MOBILE COMMUNICATION

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INTRODUCTION

WHAT IS A MOBILE ?

- A mobile is a portable telephone that does not use a wired connection. It connects to a wireless carrier network using waves.

INTRODUCTION

WHAT IS MOBILE COMMUNICATION ?

- A wireless form of communication in which voice and data information is emitted, transmitted and received via microwaves.
- This type of communication allows individuals to converse with one another or transmit data while moving from one place to another.

1G TECHNOLOGY

- 1G refers to the first generation of wireless telephone technology.
- Mobile telecommunication was first introduced in 1980s and completed in early 1990s.
- Data service almost non-existent.
- It allows the voice call in 1 country.
- 1G network use analog signal

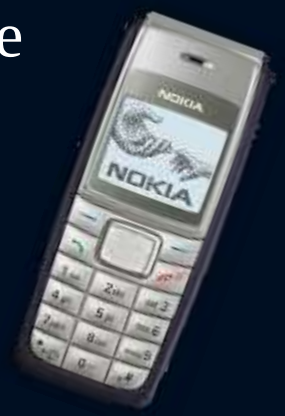
1G TECHNOLOGY

DRAWBACKS:

- Poor voice quality
- Poor battery life
- Large phone size
- No security
- Limited capacity

2G TECHNOLOGY

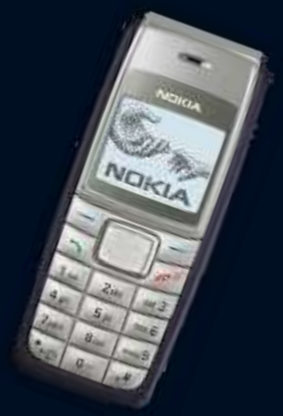
- 2G technology refers to the 2nd generation which is based on GSM.
- It was launched in Finland in the year 1991.
- 2G network use digital signals.
- It’s data speed was up to 64kbps
- It enables services such as text messages, picture messages or multi media message
- It provides better quality and capacity.



2G TECHNOLOGY

DRAWBACKS:

- These systems are unable to handle complex data such as videos.
- 2G requires strong digital signals to help mobile phones work. If there is no network coverage in any specific area, digital signals would weak.



2.5G TECHNOLOGY

- 2.5G is a technology between the 2G and 3G
- 2.5G is sometimes described as 2G cellular technology combined with GPRS

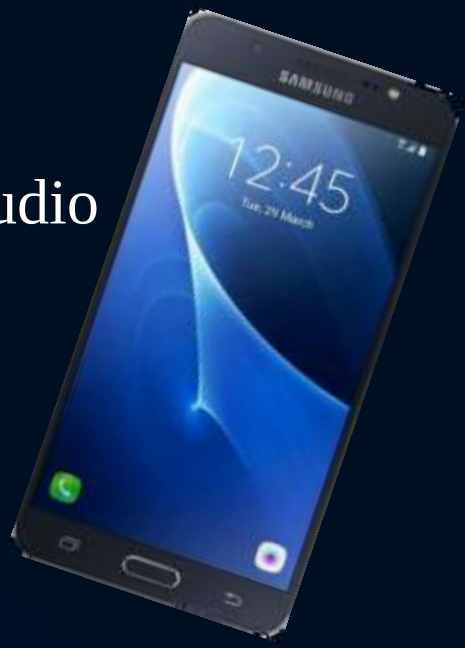
Features includes:

- Phone calls
- Send/receive E-mail messages
- Camera phone
- Speed: 64-144 Kbps.

3G TECHNOLOGY

- 3G technology refer to third generation which was introduced in year 2006.
- Data transmission speed increased from

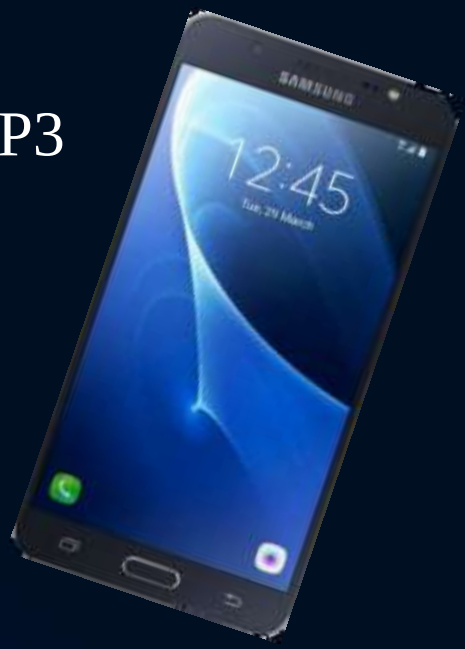
  144kbps – 2 Mbps.
- Typically called smart phones
- Accommodate web based applications and audio and video files.



