Discussion on Article 2: 
Use of Community Systems – 
Additional Explanations for the Utilization 
and Impact of BEC and CKP-Net

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This article reports on the use of two community systems: the BEC and CKP-Net. Using an action research approach, the authors examined which design factors of community support systems influence community activity in communities that use face-to-face communication as the main mode of communication. As we look to understand how technology impacts activity (and in turn, performance), we must understand streams of research that focus on technology utilization. Utilization can be based on various factors including, but not limited to, technology acceptance and task-technology fit.

One of the most cited models for understanding technology acceptance is the technology acceptance model (TAM; Davis, 1989). The TAM model was an early attempt to answer the question: What causes people to accept or reject information technology? This research brought forth two significant determinants to technology acceptance: perceived usefulness and perceived ease of use.

Perceived usefulness is how much a person believes that using a specific system will benefit their job performance. A system high in usefulness is one for which a user believes in the existence of a positive use-performance relationship (Davis, 1989). This relationship is a bit tenuous in both the community systems investigated in this study. However, those aspects of the community-supporting systems that appear to be the most highly related to job performance (i.e., obtaining information about workshops they need to attend or information directly related to courses one is taking) were the aspects of the systems that had the highest page-view rate.

Perceived ease of use refers to how easy a person believes a system will be to use. Keeping all factors constant, a user is more likely to accept an application that is perceived to be easier to use when compared to another. In this aspect, the two community systems appear to be perceived as fairly easy to use, but this is unclear from the data that are presented in the article. The latest revised model of the TAM, termed the unified theory of acceptance and use of technology (Venkatesh, Morris, Davis, & Davis, 2003), brings forth four constructs that lead to behavioral intention and usage behavior (performance expectancy, effort expectancy, social influence, and facilitating conditions), each of which needs to be considered when trying to understand the usage pattern of the community-supporting systems and what factors will play a role in the systems’ acceptance.
However, even well-conceptualized technologies that are accepted by users fail in the work environment when there is a poor degree of task-technology fit. Task-technology fit is the degree to which the technology assists an individual in performing his or her work tasks. Technologies have a positive impact on performance only when there is a correspondence between their functionality and the task requirement for users (Goodhue & Thompson, 1995).

To understand how a technology fits with work tasks, one can look at the characteristics of the tasks that are conducted in a given environment and how the characteristics of a technology fit with these tasks. For a technology to have a positive performance impact, there must be a good fit between the task and the technology, and the technology must be accepted by the organization. In this case, the technology in both the BEC and CKP-Net does not seem to have a direct relationship to the tasks these communities are engaged in. However, as noted in the article, the communities rely primarily on face-to-face communication, and it is those aspects of the technology that support face-to-face tasks that were the most successful in these systems.

I noted that the task acceptance model and task-technology fit are not two mutually exclusive theories. The two theories work hand in hand when it comes to the successful use of community-supported systems. A technology can be perceived as easy to use by a user, and it may be utilized to accomplish the task with the intent of increasing user performance. But when the technology does not fit the task requirements, the user may begin to perceive the technology to be not so easy to use (which may be an issue with the chat aspects of the community systems). For the successful usage of technology, there should be a blend of technology acceptance with task fit. When the choice of system design factors has to be made, system designers should make sure that the system deployed possesses the qualities that lead to technology acceptance in conjunction with there being a fit between the technology and the task.

REFERENCES


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