

Telecollaboration Opportunities of Sensor-based Networks

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I. ABSTRACT

Telecollaboration (TC), a next generation Internet application would demand particular Quality of Service (QoS) requirements in order to function properly for which besteffort (BE) delivery becomes inadequate [2]. To win on the technology transition and prepare for tomorrow, the nature of Australian federal government funded CeNTIE's (Centre for Networking Technologies for the Information Economy) TC (Telecollaboration) project at UTS was mainly to understand, investigate and guide the participants of TC by providing them with numerous opportunities to reap the collaborative benefits in an efficient manner. It was our aim to establish and assess the boundaries of concept formulation and early popularization of this transition through R & D of extension, enhancement and exploration of collaborative opportunities involved that are cognitive and non-cognitive in nature [1]. In this work, we focus on conducting experimentation in sensor-based environments for the implementation of the TC technology apart of testing its technical and educational advantages. This work aims to provide a good foundation on the adaptive TC technologies in these sensor-based environments, where strategic online content and media outlets enforces Internet neutrality overlaid on top of the reflected sensory feedback from a sensor-based environment such that a natural and predictable relation exists between a participant's collaborative opportunities and the subsequent changes in the sensations presented which in turn broadens the educational inequalities.

It is of equal importance to make sure that complexity issues associated with pro-active design of the TC technology infrastructure, applications and content suitability must be resolved during the diffusion phase which could then be accomplished through demonstrations and pilot trails [1] [4]. This work deals with the development of sound technical principles and provision to foster diversity for collaborative practices of the participants where adoption can take place. In an innovative application such as TC, the proposed solutions for sustainability issues in sensor-based network environments would resolve mysteries of user experience not just to make sense of drastically different and unfamiliar facets of TC application arenas (such as education, healthcare and other government departments etc) but to better understand the reflective spectrum of reactions in the realms of TC [3]. In this work, we first emphasize the importance of building rigorous sensor-based environments that are smart venues for

innovation and building collaborative capital. Next, we propose a conceptual value-added framework with which to understand the concept of redefining the wealth of new business trends (business system perspective), user needs (participant perspective), technological issues (sensor-based network infrastructure perspective) and pedagogical approaches (participant's collaborative outcomes perspective) when evaluating the performance of TC. However the impact of sensor-based network environments plays a major role in this context.

Finally, this paper concludes with the possibility of opening new avenues for the examination of operational and action-research perspectives of new theories of sensor-based network with the potential explanation in genuine TC terms that are not just evolutionary but revolutionary in nature.

It is expected that the exploration of TC in sensor-based network environments would serve a useful role for routine collaborative operations where the participant does require sensory feedback. A synergistic advantage from system thinking point of view can be achieved by combining both TC and sensor-based network environments. The choice between the two must ultimately be related to the quality of sensory information available to all the stakeholders involved. More critical approaches are under development in this area.

References

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