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COMPARING MANAGERIAL LEADERSHIP IN KNOWLEDGE INTENSIVE CONTEXT: HOW LEADERSHIP SKILLS AND STYLES DIFFERS AMONG ORGANIZATIONAL LEVELS?

Bilgi Yoğun Sektörlerde Yönetimsel Liderliğin Karşılaştırılması: Liderlik Becerileri ve Tazları Yönetim Kademelerine Göre Nasıl Değişiklik Gösterir?

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ÖZ

Günümüzün küreselleşmiş dünyasında, yenilikçi olmak birçok kuruluş için en önemli öncelik haline gelmiştir. Bilgi odaklı sektörler, rekabet eden ülke ekonomileri için daha önemli olmaya başlamıştır. Bu gelişmeler, "bilgi yoğun firmalar (BYF)" olarak adlandırılan yeni örgütlenme biçimlerinin yanı sıra "bilgi işçisi" olarak adlandırılan yeni bir çalışan türü ortaya çıkarmıştır. Bu tür çalışanlar beyin güçlerini kullanır ve çoğunlukla fiziksel görevlere dayalı olan el işçiliğinden farklı bir yaşam şekli olarak düşünerek geçimlerini sağlarlar. Bilgi işçileri genellikle bilgi yoğun firmalarda çalışırlar. Ayrıca teorik ve analitik becerilerini karmaşık sorunlara yaratıcı çözümler bulmak ve yeni ürün veya hizmet geliştirme süreçlerindeki belirsizliklerle başa çıkmak için kullanırlar. Ayrıca, bilgi işçilerinin ortaya çıkardıkları yeni bilgileri ve ürünleri, kurum içinde ve dışında çoğaltmak kolay değildir. Bu sebeple bu bilgili çalışanlar bilgi yoğun kuruluşların en değerli kaynaklarıdır. Konularında uzman olmaları, bilgi çalışanlarına işlerinde özerklik ve kontrol gücü verir. Bu açıdan bakıldığında bilgi yoğun ortamlarda geleneksel yönetim yaklaşımları ve yöneticilerin liderlik stilleri sorgulanır. Bu nedenle, çağdaş bilgi odaklı organizasyonların niteliği ve değişen odakları, üst düzey yöneticiler için yeni liderlik becerileri ve stilleri ve ortaya çıkarmıştır. Hem yöneticiler hem de bilgi çalışanları ile yapılan görüşmeler, bilgi yoğun firmalara liderlik yapan yöneticilerin örgüt kademelerine bağlı olarak, farklı liderlik beceri ve tazlarına sahip olmaları gerektiğini göstermiştir.

ABSTRACT

In today's globalized world, being innovative has become a top priority for many organizations. The knowledge-oriented sectors have started to gain much power and attention for the competing economies. Such developments give rise to new form of organizations named as "knowledge intensive firms (KIFs)" along with a new type of employee called as "knowledge worker." Such workers use their brain power and think for a living unlike manual workers whose work is mostly based on physical tasks. Knowledge workers are generally work in knowledge intensive firms and use their theoretical and analytical skills to find creative solutions to complex problems and dealing with uncertainty of knowledge creation through new product or service development. In fact, the new knowledge and the products they create is not easy to replicate both inside and outside of organization. These workers are the most valuable assets of knowledge intensive organizations. Being expert and skillful gives knowledge workers the autonomy and control power on their job. Traditional approaches and leadership styles of managers are questioned and not welcomed in such settings. Therefore, the changing focus and the nature of these contemporary organizations unearthed new leadership styles and approaches for the executive officers. Interviews with managers and knowledge workers revealed that different managerial skills and leadership styles are favored depending on the organizational levels of managers doing leadership in knowledge intensive setting.

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1. INTRODUCTION

This paper investigates the leadership skills and styles of managers of knowledge workers. Hence, it focuses on the questions of how skills and styles of managers doing leadership differs between operational (project), middle and top (senior) levels in a knowledge 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.

When it comes to leadership in organizations the importance and the influencing role of the context is stressed by the researchers (Bryman, Stephens and Campo, 1996:353). Existing research on managerial leadership in knowledge intensive context has contradictory results and arguments in operational and project level leadership. While one side of researchers underlined the facilitator role of managers the other side emphasized the participating act of leaders. Alvesson and Sveningsson (2003a:359) argued that the facilitating leadership of managers consists of mundane acts such as listening employees and engaging in informal chats. As such, they even questioned whether leadership is necessary in knowledge intensive settings. On the other hand, other scholars underscored that, managers need to understand and capable of some technical aspects of knowledge work and involve in operational processes. To put it another way, they stressed the hands-on leadership towards knowledge workers without having directive control. So that managers can foster knowledge sharing and gain credibility from knowledge workers for leading (Monsted, 2003:1, Trevalyan, 2001).

