

Go Mobile, Smartphone's and Tablets are Transforming the Way we Surf

Er Vipin Laddha

Officer Incharge

Centre for Information Management & Computer Applications (CIMCA)

Swami Keshwanand Rajasthan Agricultural University

Bkn Rajasthan

vladdha@yahoo.com

Abstract:-

Traditionally, access to the Web has been via fixed-line services on large-screen laptops and desktop computers. However, the Web is becoming more accessible by portable and wireless devices and according to ITU (International Telecommunication Union) with current growth rates, web access by people on the move — via laptops and smart mobile devices – is likely to exceed web access from desktop computers within the next five years. The shift to mobile Web access has been accelerating with the rise since 2007 of larger multitouch smartphones, and of multitouch tablet computers since 2010. Both platforms provide better Internet access and browser- or application-based user Web experiences than previous generations of mobile devices have done.



Figure 1



Figure 2

Introduction:-

A **smart phone** is a mobile phone built on a mobile computing platform, with more advanced computing ability and connectivity than a feature phone. The first smartphones mainly combined the functions of a personal digital assistant (PDA) and a mobile phone or camera phone. Today's models also serve to combine the functions of portable media players, low-end compact digital cameras, pocket video cameras, and GPS navigation units. Modern smartphones typically also include high-resolution touchscreens, web browsers that can access and properly display standard web pages rather than just mobile-optimized sites, and high-speed data access via Wi-Fi and mobile broadband. The most common mobile operating systems (OS) used by modern smartphones include Google's Android, Apple's iOS, Nokia's Symbian, RIM's BlackBerry OS, Samsung's Bada, Microsoft's Windows Phone, HP's webOS, and embedded Linux distributions such as Maemo and MeeGo. Such operating systems can be installed on many different phone models, and typically each device can receive multiple OS software updates over its lifetime.

The distinction between mobile Web applications and native applications is anticipated to become increasingly blurred, as mobile browsers gain direct access to the hardware of mobile devices (including accelerometers and GPS chips), and the speed and abilities of browser-based applications improve. Persistent storage and access to sophisticated user interface graphics functions may further reduce the need for the development of platform-specific native applications.

Mobile Web access today still suffers from interoperability and usability problems. Interoperability issues stem from the platform fragmentation of mobile devices, mobile operating systems, and browsers. Usability problems are centered around the small physical size of the mobile phone form factors (limits on display resolution and user input/operating). Despite these shortcomings, many mobile developers choose to create apps using Mobile Web. A June 2011 research on mobile development found Mobile Web the third most used platform, trailing Android and iOS. However, some of the leading VAS providers like Comviva, Onmobile have come a long way in overcoming these shortcomings in their latest mobile data solutions offerings.



Figure 3

Standards:-

Standards improve the interoperability, usability, and accessibility of mobile web usage.

The Mobile Web Initiative (MWI) was set up by the W3C to develop best practices and technologies relevant to the Mobile Web. The goal of the initiative is to make browsing the Web from mobile devices more reliable and accessible. The main aim is to evolve standards of data formats from Internet providers that are tailored to the specifications of particular mobile devices. The W3C has published guidelines for mobile content, and is actively addressing the problem of device diversity by establishing a technology to support a repository of device descriptions.

W3C is also developing a validating scheme to assess the readiness of content for the mobile web, through its *mobileOK Scheme*, which will help content developers to quickly determine if their content is web-ready. The W3C guidelines and mobile OK approach have not been immune from criticism. This puts the emphasis on Adaptation, which is now seen as the key process in achieving the ubiquitous web, when combined with a device description repository.

mTLD, the registry for .mobi, has released a free testing tool called the MobiReady Report (see mobiForge) to analyze the mobile readiness of website. It does a free page analysis and gives a Mobi Ready score. This report tests the mobile-readiness of the site using industry best practices and standards.

Other standards for the mobile web are being documented and explored for particular applications by interested industry groups, such as the use of the mobile web.

The Seventh Mass Medium:-



Figure 4

Since the first ringing tone was sold on the mobile phone in Finland in 1998, the mobile has emerged as the seventh of the mass media. Today a wide range of paid media content is consumed on mobile phones ranging from 9.3 billion dollars of music and 5 billion dollars of videogaming to horoscopes, virtual gifts, jokes, news, adult entertainment, etc. Also like on all other media, advertising appeared onto mobile when a free news service launched in Finland sponsored by ads in 2000.

In 2005, The Crazy Frog ringtone became the first mobile ringtone to cross over into the mainstream music charts, beating Coldplay for the Number 1 spot on the UK charts.

Advertising:-

Advertisers are increasingly using the mobile Web as platform to reach consumers. The total value of advertising on mobile was 2.2 billion dollars in 2007. A recent study by the Online Publishers Association reports that about one-in-ten mobile Web users said they have made a purchase based on a mobile Web ad, while 23% said they have visited a Web site, 13% said they have requested more information about a product or service and 11% said they have gone to a store to check out a product.

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