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# The Ambiguous ICT: Investigating How Users Relate to and Interact with Their Device

#### Jessica Blank

#### ABSTRACT

The purpose of this research is to gain a detailed understanding of how everyday tablet users relate to and interact with their device. This is done with the intention of distinguishing the tablet from other ICTs on the market, as well as defining their role and significance in the contemporary information society. Qualitative data was collected from a sample of seven habitual tablet users using a combination of TA methodology with preliminary and follow-up interviews. Subsequent analysis was done along the lines of predetermined key themes identified by the researcher focusing on the allocation and experience of time, the incorporation of the device into user's everyday life, usability of the interface, and physical comfort/discomfort during use. Two further key themes emerged following the research, raising questions of the adaptability of tablets to individual needs and the private nature of the relationship between users and their device. The research question, methodology and interpretation of results relied on theories of domestication, ICT design, time and the

#### INTRODUCTION

The research undertaken aims to shed light on the significance of tablets to individual users, and how this unique and complex ICT positions itself within contemporary society. At the core of such an investigation lies the desire to uncover the existence and true potential of the notion of the information society (IS). Despite the latter's disputed nature, the question of the risks and benefits of an information-driven society remains high on the agenda of media and communication studies. ICTs play a crucial role in establishing and maintaining what Mansell defines as 'the pervasive dominant vision of the Information Society [...] strongly informed by the idea that if better versions of the underlying technologies could be built, they should be developed in order to drive economic growth and to augment military strength' (2010: 168). With this in mind, the study of tablet devices, as a by-product of the IS, is essential to analysing society as it currently stands as well as anticipating its evolution.

However, to study a single ICT and expect a macro analysis of society is unrealistic. Therefore, as an initial point of contact with tablet devices, this research aims to form a more information about whether or not businesses should consider using them in operations or optimizing their existing platforms for tablet use.

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are thus at the core of the Information Society, making research on them particularly important and relevant.

When investigating any part of the Information Society, Webster emphasizes the importance of 'accounts that [...] strive to identify the most consequential characteristics of how we live.' (2006: 454). In order to do this, one must first understand what the Information Society means and what its constitutive components are. At the heart of this is a shift of value from tangible goods to intangible goods. That is, the Information Society is characterized by endless flows and the 'application of [...] knowledge and information to knowledge generation and information processing/communication devices, in a cumulative feedback loop between innovation and the uses of innovation' (Castells, 1996: 31). The use of ICTs is thus essential to the generation of capital and the functioning of the economy. Furthermore, technology in the Information Society permeates all aspects of human life, especially human interaction. Castells identifies the IS as articulated by a series of networks, 'complex structure[s] of communication constructed around a set of goals that simultaneously ensure unity of purpose and flexibility of execution by their adaptability to the operating environment' (2013: 341). ICTs connect individuals to these networks by sustaining both networked individualism and communalism, the new forms of communication that exist in contemporary society.

Taking the IS as a starting point from which to develop a theoretical framework for research on user appropriation of tablet devices enables a logical development of ideas via the characteristics of such a society. Lash understands the 'primary qualities of information [as] flow, spatial compression, temporal compression [and] real time relations' (2002: 2). These can also be easily attributed to tablet devices, indicating the importance of the nexus between ICTs and the IS. The study of tablet/user relations should provide valuable insight on the functioning and development of an IS as Castells identifies that 'the relevance of a given technology, and its acceptance by people at large, do not result from the technology itself, but from the appropriation of the technology by individuals and collectives to fit their needs and their culture' (Castells, 2012: 362). Studying the appropriation of an ICT by users as well as its position in society provides very specific insight about how life is mediated by new technology in contemporary society.

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*Objectification:* Focuses on how users ascribe their own values to the object in question. This is expressed and observed through 'usage but also in the physical dispositions of the objects in the spatial environment' (Silverstone *et al.*, 1992: 22).

Incorporation:

The importance of design in formulating the research question is twofold. On the one hand, enabling a greater understanding of how and why users interact with their tablet in certain ways. On the other, mapping the position of tablet devices in relation to other ICTs. As Freeman notes,

adoption of new technologies into society depends on how they are used; the significance of tablet devices is determined by those who actively engage with them because 'their sociotechnical features directly relate to the major cultural trends underlying social practice in our society' (Castells, 1996: 362).

