Understanding and exploiting idiosyncrasy in the use of ICT devices such as tablets: setting the background

Ina Fourie

Department of Information Science, University of Pretoria, Pretoria, South Africa

Please note, this is not the final version that appeared in Library Hi Tech

Abstract

Purpose – When using information communication technology (ICT) devices it is easy to be trapped by purely the purpose of their design, how they are marketed, product reviews and noting, or even copying, the behaviour of the younger, Net Generation. The purpose of the column will be to argue for encouraging all to contribute to deepening our understanding of fully exploiting technology. This includes encouraging people who may be less techno-savvy but with a richer life-world and life-experience to share their use of devices such as tablets, and to allow all to benefit from the idiosyncrasy in use that should be aimed at a life-fit with personality, learning style, preferences, etc., and widening information spaces and information horizons.

Design/methodology/approach – The column will be written against the background of research from Information Behaviour, and the Learning Sciences (especially Andragogics).

Findings – There are many reasons to explore more than the obvious ways in which ICT devices such as tablets can be used, and for encouraging a spectrum of users to share the idiosyncrasies in their use thereof. Library and information (LIS) services should move from merely teaching people information literacy and ICT skills to creating grounds for sharing practices and experiences in using devices such as tablets. The focus should move to exploiting the benefit of exploring idiosyncrasies in ICT use and how to encourage people to reflect their life-world and life experience in their use of ICT devices such as tablets to widen their (and our) information spaces and information horizons.

Originality/value – Although much has been published on ICT in the Library and Information Science literature and more recently in relation to the Net Generation, I am not aware of publications exploiting idiosyncrasy and the value that can be added by considering the life-world and life-experience of people in their choices in using ICT devices such as tablets. This paper sets the background for further reflection.

Keywords – ICT, Information, Users

1 Introduction

The abundance of information and new developments we all face, especially regarding information communication technology (ICT) devices is nothing new. Mobility in communication and accessing information, and ubiquitous devices, are no longer novelties. Neither are our fears for information overload and claims of despair on being unable to keep up, frustration in moving from one device to the next, and concern about the widening gap in the digital divide – especially the grey digital divide (i.e. the elderly) who are considered to be mostly less techno-savvy (Morris, Goodman and Brading, 2007).

Amazingly enough there always seems to be somebody who is keen and able to fill the gaps in knowledge created by such developments, or who for some or other reason, is "forced" to take up the challenge. Here I am thinking of the excellent columns presented by Phil Bradely, Peggy Anne Salz and many others writing on technological issues. I am thinking of the books in the *The Accidental* series published by Information Today and the *TECH Set* by Facet Publishing. The emphasis is mostly on "how to use", the purposes for which something can be used, and the technological strengths. Although valuable, this is, however, not sufficient considering the spectrum of developments and possibilities we face.

We are encouraged to use ICT according to its projected purposes and strengths. The emphasis is on technological skills, pressing the right buttons and making the right clicks. It is on understanding the devices. In a society driven by the need to increase innovation, productivity, and competitive edges, and where words such as "user empowerment", "consumer empowerment", "shared decision-making", "informed decisions" and "reaching one's full potential" is at the order of the day, it seems timely to reflect on whether we need to look further than the Net Generation and gurus in ICT for ideas on making the most of ICT devices – in fully exploiting the information spaces and information horizons they can open and finding a "life-fit" with such devices. The terms "information spaces" and "information horizons" have been raised in the Information Behaviour literature (Sonnenwald 1999) and will be explored in more detail in a next paper. My inspiration for referring to finding a "life-fit" with ICT comes from the work of Selwyn (2004).

This paper will set the scenario for reflecting on exploiting unique contributions or idiosyncrasies in the use of ICT devices by considering the full spectrum of people using it. It argues the importance of allowing people to draw on their own choices and experiences in using ICT devices and to share this with others. It will argue that people who are often considered to be less techno-savvy than the Net generation can add value to how we find a "life-fit" with ICT and adding value to the use of the latest devices. As background the paper will consider the following: what happens if new ICT devices come on the market, our current focus in studying the use of ICT devices, the danger of being too side-tracked by the Net Generation, and the value of considering idiosyncrasy and eventually life-world and life-experience in fully exploiting ICT devices and finding "life-fits". In conclusion it will refer to how we might be able to draw on the literature of Information Behaviour and the Learning Sciences (especially Andragogics) for further reflection.

