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Administration Sciences**

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**Team development and
leadership in virtual teams**

Dissertation highlights

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1. Introduction and research questions

The starting point of this research was a personal experience in working at a multinational company's shared service centre and seeing several teams operating semi-virtually, where the team members were dispersed to 3-4 hubs and had to work together to achieve the goals of a Transformation Programme. There were several issues in the operation and leadership of the team, and there was a workshop that aimed at resolving these issues. This led to the preparation of the case study presented, however at that stage the virtual team as a concept was not eminent in the research.

After this case study has been published and presented, I decided to dig deeper into the available literature and found the concept of virtual teams and prepared a literature review on virtual teams from a leadership perspective. The literature gaps I found were the following:

- 1. The existing literature does not provide practical tools and techniques for the leaders that could be used to tackle issues in virtual teams.**

- 2. The team development from both a knowledge and evolutionary perspective is not widely discussed in the literature.**

This led to preparation of the paper on a practical toolkit for leaders that analyses the roles, functions, tools, and techniques of leaders that could help them in different stages of the team development. The research questions discussed in the above papers were the following:

Q1. What is the difference between the leader's role in virtual teams compared to the "traditional teams"?

Q2. What are the practical tools and techniques available for the leaders of virtual teams in different stages of team development and how they differ from the ones applicable in "traditional teams"?

The next step was looking at the individual level, where the research questions were also twofold:

Q3. Why is independency and individuality important in virtual teams?

Q4. Is the SDLRS a suitable tool to support the leaders in choosing the right team members and facilitate their involvement in their learning paths?

Thus, the concept of Self-Directed Learning (SDL) came up during the literature review, which is a concept on how independently and individually people can organize and manage their learning. Though first this seemed like an outlier from the original concept, after digging deeper I realized how this could heavily support the leaders on the long run. If the SDL Readiness (SDLR) can be measured successfully, this could be a great tool for the leaders in several stages of the team development: first, during the selection process and the forming phase, where the team members are selected and have their induction to the team. Second, after the storming and norming phase is also heavy with learning, which is hard to manage and coordinate purely virtually, so higher level of independency is required from the members.

Thus, a research design was drawn up to figure out how SDLR Scales (SDLRS) previously applied in the field of nursing education could be transitioned to virtual teams. After this design has been finalised, the data collection

started with Fisher et al.'s (2001) original 40-item SDLRS questionnaire, that has been analysed through 200 responses and a new, streamlined 9-item questionnaire has been drawn up that could serve the above purpose for virtual team.

2. Methodology

The research methodology is a mixture of quantitative and qualitative analysis.

Chapter II. – Literature review on the existing literature on virtual teams and leadership

Chapter III. – Case study on a multinational team's conflict resolution issues

Chapter IV. – Practical toolkit preparation based on literature review and case studies (theoretical synthetisation)

Chapter V. – Research design on data collection and data analysis

Chapter VI. – Qualitative and quantitative analysis based on a questionnaire and own data collection

3. Findings

This dissertation provided a thorough analysis on leadership and team development in virtual teams. Our aim during the research journey was simple: provide a theoretical analysis and background to our problems and find a practical solution to tackle it. As introduced in Section 3.2 of Chapter I – Introduction, this doctoral dissertation focused on several research questions, that could be divided to two main sections.

The first set of research questions discussed in Pillar I. of the dissertation focused on the differences between traditional and virtual teams and how the leader should manage these differences in different stages of team development:

Q1. What is the difference between the leader's role in virtual teams compared to the “traditional teams”?

Q2. What are the practical tools and techniques available for the leaders of virtual teams in different stages of team development and how they differ from the ones applicable in “traditional teams”?

The in-depth literature review, the theoretical synthetisation of the applicable academic literature and the professional experience of leaders and coaches and the case study presented in Pillar I. brought light to the following findings in reflection to the above research questions:

1. The benefits and challenges of virtual teams cannot be separated – a benefit can easily turn into a challenge, if not managed properly. Thus, the role of a leader is even more crucial in virtual teams.

