ETM 522/622: Communication and Team Building

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Research Report

Achieving better Decision Making in virtual teams

Team 2

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Abstract:

I am a citizen, not of Athens or Greece, but of the world

Socrates

   Globalization where it opens opportunities, never possible before; also creates hindrances never emerged before. Creating geographically dispersed teams is essential part of creating the best in-class products leveraging expertise around the globe with optimal cost-benefit projections. In-efficient decision making across such virtual teams could be a major stumbling stone. To ensure common goals can be achieved by clearly communicating the expectation across multitude of cultures there needs to be a carefully determined set of decision making rules to adhere to by the virtual organization at large. During our research we will analyze decision making fundamentals and how they can be applied and optimized for virtual teams.

Introduction:

   The number of resources working remotely has been rapidly rising for the past few decades. A recent study says 40 percent or more of a company's employees today work remotely and this percentage trend will rise in the future. While more and more companies are switching to the virtual team concept, there are many key areas of concern involving such teams. One of the most important factor to pay attention is decision making in virtual teams [3]. When we say decision making, it is just a high level concept. A lot of factors are taken into consideration while making a decision and based on the process we can then characterize our decision making. In this report we will only discuss two major aspects, clear communication and cultural challenges, that impact decision making in virtual teams.

   Decision making in virtual teams interested all of us because currently each one of us is working with virtual teams in our respective companies. We all have been facing issues when it comes to decision making and this was a good opportunity to figure out the causes, analyze them and come up with optimal solutions to these problems which would help us in making better decisions in the future. With each one us working in different areas like technology, banking and research the nature and cause of problems faced with the virtual team varied. But they mainly aligned with ineffective communication and cultural in-differences. This research report gives us a deep understanding of how these factors impact the decision making process and what are the mitigation strategies that we propose to deal with them.

Literature Review:

In this research paper, we chose to examine decision making by conducting a survey (Appendix A)on the virtual teams at each of our work places. We thought this method would reveal industry specific findings related to decision making in virtual teams as our team members belong to financial, healthcare, silicon & retail industries; this will bring in multiple scenarios to be analyzed.

What is decision making?

The decision making phenomenon is a complex procedure and just by looking at the possible inputs and outputs did not help us understand it. In order to get a deeper understanding, we decided to perform a triage and understand the root causes that impacted this phenomenon. What makes it even complex is the idea of involving individual participation in order to arrive at a group outcome. In order to understand a group decision dynamics it is very important to understand the interaction and communication pattern between team members. Decision making is not a discrete or independent event. It involves a series of choices and activities. Our survey (Appendix A) wanted to examine this nature of decision development by asking questions and generating data showcasing how communication and cultural differences impact decision over time.

In theory, decision making basically contains three phases: Intelligence, design and choice.

All the required information is collected, all possible alternatives are vetted and the final decision is made assuming all the members follow a systematic logic to reach decisions. In today's date where we have virtual teams across the globe, a common systematic approach does not exist. Different thought process and cultural barriers can play a key role in influencing the decision.

Impact of Communication on Decision making in Virtual teams

Communication is an essential aspect in the decision making process [2]. How a team communicates in order to make a decision speaks a lot about the process followed in the company. Some teams rely on an individual leader to make the decisions whereas in other project groups all the team members are actively involved during decision making. The former alludes to waterfall model following organizations and the latter points more towards the in vogue agile process. To name a few limitations with a single leader making the decisions are single perspective used towards the problem and information held by a single person is mostly ignored. Some of our organizations are using the agile technology which emphasizes on involving all the team members while making a decision. In addition; based on experience within our group; it seems that following two methods of decision making are very valuable for technical projects:

 Group Consultative: This method is also referred as *"Teach, Learn & Decide"*. In this process every member of the team is highly technical and skilled in very special area of expertise; product of his expertise is dependent upon several other areas [1] of functional expertise with dedicated members assigned to each one of them. All functional experts interact to learn from each other; resolve dependencies to produce quality results. Team Leader or manager also uses his functional expertise and

experience to learn from group members and uses his experience to decide optimal route to success. As apparent that this method is impacted by communication skills of team members as to how effectively they communicate to collaborate for generating meaningful results. One key point; we noticed is that such projects don't necessarily get much impacted by "verbal communication" skills; mostly it is emotional impact felt by team members due to certain incidents during decision making resulting in "hurt" feelings potentially impacting quality results and slowing down execution.

