



The Hidden side of Mobile Innovation

Seven tips for sustaining mobile
innovation and realizing your
mobile strategy



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Transforming businesses
through mobile

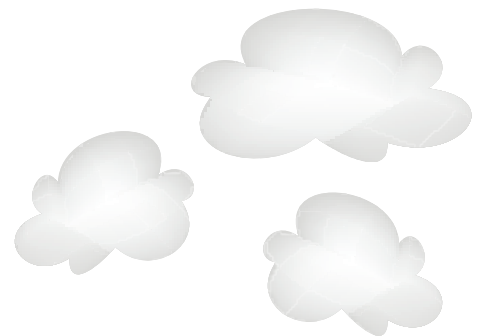
So you have launched your app on the app store. You have won awards for the design. The folks at the app store love the app and consumers have started downloading it. Time to go on that vacation to Maui, right?

Absolutely! But be prepared to cut short your trip!

As businesses battle to keep up with the accelerated pace of their customers' mobile-based lifestyles, they are in danger of pushing out the applications without the ability to sustain innovation. The bigger challenges in mobile are not "build-time" but "run-time."

The "behind-the-scenes" of building mobile applications may not be as glamorous as the superstar app itself, but it is a critical necessity to optimal performance, innovation and a business' competitive edge.

In order to advance innovation and revenues for its clients and the overall market, July Systems reveals seven tips that address hidden challenges that make or break your mobile strategy, and a nudge in the right direction to address these challenges.





Focus on the Use Case, NOT the Technology

Push, location and touch are some of the game changing technology levers in mobile that have great potential. For companies that want to leverage this potential these technologies need to be tuned to meet the business needs. For example, mobile retailers must ask themselves the following questions:

- How can I improve the responses to my mobile promotions and campaigns?
- How can I use location to improve the relevance of my message?
- How can I use location to directly increase footfalls in my store?, or
- How can I use touch to increase engagement on my products?

Let's pick touch as an example. It's a great technology to get consumers to engage deeply with the product catalog, swipe through 360 views or drag and drop products into a basket.

But taking it a step further, wouldn't it be great if it worked in offline mode too?

A mobile platform should enable businesses to answer these questions. It should help business connect the technology and the use case. This will enable them to differentiate from their competitors and drive significant impact on their business.



2 Build Modularly

Mobile devices have varying capabilities such as memory capacity, screen resolution and size of the display, network connectivity, support for different standards and interfaces, different operating systems and their versions.

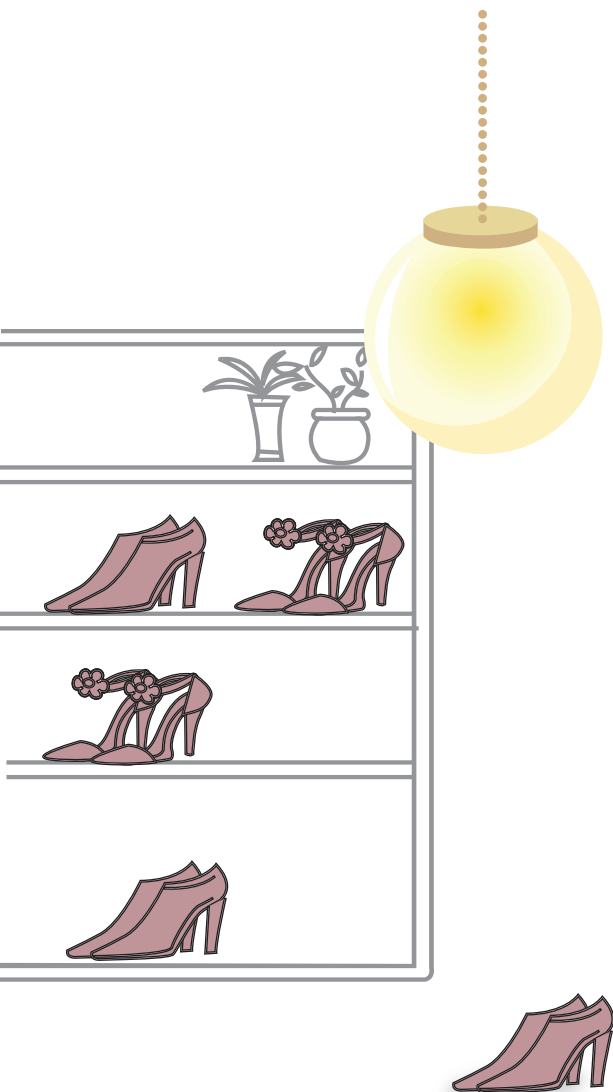
Apart from the inherent technology challenges of this fragmentation these differences in mobile devices and form factor lead to different use cases and usage behavior. How do you build for different mobile devices in a manner that is manageable where one size does not fit all?

