Trust in Virtual Teams and Team Effectiveness

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Abstract- This paper is about trust in virtual teams and team effectiveness. Virtual teams are teams comprising of people who communicate and work together digitally. They can be located in the same physical space or can even work from different parts of the city. The research questions are put together on the basis of various parameters in order to get the result of the trust in virtual teams. We have done the research using exploratory case-based methodology by taking interviews in projects of five companies. The purpose of this research paper is to find out whether trust level matter more in virtual teams and its effects on team effectiveness. In this paper, trust along with few other parameters is taken into consideration to identify the level of trust in virtual teams. On the basis of the analysis of each of the parameters, propositions are given along with their justifications.

Keywords: Trust, virtual teams, team size, information exchange, medium, high, low, companies

INTRODUCTION

According to the trust traditional models, trust has been developed due to establishing long-term interaction. But in recent research, it has been identified that trust has been developed among the members of virtual teams. Nevertheless, research has demonstrated that trust can be fostered and sustained among them, especially when remote workers are encouraged to be brought together swiftly with members all around the world. For potential success, effective conflict resolution in teams is essential. This element becomes even more important because virtual teams encounter unique circumstances. E-mails and other online platforms frequently lose relevance, and the regularity of casual interactions has decreased. Within a virtual team, the choice may be less clear. Decision-making gets impeded, operations get negatively impacted, and team effectiveness gets detracted as a result of less trust among teammates. We are basically doing case based research.

Teammates fail to perform efficiently when the members of the project do not trust each other enough.

It is quite challenging to cultivate and retain trust in conventional work premises. However, in a virtual space where people generally interact with individuals they have never seen in reality, it is considered a more challenging process. Besides their own family and friends, humans are conditioned to not trust anyone, according to a few scientists. Nevertheless, research has demonstrated that trust can be fostered and sustained among them, especially when remote workers are encouraged to be brought together swiftly with members all around the world. For potential success, effective conflict resolution in teams is essential. This element becomes even more important because virtual teams unique encounter circumstances. A particularly advantageous historical context exists to consolidate prior information on the subject and provide solutions as a result of the Covid-19 epidemic, which caused many enterprises to adopt remote working abruptly and quickly.

Minimizing barriers even more and enhancing connections among remote workers, the Covid-19 outbreak has ramped up the already rapid rise of information and communication tools. The importance of virtual teams in modern enterprises was rising day by day owing to the contributions of the hyperglobalization practices of the previous decades prior to the pandemic. Virtual teams, also known as groupings of geographically scattered work colleagues, have mutual objectives, norms, and processes. Also, they cooperate, interact and collaborate, surpassing the time and location barrier by using technologies. These team members work within the same corporate frame of reference even though the individuals involved belong to diverse cultural backgrounds. They are able to manage a significant amount of digitally mediated interactions and pool a wide range of skills and expertise. These elements increase friction in today's companies and may add to the diversity. Using significant variations and assumptions to tackle the issue at hand, which can lead to inaccuracies or misconceptions, a virtual team would probably mould information via their particular mental frameworks.

This can lead to poor collaboration and decreased unity among workers, especially when combined with an absence of physical interaction. During the information recovery this causes phase, disagreements, communication barriers, and issues with trust. Subsequently, in comparison to work premises, distrust may impact team effectiveness and produce more conflict. In virtual teams, trust among employees may get affected, which in turn decreases their interest in the company if inefficient cooperation occurs from badly managed or uncontrolled disputes. In order to resolve conflicts in remote workers that can maintain team effectiveness, team managers may need to quickly integrate tools. Managers may handle virtual teams more effectively and produce more by thoroughly understanding trust-related concerns. The quality of effective collaboration can frequently be strengthened with the help of trust. Workplace team effectiveness and productivity can be directly influenced by a trust. The majority of trust-related studies seem to place trust as the main characteristic for building relationships.

