Drop in the User Engagement

SQL 1: Active User vs New User

SELECT count(distinct e.user_id) AS active_user,

    count(distinct u.user_id) AS new_users,

    date_trunc('day',e.occurred_at) AS day,

    date_trunc('day',u.activated_at)

FROM tutorial.yammer_events e,

  tutorial.yammer_users u

WHERE activated_at >= '2014-07-01'

  AND activated_at <= '2014-09-01'

GROUP BY day,

    date_trunc('day',u.activated_at)

HAVING date_trunc('day',e.occurred_at) = date_trunc('day',u.activated_at)

ORDER BY day

SQL 2: New User Weekly

SELECT count(distinct user_id) AS weekly_new_active_users,

    DATE_TRUNC('week', created_at),

    state

FROM tutorial.yammer_users

GROUP BY 2,

    3

ORDER BY 2

SQL 3: Retention Rate by User Age

SELECT DATE_TRUNC('week',z.occurred_at) AS "week",

AVG(z.age_at_event) AS "Average age during week",

COUNT(DISTINCT CASE WHEN z.user_age > 70 THEN z.user_id ELSE NULL END) AS "10+ weeks",

COUNT(DISTINCT CASE WHEN z.user_age < 70 AND z.user_age >= 63 THEN z.user_id ELSE NULL END) AS "9 weeks",

COUNT(DISTINCT CASE WHEN z.user_age < 63 AND z.user_age >= 56 THEN z.user_id ELSE NULL END) AS "8 weeks",

COUNT(DISTINCT CASE WHEN z.user_age < 56 AND z.user_age >= 49 THEN z.user_id ELSE NULL END) AS "7 weeks",

COUNT(DISTINCT CASE WHEN z.user_age < 49 AND z.user_age >= 42 THEN z.user_id ELSE NULL END) AS "6 weeks",

COUNT(DISTINCT CASE WHEN z.user_age < 42 AND z.user_age >= 35 THEN z.user_id ELSE NULL END) AS "5 weeks",

COUNT(DISTINCT CASE WHEN z.user_age < 35 AND z.user_age >= 28 THEN z.user_id ELSE NULL END) AS "4 weeks",

COUNT(DISTINCT CASE WHEN z.user_age < 28 AND z.user_age >= 21 THEN z.user_id ELSE NULL END) AS "3 weeks",

COUNT(DISTINCT CASE WHEN z.user_age < 21 AND z.user_age >= 14 THEN z.user_id ELSE NULL END) AS "2 weeks",

COUNT(DISTINCT CASE WHEN z.user_age < 14 AND z.user_age >= 7 THEN z.user_id ELSE NULL END) AS "1 week",

COUNT(DISTINCT CASE WHEN z.user_age < 7 THEN z.user_id ELSE NULL END) AS "Less than a week"

FROM (

SELECT e.occurred_at,

u.user_id,

DATE_TRUNC('week',u.activated_at) AS activation_week,

EXTRACT('day' FROM e.occurred_at - u.activated_at) AS age_at_event,

EXTRACT('day' FROM '2014-09-01'::TIMESTAMP - u.activated_at) AS user_age

FROM tutorial.yammer_users u

JOIN tutorial.yammer_events e

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      ON e.user_id = u.user_id

      AND e.event_type = 'engagement'

      AND e.event_name = 'login'

      AND e.occurred_at >= '2014-05-01'

      AND e.occurred_at < '2014-09-01'

    WHERE u.activated_at IS NOT NULL

  ) z


 GROUP BY 1

 ORDER BY 1

LIMIT 100
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SQL 4: Device Access

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SELECT DATE_TRUNC('week', occurred_at) AS week,

     COUNT(DISTINCT e.user_id) AS weekly_active_users,

     COUNT(DISTINCT CASE WHEN e.device IN ('macbook pro','lenovo
thinkpad','macbook air','dell inspiron notebook',

       'asus chromebook','dell inspiron desktop','acer aspire notebook','hp pavilion
desktop','acer aspire desktop','mac mini')

       THEN e.user_id ELSE NULL END) AS computer,

     COUNT(DISTINCT CASE WHEN e.device IN ('iphone 5','samsung galaxy
s4','nexus 5','iphone 5s','iphone 4s','nokia lumia 635',

     'htc one','samsung galaxy note','amazon fire phone') THEN e.user_id ELSE
NULL END) AS phone,

      COUNT(DISTINCT CASE WHEN e.device IN ('ipad air','nexus 7','ipad
mini','nexus 10','kindle fire','windows surface',

      'samsumg galaxy tablet') THEN e.user_id ELSE NULL END) AS tablet

 FROM tutorial.yammer_events e

 WHERE e.event_type = 'engagement'
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    AND e.event_name = 'login'

 GROUP BY 1

 ORDER BY 1

SQL 5: Email Action Weekly

SELECT date_trunc('week', occurred_at),

    count(*),

    action

FROM tutorial.yammer_emails

GROUP BY 1,

      3

ORDER BY 1

SQL 6: User Events Weekly

select DATE_TRUNC('week', e.occurred_at),

    COUNT(DISTINCT e.user_id) AS weekly_events,

    e.event_name

 from tutorial.yammer_events e

 group by 1, 3

 order by 1;