



What are the success factors for project leaders in virtual teams?

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Abstract

Technology moves fast in today's world. For virtual project leaders it is important to keep up with knowledge and technology to use it to their advantage in moving forward. A project leader already faces great challenges in keeping his team's performance at the highest level, meeting deadlines and staying within scope and budget. This challenge is further magnified when members do not meet face to face. This paper addresses such challenges using interviews with experts who identified some important success factors for project leaders stepping into virtual teams. The greatest challenge for project leaders of virtual teams is to create group dynamics and keep communications effective. The biggest issue in virtual teams is often the trust factor, something that must be tackled right away. One of the success solutions for virtual teams is to meet face to face during the project. Another interesting points emerging from the interview is that for virtual projects to be successful they need mature organizations to back them up.

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"Coming together is a beginning. Keeping together is progress. Working together is success". - Henry Ford.

1. Introduction

Success in a globalized world is ever more contingent on virtual communication. Project management, one of the cornerstones of successful business practices in today's world, is becoming more and more virtual in nature. While this has its advantages, such as allowing project teams to become more diversified and the talent pool to become larger, it also raises many challenges. Leading a virtual team is a radically different experience from leading a co-located team.

In recent years, attention has increasingly turned to this challenge, giving rise to new theories and survey-based guidelines for success. This paper addresses some of these issues by looking at questions that remain partly unanswered. What are the success factors for project leaders in virtual teams? What are the challenges of virtual teams? And what are the solutions? Are there some issues in virtual teams that do not appear in co-located teams? Is the 'Six Lookings' (Briner a.m. 2009) a good-guideline for virtual team management?

This paper attempts to provide some answers to these questions, using interviews with Bob Dignen, Elín Torfadóttir, and Sophie Froment, specialists in team management with years of experience. The interviews yielded both subjective and objective information, advice and useful guidelines for future project leaders in virtual teams. The above mentioned specialists answered questions about virtual challenges, solutions, gave examples and success tips. To fill out the picture the paper also looks at a case study involving an Icelandic and Dutch virtual team. Their virtual project is in progress and it will be interesting to see if any of the success factors identified by the specialists turn out in the Icelandic and Dutch virtual team. The project leader of that virtual team also gave his viewpoint on the project's progress.

2. LITERATURE REVIEW

In the last decade many articles have been written about virtual teams. Virtual management is an increasing feature of global organizations. Nowadays it is likely that people will either manage, or become part of a virtual team. (Smith & Sinclair, 2003) Working in virtual teams is becoming more dynamic and complex. (Kimball, 1997) In recent years more books and articles have been published on the topic providing theories, case studies, and new tools for project leaders in virtual teams. (Smith & Sinclair, 2003)

Project leadership has also been the subject of many recent studies. (Meredith & Mantel, 2010) But the question remains whether theories about project management success factors such as the Six Lookings provide a key to success in virtual teams? What are the unique challenges of a virtual team? And what are the solutions?

2.1 Virtual team by definition

A few definitions of virtual teams already exist. Perhaps the simplest description is that in addition to being a team, virtual team members are physically separated by space and time, or both. The team members primarily interact electronically. They may also meet face to face occasionally. (DeRosa & Lepsinger, 2010)

„Virtual teams offer tremendous opportunities, and tribulations. Electronic communications allow companies to recruit talent without the constraints of location, and to offer scheduling flexibility such as telecommuting and working at home offices. It also creates the potential for follow-the-sun 24-hour workdays and the ability to maintain close contact with customers throughout the world“ (Solomon, 2000),

With the rapid increase in globalization, more projects are now developed in global teams. (Meredith & Mantel, 2010) Virtual teams proliferate and there is a greater need for leadership. The concept of virtual teams is relatively new to the organizations chart, but they still need a well defined concept of the role of leadership. (Kanawattanachai & Yoo 2002) For virtual teams to become fully functional they rely on technology; the internet, telephones, cameras, intranet, extranets, and communication tools. These are examples of the technology virtual teams use to communicate, coordinate and collaborate. (Handy, 1995) In discussions of virtual teams, most attention is focused on the technology that supports the team. But it is really the changes in the nature of the teams that should attract attention, not their technology. Managing a virtual team means managing the whole spectrum of strategies, communication and project management techniques, and both human and social processes to support the team. (Kimball 1997)

2.2 Principles of leadership and virtual leadership

Leadership competence is the potential to shape a vision and goals, and to maintain that vision for intended goals with a group of people and lead them in the right direction. It is important for leaders to win people to their side. Leadership competence is the ability to earn respect among followers who believe in the leader's talents. (Jónasson & Ingason, 2011)

