



FACULTY OF ENGINEERING & TECHNOLOGY

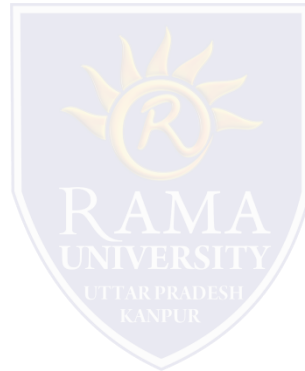
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Topics Covered

Applications for WAP

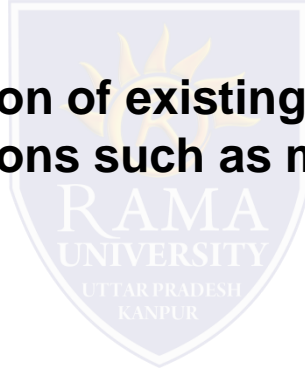


The WAP Protocol Stack

The Wireless Application Protocol (WAP) is being used to develop enhanced forms of existing applications and new versions of today's applications.

The WAP will allow customers to easily reply to incoming information on the phone by allowing new menus to access mobile services.

Early applications are modification of existing applications such as information, along with applications such as mobile commerce, mobile banking and mobile games.



Mobile Commerce

Mobile commerce applications involve using a mobile phone to carry out financial transactions. This usually means making a payment for goods or transferring funds electronically. Transferring money between accounts and paying for purchases are electronic commerce applications.

There are several issues relating to the development of mobile commerce applications, such as security, integration with the retail and banking hardware and systems, non-standardized mobile infrastructure and competing e-commerce standards. Additionally, there is a lack of standards relating to the mobile phone to network interface, the interfaces between host and mobile platforms and between different mobile platforms. As such, the scalability of mobile commerce is questionable.

There are also questions about the appropriateness of using a mobile phone as the interface to e-commerce applications. The MMI (Man Machine Interface) on mobile phones is currently sub-optimal and difficult for mass-market users to manipulate.

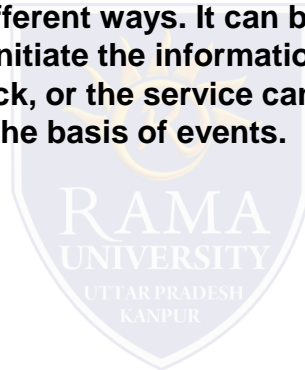
Mobile Banking

The successful implementation of mobile banking programs incorporates several different elements such as private information services, WAP and security.

There are a few technology limits affecting how the mobile banking service is designed:

Any information that is useful to bank customers can be provided such as last 4 transactions, account balances, overdraft limits and so on.

Information can be provided in a number of different ways. It can be pull based and requested on an adhoc basis via a telephone call to an electronic voice menu to initiate the information. Alternatively, the user could send an information request in and get an information message back, or the service can be push based such that information is automatically generated at set intervals or on the basis of events.



Games

Games are a huge service that many people see as being a key application for future mobile devices. In the same way as music distribution will increasingly take place electronically, so too will games. Instead of having to go to the video store to rent a game or video, we can download this from an Internet site and charge this transaction to our mobile phone bill.

Mobile games suppliers using WAP include:

www.digitalbridges.com , <http://www.wapholesun.com>, www.k-mobile.com and others.



Ringtones

Another emerging service is downloading ringtones. Ringtones are the tunes that the phone plays when someone calls it. With the same phone often sold with the same default tune, it is important for phone users to be able to change their ringtone to distinguish it from others. Phones often come with a range of different ringtones built into the phone's memory that the users can choose from. However, it has become popular to download new ringtones from an Internet site to the phones. These tunes tend to be popular television or film theme tunes. Ringtones composers are also popular because they allow mobile phone users to compose their own unique ringtones. Expect to see this application grow in availability and popularity over time!

Internet Email

Upon receiving a new email in their mailboxes, most Internet email users do not get notified of this fact. They have to dial in speculatively and periodically to check their mailbox contents. However, by linking Internet email with WAP Push, users can be notified whenever a new email is received.

The Internet email alert is provided in the form of a short message that details the sender, the subject field and first few words of the email message. Most of the mobile Internet email solutions incorporate filtering, such that users are only notified of certain messages with user-defined keywords in the subject field, or from certain senders.