

THE STRENGTH OF TRUST: DISCUSSION ON THE INFLUENCING FACTORS OF THE CHINESE FARMERS' ADOPTION OF MOBILE AGRICULTURAL SCIENCE AND TECHNOLOGY KNOWLEDGE SERVICE

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ABSTRACT. Numerous scholars have pointed out that the mobile service has played an important role in dissemination of knowledge in science and technology, but for now, the mobile service has not played an intermediary role in the dissemination of knowledge of agricultural science and technology as it should be in our rural areas. According to the relative theories and literature, this article builds a theoretical model of the farmer's adoption behavior of the mobile agricultural knowledge services from the angles of the adoption of mobile technology, the expectations of usefulness, communication channels, trust, the adoption intention and the adoption behavior. Based on the survey, use the exploratory factor analysis, confirmatory factor analysis and structural equation model to verify the above theoretical model. In conclusion, the mobile technology adoption, the expectations of usefulness effect the adoption of behavior indirectly through the adoption of intention; trust is an intermediary variable for the communication channels to impact the adoption intention then to the adoption behavior. Thereby enhancing the farmer's adoption intention, popularizing rate of mobile service in rural areas and improving the farmer's trust can enhance the intermediary role of mobile service in diffusing the knowledge of agricultural science and technology.

Keywords: Trust, Mobile service, Knowledge of agricultural science and technology, Farmers adoption behavior

1. **Introduction.** Theory and practice show that information technology has become the key to economic growth [1]. Information technology promotes sustainable economic growth through three channels: information technology which in produce (information technology and equipment production, Information technology to assist the production, etc.) provides new products or new services (Internet, etc.), improve the contact between in business and customer (e-commerce, etc.). More than half of China's population is farmers ¹. The development of agriculture is very important in China. Therefore, use information technology to promote the basic driving of Chinese agricultural development in agricultural production, but also solve agricultural problems about China's strategic selection. In survey that was done by J. Rolfe et al. (2003), 47% of the surveyed farmers

¹CNNIC "The 26th China Internet Development Statistics Report".