

学校编码: 10384
学号: 17720070153540

分类号__密级__
UDC__

厦 门 大 学

博 士 学 位 论 文

信息系统持续使用影响因素的
实证研究

——以手机银行为例

Empirical Study on Factors Influencing Continued Usage
of Information System: An Example of Mobile Banking

陈超辉

指导教师姓名: 刘震宇 教授

专 业 名 称: 技术经济及管理

论文提交日期:

论文答辩时间:

学位授予日期:

答辩委员会主席: __

评阅人: __

2012 年 4 月

厦门大学学位论文原创性声明

本人呈交的学位论文是本人在导师指导下，独立完成的研究成果。本人在论文写作中参考其他个人或集体已经发表的研究成果，均在文中以适当方式明确标明，并符合法律规范和《厦门大学研究生学术活动规范（试行）》。

另外，该学位论文为()课题(组)的研究成果，获得()课题(组)经费或实验室的资助，在()实验室完成。(请在以上括号内填写课题或课题组负责人或实验室名称，未有此项声明内容的，可以不作特别声明。)

声明人（签名）：

年 月 日

厦门大学学位论文著作权使用声明

本人同意厦门大学根据《中华人民共和国学位条例暂行实施办法》等规定保留和使用此学位论文，并向主管部门或其指定机构送交学位论文（包括纸质版和电子版），允许学位论文进入厦门大学图书馆及其数据库被查阅、借阅。本人同意厦门大学将学位论文加入全国博士、硕士学位论文共建单位数据库进行检索，将学位论文的标题和摘要汇编出版，采用影印、缩印或者其它方式合理复制学位论文。

本学位论文属于：

1. 经厦门大学保密委员会审查核定的保密学位论文，
于 年 月 日解密，解密后适用上述授权。

2. 不保密，适用上述授权。

（请在以上相应括号内打“√”或填上相应内容。保密学位论文应是已经厦门大学保密委员会审定过的学位论文，未经厦门大学保密委员会审定的学位论文均为公开学位论文。此声明栏不填写的，默认为公开学位论文，均适用上述授权。）

声明人（签名）：

年 月 日

厦门大学博硕士学位论文摘要库

摘要

尽管信息系统被初次采纳是其成功的重要一步，但能否最终获得成功，则更多地取决于是否被用户长期持续使用。信息系统的持续使用对企业的长期技术创新、企业的长期发展起到了关键的作用。因此，研究人们为何和如何持续使用信息系统是信息技术管理的研究者和实践者面临的重要问题。本文基于理性行为理论和认知失调理论，从企业、个人、社会环境等多个视角，提出了信息系统用户持续使用影响因素的整合模型，结合前人研究成果对模型所包含的变量进行测度，并用 373 份有效问卷调查数据对理论模型进行验证，在此基础上，给出提升用户持续使用意愿、提高用户满意度的管理建议。

本文的主要创新点及其结论归纳如下：

(1) 以前很多研究仅证实影响用户持续使用意愿的主要影响因素，但是没有分析这些因素对持续使用意愿的影响规律。本文分析了感知服务质量、感知可用性、期望确认对用户满意度的影响规律，以及用户满意度、感知可用性对持续使用意愿的影响规律。这些规律既丰富了信息系统持续使用行为的理论研究，也为企业在用户使用信息系统的不同阶段，提升用户满意度和用户持续使用意愿提供了有意义的指导。

(2) 本文对信息系统持续使用行为的相关理论研究成果进行了总结，将期望确定理论、技术接受理论两大主流研究方向进行整合，以它们为基础，从个人、企业、社会环境等几个维度分析影响信息系统持续使用行为的研究变量。以往很多研究表明，感知风险、感知成本对用户持续使用行为有直接的影响，社会规范对用户持续使用行为有显著的影响。但是本文发现，感知风险、感知成本是以用户满意度为中介，对用户持续使用意愿产生间接的影响的；而社会规范不会对用户持续使用行为意愿产生影响。这些研究结论都是对我国信息系统持续使用行为研究的有益补充。