Additionally, there is just greater potential for misconceptions to develop and persist when interaction via online technologies progressively replaces physical conversation. A team manager establishes trust through intuition, which works effectively for more mature company experts. Nevertheless, a more scientific approach is essential in today's modern virtual workplaces and has benefits. Finding common situations that people use to create individualized connections that support development of trust becomes more difficult for team members when they are separated physically. However, it requires more effort and time in order for managers to foster trust in their remote workers. Leaders may cultivate a sense of trust and a productive workforce by adhering to clear, regular, and honest communication, offering chances to develop closeness and intimate experience, and showing a willingness to discuss successes and failures. More organizations are running into problems that include the propensity for barriers, sporadic information sharing, communication, unexplained disputes, and more due to the likelihood that virtual and hybrid work styles will persist.

LITERATURE REVIEW

Aim of literature review

The aim of the literature review is to identify inconstancies: gaps in research, open questions left from other research and to provide foundation of knowledge on topic.

(https://uscupstate.libguides.com/c.php?g=627058&p=4389968).

We are carrying out the research with the help of new variables like Leadership, Information Exchange, complexity, Absenteeism, Knowledge Management, Employee Turnover. The existing variables that we have used are leadership and trust. Andres (2006)- Concentrated on the effect of correspondence medium on virtual bunch processes. His review explored the speculations that group construction and correspondence mode would influence the development of virtual bunch processes. The creator examined the way of behaving of programming improvement groups. The groups created nitty gritty plan documentation for determined improvements to a speculative college data framework working in F2F or videoconference settings. The research demonstrated the videoconference

groups displayed more subgroup data trade when analyzed to the F2F groups, where more

group wide aggregate ways of behaving and data trade were noticed. He presumed that more prominent group wide aggregate ways of behaving led to gotten to the next level data sharing exercises among F2F colleagues.

Jarvenpaa and Leidner (1999)- Analyzed the difficulties of making furthermore, keeping up with trust in a worldwide virtual group. The creators provided details regarding a series of distinct contextual analyses on worldwide virtual groups that dealt with a typical cooperative venture with PC interceded correspondence furthermore, whose individuals were isolated by area and culture. The creators presume that trust can exist in groups fabricated exclusively on an electronic organization.

Branson, Moe and Sung (2005)

They found that virtual groups process less data than people when participated in direction. It shows up that F2F groups frequently utilize more data and go with better choices than people, while virtual groups utilize less data than people or on the other hand F2F. Virtual groups spend more time dealing with the group processes what's more, less time in handling data

what's more, navigation, in any event, when the undertaking is a dynamic errand.

Branson et al. (2005) tracked down that F2F groups handled more data than people, and that people handled more data than virtual groups while making a presentation examination choice.

Alge, Wiethoff and Klein (2003)

Inspected whether fleetingness – the degree to which groups have a past or on the other hand hope to have a future together influences F2F and virtual groups' capacity to convey really and go with great choices. For groups coming up short on a set of experiences, results show that media fuels contrasts. F2F groups displayed higher transparency and data trade than virtual groups.

We have carried out this research work by taking interviews in five projects of multinational companies.

RESEARCH METHODOLOGY

The main purpose of taking interviews is to find out the level of trust in virtual teams. The reason behind choosing qualitative research is that we are able to explore more on the basis of the responses that we have got after taking interviews in the projects of five companies. We have considered information exchange, task complexity, knowledge management, employee turnover and trust as contextual variables. The interviews were taken for duration of 25-30 minutes each. Basically, there are eight parameters namely leadership, task complexity, absenteeism, employee turnover, trust, information exchange, knowledge management and team size using which questions were framed and interviews were taken. After taking the interviews, we analyzed all the interviews using the results that we got by putting them in one analysis table. The propositions are arrived at using the common findings in the analysis table.

