SNS COLLEGE OF TECHNOLOGY

(An Autonomous Institution)
COIMBATORE – 35
DEPARTMENT OF COMPUTER SIENCE AND ENGINEERING

UNIT 1
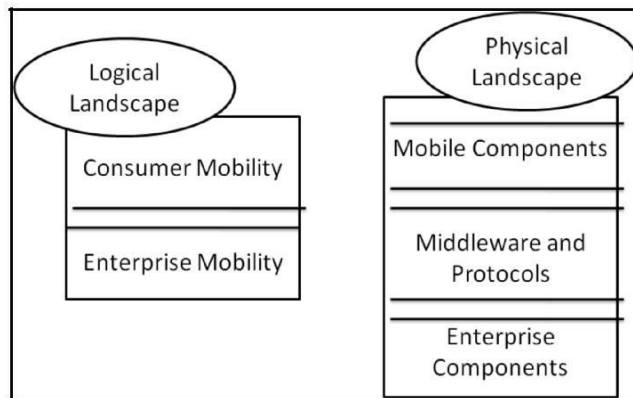## GETTING STARTED WITH MOBILITY

Syllabus:

Mobility landscape, Mobile platforms, Mobile apps development, Overview of Android platform, setting up the mobile app development environment along with an emulator, a case study on Mobile app development.

Mobility Panorama:

It is classified into

(1) Logical Landscape

(2) Physical Landscape

Logical Landscape:

It describes the rationale behind mobility for different stakeholders.
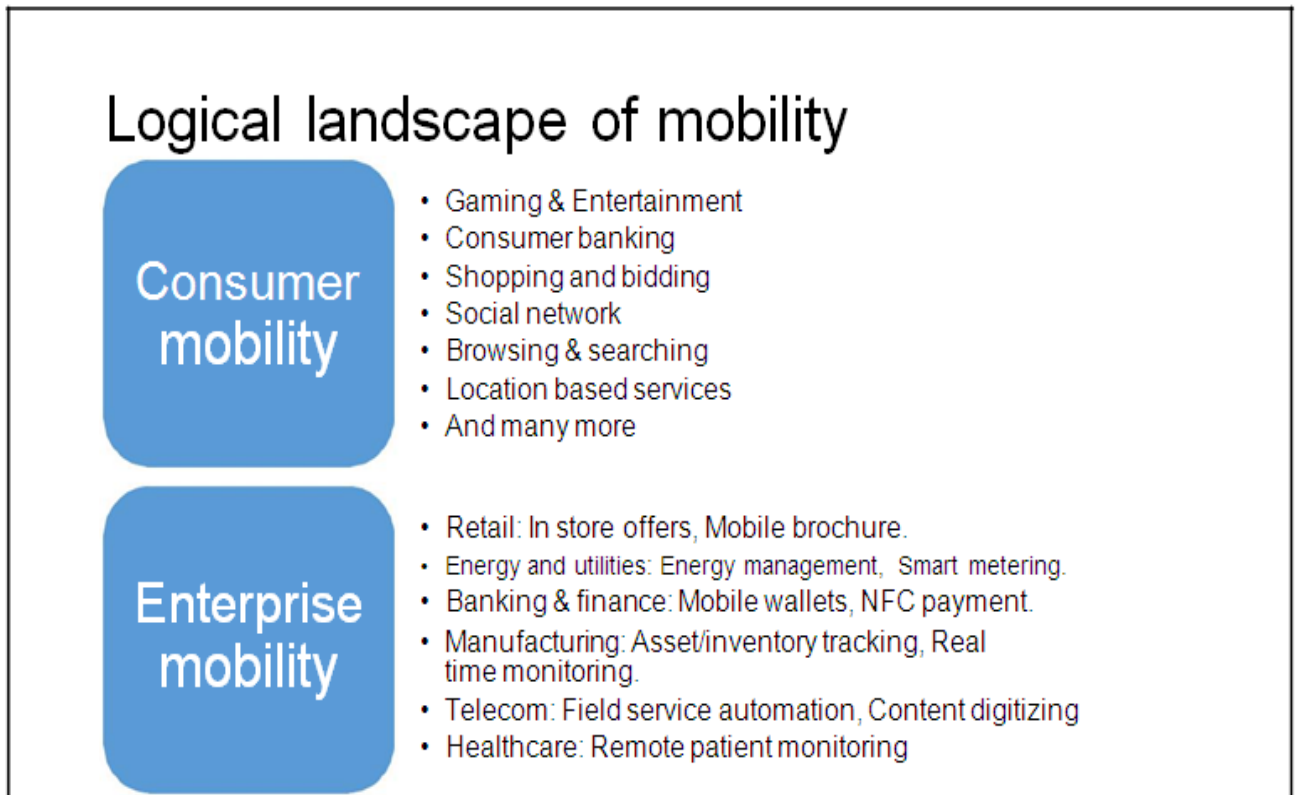
Consumer Mobility:

☐ Focused toward the end user.

