

The Rise of the Tablet

Paul O'Donnell

Computer Science Department, Letterkenny Institute of Technology, Ireland

Nigel McKelvey

Computer Science Department, Letterkenny Institute of Technology, Ireland

Kevin Curran

School of Computing and Intelligent Systems, University of Ulster, Northern Ireland

Nadarajah Subaginy

School of Computing and Intelligent Systems, University of Ulster, Northern Ireland

INTRODUCTION

Not so long ago, science fiction writers were visualising what the future would be like and how humans and computers would interact. It was within this realm that people began to see characters in movies and television shows using hand held devices with touch screen capabilities casually performing computerised tasks (Dalakov, 2010). With writer's imaginations being slightly ahead of the technology of the time it was not until for some decades that it became possible to create such a device. In the 1980's the tablet starts to take shape and be seen as a viable device by some of the major players in the computer manufacturing. Apple release the "Newton" along with a host of other companies all jostling for market position with their own versions of the tablet but unlike the tablet of today these were pen driven devices with handwriting recognition software. Unfortunately none of these devices were ever really embraced by the consumer, some because they were not user friendly others because they were more suited to being used as a PDA (Personal Digital Assistant) rather than a tablet computer.

It was Bill Gates that coined the phrase "Tablet Computer" when in 2001 he announced to the world at the COMDEX conference in his "State of the Industry speech" that the Tablet would become the most popular form of PC within five years (Hodges et al., 2012). He then went on to reveal the Compac Windows XP Tablet and Acers Tablet. These were unlike the previous attempts boasting full colour screens with their own operating system but still relying on a stylus for single

point input. Again many companies came out with their versions but once again none of these tablets captured the consumers or the professional's eye. It was not until 2010 that Apple announced their version of the tablet in the form of the iPad. This was popular and offered consumers a totally new experience in computing. It also showed the way for other companies to follow suit and create tablets of their own.

However of late, there has been a move to more hybrid tablet/laptop devices. For instance, the Microsoft Surface Pro 2 running Windows 8.1 which has an improved battery life over the first Surface pro. The accompanying keyboard however really only works when at a table. More preferable are the hybrid Windows laptops where the screen can be detached and used as a tablet. The Asus tx300 is one such hybrid laptop/tablet where the keyboard dock part actually functions as an additional battery as well as supporting a separate hard drive. The Asus Transformer Duet goes one step further and runs Windows 8 and Android on the same tablet. It is a true dual boot hybrid and we can expect to see more of these in the days ahead.

BACKGROUND

As Media tablets become more affordable their usefulness has become more apparent. As the operating systems evolve and new faster processors are introduced the home user now can pick their tablet up from where ever they are in the home and turn it on, and without having to wait a couple of minutes for it to boot up, they

DOI: 10.4018/978-1-4666-5888-2.ch571

are online almost instantly, emails, social networking, general surfing it is all at their fingertips and it is this tactile approach that people enjoy there is no procedure to go through the interface can be customised to any way the user wishes and with the stroke of a finger it can all change. Its intuitive design makes for sharing the experience much easier due to its compact size it is easily passed around be it showing holiday pictures to explaining homework or giving directions. The media aspect of the tablet is also very important as Internet speeds increase and streaming becomes more of a possibility or even through saved or downloaded content the capabilities of the tablet as an entertainment device come to light with this content been able to be watched in most cases in HD quality video. All this coupled with its mobility with the availability of 3G connections allows the home user a non-cumbersome complete mobile solution. But it still remains that it is in its simplicity that the tablet succeeds and why it will remain so successful and a must have for the tech savvy household and even for those who have little or no tech knowledge (Dodge, 1997).

A salesman for instance can display his products in a web based format that everyone is used to and even hand over the tablet to the manager/customer and let them browse the catalogue themselves. Projected sales and profits and stock levels can be easily displayed and orders easily taken, new products can easily be demonstrated in HD video therefore allowing the salesman to stay ahead of his competitors. Using a tablet as a sales tool will save time for both parties involved and increases the productivity of the salesman as he is able to provide a professional presentation and affording the customer the ability to view future products in a 3d image and all at the touch of the screen. Another benefit to a company is that there are no volumes of paper be it documents or promotional flyers that the salesman must carry around. The tablet will reduce the amount of paper and printing used by a company in their sales force as the tablet will display any and all types of document and as printing is a large part of a business expense especially colour printing the tablet easily becomes a document viewer.