Case an	alvsis	of first	company

Variables	Company A	Reason		
Leadership	Centralized	The project is person-oriented, not process oriented. The manager only makes the		
		strategies without involving other members		
Information	Medium	The team struggle on daily basis in terms of information exchange as their processes are		
exchange		neither fully dependent nor independent.		
Task	High	Task complexity is high because the team members in the project had to keep the tools		
Complexity		ready for other employees to use before the cycle of performance appraisals		
Team Size	Medium	The average team size in company A is 8, and the team size in the project is also 8. So,		
		comparing both we can say that the team size is average.		
Absenteeism	Medium	The team members are less absent that too they seek prior permission from the		
		supervisors. During covid time, absenteeism was moderate.		
Knowledge	Low	The documentation work in the project was not even started when the team lead joined		
Management		company A. The team struggle the most in terms of this area.		
Employee	Low	The organization doesn't follow an aggressive work culture due to which only few		
Turnover		employees put in their resignation as unlike other organizations.		
Trust	Medium	The trust level is medium as because the team members do not always help each other		
		when someone faces any kind of issues in the team.		
		Eg- If someone in the project is absent on a particular day, then the other members may		
		or may not do their work in place of them.		

Case Analysis of second Company

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Parameters	Company B	Reason		
Leadership	Participative	According to the team lead, team members collaborate with others and during the time		
		when any issue happens, they give in their suggestions or another idea which can be taken.		
Information	Medium	The information exchange between the team members was a struggle because of hybrid		
exchange		mode. It is difficult to exchange thoughts and put them forward through online platforms.		
Task	Medium	The project was an ongoing one. So, the members of the team are used to the technology		
Complexity		and working methods. The tasks were completed with-in the specified timeline.		

Team Size	Medium	The project team is a twelve-member team which is nearly equal to the average team size i.e 13 in the company.	
Absenteeism	Low	There were very few absent cases during the online working mode when the pandemic started. People were happy to work from home and the efficiency of the members also was high.	
Knowledge Management	High	Knowledge Management processes and data are documented and kept for references. Therefore, any new member who joins the team can easily go through the required documents and understand what is actually done in the area till date.	
Employee Turnover	Medium	During the pre-covid and covid times, employee turnover was low. As the markets are up, new opportunities are available and employees are going for it.	
Trust	High	As the team follows a horizontal structure of communication in between the members of the team and as a result of good communication the team members have high level of trust. The team members also help each other as and when required.	

Case analysis of third Company

Parameters	Company C	Reason		
Leadership	Participative	The team takes suggestions or inputs from the team members. Everyone participates and		
		agree on the same point in the team.		
Information	High	As communicated by the tech lead, everyone working in the team let others know about		
exchange		what they are doing and help each other with their opinions.		
Task	High	According to tech lead, the team members do their work on the basis of their		
Complexity		requirements. The developers, testers, support people have to understand their work and		
		then work on the part being assigned to them. Sometimes, the work is not being able to		
		get completed within the stipulated time frame.		
Team Size	Low	As in IT companies, teams can have 100 members depending upon the requirements and		
		this team is having only 10 members so we can say that the team size is low.		
Absenteeism	Low	As the team members are very less absent due to online work, therefore, absenteeism is		
		low.		
Knowledge	Low	The documentation work is not done on a regular basis. The manager does not take into		
Management		consideration documentation with much importance.		
Employee	High	The attrition rate in the project is 35% whereas in the company it is 36%. As the rate of		
Turnover		attrition in the project is almost same as the company's attrition rate, therefore, we can		
		say that the employee turnover is high.		
Trust	Low	There is lack of information sharing in the team, the team members do not help each		
		other that much as and when needed.		

Case analysis of fourth company

Variables	Company D	Reason		
Leadership	Participative	There is team collaboration between the team members; all of them work together and are given choice to make decisions in their team.		
Information exchange	High	The team was very efficient in terms of information exchange even in virtual mode. Every day they have their scrum calls in which they discuss important matters like changes that needs to be implemented.		
Task Complexity	High	As told by the team lead, they were responsible for developing and handling the core jobs of UHG which contains confidential information about its customers along with their premium purchases.		
Team Size	High	As the average team size in UHG is 10 members, and the team is having 12 members, so comparing both of them we can say that the team size is high		
Absenteeism	Low	The team members are less absent that too they seek prior permission from the supervisors. During covid time, absenteeism was moderate, but thereafter things changed as teammates are regular and punctual in their work.		