Hving such conflicting findings in literature, this research aims to further investigate the field by looking at the leadership skills and styles of managers based on their positional levels. In effect, there is not much investigation in the literature in terms of the leadership skills and styles of managers and how these roles and styles diverges based on the low, middle and top levels in knowledge intensive organizations.

In this research, perceptions of participants deemed essential and thus a qualitative approach is taken into account (Bryman et.al, 1996:1021). To this end, in this study through using semi-structured interviews, the main purpose is to explore imperatives of managerial leadership and gain rich insights about its importance in knowledge intensive setting (Bryman, 2008). Therefore, the findings can contribute to the existing contradictory debate in leadership in operational project-based levels while addressing the gap in middle and top position levels.

2. LITERATURE REVIEW

2.1. Leadership, Management and Managerial Leadership

The leadership domain has become a contradictory concept (Clegg, Kornberger & Pitsis, 2008), 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 & Curphy, 2009). There are numerous definitions of leadership and it is argued by researchers that these definitions will grow Yukl (2010). However, according to Stodgill (1974) "influence" is a consistent pattern of many definitions of leadership. Besides leadership is seen as 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, 2007).

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 & Sveningsson, 2003c:1435). 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, 1997). Furthermore, competing for innovation in highly developed technological environments and knowledge intensive sectors require a different type of agencies called knowledge intensive firms and skillful experts named knowledge workers (Drucker, 1993; Donnelly, 2004).

Knowledge intensive firms are companies, where most of the work are performed by well educated, qualified employees Alvesson (2000:1101). The main intention of these firms is to produce qualified products and/or services through generating and using new knowledge (Kärreman, Sveningsson, Alvesson, 2002:70; Blackler, 1996:1021). 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, 1995:773). The tasks of knowledgeable employees involve dealing with complexity and uncertainty Donnelly (2004:78). 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., 2002:70; Robertson & Swan, 2003:831). 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, 1995).

Knowledge workers are highly educated and have esoteric expertise in one or more specific area (Donnelly, 2004:78; Robertson & Swan, 2003:831). 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, 1992:55). 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, 2004; Robertson and Swan, 2004:123). Thus, it can be understood that knowledge workers have considerable autonomy and freedom in their tasks (Robertson and Swan 2004:123; Clegg et al. 2008).

2.3. The Importance of Knowledge Sharing and the Rhetoric

Facilitating and encouraging knowledge sharing is one of the most critical tasks of managers in knowledge intensive organizations because of the creation of knowledge (Edwards, 2007: 64). 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, 2003:1; Edwards, 2007: 64). 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, 2007).

Moreover, besides knowledge sharing, particularly in-service oriented businesses rhetoric is also seen as essential in knowledge work. According to Alvesson (2001:863) "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, 1993:997).

2.4. Leadership Skills and 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. 2009). The other side, on the other hand, underline the importance of involvement of managers on knowledge work processes when it is needed (Trevelyan, 2001). Below these contradictory findings in literature will be discussed.

2.4.1. Leadership Skills 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 & Sveningsson, 2003a:359). 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, Jarvenpaa & Beers, 1996:53). 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, 2003:1).

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., 1996:53). 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. 1996:53; Scarbrough 1999:5). Hence, the leadership in KIFs is not seen as salient (Alvesson, 2004). 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., 2009). In this type of context some researchers even question whether there is a need for management and its leadership (Alvesson and Sveningsson, 2003a:359; Alvesson and Sveningsson, 2003b:961).

In contrast, other researchers have stressed on the importance of managers' involvement in operational knowledge work by other researchers (Trevalyan, 2001; Mintzberg, 1998:140). In her research on academic research scientists and their managers, Trevalyan (2001) 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 Trevalyan, 2001). 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 2001; Hughes et al. 2009).

2.5. The Skills and 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 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 Vlax, 2010). 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, 2003:1). 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 2015; Wallace and Creelman, 2015).

2.5.2. Transforming from Specialist to Generalist Leadership

As mentioned 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 (Trevalyan, 2001). 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 2015; Wallace 2015).

