Lifestyle-technology fit: Theorizing the role of self-identity in IS research

Constantinos K. Coursaris [a,b,c,*], Wietske Van Osch [d]

[a] Department of Media and Information, 414 College of Communication Arts and Sciences, Michigan State University, East Lansing, MI 48824, USA
[b] Department of Advertising and Public Relations, 414 College of Communication Arts and Sciences, Michigan State University, East Lansing, MI 48824, USA
[c] Usability/Accessibility Research and Consulting, 414 College of Communication Arts and Sciences, Michigan State University, East Lansing, MI 48824, USA
[d] Department of Media and Information, 436 College of Communication Arts and Sciences, Michigan State University, East Lansing, MI 48824, USA

ABSTRACT

Sociology and modernist theories have long emphasized the central role of lifestyle in processes of self-identity and attitude formation. Furthermore, lifestyle has been used to great effect in marketing and health research to predict attitudes, cognitions, and behaviors, but has largely been ignored in the IS field. In this study, we demonstrate the potential usefulness of incorporating lifestyle into IS research by using lifestyle cluster segmentation in the context of technology adoption. Based on a U.S. national random sample of 402 non-cloud service users, we propose, analyze, and validate a multi-faceted model of cloud technology adoption that integrates technology attributes—the dominant predictors in IS adoption and acceptance models—with a range of demographic, domestic, leisurely and professional variables for providing a holistic theoretical understanding of and practical insights into the technology adoption process.

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1. Introduction

Convergence exists amongst various models of IS adoption and acceptance that individual's beliefs and attitudes about or perceptions of IT have a significant influence on usage behaviors. Furthermore, general awareness exists among IS scholars that individual differences are important potential antecedents to user satisfaction and subsequent adoption or usage intention. Yet, the question of individual characteristics and their effect on technology adoption or acceptance has received surprisingly little attention (Devaraj, Easley, & Crant, 2008).

Whereas prior research has focused considerable attention on the centrality of beliefs and attitudes in several key outcomes such as attitudes toward or usage of IT, less emphasis has been placed on how such beliefs and attitudes are formed (Agarwal & Karahanna, 2000). A few exceptions exist, namely Devaraj et al. (2008), Agarwal and Karahanna (2000), Agarwal and Prasad (1999), Davis (1993), Davis, Bagozzi, and Warshaw (1992), Compeau and Higgins (1995). Each of these studies examine different influences on the formation of beliefs about and attitudes toward IT, including perceived enjoyment (Davis et al., 1992), self-efficacy (Compeau & Higgins, 1995), system design characteristics (Davis, 1993), cognitive absorption (Agarwal & Karahanna) and various individual and situational influences (Agarwal & Prasad, 1999). More recently, Devaraj et al. (2008) have pointed to the importance of analyzing personality—through the Five-Factor Model—for understanding technology acceptance.

However, one limitation among these models of antecedents to beliefs and attitudes about IT is that they have focused exclusively on other system design dimensions or characteristics of the interaction between the user and the system at the expense of analyzing individual user characteristics beyond a limited set of user-related control variables, such as gender, age, education, and knowledge levels. Furthermore, although the recent attention for personality is encouraging, lifestyle—through its comprehensive nature including leisurely and professional dimensions in addition to personality metrics—as well as its potential to bridge individual-level, behavioral with broader societal-level, structural characteristics may be more useful in the context of studying technology adoption and acceptance.

Recent advances in marketing and health studies have suggested that lifestyle is an important antecedent to human attitudes and behaviors. Hence, borrowing from relevant insights in these reference domains, including psychology, health studies, as well as marketing and consumer research, we explore the importance of lifestyle in the formation of beliefs and attitudes toward IT that subsequently affect adoption intention and usage behaviors. In an era where high technologies are becoming extensions of one's individual identity and important media for communicating

* Corresponding author at: Department of Media and Information, 404 Wilson Road, 414 College of Communication Arts and Sciences, Michigan State University, East Lansing, MI 48824, USA. Tel.: +1 517 944 0461; fax: +1 517 355 1292.
E-mail addresses: coursari@msu.edu (C.K. Coursaris), vanosch@msu.edu (W. Van Osch).

lifestyle, ignoring lifestyle dimensions of the user that extent beyond basic demographic characteristics—gender, age, and education—to include a broader set of variables—including attitudes, values, and interests—will limit our abilities to provide a more complete understanding of how beliefs and attitudes toward IT emerge and evolve.

In particular given the increasing diversity and proliferation of similar and equally functional technologies, selection of one tool over another will likely be affected to a growing extent by the fit between the technology and the lifestyle or identity of the individual user rather than beliefs and attitudes about its utilitarian performance. Therefore, this study aims to examine the relationship between lifestyle and technology—i.e., lifestyle-technology fit—for several reasons. First, technology adoption and acceptance models are well-established and validated in the IS literature and have been subject to many extensions (see summary by Venkatesh, Morris, Davis, & Davis, 2003), none of which have focused on lifestyle factors. Second, the basic conceptions underlying technology adoption and acceptance models place significant emphasis on individual attitudes and beliefs to technology, in which lifestyle is likely to play a role. Third, lifestyle has been found to be a significant individual-level predictor of consumer and health behaviors, hence, effects of lifestyle on technology adoption behaviors seems probable.