Data Driven Decision Making: We also noticed that highly technical projects rely a lot on "data" to make decisions. This method of decision making is most effective according to our survey as it is least dependent on human behavior. People just look at tables, pie charts, histograms & waveforms to determine the course of action for the project and this method is not impacted by communication or cultural impact.

Our research however shows that culturally diverse groups produce significantly higher number of superlative and realistic ideas than compared to homogeneous group.

Tools used by virtual teams to Collaborate: Some of the common tools used by virtual teams for collaboration and meetings are:

- Phone/Teleconferencing.
- Emails.
- Web Meetings/Share Screens.
- Videoconferencing.
- Face to Face.

We found that each one of the above methods is useful and can be used depending upon purpose of the meeting. For instance; phone/teleconferencing are real time but missing personable aspect of communication. Emails are good to communicate and exchange data & high level ideas across multiple time zones but are missing personable aspects of communication like facial expressions and tone of voice etc. Web meetings are also real time, visual where data can be easily shared, personable but suffer from problem of conducting meeting in common time zones. Video conferencing meeting are also real time and highly personable and very effective substitute of face to face meeting that lets every member share data observe physical gestures and tone of communication to see how others are reacting to decisions etc. but they also have an issue to coordinate common time zone for a meeting and can be expensive to setup and run at the facility. Lastly; there is also a good old method of having a face to face meeting for decision making. We noticed that under certain circumstances best recipe is to use a combination of all tools above based on a purpose of a meeting.

In some of our organizations not every member agrees with the decision being made. In these cases we stick to the majority's point of view and a decision is made. Such situations are called "Disagree and commit". The project manager should not hold off a decision for group consensus and delay the project.

Cultural challenges impacting decision making in virtual teams:

"Modern industries face many challenges because of competitive global economy and unstable environments. Among these challenges are the use of information and communication technology (ICT), a multicultural workforce, and organizational designs that involve global virtual teams [6]. Results suggested that cultural diversity had a positive influence on decision-making and a negative influence on communication. ICT alleviates the negative impact on intercultural communication and supported the positive impact on decision-making. A team from different culture has different background, values and perspective which affect their understanding and consequently influences the behavior and goal in decision making. Virtual team might take longer to reach a decision because of the interaction behaviors but their decision accuracy is better than face-to face teams. These interaction differences could be improved by adapting .The lack of shared context and numerous discontinuities faced by virtual team members can hamper decision making [4]. For example, a lack of common language or agreement about role structure may hinder member's understandings of tasks and relationships, thus bringing conflicts among group members and making it difficult to reach consensus [5], which is hard to overcome by ICT as well.

Analysis and Results:

Results of our "survey" (Appendix A) based research are shown as pie charts (Appendix B) along with our analysis. One of the intents of our survey was to relate it to our experience in the industry.

1. **Best tool for decision making:**

The objective was to investigate if there are any crucial factors that make a virtual team's decision-making successful. Are there acts at group level and critical member contributions that contribute to successful decision?
Typically a series of meetings or discussions need to happen before to share data & information that leads to final decision. And it is best to use the tool where team members can visually see each other to get everyone's undivided attention and to ensure all physical gestures are interpreted accurately showing disagreement or concern. Survey results below also agreed with our expectations "video conferencing" is voted highest with 36% in favor. In addition; runner up is "web meeting" as expected because it enables sharing of valuable data before decision making.

2. **Effect of Informal Team Meetings on decision making:**

Purpose of the informal meetings that eventually lead to a decision making meeting is to enable team members open up with each other, to allow for more comfortable discussion environment with higher degree of trust. Survey results agree with 64% of respondents agreeing to it.

3. **Effect of geographically dispersed members on decision making:**

Team members in different geos can bring valuable perspective; like impact of local consumers, market & competition into decision making process drastically impacting success and profitability due to those local markets. Our survey agrees with 36% respondents agreeing.

