Why to Use Mobile Technology?

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Abstract

No holistic portrayal exists to map and discuss values deriving from mobile technology use. This empirical paper addresses this gap. To address research purpose adapted grounded theory approach is applied to collect and analyse in-depth interviews with twenty-eight SME managers. This study concludes that mobile technology represents novel and unique category of technology. Whether MT is a simple mean to advanced communication with no physical boundaries of time and location or a business tool to boost creative thinking, this study concludes that MT is different to fixed network and stationary desktop IT because of its core distinctive feature, being mobile. True nature of MT lies in seeing MT as a source of value that derives from using MT. Ultimately by mapping distinctive to MT values and factors that form these values this study endeavors to transform business practitioners' view of mobile technology as purely technically MT to strategic tool that drives new ways in exploiting ubiquitous technology.

Introduction

Mobile technology (MT) brings the possibility to transmit information irrespective of time and location (Balasubramanian et., 2002). But is this all? In reality MT penetrated all the aspects of social and business existence. Technical features of MT are visible but benefits are visible in actual usage offering unique user experience. No holistic portrayal exists to map and discuss values deriving from MT use. This empirical paper addresses this gap by exploring practices in the advertising and marketing industry where MT is utilised both as strategic and operational tool.

Background to the Study

Despite the fact that MT was around over the last fifteen years, academics have not reached a conclusion in what MT actually is. Scholars distinguish two contrasting perspectives on defining MT. First (Wiredu, 2007; Mohelska, 2010) considers mobile devices as *"an alternative way to interact with a traditional Web site, albeit in a different format or on a more limited or constrained basis"* (Tarasewich et al., 2002, p. 43). Herein mobility is a restraining feature because portability and small size of mobile devices restrict MT users to perform certain tasks that can be only completed on stationary fixed networks personal computers. Hence, MT represents a sub-category of information technologies (IT).

On the other hand, second, opposing group of scholars (Jarvenpaa & Lang, 2005; Sheng et al., 2005; De Reuver et al., 2008) believes that MT is a novel unique concept. In fact, Jarvenpaa and Lang (2005) refer to MT as being a combination of communication and computing capabilities, not restricted contextually. Xiaojun et al. (2004, p. 205) emphasise techical essense of MT defining and categorising MT as a broad range of mobile and wireless networks (1), the mobile Internet (2) and mobile devices (3) that facilitate activities anywhere and anytime. Herein mobility is a distinctive feature that differentiates MT from fixed networks and stationary desktop IT because true ubiquity implies consumption of information and services anytime and anywhere regardless of connection to the wireless networks.

Growing number (Nah & Siau, 2005; Jarvenpaa & Lang, 2005) of studies looks at the use of MT to understand uniqueness such technological platforms have in comparison to fixed networks and stationary desktop IT. Vast majority of research about the use of MT explores the B2C context with a particular interest to adoption of mobile marketing (Barwise and Strong, 2002) and few papers focusing on mobile commerce (Barnes, 2002). In particular Rochford (2001), Hammed (2003), Sheng et al. (2005), and Donnelly (2009) highlight organizational benefits of using MT, which are flexible communication, mobility of employees, cost reduction, and positive financial performance. Sheng et al. (2005) adopt value-focused thinking (Keeney & McDaniels, 1992) in attempt to reveal values associated with the organisational adoption of MT. Ending with outline of three organisational areas that MT advances such as (1) operations, (2) communication and knowledge sharing, and (3) marketing effectiveness Sheng et al. (2005) fail to recognise distinctive values that MT use provides. In 2005 Jarvenpaa and Lang publish results of their research that attempts to explore experiences of using MT through process perspective. Jarvenpaa and Lang (2005) outline a list of paradoxes that simultaneously envision strengths and challenging issues related to the MT usage. For instance, MT is found to be a highly engaging platform allowing people to interact anytime anywhere but disengaging at the same time because it limits the depth of conversation that occur in face-to-face scenarios. Thus, it is clear that MT is valuable for both the personal and professional use. But answers to *Why* and *How* are quite fragmented across academic and industry papers.

This paper treats MT as a distinct category of technologies because application of MT provides distinctive and unique experiences compared to business opportunities given by the use of stationary and fixed networks IT. Mobility feature drives new strategic and operational opportunities for companies. Drawing on the above-mentioned concerns this paper aims to address gaps in academic literature. In particular, there is a need to understand why mobile technology is truly different to fixed networks and stationary desktop IT, why to use MT. In finding answers to these questions this paper endeavors to map distinctive MT values. Empirical data given by MT users who engage with MT on both personal and professional levels is explored and analysed. Jensen (1996, p. 60) stresses that knowing *"consequences of consumer value can probably be considered as the most fundamental prerequisite for sustainable competitive advantage"*. Ultimately by mapping distinctive to MT values this study endeavours to drive new ways in exploiting MT.

