# Trippie – Payments Integration Update 2/11/19

After discussing with Fadi, he said it would be best if there was a way where we hold the funds after charging the customer when, the user accepts an offer from a Tripster, holding those funds and then later sending them to the service provider once the Trippie is completed.

This is possible with Stripe Connect and in which case we are left with only one method of creating charges and that is using the Separate Charges and Transfers approach ([Link](https://stripe.com/docs/connect/charges-transfers#grouping-transactions-intents) to Stripe docs on creating separate charges and transfers).

Key notes:

* This approach is only applicable where both the platform account (Trippie’s Stripe account) and the service provider’s account (Tripster’s connected account) are in the same country. In the case Trippie wants to expand their business overseas, they will have to switch the way they charge customers.
* Also, as Trippie is based in New Zealand, they cannot use the Charges API provided by Stripe to charge the senders and will instead have to be using the Payment Intents API.

Based on what has been said above, below is the workflow of the how payments will be processed in the Trippie Application using Stripe.

1. **Charging the Customer.**

This is the best time to charge the user, because if the payment fails due to any reason such as lack of funds no one is harmed as the offer is not accepted and the Tripster is not committed to making the delivery. Also, if no offers are accepted, the Trippie will automatically expire and this stops a Trippie from being delivered without making a payment.

This payment is sent to Trippie’s stripe account and not directly to the Tripster as this will ensure that the Trippie is delivered before the Tripster receives the money.

As we are using the Payment Intents API, this is the flow for charging a customer when they tap on the “Accept Offer” button. ([Link](https://stripe.com/docs/payments/save-after-payment) to Stripe Docs).

* 1. Accept a payment
  2. Save the card
  3. Charge the card later

1. **Sender cancels Trippie.**

If the sender cancels a Trippie, we refund the amount we charged the customer while also deducting any cancellation fees. This should be simple and straightforward as we are making refund from only Trippie’s account.

1. **Driver cancels the Trippie**

In the case of the driver cancelling a Trippie, we refund the amount back to the customer and take the right action against the service provider such as a suspension or banning the Tripster from delivering a Trippie.

1. **Trippie Completed**

Once the Trippie is delivered, we run a cloud function that transfers the amount we charged earlier from the customer’s card minus the commission.

All scenarios mentioned above go through the following process:

* + 1. An action on the app triggers a cloud function.
    2. Cloud function runs to access the Stripe API and process payments or make a refund
    3. Cloud function returns a response, that can be saved to the database or show to the user.

Stripe recommends that all decision related to the amount of a payment made on the server side which is a more secure and trusted environment compared to making this calculations client side. (<https://stripe.com/docs/payments/accept-a-payment#node>)