Towards a New Role Model in Virtual Teams: The Effects of "Elective Leadership"

Ralf Friedrich[1,2], Udo Bleimann[1], Ingo Stengel[1], Paul Walsh[2]

[1]Centre for Advanced Learning, Media and Simulation,
h_da – University of Applied Sciences Darmstadt, Germany
[2]Cork Instiute of Technoloy, Cork, Ireland
ralf.friedrich@h-da.de
u.bleimann@fbi.h-da.de
ingo.stengel@h-da.de
paul.walsh@cit.ie

Abstract: This paper introduces a new role model for virtual software development teams where the leader is elected by the team instead of nominated by management.

1 Introduction

The business world is changing rapidly and with this change new ways of organising work are being established. In the area of software engineering, more work is being done through virtual software teams [Ch04]. Virtual software development teams are teams that cross several boundaries, such as geographic, temporal, and organizational boundaries and primarily employ telecommunication and information technologies to accomplish a common task [MH08].

More and more companies work in so-called onsite/offshore organizations where some team members are located in Europe and other team members are located in low cost countries. These virtual software development teams are tasked to develop complex software systems. The team members of these teams do not see each other and in order to master the project have to learn virtual work practices. Current virtual teamwork practices require different competencies and skills from the team members [WB00].

This research is based on the hypothesis that virtual teams can be as productive as teams being able to work face-to-face. Currently, there is the sense that virtual teams are less efficient than "normal" work teams. This research challenges this thinking.

Team performance depends on the motivation, skills and competencies of its members on how to work in a virtual environment.

Current research on the factors above provides information on how to increase the motivation through the use of peer-assessments [MTG09], the design of computer-supported collaborative learning (CSCL) [SW04] and an introduction of a role model [Kö07].

All the above authors describe concepts where basically peer groups provide feedback to each other to increase the performance of the learning group or project team.

However, the introduction of formal team leadership is not considered.

In a peer group, all members are on the same hierarchical level and have the same rights and duties. This research will implement in the control group treatment a leadership model called "elective leadership". This model will extend the current implementation of CSCL. The expected effects of the elective leadership model are to have a person in charge of implementing important virtual team processes. The treatment will focus on two virtual team processes: the get-to-know-each-other process and the feedback process.

2 "Elective Leadership" Approach

The treatment for the control groups is called "elective leadership". It is a concept where the team elects a leader, based on an election procedure. The leader has to implement two team processes. Also the performance of the leader is on a regular basis assessed by the team members. If the team members are dissatisfied with the received leadership, they can initiate a change of leadership process. The flow of the treatment is shown in the figure 1 below:
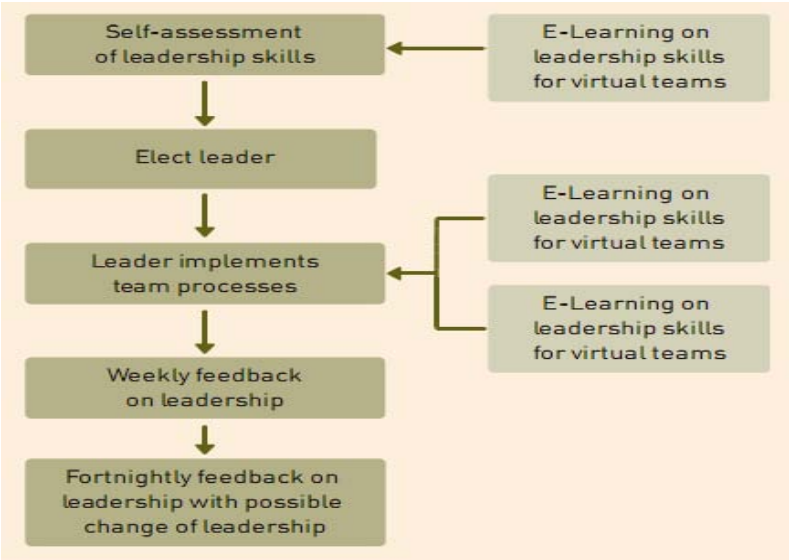

Figure 1: The elective leadership treatment

First the participants complete an e-learning lesson on leadership. As the result of the e-learning they should be able to identify their leadership skills for virtual teams. The test will focus on the ICF core competencies [Ic08] on the areas below:

- Setting the foundation of virtual leadership

- Co-creating the leadership between the leader and the team

- Communicating effectively with team and the stakeholders

- Facilitating learning and results of the team

As a result of this self-assessment, the people will get a score. The score can give an indication on who may have some good leadership skills. Also at this time, the team receives training on leadership and possible tasks within the authority of the leader.