The remainder of this paper is organized as follows. First, we trace the evolution of the concept of lifestyle from its sociological origin in the works of Max Weber to the more recent modernist perspective of lifestyle as a means of self-expression in the works of Anthony Giddens. Subsequently, we discuss how lifestyle has been successfully applied in other behavioral disciplines for understanding consumer and health behaviors as well as how we can extend theories of technology adoption through a lifestyle lens. Following the literature review, we discuss the methodological approach underlying this study and present the findings from our PLS analysis of a random sample of 402 surveys in order to analyze and validate the proposed multi-faceted model of technology adoption that integrates technology attributes with a range of demographic, domestic, leisurely and professional variables for providing a holistic theoretical understanding of and practical insights into the adoption process.

2. Theoretical background

In this section, we present prior literature on lifestyles, in particular in the context of technology adoption and acceptance. Hereto, we first present an overview of lifestyle theories, followed by a discussion of the relation between lifestyles and attitudes. Subsequently, because technology acceptance and adoption theories are well-established in the IS field, we present only a brief overview of the relevant literature. Finally, we extend this work by integrating lifestyle into adoption theory to investigate the relation between lifestyle and technology attributes influencing adoption intention.

2.1. Lifestyles

A lifestyle typically refers to an individual's view of the world. Although in the traditional, more restricted sociological sense of the word, the term signifies a distinctive style of life of specific status groups (Rojek, 1985; Sobel, 1982; Weber, 1946; Weber, 1978), Giddens (1991) argues that in the post-traditional or modernist era—where social roles are no longer defined for us by society—each individual needs to actively construct his or her own self-identity by means of a variety of lifestyle choices. Rather than a choice of the more affluent classes, Giddens (1991)

postulates that everyone in the modern society has to construct or select a lifestyle—through choices about jobs, consumption patterns, behaviors, attitudes and beliefs—although wealth certainly enhances one's flexibility in doing so.

We concur with Giddens' (1991: 81) who argued that the more post-traditional the setting, the more lifestyle concerns the very core of one's self-identity, its making and remaking. Hence, in the contemporary consumer culture (Featherstone, 1987) and due to the shift of mass consumption to mass customization (Prahalad & Krishnan, 2008), lifestyle connotes individuality, self-expression, and self-consciousness and is expressed through a wide range of choices and behaviors including one's body, clothes, speech, leisure pastimes, food preferences, home, as well as a variety of technology choices. Consequently, consumption behaviors—specific products, services, or technologies as important self-identity markers—have become the cornerstone of lifestyle construction.

Due to our interest in incorporating lifestyle into IS theory, an initial exploration of the concept of lifestyles provided an impressive number of potential lifestyle variables and lifestyle segmentation models in the extant literature. However, an in-depth exploration of these five models sheds light onto important differences and similarities as well as advantages and disadvantages for the context of technology adoption, hence, can provide a foundational theory to guide IS researchers interested in lifestyle considerations.

More specifically, in the multidisciplinary literature on lifestyles, we have identified five models for assessing and segmenting lifestyles (see Table 1). The first model, by Plummer (1974) emerged in marketing and focuses on four specific dimensions of lifestyle namely activities (e.g., hobbies), interests (e.g., community), opinions (e.g., politics), and general demographics. The second model, by Huneke (2005) with the same origin on marketing, focuses primarily on household dimensions of lifestyle including running a home, childbearing, making a living, and/or seeking community.

The third model, proposed by Doyle and Youn (2000) offers a more restricted and psychological perspective of lifestyle in terms of two dimensions, namely personality traits and individual profile. The fourth and a more recent model, by Ganglmair-Wooliscroft and Lawson (2011) offers a similar psychological assessment of lifestyle segments through four dimensions, including attitudes, interests, opinions, and values.

The fifth and final model, the Brand Strategy Research (BSR) segmentation model, originally proposed in 1985 by Brethouwer et al., has gained significant popularity recently in the context of analyzing new media, (Bouwman, Carlsson, & Molina-Castillo, 2008; de Reuver & Bouwman, 2010; Molina-Castillo, López-Nicolás, & Bouwman, 2008). This model is the most comprehensive model and analyzes five dimensions of lifestyle, including character, type of household, professional information, hobbies and interest, as well as values. As such it provides a useful integration of the above four model in that it combines the core focus of each of them; namely hobbies (Plummer, 1974), household type (Huneke, 2005), personality (Doyle & Youn, 2000) and values (Ganglmair-Wooliscroft & Lawson, 2011), while augmenting these with an assessment of professional identities.

In this study, we use the BSR segmentation model in determining the role of lifestyle in technology adoption. Our reasons for doing so are twofold. First, as abovementioned, this model is most comprehensive by encompassing psychological, domestic, leisurely, and professional dimensions. Second, this model has been previously validated for its usefulness in consumer assessments of new media (Bouwman et al., 2008; de Reuver & Bouwman, 2010; Molina-Castillo et al., 2008), hence, is expected to be relevant in understanding technology adoption. Third, since the BSR model