How to Manage Virtual Communities and Teams using Adjacencies: A process based on Functional Analysis and Adaptive Structuration Theory

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ABSTRACT

This paper aims at responding to the need for specific management of virtual entities. It proposes a flexible process based on Functional Analysis and Adaptive Structuration Theory, called Virtual Entities Management Support (VEMS). Starting from environmental requirements analysis, the method helps to choose functions, attitudes, and tools based on a strategic vision in three dimensions: the virtual entity value addition, the members’ satisfaction, and the entity flexible frontiers. It leverages the powerful concept of adjacent individuals and adjacent communities inside the 3-D model. The full process is detailed and applied to five virtual entities inside and outside the industry. It raised a common view of 21 best attitudes. The paper provides managerial guidelines to managers of virtual entities.

Keywords: E-Collaboration, Virtual Communities, Virtual Management, Virtual Teams, Web 2.0

INTRODUCTION

Large organizations have an increasing need to build workgroups with geographically distributed members. Virtual teams, defined as teams that work remotely, are growing internationally. In 2002, a survey in Germany with 376 managers concluded that over 20% of workgroups work virtually (Bundesverband, 2002). Not only inside but also outside organizations, web 2.0 tools allowing distance collaborative interaction (DiNucci, 1999) have enabled an explosion of virtual communities, defined as networks with individual and collective identities (Cova, 2010). Communities of customers, partners, cooperation projects, or groups of more general interest are created spontaneously or through the influence of organizations. Internally and externally, the management of virtual groups includes multiple activities, such as: project administration, knowledge management, decision-making, relationship management, entertainment or events organization, experience sharing, etc. Virtual collaboration (i.e.,

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Remote collective communication) becomes a day-to-day professional reality. The literature has detailed successful cases of virtual collaboration (Harwood, 2010), but there are also risks of failure. Virtuality, or the combination of distance between individuals and use of web 2.0 interactive technology, imposes special conditions and transforms relations:

- People meet rarely, if ever
- Dialogues are mostly asynchronous and only sometimes synchronous
- Written communication dominates
- Emotions are less visible and difficult to express
- Traces of communication are available
- Archives are abundant
- Web 2.0 technological tools dominate
- Members belong to multiple virtual entities
- They participate in several conversations at the same time
- Members statuses and roles are less visible

These characteristics generate weaker professional links, new attitudes in conversations, larger exposure, and trust issues (Montoya, 2009). On one hand, virtuality can be seen as an impediment; on the other, it can be seen as potential for greater efficiency, as communication is written, asynchronous, and better thought-out. Internally, as well as externally, virtual entities share a common goal: They exchange experience, look for solutions, and despite issues with anonymity, they collaborate interactively amidst a backdrop of up to 100 web tools (Good, 2011). Virtual entities require new management skills. According to French marketing managers, this “virtuality challenge” appears to be headed in a direction of progress: Managers rated their satisfaction with virtual collaboration as 2.6 on a 0 to 5 point scale in 2010 (Diviné, 2010).

In this context, the subject of this research was how to provide a method to support the management of virtual organizations. The aim of this method was to help managers of virtual groups to deal with virtuality conditions, including: formulating goals, identifying attitudes, and choosing web 2.0 tools. With this method, called Virtual Entities Management Support (VEMS), managers should be able to create their own practice route. It is a framework to build one’s own solutions, not merely a generic list of recommendations. VEMS applies internally and externally to help achieve the objectives of virtual groups managers. Internally, it will help managers of virtual teams of employees when they do not have an established procedure for using project management software that fully determines activities and types of communication. It applies to any team transversal — permanent or ephemeral — of a distributed organization, which must define its objectives, govern modes of living and working to accommodate virtuality and benefit from it. Externally, community managers need to further define their goals and attitudes with participants; they will acquire principles and reflexes with the method. VEMS helps in the design of a vision, helps managers choose functions and attitudes, and defines the most suitable tools. It covers three kinds of management activities, with upstream assistance in defining objectives and constraints and downstream assistance in selecting the best association of tools.

VEMS provides a model representing a virtual entity in three dimensions and a stepwise process for producing a vision, and identify functions, attitudes, and tools to manage the entity. It is based on a theoretical framework, which includes functional analysis (Le Moigne, 1999) and the Adaptive Structuration Theory (AST; DeSanctis & Pool, 1994; Orlikowski, 2000). The functional analysis helps define the steps for identifying the constraints of the environment, the inferred and complete list of functions, and the attitudes. AST introduced the concept of Technology Spirit, which represents the intents of the designers of the technologies and the structure of the social group of users. It allows building a model of representation of the virtual entity. We will use the three dimensional model (Diviné, 2012), based on ACP analysis of the internal and external use of 17 web 2.0 tools on a sample of 179 large enterprises. The dimensions are the value addition, defined as...
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