

Dmitry Stillermann: Dos and don'ts for building enterprise apps



by Dmitry Stillermann January 4 2012

When does it make sense to switch to a tablet in a business scenario? And how much should you spend? For internal business processes, tablet applications provide the most value for the staff involved in many external meetings. Sales, CRM/IRM, and client advisory services are important areas. In addition, reporting and visualization capabilities can improve a firm's internal communications as well as dealings with clients. Then, there's the matter of implementation costs. I can make a firm statement: tablet development does not have to be costly, provided that you know what you're doing.

Vendors, not being heavily constrained by any legacy compatibility considerations, have used all the best ideas that the software industry has come up with during the last decade. Development tools are unbelievably efficient and application programming interfaces (APIs) are well designed and documented.

Unlike the platforms of the earlier generation--like Windows Mobile, BlackBerry OS, or Symbian--mobile device emulators can actually be used as reliable test benches, reducing the hardware costs of development teams.

Technical concerns are also becoming progressively easy because platform vendors are adjusting their software and tools to the idiosyncratic needs of the enterprise. With help from knowledgeable developers, a tablet app can be made as secure as one running on your PC.

Industrial grade authentication and encryption for network transport and storage is provided by the platforms out of the box. More complex needs--like support for RSA authentication or additional encryption algorithms--can be supported by reusable libraries, both vendor-specific and open-source (the latter being oftentimes more robust).

Mature platforms, which at the moment largely means Apple iOS (though competitors will eventually catch up), provide built-in mechanisms for protection against theft and malicious attacks, which can be further extended by enforcing IT policies as part of the enrollment framework.

Publishing, deploying and managing apps are less of a hassle than some will lead you to believe. For publicly-available apps, the Apple App Store approval process is now a well-trodden path even for individual developers. For the in-house scenario, Apple's Mobile Device Management (MDM) provides an impressive suite of technologies that can satisfy some of the most complex and stringent enterprise IT requirements.

Newcomers, however, are still lagging behind. The Android platform, for instance, does not offer a comparable set of tools for the enterprise context. However, given much more open and developer-centric nature of the Android ecosystem, many things can be implemented independently -- again, provided that you or your development partner have the necessary technical expertise. Many hopes are placed on Microsoft Windows Phone, mostly

because of Microsoft's overall track record with business customers, though the platform is still essentially in its infancy.

On the other hand, there are some business areas where mobile and tablet technology is not yet mature enough for immediate adoption. The bulk of middle- and back-office tasks can still be accomplished on stationary PCs and for most of them there is no viable business case for widespread migration to mobile. As for the front office, existing tablets' limitations in connection bandwidth and GUI complexity make them unsuitable for many tasks. Dmitry Stillermann is Vice President of Capital Markets for software development company DataArt.