

## Association for Information Systems AIS Electronic Library (AISeL)

---

AMCIS 2012 Proceedings

Proceedings

---

# Novice User's Trust of Data Mining Technology

Thomas Ngo-Ye

*School of Business, Dalton State College, Dalton, GA, United States., [tngoye@daltonstate.edu](mailto:tngoye@daltonstate.edu)*

Jae Choi

*Computer Information Systems, Alabama State University, Montgomery, AL, United States., [jchoi@alasu.edu](mailto:jchoi@alasu.edu)*

Follow this and additional works at: <http://aisel.aisnet.org/amcis2012>

---

### Recommended Citation

Ngo-Ye, Thomas and Choi, Jae, "Novice User's Trust of Data Mining Technology" (2012). *AMCIS 2012 Proceedings*. 65.  
<http://aisel.aisnet.org/amcis2012/proceedings/Posters/65>

This material is brought to you by the Americas Conference on Information Systems (AMCIS) at AIS Electronic Library (AISeL). It has been accepted for inclusion in AMCIS 2012 Proceedings by an authorized administrator of AIS Electronic Library (AISeL). For more information, please contact [elibrary@aisnet.org](mailto:elibrary@aisnet.org).

# **Novice User's Trust of Data Mining Technology**

**Thomas Ngo-Ye**  
Dalton State College  
tngoye@daltonstate.edu

**Jae Choi**  
Alabama State University  
jchoi@alasu.edu

## **ABSTRACT**

Although data mining has been widely and successfully used in the domain of business operations, research into how novice end users might make an adoption decision is sparse and much needed. This paper employs a view that trust is generally assumed to be an important precondition for the adoption of any information technology and identifies the antecedents of trust in data mining systems synthesizing empirical studies on people's trust in computer-mediated services as well as multiple anecdotal evidences documented in the literature. In recent decades, innovative information technologies (IT) and their applications have profound impacts to many aspects of people's work and life. The relationship between people and technology becomes more critical. While the adoption and use of technology has been widely studied, trust of information technology has not received much attention.

We investigate user's trust toward an innovative and important information technology – data mining. We not only adapt conceptual relationships previously proposed in e-commerce context, but also propose new constructs and new hypotheses. We contribute to trust literature by developing and validating a new conceptual model of trust toward an innovative technology. It will broaden our understanding of an important area of trust application – trust of information technology. Our research also has practical implications for organizations where management could benefit from this study to know why novice business users trust or not trust data mining technology.

We can imagine that in some scenarios where data is collected and available. Easy to use data mining tools are also accessible. So the question is to what extent novice users trust and distrust data mining applications. For a trader (such as in stock market, option market or commodity market) who is a novice user of data mining technology, what is the degree of trust and distrust of the data mining technology? Understanding this would help organizations better adopt and use data mining applications for business activities.

In essence this view of user trust of data mining technology is similar to that in online environment for e-commerce. The core is does novice user trust data mining technology backed application to make a business decision, such as buy or sell a stock, accept or decline a loan application, send out promotion to a particular potential prospect, or make a phone call to a potential donor.

In this paper, we concern more of the overall judgment, sentiment and attitude of users on the data mining application and examine the antecedents affecting user's trust of data mining technology.