

Association for Information Systems

## AIS Electronic Library (AISeL)

---

DIGIT 2019 Proceedings

Diffusion Interest Group In Information  
Technology

---

12-15-2019

### Risky Behavior: A Three-Factor Adoption Model

Michael Erskine

*Middle Tennessee State University, michael.erskine@mtsu.edu*

Christopher Sibona

*University of North Carolina Wilmington, Wilmington, NC, USA, sibonac@uncw.edu*

Elizabeth White Baker

*Virginia Commonwealth University, bakerew@vcu.edu*

Follow this and additional works at: <https://aisel.aisnet.org/digit2019>

---

#### Recommended Citation

Erskine, Michael; Sibona, Christopher; and White Baker, Elizabeth, "Risky Behavior: A Three-Factor Adoption Model" (2019). *DIGIT 2019 Proceedings*. 12.

<https://aisel.aisnet.org/digit2019/12>

This material is brought to you by the Diffusion Interest Group In Information Technology at AIS Electronic Library (AISeL). It has been accepted for inclusion in DIGIT 2019 Proceedings by an authorized administrator of AIS Electronic Library (AISeL). For more information, please contact [elibrary@aisnet.org](mailto:elibrary@aisnet.org).

# Risky Behavior: A Three-Factor Adoption Model

*Completed Research Paper*

**Michael A. Erskine**  
Middle Tennessee State University  
[michael.erskine@mtsu.edu](mailto:michael.erskine@mtsu.edu)

**Christopher J. Sibona**  
University of North Carolina - Wilmington  
[sibonac@uncw.edu](mailto:sibonac@uncw.edu)

**Elizabeth White Baker**  
Virginia Commonwealth University  
[bakerew@vcu.edu](mailto:bakerew@vcu.edu)

## Abstract

*This study seeks to understand the convenience versus privacy risk debate that many consumers knowingly and unknowingly participate in every day, as well as the impacts of these information privacy and trust concerns on innovation adoption. We investigate the relationship between the motivation, perception, and intention-to-use of reputation-aware applications, particularly regarding possible privacy threats. Our theoretical model presents a unique and novel interpretation of technology acceptance of reputation-aware systems that have high privacy risks. Specifically, we combine PMT and TAM to propose a three-factor technology adoption model to evaluate the risk, coping, and benefit calculus of technology adoption. We pose two research questions: (1) What are the factors influencing a user's assessment of the benefits and threats adopting reputation-aware applications?; and (2) Does a three-factor adoption model present greater predictive power to assess behavioral intentions? The results of our empirical evaluation reveal that behavioral intent regarding the adoption of reputation-aware applications can be predicted using a three-factor adoption model, with the findings significant and reliable across all three factors. Additionally, the results show that the conceptual model has improved predictive power over existing acceptance models in the context of reputation-aware applications. The TAM/TPB components were able to predict approximately 62% of the variance of behavioral intention, whereas the PMT and TPB model was able to predict 74% of the variance of behavioral intention.*

**Keywords:** Human-computer interaction, technology acceptance, protection motivation theory, privacy.