Virtual Team Performance: A Transactive Memory System Perspective

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Abstract : Virtual teams (VT) initiatives, in which teams are geographically dispersed and communicate via modern computer-driven technologies, have attracted increasing attention from researchers and professionals. The growing need to examine how to balance and optimize VT is particularly important given the exposure experienced by companies when their employees encounter globalization and decentralization pressures to monitor VT performance. Hence, organization is regularly limited due to misalignment between the behavioral capabilities of the team's dispersed competences and knowledge capabilities and how trust issues interplay and influence these VT dimensions and the effects of such exchanges. In fact, the future success of business depends on the extent to which VTs are managing efficiently their dispersed expertise, skills and knowledge to stimulate VT creativity. Transactive memory system (TMS) may enhance VT creativity using its three dimensons: knowledge specialization, credibility and knowledge coordination. TMS can be understood as a composition of both a structural component residing of individual knowledge and a set of communication processes among individuals. The individual knowledge is shared while being retrieved, applied and the learning is coordinated. TMS is driven by the central concept that the system is built on the distinction between internal and external memory encoding. A VT learns something new and catalogs it in memory for future retrieval and use. TMS uses the role of information technology to explain VT behaviors by offering VT members the possibility to encode, store, and retrieve information. TMS considers the members of a team as a processing system in which the location of expertise both enhances knowledge coordination and builds trust among members over time. We build on TMS dimensions to hypothesize the effects of specialization, coordination, and credibility on VT creativity. In fact, VTs consist of dispersed expertise, skills and knowledge that can positively enhance coordination and collaboration. Ultimately, this team composition may lead to recognition of both who has expertise and where that expertise is located; over time, the team composition may also build trust among VT members over time developing the ability to coordinate their knowledge which can stimulate creativity. We also assess the reciprocal relationship between TMS dimensions and VT creativity. We wish to use TMS to provide researchers with a theoretically driven model that is empirically validated through survey evidence. We propose that TMS provides a new way to enhance and balance VT creativity. This study also provides researchers insight into the use of TMS to influence positively VT creativity. In addition to our research contributions, we provide several managerial insights into how TMS components can be used to increase performance within dispersed VTs.

Keywords : virtual team creativity, transactive memory systems, specialization, credibility, coordination