

UNIVERSITY OF MACAU
FACULTY OF BUSINESS ADMINISTRATION

Banking on the Internet :
Impact on Customers and Management

THESIS PRESENTED TO THE
FACULTY OF BUSINESS
ADMINISTRATION, UNIVERSITY
OF MACAU FOR THE GRANTING
OF THE MBA DEGREE IN
BANKING AND FINANCE

ESTHER SAO LAI, LEI

Banking on the Internet:

Impact on Customers and Management

TABLE OF CONTENTS

I.	Introduction.....	1
II.	The Path to Internet Banking.....	2
	2.1 The evolution of Banking Technology.....	2
	2.2 Change in the banking sector.....	5
	2.2.1 e-banking services of U.S. Bank.....	9
	2.2.2 e-banking services of U.K. Bank.....	10
III.	The development of Internet Banking.....	17
	3.1 The first Internet Bank : Security First Network Bank.....	17
	3.1.1 Founding Vision and First Steps.....	17
	3.1.2 Customer Response.....	20
	3.1.3 A functional Business Model.....	24
	3.2 Traditional Banking vs. Internet Banking.....	28
	3.3 The Development of Virtual Financial Institutions.....	31
	3.3.1 Electronic Commerce Strategies and open systems.....	31
IV.	Banking on Internet : The Customer Viewpoint.....	38
	4.1 The new living style.....	41
	4.2 Online information privacy.....	45
	4.2.1 Consumers' information privacy concerns are real.....	45
	4.2.2 Impact of privacy concerns on the future of business over the Internet.....	50
	4.2.3 Asymmetric interest : root cause of privacy problem.....	53
	4.2.4 How companies father information on Web users.....	55
V.	Banking on Internet : Management Viewpoint.....	58
	5.1 Change for Delivery banking products.....	58
	5.2 New Distribution channel.....	63
	5.2.1 The future distribution channel structure.....	64
	5.2.1.1 The customer segments.....	66

5.2.1.2	The existing and future distribution channel structure.....	68
5.2.1.3	The change process.....	69
5.2.2	The banks' strategic distribution channel decisions.....	70
5.2.2.1	The local/national branch banking strategy.....	71
5.2.2.2	The International branch banking strategy.....	72
5.2.2.3	The local/national Internet banking strategy.....	73
5.2.2.4	The International Internet banking strategy.....	74
5.2.2.5	The dual channel strategy/ the hedge strategy.....	75
5.2.3	The most popular Distribution channel strategies in Danish retail banking.....	76
VI.	E-commerce solutions for payment system	78
6.1	Digital Currency.....	79
6.2	Electronic Credit Card Payment.....	81
6.3	Electronic Cheque payments.....	83
6.4	Smart Cards on the Internet.....	84
6.4.1	Smart Card functions.....	84
6.4.2	How a smart card works on the Internet.....	85
6.4.3	Token-based payment.....	86
6.4.4	Smart card applications – In America.....	88
VII.	Conclusion.....	94
VIII.	Bibliography.....	96