Academic Virtual Meetings Management with a Synthesis Builder

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ABSTRACT

In this paper, we propose asynchronous virtual meeting (AVM) as a tool that can be integrated to virtual campuses, university Web sites or e-learning platforms. It is a way for participants from academics and students to discuss for a defined period, one or more topics. The AVM participants have to give, respectively, objective and punctual interventions as opinions, responses chosen from a proposed list and/or suggestions. In real time, specific processes for data analysis give a progressive synthesis of the discussions visible for all participants. The proposed tool can avoid different problems and constraints that the higher education meetings organizers are faced to. We developed a prototype for the tool that was tested with a group of participants from our university. The results were interesting and showed contribution to enhance communication and decision making in higher education.

KEYWORDS

Academic Meetings Management, Asynchronous Virtual Meetings, Educational Data Analysis, Higher Education Digital Work Spaces, Virtual Meetings

INTRODUCTION

After the Information and Communication Technology (ICT) challenges, different academic tasks use technologies to enhance management and teaching/learning processes in higher education. Technology in general has not only improved knowledge storing methods and learning techniques but has also acted as a catalyst to struggle the barriers of inflexible organizational structures (Shabha, 2000). Hence, some universities move to virtual workspaces or e-university where networks, Internet, computer science processes ... are used to do or help the departments (the smallest components in a university) activities. We are analyzing nowadays the use of ICTs for concrete add-ons to education institution, so we have to analyze problematic situations and try to solve them using the existing and rich technology tools. A survey done by Watson Wyatt company showed that firms that communicate effectively are four times more likely to report high levels of employee engagement compared with firms that communicate less effectively (Watson-Wyatt, 2007). Garrison and Anderson assert that "to realize that potential of e-Learning as an open but cohesive system to support learning, it is essential that we rethink our pedagogy" (Garrison, Anderson, & Archer, 2000).

This means improve of the general management of trainings. One among these problematic situations that affect higher education management, pedagogy and perhaps also trainings quality is related to academic meetings. Indeed, different meetings are scheduled in a department or higher levels of university hierarchy to discuss different pedagogical, administrative, scientific or social questions. Always, the concerned with the meeting are required to make efforts to free themselves for the appointment and sometimes, they are forced to give up some tasks such as teaching. In addition, some issues discussed during the meeting require serious reflection and maybe even data to provide

a successful review or proposition. However, when these issues are presented during the meeting, a participant can just give shallow opinions and/or suggestions. Sometimes, for important subjects, these can lead to other appointments to continue the discussion and the same constraints are repeated for the group involved in the meeting. The third problem is related to the number of persons to invite to the meeting: the question can involve all students and all teachers (about Five hundred people (500) for a department) for example, however, it is impossible to have everyone on the place of the meeting. The organizers will then be faced with the sensitive issue of persons' choice. The chosen ones will propose opinions/suggestions in place of the others which can lead to conflicting situations that disrupts the department or all the university activities and give out inadequate decisions. This is from one hand, from another hand, the authors in (Romano & Nunamaker, 2001) show an analysis about the meetings costs that can be considerable if hold with the face to face mode. To avoid these problems, some meetings designers thought about the use of technology. Hence, a variety of augmented meeting support (AMS) technologies (Meyer& Bulyk, 1986-a) (Meyer & Bulyk, 1986-b) exist that may improve productivity including 3-Dimensional multiimaging (Lester, 1987), Video teleconferencing (Rosetti, 1985) television/film, both technology and actual content (Restuccio, 1985) and automated group support systems (Nunamaker, Dennis, Valacich, Vogel, & George, 1993) (Nunamaker & Briggs, 1996). Consequently, the majority of the existing works on virtual meetings concern the synchronous virtual meetings such as videoconferencing. "A videoconference is a set of interactive telecommunication technologies which allow two sites or more to interact through bidirectional video and audio transmissions simultaneously" (GIVP, 2008). However, synchronous meetings can have the same constraints than the face to face ones added to those related to the used technology (quality of the used networks, the state of the used computer at the meeting time, etc). For that, we studied the case of meetings inspired by contextualized forums that can improve the quality of the meetings results and decrease the participation constraints for the academics. In this paper, we propose asynchronous virtual meetings as an integrated module in the e-department (the digital workspace for a university department) space or even to digital campuses or e-learning platforms.

The data collected and the information produced in these kinds of meetings will feed the decisional system of the department. This last will take the adequate actions and the track of their effective execution can be aided by a process that can be an extension of the tool or of the e-department in the future. In this paper, we focus on the asynchronous virtual meetings tool and the decisional system is considered as part of the e-department processes not discussed here. We first give an overview about background knowledge and related works. After that, in the third section, we present the proposed asynchronous virtual meetings tool with the parameters definition and the modalities for analyzing the participants' proposals. Before the conclusion, we discuss, in the fourth section the evaluation of our contribution.

BACKGROUND KNOWLEDGE AND RELATED WORKS

Higher education is nowadays moving over the world to more and more virtual functionalities integrated to their respective digital workspaces. A digital workspace for an education institution called also virtual school; virtual campus … allows its students, teachers and staff to access individualized information and services at any time, from any place, only with an Internet connection and a Web browser. In different universities over the world, these spaces are used and managed. They offer many services accessed via a secured user account already created and activated by the workspace administrator. Among these services, we have:

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