2. The leader's role is more significant in virtual teams in the forming and storming stage, since the lack of interpersonal communication, limited opportunities to form informal relationships makes the establishment of trust even harder. On the other hand, the leader's role is less significant in the norming and performing stage, similarly to "traditional teams", since by that time the team works as a "well-oiled machine" with limited intervention required

3. The biggest difference between traditional teams and virtual teams is the "how" and not the "what", when it comes to tools and techniques. Both types of teams face

the almost same issues during their evolution, however due to the nature of virtual team set-ups, some tools and techniques must be adapted to work in virtual teams by implementing the same issue resolution and leadership techniques and tools in new ways than before.

The novelty and uniqueness of the findings presented in the journal papers and conference proceedings of Pillar I. lies in the theoretical synthetisation of the academic literature and its implementation to a practical toolkit, which has not yet been presented in the academic literature of virtual teams. This was one of the goals when starting the research journey: bringing the theory into practice, which this toolkit is a great example for.

On the other hand, even though the toolkit is a new and unique collection, it has several limitations. First, it is an inventory of tools and techniques and not an overall solution to every problem a leader may face. The authors used their leadership experiences, case studies from coaching sessions, which of course gives a certain limitation to the toolkit as well. Furthermore, the toolkit is not a sole solution at all: the leader should be able to make the decision on how and when to apply it – based on their

experience and knowledge of their team. Thus, the toolkit will not transform a “bad” leader into a “good” one, it only provides a summary that someone with great leadership skills can utilize.

For future considerations, this toolkit can be further developed and tested, ensuring that it evolves as the technology and the virtual team operations develop with time. Another interesting aspect could be providing a toolkit for the team members, i.e. bringing in the perspective of the team members to extend this research as well (which is partially done in Pillar 2. of the dissertation).

The second set of research questions discussed in Pillar II. of the dissertation focused on the individuals’ contribution to the success of team development and the applicability of the SDLR scales in virtual teams:

Q3. Why is independency and individuality important in virtual teams?

Q4. Is the SDLRS a suitable tool to support the leaders in choosing the right team members and facilitate their involvement in their learning paths?

The in-depth literature review on Self-Directed Learning and the empirical research on the applicability of the SDLR scales – based on a preliminary research design – in virtual teams presented in Pillar II. brought light to the following findings in reflection to the above research questions:

1. Independency and individuality in learning (i.e. SDL) is an important way how an individual can contribute to the success of the virtual team. Since there is a limited opportunity to connect informally during working hours, the more independent an individual is when it comes to learning (on-the-job or training, does not matter), the better they can fit into the operation of a virtual team.

2. SDLR scales may be used in virtual teams, however with significant modification and simplification (SDLR-9) – the original 40-item Fisher et. al (2001) questionnaire had to be reduced to a 9-item model, while keeping the same factor structure with a higher latent variable.

3. SDLR-9 could be used in all stages of team development, but with a different focus: in the forming

stages as part of the team member selection, in later stages to define the learning needs more efficiently and the involvement of the leader as well.

The SDLR-9 model is a unique and new method to measure SDLR in virtual teams: first, the SDLR scales have never been tested in virtual teams or in any other Hungarian population. Secondly, a previously 40-item method has been successfully reduced to a 9-item questionnaire at the same time keeping the original factor structure. Though similar simplification has been done (i.e. Fisher et al. used 40-item scale, which they later reduced to 29), whoever not to this scale with the same results. The findings of course, have certain limitations. The SDLR-9 has been developed based in Hungary and on a limited number of responses. Thus, the SDLRS-9 model should be further evaluated and validated through data collection and analysis in both Hungary and other countries as well. It is important to note that failing to validate this model would not mean that SDL itself is not an important aspect in virtual teams, only that the measurements that worked in nursing education are not suitable for virtual teams. Overall, when it comes to virtual

teams, where team members are not always available to each other, being able to tackle issues and gather new information efficiently will always be important and could be a success criterion for them. The leader should focus on the individuality and independency of the potential team member when making decisions about the team structure and the expectations regarding the individual's performance. Thus, as a future consideration, the importance of individuality, independence in virtual teamwork – which may sound as a paradox – should be in more details analysed.

4. References

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