research findings from two different operational level departments of XYZ. The main aim is to underline both knowledge workers` and management's perspectives on the leadership styles of managers and understand what kind of managerial compatibilities are essential in operational levels. The second phase will introduce the perspectives on managerial competencies and leadership style of middle managers in a knowledge focused context.

3.2 Managerial Competencies and Leadership Styles in Operational Level

The interviews with knowledge workers showed that the key managerial competencies are having a specialist expertise as well as sharing knowledge with knowledge workers and involving in problems solving when it is needed.

"It would be good if there is a person who has vast knowledge and share his/her knowledge for our development" (Engineer 2A)

"Leader is important for the managing internal communication and interaction of employees otherwise the department would be more individualistic and everybody pay attention to only their job and responsibilities."(Expert 1B)

"Leader is necessary. A person who can provide good work conditions for us, can keep us away from unnecessary tasks and capable of guiding us in turbulent times. There is also need for a person who can stand behind and support his/her team when we face a problem" (Engineer 1A)"

"Finding solutions to the problems is the main one when employees find themselves in a difficult situation while interacting with customers. Meanwhile technical help is also very crucial." (Engineer 1B)"

Moreover, in departments that are engaging in project oriented knowledge work in client firms managing relationship with customers and negotiating effectively with client firms are perceived as highly important. Therefore, The communicative and rhetorical skills of managers are perceived as crucial skills to build healthy relationships with clients.

"One of the strategic responsibility of mine is managing relationships with customers. I know the customers caress me. Because, there isn`t any discrimination between them. It is also important to maintain process of effective communication. The customer should trust you. At this point it is crucial to show the right way with persistence and patience and make them understand that you care their problem as much as they care. Therefore it is important to empathize with them and gain their trust."(Manager B)

"There is a need for leader, otherwise it would be difficult to find new customers and managing the relationships with these customers"(Expert 2B)

"In negations processes and particularly in reconciliation processes with customers leadership skills become prominent " (Engineer 1B)

Moving on to the leadership style in project level participative (hands-on) style leadership is mostly supported and managers` involvement in operational

knowledge work processes and assisting knowledge workers more like a consultant rather than a directive leader is seen as appropriate and style of leadership for orchestrating knowledge based project work.

However I think there should be some level of control and involvement for caring. Without direct control involvement is needed for knowledge sharing and communication" (Engineer 1A)

"I think the manager should be a good communicator and avoid from discrimination among employees while making workers feel that you are with them"(Manager B)

"In our department control is more related with communication. Our manager does not bring us to book he knows what is going on. As a result because the communication level is high in our department our manager knows which decisions are going to taken and when"(Engineer 1B)

3.3 Managerial Skills and Leaderhip Styles of Middle Managers

The interviews with project managers in operational levels and the middle level revealed that building strong relationships with subordinates and being supportive are highly important for middle managers.

"Having good relationships with people around you is essential to be eligible to empower and coordinate them...Building trustworthy and sincere relationships is important otherwise you cannot create synergy" (Mid Manager)

"The upper manager needs to speak the same language with me. I mean mutual understanding is fundamental. On top of this, he needs to give support to deal with the problems that I can not solve myself" (Manager B)

A long with having strong ties with inferiors, being eligible to see the big picture and future directions of the work are perceived as crucial skills for middle managers.

"The leader is a person who has a technical and technological vision as well as skills to develop strategies" (Mid. Manager)

"The middle managers more vision and organization oriented. They need to try to picture the position of this company in the sector and be eligible foresee the transformation inside and outside in ten years time." (Manager B)

"The Middle manager needs to stay informed regarding developments and strategical movements in the sector. We often focus on the operational tasks so the manager needs to fulfill these areas.

Moreover, problem solving skills and ending problems before they create chaos are also underlined as essential competencies for middle level managers in knowledge intensive context.

"When the big problems occur you need undertake a protective role as an umbrella. As a middle manager you need to manage the tension, lower the stress and give support to overcome the problems before they bigger and become the issue for top management" (Mid. Manager.)

"When you encounter with critical issues it is important (for middle managers) to determine and fix the problems" (Manager A)

The consultation with managers unearthed that middle managers capability to transform operational information into picture that senior managers can make sense is the final vital competence of middle managers in knowledge intensive context.

" The project managers see things in terms of technical aspects and aim to finish the tasks effectively. On the other hand top management interested in profitability and productivity. As a manager you need manage the tension between upper and higher levels and you need to become a translator and/or transformer channel for the information flow between these two levels" (Mid. Manager)

As can be understood from the data provided above, distinct from operational levels, middle level managers need to have more generalist style of leadership through building supportive long lasting relationships, drawing a big picture of the knowledge driven sector and foreseeing the future route of the organization.

