

# Chapter 1

## Consumers' Attitudes Toward Mobile Commerce: A Model to Capture the Cultural and Environment Influences

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### ABSTRACT

*Mobile commerce operates in a global market place where services are rolled out to different nations. However, it is unclear if mobile commerce developed for one national environment can be successfully applied in another. There are likely to be many influences on attitudes to mobile commerce, including environmental and cultural. This paper reports on a study on consumers' attitudes toward m-commerce from samples in a city in China and a city in the UK. Attributes of environment and cultural influences are explored and the paper develops a model on Consumers' Attitudes toward M-commerce in different Cultural Environments (CAMCE). The paper makes contribution by identify and distinguish between influences related to the environment and to culture.*

### INTRODUCTION

Mobile commerce is a truly global phenomenon. It involves mobile technologies and services that are used in a global market place with similar devices and services being offered in many countries.

The service and technology providers are global companies with international user bases. The challenge for the mobile industries and service providers is how to enter the variety of different national markets each with their own environment characteristics and cultural identity.

This research tries to address an issue that is not explicit in much of the existing literature, namely

DOI: 10.4018/978-1-4666-1568-7.ch001

that differences in technology use and adoption may be due to cultural differences or due to differences in the technology infrastructure and general business environment. Previous cultural works seem to not recognize the role of technology and the wider environment in influencing attitudes (e.g. such as Hofstede 1991, 2001; Triandis 1994). Previous technology adoption work (e.g. Davis, 1989; Barnes, 2003; Kleijnen 2003) seems to not recognize environment or cultural impacts on technology adoption.

The purpose of this study is to explore consumers' attitudes toward mobile commerce from samples in two nations (China and the UK) and to identify and distinguish between influences related to the environment and to culture. This is particularly challenging given that culture and environment are interlinked. The wider influences can be classed as political, economic, social and technological (Hutton 2007; Subramanian 2006; Engel 1995; Miller 1990) and these will consist of environment and cultural aspects. Some existing works do explicitly recognize the wider environmental influences on technology adoption. For instance Rogers' Diffusion of Innovation work, though not explicitly using cultural and the wider environmental influences on adoption patterns and rates, identifies related influences such as the nature of social systems and the existing communication channels (Rogers 2003, p222). Rogers also briefly discusses cultural relativism (ibid, p. 441) which recognizes that each culture should be 'judged' in light of its own specific circumstances and needs.

This research focuses on mobile commerce since this is an important and growing set of technologies and services in the global market place. The trend over the last decade or so has been towards an increase in use and importance of mobile technologies in the workplace (e.g. Anckar and D'Incau 2002; Barnes 2003; Damsgaard and Gao 2004; Fitch and Adams 2006). Mobile technologies such as cell phones, smart phones, PDAs, Blackberry etc, have changed the face of personal

and business telecommunications in Europe, the United States, and Japan where mobile access has become a necessity rather than a luxury (Skelton 2003, preface). From a strategic perspective, mobile technologies are fueling significant changes in business and working practices (Barnes 2003), and developing new structures and value chains (Anckar and D'Incau 2002; Barnes 2002). Already for some groups, Internet access via cell phones has exceeded access from personal computers (Williams 2006). In technologically developing countries mobile access to the Internet is seen as the most promising option to address the digital divide (IDRC 2004; Lester et al 2006). For instance mobile access via PDA and cell phones has become instrumental in supporting healthcare in Africa (Friedman 2003; Goering 2006; Dwolatzky et al 2006). The cell phone is becoming increasingly important as a technology in both the breadth and depth of how it is used, from business and social perspectives. For many people m-commerce will be synonymous with e-commerce and it has a global reach (Lord, 2004). There is consequently a need to understand peoples' attitudes towards this important aspect of e-commerce (Constantiou et al 2007, p51). There exist several definitions on m-commerce such as *M-commerce* is any electronic commerce done in a wireless environment, especially via the Internet (Turban and King, 2003, p.334); *M-commerce* is the use of wireless digital devices to enable transactions on the web (Laudon and Traver, 2002, p.18). This study prefers to use this explanation that *M-commerce* is the buying and selling of goods and services through wireless handheld devices such as cellular phones, and personal digital assistants (House, Mahajan and Danesi, 2001).

The rest of this paper is structured as follows. First some of the attributes of the technological environment are compared between China and the UK in relation to m-commerce, then attributes of culture are examined and how these are likely to impact attitudes. Then the study is described and the results discussed. The paper then presents a

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