**Business Case for PRCL-0012**

ABC Tech is an mid-size organization operation in IT-enabled business segment over a decade. On an average ABC Tech receives 22-25k IT incidents/tickets , which were handled to best practice ITIL framework with incident management , problem management, change management and configuration management processes. These ITIL practices attained matured process level and a recent audit confirmed that further improvement initiatives may not yield return of investment.

ABC Tech management is looking for ways to improve the incident management process as recent customer survey results shows that incident management is rated as poor.

Machine Learning as way to improve ITSM processes

ABC Tech management recently attended Machine Learning conference on ML for ITSM. Machine learning looks prospective to improve ITSM processes through prediction and automation. They came up with 4 key areas, where ML can help ITSM process in ABC Tech. 1. Predicting High Priority Tickets: To predict priority 1 & 2 tickets, so that they can take preventive measures or fix the problem before it surfaces. 2. Forecast the incident volume in different fields , quarterly and annual. So that they can be better prepared with resources and technology planning. 3. Auto tag the tickets with right priorities and right departments so that reassigning and related delay can be reduced. 4. Predict RFC (Request for change) and possible failure / misconfiguration of ITSM assets. Total of about 46k records from year 2012,2013,2014

Data needs to be queried from MYSQL data base (Read Only Access)

CI\_Name SUB000508

CI\_Cat subapplication

CI\_Subcat Web Based Application

WBS WBS000162 Incident\_ID IM0000004

Status Closed

Impact 4

Urgency 4

Priority 4

Category incident

KB\_number KM0000553

Alert\_Status closed

No\_of\_Reassignments 26

Open\_Time 05/02/2012 13:32:57

Reopen\_Time

Resolved\_Time 04/11/2013 13:50:27

Close\_Time 04/11/2013 13:51:17

Handle\_Time\_hrs 3871,691111

Closure\_Code Other

No\_of\_Related\_Interactions 1

Related\_Interaction SD0000007

No\_of\_Related\_Incidents 2

No\_of\_Related\_Changes 1

Related\_Change C00000056

**Business Case for PRCL-0017**

No-Churn Telecom is an established Telecom operator in Europe with more than a decade in Business. Due to new players in the market, telecom industry has become very competitive and retaining customers becoming a challenge. In spite of No-Churn initiatives of reducing tariffs and promoting more offers, the churn rate ( percentage of customers migrating to competitors) is well above 10%. No-Churn wants to explore possibility of Machine Learning to help with following use cases to retain competitive edge in the industry.

PROJECT GOAL

Help No-Churn with their use cases with ML

1. Understanding the variables that are influencing the customers to migrate.

2. Creating Churn risk scores that can be indicative to drive retention campaigns.

3. Introduce new predicting variable “CHURN-FLAG” with values YES(1) or NO(0) so that email campaigns with lucrative offers can be targeted to Churn YES customers. help to identify possible CHURN-FLAG YES customers and provide more attention in customer touch point areas, including customer care support, request fulfilment, auto categorizing tickets as high priority for quick resolutions any questions they may have etc.,

**Business case for PRCL-0019**

FicZon Inc is an IT solution provider with products ranging from onpremises products to SAAS based solutions. FicZon major leads generation channel is digital and through their website. FicZon business is majorly dependent on the sales force effectiveness. As the market is maturing and more new competitors entering the market, FicZon is experiencing the dip in sales. Effective sales is dependent on lead quality and as of now, this is based on manual categorization and highly depended on sales staff. Though there is a quality process, which continuously updates the lead categorization, it’s value is in for post analysis, rather than conversation. FicZon wants to explore Machine Learning to pre-categorize the lead quality and as result, expecting significant increase in sales effectiveness.

PROJECT GOAL: 1. Data exploration insights – Sales effectiveness. 2. ML model to predict the Lead Category (High Potential , Low Potential)

**Business Case for PRCL-0027**

The case business case is on the inventory management. Keeping Inventory of spare in various service centre to the market demand is always a challenge as most service centres spends significant amount in spare parts inventory costs. In spite of this, availability of spare parts is been one of the problem areas.

PROJECT GOAL: 1. Create Predictive model for inventory forecasting so that service centre achieve JIT standards.

**Buisness Case for PRCL-0015**

Bank GoodCredit wants to predict cred score for current credit card customers. The cred score will denote a customer’s credit worthiness and help the bank in reducing credit default risk. Target variable → Bad\_label 0 – Customer has Good credit history 1 – Customer has Bad credit history (falls into 30 DPD + bucket) Our benchmark model has gini as 37.9