A lowest common denominator approach will reduce costs and effort but will result in terrible (think one star ratings in the app store) experience. On the other hand, custom development for each device platform will trigger an avalanche of build and management costs.

Businesses are faced with opposing challenges – the need to customize the experience for usage behavior per mobile device platform vs. reducing effort to build and manage them.

The optimal approach is to develop applications across these devices platforms using a modular approach. To be effective, modules should be developed with flexibility across the user experience layer, logic layer and the integration layer. For example, a complex feature like offline product catalog described in #1 will become unmanageable if it is not developed modularly. The flexibility in the user experience layer will allow it to be modified for each OS and form factor. The reusable logic layer will require only minor changes to optimize the offline sync parameter for each device to accommodate its processing and memory capacity. The integration layer will remain common across all device platforms.

This approach is the key to solving this dichotomy between reusability and flexibility.



3 Choose the right development environment

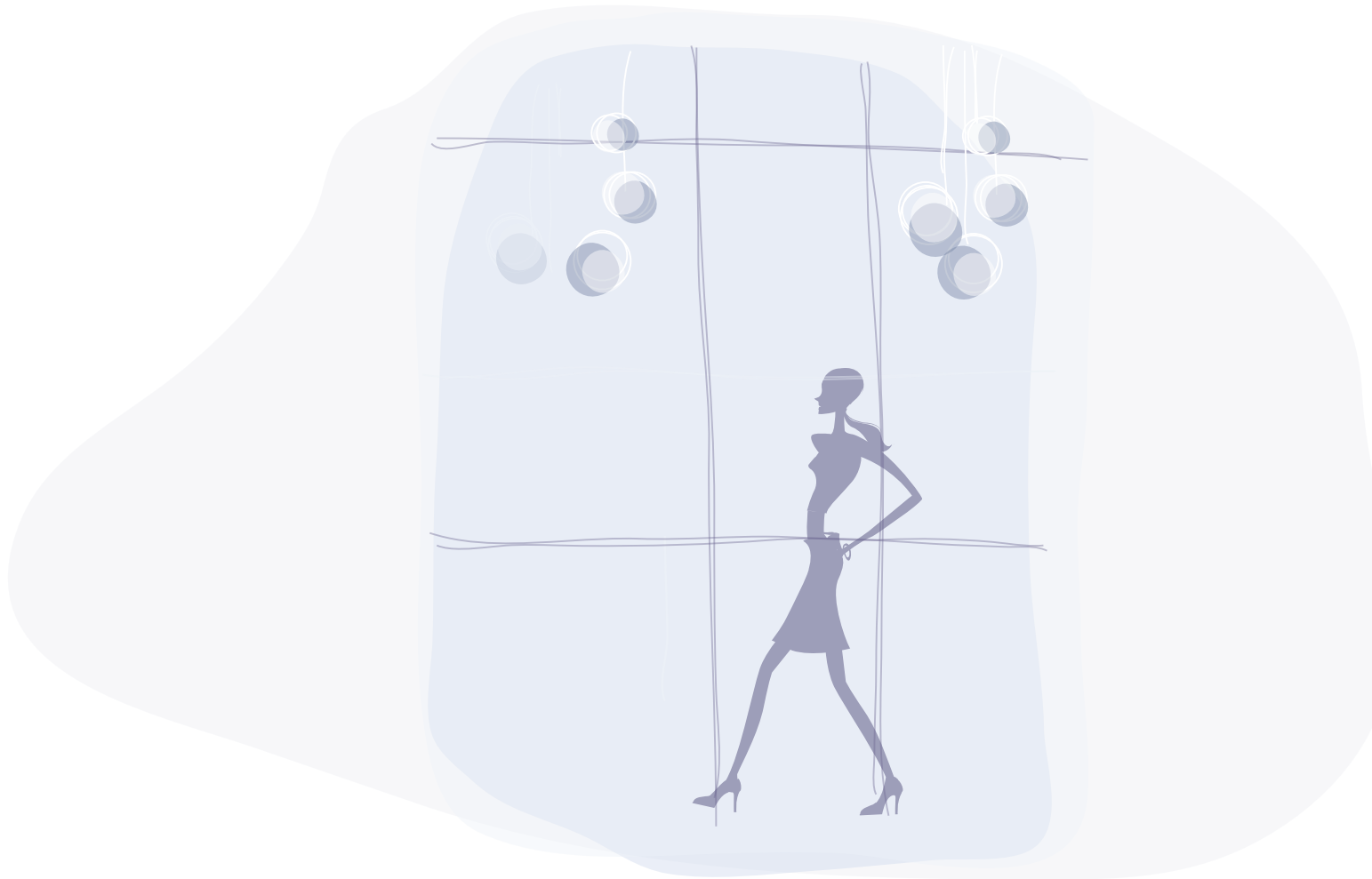
Most applications developed have certain points, which under extra-ordinary pressure will break, causing the application to malfunction. Common pressure points in mobile applications are connection management, memory management, multi-threading, application responses at heavy load, backward compatibility, etc.

To reduce the risk of downtime, “application pressure points” have to be thoroughly addressed in the development lifecycle. A robust development methodology, modular development environment and a suite of tools to help in testing and publishing will reduce risk from these application pressure points.

