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# HABITS IN VIRTUAL TEAMS: AN EXPLORATORY STUDY

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## Abstract

Despite the differences between virtual and collocated teams, empirical studies have identified a number of challenges that virtual teams experience. We argue, in this work-in-progress study, that habits constitute a good explanatory factor for understanding behaviour in the virtual team environment. In this study, we analyse 'offline' habits in the cases of student-based global virtual teams and examine the degree to which these have been modified or replicated within an online, virtual team situation.

**Keywords:** *Virtual Teams, Habits, Online Behaviour*

## 1 INTRODUCTION

Over the last few years several researchers, including ourselves, have been studying the challenges of virtual team working and virtual collaboration. Working and collaborating virtually are about new ways of dealing with new challenges and incorporating new technologies into the day to day communications and interactions. For this type of learning, however, to be effective it requires virtual team members to 'unlearn' the deeply held attitudes and habits which are often well embedded not only in their work life but in their identity too. Working effectively in virtual teams often means learning to trust in different ways, to resolve conflicts differently and to lead differently; further, it means developing a new work identity and even coping with emotions in different ways.

Virtual teams consist of geographically dispersed individuals who interact through inter-dependent tasks guided by a common purpose with links strengthened by webs of communication technologies (Lipnack and Stamps, 1997). In this way, virtual work is carried out across time and space as well as across organizational boundaries; moreover, apart from the organization, the team members and the type and requirements of the project may vary as an individual shifts from one virtual team to another. Based on these characteristics, the formation, development and sustainability of new methods of work are often required. It is not surprising, therefore, that the current literature suggests that virtual teams face several challenges which affect their success. These challenges are generally identified in the areas of technology, culture, interpersonal relations and project management (Kayworth and Leidner, 2000; Kayworth and Leidner, 2002). For example, in a study on the use of videoconferencing systems (Panteli and Dawson, 1999) a situation was noted where one of the senior managers in the organization studied had the habit of walking around the room during meetings and this habit continued during video-conferencing meetings. His secretary knew that this was not an appropriate behaviour in a videoconferencing environment, but noted 'how could I ask him to sit down?' [her emphasis]. Accordingly, we propose that habits, as represented in individual members' behaviour, are especially critical in the virtual environment where members are expected to collaborate and share their knowledge in a mediated environment.

In this study, we argue that understanding virtual teams requires an acknowledgement and an appreciation of the influence of habits on virtual team working. In essence, the concept of habits is used as an explanatory concept of the challenges experienced in virtual teams and of virtual team behaviour. While habits have been mentioned in earlier studies on virtual environments (e.g. Panteli and Dawson, 2001), and has been studied within the IS domain to explain usage and intentions in the use of IS (Limayem et al, 2007; Limayem and Hirt, 2003), this will be the first study that will focus on habits in virtual teams aiming at improving our understanding of virtual team working.

In what follows, we present the concept and significance of habits in human behaviour. We then present the project background and the methods used to collect our data. By the time of the conference, we hope to be able to present the findings of our analysis. A preliminary discussion of findings is presented here.

## **2 HABITS: CONCEPT AND SIGNIFICANCE**

The concept of habit has traditionally been studied in philosophy, sociology and psychology. Habits have had a long presence in the literature. Darwin referred to the feeding habits of British insects in 1859. Sociologists, James (1890) and Durkheim (1893), then discussed habits in human behaviour. In general, habits are described as the repeated performance of behaviour sequences (Garling and Azhausen, 2003, p.2). Hodgson and Knudsen (2004: 287) defined a habit as 'a propensity to behave in a particular way in a particular class of situations'. As indicated, 'habits are formed through repetition of action or thought' (p. 286/7). Similarly, Aarts et al (1997) explain that frequent performance of certain behaviour leads to habit development. They use the example of a university student who needs to attend lectures for the first time and chooses to go by bicycle. When this travel mode is frequently chosen, then it becomes habitual to the point that the action of 'going to lectures' is directly linked to 'going by bicycle'. For this Aarts and Dijksterhuis (2000) posit that habits are goal-directed and their activation depends on goals. Thus, habits are found to reduce the elaborateness of information use (Aarts et al, 1997). It thus has been acknowledged that habits are not 'just' bundles of frequently performed behaviors, but, in addition, are performed automatically (Verplanken, 2006, 2009; Verplanken & Aarts, 1999; Verplanken & Orbell, 2003).

