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Dan Woods Contributor

I find technology that matters for early adopters.

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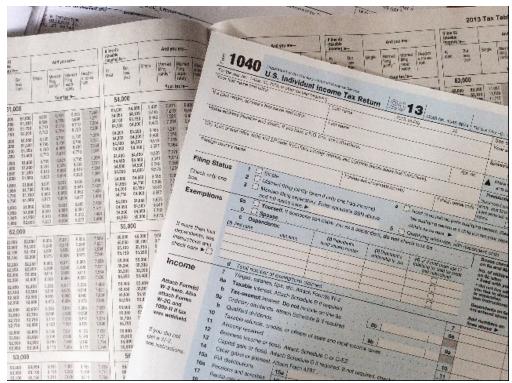
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## Are You Ready for Do It Yourself Mobile Apps?

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We're increasingly living in a DIY age. But we aren't yet living in a DIY age for mobile apps. In my view, it is time for most companies to start. There are a variety of technologies that are emerging that allow true DIY development of mobile apps. It is time to explore them. If every mobile app is being done by a consultant, in my view, you are missing out a huge opportunity, and possibly wasting a lot of money.

DIY is pervasive these days. Whether it's self-service checkout at the grocery store, home repair how-to videos on YouTube, or your neighbor brewing his own beer in his backyard, having the ability to be your own expert greatly expedites our individual efficiency. It also leads to massive innovation as Eric Von Hippel's research on User-driven Innovation has shown.



A Popular Form This Time of Year

But until recently, self-service has mainly been something we do on our desktops. Self-service software, tools like Excel, Word, and PowerPoint, create documents that must be sent around. We've all spent too much time dealing with too many versions of too many documents. These older tools were not intended to meet the demands of real-time automation for basic data collection that many companies need. We've all experienced that difficulty of having to email the latest version of a spreadsheet to a colleague or upload copious amounts of data from individual forms rather than having software that could do that for us. The problem with the documents that are truly self-service is that the information in them is not connected to an organized central repository.

Another form of self-service has comes form Software-as-a-Service apps like Salesforce.com and other simple web apps. These apps do allow customization by mere mortals, but only inside the universe of the app. You can add fields and such and the information collected flows to a central place for use by others. It is powerful stuff but the use you can make of these apps is generally determined by the designers. They are flexible, but they don't create something that can be adapted to any use.

We've gotten to a point at which the power of mobile devices, pervasive high quality wireless networks, and the power of automated software development have created a huge opportunity for a kind of app that we all want but that has been missing. These are apps that are as easy to make as a presentation but can be deployed on the mobile devices that we all carry around.

Companies like <u>Appeelerator</u>, <u>EachScape</u>, and newer ones like <u>Appery.io</u> help developers create mobile apps faster. This is important but not quite the kind of self-service that will be transformational.

The kind of self-service experience I'm talking about is being created by companies like <u>doForms</u>, and a few others, who are bringing self-service creation of mobile apps to a far wider audience. By using these technologies, you can explore the scope of what mobility can do for you, how it can changes business processes, and be agile.

Companies do not need to incur significant technological debt to develop the customized applications they need to run their operations more smoothly and at a lower cost – but they should view it as both a necessity and an opportunity to do this development themselves. Why? Because they can produce a solution tailored specifically for their business and do so quickly, and at low-cost.

After you have pushed these DIY technologies to the limits, maybe then you realize you need a consultant to do the perfect native version. But you will be confident you know what you want.

## Why You Should Be in the Mobile Apps Business

As I've written before (<u>How To Become Just Enough of a Software Company to Succeed</u>), all businesses should now be in the apps business. So what exactly does self-service application development look like? It doesn't look like a developer interface. In order to succeed, the DIY mobile apps are not about modeling the app. They must start with another familiar metaphor that quickly provides the needed context.

doForms does this by using the concept of the form as the starting point for building mobile apps. They refer to themselves as a mobile forms and workflow solution, but what they really are is a do-it-yourself mobile application platform for data capture and workflow. The DIY developer starts with a blank form and then can add fields to capture or present information. This is done in the same sort of drag, drop, and configure pattern used in presentations. It is possible to add logic to make sure data is correct within a field and across fields. In addition, the capabilities of the mobile device for location- and time-stamping, for taking photos, sketching, collecting payment, for recording video, and such can all be included. doForms can implement simple workflows by passing forms from one person to another.

