Understanding Risk Perception Related to Trust and Bias in Cyberspace

Emeka P. Idoye and Eui H. Park
Department of Industrial & Systems Engineering
North Carolina Agricultural & Technical State University
Greensboro, USA

Abstract

This study is to understand a risk perception related to trust and bias in cyberspace under different levels of cognitive risks. It is assumed that risk perception in cyberspace is different by gender and is influenced by trust and bias, as well as by fear and privacy factors. Based on Kahneman & Tversky's study of Prospect Theory, the trust and bias risk quadrants are used to determine how an individual will perceive usage of cyberspace with high or low trust; high or low bias; high or low fear; and high or low privacy. The goal of this study is to mitigate fear and privacy issues between genders while performing certain activities online. This study was conducted by implementing two phases of surveys. This study benefits (1) internet and website designers and users in terms of considering different levels of risks in design that will help increase trust; and (2) reducing negative perceptions which are key to developing trust relationships with cyberspace users.