**Abstract:**

Mobile device becomes very important part of our daily life. Upcoming technologies break the concept of limitation in terms of Architecture, memory and performance. This paper deals with the growth of mobile Architecture, mobile memory, mobile performance and additional features like accelerometers and compasses are also discussed. Mobile processors are growing with each passing year. The design and deployment of mobile processors over the years is largely affected by Communication, performance, and low-power operation [4]. Smartphone manufacturers making their phones to perform computer like features, they make phones with processor like ARM11, CortexA8, Snapdragon, Tegra and Armada etc. Choosing flash memories for mobile phones will immensely help the manufacturers to achieve their goals i.e. “more flash memories with less cost”. Mobile RAM’s are optimized to reduce the battery usage and increase the performance of the smart phones. Mobile storage is an important factor for mobile developers because smart phones should have enough memory to handle installing, running the application and switching from one application to another. Identifying the problems and finding solution to implementing accelerometer and electronic compasses in smart phones without depending of Wi-Fi infrastructure is very complex. Noisy phone sensors and human movement give a tough situation to deal with the implementation of the compass.