Habits are particularly important as when they develop, they are often difficult to alter. It may be assumed that the cost of searching for and constructing alternative behaviours is generally too high and the expected gains of the new alternatives too low or uncertain. This may explain why past solutions are used in new situations; this is to make behaviour easier and less risky (Garling and Azhausen, 2003). Nevertheless, availability of alternatives can break habits as noted in the studies by Garvill et al (2003) and Fujill and Kitamura (2003). Also, habits may be more vulnerable to change when the context in which they are performed changes (Verplanken & Wood, 2006; Wood et al., 2005). In this paper, we examine the role of habits in the process of virtual team working. The background of the specific project under investigation is presented below.

## **3 PROJECT BACKGROUND**

This present study follows from an earlier collaboration between the University of Bath and the Athens University of Economics and Business, which took place in the spring of 2007. At the time, students in both Universities were asked to work together on a joint course assignment organized in virtual teams; each team included members from both institutions. We used this exercise as an opportunity to study the behavior and interactions of students from different cultures in virtual teams; this was an intention that was clear to the students.

In the assignment, students were asked to jointly evaluate a number of e-shops and provide suggestions for improvement to the e-shop that scored the worst. The students based in Britain were final year undergraduate Business students and some MSc students attending an optional course on Virtual Organizing taught by the first author, whereas the students based in Greece followed an MBA optional course on E-Commerce and Inter-Organizational Networks taught by the second author of this paper. We felt that the contents of these courses offered complementary expertise to the students, so that they could effectively address the requirements of their assignment. In the joint group assignment, in addition to the evaluation of e-businesses, the virtual student groups were asked to include, in an appendix, a copy of all interactions among their team members. These typically contained email and MSN interactions, even though many students found it useful to have the occasional telephone conversation. The students were also required to submit an individual report reflecting on their virtual team experience. Following this project, the students stated, both formally and informally, that they found this experience interesting and useful, even in cases where the group dynamics were problematic. Having reviewed both the group and individual submissions, we held two focus groups, one at each site, as well as follow-up interviews with some of the students.

In the course of analyzing the research results, in addition to cultural issues – a well researched topic in global virtual team collaboration – habits emerged as one of the themes the students identified as important. Habits could be constructive or destructive and ranged from attitudes towards people, technology, assignments and group work. Common areas where habits were formed and occasionally challenged as part of student group work included splitting up the work, understanding of editing and formatting conventions and rules, prioritizing, keeping to deadlines, feeling the need to establish an informal relationship with team members. These findings led us to identify habits as an interesting theoretical angle for studying group work and, in particular, exploring how a virtual team setting might alter the habits of individuals.

Therefore, following a review of the literature on habits, we repeated the virtual team student collaboration between the two Universities in the spring of 2009. This time, we were able to use the Moodle software with designated space for each team. This would enable us to access and record student interactions on the assignment online. Moodle was set up at the University of Bath, and the Greek instructor and her students were given access.

The content of the group assignment was maintained (evaluation of e-shops) so as to keep the two sets of projects comparable. However, due to course schedule in the two universities and the difference in the timing of the Easter break, we set a tighter deadline of two weeks in the recent project. Because of our interest in the study of habits, however, we introduced some changes to the assignment process. These are described in the following section.

#### **4 RESEARCH METHOD**

The intention of this exploratory research is to investigate how individual habits may change in a virtual team setting. Using our student group, we therefore sought to compare student habits before and after the virtual collaboration. To this end, we collected data from the students in two phases.

First, we compiled a set of questions on student habits. These were formed on the basis of our reading of the literature on habits, the findings of our earlier study, informal discussions with other students and expert academic input from the third author. This questionnaire (see Table 1) was distributed to the students at the time when the assignment was announced. Students in both universities were asked to fill in the questionnaire, and they subsequently received a copy of their own answers.

