Chapter 76
C2C Mobile Commerce: Acceptance Factors

Lori N. K. Leonard
University of Tulsa, USA

ABSTRACT
C2C e-commerce is being changed by the acceptance of mobile commerce devices. However, the extent of the use of mobile devices for C2C e-commerce is affected by many factors. A model of an individual’s intention to make use of mobile devices for C2C e-commerce is presented. That model includes usefulness, ease of use, convenience, trust, and security. Propositions are developed for future research endeavors.

INTRODUCTION
Consumer-to-consumer (C2C) e-commerce has not been studied as much as other areas of e-commerce (Jones & Leonard, 2007), but C2C e-commerce is one of the fastest growing segments in e-commerce, heavily due to the increase in popularity of online auctions. However, C2C e-commerce includes more than the use of online auctions. C2C e-commerce can be seen in places such as web forums, chat rooms, and third party consumer listings. With this increase in C2C e-commerce popularity, there is still very little known about the acceptance of mobile devices for C2C e-commerce transactions.

Mobile devices provide users the ability to conduct transactions anywhere, at anytime. Mobile devices offer a unique opportunity to conduct C2C e-commerce. Many individuals are conducting C2C e-commerce as a means to acquire products at a more reasonable price, to acquire products that are considered scarce, or to sell items as another source of income, to name a few. However, these same individuals have jobs and other activities that may otherwise limit one’s ability to utilize C2C e-commerce frequently, especially when online auctions end during the work day hours. Therefore, mobile devices offer the ability to monitor online items at any time. Mobile devices offer the opportunity for users to conduct transactions at their convenience, raising the question, “What
factors impact the acceptance of mobile devices for conducting C2C e-commerce?”

This chapter addresses that question by exploring the mobile commerce research regarding intention to use. From that research, a model is proposed, utilizing previously studied factors, for an individual’s intention to utilize mobile devices for C2C e-commerce. Propositions are provided for future research as well.

BACKGROUND

Mobile devices open a range of opportunities for conducting C2C e-commerce. However, determining the acceptance of mobile devices for C2C e-commerce transactions is yet to be determined. Many researchers have examined mobile commerce in terms of adoption, intent to use, and success. In this section, a few of those studies will be explored.

The intention to use and the acceptance of mobile devices has been examined. Wang, Lin, and Luarn (2006) explored the behavioral intention of users with regards to mobile commerce. Using the technology acceptance model (TAM), the theory of planned behavior (TPB), and the mobile banking acceptance model, they collected data from 258 users in Taiwan and found self-efficacy, perceived financial resources, perceived usefulness, perceived ease of use, and perceived credibility to impact a user’s intent to use mobile services. Wu and Wang (2005) studied users’ acceptance of mobile commerce in terms of behavioral intent. Surveying users who were invoked in online banking, shopping, investing and or online services, they found perceived risk, cost, compatibility, and perceived usefulness to impact a user’s intent. Bhatti (2007) also studied mobile commerce’s acceptance by looking at behavioral intent. Collecting data from a survey of mobile commerce users, he found perceived behavioral control, perceived ease of use, and subjective norms to impact intent.

Xu and Gutierrez (2006) examined critical success factors in mobile commerce. Utilizing a Delphi panel of experts in mobile commerce and wireless communications, they found four factors to be important in mobile commerce success—convenience, ease of use, trust, and ubiquity. Jih (2007) also found convenience to be vital in shopping intention via mobile commerce.

Finally, Fang, Chan, Brzezinski, and Xu (2005-6) examined acceptance of mobile commerce with regards to intended use. They took a different approach than the previous studies by looking at task type – general, gaming, and transactional. Therefore, they developed and tested a model for each. For general tasks, perceived usefulness and perceived ease of use influenced the user’s intention to use mobile commerce. For gaming tasks, perceived playfulness influenced the user’s intention to use mobile commerce. For transactional tasks, perceived usefulness and perceived security influenced the user’s intention to use mobile commerce.

From these studies it is evident that many factors can play a role in influencing mobile commerce’s use. The next section will take the results of the previously mentioned studies and apply them to C2C e-commerce, therefore, resulting in a model to determine mobile device use in C2C e-commerce.

MODEL FORMULATION

Given the above studies’ findings, a model for the intent to use mobile devices for C2C e-commerce is presented. The model incorporates variables from the mobile commerce studies as they apply to C2C e-commerce. The model proposes that perceived ease of use, usefulness, convenience, trust, and security impact the intention for users to utilize mobile devices for C2C e-commerce. Figure 1 presents the proposed model.