

Hi Joe.

I hope you are having a great day.

The purpose of this email is to serve as a form of reconnaissance for information about the mobile application we are currently developing. I understand things have not gone as smoothly as we would like them for reasons perhaps beyond our control but the hope is that this interaction can help expedite the development of the application and we can get it behind us. Surely we cannot exhaust all possible processes that occur during an ordinary business day in a single interaction but we can however use this as a starting point.

Essentially, we want to find out the number of transactions you have per unit of time. For instance, how many transactions in a minute, hour, or day do you get currently? Are there any days in particular where the velocity of transactions is at a peak, how many different possible kinds of transactions can occur, and in what ways do they occur?

#### 1. Transaction velocity

We ideally just want to find out how many transactions you have at any particular point in time during the day, week, or month. This will help us decide how the solution we develop will interact with your infrastructure. Whether communication can be in real-time or we could design batch processes that will execute at every set interval, say at the end of the day, we just upload all transactions that were made. This also determines how much work should be done.

- The real-time solution will ensure the timeliness of the data. That means at any given point in time, you can see accurate or near-accurate data in the system. Therefore every time a transaction record is created, or altered, we need to reflect that immediately. This takes more resources to develop, deploy(implement), and maintain because we need to ensure that the solution will be resilient enough to always be up and accurate enough to avoid flaws in critical financial data. This therefore translates to more manhours on both our sides. It also means that at any given point in time when traffic is high, the provisioned infrastructure should have sufficient computational power to handle that.
- The batch-processing solution sacrifices timeliness for simplicity and a lower overall cost of development, deployment(implementation), and maintenance. We agree on how to structure the data(preferably comma-separated files like CSVs) that will eventually be uploaded at the end of an interval. It could be a day, or half a day, etc.

The entire decision regarding which solution to go with will entirely depend on your preferences and our recommendation which will entirely be based on information about transaction velocity.

#### 2. The nature/flow of the transactions(Transaction flow).

The nature and flow of transactions in this regard refer to every possible type of transaction that could occur. Whether it's a purchase, a transfer, etc, we need to know what that data looks like and what parts of it are essential. This way we can decide how we can design the way our solutions will interact with each other by setting up schemas that dictate the structure of the data.

The process flow on the other hand just refers to the data in motion. What are all the possible ways you could use the data that you would have described above? What happens when a client initiates all possible forms of interaction, from initiation to completion? The more predictable these scenarios are, the more we can translate them programmatically.

Please feel free to ask me for any additional context should you need it. I am available at your earliest convenience.

Thanks, Tyrone