Knowledge	High	The documentation work is updated everytime a change goes into production. Hence,		
Management		knowledge management is done properly.		
Employee	Low	The company is very effective in terms of retaining employees because of its work culture		
Turnover		and HR teams.		
Trust	High	The team has effective communication between themselves and the team members help		
		each other when they are in difficult situation. Eg- If someone takes leave, the team		
		members do his/her work thus increasing the level of trust.		

Case analysis of fifth company

Parameters	Company E	Reason			
Leadership	Participative	The team takes suggestions or inputs from the team members. As communicated by the			
		tech lead, whenever the team faces any issues all the members of the team give their			
		opinions to sort out the issues.			
Information	Medium	As communicated by the tech lead, the information exchange was limited for some people			
exchange		due to technical difficulties in their home and for others it was smooth.			
Task	Medium	The tasks that were assigned to the team members required some amount of domain			
Complexity		knowledge as well as help from other members of the team. Hence, the task complexity is			
		medium.			
Team Size	Medium	As the average team size in Barclays is 10 members, and the team is having 10 members,			
		therefore, we can say that the team size is medium.			
Absenteeism	Low	As the team members are very less absent due to online work, therefore, absenteeism is			
		low.			
Knowledge	Low	The documentation work is not done on a regular basis. The manager takes into			
Management		consideration documentation part after certain interval of time and not regularly.			
Employee	Medium	The attrition rate in the project is 10% whereas in Barclays it is 11%. As the rate of			
Turnover		attrition in the project is nearly equal to the attrition rate in the company, therefore, we can			
		say that the employee turnover is moderate.			
Trust	High	Tech lead told that there is a horizontal structure of communication in between the			
		members of the team. Apart from this, there was information sharing in the team, the team			
		members also helped each other by doing each other's work as and when needed.			

Combined Analysis of five interviewed companies

Parameters	Company A	Company B	Company C	Company D	Company E
Leadership	Centralized	Participative	Participative	Participative	Participative
Task Complexity	High	Medium	High	High	Medium
Absenteeism	Medium	Low	Low	Low	Low
Employee Turnover	Low	Medium	High	Low	Medium
Trust	Medium	High	Low	High	High
Information Exchange	Medium	Medium	High	High	Medium
Knowledge Management	Low	High	Low	High	Low
Team Size	Medium	Medium	Low	High	Medium

Propositions:

- Trust level is high when absenteeism is low Reason: As the team members are less absent, hence, they help each other as and when required, thereby increasing the trust level.
- Trust level is high when the leadership style is participative

Reason: The team takes suggestions or inputs from the team members. Everyone participates and agree on the same point in the team.

Also, there is a horizontal structure of communication in between the members of the team. Apart from this, there is information sharing in the team, the team members also helped each other by doing each other's work as and when needed thereby increasing the level of trust.

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- Trust level is low when employee turnover is high Reason: It is because when the trust level is low many employees leave their organizations as they are not been able to adjust in their teams.
- Trust level is medium when leadership style is centralized

Reason: Leadership style is centralized as the project is person-oriented, not process oriented. The manager only makes the strategies without involving other members.

The trust level is medium as because the team members do not always help each other when someone faces any kind of issues or challenges.

Eg- If someone in the project is absent on a particular day, and then the other members may or may not do their work in place of them.

CONCLUSION

After doing the research analysis, we are able to conclude that out of five projects in the companies that we have interviewed, three of them are having high trust in their teams whereas in one company the trust level is medium and the other one is low.

REFERENCES

- [1] Abutabenjeh, S. and Jaradat, R., (2018). Clarification of research design, research methods, and research methodology: A guide for public administration researchers and practitioners. *Teaching Public Administration*, 36(3), pp.237-258. Accessed from:
- [2] https://www.researchgate.net/profile/Sawsan-Abutabenjeh2/publication/325364832_Clarification_of_resea
 rch_design_research_methods_and_research_me
 thodology_A_guide_for_public_administration_r
 esearchers_and_practitioners/links/5c886f04299
 bf14e7e7831e9/Clarification-of-research-designresearch-methods-and-research-methodology-Aguide-for-public-administration-researchers-andpractitioners.pdf
- [3] Aeon, B. and Aguinis, H., (2017). It's about time: New perspectives and insights on time management. Academy of management perspectives, 31(4), pp.309-330. Accessed from: https://doi.org/10.5465/amp.2016.0166

