**HTC issue #7**

**PayPal initial investigation results – By Jeff Hatton**

Firstly, PayPal has two data transfer format protocols. They are NVP or SOAP – NVP is recommended by PayPal (SOAP has waaay more overhead and is a lot slower).

<https://developer.paypal.com/docs/nvp-soap-api/nvp/>

They have walkthrough demos which show off both their client option (easy, but simple) or server side option (more complicated, but more control):

<https://demo.paypal.com/us/demo/go_platform/checkoutGroup/ecflow>?

Paypal has a “sandbox” mode for developers to test in. This will allow us to test transactions before going live with PayPal integration. PayPal has a developer account, as well as a merchant account. We will need a developer account to get access to the sandbox. Twila will likely need to set up a merchant account for herself at some point – although when it gets to that point, we will likely be familiar enough with PayPal that we can help her get set up, but in the end, we shouldn’t need anything from her. We should ask if she already has a business PayPal account.

<https://developer.paypal.com/docs/get-started/#>

PayPal should not need any additional integrations in order to be implemented aside from a reference in page header to the PayPal javascript sdk, especially for client side. They do have a Node SDK in case we decide to go serverside.

<https://github.com/paypal/Checkout-NodeJS-SDK>

Most options for integration make calls to PayPal’s API which handles the entire process (such as the easy button, which is just copy paste code). An advantage to this is that with a minimalist html starter page, PayPal should be something we can start addressing early so that if there are unexpected kinks, we can work them out early, independent of how the website is being developed for the most part.

<https://developer.paypal.com/docs/checkout/integrate/#1-set-up-your-development-environment>

Concerns:

PayPal focuses on expediency - doesn’t seem to have options appropriate for wanting/needing potential advertisers to be approved in order to advertise. Might need to be a developed process. PayPal has something called Braintree which can add flexibility and possibly security but may have overhead and complexity drawbacks. For future discussion.

<https://developers.braintreepayments.com/guides/3d-secure/overview>