Smart use of open source or proprietary web services to perform heavy lifting where needed will also reduce the overall development effort. Some of the commonly used mobile web services include device transformation, media transcoding, push notifications, text messaging, commerce, graphics rendering, API mediation, etc.

Instead of focusing energies on creating a compelling and competitive offering on mobile, businesses typically end up dealing with common mobile bottlenecks and show stoppers. A sound client-server architecture, leveraging the power of web services combined with granular control of each modular element in the application will dramatically increase the stability of the application.





Connect to SoMoLo ecosystem

As Mary Meeker cites in her report “Top Mobile Internet Trends” Feb 2011, one of the key technology trends to watch for is Social - Mobile - Local convergence (the SoMoLo trinity). Applications today are connected to a variety of ubiquitous and niche services. Customers on mobile expect to share, connect, follow, tweet, link to, check in, and stream from their networks and cloud services.

The ability to turn on and off easily, integrate seamlessly and update sans interruptions, with services like Facebook, Twitter, You Tube, Linked-in, Foursquare, Text Messaging, Email, etc. or with niche and innovative services like Shopkick, Delicious, Postling and others, are essential for a successful application.

Business looking to roll out their mobile strategy will do well to choose a platform that offers an integrated ecosystem. The oft-cited benchmarks for platform + ecosystem are Salesforce.com and Google apps, which are not only great platforms but connect to ecosystems (App Exchange & Google Apps Marketplace respectively).

This combination enables business to easily tie-in services from multiple providers seamlessly.

