

Getting Started with Incident Retrospectives

Moshe Zadka – <https://cobordism.com>

Acknowledgement of Country

Belmont (in San Francisco Bay Area Peninsula)
Ancestral homeland of the Ramaytush Ohlone people

Basic Terms Defined

Getting on the same page

Incident

Something happened that was not meant to happen

Incident

Something happened that was not meant to happen
and it would be bad "enough" if it happened again

Incident Retrospective

Analysis

Incident Retrospective

Analysis

Joint review

Incident Retrospective

Analysis

Joint review

Agreement on next steps

Goals of Incident Retrospective

Goals of Incident Retrospective

Understanding

Goals of Incident Retrospective

Understanding
Doing better

Non-Goals of Incident Retrospective

Non-Goals of Incident Retrospective

Deciding who's responsible

Non-Goals of Incident Retrospective

Deciding who's responsible
Punishing

Timeline

Timeline

Sequence of events

Timeline

Sequence of events

Minute/second resolution

Timeline

Sequence of events

Minute/second resolution

Consistent time zone

Timeline

Sequence of events

Minute/second resolution

Consistent time zone

Increasing

Timeline

Sequence of events

Minute/second resolution

Consistent time zone

Increasing

Thorough

Action Items

Action Items

Concrete

Action Items

Concrete
Actionable

Incident Management Process

Incident Management Process

Step by step

Incident Management Notes

Incident Management Notes

Rough

Incident Management Notes

Rough
Immediate

Assigning Responsibility

Assigning Responsibility

Prepare the retrospective

Assigning Responsibility

Prepare the retrospective

Not: "At fault"

Assigning Responsibility

Prepare the retrospective

Not: "At fault"

Not: "Handled the incident"

Assigning Responsibility

Prepare the retrospective

Not: "At fault"

Not: "Handled the incident"

Not: "Knows best"

Research

Research

Prepare timeline

Research

Prepare timeline(with references)

Research

Prepare timeline(with references)
Understand the system

Write-up

Write-up

...More details later

Review

Review

Team: On-call rotation

Review

Team: On-call rotation
Offer corrections/amendments

Follow-up

Follow-up

Recommendation to implementation

System Safety and Control Theory

System Safety and Control Theory

Applications to writing incident retrospectives

System

System

Parts we control

Environment

Environment

Parts we don't control...

Environment

Parts we don't control...
...that effect the system

Control

Control

System responding to environment

Safety Control

Safety Control

Part of system

Safety Control

Part of system
designed to avoid failure

Safety Control Failure

Safety Control Failure

Safety control...

Safety Control Failure

Safety control...
...environment...

Safety Control Failure

Safety control...
...environment...
...failure

Further Resources

Further Resources

Professor Nancy Levenson

Further Resources

Professor Nancy Levenson
CAST Handbook

Anatomy of a Write-up

Table of Contents

Summary

Summary

One paragraph

Summary

One paragraph
Appears first....

Summary

One paragraph
Appears first....
...written last

Timeline

Timeline

Bullet list

Timeline

Bullet list

Time in timezone

Timeline

Bullet list

Time in timezone

What happened

Timeline

Bullet list

Time in timezone

What happened

Optional: Link to references

What Went Well

What Went Well

A bad time...

What Went Well

A bad time...

...great as a morale boost

What Could Have Been Done Better

What Could Have Been Done Better

Appears before recommendations...

What Could Have Been Done Better

Appears before recommendations...
...written after

Analysis

Analysis

Based on CAST

Analysis

Based on CAST
Details later

Recommendations

Recommendations

Concrete...

Recommendations

Concrete...
...actionable

Recommendations

Concrete...

...actionable

Open tickets (issues/bugs/...)

Anatomy of a Write Up: Analysis

Anatomy of a Write Up: Analysis

...Finally, details!

Safety Controls

Safety Controls

List safety controls

Safety Controls

List safety controls

Short explanation

Safety Controls Failures

Safety Controls Failures

Every safety control failed

Safety Controls Failures

Every safety control failed
This is what "incident" means

Systemic Problems

Systemic Problems

Beyond an individual safety control

Systemic Problems

Beyond an individual safety control
Systemic problems leading to the incident

Missing Safety Controls

Missing Safety Controls

Aspects that lack any safety controls

Why not "root causes"?

