# mCommerce and eCommerce in Thailand – A Value Space Analysis

Ranjan B. Kini1<sup>1</sup>, Somboon Thanarithiporn<sup>2</sup>

<sup>1</sup>Indiana University Northwest, School of Business & Economics, USA, (<u>rkini@iun.edu</u>)

<sup>2</sup>Bangkok University, Graduate School, Thailand, (<u>thanarithiporn@yahoo.com</u>)

#### **Abstract**

Mobile commerce, a subset of eCommerce, conducted through mobile devices using wireless telecommunications network is poised to change the market place globally. According to Jupiter Research, Mobile Commerce (mCommerce) industry is expected to be 22 billion dollars globally. In Thailand, users seem to believe that general content such as news, weather, and sports should be low-cost or free. However, innovative pricing schemes and services are expected to attract more users. Thus, the understanding of the value space between eCommerce and mCommerce is becoming important so innovative services can be targeted to attract more users towards mCommerce In this paper, the authors have attempted to identify and understand the adoption issues and value space between eCommerce and mCommerce in Thailand by surveying faculty, staff, and students from a private university in Bangkok.

#### 1. Introduction

In Thailand, where the growth in the adoption and use of mobile phones is in double digits the expectations in relative growth in mCommerce is very high. In 2001, Thailand had 5.3 million mobile phones (compared to 5.2 million fixed line phones) in use with a penetration of 8% and was expecting 11.1 million by the end of 2004. The expected penetration rate is over 20% by the end of 2005. The current revenues from mobile phone market are expected to be Bt100 billion, according to Helen Sandberg of Total Access Communications. The high level of mobile penetration is expected to spark demand for higher speed service driving the demand for new infrastructure and the mobile Internet economy. [22]

While global mCommerce is expected to achieve revenue of over Bt.1 trillion and Asia to cross Bt.500 billion by 2005, mCommerce in Thailand is expected to be in early stages. [3][11][21] Two companies Advanced Info Services (AIS) and TAC are leading the way by offering variety of mobile, anytime anywhere, services, using the key technologies such as General Packet Radio Service (GPRS), I-Mode, and Unified Messaging. The most new mobile phones released in 2001 are embedded with technology to link to Internet using WAP (wireless application protocol). With less than 1% penetration of WAP phones analysts believe the slow speeds for WAP inhibited the growth in 2001. Among the Thai mobile phone users 19% have indicated their intent to purchase WAP phones for Internet access and mobile services provided prices and services are reasonable. [9][18][21] Matthias Goertz of Boston Consulting Group though believes that Thailand will likely follow the Japanese trend with mobile devices because Asians are generally more accepting of small screen than are Americans or Europeans. [23]

Texas Instruments CEO Tom Engibous said that mobile devices would introduce brand-new applications that are impossible for desktop devices to handle. [23] Inspite of these types of statements the value propositions of mCommerce are not very clearly tied to profitability, says Clarke. Clarke says different value propositions of mCommerce related to *ubiquity*, *personalization*, *localization*, *and convenience* are not related to consumer segments in terms of their attractiveness and their relevance to different industries. Clarke also predicts that the growth in mCommerce will depend on the perceived additional value provided by the services in relation to value currently provided by the desktop Internet services. However, in Thailand where mobile phone usage far exceed the number of fixed lines the value analysis may already skewed. [2]

### 2. The Research Study

Authors' interest in this study is to identify the level of adoption among Thai university students, the most comfortable and the early adopters of mCommerce (15-24 year old), and also to identify the currently perceived gap in the value provided by the mobile services. The identification of such a gap is extremely helpful in understanding factors that affect the adoption and the services that sought by the mobile users in making the new technology useful.

The questionnaire shown in Appendix A is translated in to Thai language and is distributed to business students, faculty and staff at a private university in Bangkok, Thailand.

### 3. Results

The results, conclusions and implications will be presented at the conference.