5 Enable and don't throttle marketing innovation

One of the key stakeholders in any company is the marketing organization because they are closest to the consumer and understand what the mobile use cases are. Their needs are typically short fuse and the necessity to differentiate drives requirements into unforeseen territories.

Typically, marketing finds IT a bottleneck and IT hopes to ignore marketing's short fuse requests.

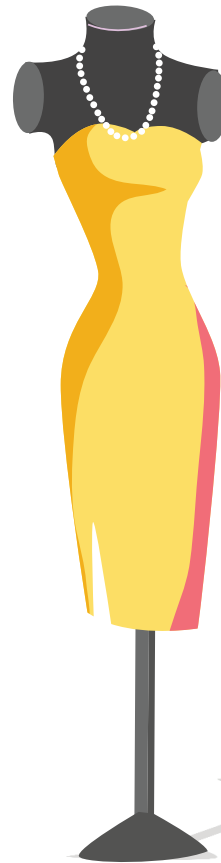
But what if there were tools that gave some power and control to marketing to execute promotions and drive campaigns on mobile? What if there was a way for marketers to communicate more visually what they needed from their IT teams for their mobile applications? A platform that provides easy-to-use tools for marketers can significantly impact the ROI of mobile projects. Marketing teams can use such tools to build time-sensitive mobile sites for promotions, events and have seen significant increase in traffic. They can quickly add QR codes, vanity URLs, analytics and more.



Growth in consumer demand is neither linear nor predictable

Many businesses are challenged with accommodating the growth in adoption of their mobile applications as consumers use their mobile devices frequently. Growth in mobile usage is exceeding all predictions. Consumer usage behavior is evolving with no fixed patterns emerging yet. Mobile is also more prone to large spikes in reaction to real world events that add another dimension of unpredictability. Responses to marketing campaigns and seasonal offers have brought down many a famous brand's mobile application. Planning for infrastructure through traditional approaches will not meet consumer demand - unless you over-compensate. This can turn out to be cost prohibitive.

An elastic, cloud-based solution to scale up and scale down - smoothly, seamlessly and without any interruption of service is critical to meet demand on mobile. A cloud-based platform also ensures that the newest features, devices and OS updates and innovations on mobile are pushed out as quickly as they come available.





Think tomorrow, today.

Once businesses taste success through the mobile channel, they will want to extend that success across geographies and products. Their mobile solution should be extensible to support this growth and not service a partial need. For example, a business that wants to expand to Japan should not be limited by the inability of the mobile platform to support the script. Also a business that wants to launch consumer applications and B2B applications should not be limited by the platform to integrate into the enterprise applications. Businesses that want to extend their mobile offering to new products should not be constrained by the technology or its application for the new product segment.

It is essential to have a platform that is extensible and scales with business needs.
Plan for tomorrow, today.



About the Author

Julian Philips is Vice President, Product Management & Marketing at July Systems. He has over 16 years of experience in mobile – from its humble beginnings as a single line monochrome pager, through its early development in voice, text messaging and data platforms, onto the mobile internet revolution driven by the gorgeous, power-packed smart phones and tablets that are commonplace today.

With his experience in User Experience and Mobile Marketing, combined with a deep understanding of technology, Julian helps businesses to focus their investments on mobile where it matters most.

July Systems

July Systems is a leading mobile application platform provider to businesses worldwide. Mi™ Platform, a cloud-based mobile platform, allows companies to build, manage, market and monetize rich mobile applications quickly and effectively. Over 100 of the world's largest brands use Mi™ Platform to deliver billions of transactions to over 100 million users globally. July Systems has offices in New York, Los Angeles, Germany, London, and Bangalore.

Businesses that use July Systems' cloud-based Mi™ platform do not have to worry about keeping up with the pace, scale, diversity and complexity of offering mobile applications for multiple operating systems. July Systems works closely with its clients to create a mobile roadmap that can support current and future business needs.

For more information, visit <http://www.julysystems.com>