

Mobile computation and mobile agents

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Mobile systems

“Easily moved physically and computing capabilities be used while they are being moved”

Mobile systems – static stations



Social capabilities

- **Designed** to be used as single stations



- Born to be social



Screen Size

- Imac Height : 17.7 inches
- Ipad Height:9.4 inches



- Iphone Height 4.87 inches



Peripherals

- Web Camera



- Proximity Sensor
- Motion sensor/accelerometer
- Ambient Light sensor
- Gyroscope
- Moisture sensor



Inputs methods

- Keyboard
- Keyboard Hotkeys



- Gestures
- Touch



Context

- Static



- Any time! Any Where!
- Contextually relevant



Connectivity

- Connections speed
- Intermittent Connectivity



Battery and processing power

- Limited processing
- Limited Battery



Mobile's Unique Benefits

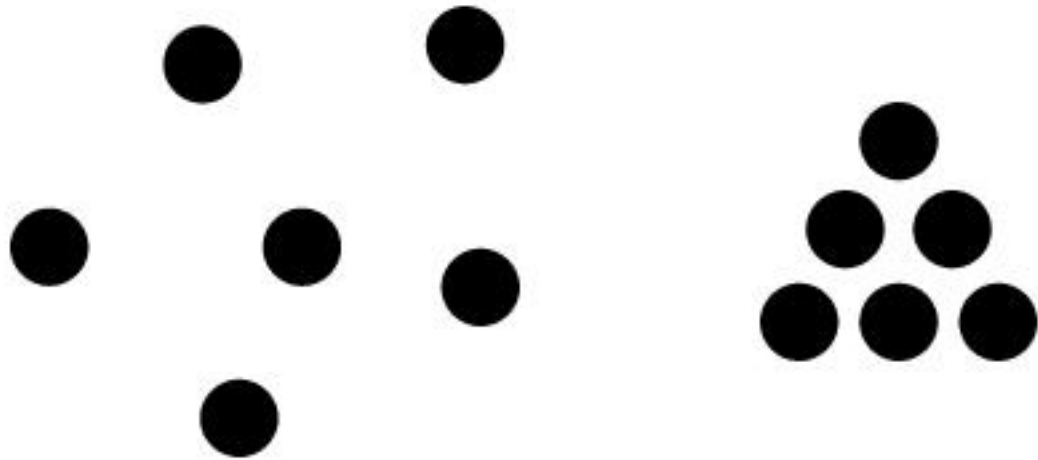
- The first Truly personal mass media
- The first always-on mass media
- The first always – carried mass media
- The only mass media with a build-in payment channel

Mobile systems added dimensions

- Location Awareness

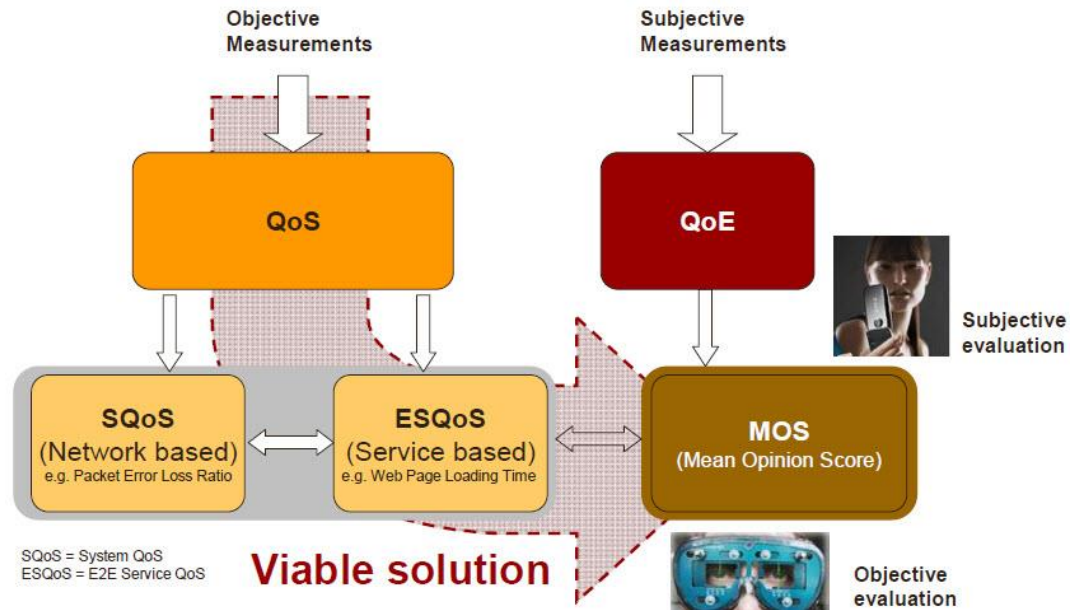


Proximity, Ambient Light Sensors



Quality of service


QoS and QoE parameters – Mapping Model



Quality of Service

- Low throughput
- Dropped packets
- Errors
- Latency
- Out of order delivery

Varying User interfaces

iPhone 5s	iPhone 5c	HTC One	Moto X	Galaxy S4	Nexus 5	Galaxy Note 3	LG G2	Lumia 1020
								
4"	4"	4.7"	4.7"	5"	4.95"	5.7"	5.2"	4.5"
1136 x 640	1136 x 640	1920 x 1080	1280 x 720	1920 x 1080	1920 x 1080	1920 x 1080	1920 x 1080	1280 x 768
326 ppi	326 ppi	468 ppi	313 ppi	441 ppi	445 ppi	388 ppi	423 ppi	332 ppi

Platform proliferation



Cupcake
Android 1.5



Donut
Android 1.6



Eclair
Android 2.0/2.1



Froyo
Android 2.2



Gingerbread
Android 2.3



Honeycomb
Android 3.0



Ice Cream Sandwich
Android 4.0



Jelly Bean
Android 4.1