Internet Voting Usefulness: An Empirical Analysis of Trust, Convenience and Accessibility

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ABSTRACT

Opportunities for Internet use in the political process are constantly emerging. The use of the Internet to obtain political news and share political information is gaining momentum. Remote Internet voting initiatives are also growing in popularity. This study presents a model of Internet voting adoption that explores the predictors of the perceived usefulness of Internet voting systems. To test the model a survey is administered to 372 citizens. The results of structural equation modeling indicate that accessibility, convenience, disposition to trust, and Internet trust all have a significant impact on the perceived usefulness of Internet Voting. Implications for research and practice are discussed.

Keywords: Accessibility, Convenience, Internet Voting, Perceived Usefulness, Technology Adoption, Trust

INTRODUCTION

In the United States, the use of the Internet to get political news and share political information has been gaining momentum. Pew Internet & American Life Project issued a report on the Internet activities of American citizens’ preceding the 2008 presidential election. The report reveals forty-six percent (46%) of Americans used the Internet to obtain political news. Specifically, forty percent (40%) of all Americans (Internet users and non-users) obtained news and information about the 2008 campaign via the Internet. Twenty-three percent (23%) of Americans said they received emails urging them to support a candidate or discuss the campaign. Ten percent (10%) of Americans used email to contribute to the political debate, while 1 in 10 (4% of all adults) sent or received a text message about the campaign or other political issues on a regular basis. This integration of electronic services into the political process is increasing over time.

Future opportunities for Internet use in the political process are constantly emerging, especially in the voting process. During the 2004 elections, thirty-one percent (31%) of Americans used the Internet for political news and information. In the 2008 elections, forty percent (40%) of Americans used the Internet for political purposes (Pew Internet and American Life, 2008). Citizens are also using the Internet to cast their ballot via a phenomenon called Internet voting. Oostveen and Besselaar
(2004) define Internet voting (I-voting) as “an election system that uses encryption to allow a voter to transmit his or her secure and secret ballot over the Internet.” Currently, efforts are in motion to enable military and overseas voters to return their ballots in a timely manner via I-voting. The lack of reliable mail delivery and distance are cited as major causes of a significant number of military and oversea votes not being counted. Urbina (2010) notes that some three million military and overseas voters from approximately thirty-three (33) states will be permitted to cast their votes over the Internet. This acceleration in I-voting is because of the Military and Overseas Voter Empowerment Act signed into law in 2009 that mandates helping military and overseas voters exercise their rights to cast a ballot (“Internet Voting, still in Beta,” 2010).

Governments around the world have been very active in researching, pilot testing, and implementing the Internet in the voting process. Estonia is recognized as the first nation to conduct a “legally binding” municipal general election via the Internet in 2005 when 1.85% of all voters voted online. In 2007, Estonia reported that 30,000 citizens used Internet voting (1 voter for every 30 eligible voters). In 2009, approximately 104,415 citizens of Estonia voted over the Internet, representing 9.5% of the people with the right to vote (Borland, 2007; Maaten, 2007; Mardiste, 2007). Election-America (2008), a professional organization that provides solutions for professional election projects, assisted The Paris Bar Association (the world’s oldest voting body) in conducting remote voting from 2002 to 2008. In 2007, the organization also set the world record for the most Internet voters (69.1%) while conducting the national presidential primary in France (Fraunholz, 2007). Currently, Switzerland is implementing a pilot program that will give some 110,000 Swiss voters living abroad the option to engage in Internet voting (ACE Electoral Knowledge Network, 2007).

Several research studies have explored the effects of the Internet on political participation (Alverez & Nagler, 2001; Anttiroiko, 2003; Gonsalves, 2008; Henry, 2003; Mahrer & Krimmer, 2005; Schaupp & Carter, 2005; Stanley & Weare, 2004). However, few studies focus on technology adoption factors. Oostveen and Besselaar (2004) state that “we are only beginning to understand how technologies may support democracy and therefore we need a better knowledge of the micro dynamics of political participation and communication, and how ICTs [Information Communication Technologies] intervene in these processes (Oostveen & Besselaar, 2004). Hazlett and Hill note that “it is essential to investigate what kinds of factors influence consumer attitudes and behaviors towards e-services” (Hazlett & Hill, 2003).

This study explores the factors that influence citizens’ perceptions of and intentions to use I-voting. A model of I-voting adoption is presented that focuses on the antecedents of perceived usefulness. Benbasat and Barki (2007) call for research that explores in detail perceived usefulness as a factor influencing adoption. Researchers have begun to explore the antecedents of perceived usefulness (Gefen, Rose, Warkentin, & Pavlou, 2005); however, more studies are needed. Building on previous literature, (Belanger & Carter, 2008; Carter & Belanger, 2005; Gefen et al., 2005; McKnight, Choudhury, & Kacmar, 2002), we respond to the call by exploring specific predictors of perceived usefulness. We posit that disposition to trust, Internet trust, convenience and accessibility have a significant impact on the perceived usefulness of Internet voting.

The remainder of the paper includes a discussion of the background literature, the presentation of the research model and hypotheses, a description of the methodology, an analysis of the results, a discussion of findings and implications for research and practice.

BACKGROUND LITERATURE

Technology adoption is a major area of research in the field of information systems (IS). Adoption research is concerned with identifying the factors that influence user acceptance
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www.igi-global.com/chapter/a-multifactorial-analysis-of-the-acceptance-of-recommender-system-for-saudi-universities-the-literature-revisited/173967?camid=4v1a

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