



GUEST EDITORIAL

Introduction to the special issue on mobile user behaviour

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Theme of the special issue

Mobile devices, such as smartphones and Personal Digital Assistants, are now in widespread use. Indeed, for many individuals, these devices have become the preferred mode of accessing and using information systems (IS). They provide their users with unique amenities such as freedom of movement, anytime anywhere accessibility, as well as location-aware capabilities.

The widespread adoption of mobile devices, however, has not led to a similar increase in our research efforts to capture the behaviour of their users. That behaviour is decidedly different from the ways in which people interacted with computers a decade ago. To better understand and improve the way users interact with mobile devices, our field is thus in need of new, or more refined, concepts and new theories.

We are pleased, therefore, to introduce a Special Issue in the *European Journal of Information Systems* on mobile user behaviour. The papers in this Special Issue all address the ways in which the increased mobility of the users violates some of the assumptions traditionally associated with the use of IS. They then develop new concepts to address these new circumstances.

Process

The selection process for this Special Issue was competitive. A call for the issue was announced on 2 July 2005, with a deadline of 1 September 2005. On that date, we had received 32 papers. Sixteen of those papers were subjected to a double-blind referee process, with two referees for each paper. Seven of these papers then eventually made it into the Special Issue, leading to an acceptance rate of 22%.

About the papers

Three of the papers are predominantly quantitative whereas four are qualitative in nature. The countries involved are the U.S. (2 ×), Canada, Australia, Denmark, Greece, and the United Kingdom. Besides focusing on mobile user behaviour, all papers share another common theme in that each one provides groundwork for further theorising in the area. No paper is, in that sense, the be-all and end-all on the matter. However, each paper provides clear directions on advancing the theoretical frameworks that capture mobile user behaviour.

Let us now introduce each of the seven papers one at a time.

Is Mobile E-mail Functional or Dysfunctional? Two Perspectives on Mobile E-mail Usage

Catherine A. Middleton, Wendy Cukier

The paper studies a number of mobile e-mail users, their addictive usage behaviour and how it infringes their work–life boundaries. It is pointed out

that even though mobile e-mail is highly functional and efficient, it also introduces disturbances into work–life balance. The authors distinguish between a functional component (i.e., efficiency, minimal disruption, immediacy, and freedom) and a dysfunctional component (i.e., danger, antisocial behaviour, distraction, and infringement) and conclude that both components can be explained through Plato's cave metaphor. The interpretation of a phenomenon from inside the cave (i.e., by people imprisoned by the mobile device) can be very different from the interpretation outside (i.e., by colleagues, family, friends, etc.).

This paper is arguably one of the first studies in the IS field that tackles the problems of overadoption, that is, the usage of an information system to the extent of addiction. It thoughtfully discusses the motives of mobile e-mail users and provides a therapeutic analysis of their dysfunctional usage patterns.

Contextual Influences on User Satisfaction with Mobile Computing: Findings from Two Healthcare Organizations
Rens Scheepers, Helana Scheepers and Ojelanki K. Ngwenyama

The paper examines how extra-organisational influences impact user satisfaction with mobile systems. It employs a longitudinal study that scrutinises the implementation of mobile technology in two healthcare organisations. The authors show that user acceptance of mobile devices is not only influenced by the direct personal context, but also by the professional context, and to some extent also by the society at large.

The contribution of this paper is in showing how users adopt the implementation of mobile devices in the workplace. This is different from traditional IS in that mobile devices have more versatile features, and can therefore be used for many other purposes as well – not just in the work context. This creates acceptance patterns that are different from traditional systems as the uses in other contexts can sometimes overshadow the uses in the organisational context. The authors thus make a strong case for the inclusion of contexts in future acceptance studies.

Switching Behavior of Mobile Users: Do Users' Relational Investments and Demographics Matter?

C Ranganathan, DongBack Seo and Yair Babad

This study examines the switching behaviour of mobile users that are under no contractual obligations. It uses an extensive data set from a North American mobile service provider that comprises more than 30,000 data points. As the study shows, the usage history (conceptualised as part of relational investments) as well as gender represent strong determinants of churn.

Opposed to the majority of papers that focus solely on technology adoption behaviour and their antecedents, this paper tackles issues that occur *after* adoption. The model provides a solid foundation for others to contribute to and extend.

Enacting new temporal boundaries: The role of mobile phones
Elpida Prasopoulou, Athanasia Pouloudi and Niki Panteli

The study examines how the use of mobile phones influences the temporal boundaries that people enact in order to regulate and coordinate their work and non-work activities.

It demonstrates that a new socio-temporal order is emerging that is partly based on the characteristics of the novel technology and partly on the user's own behaviour. Contrary to the notion of mobile phones collapsing time and space, as presented in prior research, this paper points out that time is a socially constructed item that, when changed, also changes the structural properties associated with it.

This paper is one of several in this issue that tackles the issue of blurring boundaries. All heavy users of mobile phones have experienced how the 'anytime, anyplace' availability can be both a blessing and a bane. This paper provides thoughts and concepts to deal with the issue.

Exploring the Influence of Reference Situations and Reference Pricing on Mobile Service User Behaviour

Jennifer Blechar, Ioanna D. Constantiou, Jan Damsgaard

The paper aims to explain the paradox between the huge increase in mobile phone sales and the not-so-huge increase in adoption of mobile services. Based on two longitudinal studies in Denmark, rich data is collected through a mixed method approach, including qualitative as well as quantitative methods. The authors explore the hypothesis that the reference price (a price that a consumer perceives as the regular price based on past purchases) and reference situations (comparable past situations in which a product or service was purchased) impact mobile service usage.

It may be trivial to argue that price is a deciding factor in the purchase of mobile services, but it is much less so to conclude that the reference price contributes to that decision too, and that the reference price can vary between users, and indeed, between countries and cultures. The concept helps explain the huge variation in the adoption of the same service in different countries.

Mobile Computing: A User Study on Hedonic/Utilitarian Mobile Device Usage

Robin L. Wakefield, Dwayne Whitten

This paper examines differences in intentions to use, perceptions of usefulness and enjoyment across hedonic and utilitarian advertisements of mobile devices. More specifically, the study applies an experimental approach by pitching a PDA either in the utilitarian (or functional) sense, or in the hedonic (pleasure-oriented) sense. Findings support the hypotheses that it does make a difference how the PDA is targeted towards users.

This study has great practical relevance for those suppliers in the mobile industry that struggle with the positioning of their mobile services. We see advertisements for mobile devices that target the more functional user and those that target the more hedonic user. Which

is more effective? The paper supplies concepts and provides an empirical study in which the two options are compared with each other.

Secondary User Relations in Emerging Mobile Computing Environments

Elaine Ferneley, Ben Light

The paper examines the changing role of primary and secondary users in the context of mobile devices. Primary users are users that interact directly with the technology. Secondary users are users that benefit from the data on an aggregated level (e.g., by reading summary performance reports). It uses three case studies from the U.K.

This last paper in the special issue focuses on a class of users that receives little attention in the IS literature – those that do not directly interact with systems, yet greatly benefit from the aggregated performance reports. It conceptualises these users and shows how the intro-

duction of mobile technology can blur the distinction between them and the original, primary users. In doing so, it helps us to understand the side effects, possibly unintended, of introducing mobile technology in the workplace.

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