



## **ENABLERS OF KNOWLEDGE SHARING THROUGH MOBILE SHORT MESSAGING SERVICE**

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### **Abstract**

*The study proposes a conceptual model of factors that enables knowledge sharing through SMS. It was proposed that at technological level effectiveness of SMS as communication tool, its perceived complexity, responsiveness in form of prompt response and social interaction bonds all effects knowledge sharing process through SMS. This study points out the informal or personal knowledge sharing in general society which offers potentials of time and cost savings. This research is preliminary in nature to explore factors of knowledge sharing through SMS and future research is planned to empirically validate the concepts.*

*Key words:* SMS, Knowledge sharing, Mobiles

### **INTRODUCTION**

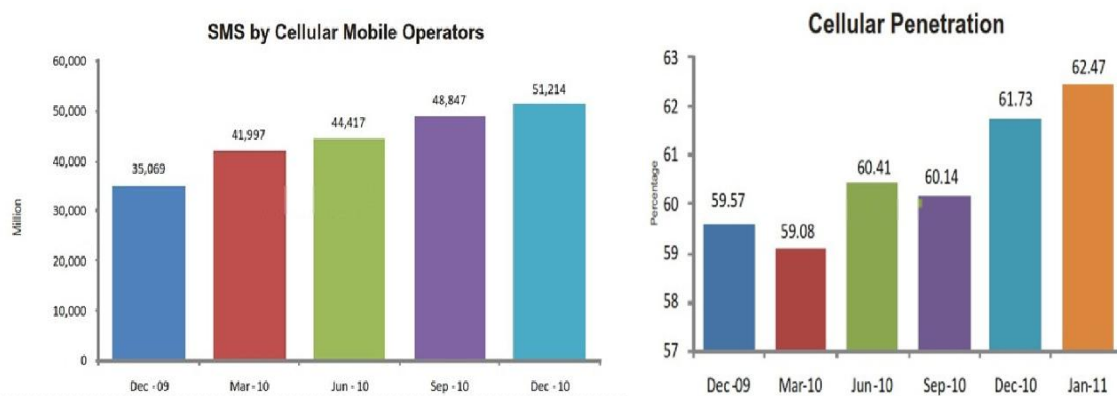
Knowledge sharing is considered as an ethical behavior of individuals (Wang, 2004). The occurrence of knowledge sharing is observed at both organizational and individual levels. It is argued that effective flow of knowledge is only possible through people (Egan, 2003). The main focus of research stream of knowledge sharing is on organizational benefits and it is generally acceptable that knowledge is an important resource of an organization. Similarly knowledge management research generally takes a narrow view of potential impacts of knowledge management i-e organizational perspective and ignores the ultimate effect on society in general. It is a fact that no organization can survive in isolation and operates in a societal framework so knowledge society must also be a focus in knowledge management research stream. In general society people share knowledge both formal and informal e.g students share notes with each other or help each others in form of combine study etc.

Recent years have been witness of new technologies and modes of knowledge sharing e.g virtual communities, blogs, emails and mobiles etc. The use of mobile is increasing becoming an essential part of daily lives by having an economic and social impact on society (Sridhar and Varadharajan, 2007). The interest of World Trade Organization (WTO) and International Telecommunication Union (ITU) in assessing the socio-economic influence on individuals shows that mobile phones are not just a technology but an important tool of

societal development. As a tool of social connectivity mobile phones have become integral part of common life in a society (Frost & Sullivan, 2003). People use mobile not to just connect to talk each other but also to share their opinions, information or discussion with each other. Short Message Service (SMS) a service component of mobile plays an important role in sharing of information in general society; in fact it is the one of the fastest growth areas in the telecommunications industry (Faulkner & Culwin, 2005). Pakistan has also faced the tremendous growth in use of cell phones and SMS service as well. Therefore, this research aims to explore the factors that affect the use of mobile SMS service for information or knowledge sharing among Pakistani users.

### LITERATURE REVIEW

According to statistics made available by Pakistan Telecommunication Authority in its quarterly report it is found that cellular subscribers in Pakistan were 100 million in 2010, with a 62.5% penetration rate at the end of January 2011 and approximately generation of 100 billion SMS during Jul-Dec 10. Lu, et al.(2010) indicated four functions of SMS in China which are equally applicable in Pakistan. These are supporting individual communication like discussion, greeting etc, supporting subscription to information and services, supporting interaction such as participation in radio programmes and supporting business client communication.



**Fig 1: Statistics of Cellular Sector of Pakistan (Source PTA quarterly report for Oct-Dec 2010)**

As SMS is an essential communication tool for individuals sharing of knowledge same like email, blogs, therefore, it is significant to investigate the factors effecting use of SMS for knowledge sharing. Van den Hooff and Van Weenen (2004b) argued that knowledge sharing

process has two dimensions that are knowledge donating and knowledge collecting. Knowledge donating refers to communicating information to others, while knowledge collecting refers to consulting others to share their knowledge.