2 What happens if new ICT comes on the market?

As soon as a new ICT device appears it is described in terms of the design and how it is marketed (i.e. the advertisements, marketing documents, official manuals and guidelines), as well as the reviews reflecting on the capacity, features and shortcomings. I am mentioning a few examples only: smart phones, mobiles, podcasting devices, tablets, e-book readers, and ultrabooks; all on which numerous reviews can be found on the Web and in publications such as *PC Magazine* and *PC Format*.

We perhaps have time to do a few studies on how people such as the users of library and information (LIS) services, LIS professionals themselves, or others, such as professional groups (teachers, plastic surgeons, cardiologists) are using the latest ICT. From the many available reports I am mentioning a few only to stress the point: Johnstone (2011) reports on mobile learners and libraries, Medeiros (2010) on iPads and interlibrary lending, Wong (2012) on the suitability of mobile platforms, Freshwater (2011) on iPhone and iPad applications for plastic surgeons, Little (2011) on smart phones and mobile technologies in academic libraries, Marchman (2011) on the use of iPads in cardiology... and the most interesting reference I came across: Smith (2011) reporting in *The New Scientists* on apps for apes in an article titled "orang-utans get appy". Even here the focus is on how they

reacted to the iPads: "orang – utans went bananas", and "... he threw up his hands and clapped".... And then there is a new device on the market and a new buzzword to become acquainted to.

The focus is on how to influence people in using ICT. When considering the older generation, and especially the elderly, it is about training them and getting them on board in using ICT; changing their attitude. It is about the use of the technology, the adoption, suitability for various contexts, and how it can change people's lives.

3 Interest in the Net Generation's use of technology

We are keen to see how the Net Generation (also referred to as the Net Gen, Google Generation, Generation Y or millennials) growing up with computers and the Internet, is using the latest ICT, and to learn from them. Blackburn (2011) reports on their adoption of new technologies in libraries through the diffusion of innovation process, while Autry and Berge (2011) report on bringing the different generations together.

Effective use of ICT is strongly associated with the multiplicity of skills and attitudes of the Net Generation. "Digital natives are often said to be 'hardwired' to think from a technological perspective" (Autry and Berge, 2011, p. 463). We are concerned about their often uncritical acceptance of information, superficial and quick reading. Yet their easy adoption and intuitive use of new ICT devices is the envy of numerous parents and senior colleagues who consider themselves to be less techno-savvy. They are seen as the early adopters of ICT. This is stressed by Blackburn (2011, p. 675): "... millennial librarians are the innovators and early adopters through which technology is diffused into libraries... Through their unique technology-driven characteristics and personality traits, these librarians are more likely to become change agents or surrogate buyers for their libraries as part of the innovation process". It is easy to get the perception that they are the ones to drive innovation, and that they may be the group who needs to set the tone in the use of ICT devices. Although their input is certainly very important, the question arises: are they the only ones that can contribute to innovative use of ICT? May there perhaps be more insight to be gained if we consider a wider spectrum of people and how they use ICT? What shall we call these people: "more mature users", "older users" (not necessarily the elderly) or the "users with a richer life-world and life-experience"?

May we perhaps by focusing too much on ICT knowledge and skills, and imitating the younger generation, miss out on a wealth of possibilities? Are we perhaps depriving ourselves of richer experiences and benefits from ICT devices? The terms "information space" and "information horizons" mentioned in the literature of Information Behaviour (Sonnenwald, 1999) leave the impression of a very wide scope in dealing with information and information sharing. This is something to work towards if we consider the demands of current day society as sketched in the Introduction. A good point of departure may be to start with finding "life-fits" for ICT (Selwyn, 2004). Tablets seem to offer many possibilities.