☐ Comprise mobility solutions such as social networking, games, shopping, bidding & utilities.
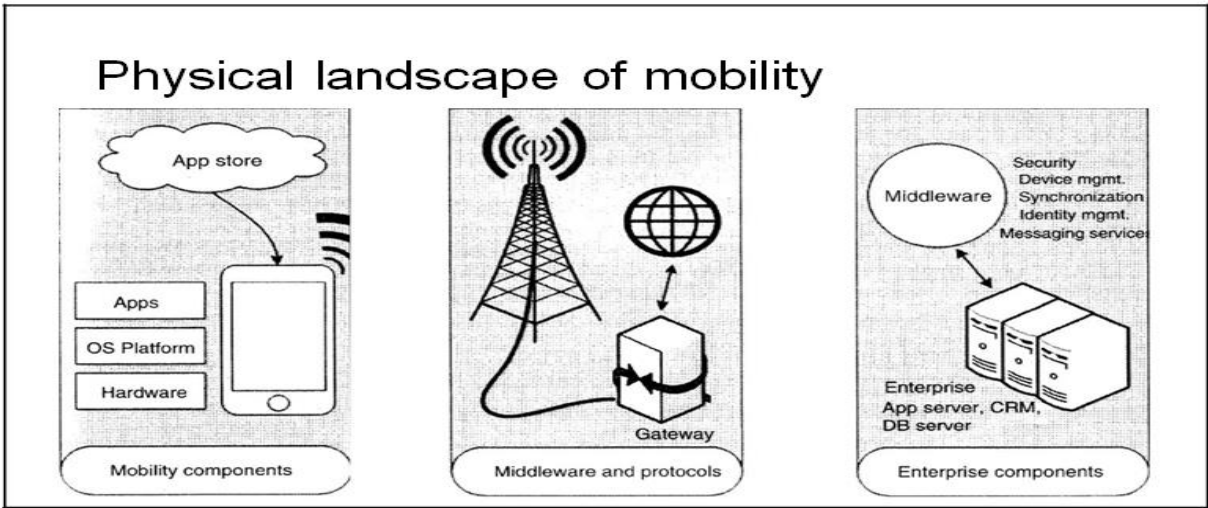
Enterprise Mobility:

☐ Focused toward various stakeholders of an organization such as vendors, partners, suppliers, workforce and their end consumers.

☐ Mobility is enabling enterprises to increase productivity of their

workforce.

Physical Landscape:

It portrays the infrastructure that enables mobility.

Logical landscape of mobility

Consumer mobility

- Gaming & Entertainment
- Consumer banking
- Shopping and bidding
- Social network
- Browsing & searching
- Location based services
- And many more

Enterprise mobility

- Retail: In store offers, Mobile brochure.
- Energy and utilities: Energy management, Smart metering.
- Banking & finance: Mobile wallets, NFC payment.
- Manufacturing: Asset/inventory tracking, Real time monitoring.
- Telecom: Field service automation, Content digitizing
- Healthcare: Remote patient monitoring

Physical landscape of mobility

Mobile Components:

☐ Key mobility components are mobile devices, mobile platforms, and mobile app stores.

☐ Mobile devices are the centre piece of mobility, and available in different shapes and sizes such as smart phones, tablets, phablets and smart watches.

☐ Mobile platforms such as Android and Applie iOS, are software stacks that power mobile devices.

☐ Mobile app stores are online market places of mobile apps. Ex.

Google Play, App Store

Enterprise Components:

☐ Comprises hosts of servers, such as database servers and application servers that cater to enterprise portion of mobility solutions.

☐ Also comprise enterprise solutions that cater to the requirements of

☐ data security

☐ data synchronization between mobile devices and enterprise servers and identity management

Middleware and Protocols:

☐ It acts as glue between mobility and enterprise components.

☐ Access mechanisms such as Wi-Fi, Bluetooth, Code Division Multiple Access (CDMA), General Packet Radio Service (GPRS), and GSM are some key components of this layer that allow mobile devices to communicate.

☐ Other key components are gateways such as WAP and SMS

gateways that enable interaction between mobile devices and the Internet.