目前国内还没有学者对手机银行持续使用行为进行研究。本文用手机银行这一新兴的信息系统应用的使用行为来进行实证研究，既弥补了国内关于手机银行持续使用行为研究的空白，也丰富国内信息系统持续使用行为的研究。

关键词：信息系统；持续使用意愿；手机银行

Abstract

While initial acceptance of information system (IS) is an important first step toward realizing IS success, long-term viability of an IS and its eventual success depend on its continued use rather than first-time use. Only by long-term use, can IS keep old customers and attract new customers to bring enterprise profits; otherwise, the company might suffer from failure. The continued usage of IS plays a crucial role in the cooperation's technology innovation and development in the long run. Consequently, the researchers and practitioners of information technology management have to apply importance to the customers' continued usage of IS. This paper aim to investigate continued IS usage behavior on the basis of Theory of Reasoned Action (TRA) and Cognitive Dissonance Theory (CDT). On the theoretical foundation of ECM and TAM, we establish an integrated model of users' intentions to continue IS usage combining these two perspectives and incorporating individual, social and environmental factors as additional variables, including perceived ease of use, perceived risk, perceived cost, perceived service quality, social norm. Finally, we take an investigation, 373 effective questionnaires were collected to verify the theory model and some implications for improvement of continued usage intention and satisfaction are suggested.

The conclusion and major theoretic innovations of this research may be listed as following:

(1) Although former researchers found some factors influencing users' intentions to continue IS usage, they hadn't analyzed the relationship of them. This paper explore the law of the relation of some variables with significant influence, indicating that user satisfaction is related nonlinearly with perceived usefulness, perceived ease of use and confirmation. User Continued usage intention is nonlinearly influenced by user satisfaction and perceived usefulness. These results enrich the study of continued usage of IS and it suggest IS provider to improve continued usage intention and satisfaction in different phase.

(2) It establishes an integrated model for understanding the continued IS usage behavior. Our study, in the context of users' continued usage of mobile banking, reveals that in addition to user satisfaction and perceived usefulness, perceived ease of use, perceived risk, perceived cost are factors that affect continued usage of IS.

Customer satisfaction and perceived usefulness are the factors influencing users' continuance intention directly. And customer satisfaction and perceived usefulness are the mediator variable for perceived ease of use to have an effect on users' continuance intention. Customer satisfaction is the mediator variable for perceived risk and perceived cost to affect the users' continuance intention. Although the some previous researches noticed that the social norm is an important influencing factor when users decide to adopt information system, the empirical study find that it has no significant effect on the users' continuous usage intention during the phase of the users' continuous usage. These results enrich the theory of continued usage of IS.

At present there aren't scholars who study users' continued usage of mobile banking in China. This paper researches users' continued usage of mobile banking firstly. It enriches the research of continued usage of IS in China.

Key words: Information system; Continued usage intention; Mobile banking

目录

第 1 章 绪论	1
1.1 研究背景	1
1.1.1 理论背景.....	1
1.1.2 实践背景.....	3
1.2 问题的提出	5
1.3 研究意义	6
1.3.1 理论研究意义.....	6
1.3.2 实践指导意义.....	7
1.4 研究内容和逻辑结构	7
1.4.1 主要研究内容.....	7
1.4.2 论文逻辑结构.....	10
第 2 章 理论基础与文献综述	12
2.1 理论基础	12
2.1.1 技术接受理论基础.....	12
2.1.2 期望确认理论基础.....	19
2.1.3 其他理论基础.....	25
2.1.4 理论总结与比较.....	30
2.2 国外关于信息系统持续使用行为的研究情况	31
2.2.1 基于技术接受理论基础的研究情况.....	31
2.2.2 基于期望确认理论基础的研究.....	36
2.2.3 基于其他理论基础的研究.....	42
2.3 国内关于信息系统持续使用行为的研究情况	46
2.4 现有研究的总结和进一步研究的空间	49
2.4.1 现有研究的总结.....	49
2.4.2 现有研究的不足和进一步研究的空间.....	52
2.5 本章小结	53
第 3 章 理论框架和假设的提出	54
3.1 用户满意度对持续使用的影响	56
3.2 用户的期望确认对满意度的影响	59
3.3 感知可用性对满意度和持续使用的影响	59
3.4 感知易用性对满意度和持续使用的影响	61
3.5 用户的期望确认对感知可用性、感知易用性、感知服务质量的影响	62
3.6 感知风险对满意度和持续使用的影响	63
3.7 感知成本对满意度和持续使用的影响	66
3.8 社会规范对持续使用的影响	68
3.9 感知服务质量对满意度的影响	69
3.10 整合的研究模型	71
3.11 本章小结	72
第 4 章 研究方法与实证设计	75
4.1 问卷设计方法与原则	75

