Conceptualising user hedonic experience

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ABSTRACT

For many years, the approach taken towards technology design focused on supporting the effective, efficient, and satisfying use of it. The way people use technology has shifted from merely using it to enjoying using it. This paper describes an early approach to understanding user experience in context of technologies (e.g. digital cameras, PDAs, and mobile phones), as well as in more general context such as physical activities e.g. exercising, orienteering, and walking, and in context of diaries. The focus of this paper is on *hedonic user experience*; that is pleasure, enjoyment, excitement, and fun in the context of technology. This study provides insights into factors contributing to and influencing such experiences and the relationships between them.

Keywords

User experience, pleasure, joy, excitement, fun, HCI, personal technology, diary, mobile phone, PDA

INTRODUCTION

For many years Human–Computer Interaction, as a discipline, has focused on achieving the effective, efficient, and satisfying use of technology. The set of defined standards, guidelines, and principles (e.g. Nielsen, 1994; Dix, 1993) helped designers to fulfil users' requirements in the context of artefacts used mainly for work related activities. Although rules and principles have been applied by designers for at least a decade, it seems that a very narrow view of users' experience has been taken. Therefore, recognising the importance of users and the need for a new understanding of usability (broadened its original concerns from easy-to-use, and easy-to-learn to include notion of user experience such as pleasure, enjoyment, and fun) will shift our focus from goal-directed activities to other aspects of user experience (Thomas & Macredie, 2002; Graves-Petersen et al., 2002).

New principles and guidelines are required to help designers marching through the 'electronic era' with products that do not merely allow users to achieve their goals and tasks but allow them to experience something more, for example, pleasure, enjoyment, and empowerment. This more holistic approach to the design expands the boundary of the 'old usability' suggested by Nielson and Dix, and opens it to the new areas that need to be explored.

Advances in computing and information technology are changing the way people use and experience technology. As new technologies penetrate not only workplaces but also homes, personal space, leisure, and the social environment, research on user experience with technology has started to receive more attention.
There has been a growing focus around what we might call experience. It varies across different fields. According to Dewey experience consists of "relationship between self and object, where the self is always engaged and comes to every situation with personal interests and ideologies" (cited in McCarthy et al. 2002), whereas Preece et al. (2002, p. 19) describe user experience in the context of goals as "what the system feels like to the users…[and how they] experience an interactive product from their perspective". The latter presents user experience as subjective since it depends and it changes according to the primary objectives of a software whereas Dewey views on experience puts its focus on people and

situations, which are dynamic and change by experience.

In the context of people's interaction with technology, there is a lack of theories to conceptualise user experience, which this paper intends to investigate.

There is a need to understand human activities and technology that supports them in various ways in new environments. HCI lacks theories and methods to facilitate approaches to design products which allow for pleasurable, enjoyable, and entertaining interaction. Expanding the boundary of usability from easy to use and learn products, to products that enhance user experience into a holistic dimension, is the new HCI path that needs to be investigated. This paper provides characterisation of user experience in the context of personal technology (e.g. digital camera, mobile phone, and PDA). The following sections will discuss issues related to: user experience as a flow, description of study and methods applied. This will be followed by presentation of results, discussion, and the final section will provide conclusions.

USER EXPERIENCE AS A FLOW

The concept of *optimal experience* has its beginning in Csikszentmihalyi's (1975, 1988, 1990) holistic experience of flow. The term 'flow' describes a state of being completely involved in an activity for its own sake; "the state is so satisfying that individuals want to repeat the activity continually" (Csikszentmihalyi, 1988).

Many researchers have attempted to conceptualise flow in different environments. For instance, Ghani (1991), Ghani et al., (1991), and Webster et al. (1993) adopted flow theory in order to measure positive user experience with personal computers. Hoffman & Novak (1996), Novak, Hoffman, & Yung (1999), and Chen *et al* (1999) applied it to an online environment to measure customer experience using web, or more recently Ly (no date) employed it to a computer-related classroom environment. Additionally, the concept of 'flow' has been utilized in connection to user experience interacting with emerging technology (e.g. Wright et al., 2003; Monk, 2000; McCarthy et al., 2004).