Second, the terms *relate to* and *interact with* are to be understood as separate and distinct observable behaviours. Relating to tablet devices includes feelings of closeness to or distance from the object itself, as well as how the device articulates the user's everyday life. Interaction with tablet devices focuses on how the user carries out tasks on the device, as well as looking at how he/she physically engages with the tablet. The distinction between the two can be understood as the observation of intangible versus tangible connections between the tablet and its user.

Finally, the research question is framed with attention to the notion of time as shaped by ICTs, described by Green and Haddon (2009) as the weakening of socio-temporal structures. That is, beyond observable qualities of tablet use, the research question aims to understand how the tablet does or does not alter the experience of time. More specifically, the research question aims to identify ways in which tablet use can affect all possible aspects and formations of time such as consumption, production, communication, distance, place, identification etc.

The importance of such research is twofold. On the one hand, detailed research on the appropriation of a particular ICT provides insight into

However, as tablets and other forms of hybrid mobile communication devices become increasingly popular with users, it is crucial to understand their function in society in order to apprehend their development and lifecycle in society and within organizations.

#### RESEARCH DESIGN AND METHODOLOGY

Once the research question has been established, an appropriate research strategy and methodology must follow. This should be carefully crafted in order to extract the exact type of data necessary to create meaningful insight into the question at hand. The following section presents the most appropriate research method chosen to examine how users relate to and interact with their tablet devices. The entire process and rationale behind it will be explained in detail and elaborated in order to better comprehend as well as validate the analysis of the results.

#### Framing the Question

In order to move forwards in designing a suitable research method, it is necessary to look back at the detailed formulation of the research question. This provides direction as to what type of data would provide the best information about the ways in which users appropriate tablet devices. Furthermore, in line with the research question's inextricability to the theoretical construction of the Information Society, Webster suggests that any analysis of the subject should delve deeper than the macro-level. Meaningful data is sought out through 'the combination of rich empirical analysis and its complex relations with wider texts and conceptualizations' (Webster, 2005:454). With this in mind an initial decision to compile qualitative data, rich in meaning and open to detailed interpretation, is the point of departure in establishing an adequate methodology.

A concise iteration of the research question is as follows:

How do tablet users interact with and relate to tablet devices, with special attention to the notion of time as shaped by ICTs summarized by Green and Haddon as 'the weakening of socio-temporal structures, as more work takes place at different times, and we can [...] engage in leisure activities at different times' (2009: 11).

The type of data that will answer this question is mostly concerned with the relationship between individual users and their own personal tablet device. That is, we are not interested

in how a user relates to any tablet since this would not pull out the personal nature of the relationship between an ICT and its user that lies at the core of the interrogation. Furthermore, such a relationship exists on both a physical and cognitive level, meaning that the chosen methodology must be able to account for both how the user physically interacts with the device as well as how he/she feels or thinks whilst using the tablet. Katz and Aakhus term this 'intersection of two domains, namely the social person and the mobile machine' the Apparatgeist, encompassing the ' MSc Dissertation of Jessica Blank

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Whilst this notion of time is shared by everyone, tablets have the ability to alter individual experiences of time, and herein lies an important distinction. As we move increasingly towards an established IS, Adam emphasizes an 'additional need to ground knowledge of the

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time. Similarly, the second respondent who did not currently see the tablet as essential to his life also found use and importance for it under different conditions. When discussing the movies he had on his tablet he stated, 'I bought them when I was going out with my ex because their Internet was terrible and she didn't have a TV so it was nice to have some form of electronic entertainment. I don't really use it anymore.' Here the tablet gained relevance, becoming assimilated into his everyday life through its ability to replace other unavailable technologies.

#### Usability of Device

The importance of investigating the usability of the tablet in relation to user appropriation of the device is twofold. On the one hand, it enables a detailed evaluation of the strength and shortcomings of the ICT as a user-friendly technology. On the other, Mansell emphasizes the importance of moving away from 'linear models of the innovation process [which] assume that logical adaptive processes will ensure a smooth working-out of [...] the interrelationships between actors and structures' (1996: 22), in order to '

were rarely aware of the speed and agility with which they switched between applications. Tablet use is very much a thoughtless process but this does not mean that it is not complex. Quite the opposite, this exposed the user-friendliness of the device and its interface. As tablets are tactile devices, it is essential that its interface be specifically designed with this in mind if they are to serve their ultimate purpose.

