# BUSINESS\_INTELLIGENCE\_CHALLENGE

1. What would be the key performance indicators you would come up as the most important to monitor a credit card business? How often would you suggest such indicators must be monitored?

In the banking business there are quite a few indicators that should be monitored, which I will give, I will explain briefly and the periodicity that I think it is convenient to give.

* Type of user: there should be three types of customers, the ones that have big amount of quote in their card, the ones that has a medium quote and the last ones that has lower amount of quota in their cards, so we could identify their necessities.
* Compliance portfolio: in this section you should see the number of times that customers with cards have successfully paid their debt and those that have arrears. Of those you must make a monthly review for the average compliance that you have in the client portfolio.
* Number of cards approved vs Rejected: This review should be done on a weekly basis and refers to the number of new applications that have been received and the % of approved and deleted, and then take out a top 3 of the reasons why we refused the card to understand the reason for those rejections to look at opportunities to have those customers with us.
* Satisfaction: this metric should be followed in a weekly basis, after receiving the cards we should checked the satisfaction of the customers, that should have in the radar the amount of request that the have divided in the avg grade of satisfaction that they give us.
* Cashback amount: one of the biggest green flags that Rappi have is cashback, and from those look at how much is the average cashback that each user (low, medium, and high quote) has, from that information we should look for opportunities to offer them different types of loyalty programs, weekly and monthly review should be done.
* User retention rate and user abandonment rate: number of customers who at the end of the month continue to use the card and number of customers who abandoned the use of the card. This report should be issued monthly.
* Customer value: take out monthly the average value per customer that exists in Rappi, this would be taking out average monthly revenue \* gross margin per customer / monthly turnover rate.
* Acquisition cost: look monthly at how much it is worth to acquire a new customer to understand how effective we are and how competent we are against with the competition.
* Average customer duration in the company: despite being new to the fintech area, it is good to understand the average time that our users have been in the company.
* Value % of the client: as previously talked about customers with medium and high low quotas, we should search which of those 3 sections leaves us higher returns to know which should have the highest promotion budget, should be reviewed monthly.
* Average monthly income % client: how much is the income % of the Rappi client and should be taken out monthly, this also sectioned into the three groups of low, medium, and high quotas.
* Frequency of use: look weekly at the frequency of use of the three sections of card users to understand which is the one that uses the card the most and look if there are establishments where they are being used more often to review their patterns and have a better clustering of customers.
* Last use of the card: check how much time is being spent to use the cards and thus cross data and review what actions cause users to use the card more to encourage them. This is also done in the differentiation of the three users and should be done biweekly and monthly.
* Debt portfolio x client: review how much is the debt portfolio that exists in the different three types of users, and review what are the patterns of these and how much is affecting the execution of the other areas. A monthly review should be done.
* % Average quota use: this type of monthly review refers to reviewing how much is the quota that is used for users of low, medium, and high quota and thus cross it with the risk one to be able to understand how much of the quota that is usually delivered has % of loss.
* Budget compliance: it should be review in a monthly basis and see how much was the fulfillment of the monthly budget that you had to attract new customers and the operation of the area.
* Average ticket: weekly you should review the average value by which the three types of users make purchases, that is, how much is the average expenditure they have on the card when they use the card.

1. Propose a problem resolution strategy with the stakeholders. How would you deal with his issue? Which facts would you present?

Taking industry standard numbers is fine because it serves as a guide, but being Rappibank a card that offers cashback, has no handling fee, and has a personal banker to talk with, by theory "the main dislikes of customers are eliminated" so the card should not stop in being used. Saying this above, another type of different metric should be taken looking exclusively at the behavior of the internal user of the Rappicard.

For this metric I would use the customer who have left the card and have closed it completely, after this having already identified that group, I would see several important metrics that would be, where of the three types of customer it is, one of low, medium or high quota in order to understand which one has more risk, then I would look at their frequencies of uses, satisfaction and its last use, this to understand at what times when your satisfaction is low in order to act to encourage you not to leave, this could be done with a CRM study to offer you what you like in order to avoid your abandonment, and the follow-up could be done (through query in a dashboard) see the potential customers of abandonment and thus be able to draw a line that tells us in what moment a customer begins to become a "dormant".

1. What should we do to centralize the data in order to display it in charts for KPI monitoring? What would you propose the data governance strategy should be?

The first thing we must do is understanding the data, as we know we have a system that host the app, another system that host the riks model, the third system hosts the customers information and finally, the fourth and last system hosts all the payments information. Following this logic, I would make an MS (microservice) for each service, that every table has related information and finally all that information separated by country, here an example of the system that host the app:

Appinformation.CO\_movements: Appinformation that would be the MS, Co which is where all the information of the clients of Colombia is stored and finally movements that is all the movements that the client has, being movements those things that we do in the platform, if we made purchases on the platform that information should go to another table called Appinformation.CO\_purchase, with this kind of structure, we can have greater speed of the information and it is also easier to explore this data for other teams and not that everything is saved in a table and the staff must search among many columns for the information they need.

Already following in the previous point, we solved the problem of structuring the data, then it is time to think about where to store the data, but in Rappi we handle AWS so the information will be saved in their Data Lake. Now we have to grand the security of the information because we know that there is privileged information that not all teams should access, so there should be only one team in charge of taking the information out of the Data Lakes and creating those MS that the other teams use, so with that we ensure the security of the information. Finally, when the MS and tables are being used to track which are the most used and thus give greater search capacity to those servers so that it does not generate Lag or delay, another important factor is to feed this information back to the other teams and try to standardize the searches and have good practices so that the searches are easier.