

Lecture #4 I – Mode Technology

1. Define i-mode and give brief introduction about i-mode service

- i-mode is a wireless multimedia service popular in Japan
- It provides a Multimedia and Messaging service for Mobile Phones.
- Developed by NTT Docomo
- i-mode was launched in Japan on 22 February 1999
- i-mode users have access to various services such as e-mail, sports results, weather forecast, games, financial services, ticket booking and internet browsing.
- 45 million subscribers in Japan, 4 million worldwide
- i-mode enabled handsets are needed for accessing this service
- Limited availability: only for customers of Japanese mobile phone provider NTT DoCoMo.
- i-mode was developed as an inexpensive method of packet switched high-speed communication.

2. What are the services provided by I –Mode?

I-mode provides 6 types of services

1. E-Mail
2. Transaction
3. Information
4. Database
5. Entertainment
6. Internet Web Browsing

3. Explain in details of the services provided by i-mode?

E- Mail:

I-mode user can send and receive mails from another i-mode enabled phone, PDA or a computer

Transaction Service:

Transaction services include banking, ticket reservation, airline information and credit card information.

Information Service:

Examples of information service include news updates, weather information sports news and stock quotes

Database service:

The database service provides contents such as telephone directory search, restaurant guide, and Dictionary service.

Entertainment:

Entertainment service include network game character download, horoscope

Internet web browsing:

Internet web browsing enables users to browse contents on the internet

4. What are the components needed for i-mode service?

There are four main components that are required for i-Mode service.

1. A cellular phone capable of voice and packet communication and with a browser installed
2. A packet network
3. An i-mode server
4. Information providers

5. Draw the architecture of i-mode

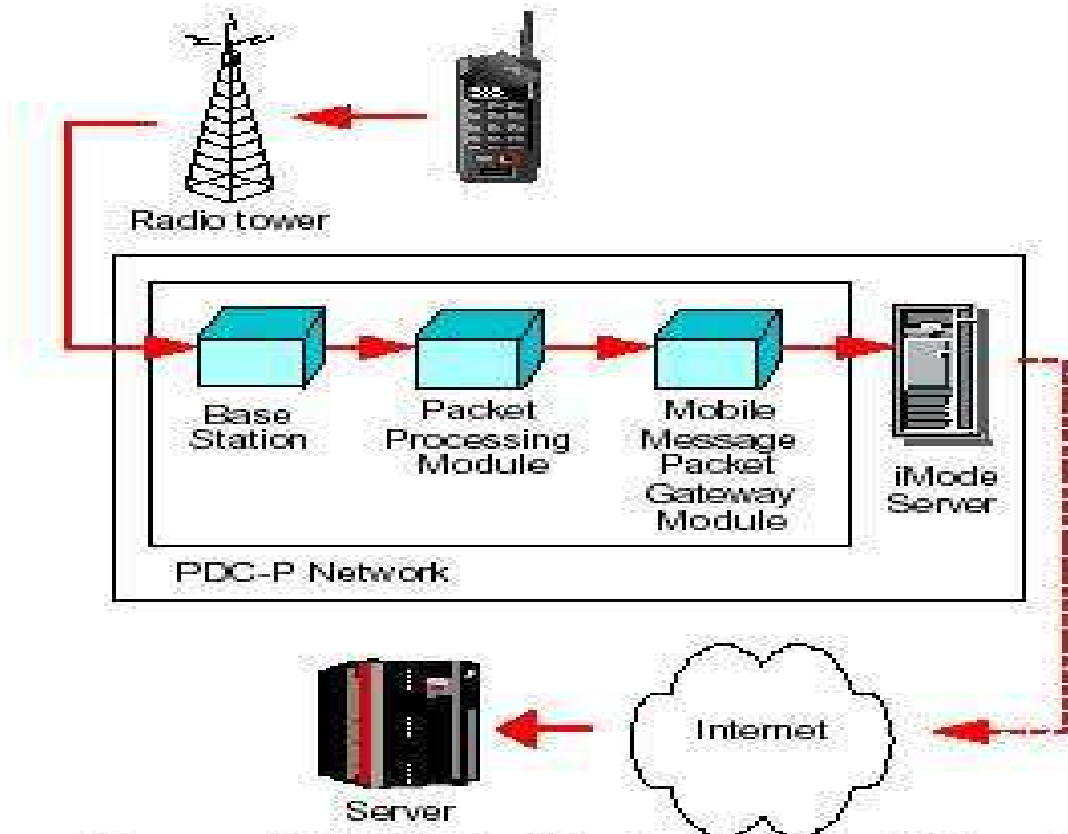


Figure 5: DoCoMo iMode Wireless Networking Environment.

- The PDC-P (Personal Digital Cellular Packet) network transports data between i-mode phone and i-mode server.
- i-mode phone sends data to the base station which forwards them to PPM(Packet processing module)
- PPM routes the packets to the M-PG (Message Packet) gateway.
- Connection between i-mode server and internet are made using TCP/IP
- I - mode server: it act as a proxy between the packet network and the internet.
- Content providers:
 1. Official content providers
 2. Unofficial content providers

- MPG (Mobile Packet Gateway) handles the protocol conversion between the two protocol platforms.

6. What are the technologies used in I – mode

1. Packet Switched Network
2. Compact Hyper Text Markup Language (CHTML)

7. Mention some I – mode phones released in UK

The first nine i-mode handsets released in the UK are:

1. NEC343i
2. NEC41i
3. Samsung s500i
4. Samsung Z320i
5. Samsung S400i
6. Sony EricssonK610im
7. MotorolaSLVRL7 i-mode
8. Motorola SLVRL6 i-mode
9. NokiaN95i

8. What is the difference between WAP and I – mode

WAP	I - mode
Circuit Switch method	Packet Switch method
use text and no images	Use images, animated images and color
users are charged for the connection time	users are not charged for the connection time