Research Method

To address research purpose adapted grounded theory (GT) approach (Corbin & Strauss, 1990) is applied to collect and analyse in-depth interviews with SME managers. Adapted GT differs from classical GT approach (Glaser & Strauss, 1967) in that existing theoretical knowledge grounds and directs a profound exploratory process.

Contextually this study focuses on the advertising and marketing industry, pioneers and advanced adopters of digital technologies (TSB, 2009), allowing in-depth exploration on the MT usage from both personal (individual) and professional (organisational) perspectives. Data includes 28 semi-structured in-depth face-to-face and web-based interviews with key decision-makers in firms that employ MT. Each interview lasts from forty minutes to one and a half hour. Most interviewees own and manage their businesses. Few interviewees are responsible for particular area within a firm devoted to understanding technological advancements (creative director in one of the firms, an account manager, two new media / digital directors, and five strategic directors). To maintain ethical principles of confidentiality

and anonymity of results each interviewee is labelled using [I] and adding order number. So interviewee 1 is labelled as I1

Value-focused thinking approach (Keeney & McDaniels, 1992) guides an interviewing process where interviewees are asked to share their accounts on attitudes towards MT and overall experiences in using MT for personal and professional purposes. By employing GT procedures (Corbin and Strauss, 1990) of simultaneous data collection and analysis the author maintains constant comparison approach that builds a rigorous theoretical conceptualisation of categories and concepts. The analysis is based on three-stage coding process. First, open coding identifies key categories to characterise MT and its use. Second, axial coding builds coding matrix to understand the MT use phenomenon. Third, final stage of an analytical process, selective coding, determines core concept and develops a storyline to present results. NVivo 10, qualitative data analysis software, is used to arrange, scan, systematically display and interpret data.

Findings

All 28 interviewees view MT as being different to fixed networks and stationary desktop IT. Difference comes under fine line of viewing MT as extension to fixed networks and stationary desktop IT but then understanding benefits in using MT. Interviewees 23, 24 and 28 say that from *"technical evolution point of view"* [I23] mobile technology is *"extended functionally from stationary computers"* [I28] but *"in terms of the way people are using mobile technology, it is quite unique and different"* [I24]. Being mobile is highlighted as a differentiating factor of MT, underpinning essence to MT functionality and application. MT is powerful in moving life of an individual with them. *"You can conduct business, your social life, your shopping, your buying; you can pretty much do your life on the move on your phone"* [I20]. Interviewee 11 states, *"Mobile technology brings an opportunity to integrate a variety of values as long as there is more value in being mobile"*. Hence, technology being mobile leads to number of benefits for the user of MT. Table 1 summarises conditions that facilitate mobility of MT and set of values that derive from using MT.

Table 1. Values of mobile technology use

Value type	Representation Quotes
Functional value	
Being cross-functional	Abilities of mobile technology to perform variety of activities at the same time: communicate, find you location, and search web. [I8]
Being intuitive	Mobile technology is intuitive. [I17]
	Using mobile devices is very, very useful, and they are so easy to adopt and use. [I24]
Being convenient	Mobile technology for me it is a *convenience* of being able to communicate across *a multitude of platforms*: would it be video, audio, text, whatever. The transfer of information is faster [I7]
Social value	
Being immediate	It is revolutionary in terms of speed and business efficiency really [I9]
Being relevant	Relevance!.. it is one-to-one communication. So, when I send you a message, that message is just for you. When you look at the message I am delivering to you, it is relevant to you; it means something to you. [I2]
Being engaging	All of this is: "We are contacting you and you need to contact us". So, you can do it while people are driving a car or walking. [I3]
Creative value	

Value type	Representation Quotes
Enabling creativity	There are much more things facilitating the mobility of the technology, which means more things can be created. I think it is much more to do with people's freedom, allowing people to do more through being mobile rather than being in one place, remaining stationary. [I1]
Emotional value	
Balancing work and personal life	It brings to me a lot of flexibility in managing personal and work life; although I head my own small business and have a control over the business. In that case it is even more effective tool to manage, differentiate where to separate in many cases is impossible. [I10]

Functional value

Firstly, functional value comprises possibilities that MT creates due technical competencies such as transmission and exchange of data in different formats, ease of use of technical functions, multi-tasking when voice conversation can happen simultaneously with texting and browsing Internet. Technical competencies are all shared between various mobile categories, devices, networks (cloud computing), applications. Hence, MT is a cross-functional type of technology, *"Mobile technology is great because it is all in one place… You can update content between different devices very easily"* [I5]. Secondly, although MT is considered to be complex in nature, interviewees 3, 6 and 7 see MT as *"intuitive in adopting and using"*. Altogether cross-functionality and intuitive interface make MT convenient to use in terms of functional benefits such as *"speed and flexibility of interaction and exchange of information"* [I24], portability, easy to use, and ability to communicate to on demand.

Social value

Social value covers purposes of communication where immediacy in response and, therefore, relevance of timely engagement are consequences of MT being mobile. Ultimately relevance and immediacy take mobile communication onto a different level of engagement with the world. It is about opportunities to engage with people and brands that could not reach or be reached before, *"Holding something small and interacting with the world every single minute through that technology is really fantastic"* [I10].

