

# Success stories in predictive analytics in Retail and CPG

Top 50 Best Companies to Work for in India 2016 – Silicon Review Magazine

Predictive Analytics Company of the Year 2014 – CIO Review Magazine

Top 20 Company in India - TiE Lumis Entrepreneurial Excellence Awards 2013

Top 50 Big Data Analytics Companies in India 2013 – CIO Review Magazine



## A large mobile network operator reduced churn through social network influence churn behavior of telecom subscribers

## **Objectives**

Is there any impact of social network on churn?

## **Our Approach**

- Considered data of top 5 on-net connections of all subscribers for 2 months
- The data covered 90% of total calling in the network
- A giant network was constructed using R where subscribers & total calling represent nodes & edges weight respectively
- Gephi was used for visualizing the network
- Divided the entire network into thousands of disjoint communities as in telecom industry, it's only your connections which affect your behavior
- Calculated various influence metrics for each subscriber & marked the influencers in each community
- Exploratory analysis done to find whether subscribers churn when an influencer churns

## **Impact**

If an influencer churn, the churn probability of subscribers in his network increases

#### Significant variables

- Indegree
- Outdegree
- Betweenness
- Closeness
- Page rank
- Eigenvector centrality

Segment	Class %	Churn %
Influencer doesn't churn	93.0 %	6.3 %
Influencer churns	7.0 %	15.3 %
Total	100.0 %	8.0 %

Class here implies community



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