

Experiencing Technology: Emerging Concepts of Hedonic Technology Use
Robin Wakefield
Baylor University
Robin_Wakefield@baylor.edu

The study of technology acceptance and use has predominately emphasized utilitarian belief factors (e.g., perceived ease of use and perceived usefulness) to predict rational user behavior. In organizations, acceptance and use is regarded as an economic challenge with logical solutions. For example, rational employees engage technology that is easy to use and effective for the task. The economic approach presupposes the user as a logical thinker whose intentions to use a technology are based on functional or utilitarian outcomes. However, intelligent users may also avoid technology even when it is the rational choice.

The premise underlying this research is that individuals both use and experience technology. That is, individuals engage technology for utilitarian as well as experiential outcomes. Prior literature suggests that technology possesses symbolic features including subjective representations and social meaning factors. Individuals may use technology for reasons other than functionality. Technology may be used to establish social identity, to gain group acceptance or achieve a certain social standing. Technology may also be used to achieve a pleasurable (i.e., hedonic) experience. Recent IS research has studied subjective factors of technology use including playfulness, enjoyment, cognitive absorption, engagement, and intrinsic motivation. These studies lay the groundwork for considering the role of cognition in motivating technology use for other than functional or organizational purposes.

Hedonic technology use is defined as the behavior of users related to the multi-sensory, imagery, and emotive aspects of information processing. The psychology literature presents two interactive modes of information processing in the domain of cognitive-experiential self-theory (CEST): rational and experiential. Cognition has typically been measured in both psychology and IS in terms of one's beliefs about objective attributes of an object. However, psychology researchers also identify within the cognitive stage the existence of implicit and automatic schemata that are unconsciously activated and form a theory of reality in the experiential system. Whereas rational information processing motivates technology use by means of beliefs, attitudes and logical processes, experiential processing focuses on intangible, subjective stimuli. Thus, the decision to use (or not use) a technology may be driven by factors unrelated to functional outcomes but significantly associated with experiential outcomes. A salient illustration is Internet usage in which the biggest success stories are the pornography industry and online gambling and gaming.

IS research predominately focuses on the rational, economic aspects of organizational technology use. However, understanding dual-processing theory in relation to technology acceptance and use has implications for managerial strategy and technology training to maximize favorable technology outcomes in the workplace. The hedonic response imparts a fundamentally different orientation toward understanding human-computer interactions and represents a powerful motivational force for using technology. Understanding how, when, and why the experiential system is activated has implications for the harnessing of hedonic energies in the organizational context.

This research presents propositions for further development and testing. Based on prior IS research and dual information processing theory the propositions include:

1. The user traits of playfulness and sensory innovativeness are positively related to imagery and have a stronger relationship with imagery than with beliefs.
2. Audio and visual stimuli are positively related to imagery and have a stronger relationship with imagery than with beliefs.
3. Technology tasks incorporating fantasy are positively related to imagery and have a stronger relationship with imagery than with beliefs.

One approach to empirically test the relationships implied by the propositions is to use a field study and survey methodology for data collection. The research variables may be measured using multi-item scales already developed and tested in IS research. A computer playfulness scale originating with Webster and Martocchio (1992) contains items such as creative, imaginative, flexible and inventive to assess individual playfulness. Sensory innovativeness has received attention in the marketing literature with scales created by Venkatraman and Price (1991) to test the construct. Measuring user imagery may be as simple as asking respondents the types of images generated during the use of certain technologies. The marketing literature also has validated scales to measure imagery vividness (Bone and Ellen 1992) while the psychology literature assesses imagery related to verbal and

nonverbal dimensions (Shaw and DeMers 1986). Furthermore, the perceived ease of use (PEOU) and perceived usefulness (PU) scales to measure technology beliefs are well-accepted in the IS literature.

Fantasy, audio and visual elements may be integrated into experiments that incorporate websites, various types of software, GUIs or different technologies. For example, manipulating the sensory elements within websites or interfaces and measuring imagery and beliefs will show the strength and direction of the proposed relationships. Similarly, the inclusion of fantasy elements within technology tasks is a means to study the proposed relationships with imagery and beliefs. Venkatesh (1999) provides such an example with a game-based training program in which users hunt monsters and find treasure.

Other considerations that represent possible confounding factors include user differences and the type of technology task involved. It is likely that the nature of the task and prior experience will influence the testing of the propositions. These factors should be evaluated and controlled in the study.