Required Assignment 1.1:   
Key Analytics Questions of Your Organisation

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**Suggested time:** 90 minutes

**Assignment Instructions**

In video 9, Professor Gangwar summarises the implementation of business analytics into a framework of key analytics questions. Use the framework in the video to reflect upon the key analytics questions in your organisation.

**Business Decisions**

1. What DECISIONS does my business make?  
   *E.g. Which offer to send to which customer?*

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| My business takes up a decision to sell more clothes this Diwali to all customers who have at least visited our store once by sharing store coupon codes. |

1. On what BASIS do I make those decisions?  
   *E.g. Past purchase behaviors of those/similar customers*

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| I understand a customer's footfall tends to buy a lucrative deal much faster when clubbed with a coupon code. Based on repetitive customer count during the coupon sales period, festivals. |

1. How do I quantify SUCCESS of my decisions?  
   *E.g. What fraction of offers get converted?*

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| Last Year's coupon campaign saw an increase in total sales by 25% YOY.  I quantify my present success of the campaign by comparing my total sales during the coupon shared period. Understanding the total number of coupon usage viz-a-viz sales without coupon application. If YOY sales are more than 50% and coupons contribute more than 50% to that, I term it to be Success. |

**Data Analytics**

1. What data do I collect to EVALUATE my decisions?  
   *E.g. Did customers redeem the coupons – after how long, how often?*

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| Data collected to evaluate my decisions would be on the following variables:  New Customer or Old Customer, Old customers with or without coupons,  Turn around the time of old customers with coupons,  Seasonal customers or year-round customers. |

1. What data should I collect to IMPROVE my decisions?  
   *E.g. Point of sales data, Social data, Reviews, etc.*

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| ML models can be used to improvise the decision taken for sending coupons and increasing sales. Data Variables to collect feedback/ reviews/ comments asking to improvise, gender, Age group data, life events days, date of visit, and customer satisfaction level. Improve the efficiency by collecting contact numbers, store visit records, peak seasons, Coupon based turnout or non coupon based. |

1. How do I improve my MODELS from the data I collect?  
   *More data, more features, better* modelling…

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| Supervised learning models can be used to help in predictions wrt to past purchases and coupon usage data. A decision tree model to understand which customer group to be selected for providing coupons. Further, ML model to understand the probable increase in sales by better understanding customer groups, and requirements, based on other important variables to convert non-buyers to buyers. |