Leadership plays a major role in virtual team performance. If the leadership is not outstanding, the team is more likely to be ineffective. Leaders who struggle to build collaboration within their teams are more likely to fail. It is important to pay attention to factors like communication and training, team composition, and team leadership, all of

which directly impact virtual team success. (DeRosa & Lepsinger, 2010). In any organization leadership is a key success factor. (Bolman & Deal, 2008) Communication is essential for leaders and is also a critical success factor. Leaders need to be able to build relationship and trust, and to be personally accountable and result driven. (DeRosa & Lepsinger, 2010) Trust is an essential factor to ensure that virtual teams work both efficiently and effectively. (Jarvenpaa & Leidner, 1998)

2.3 The role of the project leader, the Six Lookings

The role of the project leader is to look in six directions: upwards, outwards, forwards, backwards, downwards and inwards. Basically the project leader needs to look in every mirror when he is driving a project.

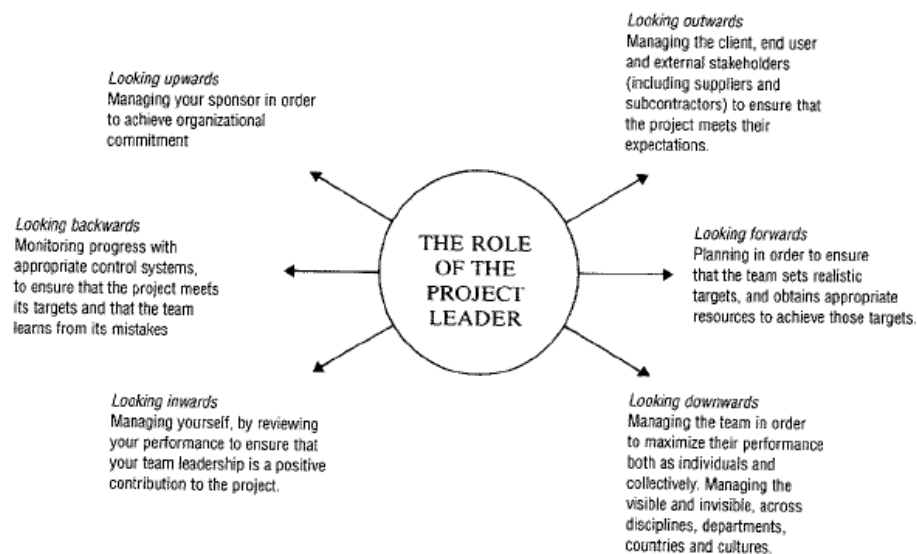


Figure 1 the Six Lookings of the role of the project leader.

The Six Lookings theory about the role of the project leader is certainly practical, but how practical? How important is it for a project leader to know the theory when walking into a virtual team?

"Looking upwards – The person who initiates the project – the project leaders boss- is the sponsor of the project. The sponsor provides an organizational umbrella. The sponsor is also, of course, an individual with personal reasons for asking you to do the job in question. It is important to know these reasons... [] So looking upwards and managing your sponsor is an essential part of the leader's role."(Briner a.m. 2009)

"Looking outwards – All projects have a client, an end user (who might be different from the client) and possibly a number of other external stakeholders (such as suppliers and subcontractors). Such parties have expectations of the projects which you must seek to meet."(ibid)

The first two Lookings concern managing the stakeholders and clients. It is important in every project to manage the sponsor and meet the clients' or end users' expectations. This should be common knowledge and everyone's goal. But while these two factors are useful to keep in mind, they are not crucial to the virtual leader's success.

"Looking backwards and looking forwards – These two facets are part of the same function. As a project leader you will need appropriate control systems to ensure that you meet targets and learn from your mistakes. You cannot do this, however, without first looking forwards – establishing realistic plans, raising necessary resources, and putting in place the appropriate monitoring and reporting systems." (ibid)

These middle factors about managing the project life cycle are useful. It is always good for leaders to look back on projects and measure the pros and cons in the working process. They will learn from it and hopefully use the wisdom for the next project. For example: to set realistic goals in the upcoming challenges. That is a success factor for project leaders and should also be a success factor for the virtual team leader.

"Looking downwards – As the leader of a team, you have the responsibility to ensure that they perform well, both individually and collectively. One theme of this book is how you can do this in the context of your organization." (ibid)

"Looking inwards – It is all too easy to become too involved in the day-to-day tasks of a project and forget that your own performance has a big impact on the overall progress of the project." (ibid)

Looking inwards is important for project leaders in both co-located and virtual teams. The ability to manage oneself and others is certainly a success factor. Looking downwards is also a success factor for leaders who want to get the best out of their teams. Whether it is in a co-located team or a virtual one, it is important to give direct orders to increase performance.

