Some Research Challenges for Studies of Virtual Communities Using On-Line Tells

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ABSTRACT

This article reports on a study of learning and the coordination of activities in a geographically distributed community (a research consortium) using survey / Social Network Analysis methods combined with interviews. This article comments on and expands some of the important issues that were raised. After outlining the wider context, it highlights two broad themes related to research in the area of Virtual Communities: the nature of the communities themselves and the way in which they are studied. Following this, four areas for future research are outlined: the continuing role of face-to-face communication in Virtual Communities; the significance of the dual nature of such groups; the importance (or otherwise) of the structure of such communities; and the role played by exogenous factors. The article concludes with some comments on where this field relates to the debate among social theorists about the role of agency and structure in human activities.

Keywords: Agency, Communities of Practice, Face-to-Face Communication, Geographically Distributed Community, Methodology, Structure, Virtual Communities of Practice

1 INTRODUCTION

The article reports on a study of learning and the coordination of activities within a geographically distributed community (the research consortium) that is involved in conducting and managing collaborative research. The consortium was created by the Canadian federal government to encourage multidisciplinary research and innovation in the area of water related issues such as watershed and ecosystems research, water infrastructure, threats to water supplies and water treatment. It consists of around 140 academics and practitioners dispersed across the country. The academics are drawn from a wide range of disciplines and cover many different research areas; the practitioners include employees from various levels of government, industrial partners, conservation bodies and members of Non-Governmental Organizations. The membership of the community changes over time and with projects and, although a number of the groups engage in face-to-face meetings of various sorts, the group as a whole is described as a Virtual Community of Practice.

Although the research consortium has a number of unique features, it is also an example of the wider phenomenon of virtual (i.e. geographically distributed) groups that work together and are described variously as
Virtual Teams, Task or Project Groups; Virtual or Electronic Communities of Practice and Knowledge Networks or Networks of Practice (Dubé, Bourhis, & Jacob, 2005; Jarvenpaa & Leidner, 1999; Vaast, 2004; Wasko & Faraj, 2000). The principal objective of this article is to take some of the themes highlighted by Dimitrova and Koku and place them in a wider research context. We will begin by examining two fundamental questions that any research into this area must face.

2 TWO BROAD RESEARCH QUESTIONS RELATING TO VIRTUAL COMMUNITIES

Before looking at the issues raised by Dimitrova and Koku’s article, it is perhaps worthwhile to step back and look at some of the more general problems faced by research into Virtual Communities. Exactly what do we mean by Virtual Communities and what are the most appropriate ways to study them? Although the questions might seem banal, pausing for a moment to reflect on these issues will help to highlight some of the key difficulties that are faced in attempting to examine the themes for future research that are contained in the following section.

2.1 What is the Nature of Such Groups?

People working together as geographically distributed groups is not a new phenomenon as such, however the explosive growth of digital technologies, and the communications revolution that followed (Cairncross, 1997; McLuhan & Powers, 1989), opened the door to the myriad of“new organisational forms” that can be found in the current literature. Although the term “Virtual Community” only came into popular use about a decade ago following the publication of Howard Rheingold’s book (Rheingold, 1993), this new concept has been quickly accepted and has become part of everyday life (Sayago & Blat, 2010). The notion of “Virtual” working has become commonplace.

Although the notion of Virtual Communities may be commonplace, this does not mean that it is fully understood. While co-located, face-to-face groups have been the topic of study and conjecture for many years, their similarities to, and differences from, “Virtual” groups is far from clear. For example, although many of the early studies of Virtual Communities focused on the issue of identity (Bruckman, 1993; Turkle, 1995), understanding how the sense of identity that characterizes the “esprit de corps” of co-located groups (who share the same experiences in the physical world) translates to the virtual world (where the nature of the shared experience is much less tenuous) remains vague.

2.2 How Do We Study Them?

If the way these groups function is not well understood, how then should we study them to improve our knowledge? Geographically distributed groups that rely on technologically mediated forms of communication and computer based communication in particular, offer opportunities to collect data that do not exist in “natural” groups. Because interaction takes place via some form of technology, the traces of that interaction are easily accessible and available in a form that facilitates processing and analysis. However, although messages and patterns of interaction between individuals can be captured in volume and analysed in detail, as with the groups themselves, the limitations of this approach is not always well understood. The lure of quantity and the illusion of accuracy to three decimal places produced by Social Network Analysis (SNA) can sometimes cloud the true value of such data.

The data contained in on-line tells is a by-product of on-line communication, the residue that remains after an activity has taken place, they are not the activity itself and do not tell the whole story. Measuring the frequency of communicative acts may show something is happening but does not tell us much about the nature of that activity and the meaning it holds for the participants. Uncovering these meanings can be problematical both from the point
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