4. **Impact of multi-cultural team members on decision making:**

Survey respondents agree by 76% being in favor of a positive impact of virtual team members on decision making. There could be multiple reasons; including positive impact of knowledge about local markets as stated above. In addition; human being's raised in certain geo-economic environment representing developed and/or underdeveloped nations will bring in a unique insight to potential success of a project or product based on decision making approach. Also we have seen sometimes certain cultural values expose people to analyze situations & data with unique dimension that can open up opportunities not thought of before.

5. **Effect of Language Barriers:**

Our survey marginally shows "language" barriers to be problematic across multi-cultural teams. Although, we agree that language barriers can be an issue in terms of people misunderstanding each other, misinterpreting comments, statements & emails etc. but language barriers should have no impact on decision making if such issues are dealt with appropriately using right set of decision making tools & processes.

6. **Time Zone impact on decision making:**

Respondents did not agree with our experience where we viewed different "time zones" to be a leverage as it enables production, data collection/analyses and execution around the clock (24/7). Since there are no idle cycles that leads to faster & efficient decisions especially the ones that are hugely dependent on "data".

7. **Best Decision Making Method in Virtual Teams:**

Our survey respondents agree with our findings through experience that most effective decision making method is either "group consultative" or "data dependent decision making" with 36% and 24% votes respectively in favor.

8. **Frequency of communication during decision making:**

Our survey respondents agree with our finding that communication should be more frequent during decision making as critical parameters impacting the decision can change daily. So, quick daily 15 or 30 minute sync up between team members and leaders can go a long way. But at least weekly sync up should be mandatory. If team members do not sync up frequently then it can impact progress and continuity to link pieces of data leading to a decision.

Conclusions:

Our research leads us to believe that there may not be a "**golden**" recipe for optimal decision making or no "one size fits all" solution. But here are our recommendations for virtual meetings conducted for decision making:

- Setup a series of meetings that eventually leads to an exclusive set of meetings with focused agenda to enable "decision making".
- Such decision making meetings should be organized using "videoconferencing" if possible to get undivided attention from all participants. This will also let everyone observe and notice negative physical gestures objecting the decision.
- Make an effort to get everyone's agreement or an agreement of "critical mass".
- All disagreements should be discussed to resolve issues until agreement.
- There should also be meetings or activities focused around "team building" so team members feel comfortable with each other and don't form unnecessary "bias" due to different language, culture & race etc.
- Active discussion involving the whole group tended to successful decisions while a more passive communication environment increased the probability of failure

References:

Reference:
[1]Nijstad, B. A. (2009). Group performance. New York: Psychology Press
[2]Hackman, J. R. and C. G. Morris, 1975. Group tasks, group interaction process and group performance effectiveness: A review and proposed integration. In L. Berkowitz (Ed.), Advances in experimental social psychology. (pp. 47-99). New York: Academic Press
[3]Martins, L. L., Gilson, L. L., and Maynard, M. T. (2004). Virtual Teams: What do we Know and Where do we Go From Here? Journal of Management, 30(6), 805- 835.
http://www.owlnet.rice.edu/~ajv2/courses/12c_psyc438001/Martins%20et%20al.%20(2004).pdf
[4]Watson-Manheim, M. B., Chudoba, K. M. and Crowston, K. (2002). "Discontinuities and Continuities: a new way to understand virtual work." Information, Technology & People 15(3): 191-209.
[5]Armstrong, D. J. and Cole, P. (2002). Managing distance and differences in geographically distributed work groups. Distributed Work. P. Hinds and S. Kiesler. Cambridge, MA, MIT Press: 167–186
[6]Shachaf, P. (2008). Cultural diversity and information and communication technology impacts on global virtual teams: An exploratory study. Information and Management, 45(2), 131-142.

Decision making in virtual teams

Do multi-cultural team members in virtual team help or hurt in decision making:

- ◎ Help
- ◎ Hurt
- ◎ None

How do team members working in different geographical location affect decision making?

- ◎ Positively
- ◎ Negatively
- ◎ Other: [_____]

How does virtual teams located in different time zones affect decision making?

- ◎ It is a leverage
- ◎ It is a hinderance
- ◎ Does not affect

Have you faced language barriers across multi cultural teams?

- ◎ Yes
- ◎ No

What is the best tool used in your project for decision making?

- ◎ Email
- ◎ Video conferencing
- ◎ Web meetings
- ◎ Tele-conferencing
- ◎ Other: [_____]

What is the best type of decision making method used in your virtual team environment?