One respondent described her frustration at not being able to move (even more quickly) between applications,

It's when you are on one app you can switch to the other one just by swiping with four fingers. I do that a lot, but I never know which order the apps are in so sometimes it gets confusing and isn't as efficient as it should be. I guess I'm trying to say that it's a bit complicated switching between apps. I don't like going back to the home screen to change an application but most of the time I have to because it's too complicated otherwise. As

entirely different when it belonged to another respondent who worked as a personal trainer. From the outset it was apparent that it was not a fashion accessory but a sturdy piece of equipment fit to survive the toughest conditions. He explained the reason for this,

I have had it break twice so now I have this big retainer on it that is meant to be

Combining the subjects' responses to this question with other information provided during the research revealed that the nature of the user's relationship with the tablet depended upon their specific use for the device. If the subject used the tablet to manage personal aspects of their lives they felt more inclined to keep their interaction with the device private, whereas subjects who used it for general entertainment purposes or mundane tasks were happy to share their experiences.

### CONCLUSION

The motivation for researching how users interact with and relate to tablets initially stemmed from the desire to know more about an increasingly ubiquitous device which, nonetheless,

inability to assess whether the subject is holding back information or being entirely truthful. Interpretation of results was based entirely on taking the participant's words as the truth with li Castells, M

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Interviewer:	And at what level?
Respondent:	I'm doing a master's degree.
Interviewer:	In what subject?
Respondent:	Fashion journalism.
Interviewer:	How long have you had your tablet?
Respondent:	I have had an iPad since March last year, March 2013.
Interviewer:	And did you purchase it or was it a gift?
Respondent:	I asked my dad to buy it for me.
Interviewer:	Okay. So I'm going to say it was a purchase pretty much.
Respondent:	Yeah.
Interviewer:	So what was the rationale behind deciding that you wanted to get a tablet?
Respondent:	I used to have a big computer, an old Mac book. Battery-wise it didn't work

winter in June. Sexy Spanish. Should prepare. Went to Wimbledon. Which reminded me, I have to get tickets to the Henley regatta if there are any left. It's not too far from home either. I could Google it. School and schedule. 23<sup>rd</sup> of July. It's very near. Tickets. I'm bad with the queue. Oh this is very, very bad. They should do a better website for the advert. This is shit, this is just a very bad layout. That's so annoying, but I can't be bothered to go and get the computer. How much is it? Where are the prices? Oh this is so difficult to understand. Just put tickets... I'm losing interest only because the website is so bad. Get in here. The race... I have no idea what the prices are. Whatever, I will get someone else to do it for me. The Henley Regatta. I have never been and I am so excited to go. Such a British... another bad website, obviously. Nobody cares about this.

If I was to have a company, even if it was only selling colourful beads for bracelets, like plastic for bracelets, the first thing I would do is have a proper website. You know, you can sell tissues for a very expensive price if you have a nice website I think. Media, shop, okay. Ticket advocate. Closure. Okay, but where are the prices. Okay, they are sold out. How do I press...? Sold out already? Crikey. 70 pounds is not that bad. Oh, oh, oh, Nicole. Henley Regatta tickets for Saturday are sold out. We should get tickets.

The coffee is getting watered down. If I was working in Tattler in order to have the biggest revenue stream, I would have this clickable with a reward style company so you could get a cut out of it.

downloading I'm not going to wait there until it downloads. I will be doing something else and go and check other stuff.

- Interviewer: Perfect. Were you... you seemed to be really comfortable. Are you comfortable when you're on your iPad?
- Respondent: Very, very comfortable. It's just a very handy computer that you can just have. In fact sometimes, since I bought the iPad... it's very funny but since I bought it the

Interviewer:	So you didn't feel uncomfortable at any point and you didn't feel like I was intrusive?
Respondent:	No. Why would it be?
Interviewer:	To make sure. Is there anything you want to add?
Respondent:	That I think it's great. I would love to know about what you come up with.
Interviewer:	Of course, perfect. That was amazing, thank you so much. It was really good.

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