However, user experience has many aspects, which have been given some consideration by researchers. For example, Brandtzeg et al. (2003) focused on enjoyment, Green & Jordan (2002) and Knight & Jefsioutine (2003) investigated the feeling of pleasure when designing products, Wright et al. (2003) looked at fun and engagement within games, McCarthy et al. (2002) explored user experience in the context of electronic shopping. As a result of his study a framework of user experience was developed. The framework consists of four aspects of experience; that is compositional structure, sensual appearance, emotional unity, and spatio-temporal fabric, which are not divisible independent components but depend on each other. Although this model does not directly addresses issues

related to positive experience, it gives a basic structure of elements influencing experience.

A different approach to user experience is presented within Hassenzahl's (2003) model, which consists of two perceptions of user experience. One is that of a designer, including product features, intended product character, and consequences, which are a judgement about the product's appeal. Another perception is that of a user including product features, apparent product character, and consequences that are moderated by the specific usage situation (i.e. work, social, or other). Hassenzahl (2003) discusses two different attributes of product character; that is *pragmatic* and *hedonic*. Hedonic attributes emphasize individual's psychological well-being and oscillate around stimulation, identification, and evocation. Although Hassenzahl (2003) discusses hedonic attributes of a product, the approach taken in that research differs from the one presented in this paper, which focuses on the nature of hedonic experience encountered by users: how users interacting with technology, rather than designers, understand, perceive, and describe hedonic experience.

So far many researchers have explored the implication of flow and various notions of experience. The focus of this study is on those dimensions of experience related to pleasure, enjoyment, and fun; collectively referred to as Hedonic Experience (HE). According to the Greek definition, '*hedone*' means pleasure – akin to sweet. Understanding HE, both theoretically and empirically, is important for designers interested in building effective and *experience rich* systems for other than work activities and purposes.

USER HEDONIC EXPERIENCE

Since the character of HE is vaguely presented within the HCI literature, it seems important to investigate:

- What is the nature of HE? This includes: how we define it, decompose its components, and what is the relationship between these components?
- What makes a system hedonically experienced; that is what features or functions of a system can evoke hedonic experience?
- What are the influential factors of HE?

In addition, we need a better understanding of how people interact with various types of technology in different contexts and how the context affects their hedonic experience.

This paper reports an interview-based study that is a general preliminary investigation of the issue of hedonic experience taken in general as well as in the context of diaries and personal technology – in detail: how people understand and perceive hedonic experience in different contexts, what are the components of HE, how they are decomposed, and what are the factors influencing HE.

Methods

Currently there are many methods available for studying users in the context of use. For example, Hassenzahl and Trautman (2001) applied the Repertory Grid Technique to investigate users' "inferences made about the product character and the resulting consequences" whereas Hassenzahl (2002) used questionnaires to gather computer expertise and general demographic data and a short interview to find out about the effect of perceived hedonic quality on product appealingness. A survey was also applied by Skadberg and Kimmel (in press) to measure factors in the flow experience model of tourists visiting a web site. Makela and Mattelmaki (2002) applied a combination of two field inquiry techniques to study users' experiences with mobile phones; that is collecting stories and self photographing. When studying human experience in virtual environments Spagnolli et al. (in press) applied ethnographic, action-based approach. Because we wanted to gather insights about how people understand and perceive hedonic experience, in general, and in the context of personal technology, we employed a semi-structured interview technique for data collection. Although this technique is time consuming, it provides rich qualitative data that will form the basis of analysis of the study.

Description of study

As well as considering explicitly people's perception of hedonic experience when using personal technology, we look also at their hedonic experience in the context of different physical activities such as: exercising, walking, and orienteering This allow us to obtain a better understanding of what it means to have hedonic experience in a larger context.

A preliminary study was conducted in order to produce an initial understanding of the nature of peoples' experiences with personal technologies (e.g. mobile phones, digital cameras, and PDAs). Part of each interview inquired broadly about a range of experiences, part was devoted to peoples' experiences when using technology, and part focused on the use of and experiences with an apparently mundane technology: the diary. Diaries were used as an example of a personal technology that can be used across different contexts (e.g. work vs. private) in ways that can change peoples' experiences. The aim of this study was to investigate:

1. How people understand or perceive hedonic experience in general, in the context of diaries, and in context of personal technology
2. How people use diaries
3. What kinds of feeling and experiences people associate with their diaries
4. What factors influence hedonic experience
5. Words that people use when describing their experience in the context of diary, personal technology, and in a general context.

