

# Chapter 11

## Culture and Internet Banking Technology: Long-Term Orientation Over the Acceptance

**Leelien Ken Huang**  
Feng Chia University, Taiwan

### ABSTRACT

*The interaction between the cultural value of long-term orientation and internet banking technology acceptance is examined. A survey involving a total of 376 potential users was conducted in an internet banking setting in Taiwan. The results confirm previous TAM findings that both efficacy and belief variables have significantly positive direct and in-direct effects on the usage, but under the cultural influence of long-term orientation, users remain hesitant to accept internet banking technology because they are more concerned with face-to-face long-term bank relationships to ensure future gratification than with current social status influence to obtain immediate benefits (e.g., convenience). Practitioners may refer this cultural influence on users' behavior in Fin-tech development. The implications of the study are discussed.*

### BACKGROUND

Despite the benefits of internet banking, its use is controversial because of varying customer perceptions of fund management through branch counters or ATMs (and other electronic devices, such as mobile phones, laptops, and PCs) services, the convenience or inconvenience of banking hours, security risks and privacy issues, technology comprehension issues, and Internet problems (Callaway, 2011; Chuang & Hu, 2012; Chaudhury, Mallick, & Rao, 2001; Proenca, Silva, & Fernandes, 2010). Our primary concern involves the intention of users to conduct financial transactions on a bank's website, as this capability continues to be a fundamental and important issue in promoting internet banking services.

DOI: 10.4018/978-1-5225-7214-5.ch011

Although the TAM can be used in a variety of adoption contexts, prior research indicates that the TAM may not be applicable to all cultures (McCoy, Everard, & Jones, 2005; Wu, 2006). Chinese culture, for example, has often been recognized as differing significantly from Western culture (Ferraro, 2002; Hofstede, 2001). Technology adoption behaviour in the Chinese setting could differ from Western empirical findings for the TAM. It is thus worthwhile to consider cultural issues when studying internet banking technology acceptance in the Chinese context of Taiwan.

Because bank services are often rendered through interactions between customers and bank employees, our cultural research on the TAM focuses primarily on the role of interpersonal relationships in influencing internet banking technology acceptance. Long-term orientation has been viewed as a key cultural factor for such social interactions (Ryu & Kim, 2010), and such an orientation values future interpersonal relationships (Hofstede, 1991; Shore, 2001). This perspective is used to test the effects on the internet banking adoption, which includes “subjective norms” and “computer self-efficacy” as antecedents, to confirm the validity of our cultural influence on internet banking technology acceptance.

Our research objective is to explore how the cultural influence of long-term orientation moderates the effect of the TAM on users’ intention to accept internet banking as they consider the appropriateness, timing, and effectiveness of personal financial services. We contribute to identifying the critical role of long-term social relationships in a new model combining the Western TAM and the Chinese culture of long-term orientation in Taiwan, which has not been thoroughly explored in previous work. We also bring the Government attention to the possible long-term orientation’s impact on users’ acceptance of those hotly debated advanced Fin-tech services since 2016 in Taiwan. This paper is organized as follows. The next section presents the research concept. The research method and data analysis are then presented. Discussions, implications and limitations for both researchers and practitioners are then presented, followed by a discussion of the conclusions of the study.

## **RESEARCH CONCEPT**

### **Technology Acceptance Model**

Based on Ajzen and Fishbein’s (1980) theory of reasoned action (TRA), the TAM finalizes two primary psychological states of individual user perceptions, “usefulness” and “ease of use”, which affect individuals’ beliefs about and attitudes towards technology and in turn determines their behavioural intentions to adopt that technology (Bagozzi, Davis, & Warshaw, 1992; Davis, 1989, 1993).

In past decades, the TAM has been shown to be a more robust model than TRA in predicting the adoption of different technologies under various contexts in terms of their validity, generality, and wide application (King & He, 2006; Lee, Kozar, & Larsen, 2003; Ojha, Sahu, & Gupta, 2009; Venkatesh & Davis, 2000). To alleviate criticism of limited predictivity, the TAM has been extended to TAM 2 by adding antecedents such as a social influence variable (e.g., subjective norms) to improve the specificity and explanatory utility of the model (Venkatesh & Davis, 2000). These antecedents, which have been tested in both voluntary and mandatory settings, have a strong TAM-supported effect (direct or indirect) on perceived usefulness (Chan & Lu, 2004; Venkatesh & Davis, 2000). However, the literature argues that the social influence antecedent of perceived usefulness may affect perceived ease of use via a crossover effect (Venkatesh & Bala, 2008).

19 more pages are available in the full version of this document, which may be purchased using the "Add to Cart" button on the publisher's webpage:  
[www.igi-global.com/chapter/culture-and-internet-banking-technology/211618](http://www.igi-global.com/chapter/culture-and-internet-banking-technology/211618)

## Related Content

---

### A Framework for Understanding Information Systems Development

Andrew Basden (2008). *Philosophical Frameworks for Understanding Information Systems* (pp. 224-264).  
[www.irma-international.org/chapter/framework-understanding-information-systems-development/28084](http://www.irma-international.org/chapter/framework-understanding-information-systems-development/28084)

### A GCN- and Deep Biaffine Attention-Based Classification Model for Course Review Sentiment

Jiajia Jiao and Bo Chen (2023). *International Journal of Information Technologies and Systems Approach* (pp. 1-18).  
[www.irma-international.org/article/a-gcn--and-deep-biaffine-attention-based-classification-model-for-course-review-sentiment/323568](http://www.irma-international.org/article/a-gcn--and-deep-biaffine-attention-based-classification-model-for-course-review-sentiment/323568)

### Fog Caching and a Trace-Based Analysis of its Offload Effect

Marat Zhanikeev (2017). *International Journal of Information Technologies and Systems Approach* (pp. 50-68).  
[www.irma-international.org/article/fog-caching-and-a-trace-based-analysis-of-its-offload-effect/178223](http://www.irma-international.org/article/fog-caching-and-a-trace-based-analysis-of-its-offload-effect/178223)

### Interpretable Image Recognition Models for Big Data With Prototypes and Uncertainty

Jingqi Wang (2023). *International Journal of Information Technologies and Systems Approach* (pp. 1-15).  
[www.irma-international.org/article/interpretable-image-recognition-models-for-big-data-with-prototypes-and-uncertainty/318122](http://www.irma-international.org/article/interpretable-image-recognition-models-for-big-data-with-prototypes-and-uncertainty/318122)

### Gene Expression Analysis based on Ant Colony Optimisation Classification

Gerald Schaefer (2016). *International Journal of Rough Sets and Data Analysis* (pp. 51-59).  
[www.irma-international.org/article/gene-expression-analysis-based-on-ant-colony-optimisation-classification/156478](http://www.irma-international.org/article/gene-expression-analysis-based-on-ant-colony-optimisation-classification/156478)