

# Social Innovation and Software: A Primer

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As someone who works in the software space, I know better than most how cliché it has become to say that we live in an app-based world. We all know instinctively, without reading it in some article, that we live in an age of instant data. We also understand that the accompanying transformations are huge in scale and in consequence. And yet, when it comes to social good enterprises, there is often a temptation to overlook harnessing mobile and web technology—either because it feels less tangible, more foreign, or more expensive than the next best alternative. Fortunately, software development has reached a point where applications, built in an understandable and transparent way, can produce real results at reasonable prices.

The first of those barriers, understanding, might be the most powerful. Many of the customers we work with aren't sure what an app should cost, or what the development process looks like. Fortunately, there are myriad online pricing tools (my favorite is called Otreva) that can solve the cost question for you. They're not perfect, but they're a good start for ballpark estimates. Understanding the development process can be a bit harder, so I'll do my best to explain the one part that is the

most important.

The process is different at every firm, but it generally follows a simple pattern: understand the project needs, design the app or website to accomplish those needs, build the design, test the build, and launch and maintain the software.

That last part of the process—not just launching, but maintaining what was launched—is almost always overlooked. This is always a major mistake, akin to buying a car but never getting a tune-up, or even changing the oil. It's a quick way to ruin your investment.

Here's why: Software doesn't exist in a static world, where everything will work fine if it's never touched after deployment. Web and mobile environments, the environments in which we experience and interact with social good software, are constantly changing. Just look at all the changes that have come with Apple's iOS 10.

While these changes are usually a net-positive for users, they sometimes require updates and maintenance to keep existing projects online. Add in other factors like the cost of cloud storage (low but still not zero) and general best-practices like automatic backups, and you'll see why a maintenance plan is a worthwhile investment.

Of course, just understanding the development process doesn't make building an app obvious. Holding conferences, conventions, workshops, and similar events

might seem like a stronger option. In some cases, these are effective ways to scale your message and reach a large number of people. Usually, though, your cost rises as you include more people in these events. An app, on the other hand, can be thought of as a fixed-price expense. As more and more people sign up to use your app, the cost per user decreases asymptotically. A conference or convention does not necessarily fit that curve. And such events are physically cumbersome. People have to travel to your city, take time off work, and manage logistical challenges like hotels and cars if your event is very big.

A larger audience can also be reached remotely via an app, which, when coupled with the right marketing strategy, can be made to grow organically, saving you time and money to devote to other aspects of your work.

Speaking of money, let me talk about cost. When it comes to cost, the tumbling barriers of development time are making mobile and web apps cheaper and cheaper each year. As part of a social good endeavor, your team has a critical mission to accomplish, and you have to do it in limited time and under tight financial constraints.

App development has always been synonymous with delays, overruns, and big budgets, or at least that was the case 5 years ago. Changes in today's development stack—the group of programs developers use to build apps—have made project development and deployment quicker

than ever. And when developers save time, they can concentrate on improving their product to deliver superior value, or simply produce a working version in a tighter timeframe.

In short, I hope this article has served as a primer for you when it comes to creating software for your social good endeavor. With the limited resources and critical mission you have, there is often a temptation to overlook apps. They're not the be-all, end-all product you need to solve the world's toughest problems. But they are an important tool in the toolkit you have at your disposal. If a web or mobile application fits into your vision of a better tomorrow, you need not be intimidated by confusion about process, scale, or cost.

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