

Role of Emotional Intelligence in Virtual Project Management

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Abstract- In today's competitive global environment, projects in organizations consist of cross-functional teams that are formed to utilize individual expertise. A project manager whose primary responsibility is to achieve project objectives deals these individuals. Since the rational and emotional aspects of a project vary in complexity, the role of the project manager is critical to project success. The objective of this study was to demonstrate linkages between emotional intelligence and the challenges faced by virtual project managers. The study will also show that there exists a multi tier relationship between Emotional Intelligence (EI) and challenges/elements of VPM.

1. INTRODUCTION

Emotional Intelligence has its roots in the concept of "social intelligence", as first identified by E.L. Thorndike as early as in the early 1920s. The term Emotional Intelligence first appeared in a series of academic articles authored by John D. Mayer and Peter Salovey [1]. Goleman defined Emotional intelligence as a person's self-awareness, self-confidence, self-control, commitment and integrity, and a person's ability to communicate, influence, initiate change and accept change [2,3]. In Working With Emotional Intelligence, Goleman applies the emotional intelligence concept to the workplace setting; Goleman says that professionally successful people have high emotional intelligence in addition to the traditional cognitive intelligence or specialized content knowledge [4]. Goleman's thesis is that 75% to 90% of effective performance, particularly in the case of managers and leaders, is attributable to "emotional intelligence" (EI). Managers who do not develop their emotional intelligence have difficulty in building good relationships with peers, subordinates, superiors and clients [5]. Recently, psychologists have shown that a 1% improvement in emotional climate creates a 2% increase in revenues. Some researchers suggest that IQ contributes to 20% of life success and EQ makes up the rest or 80 % [6].

Emotional Intelligence (EI) together with soft skills and intelligence are the major players in uplifting the motivation, reducing cultural barriers, resolving conflict, building teamwork and collaboration and enhancing communication among members in projects. The dynamics of a virtual project demand that a team is built across cultural and geographical boundaries.

Virtual Project Management (VPM) is supplanting the traditional concept of project management because of persistent pressures to reduce costs and headcount, the need to quickly address customer problems, develop products, deliver services, and tap a more diverse pool of employees across the organization [7]. Several studies suggest that Global Virtual Teams (GVTs) face significant challenges in four major areas: communication, culture, technology, and project management [8]. Current research suggests that virtual team failure is directly related to the difficulties of building trust, tpositive relationships across the three boundaries of geographical distance, time zones, and cultural differences [9]. Nauman highlighted important ~~elements/challenges~~ of VPM [10].

In this research paper, we will establish that there exists a strong relationship between EI of the project manager and challenges of virtual project management scenario, in spite of no or very little face-to-face contact between the project manager and the team. Moreover, EI plays a very decisive role in the performance of managers even in a VPM environment. The study presented here complements the earlier research done by Nauman in which challenges to virtual project management were identified [10].

11. HYPOTHESIS

This paper establishes that there exists a multi tier relationship between Emotional Intelligence (EI) and challenges/elements of VPM.

111. RESEARCH METODOLOGY

We first established a theoretical framework and defined elements of virtual project management and emotional intelligence. Then we drew references from theoretical framework of VPM and EI to interlink the role of EI within VPM. Emotional Competence Framework by Goleman was taken as a basis for seeking the role of EI in VPM.

Five dimensions of EQ were taken as the independent variables for evaluation whereas elements of VPM are taken as dependent variables. We see the effect of EI's important elements in resolving the challenges of virtual project management. Due to time and resource constraints macro

level drivers were taken rather than micro level. Mathematically represented as:

$$VPM = f(EI)$$

Given the nature of study, a primary research survey was conducted to authentically establish the proposed hypothesis. The sample was taken from Pakistani software industry project team members who are working in a virtual environment. The survey was done using pre-tested questionnaires, which included close-ended questions. Formal, informal interviews were conducted to support the findings.

The sample group constituted of only men 85% of whom were in the 20 -30 age bracket representing evenly project managers, team leaders and team members working within a virtual project environment where no projects are outsourced and the team develops projects for clients who are separated by geographical and cultural boundaries.

IV. MAIN THEORETICAL FRAMEWORK

Main concepts contributing to conceptual framework are briefly presented below. We support our hypothesis by describing the interactions among elements of EI and VPM.