- ◎ Consensus
- ◎ Democratic
- ◎ Dictatorial
- ◎ Consultattive
- ◎ Group consultative
- ◎ Data dependent decision making
- ◎ None
- ◎ All
- ◎ Other: [_____]

Do you agree multiple cultures interpret certain tones of communication differently?

- ◎ Yes
- ◎ No

What is the best method to run meetings /communicate specific to decision making?

○ Open-ended discussion

○ Brainstorming

○ Targeted

○ Other: [   ]

How often virtual teams should communicate when making critical decisions?

○ Daily

○ Weekly

○ Monthly

○ Other: [   ]

Do you think informal team meeting/group interaction efforts help virtual teams make better decisions?
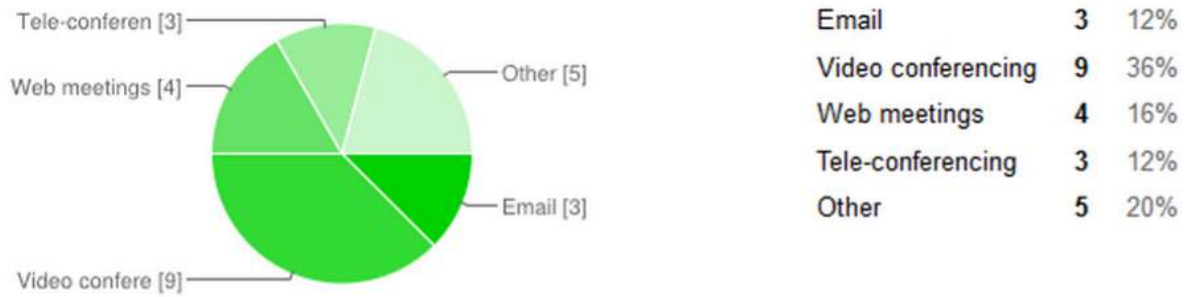
○ Yes

○ No

○ Maybe

What facilitates better communication within virtual teams?

○ Informal discussion

○ Brainstorming sessions
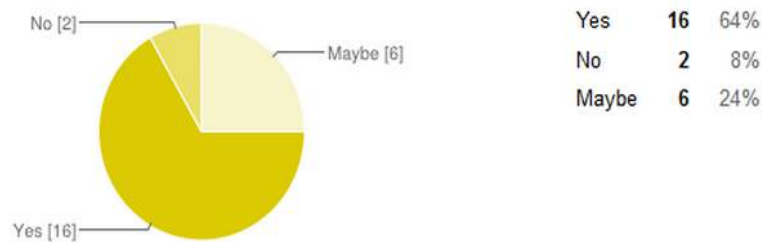
○ Face to face meetings

○ Other: [   ]

1.

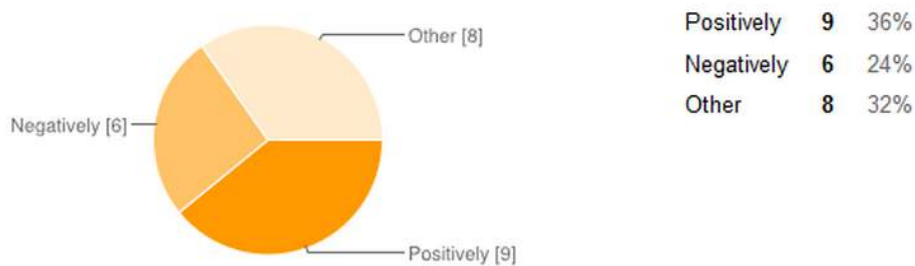### What is the best tool used in your project for decision making?

Email	3	12%
Video conferencing	9	36%
Web meetings	4	16%
Tele-conferencing	3	12%
Other	5	20%

2.

Do you think informal team meeting/group interaction efforts help virtual teams make better decisions?

Yes	16	64%
No	2	8%
Maybe	6	24%

3.

How do team members working in different geographical location affect decision making?

Positively	9	36%
Negatively	6	24%
Other	8	32%

4.

Do multi-cultural team members in virtual team help or hurt in decision making:

Hurt [0]

None [5]

Help [19]

Help	**19**	76%
Hurt	**0**	0%
None	**5**	20%

I

5.