4.2	研究变量的测度	77
4.2.1	感知可用性	77
4.2.2	感知易用性	78
4.2.3	感知风险	79
4.2.4	感知成本	80
4.2.5	感知服务质量	81
4.2.6	社会规范	84
4.2.7	期望确认	85
4.2.8	用户满意度	86
4.2.9	持续使用意愿	87
4.3	数据处理方法	87
4.3.1	探索性因子分析	87
4.3.2	数据信度检验	88
4.3.3	数据效度检验	89
4.3.4	结构方程模型	90
4.4	本章小结	91
第5章	数据检验及维度验证	92
5.1	样本基本情况描述	92
5.1.1	调查对象	92
5.1.2	样本数量和问卷回收	92
5.2	样本描述性统计分析	93
5.3	探索性因子分析	96
5.3.1	用户持续使用影响因素	96
5.3.2	用户满意度影响因素	101
5.4	度量信度和效度验证	106
5.4.1	感知可用性	107
5.4.2	感知易用性	108
5.4.3	感知风险	109
5.4.4	感知成本	110
5.4.5	感知服务质量	112
5.4.6	社会规范	113
5.4.7	期望确认	114
5.4.8	用户满意度	115
5.4.9	持续使用意愿	116
5.5	本章小结	117
第6章	实证研究结果与分析	119
6.1	用户持续使用意愿研究分析	119
6.1.1	实证模型	119
6.1.2	模型拟合结果	120
6.1.3	研究假设的检验结果	123
6.2	用户满意度研究分析	124
6.2.1	实证模型	125
6.2.2	模型拟合结果	126
6.2.3	研究假设的检验结果	129

6.3	检验结果讨论.....	129
6.3.1	对成立假设的讨论.....	129
6.3.2	对假设 H6 检验结果的分析.....	132
6.3.3	对假设 H12 检验结果的分析.....	133
6.3.4	对假设 H14 检验结果的分析.....	133
6.3.5	对假设 H15 检验结果的分析.....	134
6.3.6	对用户持续使用意愿模型的总体分析.....	135
6.3.7	对用户满意度模型的总体分析.....	137
6.4	本章小结.....	138
第 7 章	感知易用性、感知风险、感知成本作用机制分析.....	140
7.1	中介变量与中介效应分析.....	140
7.1.1	中介变量的概念和作用.....	140
7.1.2	中介变量的检验和估计方法.....	141
7.2	感知易用性中介效应的实证结果与分析.....	142
7.2.1	感知易用性通过用户满意度的中介效应分析.....	142
7.2.2	感知易用性通过感知可用性的中介效应分析.....	144
7.2.3	感知易用性通过用户满意度、感知可用性的联合中介效应分析 145	
7.3	感知风险中介效应的实证结果与分析.....	146
7.4	感知成本中介效应的实证结果与分析.....	149
7.5	本章小结.....	151
第 8 章	研究结论的规律性探讨.....	152
8.1	潜变量因子得分.....	152
8.2	数据标准化处理.....	153
8.3	变量间关系规律性探究.....	153
8.3.1	感知服务质量→用户满意度.....	153
8.3.2	感知可用性→用户满意度.....	155
8.3.3	期望确认→用户满意度.....	156
8.3.4	用户满意度→用户持续使用意愿.....	158
8.3.5	感知可用性→用户持续使用意愿.....	159
8.3.6	用户满意度、感知可用性→用户持续使用意愿.....	161
8.4	本章小结.....	163
第 9 章	主要研究结论、创新点与展望.....	164
9.1	主要研究结论.....	164
9.2	对综合实证模型的再认识.....	167
9.3	研究结论的理论意义和实践意义.....	168
9.3.1	理论意义.....	168
9.3.2	实践意义.....	169
9.4	主要创新点.....	172
9.5	研究的局限性与未来研究展望.....	173
参考文献	175
附录 1: 基于技术接受理论进行信息系统持续使用情况的研究情况汇 总	185