Creative value

All interviewees claim that mobility enables, *"pushes forward creativity in terms of idea generation and setting up business objectives"* [I10] that develops new services for creative sector clients. Creative processes are not constrained by time and specific locations, hence, allowing freedom in thinking. *"Creativity is based on flexibility that use of mobile devices allows"* [I27].

Emotional value

Final type of value, emotional, really differentiates MT from fixed networks and stationary desktop IT. Teleworking is enabled by all IT but with MT flexibility is even greater. In case with stationary IT, work is still location bound. MT, on the other hand, balances work and personal life allowing flexibility and empowers individuals to manage own workloads. Nevertheless, balance is a controversial concept when it comes to MT because expectations from clients and other social groups to approach an individual anytime anywhere sets disparity in how much time is spent on working, (1) excessive work (workaholism), *"I am constantly working and desperate for being in tune with what is going on at work"* [I13]; (2) effect of laziness, *"spending most the time on the phone and actually not doing any work is not acceptable"* [I23].

Discussion of the Findings

Results of this paper indicate that being mobile creates a set of four main values that distinguishes MT use from using fixed networks and stationary desktop IT. Collectively interviewed practitioners from advertising and marketing industry believe that MT leads to the following benefits or values, functional, social, creative and emotional. Woodruff (1997) uses similar labels to name system of values, which describes goal-based satisfaction with tasks and purposes. However, to the author's knowledge there is no existing published research that maps values or benefits resulting from the MT use.

In turn some researchers (Wu & Wang, 2005; Snowdon et al., 2006) by adopting Technology Acceptance Model to study MT adoption conceal benefits behind terms 'ease of use' and 'usefulness'. Perhaps functional values of convenience, cross-functionality among devices and intuitive interface of MT result in ease of use of mobile technology categories. Whereas creativity, social aspects of relevant, immediate and engaging communication along with ability to balance personal and work life represent usefulness of MT. On the other hand, Varnali and Toker (2010) provide summary of research on mobile marketing and lists four main values that contribute to a consumer acceptance of mobile marketing. These are utilitarian, hedonic, functional and emotional values. However, no details given to what constitute each value. Hence, this study is not only a first one to map unique values that the MT use provides but also to specify what each value entails.

Past studies proclaim MT as being convenient to use (Wu & Wang, 2005), cross-functional in integrating and exporting data across various technology (Snowdon et al., 2006), relevant and immediate in communicating and exchanging information (Snowdon et al., 2006; Spiegelman & Detsky, 2008) and as tool that balances personal life and work in that MT allows flexibility and enables teleworking on the go (Rochford, 2001; Spiegelman & Detsky, 2008). This paper reports similar findings with exception that all these benefits are grouped under certain group of values.

Convenience in use, cross-functionality, and intuitive functionality are all seen as description of values derived from MT functional or technical characteristics. Social value focuses on speed and quality of processes performed using MT such as immediacy, relevance and engagement in communication and exchange of data. In comparison to fixed network and stationary desktop IT immediacy, relevance and engagement level extremely increase when it comes to technology that is mobile and implies consumption, creation and delivery of services and products on the go anytime anywhere. Lastly, interviewed in this study practitioners see balancing personal life and work as contribution to emotional well-being. This is in line with Spiegelman and Detsky (2008); however, Spiegelman and Detsky (2008) add that simultaneously with balance mobile technology can actually create imbalance in separating personal life from work. In this study interviewees refer to imbalance between personal life and work as workaholism and the effect of laziness.

Value of enabling creativity is something not mentioned by previous studies as part of benefits that the MT use creates. Lu et al. (2005) looked at personal innovativeness as antecedent to adoption of mobile services, which is seen as helping to individuals in using MT functions and perceiving mobile services as useful but not actually affecting adoption of mobile services. This paper finds that MT is a tool that helps to boost creativity by breaking organisational constraints of time and location that commonly restricts creative thinking (West, 2002). MT is claimed by interviewees to facilitate flexibility in managing workload. According to Menzel et al. (2007), flexibility leads to more creative results in organisations.

Implications

Mobility is a distinctive feature of MT and underlines values that the MT use creates. This study concludes that mobile technology represents a novel and unique category of technology. Whether MT is a simple mean to advanced communication with no physical boundaries of time and location or a business tool to boost creative thinking, this study concludes that MT is different to fixed networks and stationary desktop IT because of its core distinctive feature, being mobile. True nature of MT lies in seeing MT as a source of value that derives from using MT. Ultimately by mapping distinctive to MT values and factors that form these values this study endeavors to transform business practitioners' view of mobile technology as purely technically MT to strategic tool that drives new ways in exploiting MT. Given qualitative nature of this study, this study is limited in ability to provide generalisable findings. Hence, a follow-up quantitative study is needed to verify results of this study and to present holistic picture of the advertising and marketing industry and across other industries.

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