The three big success factors from the Six Lookings of the role of the project leader are to manage the sponsor and clients, the project life cycle and the overall performance. These guidelines are very practical for any project leader. But what else does he need to know? What further challenges and solutions lie in wait for the leader of virtual teams?

3. The Research Project

This project looks at the difference between leading co-located teams and virtual teams. It addresses the challenges and solutions to working in virtual teams. Is the project leader's direction finder, the Six Lookings a key success factor in virtual teams? What does a virtual project leader need to do to be successful? Are Icelandic virtual teams different from international virtual teams?

3.1 Research methods

The key purpose of this research paper is to get fresh insights from people with hands-on experience of the subject. Before the interviews, questionnaires (see appendices 1,2,3) were given to a specialist on the topic for quick overview and response. Three specialists got fourteen questions each and two open questions related to virtual teams. The open questions were designed to obtain different points of view on the topic. In addition to those

interviews the project included one case study, with three interviews with virtual team members and one interview with the project manager. (See questions in appendix 3) The purpose of the case study is to get inside information on virtual team management. The team members answered eight questions and their project manager ten. All of the questions were designed to provide a view of the daily workings and challenges of virtual teams.

4. Results

4.1. The challenges of leading virtual teams versus co-located teams

Dignen believes that too many organizations do not have the structure, roles, forms or the budget to support international virtual projects. If virtual teams are supposed to be effective and successful they need mature and smart international organizations in which virtual projects are managed effectively and given support. (Dignen, interview, 24.4.2012)

The clearest difference in virtual teams versus co-located teams is they are not all located in the same place. This appears a simple fact, but it makes all communication more difficult than when team members are in one location. (Torfadóttir, interview, 9.3.2012) When leaders go international they face greater uncertainty, the language is different, the business culture is different, and they are working with new people they have likely never met before. International projects are often more involved in a complicated legal environment. Leaders face all of these factors domestically and co-located, but the intensity is higher internationally and is often the main cause for difficulty. (Dignen, interview, 24.4.2012)

When it comes to the human aspects of virtual teams, Sophie Froment notes that the main difference is the lack of non-physical contact. It comes down to communication and trust between team members. Sometimes cultural and language differences cause problems. And virtual teams can also face technical problems. (Froment, interview, 29.3.2012) A higher level of organization is needed on the leader's part. i.e. sending emails, making calls, sending invites to the meeting and making sure that everyone is able to show up virtually. As for technical matters that have to be solved, they present an even greater challenge. (ibid)

Both Froment and Dignen note some other problematic aspects of a virtual team. Two major communication factors disappear when teams go virtual: non-verbal communication and spontaneity. This could affect the group dynamic and the issue of trust. It is much harder to create group dynamic in virtual teams and building trust. There could also be some technical problems. (Froment, interview, 29.3.2012) The teams often lack direction and clarity, and are sometimes badly funded. These are all factors that need to be managed by the virtual project manager if the project is to achieve success. (Dignen, interview, 24.4.2012)

In Dignen's view virtual teams require an even clearer direction at the top of the team. The team leader must be able to articulate clearly what the team's goals are and how to achieve them. The leader's vision must be particularly strong to direct the team to success. He must communicate, not only in group meetings, but also face to face with every team member in order to get their commitment to the project. (ibid)

Dignen also argues that it is possible to produce excellence with different styles and different leadership. The key is for the leader to develop an ongoing learning mentality, to

not assume that what worked in one project will work for another. The single success factor is to encourage learning culture in the team, get people to discover the right way to work together, and commit to work positively while limiting negativity and complaints. People often need to put the blame on something when things go wrong. This is not the mentality leaders want to have in their teams. They prefer people who take challenges as they come with a smile on their faces. That is the human side of the methodology. (Dignen, interview, 24.4.2012)

On the tactical side, the virtual project leader must get the right people into his team. It is often the case that virtual teams are comprised of, not the best people, but those who are available. Building the right spirit, strong communication and a positive learning culture is paramount in these circumstances. (ibid)

For the team member, the challenge will come in different forms depending on their own motivation, and the team leader has to understand these motivations. Leaders often do not take time to establish the style they need for the project teams to success. (ibid)

In this context Froment notes that the two biggest challenges are to create a group dynamic and to keep communication effective. Overcome these challenges and the leader has greater chance of becoming successful. (Froment, interview, 29.3.2012)

