Creating Virtual Communities That Work: Best Practices for Users and Developers of E-Collaboration Software

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ABSTRACT

The use and import of virtual collaboration (VC) has increased at an exponential rate. Despite its potential advantages, however, VC continues to be hindered by feelings of distrust, detachment, and even isolation among virtual team members. For each of these reasons, the present study analyzed more than 1,500 survey responses to develop best practices for current users and developers of e-collaboration software. More specifically, this study used an expanded variation of Vorvoreanu’s (2008) Website Experience Analysis (WEA) to explore participants’ views of the seven most popular VC programs in use today: Basecamp, Dropbox, Google Drive, iDoneThis, Join.me, Skitch, and Skype. Qualitative results of this study revealed the significance of (1) name recognition, (2) interpersonal facilitation, (3) clarity/simplicity, (4) cost consideration, and (5) mobile accessibility. The study’s results were then used to develop five corresponding implications for both users and developers: (1) increased integration, (2) expanded physicality, (3) supplemental training, (4) financial entrée, and (5) utilized flexibility.

KEYWORDS

Brand Awareness, Results Only Work Environment (ROWE), Social Ties, Virtual Collaboration, Work Teams

In today’s globalized society, the use and import of virtual collaboration (VC) continues to increase at an exponential rate (Kock, 2005; Maznevski & Chudoba, 2000). VC allows team members to form around professional expertise without the restriction of physical proximity, thus, saving employees the time and expense of having to travel between distinct locations (Lipnack & Stamps, 2000). Virtual teams composed of people from across the globe can also result in increased cultural and technical diversity (Griffith & Neale, 2001), as well as the ability for members to work around the clock via asynchronous processes (Solomon, 2001). In addition, work produced virtually is more easily archived and evaluated because of the electronic trail left behind by results, comments, and interactions (Gibson & Cohen, 2003).

Despite each of its potential advantages, however, VC is not without its share of drawbacks (Cassivi, Lefebvre, Lefebvre, & Leger, 2004). As Berry (2011) writes, “The use of virtual teams adds complexity for management in many organizations because virtual teams are sociological and...
social systems just as is any team, but virtual teams also have their work processes intertwined with technological systems” (p. 192, see also Maznevski & Athanassiou, 2003). The primary shortcoming of virtual work stems from a lack of physical presence by/among its team members, resulting in feelings of exclusion and even isolation (Berry, 2006; Cohen & Gibson, 2003; Timmerman, 2000). For this reason, Kirkham et al. (2002) found team members were less satisfied by virtual work, Klein and Barrett (2001) found members were less likely to prioritize virtual work, and Hinds and Weisband (2003) found members were less willing to share information during a project’s initial stages due to their lack of face-to-face interaction (Gergle, Kraut, & Fussell, 2013; Tarmizi, 2006; Jenkins, 2012).

Due to the increased use and import of VC, combined with the deficiencies that continue to plague its successful utilization in the modern workplace, this study analyzed 1,505 survey responses to develop best practices for current users and developers of e-collaboration software. More specifically, this study used an expanded variation of Vorvoreanu’s (2008) Website Experience Analysis (WEA) to explore undergraduate students’ views of the seven most popular VC programs in use today: Basecamp, Dropbox, Google Drive, iDoneThis, Join.me, Skitch, Skype, (Sharma, 2015; see also Hyatt, 2015).

We begin this process by offering a brief review of VC, including its primary advantages and disadvantages. Next, we outline the study’s methodology and reveal its qualitative results: the significance of (1) name recognition, (2) interpersonal facilitation, (3) clarity/simplicity, (4) cost consideration, and (5) mobile accessibility. We conclude by discussing five corresponding implications for both users and developers: (1) increased integration, (2) expanded physicality, (3) supplementary training, (4) financial entrée, and (5) utilized flexibility.

As VC’s popularity continues to increase in today’s workplace, it is vital for empirical studies such as this to help organizations use their online resources more efficiently. Some organizations’ very survival may depend on it – especially those within high-velocity business environments, which rely on e-collaboration for strategic and operational purposes (Fink, 2007; see also Maznevski & Chudoba, 2000). It is also vital for studies like this to offer guidance for current and future designers of VC software in order for them to gain/retain their competitive advantage in the market place (Berry, 2011). For each of these reasons, it is our hope that this study’s results and implications will increase user satisfaction, efficiency and effectiveness, while simultaneously outlining next steps for software developers who hope to be(come) industry leaders in the field of e-collaboration.

VIRTUAL COLLABORATION

Virtual collaboration (VC) is defined as team members located in more than one geographic location who strive toward a common goal through the use of communication technology (e.g., Kock, 2000, 2008; Konradt & Hoch, 2007; Peters & Manz, 2007). The origins of VC trace itself to the late 1970s, beginning with early research into multiuser spaces and collaborative systems (Tate, Hansberger, Potter, & Wickler, 2014). By the late-1980s, the phrase cooperative learning was coined to describe instructional approaches that allowed students to work together online (Breen, 2013). During the late-1990s, I-Rooms became a popular way to define computer-mediated environments used for intelligent interaction, and by the mid-2000s both virtual worlds and virtual collaboration environments were created to “supplement the existing social web with virtual spaces that provide a means for the simultaneous presence of individuals” (Tate, Hansberger, Potter, & Wickler, 2014, p. 2-3; Bosch-Sijtsema & Sivunen, 2013).

Today, there are a myriad of terms and definitions used to describe VC processes: groupwares (Munkvold & Zigurs, 2005), online environments (Breen, 2013), collaborative technology (Wainfan & Davis, 2004), virtual teams (Townsend, DeMarie, & Hendrickson, 1998), virtual employees (Chen, Volk, & Lin, 2004), virtual organizations (Mowshowitz, 1997), virtual applications (Newman, 2014), digital work (Meares & Sargent, 1999), and learning networks (McKinney, McKinney, Franiuk, & Schweitzer, 2006), to name but a few. Although each of these terms shares certain characteristics,
On the Measurement of Participation Equality
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