Critical requirements for successful mobile app delivery

Enterprise mobile application development is still in its infancy and suffers similar growing pains experienced by application development in past decades. But why does IT struggle with mobility?

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OutSystems South Africa Director Craig Terblanche says that the mobile era has arrived. "Delivering the first app is just the start - mobile apps never stay small. Companies are struggling with standards, strategies, architecture, device priorities, and a rapidly expanding landscape of devices and user expectations."

Many mobile and web platforms multiplied by many form factors, multiplied by high expectations on pace of change and depth of integration equals an app delivery and management nightmare. iOS, Android, Windows Phone and web are just the tip of the iceberg.

More importantly, mobile development skills can be hard to acquire - HTML5, CSS3 and JavaScript are required and difficult.

Today, enterprise developers build web apps or mobile apps. Gone are the days of building client-server apps. The world now revolves around browsers and mobile devices.

"But, the time has arrived for developers just to build apps. Not web or mobile apps, just apps. Why? Because soon enough all apps will have to be accessible from whatever device type a user chooses," he explained.

Mobile-ready is mandatory

In the same way, the Web has become the default for nearly every enterprise app, mobile-ready is mandatory for any new enterprise application.

Terblanche said that organisations need a new approach for delivering mobile and customer-facing apps. "The need for a new approach is organisational, technical and operational."

It can be summarised as people and processes, one needs to create good UX skills internally because rapid adoption of a mobile app is all about the experience. IT cannot build successful mobile applications in a vacuum; organisations need to foster collaboration between developers, business analysts, users and stakeholders.

"Release early, engage with users, and tune fast or even fail fast. Because so many mobile applications have specific use cases in mind, understanding and quickly reacting to users' needs and experience is paramount to success," he stressed.

Tools and technologies are key drivers, one should utilise responsive web and hybrid approaches to address 95% of one's mobile needs. Isolate the strictly native apps as much as possible to limit the number of different code bases and skill sets required.

Terblanche said that one should deliver rich user interface design in a manner that can be easily manipulated and changed. "Detect adoption problems early and update continuously. Furthermore, adopt a backend aggregation approach that will enable you to mash-up and integrate a wide variety of data sources and services easily. Most change requests demand new data and services and the expectation will be days, not months."

Forrester has termed this new breed of apps low-code platforms, and states that 'Hand-coding is too slow to develop and deliver many of the applications that companies use to win, serve, and retain customers. Firms are turning to new, low-code application platforms that accelerate app delivery by dramatically reducing the amount of hand-coding required'.

"Automate DevOps processes to the extreme and reduce the time of testing, staging and production deployment. Iterate. Iterate. Iterate. It is the key to mobile success," he concluded.

The need to build compelling and highly usable customer and partner facing mobile apps is driving a new breed of rapid application delivery platform. Platforms specifically designed to meet the needs of multichannel apps that run perfectly on any device and can be changed at the speed of business.