Emotional Intelligence

Salovey and Mayer coined the term Emotional Intelligence in 1990. Goleman takes a somewhat broader position in describing emotional intelligence. Emotional intelligence is defined as a person's self-awareness, self-confidence, self-control, commitment and integrity, and a person's ability to communicate, influence, initiate change and accept change. Emotional intelligence at workplace is the ability to understand yourself and others well enough to express emotions in a healthy way, which is critical to job success and career satisfaction [11]. Emotional intelligence is a combination of competencies. These skills contribute to a person's ability to manage and monitor his or her own emotions, to correctly gauge the emotional state of others and to influence opinions [12].

Virtual project management

Virtual project management is the system by which virtual teams collaborate for a finite period of time towards a specific goal to be achieved within time, within budget and according to specifications. Virtual teams are defined here as groups of geographically and organizationally dispersed knowledge workers brought together across time and space through information and communication technologies in response to specific customer needs or to complete unique projects [13].

V. ROLE OF EI IN VPM

Researchers at Harvard University discovered over two decades ago that people who were best at identifying others' emotions were more successful in their work as well as in their social lives. EQ helps in managing difficult relationships. One cannot change the other person. However, your responses may influence or change the dynamic between you and the

other person [14]. The work of Mansur and Rehman concluded to establish how EI influences the performance of projects in organizations [15]. At least fifty percent of the problems responsible for the project failure can be attributed to the behavior of human resource system in project organizations (POs). Therefore, tremendous potential exists for emotions to play with the fate of projects. Research shows that there is a strong correlation between emotional intelligence and job performance. We will now correlate each of the dimensions of EI to the elements of VPM with respect to the identified challenges faced in VPM to prove our case in point further:

Self-Awareness (EI) & VPM

Self-awareness is the keystone of emotional intelligence. Virtual environment is very demanding and challenging for managers and EI plays a positive role in meeting these dynamic challenges. First we'll relate the personal awareness in EI to VPM elements.

1) *Decision-making (VPM)* In virtual environment, managers need to take sound decisions despite uncertainties and pressures. This comes under the head of self-awareness in EI. In VPM you need to think clearly and stay focused which is self-control in EI.

Self-Management (EI) & VPM

Self-management or self-regulation is the ability to keep disruptive emotions and impulses in check (self-control), maintain standards of honesty and integrity (trustworthiness), take responsibility for one's performance (conscientiousness), handle change (adaptability), and be comfortable with novel ideas and approaches (innovation). This dimension of EI is related to the ~~challenge~~ of trust, adaptability and change, innovation and motivation in VPM.

1) *Trust* Building trust through reliability and authenticity is self-regulation in EI. Trust is critical for the success of a project in VPM [16]. Trust has been cited as a single most important factor especially in the context where the parties involved in a business partnership do not see each other. There is wealth of research, which systematically examines the effect of trust in the context of electronic commerce [17]. Studies on the sustainability of virtual collaboration suggest that trust is critical to ensuring the optimal use of Information and Communication Technologies (ICT) to support the exchange among business partners [18]. In heterogeneous cultural situations the misunderstandings and potential lack of trust are likely to be higher, thus hampering further satisfactory project management [19]. In VPM, building trustworthy relationships among virtual project managers is dependent on the level of face-to-face communication support [10].

2) *Adaptability* Adaptation is essential for distributed project management and presents many challenges as well as opportunities. Sensitivity to the need for change and its

timing can dictate project success or failure [20]. Adaptability is vital for VPM and EI creates its awareness through self-regulation. People with EI adapt their responses and tactics to fit fluid circumstances. They smoothly handle multiple demands, shifting priorities, and rapid change.

3) *Innovation* In VPM, original solutions to problems are explored and in EI, people with this competency generate new ideas and take fresh perspectives and risks in their thinking.

4) *Motivation* Non-existence of face-to-face interaction is a disadvantage for virtual projects and it lowers motivation level among team members. Greater the geographical distance (time zone differences) or no face-to-face interaction will lower the motivation among team members. Greater one-to-one interaction and flexibility among parties and greater level of trust implies high level of motivation among team members. Motivation in EI is the emotional tendency guiding or facilitating the attainment of goals.

Motivation is low in VPM and through self-motivation in EI, VP managers can learn to improve and reduce uncertainty. Self-motivation increases initiative and optimism, this is what a virtual project manager needs.