3G TECHNOLOGY

FEATURES:

- Provides faster communication
- Send/receive large Email messages
- TV streaming/ mobile TV
- 11 sec – 1.5 min time to download a 3min MP3 song.



4G TECHNOLOGY

- 4G technology refer to fourth generation which was started from 2011.
- Capable of providing 100Mbps – 1Gbps speed.
- One of the basic term used to describe 4G is MAGIC:

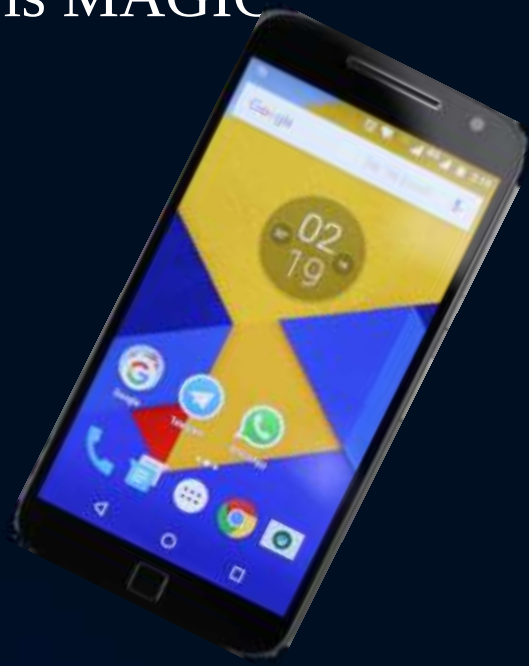
Mobile multimedia

Any time anywhere

Global mobility support

Integrated wireless solution

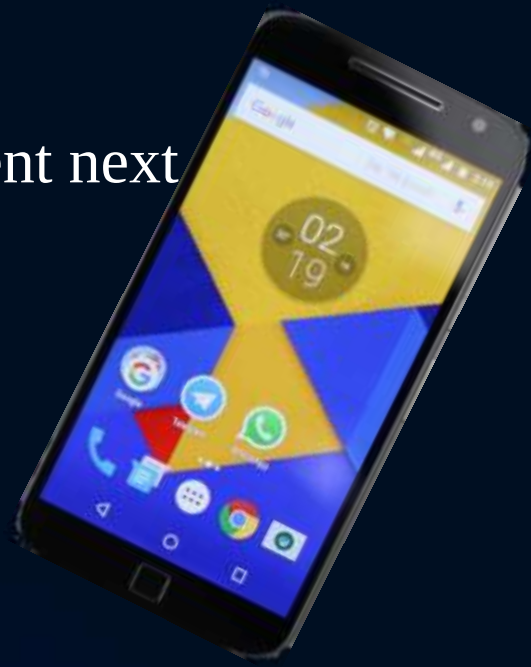
Customized personal services



4G TECHNOLOGY

DRAWBACKES:

- Battery usage is more
- Hard to implement
- Need complicated hardware
- Expensive equipment required to implement next generation network.



