Chapter 17 Smartphone Application Wave and Trends on Different Platforms

Irvine Yeo Nanyang Technological University, Singapore

Jing Cong Nanyang Technological University, Singapore

Khin Mu Yar Soe Nanyang Technological University, Singapore

Fan Jing Nanyang Technological University, Singapore

ABSTRACT

Smartphones have experienced exponential growth and this in itself changes the way consumers use mobile communications. Traditionally, a phone is used only for communicating via voice but the Smartphone has extended the functions to include music player, camera, web browsing and executing of other applications. This wave of change has affected the traditional business model of telecommunication companies as well as creates new opportunities for platform owners to gear towards full integration. This chapter seeks to explore and discuss these issues and opportunities revolving around the platform, trends, problems and opportunities.

INTRODUCTION

In the recent years, we have witnessed the rising popularity of mobile handheld devices such as smartphone and personal digital assistants (PDAs). Numerous applications have been developed for those devices including navigation maps, daily news, games, fashion guides et cetera. The ability to utilise the equivalent of a mini computer from virtually anywhere, and the convergence of web and application technologies offer an unprecedented level of flexibility and convenience, particularly for ubiquitous information access

DOI: 10.4018/978-1-61350-147-4.ch017

through these mobile devices. However, the platform of these mobile handheld devices both open and proprietary also present challenges for both developers and consumers to take advantage of the convenience of mobile handheld devices for information access.

This chapter seeks to explore and discuss the open and proprietary platforms of smartphones, trends of smartphone usage in terms of ARPU, the three criteria of platform categorization, namely the development tools; distribution channel and degree of Integration, trends of adoption by major platform owner as well as value created through complementary.

BACKGROUND

Smart Phone

A little more than a decade ago, the only function that a regular phone can perform was only making phone calls. With the introduction of a hybrid of phone and camera with low-megapixels, a radical change occurred when Smartphone came into vogue with features such as high-end camera, music, video, internet, games, applications and radio et cetera. Jason Langridge, a mobility business manager at Microsoft, defines a Smartphone as "something that combine traditional communication devices and provide rich applications and rich data applications." Gartner, in their glossary page, defines Smartphone as: "A large-screen, voicecentric handheld device designed to offer complete phone functions while simultaneously functioning as a personal digital assistant (PDA)." Tech-faq. com defines a Smartphone as: "A Smartphone is a small, all-in-one mobile device that is used for communication and computing functions. Unlike regular cell phones, Smartphones allow users to choose the applications they want to install and use. It often has PC-like functionality."

Current Market Penetration by Smart Phone

Fox (2006) argues the traditional phone or personal digital assistants are quickly being obsolete in the marketplace by what are called converged, integrated, or multifunctional devices such as smartphone as a result of the market responding to user's demands for convergence and a reduction in the number of separate devices needed to carry around. These devices include but are not limited to phones, music player, cameras, global positioning system (GPS), web browsing, storage; all of these features and functions can be found in a single smartphone.

The worldwide market for mobile phone performed extremely well in 2009 and is expected to continue its performance through 2010 and beyond. According to IDC's Worldwide Quarterly Mobile Phone Tracker, the last quarter of 2009 saw a new record level being set which 54.4 million units were being shipped, an increase of 39% from the same quarter in 2008. The full year saw a total of 174.2 million unit being shipped in 2009, an increase of 15.1% over 151.4 million units in 2008. Of all the units shipped, converged mobile devices or smartphones accounted for 15.4%, a slight increase from 12.7% in 2008.

The potentials for smartphone seems rosy as IDC anticipates that the ongoing demand will drive the smartphone market to a new shipment record in 2010. The additional impetus from the shifting landscape of mobile OS is also expected to increase its demand. Both Google's Android and Palm's webOS, released only in 2009, have revealed new ways to engage the users with their increased functionality. Windows and Symbian are expected to unveil new versions of their respective OS with more advances in 2010. All the mobile OS will compete with a thriving mobile application library, improved intuitiveness and seamlessness to provide user with a compelling experience.

11 more pages are available in the full version of this document, which may be purchased using the "Add to Cart" button on the publisher's webpage: www.igi-global.com/chapter/smartphone-application-wave-trends-

different/60471

Related Content

Supporting Learners' Interaction by Means of Narrative Activities

Giuliana Dettori (2012). Educational Stages and Interactive Learning: From Kindergarten to Workplace Training (pp. 107-120).

www.irma-international.org/chapter/supporting-learners-interaction-means-narrative/63059

Deriving Value from Platforms in IDM

Sze Wei, Niazi Babar Zaman Khanand Satish Kumar Sarraf (2012). Understanding the Interactive Digital Media Marketplace: Frameworks, Platforms, Communities and Issues (pp. 98-108). www.irma-international.org/chapter/deriving-value-platforms-idm/60464

Cultural Differences between American and Japanese Self-Presentation on SNSs

Kikuko Omoriand Mike Allen (2014). International Journal of Interactive Communication Systems and Technologies (pp. 47-60).

www.irma-international.org/article/cultural-differences-between-american-japanese/115160

Multi-Sensing Monitoring and Knowledge-Driven Analysis for Dementia Assessment

Thanos G. Stavropoulos, Georgios Meditskos, Efstratios Kontopoulosand Ioannis Kompatsiaris (2018). *Wearable Technologies: Concepts, Methodologies, Tools, and Applications (pp. 297-313).* <u>www.irma-international.org/chapter/multi-sensing-monitoring-and-knowledge-driven-analysis-for-dementia-</u> <u>assessment/201965</u>

Interactivity of Digital Media: Literature Review and Future Research Agenda

Jose Pius Nedumkallel (2020). International Journal of Interactive Communication Systems and Technologies (pp. 13-30).

www.irma-international.org/article/interactivity-of-digital-media/250263