Smartphone Technology, Consumer Attachment and Mass Customisation

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ABSTRACT

This research examines the way in which consumers interact with mobile technologies such as smartphones in order to ascertain the effect of these technologies on product markets and consumer lifestyle. Despite challenges present in the current tablet style of smartphones users felt they were able to overcome this by personalisation of the interface. Research through surveys and interviews concludes that both positive and negative aspects have been shown to exist within a new smartphone culture, these are largely reported as positive due to easier availability of information when a smartphone is accessible.

Keywords: Consumer Attachment, Mass Customization, Mobile Technology, Personalisation, Smartphones

INTRODUCTION

With recent technological advancements, the average person’s day-to-day life in the developed world has become inundated with mobile smartphones, music players and computers (Ofcom, 2012). In such a saturated market, creating a product that will stand out from others can be a challenge for designers and manufacturers. Research has shown that not only is the functionality of a product important but also the visual appearance and interface (Page, 2009). This research considers the ways in which consumers relate to mobile technologies and the impact this has on other areas of product design and whether the design industry is currently in a state of demand pull or technological push. In this work the following objectives were achieved: to identify the consumer relationship with mobile technologies; to identify the ways in which new mobile technologies and consumer uptake of technology are together likely to change the future of mobile design; to identify how these technologies are influencing other product areas; and to identify the effect the mobile technology culture has had on other areas of life.

In contrast to this, primary research intends to discover current consumer trends in the use of the mobile telephone as well as actual user needs and wants, whether current mobiles are achieving these and where consumers want it...
to go. This will be investigated through the strategic use of questionnaires and interviews. Within the applications of technology being considered are market leaders such as Apple, Android and Windows Mobile (Nokia) (BBC News website, 2011). These companies primarily deal with touch screen technologies and therefore the emphasis when referring to mobile technology will be heavily on these.

LITERATURE REVIEW

The technological capabilities needed for the mobile telephone have been established in the UK since the 1940’s, however for reasons to be discussed in this section, it took until the 1990 for the use of a truly mobile telephone to “take off” in popularity (Lacochee et al., 2003). Simply put, early mobile smartphones were large, unable to fit in the pocket and as such were often installed in cars. As they were so heavy, cumbersome and expensive, no more than a handful of households had them, and were most commonly found in the cars of doctors-on-call or in a “bank-on-wheels” (ibid). In 1973, the first true mobile smartphone, created by Dr Martin Cooper in (ImpactLab, 2011) as well as the arrival of the first analogue cellular network by company AT&T in America. Together, these set the scene for the current way we see mobile telephones – portable, with a network and therefore calls available for use in most places visited, not just in a car.

Due to the increased portability and advances in technology by 1981 mobile smartphone usage had jumped in popularity, with the largest uptake in Sweden where 20,000 mobile smartphones were in use (Lacohee et al., 2003). The market increased as businesses such as the trucking and construction industries bought mobile smartphones for safety (ibid), this industrial use gave the public exposure needed for a sudden increase in popularity. In 1987, the services provided to the general public were expanded and with licenses granted to two networks - Telecom Securicor Cellular Radio Limited and Vodasmartphone – and in the UK uptake of the mobile telephone began to boom (ibid). During this time, the popularity of the mobile telephone was very much down to a market push due to rapidly developing technology.

The popularity of the mobile telephone continued to soar - by the year 2000 at least 50% of the UK population owned a mobile smartphone, by 2003 it was estimated that 65% of households had access to a mobile smartphone (ibid) and by 2010 over 91% of individuals personally used a mobile smartphone (Ofcom, 2010). At this point, figures reported often became about the number of households that had a “smartphone” rather than a feature smartphone (ibid). Pre-retirement age (below 65), the uptake of mobile telephones in the UK in 2010 has been at minimum 91% as well as the fact that uptake has jumped by around 10% over the past 5 years in all categories. This shows the value put on mobile telephones in society today.

CURRENT MOBILE SMARTPHONE STYLING AND PERSONALISATION

It is evident that the role of the designer is changing (Tan, 2009) and new skills such as “app” design or even an appreciation for such skills within the industry are becoming more critical. While the majority of mobile smartphones sold are still feature smartphones (VisionMobile website, 2010) the smartphone market has been rapidly increasing in size. A further way the smartphones are able to be personalised is through the use of “apps” - functions that the user can choose to install on their smartphone as and when needed (VisionMobile, 2011).

Apps have many advantages over webpages that do the same job. For example the user can download just those they are interested in, there is a database dedicated specifically to hosting the apps for download therefore they are often easier to find than the equivalent webpage and they are far more portable, leaving the user in a better position to move around when access-
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