ITSM Machine Learning Project

Business case

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| Project Name | ITSM Machine Learning Project |
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| Client | ABC Tech |
| Description | Machine Learning to improve incident management process |
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# Executive summary

ABC Tech is an mid-size organisation 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.

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.

# Reasons

1. Recent customer survey results of ABC Tech shows that incident management is rated as poor in spite of ABC Tech implement ITIL best practice process.

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# Expected benefits

1. Improve Incident Management process so that over customer satisfaction rating would improve 3 points from 5/10 to 8/10.
2. Decrease overall operation cost with effective utilization of human resource
3. Reduce the downtime to improve availability to 99.97%

# Timescale

Project duration is estimated as 2(two) months starting on 16th Nov 2018.

Estimated billable man-days : 125

Delivery deadline is set at 15th Jan 2019.

# Costs

Project billing is time and material with estimated cost of USD 100k.

# Investment appraisal

The project delivery is trained machine learning model address 4 key areas mentioned above.

Expected to reduce the operational cost of 50k per annum and intangible benefit of another 50k through increase in customer satisfaction.

The breakeven of this project is one year considering all benefits.

# Major risks

The project deliverable is trained machine learning algorithm with is based on past data of 6 months. In case of any major changes in ITSM system in terms of naming convention of Configuration Item, launching of new products or services, will significantly affect the efficiency of the ML algorithm.