4.2 The solutions in virtual project teams

Dignen notes the many positive aspects of virtual teamwork: it is possible to form a team with the most desired knowledge and experience for each assignment with people from around the world. Team members are given the opportunity to work independently and are exposed to different cultures. The same is true for the leaders. (Dignen, interview, 24.4.2012)

In Froment's view one of the solutions for working effectively in a virtual team is to have clear processes in the teamwork and follow them. Weekly calls, one to one, are one method. Formal calls are also important as well as a group meeting once or twice a year. A physical meeting of the members is a key success factor. It helps people to connect and get a feeling for one another. It strengthens the group dynamic and gives a sense of belonging. (Froment, interview, 29.3.2012)

Torfadóttir's definition of virtual leadership is that it is partly attitude, partly behavior and partly knowledge. In terms of attitude, team members need to be more patient, more tolerant, more open and more curious. The leader must ensure that the team meets in the beginning and regularly during the project. He must use technology to help with communication, select people carefully, and ensure that language skills are adequate if they are not of the same nationality. He should also encourage people to be in some communication outside work. (Torfadóttir, interview, 9.3.2012)

Froment agrees with Torfadóttir as to the importance of informal communication. The leader, for example, can pick up the phone, and call to say "hi how are you doing?" In this case, as there is no agenda and no plan, it demonstrates that the leader is interested in and cares about his team members. (Froment, interview, 29.3.2012) This also builds trust, which is particularly difficult in virtual teams that do not get the casual moments co-located teams get to bolster morale. These moments must be organized by the leader and constructed around face-to-face kick-off meetings, as well as regular phone conferences. (Froment, interview, 29.3.2012)

Dignen identifies another key success factor in building trust as the delivery of good results early on the project. This demonstrates that the team has talent, competence and credibility. If the leader shows these qualities early, he will gain support from the team and build trust. (Dignen, interview, 24.4.2012) In Dignen's view, if four key factors are in place, communication, culture, technical competence and a sense of leadership and direction delivered face to face early, the team has a much greater chance of success.

4.3 A case study: the Icelandic situation

A virtual project leader located in Iceland faces all the above noted challenges as well as the issue of virtual meetings taking place in various time zones. As Froment notes, this might mean that people are checking in in the early morning, around lunch time and in the evening. As human beings have different energy levels at different times of the day, and as the virtual meetings are in various time zones, people might not be up to their best in the meetings. Some might be rushing because it is the middle of the day while others have just woken up. That could be a problem for the leader if he is located in Iceland and his team is all around the world, or if it's the other way around. (Froment, interview, 29.3.2012)

All the team members in the case study analyzed in this paper are Icelandic, working on an IT project for a foreign bank. The project manager is Dutch, and so is the project owner. The project team's task is to set up and run an IT system in six months. The project is broken down into four main tasks: analysis, development, programming and implementation. (Arnarson, and others, interview, 25.4.2012)

The team members are four: three Icelandic IT experts and one assistant mathematician. In this project they are working from different places and therefore constitute a fully virtual team. Two members of the team are located in Iceland, and the other two in Denmark and England. The project manager is located in Holland. (ibid)

Problems emerged in the first section of the project, which was the analytical one. The scope was unclear and the owner did not communicate sufficiently what he wanted the end product to look like. A lot of time was therefore invested in finding the scope and analyzing the project. At this moment the team has just finished the first section and is already behind schedule since it has been difficult to reach the project owner to answer key questions about the project. Team members agree that analysis from different locations was difficult. (Arnarson, a.o., interview, 25.4.2012)

The project manager organized a kick-off meeting in Iceland, to get the team members all at the same location. The meeting was very important in defining the scope and how to approach the project. The kick off meeting was also important for the team members to meet face to face, to build relationships and trust between each-other. The project manager spent a couple of weeks in Iceland with the team to get to know them better, get them focused and self-organized. (Hoorn, interview, 3.5.2012)

In the beginning, the project manager used the Prince method to narrow the scope with the team. When the scope was clearer the team shifted over to Scrum, a time box approach. There are daily updates on Skype, from 15-30 minutes, and the team meets face to face every 4 weeks. The project manager would prefer having the team together in one room working on the project to really capture the group dynamics. But since that is not

possible he found a way around it with these methods. As the team has a solid IT experience it will overcome obstacles. (ibid)

Now the team is starting the development section, which is easier in a virtual team. The project leader noticed that the members talked about the inaccessibility of the project owner and is trying to make some changes by getting more people involved in contributing to the team. He places great value on all members knowing what the team is doing in order to meet expectations accordingly. When the team faces issues they are brought up during daily Skype meetings and discussed to sort them out right away. (ibid)

The project manager believes this project will be successful. It helps the project that there is very little distance between Icelandic and Dutch culture. And the hardest part of the virtual team's work is behind; they are moving on and will deliver a quality product on time. The project manager believes it is important for the project owner to be able to build on this project in the future. (ibid)

Success factors:

- ☑ Organized kick off meeting for the project.
- ☑ Clear directions, and the scope was narrowed down.
- ☑ The team is using authorised methods, like Scrum.
- ☑ The team has daily virtual meetings for updates.
- ☑ Face to face meetings in every four weeks.
- ☑ Invested time in building relationship and trust.
- ☑ Issues are brought up and discussed right away.
- ☑ The project manager is working on solutions for the issues.