Social Awareness (EI) & VPM

Empathy in EI is the understanding of others by being aware of their needs, perspectives, feelings, and concerns, sensing the developmental needs of others. This relates to various elements of VPM such as:

1) *Service orientation (EI & VPM)* Service orientation i.e. meeting customer's need is done through social awareness, which is important for VPM as well.

2) *Empathy in EI and Cultural Difference in VPM* Members of different organizational cultures may often have different norms, values and policies that may lead to misunderstandings, hidden agendas, uncertainty and conflict [21]. In EI, respecting people from different backgrounds is one of the elements of social awareness. People with this competency see diversity as opportunity, creating an environment where diverse people can thrive. This quality of EI plays a major role in VPM and increases motivation.

In EI, collaboration and cooperation helps people balance a focus on task with attention to relationships thus promoting a friendly, cooperative climate, which is essential for effective VPM. People with this competency collaborate, share plans, information, and resources thus enhancing trust and reducing cultural differences.

Relationship Management (EI) & VPM

Social skills are fundamental to emotional intelligence. This cluster of competencies revolves around teamwork and it includes how effectively managers get things done in organizations. Mike Miller's opinion is that many managers

fail because they are too rigid and have poor relationships [22]. As a consequence they are unable to adapt to changes in the business environment, organization, culture, work processes, and technology – which is the exact dilemma with which VPM managers are battling all the time. Managers who are unable to receive or respond to feedback are unable to determine how they need to change their approach to leading others.

These emotional intelligence skills, combined with empathy, can enhance satisfaction and productivity at work and in other aspects of life.

1) *Communication Management* Communication and conflict management is one's ability to effectively encode and decode messages to be able to convey ideas across different mediums to various receivers of the message; it is also demonstrative of the social skills, which are learnt through social awareness. Since VPM is also a process of conveying decisions and progress across different mediums between the senders and receivers of the message therefore in its very simplistic form we may imply that the same is also important in VPM also.

Dispersed teams have less opportunity for face-to-face communication and hence lose non-verbal aspects of communications that make up 65% to 93 % of a message's meaning [23]. Qureshi stressed the importance of geographically dispersed members to have mutual knowledge for effective communication. The lack of face-to-face interaction in virtual teams may create obstacles to effective coordination and communication more salient and thus further impair team effectiveness [24]. The lack of mutual knowledge and shared language among team members can hamper communication.

In EI, people with communication competency listen well, seek mutual understanding, and welcome sharing of information fully. They also foster open communication and stay receptive to bad news as well as good.

2) *Conflict Management* Conflict is common in projects. Without the ability to interact face-to-face and learn from one another, conflict is more likely to occur in such virtual environment. Cultural differences between software team members may cause conflicts and affect performance.

In EI people with conflict management competency handle difficult people and tense situations with diplomacy and tact. They spot potential conflict, encourage debate and open discussion and orchestrate win-win solutions.

3) *Change* Globalization, increased competition, technological development, and diversification are some reasons why organizations should be prepared for change and undertake change [25].

Handling change is vital for VPM as virtual environment is dynamic in nature. Managers with this competence recognize the need for change and remove barriers.

4) *Team capabilities* When coworkers are not located in the same location, camaraderie and socializing -- important informal aspects of teamwork coordination-- are significantly reduced, and cohesiveness and team unity, and the means of socializing with new members of the global team, are harder to cultivate [25,27]. Thus creating group synergy in pursuing collective goals is a challenge in VPM environment. New improved methods must be explored and adopted such as video conferencing, employee special newsletters, celebrating special cultural and personal events etc.

In EI people with this competency cultivate team qualities like respect, helpfulness, and cooperation. Enhancing EI skills of Team Leaders and Project Managers enables them to maintain a positive attitude as they eliminate impediments to team success. Thus EI helps managers to cope with the challenges of VPM through social awareness.

VI. RESEARCH FINDINGS

EI is vital for VPM keeping in view Goleman's competencies model. We found that managers having more personal and social awareness competencies performed better in the VPM environment as compared to those who demonstrated a lower level of social awareness. Findings support the proposed hypotheses that there exists a multi tier relationship between EI and VPM.

Self-Awareness

Demonstrated self-awareness was comparatively (83%) low when working within VPM environment although the individual's EI self-awareness quotient was comparatively higher (100%). This may be because the decision-making role in VPM is underplayed due to definite predefined rules. Although the individuals had (85%) self-awareness but lack of decision-making and confidence was found within a VPM environment. We may conclude that EI although high but did not contribute towards good management in VPM setting.