附录 2: 基于期望确定理论进行信息系统持续使用情况的研究情况汇总	186
附录 3: 问卷调查表	190
附录 4: 规律性探讨的因子得分系数矩阵与因子得分函数	193
致谢	196

厦门大学博硕士论文摘要库

厦门大学博硕士学位论文摘要库

Contents

Chapter 1 Introduction	1
1.1 Research Background	1
1.1.1 Theoretical Background.....	1
1.1.2 Practice Background	3
1.2 Research Problem	5
1.3 Research Significance	6
1.3.1 Theoretical Research Significance	6
1.3.2 Practicality Research Significance.....	7
1.4 Research Content and Composition	7
1.4.1 Key Content of Research	7
1.4.2 Composition of Research	10
Chapter 2 Theoretical Fundament and Literature Review	12
2.1 Theoretical Fundament	12
2.1.1 Technology Acception Theory	12
2.1.2 Expection Confirmation Theory	19
2.1.3 Other Theoretical Fundament.....	25
2.1.4 Theory Compare	30
2.2 Research About IS Continuance Overseas	31
2.2.1 Research Based On Technology Acception Theory.....	31
2.2.2 Research Based On Expection Confirmation Theory	36
2.2.3 Research Based On Other Theoretical Fundament	42
2.3 Research About IS Continuance In China	46
2.4 Research Summary and Region of Further Investigation	49
2.4.1 Research Summary	49
2.4.2 Inadequate Research and Region of Further Investigation	52
2.5 Summary	53
Chapter 3 Theoretical Framework and Research Hypotheses	54
3.1 Satisfaction Influence Continuance	56
3.2 Confirmation Influence Satisfaction	错误!未定义书签。
3.3 Perceived Usefulness Influence Satisfaction&Continuance 错误!未定义书签。	
3.4 Perceived Ease of Use Influence Satisfaction&Continuance 错误!未定义书签。	
3.5 Confirmation Influence PU/PEOU/Perceive Service Quality 错误!未定义书签。	
3.6 Perceived Risk Influence Satisfaction&Continuance 错误!未定义书签。	
3.7 Perceived Cost Influence Satisfaction&Continuance 错误!未定义书签。	
3.8 Social Norm Influence Continuance	错误!未定义书签。
3.9 Perceived Service Quality Influence Satisfaction	错误!未定义书签。
3.10 Integrated Model for Empiric	错误!未定义书签。
3.11 Summary	72
Chapter 4 Research Methods and Empirical Design	75
4.1 Questionnaire Design	75
4.2 Measurement of Research Variable	77