The interviewed subject group consisted of 11 people. Six of those were computer scientists; two of them were students; one was a self-employed hairdresser; one was a civil servant; and one was a PA working in a Computer Science Department. Volunteers were asked to talk freely about their understanding and examples of hedonic experience, in the context of three sets of questions – the first about HE in general(people gave examples of hedonic experience mainly in relation to physical activities such as: exercising, walking, swimming, playing instruments, or paragliding), the second about diaries, and the third about technology (people discussed experiencing hedonic experience while using mobile phones, digital cameras, PDAs, and various software packages). Each interview lasted between 30 - 50 minutes and was audiotaped. The data was then transcribed and analysed by using qualitative methods to extract the high level of concepts that captured participants understanding of hedonic experience.

RESULTS AND DISCUSSION

In an effort to develop the model of user hedonic experience, the analysis of the data was performed that helped in categorising determinants of hedonic experience and factors influencing it. The former refers to clusters of concepts extracted from the key phrases used by participants during the interviews, whereas the latter one refers to 'things' (features or situations) I don't know how to call them that were identified by participants.

It was apparent from the analysis that there are five major components constituting hedonic experience. These are: pleasure, enjoyment, excitement, fun, and happiness. These components are consistent across all three contexts of hedonic experience investigated in this study.

The findings from the preliminary study have indicated determinants of hedonic experience in three different contexts: in general, when using diaries and when using technology, which do varies across contexts (see table 1). The results of the study are summarised under five headings:

1. Determinants of hedonic experience in general context, including different types of physical activities (e.g. skiing, walking, exercising, orienteering, paragliding, and playing instruments).
2. Determinants of hedonic experience in context of diaries, including issues related to how people use diaries and what kind of experiences they account for when working with them in work vs. private related context.
3. Determinants of hedonic experience in context of technology, taking a closer look at each category of determinants and highlighting peoples' needs in relation to these categories.

4. Similarities and differences of determinants across contexts
5. Factors influencing hedonic experience when dealing with technology.

Determinants of hedonic experience in general

When discussing hedonic experience participants often mentioned different types of physical activities (including swimming, walking, orienteering, skiing, paragliding, yoga, gaming, and exercising), as well as reading, listening and making music, doing photography, and teaching. However, the most frequently discussed activities that produced hedonic experience were not related to work.

As stated, participants distinguished five components of hedonic experience, which then were characterised by a set of determinants to create such experiences. Seven groups of determinants emerged from the data, within which some of them were consistent across two contexts. However, none of the determinants were consistent across all three contexts (see table 1).

When participants discussed hedonic experience in general, they identified four sets of determinants for such experience: *challenge/achievement,* from which the most frequently mentioned were: sense of achievement, sense of being able to do something, or a sense of satisfaction; *interactivity-social element (*e.g. sense of affiliation, interactivity with others); *feel good,* which the most typical were a sense of restful, sense of nourishment, or sense of feeling good about yourself or others; and *novelty,* which incorporated novel activities, environment, and a sense of surprise.

It appeared that, for example, *novelty* and *interactivity-social element* are common when discussing HE in general and when using technology. Further sections will discuss this in more details.

Determinants of experience	General	Diaries	Technology
Challenge/ achievement	⟩		
Interactivity – Social element	⟩		⟩
Feel good	⟩	⟩	
Novelty	⟩		⟩
Usability/ functionality		⟩	⟩
Appealingness		⟩	⟩
Evocation		⟩	

Table 1 Summary of determinants of hedonic experience across different contexts.

Determinants of hedonic experience in the context of diaries

Diaries are ubiquitous and important tools not only in the work environment but also in a private context. They are an example of a personal technology that is very simple and mundane, and as such, carries limited potential for hedonic experience. Experiences when using diaries are more associated with pleasure, determined by *usability*/*functionality, feel good, evocation,* and *appealingness* of diaries. Participants also discussed their happiness as being triggered by a *feel good* factor when, for example, viewing up-coming holidays. Other experiences like fun and excitement are provoked by *evocation* factors (*e.g.* viewing notes, which conjure up personal memories of some events). This determinant is consistent with Hassenzahl's (2003) model of user experience and it appears to be one of the key factors within product's hedonic attributes (task/goal-unrelated). Although *evocation* appears in both studies, there is a mismatch between its affect on peoples' experience. Hassenzahl's (2003) study suggests that *evocation* produces a set of consequences, one of which is pleasure whereas the study reported here shows that it can provoke other kinds of experience, namely excitement and fun. Although these findings provide a significant difference as to a diversity of experiences generated by the same determinant, it requires further investigation in order to make a stronger claim.