Why not "root causes"?

What is the "root"?

Why not "root causes"?

What is the "root"?

What is special about the "root"?

Why not "root causes"?

What is the "root"?

What is special about the "root"?

"Root" often in environment

Actionable Recommendations

Actionable Recommendations

Recommendation must be related to issues identified

Actionable Recommendations

Recommendation must be related to issues identified
Additional safety control

Actionable Recommendations

Recommendation must be related to issues identified

- Additional safety control
- Improvement to existing safety control

What Are Recommendations?

What Are Recommendations?

Software changes

What Are Recommendations?

Software changes
Configuration changes

What Are Recommendations?

Software changes
Configuration changes
Process changes

What Are Recommendations?

Software changes
Configuration changes
Process changes
Clear definition "done"

Incident Retrospective Review

Incident Retrospective Review

"Post-Mortem Meeting" ?

Incident Retrospective Review

"Post-Mortem Meeting"?
De-emphasize the meeting!

Async Feedback

Async Feedback

Comments from the team

Async Feedback

Comments from the team
Give enough time

Addressing Async Feedback

Addressing Async Feedback

Change

Addressing Async Feedback

Change
Clarify

Addressing Async Feedback

Change
Clarify
Disagree

Incident Retrospective Meeting

Incident Retrospective Meeting

Limit back-and-forth

Incident Retrospective Meeting

Limit back-and-forth

Invite on an as-needed basis

Roles in Incident Retrospective Meeting

Roles in Incident Retrospective Meeting

Presenter

Roles in Incident Retrospective Meeting

Presenter
Moderator

Roles in Incident Retrospective Meeting

Presenter

Moderator

Note-taker

Follow-up on Incident Retrospective Meeting

Follow-up on Incident Retrospective Meeting

Attach notes

Follow-up on Incident Retrospective Meeting

Attach notes

Make agreed-on changes

Follow-up on Incident Retrospective Meeting

Attach notes

Make agreed-on changes

Announce

Finalize Write-Up

Finalize Write-Up

Formally note "write-up is complete"

Finalize Write-Up

Formally note "write-up is complete"

List of "done" write-ups

Implementing Recommendations

Implementing Recommendations

The main point!

Prioritizing

Prioritizing

Clearly decide

Tracking

Tracking

Labels/links

Tracking

Labels/links
Searchable

Commitments

Commitments

When?

Commitments

When?

Document

Revisiting Recommendations

Revisiting Recommendations

Not written in stone

Common Recommendations

Common Recommendations

Some issues cause multiple incidents

Communicating Status of Recommendations

Communicating Status of Recommendations

Planned/in-progress/dropped/done

Onboarding

Onboarding

From here to there

Document the Process

Document the Process

Step-by-step

Document the Process

Step-by-step
Template

See one, Do one, Teach one

See one, Do one, Teach one

Medical school system

See one, Do one, Teach one

Medical school system
Watch someone else doing it

See one, Do one, Teach one

Medical school system

Watch someone else doing it

Do it with someone else watching

See one, Do one, Teach one

Medical school system

Watch someone else doing it

Do it with someone else watching

Reverse roles in step 1

Allocating time

Allocating time

A new job responsibility

Integrating feedback

Integrating feedback

Professional and clear

Clear standards

Clear standards

What's "good enough"?

Deadlines

Deadlines

When is it due?

Iterating

Iterating

Getting better

Updating the Process

Updating the Process

Process for update

Communicating changes

Communicating changes

Announce clearly

Clearly needed changes

Clearly needed changes

Missing things

Clearly needed changes

Missing things

Unclear

Changes over time

Changes over time

Common problems

Changes over time

Common problems

Make it easy to analyze

Standard vs. Team-led

Standard vs. Team-led

Can different teams have different processes?

Intentional Learning

Intentional Learning

Research

Intentional Learning

Research
Discuss

Summary

Highlights

Basics: Blameless

Basics: Blameless

Avoid blame

Basics: Blameless

Avoid blame

"Humans are not the cause"

Consistency

Consistency

Process

Measure

Measure

Is it useful?

Iterate

Iterate

Remove what doesn't work

Iterate

Remove what doesn't work
Add what's needed

Goal

Goal

Better incidents!

Do

Do

Start doing retrospectives...

Do

Start doing retrospectives...
...and iterating on the process!