#### References

- 1. Asia Pacific M-Commerce Report, <a href="http://www.tnsofres.com/apmcommerce/product.cfm">http://www.tnsofres.com/apmcommerce/product.cfm</a>, May 2001.
- Clarke, Irvine. "Emerging Value Propositions for M-Commerce", Journal of Business Strategies, Vol. 18, No. 2.
- 3. "Driving Mobile Commerce in the U.S.: Who is Leading Whom?" *The Silicon Valley World Internet Center*, August 29, 2001.
- 4. "European Mobile Commerce Survey", *Mobicom Consortium*, Athens, Greece, 2001.
- 5. "Go Mobile—Now", *Computerworld*, Vol. 35, Issue 24, 6/11/2001.
- 6. "Going Through The Trial Period", <a href="http://www.businessinthailandmag.com/archive/june01/43">http://www.businessinthailandmag.com/archive/june01/43</a> a.html
- 7. "Introduction to the Asian Mobile Market", Asia Pacific Research Group, December 21, 2001, Hong Kong.
- 8. Karnjanatawe, Karnjana. "Inet prepares for SET listing", *Bangkok Post*, November 29, 2000.
- 9. Kittikanya, Charoen. "Uptake remains relatively slow", *Bangkok Post*, 2000 Year-End Economic Review, Bangkok, Thailand.
- 10. Leung, Kenneth and John Antypas. "Improving Returns on M-Commerce Investments", *Journal of Business Strategy*, September/October 2001.
- 11. "mCommerce: Forget the Hype Let's Get Down to Real Market Opportunities", *The Silicon Valley World Internet Center*, June 27, 2001.
- 12. "Mobile Devices", eINFORM, Vol. 3, Issue 6, IDC.
- 13. "Mobile Payments", http://www.mobile.commerce.net/, Mobile Commerce Net, December 28, 2001.
- 14. Mykkanen, Niko. "Mobile Payments A report into the state of the market", <a href="http://www.mobile.commerce.net/">http://www.mobile.commerce.net/</a>, October 2001.
- 15. Nohria, Nitin and Marty Leestma. "A Moving Target: The Mobile-Commerce Customer", *MIT Sloan Management Review*, Spring 2001.
- 16. Nosek, John and Munir Mandviwalla. "Mobile group support technologies for any-time, any-place team support", *Information Technology & People*, Vol. 9, No. 4, 1996.
- 17. Pinnell, Gary. "Mobile Commerce use rising", *Central Penn Business Journal*, Harrisburg, PA, Vol. 11, Issue 20, 2001.
- 18. Puntumeka, Prapa and Aree Orapin. "Mobile Phone Services in Thailand Consumer Price Index", *International Working Group on Price Indices*, Canberra, Australia, April 2001.
- 19. Raisinghani, Mahesh S. "WAP: Transnational Technology for M-Commerce", *Information Systems Management*, Auerbach Publishers, Summer 2001.
- 20. "Retail Slump May Not Last Long Analysts", <a href="http://www.businessinthailand.com/archive/june01/43">http://www.businessinthailand.com/archive/june01/43</a> b.html
- 21. "The Asian Cellular Market", Asia Pacific Research Group, February 2, 2002, Hong Kong.
- 22. Tuason, Rizza N. "TelecomAsia: taking on new challenges for stronger growth", <a href="http://www.businessinthailandmag.com">http://www.businessinthailandmag.com</a>
- 23. Waltham, Tony. "Wireless ear under way", *Bangkok Post*, 2000 Year-end Economic Review, Bangkok, Thailand.

### APPENDEX A

## Mobile Commerce Adoption/Value Space Survey Please Circle the Appropriate Response for Items 1 to 10

1.	Age:	<20 41-50			51-60		>60	
2.	Gender:	Male			Female			
3.	Faculty Member:	Part-time	e		Full-time		Not Applicable	
4.	Staff:	Part-time	e		Full-time		Not Applicable	
5.	Student:	Part Tim	ie		Full Time		Not Applicable	
6.	Student Status: Undergr		raduate		Graduate		Not Applicable	
7.	Working Student	<u>t</u> :	Part Time		Full Time		Not Applicable	
8.	Annual Income:		<\$10,000 \$30,001-40,00 \$60,001-70,00 \$90,001-100,0	00	\$10,001-20,000 \$40,001-50,000 \$70,001-80,000 >\$100,000	\$20,001- \$50,001- \$80,001-	60,000	
9.	Primary location (Please Circle ON		et Access:		Home School Friends/Neighbo Other		Work Public Library Mobile Device	
10.	Own a Mobile De	evice?	Cell Phone Other		Palm		Pocket PC Not Applicable	
11.	My average Inter	net usage	per week is (f	fron	n all locations):		Hours	
12.	Approximate Do	llar amou	nt I spent usin	g In	ternet last year: \$			
13.	CURRENT USAG	GE:						
	Services Used	: [Please	put a check (	) w	here applicable or	put NA (l	Not Applicable)]	
				Int	ernet (Desktop)		Mobile Device	
	y/Financial Service	S						
Shoppir								
Entertai								
	tion and News							
Travel b	eservation							
	communication							
Other	ommunication							
None								
14.	REASONS FOR U	JSING:	<b>'</b>			<u>,                                    </u>		
You use			Please put a sco	ore f	from <i>1- very impo</i>	rtant to 5	<b>- least important</b> to you	ı, or
NA-not	applicable.)							
					Internet (Deskt	op)	Mobile Device	
Good pr					-			
	alue for the money			$oxed{\bot}$				
Access	•			igspace				
Comfort				₩				
	available			$\vdash$				
Curiosit	here available			$\vdash$				
Persona	*			$\vdash$				
i ci sona	nzanon			—				

Better information		
It was fun		
It helped me in business		
Recognition among peers		
15. <u>PROBLEMS FACED:</u>		
The <u>problems you faced</u> when you used Intern	net (Desktop) or Mobile Device Se	rvices are: (Please put a
score from 1-very important problem to 5-lea		
	Internet (Desktop)	Mobile Device
Complicated to use		
Access speed		
Lack of security		
Poor quality of service		
Service is not personalized enough		
MOBILE DEVICE ONLY		
High price for mobile access		
Inconvenience in using mobile device		
INTERNET ONLY		
Bad (too high) price		
Bad (poor) value for the money		
16. <u>IMPROVEMENTS NECESSARY:</u>		
You will use Services on Internet or Mobile De		core from <i>1-very</i>
important change to 5-least important chang	* **	
	Internet (Desktop)	Mobile Device
Improved access speed		
Improved ease of use		
Improved security		
Improved customer support		
Lower price		
MOBILE DEVICE ONLY		
Improved comfort device		
miproved comfort device		
Innovative personalized applications		