4 Finding a "life-fit" with my tablet

When acquiring a tablet I started wondering about the change in my life. For the first time, for me, I really had the feeling of empowerment and achievement that could be contributed to the use of technology – I can do things I could not do before. I can manage my life by having numbers and names, notes, reminders, decisions taken at a meeting, maps, the Bible, and translations for words in French, German and Spanish at the touch of a button. I have the *Oxford Dictionary* at hand; photos of my son's wedding; even a few photos of my twin sons as babies. I feel confident. I experience less stress when going from point A to point B – I can follow every step on my tablet. I can immediately check the picnic menu offered at a wine farm. I can read a textbook on an eight hour day flight; enlarging the text I don't need to

fiddle around for reading glasses. I don't need to pay extra because my luggage is overweight for carrying textbooks and articles around on a conference trip. I am happy about my choice of applications (apps) on my tablet. It somehow reflects me, and the way I like to do things. It reflects my preferences and style. I listen to what younger colleagues are using and how they are using it. I learn from them, but I think "I also can contribute something". It is not always so easy for me to figure out which points to touch... but somehow I get by, and I think my spectrum of applications, and those to be added, might reflect a richer picture of the life-world faced by working professionals trying to find a balance with everyday life responsibilities. I have a richer spectrum of work and research experience to draw on. My tablet reflects my idiosyncrasy in using it...and I might just be better equipped, to widen the information space and the information horizons than some of my younger colleagues (This can be further explored in another paper drawing on the Learning Sciences and adult learning theories (Andragogics)).

This brought me to this column theme: reflecting on how we can exploit contributions from people with a richer life-world and life-experience to enhance the use of ICT devices. I think it is time to consider the full spectrum of people that is using ICT and what they can contribute on innovative use, and also how this can be used to help more people to *gain confidence* in what they can contribute. Knowing which buttons to press and technical skills are important, but so is the ability for each person to draw on his/her life-world and life experiences to find unique ways of using technology. Selwyn (2004) refers to a "life-fit". I would like to add "idiosyncrasy" and "idiosyncrasies" — bringing that what may be unique and different to the table — or more specifically the tablet (For me this is an innovation with endless possibilities for unique and idiosyncratic use.)

How do we approach ICT and older people?

Before arguing a different approach, first a few words on how we currently approach ICT adoption and ICT skills by older people. Numerous reports have appeared on teaching ICT skills. Fourie and Krauss (2011) offer an extensive review on teaching ICT and Internet focused information literacy skills to teachers in developing communities. The literature focuses mostly on *how*: how we can teach people, how we can tell them to use technology, how we can influence them and change their habits, how they can learn from others, and how we can get them to accept the use of technology. Freddolino *et al.* (2011) report on using peer tutors to teach older adults about technology, Hanson (2010) on influencing technology adoption by older adults, and Sang, Valcke, Van Braak and Van Tondeur (2010) on thinking processes. Few, such as Bailey and Sheehan (2009), report on their views. They wrote on the "Technology, older person's perspectives and the anthropological ethnographic lense".

By focusing on before-mentioned issues we are trying to include older people in the use of ICT; we try to lessen the gap in bridging the digital divide by understanding the barriers and challenges they face (e.g. lack of time to learn and practice skills, insufficient skills, inadequate Internet access). Teaching approaches build on behaviourism and constructivism. Although teaching older people concerns adult learning, there is limited reference to adult learning theories and Andragogics. Guistini (2009) is one of few to dwell on the utilization of learning theories, including adult learning theories.

The term "Andragogics" was introduced by Malcolm Knowles. "If in an educational situation an adult's experience is ignored, not valued, not made use of, it is not just the experience that is being rejected, it is the person" (Malcolm Knowles, cited by Gerding, 2007, p. 225). Although the use of ICT has been connected to emotion, accomplishment, priorities, and dealing with isolation, there is not much evidence of how we actually learn from people's use to enrich a wider spectrum of users: of enriching "life-fits" and widening "information horizons".

Tablets, more than any of the preceding technologies and devices, seem to offer the opportunity to encourage a wider spectrum of people to contribute. This is well captured in the words of Mashman (2011) on the intuitive nature and accessibility of iPads (Apple's tablet brand): "The human interface of the device is very friendly, simple, and attractive. It feels like it wants to invite you in, and it seems to be expecting you". The physical appearance of an iPad is described as "lean and mean"; it can slip into a handbag or it can elegantly be carried as a notebook. A perfect device for "users with a richer life-world and life-experience" to be encouraged to explore in finding a fit with their experiences, needs, preferences, etc., to share with others and to have confidence in the contribution they can make.