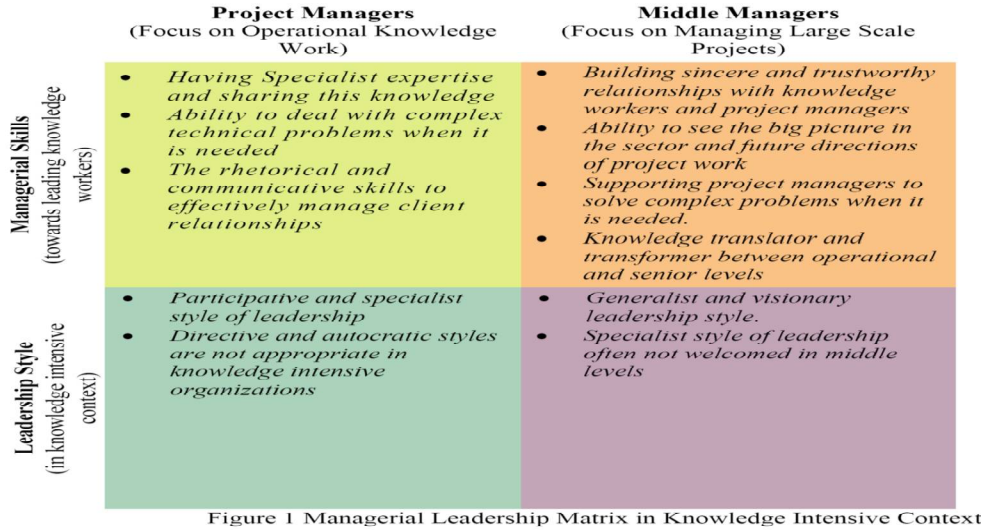


Figure 1 Managerial Leadership Matrix in Knowledge Intensive Context

DISCUSSION AND CONCLUSION

The main of this study is to examine the required managerial skills and leadership styles in both operational and middle levels of a knowledge intensive firm. This section will discuss the findings about vital skills and leadership styles of managers in both levels respectively.

Interviews in operational departments of XYZ revealed that understanding technical process of knowledge work to contribute to knowledge sharing and problem solving is perceived as one of the important managerial skill. When engineers were asked about the necessary leadership skills, the leading themes in both departments were being communicative, having adequate knowledge and sharing this knowledge for the support and development of knowledge workers. These findings were in line with the claim of Monsted [20] which implies that the leaders of the knowledge workers have to understand the technical language to foster knowledge sharing and to gain credibility.

Moreover, the remaining findings of this study contributes to the existing theory. The data shows that problem-solving skills of managers are also seen as crucial managerial competencies. As mentioned in the literature review part existing theory includes two contradicting point of views on managerial roles and leadership styles for knowledge based project work in operational levels. One side argued that the main leadership roles of managers are mundane, such as informal chatting, being cheerful and particularly listening others Alvesson and Sveningson [6] In contrast, the other researchers underline the importance of having technical knowledge and contributing to knowledge sharing. Trevalyan [27]; Monsted, [20] In addition to these existing findings, this study revealed the importance of problem solving skills as leadership competency in operational levels. Dealing with problems and ambiguity sometimes can even be extremely challenging for knowledge workers to settle a matter. In these circumstances, technical skills, intellectual capabilities of managers can assist knowledge workers. As a result, findings revealed that managers also need to have capabilities for problem solving when necessary.

Alvesson [2] argued that rhetoric is one of the most crucial parts of the knowledge work and using these skills were the responsibility of both knowledge workers and managers to develop relationships with client firms Alvesson [1] However, the interviews with the manager and knowledge workers in client focused department (B) of XYZ unearthed that managers` negotiating and convincing skills towards client firms are also perceived as a vital managerial competency particularly when the unexpected problems occur. To this and it could be said that, at least for department B, the use of rhetoric to convince the clients and maintain the relationship with them is more on the managers` shoulder.

Finally the appropriate leadership style in operational project setting supports Trevelyan`s [27] argument that leaders should understand and be involved in the processes and interact with the knowledge workers without having direct control on them. On the other hand, contradicting with the arguments that see the role of managers as facilitating the knowledge work processes and which underlines the passive, hands-off (laissez-faire) leadership Alvesson [29]; Robertson and Swan [22].

Moving on to the managerial ingenuities and proper leadership approach in middle levels the gathered data signals the value of building strong and trustworthy relationships with subordinates to gain credibility and to lead. What is next, it is also revealed that having visionary thoughts about the future directions of the projects and being able to see the big picture in the sector are the vital abilities that the middle managers need to have. Having these results in hand, it can be said that Wallace and Creelman`s [46] arguments are in line with these findings.

One interesting finding of this study is the importance of being supportive and solving problems when it is needed are also seen as vital in middle level as in operational level. Thus, it could be said that in a setting where ambiguity and complexity is present to be eligible to deal with problems ,that these factors create, is the most powerful way of gaining credibility in target related levels of a knowledge intensive organization.

The additional contribution of this study is the both translator and transformer role of middle managers between lower and higher level of the hierarchy. Newell and her associates [39] argued the background knowledge of the senior managers is not enough to understand the knowledge created in projects. However, they also stress the significance of spreading this knowledge throughout the organization and particularly in senior levels. This research shows that the translation of information and transformation of the new knowledge created in projects into an understandable picture is undertaken by middle management. To this end it can be understood that middle managers play vital role for both organizational learning and startup innovation through convincing managers in senior levels.

Finally, the findings supports the view of generalist leadership style ,which mainly focuses on relationships and coordination of the knowledge based projects rather than trying to master each project, is a supported style of leadership in middle levels. Wallace and Creelman [46]; Wallace [26] This finding shows that the expected leadership styles are different in both levels of the organization. Although the specialist and participative leadership preferred in operational levels, more generalist and visionary leadership is expected from managers in middle levels. To conclude, both operational and middle level managers need to prepare themselves to deal

with complex problems and develop their communication and convincing skills for the relations with clients. In addition is vital for managers to be aware of the necessary managerial skills in their working levels to gain credibility from knowledge workers. Having these competencies and approaches in hand managers` presence and leadership seems still important even in knowledge worker dominated postmodern organizations.

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