- [4] Also, M., Gregg, D. and Ramirez, R., 2017. Virtual team effectiveness: The role of knowledge sharing and trust. Information & Management, 54(4), pp.479-490. Accessed from: https://doi.org/10.1016/j.im.2016.10.005
- [5] https://wikipedia.com/
- [6] Choi, O.K. and Cho, E., (2019). The mechanism of trust affecting collaboration in virtual teams and the moderating roles of the culture of autonomy and task complexity. Computers in Human Behavior, 91, pp.305-315. Accessed from: https://doi.org/10.1016/j.chb.2018.09.032
- [7] Costa, A.C., Fulmer, C.A. and Anderson, N.R., 2018. Trust in work teams: An integrative review, multilevel model, and future directions. Journal of Organizational Behavior, 39(2), pp.169-184. Accessed from: https://doi.org/10.1002/job.2213
- [8] Garro-Abarca, V., Palos-Sanchez, P. and Aguayo-Camacho, M., 2021. Virtual teams in times of pandemic: Factors that influence performance. Frontiers in Psychology, 12, p.624637. Accessed from: https://doi.org/10.3389/fpsyg.2021.624637
- [9] Alsharo, M., Gregg, D. and Ramirez, R., 2017. Virtual team effectiveness: The role of knowledge sharing and trust. Information & Management, 54(4), pp.479-490. Accessed from: https://doi.org/10.1016/j.im.2016.10.005
- [10] Olaisen, J. and Revang, O., 2017. The dynamics of intellectual property rights for trust, knowledge sharing and innovation in project teams. International Journal of Information Management, 37(6), pp.583-589. Accessed from: https://doi.org/10.1016/j.ijinfomgt.2017.05.012
- [11] Morrison-Smith, S. and Ruiz, J., 2020. Challenges and barriers in virtual teams: a literature review. SN Applied Sciences, 2(6), pp.1-33. Accessed from: https://doi.org/10.1007/s42452-020-2801-5
- [12] Hacker, J.V., Johnson, M., Saunders, C. and Thayer, A.L., 2019. Trust in virtual teams: A multidisciplinary review and integration. Australasian Journal of Information Systems, 23. Accessed from: https://doi.org/10.3127/ajis.v23i0.1757
- [13] Bhat, S.K., Pande, N. and Ahuja, V., 2017. Virtual team effectiveness: An empirical study using SEM. Procedia Computer Science, 122, pp.33-41. Accessed from: https://doi.org/10.1016/j.procs.2017.11.338

- [14] Liao, C., 2017. Leadership in virtual teams: A multilevel perspective. Human Resource Management Review, 27(4), pp.648-659. https://doi.org/10.1016/j.hrmr.2016.12.010
- [15] Zakaria, N. and Yusof, S.A.M., 2020. Crossing cultural boundaries using the internet: Toward building a model of swift trust formation in global virtual teams. Journal of International Management, 26(1), p.100654. https://doi.org/10.1016/j.intman.2018.10.004
- [16] Collina, L., 2021. What are the Implications of Virtualisation for Building Trust During the Management Consultancy Lifecycle?. MANAGEMENT CONSULTING, p.18.
- [17] https://www.researchgate.net/profile/Nicholas-Conner/publication/353004859_Management_consultancy_the_power_to_unleash_natural_capital_thinking_Management_Consultancy_Journal_Vol_7_June/links/60e3c0d2a6fdccb7450ad9ce/Management-consultancy-the-power-to-unleash-natural-capital-thinking-Management-Consultancy-Journal-Vol-7-June.pdf#page=18
- [18] Leonard Branson Thomas S. Clausen Chung-Hsein Sung, (2008), "Group Style Differences Between Virtual and F2F Teams", American Journal of Business, Vol. 23 Iss 1 pp. 65 - 70