

# **ANTECEDENTS TO USER ENGAGEMENT IN SOFTWARE DEVELOPMENT**

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## **ABSTRACT**

This research seeks to address a gap in understanding new insights into antecedents to user participation in software development. The role of users in software development is vital in building the best software products as efficiently as possible. Bringing users into the development process is important in overcoming the problems associated with failure to meet software development goals including meeting requirements, satisfying users, finishing on time, and staying within budget. It is understood that user participation can properly prepare and train users for this role. This research will study antecedents to user participation using theories, Job Engagement Theory and Workplace Spirituality.

**KEYWORDS:** job engagement theory, workplace spirituality, software development, User participation, project management

## **INTRODUCTION**

### **Antecedents to User Engagement in Software Development**

#### **Purpose and significance of the research project**

The first theory we focus on is Job Engagement Theory (Kahn, 1990), (Rich, 2010), this is described as the utilization of an employee's full self in terms of physical, cognitive and emotional energies to task performance. Kahn (Kahn, 1990) described job engagement as the utilization of an employee's full self in terms of physical, cognitive and emotional energies to task performance. Three psychological conditions that are antecedents of job engagement are meaningfulness, safety and availability (Table 1). This theory may provide a more comprehensive explanation for job performance effects and thereby help foster user engagement.

<b>Psychological Conditions</b>	<b>Engagement</b>
Meaningfulness/ Value	Physical tasks
Safety/Expectations	Emotional connections
Availability/Ability	Cognitive Contribution

**Table 1 Job Engagment**

The second theory we focus on is Workplace Spirituality (WPS) which provides us with a theoretical framework that allows for levels of analysis at the individual, group and organizational level (table 2). Workplace spirituality involves alignment between one’s core beliefs and the values of their organization, (Mitroff and Denton, 1999), and is defined as “... the recognition that employees have an inner life that nourishes and is nourished by meaningful work that takes place in the context of community (Ashmos and Duchon, 2000, p. 137).

<b>Individual Level Meaningful Work</b>	<b>Group Level Sense of Community</b>	<b>Organization Level Alignment with Organization Values</b>
Enjoyment	Sense of connection with Co-workers	Feel connected to organization’s goals
Energized	Employee/group support	Identify with organization mission and values
Personal meaning and purpose	Group common purpose	Organization cares about employees

**Table 2 Three dimensions of Work Spirituality**

### **Methodology**

The research involves the use of two surveys, one for users participating in software development and one for project managers managing the participating users and the software project. The questions pertaining to job engagement have been developed and tested.