

The Unique Challenges of Virtual Teams

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In today's increasingly globalised world, the need for work teams to span temporal and geographic boundaries is growing. These virtual teams allow many of the limitations of standard co-located teams to be side-stepped, while at the same time offering many improvements, such as access to a wider skill base and a more culturally diverse team membership. While these improvements can be significant, they often come at a price. Virtual teams have many unique challenges that the project manager must address if the team is to be effective. This essay examines these challenges and investigates what can be done to minimise any negative impact associated with them.

Perhaps the most important of these challenges is sufficiently supporting a virtual team in terms of giving its members the ability to properly interact with one another. Because members are not in the same location or time zone, face-to-face or even synchronous communications may not be possible. Media richness theory states that the 'richer' a communications medium, the more information can be transmitted. Lengel and Daft (1988, cited in Domino, Hevner and Webb Collins, 2002: 77) found that face-to-face, phone and letter communications amongst other traditional methods followed this theory. Plowman (1995, cited in Domino et. al, 2002: 77) and Sillince (1996, cited in Domino et al., 2002: 77) also found that as timing and modality information reduces in a medium, communication effectiveness diminishes. Karolak (1998: 64) provides a compatible view of communications in virtual teams, providing the dimensions of content and timeliness. As the timeliness factor goes from low (postal mail, voice mail and e-mail) to high (video / telephone conference and face-to-face), the content of the communication increases. Andres (2002) has found that face-to-face interactions are more than twice as productive as video conferencing. Andres also found that in face-to-face settings, team members are more critical of alternatives presented in decision-making processes. This indicates that one outcome of a rich medium is that better decisions are made. The project manager working with a virtual team needs to make available the highest level of 'richness' so that communications can be as unequivocal as possible. One way to improve richness in virtual team communications is to provide a temporal coordination mechanism. This "process structure imposed to intervene and direct the pattern, timing and content of communication in a group" (Montoya-Weiss, Massey and Song, 2001: 1252) can reduce conflict, especially when avoidance and compromise conflict management techniques are employed (Montoya-Weiss et al., 2001). The greater the number of visual cues received by a listener, the increased likelihood that the full intent of the message will get through. Virtual teams may by necessity communicate 90% of the time through e-mail, but a conscious effort by the project manager is required to ensure that a variety of media is used to counter ambiguity, improve team member socialisation, increase team trust and to reduce conflict.

To support effective communications, Maurer and Holz (2002) provide an overview of the MILOS software system that helps coordinate virtual projects. It allows tasks to be assigned, the tracking of deadlines, provides asynchronous and synchronous communication functionality and the provision of knowledge management. By using such a software application, project managers can better coordinate tasks and communications amongst geographically dispersed team members. Dustdar and Gall (2002) illustrate how Peer to Peer (P2P) communications technology, Short Message Service (SMS) and Meta tags can be used to improve existing collaborative technologies for virtual teams. All of these technologies can dramatically improve the ability of the team to interact with one another and to perform at or greater than the standard of a co-located team.

While communications can be supported in a virtual team environment, a deeper understanding of those involved in the process is necessary to enable team effectiveness. As virtual teams are often global in nature, a common challenge facing project managers is the understanding of cultural differences. Karolak (1998: 48) provides three important issues to be aware of when working with team members from a different culture. The first of these is the level of individual responsibility and accountability in a culture, where delays in decision-making can occur when a higher emphasis is placed on consensus. Next is the issue of suggestion acceptance, in that some cultures will not discuss them openly giving the perception (from a westerner's standpoint) that all is well and the suggestion is to be implemented. Finally, Karolak suggests that some cultures find it unacceptable to admit problems unless absolutely necessary. This can lead to problems when the project manager is half way across the globe and is unable to observe work tasks in person. To reduce problems that can arise from these differences, the project manager and the team members need to be understanding of the other team members' culture so they know what is acceptable. Next, modifications in the team member interactions may be required to allow 'digging' deeper to find out what is really happening in culturally diverse locations.

Cultural misunderstandings, along with problems in communications can create an atmosphere lacking in trust. Even when the project manager has been careful to ensure the right communication support systems are in place, a virtual team can be made ineffectual if the team members cannot rely on each other to do their share of the work at the required standard (Cascio, 2000: 83). Cramton and Webber (1999, cited in Susman, Gray, Blair and Perry, 2002: D3) illustrate how trust in virtual teams can be lowered by reduced face-to-face interaction and differences in geographic location. Kirkman, Rosen, Gibson, Tesluk and McPherson (2002: 71) observed that the important elements of building trust in a virtual team are rapid e-mail response, general reliability, and consistency in following through on tasks. Teambuilding prior to the virtualisation of a team can significantly build trust between members, as they are able to put a face and personality to the individuals they will be working with (Kirkman et al., 2002; Kramer, 1996, cited in Susman et al., 2002: D3). Coppola, Hiltz and Rotter (2001) add to this insight in finding that communications between members very early on in the team's lifespan cements feelings of goodwill and therefore enhances the level of trust. This early interaction usually takes the form of

socialisation and can be likened to the process of teambuilding discussed in Kirkman et al. (2002). Kramer (1996, cited in Susman et al., 2002: D3) suggests that collaborative technologies for supporting virtual teams that make team member interactions routine are chosen to minimise the risk of unreliability when the team trust level is low. This leads to the possibility that the project manager can offset the problem of reduced team trust by implementing routine communication, either in the technology or by generating rules and procedures. While this is not ideal, at times it may not be possible to bring together a team that is highly reliable, due to a lack of labour resources or other factors.

One common outcome of a lack of trust is an increase in conflict amongst the team members of a virtual team. Cramton (2000, cited in Hinds and Bailey, 2000: C3) found that virtual teams suffered a higher level of conflict than co-located teams because an imbalance of information commonly existed between its dispersed members. The team members assumed that everyone had access to the same information and disagreements were attributed to personal factors. The length of time conflict is left to occur has also been found to be greater in geographically dispersed virtual teams due to unshared contexts (Armstrong and Cole, 1996: 194, cited in Hinds and Bailey, 2000: C3). Temporal mismatches between team members may also play a role in generating conflict. Barley (1988, cited in Hinds and Bailey, 2000: C3) describes how technologists in a hospital created negative attributions of radiologists because they were difficult to track down due to unpredictable routines. A certain level of conflict can be beneficial for the team, but it should be managed effectively so that it does not stall work from proceeding.

Another important challenge in a virtual team is to preserve the team members' satisfaction. The virtual team environment can remove options for social interaction such as 'standing around the water cooler'. Feelings of isolation may set in with the potential for this to affect performance (Kirkman et al., 2002: 76). Some of the techniques previously mentioned to counteract these feelings include teambuilding and regular socialisation communications. In some cases being a virtual worker might be associated with reduced social security. Being part of a more flexible, 'unseen' workforce could result in fewer benefits and an uncertain future (Maurer and Holz, 2002: 145). Positive feedback can help let the team members know that they are an important asset to the organisation and the team.

All of the challenges examined in this essay are either unique to virtual teams, or are amplified versions that co-located teams experience. The core reasons for these challenges lie in geographic dispersion, temporal asymmetry, cultural differences, communication limitations and reduced team member interaction. The project manager needs to initiate a virtual team with these challenges in mind, so that she can reduce conflict, maintain trust, remove feelings of isolation and limit information inconsistencies amongst team members. The benefits of virtual teams such as an increased labour pool, decreased costs and improved flexibility can be lost if careful attention is not paid to the challenges discussed here.

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