Self-Management

Although trustworthiness, conscientiousness, achievement orientation and optimism was sufficiently high in the individuals (70%) but the demonstrated self-management was proportionately much higher (91%) within the VPM context. This implies that the team members in VPM environment must employ more self-management skills if the environment is virtual rather than in a conventional project implementation environment.

Social Awareness

We found empathy, service orientation and organizational awareness 100% among individuals whereas demonstrated social awareness of managers was found 95% in VPM. This implies that high EI contributes towards effective VPM.

Relationship Management

Communication and collaboration, change, teamwork and building bonds was 87% in the managers and the

demonstrated relationship management in VPM environment was 86% which implies that this aspect of EI is strong in VPM context and contributes towards good virtual project management practices.

VII. PROPOSED MODEL

We can propose from the current research that EI affects positively towards VPM and there is an overlapping relationship between the two as shown in fig1. Further the elements of EI and VPM have been identified which positively impact each other have been summarized in figure 1.2 below.

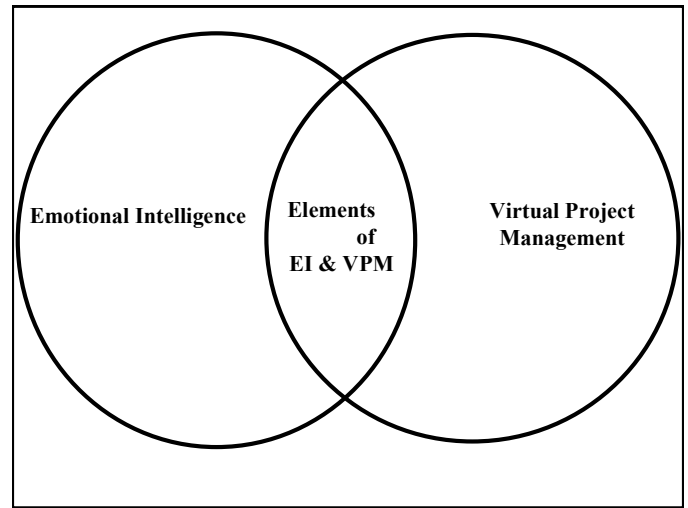


Fig. 1.1 Proposed Overlapping Relationship Between EI &VPM.

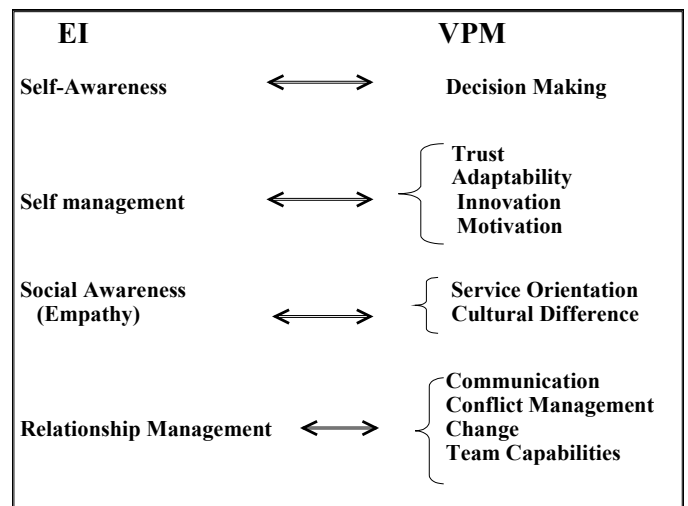


Fig. 1.2 Proposed Overlapping Relationship Between EI &VPM.

VII. CONCLUSIONS

In this study we provided a deeper understanding of EI with respect to significant issues of global virtual teams by highlighting an overlapping relationship between the two. We established that EI helps project managers to cope with the challenges of VPM through self-awareness, self-management, social awareness, and relationship management. Further we found that there exists a strong positive relationship between EI and VPM and managers with high EI are better equipped to deal with the challenges of VPM.

We validated the model proposed through our research findings to conclude that elements of EI plays a critical role in countering the challenges of VPM thus enhancing effective VPM.

The study yields interesting conclusions that can help organizations to manage their global virtual team projects more effectively by creating EI awareness. This study makes some initial observations regarding the role of EI in effective VPM. There exist several potential directions for subsequent research in this field.

