April 1st, 2016

Dear Multi-State Registration and Filing Portal (MRFP) Inc.:

Your decision to build a single portal for nonprofit registration is very exciting. We believe your most important design consideration is whether to use a software-as-a-service (SaaS) product or to build a custom solution. We strongly suggest the SaaS approach. In the table below, we describe in detail the SaaS/custom decision in the context of each of the parameters we think you should consider. We use Screendoor, our data collection platform, as an example of the SaaS approach. The high level take-away is that the SaaS approach in general, and Screendoor in particular, will get you the vast majority of the functionality you will need in a way that is robust, scalable, available out of the box, and at zero cost. The read/write API and the ability to "stack" with other modern micro-services will provide the foundation for expanding functionality as the project expands.

## High Level Considerations

|  | Screendoor/SaaS | Custom Solution |
|---|---|---|
| Launch | Ready to go live on the first day of the project. Technical risks are mitigated because of the existing user base. Screendoor is actively used by 31 clients, including city, state and federal agencies. | Likely to take weeks or months, and still not be robust. Since many of the features needed are technically complex, there is significant risk involved in building them from scratch. |
| Scale and Security | Cloud-based technical infrastructure (such as AWS) and the ability to conduct load testing makes it easy for to scale to a very high level of demand. AWS exceeds industry standards for security and protection of personally identifiable information. See https://www.dobt.co/security/ for more details. | Solutions hosted locally are expensive to scale and difficult to secure. Even if it is cloud-based, scaling a custom solution will involve significant risk since it has not been tested with other clients. |
| Price | The economics of SaaS (high fixed cost to build product initially, low marginal cost for each | A custom product with the robustness of Screendoor would be very expensive to |

| | deployment) go very well with the transaction-based funding model. | build. Even if a vendor can offer you a free custom product, they will incur significant cost during the build, which creates additional risk for MRFP. |
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## Features

This section articulates how Screendoor handles the features that are mission critical to MRFP. A custom developer could handle providing this functionality in a number of ways, but at the broadest level we can say that it would be costly and time consuming to build these to the level required to make this project successful.

| Feature | Screendoor |
|---|---|
| Open Data/API | Screendoor's robust, read/write API would lay the groundwork for a wide range of functionality, including the creation of two way interaction with state databases, integration with open data portals, and ensuring that third party vendors can develop apps on top of the data. Screendoor comes with built-in integrations with open data portal such as Socrata and CKAN.<br><br>Documentation of our API can be found here: http://dobtco.github.io/screendoor-api-docs/ |
| Payments | Screendoor currently allows our customers to collect fees with the Stripe, a user friendly payment processing system that makes paying registration fees as easy as buying an item from an online retailer. Stripe is used by TED, Twitter, The Guardian, Kickstarter, and many more. Part of our service fee would cover ensuring the registration fees are delivered to the appropriate state, in whatever way is most appropriate. |
| Account Management | Organizations and their professional fundraisers can log into the portal and access all of their registration reports from previous years. Screendoor provides this functionality out of the box: users who respond to a form can log in and |

| | review their previous responses (including attached documents).<br>In order to avoid additional complexity, registration service providers will be able to create one account and transmit data on behalf of many registrants/clients. |
|---|---|
| Form Builder | The creation and publication of the registration form should not require technical expertise. Screendoor comes with a full-featured, easy-to-use form builder. Portal administrators could use Screendoor's conditional form fields to reduce form complexity and specify state-specific form fields. They could also add validation rules to ensure submitted data is complete and formatted correctly. |
| Workflows | We recommend a solution that would enable each participating state to carry out its existing filing and reporting workflow. In Screendoor, an admin user would be able to trigger automated actions whenever a registration is filed, e.g., if an organization registers in a given state, the appropriate state employee will be notified automatically. |
| Customer Support | Screendoor has a dedicated customer support team. Also, the MRFP team members with appropriate permissions can review submissions, send messages to applicants, take notes, and re-open submissions for editing, all in the Screendoor response dashboard. |

## Other Considerations

Rather than building a single app that meets all of these requirements, we propose MRFP use Screendoor as a base infrastructure, paired with the best available "micro-services".  We believe this approach follows best practices in modern government technology. To [quote](#) Mark Headd:

"Services would be compact and focused on doing one thing well. Because of this, the development
and management of different services could be farmed out across the government IT footprint (and even out to the civic tech community)."

Further, the micro-services approach has several other advantages:

(i) Micro-services reduce risk, since each service has already been proven to do a single task very

well at scale;

(ii) Micro-services are highly customizable, and therefore more likely to be useful as needs change; and

(iii) Micro-services are more likely to be reused by other constituencies that have similar but not identical needs.

We think there are two particularly good candidates for micro-services that can integrate with Screendoor.

| 990 Form Import | In the first version of the portal, registrants would be required to upload their 990 tax filings as PDFs. A Screendoor integration with Captricity, a platform that captures data from PDFs, would convert the tax documents to machine-readable data and append it to the registrant's record. <br><br> Once the IRS releases e-filed Form 990 tax data in XML, we can explore building a Screendoor integration: the form would ask registrants to submit their Employer Identification Number (EIN), retrieve the Form 990 most recently filed under the EIN, and auto-populate the form fields with the necessary data. |
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| Analytics Dashboard | An analytics dashboard can be built using the Screendoor API. The dashboard could, for example, provide summary statistics of charities who have applied and registered. Paired with automated notifications, analytics would allow regulators to quickly respond to charities flagged for further investigation and issue noncompliance penalties. |

Regardless of which approach is selected, we strongly encourage MRFP to measure the effectiveness of the new Portal. Techniques like Net Promoter Score and measurements like duration of registration process will give you a sense of how well the new solution is performing. Based on our preliminary investigation of existing registration sites, we believe we can improve efficiency and customer convenience dramatically, with the added benefit of increased data transparency, and information sharing.

Thank you for considering our recommendations, and for your work on this important project.

Best Regards,

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