Second, after the virtual team exercise had been completed, we asked the students to submit an additional, individual assignment, where they were invited explicitly to reflect on their habits in collocated environments and on how these may have changed as a result of the virtual collaboration. They were asked to reflect on their answers on the questionnaire on habits that they had filled in earlier as a reference point.

Following the submission and evaluation of the assignment, we also conducted focus groups on the nature of the project in order to gain a richer understanding of their experience with the virtual team exercise.

All our current input on student habits relies on the students' own account and perceptions of how their habits might have changed. The use of the Moodle software allows us to validate whether their responses on how they behaved in the virtual team environment actually corresponds to their actions. We have no other record of their previous off-line behavior than their own accounts, so it is difficult to validate the student responses. The fact that they described their off-line habits before engaging in a virtual collaboration goes some way in mitigating this methodological limitation. Additionally, given the exploratory nature of this research, we feel that the research setting is adequate for a preliminary study of habits in the virtual environment and for setting the agenda for further research in this area.

	On a Likert Scale from 1 (never) to 5 (always), please choose the most appropriate answer that represents yourself:	Never				Always
1	In a team situation you are the quiet member.	1	2	3	4	5
2	In group projects you tend to undertake leadership responsibilities	1	2	3	4	5
3	In a social setting when you meet people for the first time you take the initiative to introduce yourself	1	2	3	4	5
4	When working with people from other ethnic groups you try to find out more about their background	1	2	3	4	5
5	In a group project context, I treat people with work experience with more respect	1	2	3	4	5
6	In projects, I leave things to the last minute	1	2	3	4	5
7	I take active action to resolve conflicts	1	2	3	4	5
8	I prefer face to face communication to discuss project issues	1	2	3	4	5
9	If I see a team member we always talk about the project	1	2	3	4	5
10	In most teams I have worked in, we split up the work in the beginning of the project	1	2	3	4	5
11	In most teams I have worked in, we renegotiate the split of work	1	2	3	4	5
12	In most teams I have worked in, we support weaker team members	1	2	3	4	5
13	In most teams I have worked in, we split the work according to preference of members	1	2	3	4	5
14	In most teams I have worked in, we split the work according to competence	1	2	3	4	5
15	In most teams I have worked in, we split the work according to interest	1	2	3	4	5

*Table 1: Questionnaire on student habits in group projects*

## 5 DISCUSSION AND CONCLUSIONS

The study is currently under way. At the time of writing, the project has been completed and reflection reports submitted. By the time of the conference we will analyse our data and discuss the significance of our findings in the virtual team literature. We will identify the impact of these habits, positive or negative, to the team practices and examine how these have changed, modified or replicated, in the virtual team environment. In particular, in our analysis we will examine whether offline habits have extended onto virtual team situations and how the virtual team setting might have altered the habits of individuals. Cross-cultural differences will also be considered in the analysis to take account of the diversity of the students. Finally, we will also compare students' habits to the level of individual satisfaction as noted in students' reflection reports.

Our study proposes that considering virtual team behaviour as a habit contributes to a better understanding of the challenges involved. Habits may, thus, be a new and interesting concept to consider in the large and complex domain of virtual organizations. The new generation of technology users is developing a new relationship with the virtual world; through communities such as second life, and online game communities such as EVE, interacting with strangers is becoming a habit in itself. Further, as ICTs are becoming routinely used in work and other arrangements, the meanings we give to them changes over time (Orlikowski, 1992). Thus, as usage practices and norms of media behavior change, perceptions of virtuality may also change (Chudoba and Watson-Manheim, 2008).

For practitioners, the study is useful as it indicates that effective managerial strategies can help achieve effective and collaborative virtual teams. Strategies, including training and incentives, that technology awareness and support can provide team members with an environment conducive to identifying the need for and making necessary changes in work practices.

We readily acknowledge the limitations of the study which include an emphasis on habits as frequencies, and not as automaticities as it was also noted in the recent literature. Due to the exploratory nature of the study, we chose not to measure habits in-depth though measuring tools exist to do so. Further research is therefore required in this area.

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