

Web and Mobile – A unified digital strategy

As the mobile revolution marches on, Insurers are under pressure to provide anytime, anywhere capability to their agents. What this means is that the tasks that agents are able to complete from their office, must also be able to be completed using their smartphones even when they are not in the office. To enable the same capabilities on both the web and mobile devices requires a good unified digital strategy.

There are broadly two approaches to extend the feature set available on a web portal to smartphones – the insurer can make the web portal work well in the small form factor of smartphones or create mobile apps that can be installed on smartphones. We will examine both of these approaches.

Responsive Web Approach

Extending the web portal to smartphones is typically done in one of two ways. A few years ago, Insurers created an additional mobile optimized website, commonly referred to as the .mobi site. This website duplicates a subset of the capabilities available on the web portals. However, this is no longer seen as a viable approach because the solution leaves IT with two websites to maintain and enhance. The primary issue with this approach is that the new features introduced into the web portals take much longer to become available in the .mobi site.

A newer approach, which takes advantages of advances in HTML technologies, (more specifically, HTML 5 and CSS 3 media queries) takes the same website, reorganizes the content and adapts to devices of all sizes. This approach, known as responsive web design, enables the users to utilize the same web portal on smartphones with ease. The primary advantage of responsive web design is that there is only one code base to maintain and hence, any new features that are added to the portal are then available on smartphones immediately. However, one key issue is that this solution is still a website—even though the site presents in a nicer, more compact view on smartphones, it is

still a site accessed via the smartphone's browser. The site is still not a rich mobile app that takes advantages of all of the device's capabilities.

Mobile App approach

In order to present a rich and natural look-and-feel it is best to go with mobile apps. Mobile apps can provide significantly more capability to the user, including some offline capability for when the mobile phone temporarily loses network connection. The apps can also interact with the phone's native features, such as the use of Apple Pay for online payments or adding their agent's contact info into the phone's contact list.

While mobile apps are definitely more superior to responsive web portals, creating mobile apps is not an easy task and it usually requires using a brand new development skillset that is often not readily available within an Insurer's IT department. There are certain device independent app technologies, such as PhoneGap, that promises the easy creation of apps using HTML 5, a skillset that is usually readily available in Insurance IT. While device independent apps work to a certain extent, the performance and richness of the user interface does not match those of real native apps. Another disadvantage is that these device independent apps are still a new development and a new software paradigm (single page web application) compared to portal web development. For these reasons, native mobile apps are much superior to HTML 5 based apps. The only disadvantage is that there is a significant amount of development and maintenance effort.

Unique unified digital approach

Over the years, we have developed portals and mobile solutions for our carrier partners using the approaches outlined above. Based on that experience, we have come to realize that in order to take advantage of the true capabilities of smartphones and provide a rich user experience, building responsive portals and

complementing them with natively built mobile apps is the best course.

Though it may appear that we are resorting to building out two separate solutions, based on significant research we have arrived at what we believe is a unique and innovative way to tackle this challenge. In this unified digital strategy, respective code bases are kept very compact, and subsequent code changes are required only when there is a significant change in technical capability and not when there are any changes to the existing features. What this means is that if the business units want to change a few fields in a page or alter the workflow for a transaction, the change should be made through configuration of the pages and workflow without requiring code changes.

The code change will however be necessary if a new technical capability has to be supported, for example Apple Pay. The configurations, which we call metadata, tells the portal and app what features are available to a user, what information is to be collected for a transaction (say online payment), what API is to be invoked when the user submits a transaction and what information is to be displayed after the API call. The portal and app implementations then read the metadata and configure the user interface to allow these permitted transactions for the user. Since the portal and app are metadata driven, it becomes possible to change the portal and app behavior without programming simply by changing the metadata. This does not eliminate all of the programming, but by defining the metadata configuration well we can minimize customizations that will be needed

to the portals and apps. The primary advantages of this approach are:

1. It achieves a unified digital goal of extending the same capability on both the web and mobile and at the same time takes advantage of the richness of each platform.
2. The compact code base that does not change often. Feature changes are made simply by making configuration changes to the metadata.
3. There is no need to implement multiple apps or websites, one for agents and one for insureds. The apps and portals are role based and limit the feature set based on the logged in user.

One disadvantage though is the multiple codebases. However, the code is compact, configurable, delivers significant capability and does not require frequent customization. This approach not only lets users access their data whenever and wherever, but there is also really no need to build multiple portals or apps for each user community.

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