PERFORMANCE ANALYTICS FOR IT SERVICE OPERATIONS

Public Project Summary

Capstone Project

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Introduction

I am working on an IT project with one of the biggest manufacturing giants (henceforth will be referred to as client/customers). They are customers for my current company.

The Company for which I work currently is a multinational information technology service and consulting company. It operates in 46 countries.

My Company provides IT services to the Client. The Customers raise their issues with the help of a tool called ServiceNow. They raise incident or ticket and assign to the groups that are managed by my current Company.

ServiceNow (SNOW)

ServiceNow IT Service Management (ITSM) provide a solution to Service Management in various industries. It is a leader in the 2018 Gartner Magic Quadrant for ITSM.

It is a tracking tool, which manages various activities related to an organization. Example- HR, IT, Legal Departments etc. It is the most successful tool for ITSM in the current market, which provide cloud based services for service management with continuous improvements as per the latest market requirements.

In Terms of reporting, it has advanced reporting & Performance analytics capabilities that offers solution to represent the inbuilt data in graphical fashion. Using performance analytics, ServiceNow is capable of querying historic data on demand with various advanced features. Text Analytics is another latest one which has been introduced as part of ServiceNow Kingston upgrade. However, all these modules comes with a huge cost.

Besides ITSM, ServiceNow has other systems, for instance, ITOM, ITBM, Security, Customer Service, HR Service Management tools and a number of others. Consequently, ServiceNow's scope is huge, especially considering the fact that it is owned by a company with over $1 billion revenue.

Project Objective

I will be working to provide business intelligence visualization and data reporting tools to monitor business processes that frequently change to track the current performance of metrics and key performance indicators (KPIs) with the help of Power BI.

ServiceNow Operations dashboard will help the IT Operations team to keep a vigilant eye on all the KPIs and take immediate action if the agreements are on the borderline of breaching. It can

also help the Customers in multi-vendor environment to understand which vendor is providing lower level of service and in this way; the customers can take appropriate actions.

Operations Dashboard

I will be working to provide following Operations Dashboard:

Dashboard-1: Open tickets: Standard

This dashboard can be used by the IT Operations team to understand how many tickets are open at a given instance. Based on that they can alert all the incidents Managers to understand why the tickets are open and if they can be closed soon. Generally, it's good to have that information every first Monday of the month for a monthly chart and every Monday of the week for a weekly chart.

Dashboard-2: Current backlog

This is of utmost importance as this chart provides information on the number of tickets that are opened since some time interval. These intervals are 1 Day, 1 Day, 2 Days, 3-5 Days…61-180 Days, to 180+ Days. This will help the Operations Team to keep special priority on the ones that are opened since long. They can contact the users or send reminders to the users in case the tickets are waiting for their action.

The weighted backlog can provide a clear trend of the tickets that are opened since long.

Number of tickets bounced talks about number of times a ticket is re-assigned to different groups. This shows that a particular ticket was not handled in the best possible way and was bouncing to different groups due to lack of knowledge. This is called ping-pong of tickets.

Dashboard-3: Current weighted backlog

This chart will provide information if a ticket is open since long with just one Metrix, weighted backlog.

Dashboard-4: Customer Satisfaction

This section directly touches the customer's experience on the service provided by the IT Operations. This experience is rated between 1 and 4 with an attribute called Smiley. 1 and 2 are considered negative feedback; 3 and 4 are considered positive.

Dashboard-5: Customer Satisfaction (by Category)

Here we are talking about capturing percentage of negative feedback by incident category and sub-category.

Dashboard-6: Resolution Time by Groups – On Hold Time Included

This dashboard provides information on average number of days to resolve a ticket based on resolver groups (On-hold time included). It also includes the time a ticket was moving from one assignment group to other or if the ticket was kept on hold for some reason. This gives a clear picture if there was any delay to resolve a ticket and the Management can work to improve this.

Dashboard-7: Resolution Time by Category – On Hold Time Included

This dashboard will provide a clear picture of average number of days it takes to resolve a ticket based on category and sub-category.

Dashboard-8: Resolution Time by Groups – On Hold Time Excluded

The above dashboard, which shows Resolution Time including on hold time can be little bit mis-interpreting. It might happen that the ticket was on hold for some purpose. To confirm this we can check this dashboard that excludes any on hold time. This information is present in the SLA Table (Elapsed Time (d)).

Since the SLA Table has data between Oct 2017 and Feb 2018, we could capture information for that period only.

Dashboard-9: Resolution Time by Category – On Hold Time Excluded

This is very informative to improve customer Service for a particular category.

Dashboard-10: First Call Resolution

This part is focusing on the reactiveness of Service desk. There is a page filter applied with two conditions: The contact type should be only call and the tickets should not be routed outside the Service Desk.

Dashboard-11: Re-open count by Groups

The re-open count indicates that the customers were not happy with the ticket resolution and have reopened the ticket to be analyzed or worked upon again.

Dashboard-12: Re-open count by Category

This dashboard can help the Group Managers to understand which category service can be improved.

Dashboard-13: Incident Groups

General trend on incident data.