Diaries were used at the first stage of the preliminary study to help with categorisation of determinants of different user experiences identified by participants. However, it appeared that diaries are examples of invisible technology, which is "out of sight, out of mind, but ever more powerful" (www.jnd.org) as one of the participants noted: ' …*gosh, you make me realise how important the diary is and I'm taking everything for granted'.* [Diaries fade into the background of peoples' lives and work in harmony with them but can create a completely chaotic environment when lost. When asked about feelings when a diary was lost, one of the participants commented: ' … *my experience of loosing one … my whole live comes to an end … I though I've lost a part of me … yeah, it was a disaster.'* Another one stated: ' … *when I discovered that I lost it, I felt horrible, I felt, I think, lost.'* As much as participants appreciated having diaries they also could see the diaries negative affects on people; that is being too dependant on diaries and reducing the usage of peoples' memory when using them. '… *thing that I don't like about it is it doesn't make your memory function. You rely too much on it. You know, where as I never used to I remembered everything. Never forgot anything. Now I depend much too much on it.'* this cane be taken out as it doesn't relate to hedonic experience. If yes then the following sentence need to be changed]In contrast to these negative feelings participants also identified a whole set of positive experiences that fall into *feel good* category of determinants of user experience, which is common to hedonic experience in general (see table 1). Giving a sense of safety and security, reducing stress, and making one feel important these are only a few examples from the *feel good* category. '… *I think when I'm not at work it gets less cluttered but that might make*

us feel less important' was a comment from one of the participants.

It was apparent from the data that *usability/functionality* issues and *appealingness* are pertinent in the context of diaries and technology. This might be related to the fact that they both are examples of personal technology. They can be used not only to satisfy users needs where *usability/functionality* are the key factors but both artefacts share some physical attributes that users can experience such as touch, feel, or the look, which in turn evoke aesthetically pleasing experiences. These issues appeared to be of a high importance within work of other researchers (Jordan, 2000, 1988; Tractinsky et al., 2000). The former argues that aesthetic and physical attributes of products can evoke pleasurable experiences and can change peoples' perception and usage of them. People have different feelings towards their diaries depending on whether they use them for work or personal or social activities. The former evokes pleasurable experiences such as *feel good* (e.g. giving sense of being in control, or making them feel important). The latter brings happiness (e.g. when viewing the coming holidays marked in a diary) and funny memories (e.g. when viewing notes and dates of events). This is in line with the findings of Novak et al. (2000). They reported that online customer experiences were positively correlated with non-work related activities (fun, recreational and experiential use of Web) but negatively correlated with work-related activities.

Determinants of hedonic experience in the context of technology

As mentioned earlier, participants identified five constituents of hedonic experience when using technology, which are: pleasure, enjoyment, excitement, fun, and happiness. Each of the constituents can be described by a set of determinants, which next section will explore in detail.

The technologies that participants mentioned most frequently as being implicated in hedonic experience were: mobile phones, digital cameras, PDAs, and computer software (database and web browser). Most of the time, usage occurred outside work environment. However, with PDAs were, even though usage was primarily outside work, very often the activities t were related to work. Computer software (database) was another technology used in relation to work.

Four sets of determinants were identified that evoked different user experiences. These are: *usability/functionality, interactivity-social element, appealingness, and novelty* (see table 2 for details). Each of those can be characterised/described by a set of factors that contribute to a specific experience to happen.

Determinants Of experience	Pleasure	Enjoyment	Excitement	Fun	Happiness
Usability/ functionality		√			√
Interactivity/ Social element	√		√	√	
Appealingness	√				
Novelty	√			√	√

Table 2 Hedonic experience in context of technology

Usability/functionality group represents issues that are related to: how usable and efficient is the technology, how transparent the functionality is so the learning process and interaction between technology and a person can be as easy and stress free as possible, how useful the functions are so they can help in one's activity. This appeared to be an important factor for the other researchers as well including Hassenzahl (2003) and Pilke (2004). The former argues that utility and usability are primary instrumental and can lead to a product's character, which in turn can produce a set of consequences (e.g. pleasure). In this study, we claim that usability/functionality can have a direct impact on pleasure and happiness as one of the participants noted: *'… it makes me happy … it's also very good, very useful tool that does make life easier'* when discussing database software.