Here are the kind of processes that have been automated with doForms:

- One of the world's largest commercial real estate management companies uses it to streamline and consolidate the data from buildings inspections for clients with a large national footprint
- A midsized pluming company uses it to manage its workforce, dispatch work
  orders to plumbers in the field who document the job, lookup parts and
  costs uploaded to their forms, collect payment, and issue an invoice all from
  their mobile devices.
- A franchise operation uses doForms to do self-scoring kitchen inspections, with photographic documentation of exceptions.
- A small Texas town documents and archives the details and location of all residential gas and electric installations.
- A global telecom company uses doForms to provide a mobile solution infrastructure for large data collection, ensuring scalability and enabling them to retrieve and maintain master records in real-time from the field.

With doForms, self-service mobile applications are possible because of mobile device abstraction, networking capabilities, and software advances. With its self-service app development, doForms allows any novice to enter

information into a form from anywhere and turn that data into actionable intelligence. The application is modeled on the forms users are already using. It's as easy as Excel, but application ready in a way Excel is not.

doForms automates this type of simple data collection. It's not a replacement for complex applications — it's really intended to automate what's never been automated before. Think of energy companies collecting data in oil fields or manufacturing companies whose technicians are servicing products — they can collect that data and immediately enter it into a database rather than having to put it into Excel and then wait to reconnect to an Intranet site later.

While the cloud and API technology behind doForms is sophisticated, the interface for the user is kept as simple as possible and because it can be configured to work with existing applications, doForms augments workstreams rather than forcing users to learn new technology. doForms also enables PDFs, such as receipts or confirmations, to be emailed to customers. This improves the ability of field staff to do their jobs effectively. What doForms shows is that for businesses, self-service mobile apps don't recreate the wheel – they just make the wheel roll much more smoothly.

The integration with the back end happens through a server that has standard connectors to a variety of systems such as Salesforce.com and others. It may require some work to connect to obscure systems or custom systems, but once that's done, the DIY developers can work on their own.

The concept of the form and all it implies fills in lots of blanks for the DIY developer. It's an especially pertinent solution for any work that relies on hundreds, if not thousands of paper forms. I doubt anyone needs a run-down on the problems with entering information collected by hand into a spreadsheet – from user error with mistyped entries to the laborious nature of the data collection, there's a reason even industries with a traditional affinity for paper, such as law, are moving towards digitization.

The philosophy behind doForms is to avoid unnecessary complexity in building mobile applications that capture enough data and are able to assign enough work in a process that is as easy as buying a song in iTunes. Can you build any application in doForms? No. But the point is that there is a huge domain of applications that can be built that can have a huge impact on improving productivity and efficiency. Such applications allow for data to be put to use in real-time and for every employee to infuse data into their daily work and decision-making. Perhaps equally important, though, is that it allows any CIO with a user base clamoring for more mobility to meet those demands head on.

Netflix's Daniel Jacobson has pushed businesses (<u>How A Netflix Tech Innovation Can Unleash Creativity in Your Business</u>) to adopt experience-based APIs push the ability to configure what APIs are needed closer to the people who are using them. doForms does the same thing for mobile apps. Whether you use doForms or the other form-based choices, if you have a lot of people, collecting and sharing a lot of data, then you probably should be building your own mobile apps.

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<u>Dan Woods</u> is on a mission to help people find the technology they need to succeed. Users of technology should visit <u>CITO Research</u>, a publication where early adopters find technology that matters. Vendors should visit <u>Evolved Media</u> for advice about how to find the right buyers. See list of Dan's clients <u>on this page</u>.

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