Considering idiosyncrasy in the use of ICT: tablets as exemplar

Idiosyncrasy is seldom mentioned in the LIS or educational literature. An exception is Orom and Cervone (2009) writing on personality dynamics, meaning, and idiosyncrasy. "Idiosyncrasy" is associated with uniqueness, peculiarity, unconventionality, and individuality. Many years ago I came across the term in a book on personal databases of which I no longer have the title at hand.

The technological abilities of a device such as a tablet are depicted in its specifications and technical reviews. The Net Generation seems to have a better ability to figure this out. However, the value, for me in using a tablet, is the diversity of choices in applications, how to select these, which to purchase, how to organise these and how to integrate the applications in a meaningful way. My own applications include mind maps, note taking, a calendar, applications for reading and annotating documents in pdf, dictionaries, books, travel information including booking systems, currency conversion, maps and geographic positioning systems. There are many more. Why did I select these, and how do I use them? What can be learned by asking other "more mature users" or "older users" about their use of tablets?

Each person's use will show unique components; from there the suggestion of "idiosyncrasy". By studying the use of tablets, much might be learned about information behaviour (including information seeking, information use and information communication), that can be interpreted in many useful ways to promote productivity, innovation and self-efficacy. This will be no easy task, and I am not underestimating the challenges and complexity. In arguing for LIS professionals to pursue this line of thought I am merely thinking of the potential it may hold. It will amongst others affect teaching ICT and information skills, encouraging users to explore applications by drawing on their own lifeworld and life experiences; and exploring means for studying information behaviour regarding the use of tablets and other ICT devices. (Suggestions on these will be addressed in a later paper.)

Preliminary suggestions on what we may consider in exploring idiosyncrasies

Acknowledging the importance of knowledge of the technical abilities of ICT devices, technical skills and learning from the characteristics and behaviour of the Net Generation, more can be gained by encouraging the sharing of idiosyncratic use of ICT devices. Users need to be encouraged to consider ICT devices such as tablets in different ways. They need to be encouraged to consider, amongst other things the following in using their devices:

- Their life-world: everything important from work, studies, health, and socialisation to entertainment.
- Their life-experience: everything from quickly finding a service provider, to the need to remember where you have parked your car, or the books you intend to buy, or realising that you may by sitting in a restaurant in a foreign country with no means of figuring out

- what the names of the dishes mean you intend to order, or that you can use the time in a doctor's consulting room to review an article (if you have it on hand), etc.
- Acknowledging the importance of personal preference and learning styles in choosing applications. Considering the thousands of available applications much depends on the popularity of applications, recommendation by others, but also the ability to find a "lifefit". To trust your ability to make a good decision.

In gaining from input from a wider spectrum of people, two issues are of importance:

- Those collecting data (e.g. LIS professionals) should be open to the input on idiosyncratic use and how it can benefit the use of ICT devices such as tablets.
- Those who are requested to give input must belief in the value of their contribution. They must realise that their use of tablets will not be stable and static, but rather unstable and dynamic as they grow in their experiences, and as their life-world may change.

At this stage I do not have suggestions for best ways of collecting data, or how to actually encourage people to share. This requires further reflection and wider reading from the literature of Information Behaviour and the Learning Sciences, including Andragogics.

3 Conclusion

In preparing people to fully exploit ICT devices such as tablets, and in supporting information behaviour that can fit the demands of current society, we need to take a closer look at what can be learned from studying idiosyncrasies in the use of such devices. We should explore means to encourage not only the Net Generation, but also "users with a richer life-world and life-experience" to share their choices and applications. We should search for means to facilitate such sharing, as well as for analysing and interpreting what we learn. We should develop new models of helping people to find a "life-fit" with ICT and, at the same time work on bridging the digital divide.

LIS services should move from merely teaching people information literacy and ICT skills to creating grounds for sharing practices and experiences in using devices such as tablets. The focus should move to exploiting the benefit of exploring idiosyncrasies in ICT use and how to encourage people to reflect their life-world and life experience in their use of ICT devices such as tablets to widen their (and our) information horizons. I intend to reflect more on these by considering especially the literature from Information Behaviour, the Learning Sciences and Andragogics in a paper to follow.

References

Autry Jr, A.J. & Berge, Z. (2011), "Digital natives and digital immigrants: getting to know each other", *Industrial and Commercial Training*, Vol. 43 No. 7, pp. 463-466.