Unsuccessful factors:

- ✗ The project owner is very occupied in other assignments.
- ✗ The project owner is not sharing enough knowledge with the team.

5. Conclusions

In the existing material on the subject of virtual project management the authors agree on the crucial role of communication, trust and leadership as keys to success. (Bolman & Deal, 2008) (DeRosa & Lepsinger, 2010) (Jarvenpaa & Leidner, 1998)

This paper has attempted to look at the above-mentioned factors from a human perspective. All three specialists interviewed agreed with the authors quoted that the greatest challenges faced by virtual teams are direct communication, creating group dynamics and trust. Froment identified a lack of spontaneity and absence of non-verbal communication in virtual teams. Dignen emphasized the problem of structural and organizational support, i.e. the necessity of virtual teams being backed up by mature organizations. The solutions, in Dignen view, are the four key success factors: communication, culture, technical competence and a sense of leadership and direction delivered face to face early. Froment also noted the importance of informal communication to build group dynamics and trust while Torfadottir emphasized a greater flexibility and openness on the leader's part. These views were all corroborated by the team leader and team members of the Icelandic-Dutch team analyzed in the case study.

More case studies are needed with regards to the workings of Icelandic virtual teams as well as the structural challenges of virtual project management for international organizations. However, the clear conclusions to be drawn from this study are that while traditional guidelines to project management such as the Six Lookings are useful for all project managers, the virtual team leader needs to go beyond these guidelines and place greater emphasis on the human factors. As the world becomes more globalized and technology driven, the human element of communication must not be overlooked.

5.1 Implications for future studies

It would be very useful to carry on with the interviews to get more and different opinions from specialists in virtual management in order to develop a theoretical framework around the role of the virtual project leader. Further exploration should also include more case studies on Icelandic virtual teams to understand how they go through the processes required, and how they deal with distance. Lastly, following through with case studies from the Icelandic perspective could also throw some light on how well prepared international organizations are for virtual teams.

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Appendix 1.

Leading a virtual team, questions for specialists.

Questions:

1. What would you say is the biggest difference between leading / working in virtual teams compared to co-located teams (in the same place)?
2. What are the pros and cons when working with virtual teams?
3. In your career working with virtual teams, what methods have you found most useful, if you used any specific?
4. Are there any tasks more difficult than others?
5. What are the challenges?
6. What are your solutions?
7. Are there any threats?
8. How do you deal with the unexpected threats?
9. Any special competencies/skills needed?
10. Give an example.
11. Do you think building trust is a greater challenge in virtual teamwork? Why?
12. How do you build trust during virtual teamwork?
13. Regarding leadership, what are the key qualitys for leaders in virtual teams
14. Are there any other vital conclusions regarding virtual teamwork?

Open

1. Which do you feel is the greatest challenge – the issue of culture or distance? Which other factors are most important to reduce team effectiveness?
2. Do you have any other thoughts about either multicultural or virtual teams?

Appendix 2.

Belonging to a virtual team, questions for team members.

Questions:

Are your roles clear in the team? How?

Do you get direct instructions from the project manager? Example?

Is it important to meet face to face in virtual teams? Why ?

Is the team using any specific methods?

Do you feel there is trust between team members in the virtual team? Did you do anything to build it up?

Do you think the experience will help the team in this virtual project? How?

Is there any specific reason for the delay in the project?

Has there been any kind of troubles during the project that is related to the virtual process? If so can you explain them?

Appendix 3.

Leading virtual teams, questions for the project manager.

Questions:

Can you explain your role as the project manager of the team?

Did you organize a kick-off meeting? Why?

Do you think it is important to meet face to face? Why?

Did you use any specific project management methods? Example?

Did the project manager do anything specific to increase the trust between the project manager and the team?

Is the project owner supporting the team?

Is the team experience as it specialists a competence in the virtual work?

Have any problems come up regarding the virtual process? If so how? What are your solutions?

Are there any problems regarding the team members' nationality?

Do you think the project will be successful? Why?