2.5.3. Leadership Skills and Styles at Top Management Level

The main purpose of this study is to understand what leadership skills and styles are expected from managers of knowledge intensive firms. Additionally, in this research project top management was defined as the chief executive officer of an organization. When it comes to strategic management in

knowledge intensive firms little has been done to investigate top management issues in this knowledge-based context (Greenwood et al., 2005). In particular there is a room for qualitative deep investigation about required leadership skills and styles at top level of an organization. The main responsibilities of top managers is to set the strategic direction of the company and foster technological pathway (Mintzberg, 1979) and ensuring whole organization's effectiveness (Hambrick,1989). Such skills are included in strategic leadership framework (Green, 1995). Apart from this Nord and Tucker (1987) found that managing conflicts particularly during project implementation processes is also crucial for top managers.

3. RESEARCH DESIGN AND METHODS

3.1. Research Objectives

The previous research on leadership skills 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 skills of managers in different contexts (Alvesson and Sveningsson 2003b:961; 2003c; Trevalyan 2001). Thus, as a different context, engineers as highly skilled and educated knowledge workers and their managers can be investigated for the aim of understanding how knowledge workers and managers themselves perceive the leadership skills and competencies of managers in both project (operational) and middle levels in each levels of the organization. In this respect, this research aims to examine the following aspect: What are the central leadership skills and styles in operational and middle levels from both knowledge workers and managers perspective?

3.2. 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 (2009). In this research, the interviews were face-to-face and useful to obtain information, feelings and opinions (Hair, Money, Samouel and Page 2007; Mathews and Ross 2010). Ten 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 (1 manager and 4 Engineers) including one middle level manager and the CEO of the company.

3.3. 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. In addition, present research also involves interviews with chief executive officer who embraces the organization as a whole and deals with the strategic issues.

3.4. Data Presentation

There are three sections 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 skills are essential in operational levels. The second part will introduce the perspectives on managerial competencies and leadership style of middle managers in a knowledge focused context. Finally, the third phase includes the chief executives' views in terms of leadership skills and styles that are appropriate for senior levels.

3.4.1. Managerial Competencies and Leadership Styles in an 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 responsibilities 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 negotiations 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).

3.4.2. Managerial Skills and Leadership 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 cannot solve myself" (Manager B)

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 built supportive long-lasting relationships, they also need to foresee the crisis within the organization and end it before it leads to chaotic problems within the organization. Finally, they need to bridge low and high levels of organization and also coordinate the project-oriented departments.

3.4.3. Managerial Skills and Leadership Styles of Top Managers

The discourses of the chief executive officer and the perceptions of project and middle managers on necessary skills of top manager indicated two crucial skills for managing people and the organization.

First of all, the interviews with the chief executive implied that he is aware of how to manage knowledge workers and even knowledge worker managers. In fact, for him managing is not about telling what to do in detail instead it is more about managing more strategic issues. Therefore, the first necessary skill is more about determining the vision and imposing this on to the people for implementation.

"Never tell people what to do in detail instead the top leader must identify the company policy, goals and strategies and impose them on the leaders at lower levels." (Top Manager)

Secondly, as a top manager managing managers of knowledge workers involve mostly reconciling, conflict and anger management skills.

"People who have come to this level are all very special with their own ambitions. In addition, each of them has their own personal and career goals. In fact, they are all highly skilled, highly educated, smart and experienced in their fields. For the success of our company, it is necessary to ensure that these individuals cooperate individually for the common interests of the company while at the same time achieving their own goals. At this point, ambitions are clashing but if you don't act together the ship is taking water... According to the situation, every 3 to 5 years, the company's strategic goals and plans are reorganized. At this point, the preparation of strategic goals and plans together is important for imposing such targets to the managers...In addition the ability to convince at first is very important. These conflicts need to be moved in the direction of the interests of the company. You need to convince the manager that you are wrong or unfair, and if you can't do that, it's hard for you to manage these people. At this point you need to run the appreciation and reward mechanism. Besides, communication skills, experience and education can also play an important role...In fact, you need to be very careful about the way you talk, the tone of it and the words you use. Because, such people can easily find jobs in the industry. This situation needs to be managed in a multi-level manner. You're going to make your own position. You have to make them feel how important you are to them before you offend them. Besides, as I said at the beginning, to be calm and convincing are very critical skills. When you get angry, you shouldn't burst with anger, you can overcome a lot of things when you think for a while and call that person to talk about the issues once again. The top manager does not have to work actively all the time. He needs to take time to think about how to direct people to strategic goals. (Top Manager)

"When you look at the top manager he is a professional and cold-blooded person. He worked on projects and knows how to empathize with people. You are very comfortable with it in terms of communication (Middle Manager).