REFERENCES

- [1] Salovey, P., & Mayer, J., "Emotional intelligence. Imagination, cognition, and personality," 9(3), pp.185-211, 1990.
- [2] Goleman, D., "Emotional Intelligence: Why It Can Matter More Than IQ," New York: Bantam Books, 1995.
- [3] Goleman, D., "Working with Emotional Intelligence," New York: Bantam Books, 1998.
- [4] Goleman, D., "The compelling business case for developing emotional intelligence competencies". Keynote address at The 5th International Conference & Exposition on Using Competency-Based Tools & Applications to Drive Organizational Performance. Conference presented by Linkage, Inc., One Forbes Road, Lexington, November 1998.
- [5] Goleman, D., "What Makes a Leader?" Harvard Business Review, November-December, pp. 93-102, 1998.
- [6] Copper, R.K., "Applying Emotional Intelligence in the Workplace," Training & Development, 51 (12), 31-38, 1997.
- [7] Duarte, Deborah L. Snyder, Nancy Tennant, "Mastering Virtual Teams: Strategies, Tools, and Techniques That Succeed", Jossey Bass, 2001.
- [8] Kay worth, Timothy and Leidner, Dorothy, "The Global Virtual Manager: A Perspective for Success," European Management Journal, pp. 183-194, Aug 2000.
- [9] Kimble, Chris, Li, Feng, and Barlow, Alexis, "Effective Virtual Teams through Communities of Practice," Management Science Research Paper No.2000/09.
- [10] Nauman, S., and Iqbal, S., "Challenges of Virtual Project Management In Developing Countries," published in conference proceedings in IEMC, Foundland Canada, September, 2005.
- [11] Sims, B., "Handling emotions while on the job," The Eagle, p. E2, November 8, 1998.
- [12] Caudron, S., "What Emotional Intelligence Is...and Isn't," Workforce, 78, p 62, 1999.
- [13] DeSanctis, G., and Poole, M. S. "Transitions in Teamwork in New Organizational Forms," Advances in Group Processes (14), pp. 157-176, 1997.
- [14] Everett, T and Smyth, D., "Managing Difficult Or Challenging Relationships," All About Emotional Intelligence from Six Seconds, November 18, 2005.
- [15] Mansur, A., and Rehman, A, "Emotional Intelligence (EI) and Success of Projects - An Analytical Study of Emotional Intelligence in Selected Project Organizations of Pakistan," paper presented at the Nexus Conference, Holland, 2005.
- [16] Jarvenpaa, S.L. and Leidner, D.E. "Communication and Trust in Global Virtual Terms," Journal of Computer mediated Communication (3:4), 1998.
- [17] C. Cheung, and M. Lee, "Trust in Internet Shopping: Instrument Development and Validation through classical and modern approaches", Journal of Global Information Management, vol. 9, no. 3, pp. 23-35, 2001.
- [18] Bandow, D., "Working with the Borg: Trust, systems development and dispersed work groups," Proceedings of the Conference on Computer Personnel Research, pp.163-169, 1998.
- [19] Evaristo, J.R. "The Management of Distributed Projects Across Cultures," Proceedings of the BITWORLD, Cairo, Egypt, 2000.
- [20] Qureshi S., & Liu M., "A Grounded Theory Analysis of E-Collaboration Effects for Distributed Project Management", Proceedings of the 38th Hawaii International Conference on System Sciences, 2005.
- [21] Evaristo, J.R., "Non-consensual Negotiation in Distributed Collaboration," Communications of the ACM, pp. 89, 2001.
- [22] Miller, M., "Emotional Intelligence Helps Managers Succeed," Credit Union Magazine, 56 (7), 25-26, 1999.
- [23] Harris, T. E. "Applied Organizational Communication: Perspectives, Principles, and Pragmatics." Hillsdale, New Jersey: Lawrence Erlbaum Associates, 1993.
- [24] Jarvenpaa, S.L. and Leidner, D.E. "Communication and Trust in Global Virtual Terms," Journal of Computer mediated Communication (3:4), 1998.
- [25] Kotter, J.P., "The Leadership Factor," New York: The Free Press, 1988.
- [26] Alexander, S. "Virtual Teams Going Global," *InfoWorld*, from <http://www.infoworld.com/articles/ca/xml/00/11/13/001113cavirtual.xml>, November 2000.
- [27] Benett, G., "Working Together, Apart" *Intranet Journal*, from <http://www.intranetjournal.com/features/idm0398-pm1.shtml>, 2001.