Have you faced language barriers across multi cultural teams?

No [10]

Yes [14]

Yes	**14**	56%
No	**10**	40%

6.

How does virtual teams located in different time zones affect decision making?

Does not affe [6]

It is a hind [12]

It is a lever [6]

It is a leverage	**6**	24%
It is a hinderance	**12**	48%
Does not affect	**6**	24%
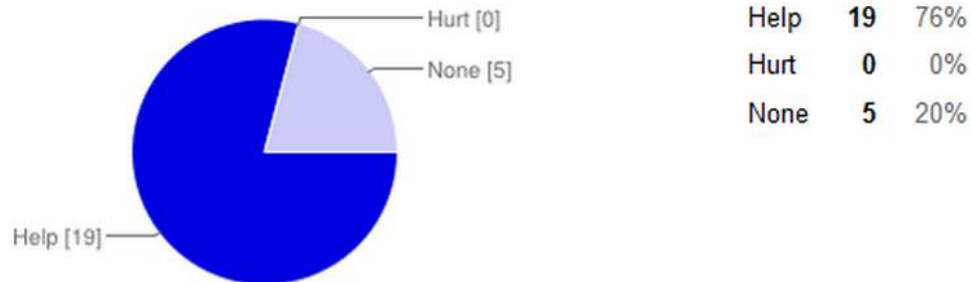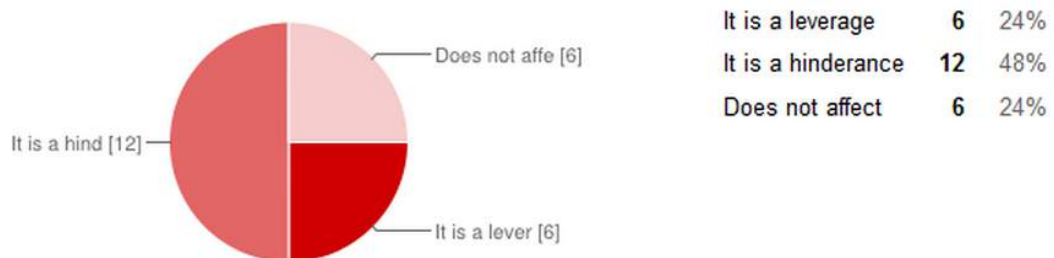
7.

What is the best type of decision making method used in your virtual team environment?

Consensus	1	4%
Democratic	1	4%
Dictatorial	1	4%
Consultattive	0	0%
Group consultative	9	36%
Data dependent decision making	6	24%
None	0	0%
All	3	12%
Other	3	12%

Pie chart labels: None [0], All [3], Other [3], Consensus [1], Democratic [1], Dictatorial [1], Consultattive [0], Group consult [9], Data dependen [6]

8.

How often virtual teams should communicate when making critical decisions?
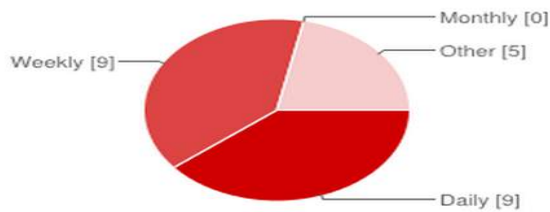
Daily	9	36%
Weekly	9	36%
Monthly	0	0%
Other	5	20%

Pie chart labels: Monthly [0], Other [5], Weekly [9], Daily [9]

9.

What facilitates better communication within virtual teams?
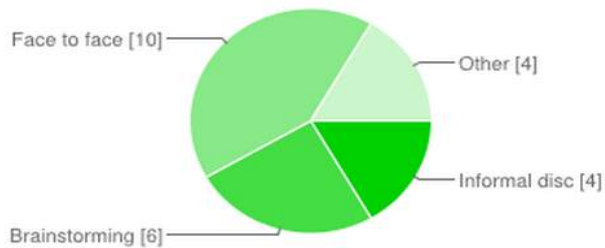
Informal discussion	4	16%
Brainstorming sessions	6	24%
Face to face meetings	10	40%
Other	4	16%

Pie chart labels: Face to face [10], Other [4], Informal disc [4], Brainstorming [6]