The team will discuss this list and the result of this discussion will be a RACI-chart [Pm08], showing the leadership tasks and the role of each team member on the chart. RACI is an acronym for Responsible, Approval, Consulted and Informed.

Then the team leader will implement two key team processes:

1. The team get-to-know-each-other-process, also called the initiation process. The objective of this process is to create a sense of belonging, team spirit and commitment. This is a process where the team building takes place. The expected result of this process is that team members will trust each other and care for each other. Another element of this process will be a detailed introduction to the project plan and the work ahead. During this process, the team will learn how to work virtually on the project.

2. The team feedback process. This process will be implemented in several ways. On a weekly basis, participants will report their current motivation back based on a self-assessment of a factor from 1 (low) to 10 (high). Then there will be a formal feedback round every two weeks. During this feedback round, a new team leader can be elected. The outcome of this feedback process should be a continuous high level of motivation and productivity.

The innovative approach of "elective leadership" is that the leader is chosen by the team of peers and the team gives clear mandate to the leader. In a normal software development project the team leader is nominated by management. Here the team is empowered to make the decision. Also, the team has the power to keep the leader or to change the leader periodically. The power of the leader is clearly defined through the charter and the charter is approved by the complete team. This kind of leadership approach should work very well in situations where all team participants are on the same hierarchical level, like international academic research projects, as it provides a clear structure for the leader and the team, allowing faster and clearer decision-making.

The other innovation is the regular feedback for the leader. On a normal project team the leader gives feedback to the team members. On the other hand, many leaders in industry do not receive structured and qualitative feedback about their leadership styles, blind spots and strengths. Based on the feedback received and the distribution of the feedback, the leader can table any discrepancies on the leadership style or decisions.

Bibliography and references

[Ch04] Chudoba, Katherine M; Mei, Lu; Watson-Manheim, Mary Beth; Wynn, Eleanor: How virtual are we? Measuring Virtuality and Understanding Its Impact in a Global Organization. Published by Florida State University, Intel Cooperation and University of Illinois. Available at: http://redesignresearch.com/chi05/Virtuality%20Index.pdf, 2004.

[Ic08] ICF – International Coach Federation, ICF Core Competencies, Available at: http://www.coachfederation.org/research-education/icf-credentials/core-competencies/ [Accessed: 27th September 2009], 2008

[Ja04] Jawadi, Nabila: Trust's forms and development in virtual teams. University of Paris Dauphine. Available at: www.crepa.dauphine.fr/documents/Co/doc_00lRpf.doc. [Accessed: 27th September 2009], 2004

[Kö07] Kölle, Ralph: Java lernen in virtuellen Teams Kompensation defizitärer Rollen durch Simulation, Hochschulverband für Informationswissenschaft (HI) e.V. Konstanz, ISBN: 978-3-940317-17-9, 2007

[MC00] Maznevski, Martha L.; Chudoba, Katherine M, Bridging Space Over Time: Global Virtual Dynamics and Effectiveness. In: INFORMS, Organizational Science, Jg. Vol. 11, H. No. 5, S. 473–492, Available at: http://uainfo.arizona.edu/~weisband/distwork/maznevski.pdf. [Accessed: 27th September 2009], 2000

[MTG09] Mourlas, Constantinos; Tsianos Nikos and Germanakos, Panagiotis: Cognitive and Emotional Processes in Web-Based Education: Integrating Human Factors and Personalization, Information Science Reference (an imprint of IGI Global), ISBN 978-1-60566-392-0 (hardcover) - ISBN 978-1-60566-393-7 (ebook), 2009

[MH08] Müthel, Miriam; Högl, Martin: Tackling the Leadership Challenge in Dispersed Project Teams. In: Projekt Management Journal, H. 5, S. 32–39, 2008.

[Pm08] Project Management Institute: A Guide to the Project Management Body of Konwledge, 4th edition, ISBN: 978-1933890517, 2008

[SW04] Strijbos, J. W., and Weinberger, A.: Emerging and scripted roles in computer supported collaborative learning. Computers in Human Behavior, 2004.

[WB00] Wong, Sze-Sze; Burton, Richard M.: Virtual Teams: What are their Characteristics, and Impact on Team Performance? In: Computational & Mathematical Organization Theory, H. 6, S. 339–360, 2000.