**DECISION SITUATION.**

Let’s Consider Electronic Company named “Micromax” , Micromax is an Indian [consumer electronics](https://en.wikipedia.org/wiki/Consumer_electronics) company headquartered in [Gurgaon](https://en.wikipedia.org/wiki/Gurgaon), [Haryana](https://en.wikipedia.org/wiki/Haryana). The company was established as an [IT](https://en.wikipedia.org/wiki/Information_technology) software company operating in the embedded devices domain; it later entered the mobile handset business and PC Computer/ Laptop Business. By 2010, it was one of the largest domestic companies making handsets in the low-cost feature phone segment in India and Fastest growing business in terms of the Laptop and Personal Computers. Micromax has the Strategy to focusing on low pricing as to compete with international brands. Micromax always has the best promotion features.

Micromax has decided to provide the heavy discount to the Students based on the Student performance and the various factors. The Company must come up with the kind of the automated system which will check the Student details and recommend the discount based on the Student profile and Student academics. Micromax then further use these details for the analytics purpose and how in future this can be helpful for the company.

**BUSINESS RULE #1**

Business Rule for the Micromax for this Situation are as follows: -

1. A Customer must have valid Student id.

As the promotion is for the Students so, as to check whether the customer is student or not we need Student id for the primary verification.

1. Student id Expiry must be after Current month.

As the Customer is providing the Student id the id must be after the current date as to verify the situation that the Student is still pursuing the College.

1. A Customer must have valid identity (Passport, State id, License etc.)

As fake college id can be created as to verify the Name and other details we need Govt Official id for the verification.

1. A Customer must have valid Transcript.

As the offer is valid for the gpa above 3.0 for the verification we need college transcript as to ensure the gpa above 3.0.

1. A Customer must have the gpa above 3.0.

As the offer is valid for the gpa above 3.0.

**BUSINESS RULE #2**

[This set of the Problem comes under Classification Problem where the electronics](https://en.wikipedia.org/wiki/Consumer_electronics) company Micromax will provide the discount to the student or not based on the various factors. As there are various dependent factors on which the discount will be varied. In the Case, we have the dependent variable as Discount and the independent variables are College Student id, Expiry Status, Govt Identity, Transcript, Gpa above 3.0.

The Values for the Independent variables must be: -

Student id (Yes/No): - Weather the Customer has valid Student Id, if he has Student id then Yes Else No.

Student id Expiry (Yes/No): - Weather the Customer Student Id Expiry after Current month, if he has id Expiry after Current month then Yes Else No.

Govt id (Yes/No): - Weather the Customer has valid Government approved Id, if he has Govt id then Yes Else No.

Transcript (Yes/No): - Weather the Customer has valid Transcript, if he has Transcript Then Yes Else No.

Gpa above 3.0 (Yes/No): - Weather the Customer has valid Gpa, if he has Gpa above 3.0 Then Yes Else No.

As to Predict the output variable (Discount) we will use the Logistic Regression Analysis for the Prediction based on Student id, Expiry, Govt id, Transcript, Gpa above 3.0.

**BUSINESS RULE #3**

As Micromax has created an optimization rule as If all the parameters are present how much discount should be provided based on the customer profile. If all the parameters are present how much discount should the customer get. Discount ranges from (25% to 30%) based on the gpa and the document present. Increase in 0s.2 value in gpa will increase 1% of the discount for example 3.2 gpa will get 26% discount 3.4 will get 27%. Maximum discount can be given is 30%. When all parameter is optimized i.e. all the values in the different fields are present we can run the simulation model for the discount approval or not. If the discount is approved then the maximum number of the discount provided can be derived from the Equation.