Evolution and Military Adoption of Commercial Smart Phones

Steve Mazza

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Technology Description

Smart phones are the result of the intersection of several mature and emerging consumer technologies including ¡list technologies¿. The smart phone revolution started in ¡name the date¿ with the introduction of the BlackBerry ¡model?¿. Fueled by consumer demand, Microsoft and Palm entered the market. But it wasn't until Apple introduced the iPhone that the revolution fully took hold. No longer just the tools of the business elite, now these devices were actively marketed to the average consumer – equally at home in the boardroom and in your kid's backpack.

Technological Need

More and more, our lives put us on the go. In a consumer driven market, manufacturers respond to the needs of our lifestyles. Whether for work or personal use, our smart phones span the distance from home, to the gym, to work, and are even with us on our commute time in between. In the Army's case, warfighters' needs are not all that different and smart phones are finding a niche in stateside training commands, permanent CONUS duty stations, and at different echelons in theater from Division all the way down to the dismounted soldier on patrol.

Key enablers of these devices both for the Army and for civilian use are the reduction in size, weight, power, and cost compared with carrying similar previous generation devices. Prior to the introduction of the smart phone, the end user would need an MP3 player, a hand held GPS, a cellular phone, and a laptop in order to get the same functionality; the size, weight, power, and cost of which were all prohibitive. Today, all of this functionality slips neatly into your pocket and costs less than \$500.00.

Evolution of the Technology

Technologically Enabling Advances

Smart phone technology is really a system of systems, bringing together a cadre of sensors, cellular, and WiFi capability (plus more recently near field communications, or NFC) under an integrated and unified user interface which is facilitated by touch screen capability. The technology enabling advances have principally been increases battery life, reductions in power draw, and the ability to produce inexpensive, high resolution capacitive touch screens.

Variants of the Technology

Technology Diffusion

Growth Rate

Forecast