Appealingness combines two attributes: aesthetic and physical factors. The former oscillates around attractiveness of technology (e.g. leather finish, shape, size (slim line)), the latter focuses on size (how big), weight, and a feel in one's hand. Numerous researches also suggest that these factors are the key element when discussing usage of technology (e.g. Jordan, 1998, 2000; Tractinsky et al., 2000; Hassenzahl et al. 2000; Hassenzahl, 2003). Hassenzahl et al. (2000) argue that for a system regarded as being appealing and enjoyable or fun to use, it needs to be interesting, novel, and surprising. Other researchers including Jordan (1998) and Tractinsky et al. (2000) found a strong link between aesthetics and usability. They claim that equilibrium between aesthetics and usability is instrumental in creating pleasurable electronic products.

As well as discussing positive attributes of products (mentioned above), participants problematic features that may lead to negative experiences. *' … I don't want it to be cluttered or too loud. Whether is too loud in colour, too much on a screen or just too much stuff and too many buttons. That would not be good'* was a comment from one of them. The negative effects of cluttered page layout and inappropriate use of colour on users' experience were also reported by other researchers (e.g. Pace, 2004a; Pilke, 2004). Pace (2004a) argues that by minimalizing the distractions (e.g. cluttered web interface, use of inappropriate colours, disorganised content and pop-up advertisements) faced by users, the opportunity of flow experience (experience that promote enjoyment) might be maximized.

Interactivity-social element addresses issues like: interactivity with others, functions that are used in

social context (e.g. reminders of people's birthdays), and sense of affiliation. In context of this study, the latter is perceived as one's feeling as a part of something (e.g. a team, band, or a group of owners of the same piece of technology). It appeared that being an owner of a specific very advanced technology (e.g. PDA, or a digital camera) brings pleasurable experience.

Novelty comprises of sense of surprise, an element of novelty, and sense of discoveries. In the context of this study, the former represents some features of an artefact that does something that one did not expect it to do (e.g. the ability to download ring tones from the web into a mobile phone, or the behaviour of an eye focus camera) whereas the latter one relates to new features of technology (e.g. wireless communication). It appeared that the sense of discovery is linked to curiosity, which can allow one to be absorbed in specific novel activity and is essential to experiencing pleasure (Kashdan et al., 2004). The sense of discovery seems to fit well into the Pace (2004b) study of the roles of challenge and skill in the flow experiencing by web users. In study reported by him the element of discovery ("finding, learning or observing something for the first time" p.355) is linked to joy. The same way the joy of discovery was also described by Csikszentmihalyi (1990) and Hassenzahl et al. (2000). The latter one argues that for a system regarded as being enjoyable or fun to use, it needs to be interesting, novel, and surprising. The study reported here demonstrates a strong connection between *novelty* and experience of excitement and fun when technology is concerned.

One can argue that such association might be due to two factors. One is to do with the fact that technology mentioned was new on its own and users were at the exploratory stage of it. The second that it allowed communication between people in a new mode; that is by downloading pictures from a camera onto a computer and sending them to a recipient via email service or transferring files across PDAs using wireless communication. So the excitement and fun came from exploring new features to their full potentials and technology being a communication medium between people as one of the participants stated: '… *and you do the wireless link up and you exchange documents umm … on the fly, that's quite cool.*'

Relating determinants across contexts
It appeared that two of the determinants linked to technology used are consistent with those occurred when having hedonic experience in the general context; namely *novelty* and *interactivity-social element* (see table 1). The difference between them is such that in the former *novelty* determines enjoyable experience, whereas in the latter for the majority of participants it provoked excitement and fun. In the context of questions related to how the technology (in this case PDA) makes you feel, one of the participants commented: '…*and the buzz comes when the other*

person has a palm as well, so you say let's exchange the cards Another one noted: '… *there is a sense of fun in trying out just something that probably I didn't believe that is going to work very well … it was just a bit of fun when I first got it.*' The element of *novelty* was also discussed within other research literature including Hassenzahl (2003), Novak and Hoffman (2003), and Csikszentmihalyi (1990). The former discusses stimulation (novelty) as a key factor for experience and argues (predicts) that pleasure happens when expectations are exceeded. He also discusses satisfaction, which relates to a fulfilment of expectations whereas Csikszentmihalyi (1990) discusses *novelty* as necessity for new challenges to happen. Approach taken by Novak and Hoffman (2003) suggests that peoples' desire for curiosity and novelty when using Web relates to their perception of their skills and the challenges the Web provides them.

