When working with various projects, teams, and the parent organization (Broadvail), we would like to pursue a solution that allows us to easily consolidate and track disparate information: data, document, workflows. The question then is whether we should buy an off-the-shelf Software-as-a-Service (SaaS) platform or built our own platform on a Platform-as-a-Service (PaaS) offering. From my experience, going through the route of a SaaS platform will be the best solution for a smaller company primarily due to three Rs: Reliability, Resources, Requirements.

The reliability gained by SaaS platforms cannot be understated. With modern IT infrastructure, applications and databases are held in the cloud, passing the maintenance and upgrade costs to the cloud service providers who manage the infrastructure of data centers, servers, and utilities. With these cloud services follow the rise of SaaS workflow automation tools. Typical SaaS offerings include specialized experts to continually maintain the backend of the application, while also ensuring the solution is upgraded and updated to protect it from security risks and bugs. The downsides of a SaaS solution are the higher costs and the fact that we’re at the mercy of the SaaS company with rate increases and being tied to a third-party platform.

Personnel resources also play a big part in choosing SaaS over developing our own platform. In the case where we build an internal application, we would still require the cloud infrastructure but would heavily rely on our own technical expertise (either employee or contractor) to maintain the reliability and security of our solution. Cost savings from higher SaaS rates would be negated by us having an additional employee or contractor (also having high rates) to continually secure, maintain, and upgrade our platform. Workforce with these technical skills tend to switch jobs very frequently and the time it takes to onboard new employees or contractors to maintain and upgrade the backend may be inefficient for our needs. It would be better suited to let the SaaS platforms handle this part of the maintenance pipeline.

The base requirements for both offerings (PaaS vs SaaS) are generally the same. With an in-house option, we could configure and customize the solution to best match our needs. However, there are many SaaS applications with open architecture to allow us to configure what we need to make the best use out of it, without over customizing (changing the backend) to fit our need. This is key because I have run into issues where we took a SaaS option and over-customized it to match the way my previous company did this. This resulted in a solution that was great in the short term but resulted in no future support from the SaaS company and thus had to be depreciated. If proper data architecture and user experience testing is done when choosing a SaaS option, there should be no issues in obtaining a solution to meet our needs.

Overall, a SaaS option is my recommendation because it is more reliable (in terms of infrastructure, technical expertise, and upgrades), we do not depend on our own resources to maintain or upgrade it, and there are many offerings that are flexible enough for our business requirements.