

- Following the analysis of the data, I have a few questions about it  
 What channels were used to gather the data?  
 What could be the possible reasons for the data to be inconsistent?  
 What is the primary purpose of migrating the data into a relational database?  
 What business decisions will be made with the help of this data?
- There were some data quality issues that I faced while I was analyzing the data  
 During my analysis of the data, I discovered some data issues. Since every user is associated with a unique ID, there were many duplicates in the user file. About three quarters of the rows in the file were duplicates. Approximately 10% of the users' data, such as their timestamp for last login, their state, and the signup source, was missing.  
 There were around 50% of NULL values in the receipt files, which was an important parameter for joining the receipts and the brands table. A small percentage of human errors were also present in the column name barcodes.  
 Around 15% of the values in brandCode had their brands missing.
- To resolve the problems, I would need to know the streamlined process for how the data enters the database. I might need to know the source system or the way the data comes in from the customers.
- Information that would help me optimize the assets will be to identify missing fields in the receipts data. The source system capturing data can be automated to ensure no duplicate or inconsistent data is entering the database. This can be done programmatically at the source of the dataset.
- Relational databases, which are good in performance, can degrade when data is scaled. On the other hand, NOSQL databases, which are good for scaling, have high costs. To avoid these performance and scaling issues in operational databases, we must first understand the data, then design the database in a way that minimizes the server's performance pressure.