The interviews with managers and the chief executive himself unearthed that comparing to operational and middle level managers, the main role of top managers is to see the organization as a whole and they need to have strategic leadership style. In other words, the chief executive officer needs to follow developments in the global sector and determine the vision and so the strategic direction of the company. As a result, they deal with macro level issues both inside and outside the organization.

“As a chief executive officer, I carry the vision of the company to grow, to increase profits, sales and number of the personnel, to get new customers, to increase the level of technology and strengthen the company’s position in the sector.” (Top Manager)

“Leadership is about mobilizing people for the same goal and to maintain this leadership until they reach that goal. Growth, profitability and satisfaction of all stakeholders are the primary targets of the company and the leader is the person who can take these goals” (Top Manager)

“My manager must be aware of all developments in the defense industry. It is important to have whispers in the sectoral sense, to be aware of these issues, to have strategic information about the market and specific jobs. As a result, such aspects remain empty when you focus on operational business.” (Manager A)

“I expect more visionary and more organizational views from top management. What happens to this company in 10 years? What will be the changes and developments in the world? These issues need to be investigated.” (Manager B)

Tablo 1: Managerial Leadership Matrix in Knowledge Intensive Context

	Operational Project Managers	Middle Managers	Top Managers
Managerial Skills (Towards Leading Knowledge Workers)	<ul style="list-style-type: none"> • Having Specialist expertise and sharing this knowledge • Ability to deal with complex technical problems when it is needed • The rhetorical and communicative skills to effectively manage client relationships 	<ul style="list-style-type: none"> • Building sincere and trustworthy relationships with knowledge workers and project managers • Ability to see the big picture in the sector and future directions of project work • Supporting project managers to solve complex problems when it is needed. • Knowledge translator and transformer between operational and senior levels 	<ul style="list-style-type: none"> • Imposing the vision to other people working in the organization. • Ability to reconcile • Between managers regarding organizational issues and goals. • Managing conflicts • Anger Management Skills when negotiating with middle and project managers
Leadership Style (In Knowledge Intensive Context)	<ul style="list-style-type: none"> • Participative and specialist style of leadership • Directive and autocratic styles are not appropriate in knowledge intensive organizations 	<ul style="list-style-type: none"> • Transformational and Generalist leadership style. • Specialist style of leadership often not welcomed in middle levels 	<ul style="list-style-type: none"> • Strategic Leadership Style • Vision and strategic direction-oriented leadership

4. DISCUSSION AND CONCLUSION

The main aim of this study is to examine the required managerial skills and leadership styles in operational, middle and top levels of a knowledge intensive firm. This section will discuss the findings about vital skills and leadership styles of managers in all 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 (2003:1) 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 & Sveningsson, 2003c:1435). In contrast, the other researchers underline the importance of having technical knowledge and contributing to knowledge sharing (Trevalyan, 2001; Monsted, 2003:1). 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 (2001:863) 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, 1993:997). 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 Trevalyan`s (2001) 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 2004; Robertson & Swan 2003:831).

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 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 (2005) 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 (2009) argued the background knowledge and expertise of the senior managers is often 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 throughout the organization, 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 particularly through convincing managers in senior levels.

Lastly, the findings support 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 2015; Wallace 2015).

When it comes to the top-level leadership, the crucial skills for leadership is firstly about creating a vision for the organization and being able to impose it to the whole organization. In other words, seeing the organization as a whole and determining its strategical direction is perceived as a skill for top managers to lead the company. Such findings are in line with the arguments and findings of

Mintzberg (1979) and Hambrick (1989). Interestingly, comparing to the other type of organizations, top managers are seen as less powerful and directive. In other words, instead of easily giving orders to the middle and operational project managers they need reconcile and negotiate with them to be in line with the company's vision and current direction. Besides, in order to do this, chief executive officers need to have convincing skills along with conflict and anger management abilities. So that they can effectively negotiate with managers and hold the organization in line (Nord and Tucker, 1987). When it comes to determination of the appropriate leadership style at the top, findings of this study signify strategic leadership style for chief executive officers to effectively manage the organization as a whole (Green, 1995).

To conclude, managers of each levels 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 leadership skills in their working levels to gain credibility within the expert oriented company. Having these competencies and approaches in hand managers' presence and leadership seems still important even in knowledge worker dominated postmodern organizations.

This finding shows that the expected leadership styles are different in all levels of the organization. The specialist and participative leadership preferred in operational levels, more generalist leadership is expected from managers in middle levels and strategic and visionary leadership.

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