CIOs in the enterprise space already expect to cut spending on printer supplies.....What is more, 90% of iPad users already believe they would print less with access to work documents on their tablets. (Morgan Stanley, 2011).

Stock control in a warehouse is another example of how versatile the tablet can be. The warehouse manager can carry the tablet around with him and have full access to the company's database and see what stock levels are recorded compared to what is physically present. A hotel in London supplies its guests with a tablet during their stay with pre-programmed site-seeing and shows and things to do and a taxi service the tablet in this case acts as the guests own personal concierge with all purchases being charged to the customers hotel bill. A Motor shop body repair company can use tablets in the quotation of prices with pictures taken and a detailed damage report completed by the body shop manager and the customer all on the tablet and is used as an exact record of what is agreed to be repaired. This is sent directly to the insurance company for evaluation and to await confirmation of cover by the insurance (Flynn, 2010). In the boardroom the tablet is used as a performance dashboard showing the members of the board exactly how the company is progressing and highlight any problem areas. It is a good platform for business analytics (Schmidt et al., 2012). Each member is given a tablet at the beginning of the meeting and can browse the data for themselves This would only be the tip of the iceberg as far as business applications for the tablet are concerned and as time goes on and more and more technologies come online and with the integration of the tablet into everyday business practices we will see further business professionals using this medium as a vital tool in the battle for business.

As with all new technologies security is of the utmost importance. Business's will need to adopt security procedures and policy's to deal with how customer account details are stored and how the corporate database can be accessed as customers account information and sensitive corporate data will be easily accessed if the tablet where to be stolen or left behind at a place of business. Data transmissions and their security will be of concern as in large organisations the tablet will be unable to store all of the organisations data this would refer to both the medical profession and in the corporate sense and as the tablet becomes more common the increase in data transmissions between the tablet user and the organisations central data storage will increase and more than ever the need for a secure and reliable encryption method of all transmissions will be required (Weichel et al., 2013).

Security solutions for this medium will need to move quickly as there are several operating systems and

4 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/rise-tablet/113033

Related Content

Agile Software Development Process Applied to the Serious Games Development for Children from 7 to 10 Years Old

Sandra P. Cano, Carina S. González, César A. Collazos, Jaime Muñoz Arteagaand Sergio Zapata (2015). *International Journal of Information Technologies and Systems Approach* (pp. 64-79).

www.irma-international.org/article/agile-software-development-process-applied-to-the-serious-games-development-for-children-from-7-to-10-years-old/128828

Extending the Balanced Scorecard for Outsourcing: The Goals Alignment Perspective

Preeti Goyaland Bhimaraya A. Metri (2010). *Breakthrough Discoveries in Information Technology Research: Advancing Trends* (pp. 68-79).

www.irma-international.org/chapter/extending-balanced-scorecard-outsourcing/39571

Real-Time Communication Support in IEEE 802.11-Based Wireless Mesh Networks

Carlos M. D. Viegas, Francisco Vasquesand Paulo Portugal (2015). *Encyclopedia of Information Science and Technology, Third Edition* (pp. 7247-7259).

www.irma-international.org/chapter/real-time-communication-support-in-ieee-80211-based-wireless-mesh-networks/112422

Software Modernization and the State-of-the-Art and Challenges

Liliana Favre, Claudia Pereiraand Liliana Martinez (2015). *Encyclopedia of Information Science and Technology, Third Edition* (pp. 7347-7358).

www.irma-international.org/chapter/software-modernization-and-the-state-of-the-art-and-challenges/112432

Evaluation of the Construction of a Data Center-Driven Financial Shared Service Platform From the Remote Multimedia Network Perspective

Nan Wu, Hao Wuand Feiyan Zhang (2023). *International Journal of Information Technologies and Systems Approach* (pp. 1-15).

www.irma-international.org/article/evaluation-of-the-construction-of-a-data-center-driven-financial-shared-service-platform-from-the-remote-multimedia-network-perspective/320178