4.2.1	Perceived Usefulness	77
4.2.2	Perceived Ease of Use.....	78
4.2.3	Perceived Risk	79
4.2.4	Perceived Cost	80
4.2.5	Perceived Service Quality	81
4.2.6	Social Norm	84
4.2.7	Confirmation	85
4.2.8	Satisfaction.....	86
4.2.9	Continuance Intention	87
4.3	Data Analysis.....	87
4.3.1	Exploratory Factor Analysis	87
4.3.2	Reliability Test	88
4.3.3	Validity Test	89
4.3.4	Structural Equation Model	90
4.4	Summary	91
Chapter 5 Data Quality analysis.....		92
5.1	Sample Descriptive	92
5.1.1	Sample.....	92
5.1.2	Sample Descriptive	92
5.2	Sample Descriptive Statistics	93
5.3	Exploratory Factor Analysis.....	96
5.3.1	Factors Influence Continuance	96
5.3.2	Factors Influence Satisfaction.....	101
5.4	Reliability and Validity Test.....	106
5.4.1	Perceived Usefulness	107
5.4.2	Perceived Ease of Use.....	108
5.4.3	Perceived Risk	109
5.4.4	Perceived Cost	110
5.4.5	Perceived Service Quality	112
5.4.6	Social Norm	113
5.4.7	Confirmation	114
5.4.8	Satisfaction.....	115
5.4.9	Continuance Intention	116
5.5	Summary	117
Chapter 6 Results and Analysis of Empirical research		119
6.1	The Effect of Continuance Intention	119
6.1.1	Empirical Model	119
6.1.2	Results of Model Fits	120
6.1.3	Verification Results of Research Hypothesis	123
6.2	The Effect of Satisfaction.....	124
6.2.1	Empirical Model	125
6.2.2	Results of Model Fits	126
6.2.3	Verification Results of Research Hypothesis	129
6.3	Analysis and Discussion on Results	129
6.3.1	Discussion of Supported Hypothesis	129
6.3.2	Analysis of Hypothesis 6	132
6.3.3	Analysis of Hypothesis 12	133
6.3.4	Analysis of Hypothesis 14	133
6.3.5	Analysis of Hypothesis 15	134
6.3.6	Analysis of Continuance Intention Model	135

6.3.7	Analysis of Satisfaction Model	137
6.4	Summary	138
Chapter 7	Mechanism of Perceived Use of Ease & Perceived Risk & Perceived Cost	140
7.1	Mediator and Analysis on Mediating Effect	140
7.1.1	Concept and Function of Mediator	140
7.1.2	Method of Mediator Verification and Estimation	141
7.2	Empirical Results and Analysis on Perceived Ease of Use Mediating Effect 142	
7.2.1	Analysis on Perceived Ease of Use Mediating Effect Through Satisfaction.....	142
7.2.2	Analysis on Perceived Ease of Use Mediating Effect Through Perceived Usefulness	144
7.2.3	Analysis on Perceived Ease of Use Mediating Effect Through Satisfaction & Perceived Usefulness	145
7.3	Empirical Results and Analysis on Perceived Risk Mediating Effect 146	
7.4	Empirical Results and Analysis on Perceived Cost Mediating Effect 149	
7.5	Summary	151
Chapter 8	The Regular Discussion	152
8.1	Scores of Latent Variables	152
8.2	Standardisation Processing of Datas.....	153
8.3	The Regularity of Variables.....	153
8.3.1	Perceived Service Quality To Satisfaction.....	153
8.3.2	Perceived Usefulness To Satisfaction	155
8.3.3	Confirmation To Satisfaction	156
8.3.4	Satisfaction To Continuance	158
8.3.5	Perceived Usefulness To Continuance.....	159
8.3.6	Satisfaction & Perceived Usefulness To Continuance.....	161
8.4	Summary	163
Chapter 9	Conclusion, Innovation and Outlook	164
9.1	Conclusions	164
9.2	Re-recognize the Integrated Emperical Model	167
9.3	Theoretical Significance of Conclusions and Practical Implications. 168	
9.3.1	Theoretical Significance	168
9.3.2	Practical Implications.....	169
9.4	Innovations.....	172
9.5	Limitations and Future Research.....	173
References	175
Attachment 1:	Summary of Research on IS Continuance Base on Technology Acception Theory.....	185
Attachment 2:	Summary of Research on IS Continuance Base on Expection Confirmation Theory.....	186
Attachment 3:	Questionnaire.....	190
Attachment 4:	Component Score Coefficient Matris & Component Score Function.....	193
Acknowledgements	196

厦门大学博硕士学位论文摘要库

Degree papers are in the "[Xiamen University Electronic Theses and Dissertations Database](#)". Full texts are available in the following ways:

1. If your library is a CALIS member libraries, please log on <http://etd.calis.edu.cn/> and submit requests online, or consult the interlibrary loan department in your library.
2. For users of non-CALIS member libraries, please mail to etd@xmu.edu.cn for delivery details.

厦门大学博硕士论文摘要库