

1 Problem

Problem(s)	Glitch on Facebook
Date	December 31, 2015
Time	Various times
Different, unusual, unique	Friends identified for 46 years
Facility, site	Online
Unit, area, equipment	Facebook
Task being performed	Identifying "friending" anniversaries

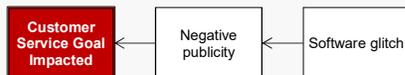
Goals

Safety	None
Environmental	None
Customer Service	Negative publicity
Regulatory	None
Production/ Schedule	None
Property/ Equipment	None
Labor/ Time	Time to fix glitch

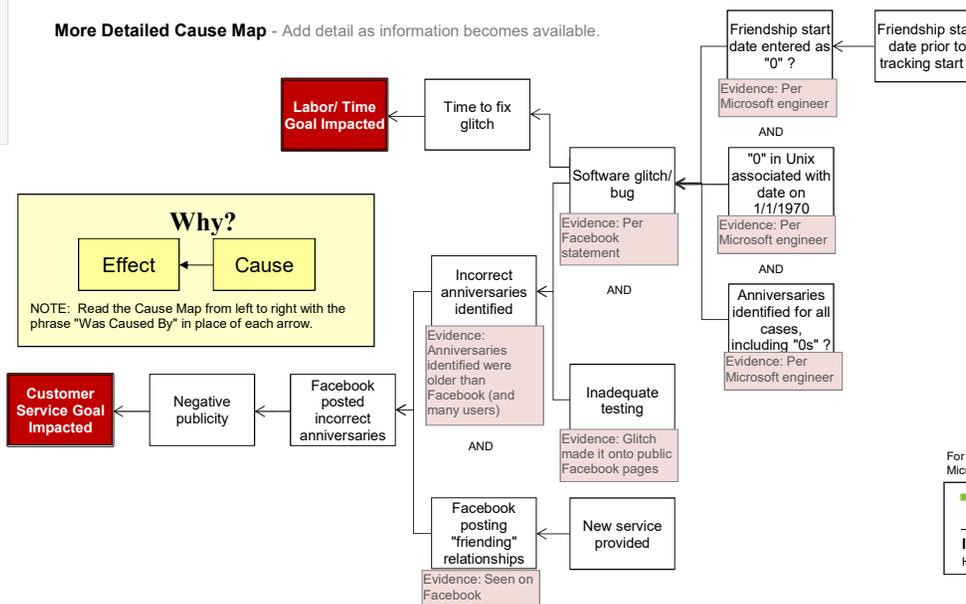
Frequency	These types of issues are frequent, but has not happened on Facebook before
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2 Analysis

Basic Level Cause Map - Start with simple Why questions.



More Detailed Cause Map - Add detail as information becomes available.



3 Solutions

Cause Mapping is a Root Cause Analysis method that captures basic cause-and-effect relationships supported with evidence.

CAUSE MAPPING

Problem Solving • Incident Investigation • Root Cause Analysis

Step 1	Problem	What's the Problem?
Step 2	Analysis	Why did it happen?
Step 3	Solutions	What will be done?

FACEBOOK MAKES USERS FEEL OLD

Cause Map

Glitch displays 46 year "friending" anniversaries

In a real blow for an industry constantly trying to remain hip and relevant, many Facebook users were notified of "46 year anniversaries" of their relationships with friends on Facebook (which is itself only 11 years old) on the last day of 2015.

"We've identified this bug and the team's fixing it now so everyone can ring in 2016 feeling young again."
- Facebook statement

The customer service goal was impacted by negative publicity. The negative publicity was caused by Facebook posting incorrect anniversaries.

Facebook posting incorrect anniversaries can be considered an effect that was caused by incorrect anniversary dates being identified by Facebook AND Facebook posting anniversary dates. Because both of these causes were required to produce an effect, they are joined with an "AND" on the Cause Map. (If the anniversary dates had been identified correctly, or if they weren't posted on Facebook, the issue would not have occurred.) The incorrect anniversary dates were due to a software glitch (or bug), according to Facebook. Inadequate testing can generally be considered a cause whenever any bug is found in software that is used or released to the public. Had a larger range of dates been used to test this feature, the software glitch would have been identified before it resulted in public postings on Facebook.

The cause of the software bug is not definitively known. To indicate potential causes, we include a "?" after the cause, and include as much evidence as possible to support the cause. Testimony can be used as evidence for causes. In this case, the source of the potential causes is a Microsoft engineer, who described a potential scenario that could lead to this issue on Facebook. Unix, which is an operating system, associates the value of "0" with the date of 1/1/1970 (known as the Unix epoch). If the date a user friended another user was entered as "0" and the system identified friending dates for all friends, the system would identify friending dates as 1/1/1970, and with some accounting for time zones, would see 46 years of friendship on December 31, 2015. It is presumed that the friend date would be entered as "0" if a friendship already existed prior to Facebook tracking anniversaries.

For a free copy of our Root Cause Analysis Template in Microsoft Excel, used to create this page, visit our web site.

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