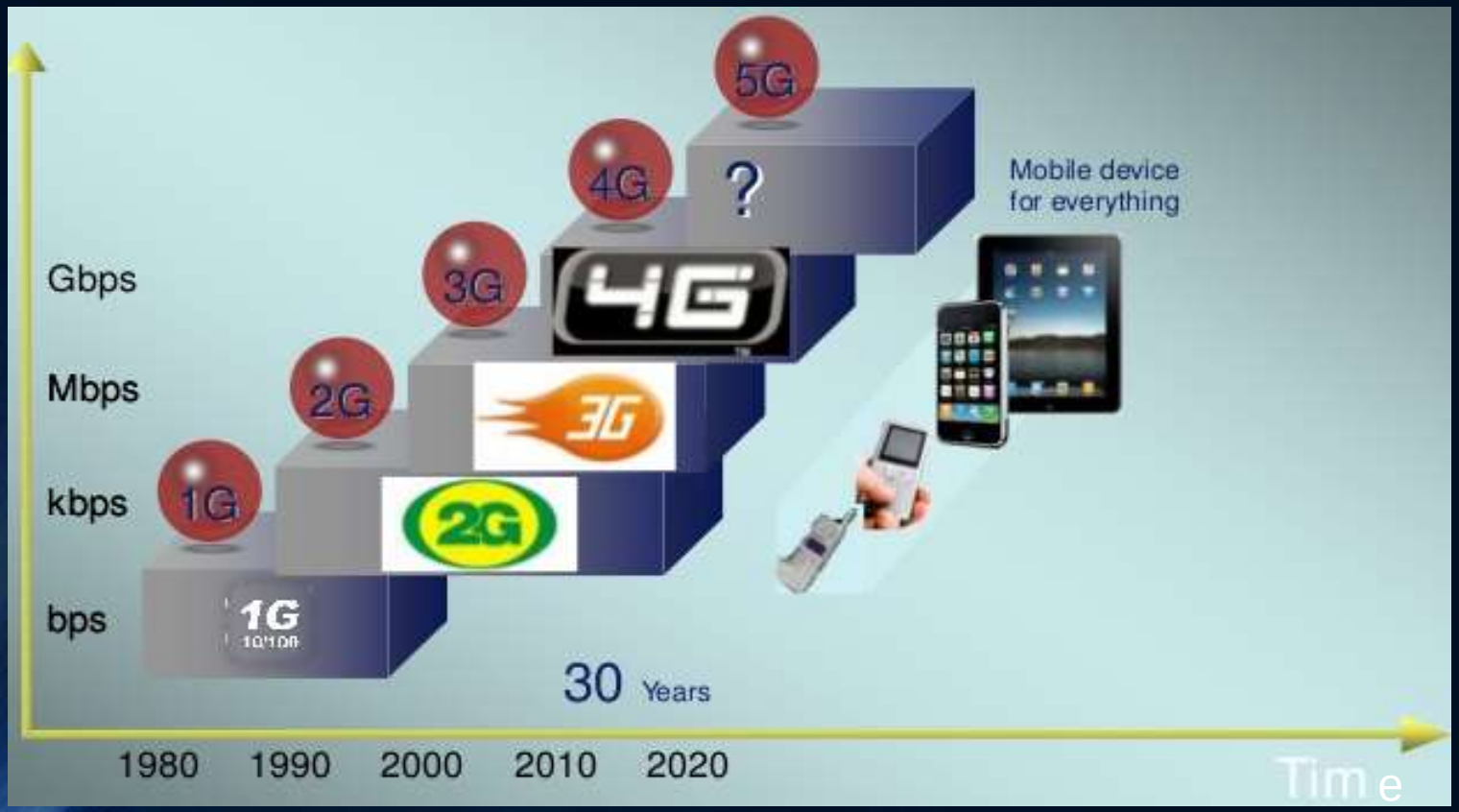
5G TECHNOLOGY

- 5G technology refer to fifth generation.
- Complete wireless communication with almost no limitation.

BENEFITS:

- High speed, high capacity
- Faster data transmission that of the previous generations.
- Support interactive multimedia, voice, streaming video , internet

CONCLUSION


5G
4G
?
3G
4G
2G
3G
1G
2G
1G
Gbps
Mbps
kbps
bps
Mobile device
for everything
30 Years
1980
1990
2000
2010
2020
Time

CONCLUSION

Generation	Time period	Definition	characteristics	Speed
1G	1980-1990	Analog	Voice only	14.4Kbps(peak)
2G	1990-2006	Digital narrow band/packet data	Data along voice,MMS,web browsing	56Kbps to 115Kbps
3G	2006-2011	Digital broad band packet data	Universal access, portability, video calling	5.8Mbps to 14.4Mbps
4G	2011-present	Digital broadband packet very high throughput	HD streaming. Portability increased to Worldwide roaming	100Mbps to 1Gbps

THANK YOU

MADE BY:

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