One can claim that *novelty* wares off with the time. Longer users 'play' with the product the excitement and fun related to discovering and trying out new features might be decreasing as one of the user stated: ' …*the eye tracking is just a toy …it was just a bit of fun when I first got it*'. This is consistent with Hassenzahl (2003) work, which suggests that "a product that was perceived as new and stimulating in the beginning may lose some novelty and ability to stimulate over time' (p. 32). One can speculate that when *novelty* fades away the excitement and fun could be transferred into pleasurable experience as one learn how to appreciate what a particular feature of an artefact has to offer. This could suggest that these experiences are not settled but rather dynamic. However, more research is needed to investigate this issue.

The *interactivity-social element* that something works in a not expected manner in general context of HE was connected to pleasure, whereas in technology context it evoked excitement and fun. As one of the participants said: ' … *my new mobile phone has these polyphonic ring tones … I got them off the web … it's my favourite band … this is very exciting.*' It can be argued that when technology is concerned, excitement and fun come from the fact that technology is considered as medium for interaction and as such allows new ways for people to communicate between each other. One of the participants stated:' …*yeah, yeah, it's great. It's very nice that I can email pictures …*' when discussing digital camera issues.

Factors influencing hedonic experience
From the analysis of the data, it was evident that there are five main factors influencing hedonic experience. There are: functionality, usability, social element, and aesthetic and physical factors.

It was apparent from participants' comments that *functionality* would determine the usage of a specific technology. People very often look for functions that would help them in activities they need to perform even when 'on the move' as one participant noted: '…*I have*

used it as my travelling office… So I would write a report if I'm on a plain using my PDA, or work out the conference budget …I was planning the conference … so I could do that….I could do all that and it's all recorded and I bring it back to my office and uploaded my machine.' Furthermore, the important issue is to provide functionality that is transparent to the users and allows the efficiency of the technology being exercised to its full potentials. *'… it's functional, it does all I need to do …'* commented one of the participants discussing his PDA. Finneran and Zhang (2003) have a similar view on this matter claiming that the artefact should be transparent so it will not interfere with person's focus on the task.

Usability was yet another crucial factor pointed out by participants as one of them remarked *'… it has to do all the things that I want it to do without all the hassle'.* Having technology for only its look and 'coolness' is not enough. People want to use it in a 'walk up and use it' manner. If it does not do what is expected to do, they 'walked away' from it and choose another one (Blandford et al., 2001). Therefore, usability seems to be of high importance not only in relation to 'goal' oriented usability but also in context of hedonic experience. This is well in line with Pilke's (2004) study, where the "requirements for a flow-inducing interface seem to be exactly the same as demands for a usable user interface" (p 9). The issue of a good usability that endorse flow (enjoyable experience) was raise also by Finneran and Zhang (2003). They argue that perceived ease of use is a person's perception of being able to use an artefact, which in turn influences flow.

Social element appeared to be of the high importance when technology was concerned. It oscillates around people using the same technology. The fact that people can perform different activities when sharing technology (e.g. transferring files through wireless communication or view pictures through emails) leads them to experience pleasure or excitement. Moreover, people feel very proud of their artefacts especially if it raise interests from external observer. The comments from one of the participants' support this claim: *' … whenever I take it out [referring to PDA] people always get … uuuuuu, what's that … it makes me feel proud …'* or another comment *' …I still remember the time when I was on the airplane. It was a long flight … I was working on my paper and I was using my PDA to do the work… errr… and the stewardess she was very curious what I do and she asked me if I could explain to her what's this was I was working on. So I explained that it was a document I was working on and I was using my PDA to write a report which I then can upload and print and everything else …and she was going wow, wow … this was cool.'*

It was apparent from the participants' statements that *aesthetic* and *physical factors* can enhance their hedonic experience. The appeal of an artefact created very positive feelings, which in turn brought some pleasurable experience to its user. This was a replay to one of the questions (*What kind of experience technology gives you?*): *' …it's attractive and it's small …it's got nice shape, … it feels nice in your hand'* or *'…should be easy to hold'* was a commend of another participant.

CONCLUSIONS

Traditional usability is about how well user's task can be supported whereas the emerging focus on user experience is reaching far beyond this. User experience is a part of every interaction between user and system. Knowing and understanding users needs is an important step that need to be taken, in order to be able to design systems that allow user experience to be pleasurable, enjoyable, or exciting.

Following Wright et al's (2003) view on experience that one can only design *for* experience, if one has a good understanding of it and its different aspects, this study has presented a first step towards developing a model of user hedonic experience, which is intended to help designers developing technology that goes beyond usability requirements and it moves towards fulfilling users needs for hedonic experience when interacting with personal technology. Proposed decomposition of HE constituents and their characteristic might help in better understanding what create experience and how it can designed.

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