Chapter 29
A Qualitative Case Study for Technology Acceptance Using TAM and the Kübler–Ross Models

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ABSTRACT

This study was an investigation of interactions based on the existing research, including the Technology Acceptance Model (TAM) (Davis, 1986) and The Kübler-Ross model for grieving and acceptance of dying that addresses emotional transitions of terminally ill patients. As obvious as this connection may be, there is little research that has been presented to analyze the human acceptance process related to other models of acceptance. Nor has there been an analysis of the technology acceptance experience from an emotional, cognitive perspective. This study produced themes that address the process for acceptance at an individual level. Themes associated with technology acceptance included force, emotions triggered by interaction with technology, how technology was introduced and relationships with those that introduced it, organic acceptance, cost associated with use, small wins learning to use the technology, societal perspectives, avoidability behaviors, social adoption, supported infrastructure, loss of freedom, finality and rejection, dependency, euphoria, and anxiety with use.

INTRODUCTION

Dr. Fred Davis (1986) developed and articulated the theoretical model for technology acceptance or TAM. TAM is a hallmark for technology acceptance leveraged in thousands of studies and articles. The premise of the model is in improving our understanding of the technology acceptance process and to create a theoretical basis for user acceptance testing, a methodology that enables system engineers and developers to evaluate a system prior to implementation (Davis, Bagozzi, & Warshaw, 1989).

The model of technology acceptance has continued to evolve, addressing both internal and external variables. Several models that have expanded upon the TAM include TAM2, TAM3, UTAUT, UTAUT2, HCI, TTF, CAM, TALC, AHP, and research on computer self-efficacy. The root of each subsequent model addresses the variables identified by Davis and continues to build upon the body of knowledge.

The Kübler-Ross model identifies a series of emotions experienced through the acceptance process. The original work of Kübler-Ross was to determine the emotions experienced by those going through the process of death and dying. The purpose of this research was to analyze previous experiences associated with technology acceptance through the lens of Kübler-Ross. The uniqueness of this study was using the Kübler-Ross model that outlines the five emotions of death and dying and discovery of potential for parallels between the two models. The Kübler-Ross model for the acceptance of death and dying reaches well beyond the interest of the original medical community (see Brounen, Verschoor, & Würdemann, 1983; Holleman, 2000; Passmore, 1989; Chao, 2008; De Miranda, 2003; Wylleman, Alfermann, & Lavallee, 2004; Sánchez & Campus, 2005; Boerboom, 2008; Sachdeva, 2009; Moncur & Waller, 2010; Kane, 2011; Massimi, 2011; Miller, 2012).

Technology acceptance has long been an area of continued research and growth, as technology evolves at an explosive rate. Also, people continue to evolve in their level of tolerance and acceptance of technology. This case study was an investigation through an analysis of interviews based on technology acceptance experience. The purpose of this study was to investigate the Kübler-Ross model as another dynamic that could be used for technology acceptance and to identify further themes associated with technology acceptance.

BACKGROUND OF STUDY

The purpose of this study provides an analysis of technology acceptance through the use of the TAM providing the perspective of the end user experience based on the Kübler-Ross model for acceptance, originally developed to understand the acceptance of death and dying. The researcher identified that there was a gap in the literature between the acceptance of technology and the emotional journey of the end user to achieve acceptance. The researcher proposed a qualitative case study that included 16 participants to discover and articulate their technology acceptance experience. The use of "technology" by the participant included the following: smartphones, tablets, a laptop, ecosystems, a suite of applications, cloud storage and sharing, High Definition television, an analog cell phone (pre-smartphones), SMS text messaging, Caller ID, and even a dishwasher. The researcher surmised that if the end user decided the technology then there would be a greater and more truthful response throughout the interview process. The interviewees selected a technology that had had the biggest impact on them or triggered the greatest emotional response. Many of the experiences identified through the interviews focused on a job-related function. Though this was not a prerequisite, it fit nicely within the context of the technology acceptance model, where the focus of Davis's research was on technology in the business environment.

Definition of Terms

The following terminology is unique to this research study and defined as follows:

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