Summary of Previous Discussion

- *Penetration of bonus cards is 20 – 30 % of entire base. Thus majority subscribers do not use any bonus cards.*
- *Typically subscribers prefer single type of bonus cards and not a combo.*

  This is exhibited in both circles.
- *The popularity of combos remain consistent month on month.*
- *The type of combos that are popular differ from place to place.*

  MP exhibits affinity to local and STD products while Kerala exhibits affinity to Data products.
- *Details of both given in excel sheet attached.*

Feedback

- Data indicated presence of latent factors behind products being consumed.
- More in depth study of subscriber usage patterns along with recharge patterns needed to be done to clearly understand recharge behavior.

Way Forward

- Cluster subscribers based on local,std,onnet, total, sms and data usages.
- See how clusters are different in MP and KL
- Identify key recharge behaviors in each of clusters.

Understanding the characteristics of subscribers in MP vs KL (univariate findings)

- KL bonus users are more data savy than MP
  - Median MP : 54.74 MB vs Median KL : 143.53
- KL bonus users are heavier ISD users compared to MP
- MP bonus users have higher recharge frequency for bonus cards
  - Median MP : 2 bonus rchgs vs Median MP : 1 bonus rchgs
- KL bonus users use higher local MOUs as compared to MP
  - Median MP 89.9 min vs Median KL : 134.4 min
- ARPUs of KEL users are higher as compared to MP
  - Median MP: Rs 148.93 vs Median : Rs. 285.7

Understanding the characteristics of subscribers in MP (Multivariate Findings)

- Subscribers clustered on usage KPIs
- 8 major clusters

HIGH_N_BONUS_RCHG_CNT + MODERATE_KPIS (Count : 362240) (**Data or Local Products**)

HIGH_DATA+HIGH_COUNT_RCHG+HIGH_ARPU (Count : 82814) **(Data Products)**

VERY_HIGH_LOCAL + HIGH SMS+VERY_HIGH_ARPU (Count: 36707) **(Local Products)**

VERY_HIGH_SMS+HIGH_COUNT_RCHG+HIGH_ARPU (22242) **(SMS Products)**

VERY_HIGH_STD+LOW_ARPU (Count : 17963) **(STD Products)**

VERY_HIGH_DATA+HIGH_ARPU (Count : 16058) (Data Products)

VERY_HIGH_LOCAL_ONNET+HIGH_N_BONUS_RCHG_CNT+HIGH_ARPU (Count 13895)

(Local Products)

VERY_HIGH_STD+HIGH_RCHG_CNT+VERY_LOW_ARPU (Count: 7077) **(STD Products)**

Understanding the characteristics of subscribers in KL (Multivariate Findings)

- Subscribers clustered on usage KPIs
- 8 major clusters

MODERATE_KPIs (Count: 464440)(**Data or Local Products**)

HIGH_DATA+HIGH_ARPU (Count: 170338)(**Data Products**)

VERY_HIGH_DATA+VERY_HIGH_ARPU (Count: 45018) (**Data Products**)

VERY_HIGH_LOCAL+VERY_HIGH_RCHG+VERYHIGH_ARPU (Count: 32101) (**Local or Data Products**)

VERY_HIGH_STD+VERY_HIGH_RCHG+VER_LOW_DATA_VERY_LOW_ARPU (Count: 27601)

(STD Products)

HIGH_ISD+HIGH_ARPU (Count: 22244) (**ISD or Data Products**)

VERY_HIGH_SMS+VERY_HIGH_RECHARGE+HIGH_ARPU (Count: 20419)**(SMS Products)**

VERY_HIGH_STD+VERY_HIGH_RCHG+VER_LOW_DATA_VERY_LOW_ARPU (Count: 16456)

(STD Products)

Multivariate Findings(MP & KL)

- Subscribers in a particular cluster take different products. Need of subscriber to take a particular product is not effectively captured in all clusters.
- Number of products have negative net_arpu. Not necessary that only bad popular products can hurt overall margins.
  - Ex. Some products have equal contribution off positive and negative ARPU subscribers and hence their overall health appears low. Typical of STD products.
- Comparison of clusters across geographies shows diversity in need and usage.