Bailey, C. & Sheehan, C. (2009), "Technology, older person's perspectives and the anthropological ethnographic lense", *ALTER – European Journal of Disability Research*, Vol. 3 No. 2, pp. 96-109.

Blackburn, H. (2011), "Millennials and the adoption of new technologies in libraries through the diffusion of innovations process", *Library Hi Tech*, Vol. 29 No. 4, pp. 663-677.

Fourie, I. & Krauss, K. (2011), "Information literacy for teachers in rural South Africa", *Journal of Information Systems and Information Technology*, Vol. 13 No. 3, pp. 303-321.

Freddolino, P.P. *et al.* (2011), "To help and to learn: an exploratory study of peer tutors teaching older adults about technology", *Journal of Technology in Human Services*, Vol. 28 No. 4, pp. 217-239.

Freshwater, M.F. (2011), "iPhone and iPad applications for plastic surgeons", *Journal of Plastic Reconstructive and Aesthetic Surgery*, Vol. 64 No. 10, pp. 1397-1399.

Gerding, S. (2007). *The accidental technology trainer: a guide for libraries*. Medford (NJ): Information Today.

Guistini, D. (2009), "Utilizing learning theories in the digital age: from theory to practice", *Journal of the Canadian Health Library Association*, Vol. 30 No. 1, pp.19-25.

Hanson, V.L. (2010), "Influency technology adoption by older adults", *Interaction with Computers*, Vol. 22 No. 6, pp. 502-509.

Johnstone, B.T. (2011), "Boopsie and librarians: connecting mobile learners and the library", *Library Hi Tech News*, Vol. 28 No. 4, pp. 18-21.

Knowles, M.S., Holton, E.F., & Swanson, R.A. (2005). *The adult learner: the definitive classic in adult education in human resource development*. 6th ed. Amsterdam, The Netherlands: Elsevier.

Little, G. (2011), "Managing technology: keeping moving: smart phone and mobile technologies in the academic library", *Journal of Academic Librarianship*, Vol. 37 No. 3, pp. 267-269.

Medeiros, N. (2010), "ILL and iPad: reflections on the fast and furious", *OCLC Systems & Services*, Vol. 26 No. 2, pp. 65-68.

Mashman, W. (2011), "The iPad in cardiology: tool or toy", *JACC: Carduvascular interventions*, Vol. 4 No. 2, pp. 258-259.

Morris, A., Goodman, J. and Brading, H. (2007), "Internet use and non-use: views of older users. Universal Access in the Information Society", Vol. 6 No. 1, pp. 43-57.

Orom, H. & Cervone, D. (2009), "Personality dynamics, meaning, and idiosyncrasy: identifying cross-situational coherence by assessing personality architecture", *Journal of Research in Personality*, Vol 43 No. 2, pp. 228-240.

Sang, G., Valcke, M., Van Braak, J. & Van Tondeur, J. (2010), "Student teachers' thinking processes and ICT integration: predictors of prospective teaching behaviour with educational technology", *Computers and Education*, Vol. 54 No. 1, pp. 103-112.

Sayago, S., Sloan, D. & Blat, J. 2011. Everyday use of computer-mediated communication tools and its evolution over time: an ethnographical study with older people. Interacting with computers. 23(5):543-554.

Selwyn, N. (2004), "The information aged: a qualitative study of older adults' use of information and communication technology", *Journal of Aging Studies*, Vol. 18 No. 4, p. 369-384.

Smith, J. (2011), Apps for apes: orang-utans want iPads for Christmas, The New Scientist 212 (issue 2844), pp. 69-71.

Sonnenwald, D.H. (1999). "Evolving perspectives of human information behaviour: contexts, situations, social networks and information horizons". In, *Exploring the contexts of information behaviour: proceedings of the 2nd International Conference on Research in Information Needs, Seeking and Use in Different Contexts; 1998 August 13-15; Sheffield, UK, TD Wilson, DK Allen (eds). London: Taylor Graham:176-190. http://arizona.openrepository.com/arizona/handle/10150/105189 (Accessed 26 February 2012)*

Wong, S.H.R. (2012), "Which platform do our users prefer: website or mobile app?", *Reference Services Review*, Vol. 40 No. 1, pp. 103-115.

Corresponding author
Ina Fourie can be contacted at: ina.fourie@up.ac.za