PROBLEM MANAGEMENT - DROP IN USER ENGAGEMENT

Yammer Social Networking Site

This document details out the root cause of the problem with possible remediation.

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1. **The Problem**:
   Number of Active Weekly engaged user is showing sudden drop starting July 28th week. Yammer defines the 'Engaged User" as "a user who logged at least one communication during the week".

2. **Analysis**:
   I have listed few possible root causes ("Root Cause Analysis") considering domain knowledge, problem as described above and experience.

   Possible root causes are further divided into three major categories to save analysis and troubleshooting time.

   a) **Category - Must**: A detailed analysis is required for every cause listed under this category.

   b) **Category- Good**: Detailed validation of root causes under this category will only done in case the Must RCA is not able to resolve the problem.

   c) **Category – Nice**: Ideally Root causes under this category should have least amount to impact on the solution. A caution must be taken before doing analysis on any causes from this category. It also a good idea to review the problem parameters to check if any of the data is missing.

   "before thinking of root cause is required to spend time in understanding, defining and agreeing on the problem definition"

   Must - Root Causes (In the order of priority):

   1) Dashboard Problem: Support team released a patch and since then the tracking aggregator is missing data from certain user segment resulting in dip in counting.

   2) New or Broken Feature: Yammer team released a new feature which is making it difficult to see and post comments in "text area". Or there is an issue with the Post function.

3) Timeout or Too slow response: Yammer infrastructure team added new security measures resulting in timeouts or slow response.
4) Organic decline: This is a normal decline and due to competitor released a new app or enhanced their popular app to add similar feature and it is very intuitive to use.

Good – Root Causes:

1) Marketing Event: A marketing event resulted in use spike.
2) Holiday or PTO: It is possible that holiday season clubbed with PTO is resulting in low user engagement.

Nice – Root causes:

1) Site is blocked: An incident involving the social site resulted in blocking site access by the management or authorities.
2) Bad Data into Production: Yammer agile team accidently push bad data (negative /boundary test cases) into production database which in turn skewing the results.

3. **Possible Cause and Solution:**

1. The very 1st step should to check user trend over a period of time to make sure that the dashboard is showing correct results. To achieve this we need to run sql queries grouped by "**tutorial.yammer.event.location"** then use an aggregate function to match against the dashboard data.

   Pseudo SQL code:
   SELECT week part of created_dt, count of all_users, count of active users
   FROM **tutorial.yammer.event**
   WHERE created_dt>='Start Date'
   AND created_dt<='End Date'
   GROUP BY location, week
   ORDER BY location, week