Communication media is a critical part of process of knowledge sharing and how much individuals shares information or knowledge varies significantly. According to Farace et al. (1978) communication effectiveness is *'the degree to which the response to a message transmission event is consonant with the overall objectives of the initiator of the event'*. If this definition is taken in the context of SMS as communication tool than it can be said that communication effectiveness is *"the extent to which SMS helps people to communicate effectively with others and provides implicit and private communication"* (Lu, et al., 2010). Rehman et al, (2008) conducted a study to investigate the individuals' perceptions about the effectiveness of communication channels they have used for knowledge sharing. SMS in Pakistan are an effective medium because of attractive packages offered by cellular operators in country including daily, weekly, fortnightly, monthly packages at low rates. Similarly SMS are convenient way because these are highly portable and can be use all time of day. It doesn't require speaking or voice noise contrary to voice call. Therefore, users perceive SMS as value added communication tool and more likely to share knowledge using SMS. Thus, it is proposed that

**H1: Perceived communication effectiveness is significantly related to knowledge sharing Responsiveness**

Along with the effective nature of communication media such as SMS the service responsiveness also plays an important role in knowledge sharing. Responsiveness means to "Willingness to help and provide prompt service" (Jiang, Klein and Carr, 2002). Tan et al (2010) found positive relationship among responsiveness and knowledge sharing, therefore, responsiveness is essential to encourage individual for knowledge sharing. By using SMS users quickly donate their knowledge to others and if they need, get immediate response from others as well. A positive feedback in form of appraisal or acknowledgement for share information motivates them to share more knowledge time by time. The absence of response from receiver to sender of SMS reduces motivation level of knowledge sharing. Thus, it is proposed that

**H2: Responsiveness is significantly related to knowledge sharing.**

## Complexity

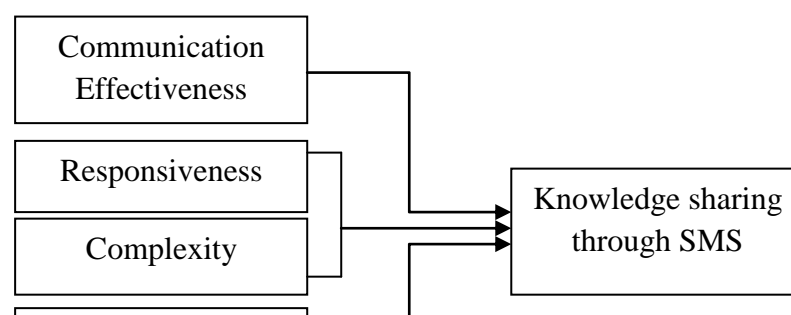
Complexity refers to difficulty in usage or understanding of a tool and is a barrier to intention. Innovation Diffusion Theory (IDT) suggests that Increased Complexity has adverse effects on adoption of an innovation. Gilham and Van Belle (2005) in their study found that perceived complexity of mobile is negatively associated with the use of Mobile Content Services. Lin and Lee (2006) in their study found empirical support that perceived complexity of technology negatively effects knowledge sharing. Sin et al.(2008) also argued that perceived complexity and risks had a negative effect on the adoption of Short Message Service (SMS) technology. Therefore, it can be proposed that

### **H4: Perceived complexity negatively effects knowledge sharing through SMS**

## Social Interaction Ties

Social Capital Theory supports to make strong social relationships among individual to get benefits (Coleman, 1988). In online communities where face to face interaction is absent, development of social capital encourages people to share knowledge (Nahapiet & Ghoshal, 1998). In a society where social relationships are developed among individuals knowledge sharing is common. This can be applied in context of SMS as well. Individuals who have strong social relationships in real world such as friends in universities or colleagues in office they are more likely share to share knowledge through SMS. In other words “unknown contact number” is ignored and “saved contact number” is paid attention. The social ties among individuals enhance trust and respect along with sharing of knowledge (Semin & Smith, 2002). Thus, it is proposed that

### **H3: Social interaction ties have positive effect on knowledge sharing through SMS**



**Fig 2: Conceptual model of enablers of knowledge sharing through SMS**

**DISCUSSION AND CONCLUSION**

The study proposes a conceptual model of factors that enables knowledge sharing through SMS. It was proposed that at technological level effectiveness of SMS as communication tool, its perceived complexity, responsiveness in form of prompt response and social interaction bonds all effects knowledge sharing process through SMS. The knowledge sharing through SMS is previously not dealt except Ng'ambi (2006) who pointed out the potential of Short Message Services (SMS) for knowledge sharing. The research offers potential for knowledge management researchers to take advantage of introducing SMS for knowledge sharing in organizational perspective as well. This study points out the informal or personal knowledge sharing in general society which offers potentials of time and cost savings. It is observed that in Pakistan young generation is the major user of SMS. A deep study is possible to examine the outputs of knowledge sharing both from economic and social point of view. Secondly study is also possible to examine the change and trends in behavior of young generation as users of SMS. This research is preliminary in nature to explore factors of knowledge sharing through SMS and future research is planned to empirically validate the concepts.

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