Use of Mobile Device Apps in Product Design

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ABSTRACT

This research provides an exploration into the influence of mobile apps and mobile devices on the design of products. It forms the initial part of a longitudinal study on the use smartphone applications in product design. The research provides a review of how mobile device design has changed as well as the usage of mobile devices. The primary data was collected by using a structured questionnaire targeted at different stakeholders such as sales, developers and users. The research reviewed the design of the mobile phone as the product in question. Findings show that mobile apps have had an influence on the design of products however; technology has driven this change, not apps themselves. The research contributes to the understanding of the relation between product design and usage of complementary products.

Keywords: Apps, Mobile Devices, Product Design, Smartphones, Technology

INTRODUCTION

With the world population just under seven billion, there are four billion mobile phones in use today (Digital Buzz, 2008). That is around 70% of the world’s population. While the internet was the revolution of Nineties, it has been suggested that the revolution of the twenty first century so far has been the Smartphone (Kellett, 2011). A projection made by Cisco Systems, states that the number of mobile devices that can connect to the internet will surpass the number of humans this year (Cisco, 2012). The term ‘mobile devices’ can also be attributed to touch screen tablets. Tablets have been in high demand over the last two years with forecasts expecting sales of 106 million units in 2012 (PCMag, 2012). The relevance to this study is that mobile devices are the primary drivers the development and use of ‘apps’.

An App is a short derivative for the term ‘mobile application’. Apps are developed usually by a third party, and installed onto the phone by the owner. Apps are described as small platforms that use the internet for transport and have many different purposes such as games, reference, business and learning (Anderson, 2010). The success of apps may be largely attributed to the introduction of the Apple iPhone and iPad. On March 3rd 2012, Apple confirmed that over 25 billion apps have been downloaded since the introduction of the iPhone in 2008 (Lawler, 2012). This figure increases when considered with the app downloads of other...
operating systems such as Google’s Android OS and RIM’s BlackBerry OS (Goessl, 2012; Murphy, 2012).

AIM OF THIS RESEARCH

With the evident popularity of mobile devices and their apps, the aim of this research is to identify the impact this has made on product design and how designers and engineers are accommodating users of mobile device apps. The significance of this study is to better identify the transition occurring today in product design, in order that designers and engineers can help cater for tomorrow’s market more effectively.

OBJECTIVES OF THIS RESEARCH

The objectives of this research are to assess the influence that apps and mobile devices are having on the design and functions of new products. The research therefore aims to show how designers and engineers are incorporating apps and mobile devices into consumer products.

Further to this, the study aims to uncover if certain products are declining in demand through the popularity of apps. Primary research was undertaken in the form of interviews with retailers as well as the product manufacturers. This provided an insight into the views and reactions of the industry towards mobile applications. Also, a questionnaire survey will be carried out to gain an understanding of why the consumer is making this switch.

Moreover, the study will aim to also identify the effect this has on designers and engineers and what future trends they are expecting. Secondary research will identify new technologies that could influence mobile devices and therefore influence future product design trends. Primary research in the form of personal interviews with current product designers and engineers will give an insight of the views and opinions of professionals within the industry regarding the issue. This allows for a real understanding of what apps are doing to product design and its designer, and if they need to adjust.

KEY QUESTIONS OF THE STUDY

1. Is there a notable trend seen across products over a period of time indicating that apps and mobile devices are having an impact in today’s products? Is there a clear evidence of products released incorporating mobile devices and applications that did not have this integration before. Also, has there been a substitution of products, making them obsolete, in favour of apps?

2. Identifying the key driving factors that make mobile applications successful. What brought about its success? This can be answered by looking into articles and journals of writers currently discussing the topic of mobile applications?

3. What are the views of the people that are affected by products? Firstly, the views of the consumer will be taken to understand why they value mobile devices and applications. Are they consciously adopting apps in favour of more traditional products? Then, the views and opinions of the industry will be analysed. This splits further into two groups, as the value and impact of mobile devices and apps will differ to designers and engineers than it does to the owners and directors of these companies.

LITERATURE REVIEW

Global Impact of Mobile Devices and Their Applications

The use of computer systems and applications has become more of a way of life that people have become accustomed to (Islam, Islam, & Mazumder, 2010). However, many applications that were previously the preserve of computers are being developed for use in mobile devices. The development of mobile applications is boosted by the growing number of people using mobile devices for their day-to-day activities. (Pattison & Stedmon, 2006). The substantial usage of mobile phones shows that there is an existence of a large marketplace for mobile devices.
Using ICT to Integrate Smallholder Farmers into Agricultural Value Chain: The Case of DrumNet Project in Kenya