

Video Anomaly Detection System - User Research Plan

Background

Video Anomaly Detection System: An AI powered interface that notifies users of incidents on site, allowing them to shorten response time, ensure an appropriate response is taken, and to review events over time.

Through this generative user research effort, we want to gain an understanding of the daily workflows of future users, and how the Video Anomaly Detection System would fulfill their needs and fit into their incident response processes.

1. What questions do I want to be answered with this research project?
 - a. How will LP users use this Video Anomaly Detection System concurrently with Milestone VMS?
 - b. What tabs/websites/applications do users currently have to split attention between?
2. What types of answers am I expecting or assuming?
 - a. Users, both manager & onsite specialists. spend much of the time spent on a computer, less time offline onsite.
 - b. Must manage monitoring multiple tools/services at once, that might delay incident response time.
 - c. Incidents may take a long time for investigation and response to happen and for it to be considered closed.
3. What decisions am I trying to make with the insights from this research project?
 - a. How to implement integrations between CMS/D3/EMT to make the reporting process more efficient while staying consistent with users' current processes.



- b. Since this tool will have UI aspects similar to Milestone VMS, I would like to maintain consistency with positive user experiences in Milestone while improving on frustrations users currently have with it.
 - c. What specific video incident metrics to display on the metrics dashboard.
 - d. What would be a reasonable time period to expect acknowledgment of a video event.
 - e. What scale of severities to use to distinguish types of events.
-

Objectives

- Understand what systems and processes users from various departments currently use for incident monitoring and response.
 - Differentiate between the needs of on-the-ground onsite users and higher-level managerial/admin users.
 - Discover regional and cultural differences that we need to consider in the design and development of this global tool.
 - Outline what metrics users value around video detection, and what they use those metrics to inform.
-

Participants

(LP) Loss Prevention

Mar 9, 2022 North Haven, CT

John [REDACTED] LP Manager, NAFC AR

Scott [REDACTED] LP Specialist, FC Support

Noah [REDACTED] LP Specialist, FC Support

William [REDACTED] LP Specialist, FC Support

Mar 14, 2022 Florence, NJ

Matt [REDACTED] LP Manager, FC

Rob [REDACTED] LP Specialist, FC Support

Mar 15, 2022 Mumbai, India



Binoy [REDACTED] Sr SLP Manager, AMZL

Vinod [REDACTED] SLP Manager

Mar 17, 2022 Singapore

HaoJun [REDACTED] Program Manager, S&LP, PS

WHS (Workplace Health and Safety)

Mar 11, 2022 Baltimore, MD: Use case generation meeting

Yvette [REDACTED] Regional Manager, WHS

Methodology

This study will consist of one-on-one and group generative research interviews, held online over Chime. The sessions will consist of asking participants to answer questions on their workflows, experiences, and frustrations, or walking through their processes via screenshare. This will allow a deep-dive into the working experiences of our users to answer the above objectives.

Interview Guide

Introduction

- Name, role, project
- Video Anomaly Detection System: An AI powered interface that notifies users of incidents on site, allowing them to shorten response time, ensure an appropriate response is taken, and to review events over time.
 - Not here to discuss ideas for this tool's functionality, but rather learn more about your current workflows to inform our design.
 - Interested in the differences between a management role and an onsite specialist role.
- There are no right or wrong answers, please be open and descriptive as even the smallest comments can be significant.
- **For groups:** I'll be asking questions directed at everyone, so everyone feel free to pitch in for each question.



- An hour long, will fill up time with questions with prioritized questions first.
- Will be recording for my own review purposes for report, will remain confidentially stored (shared screen, sharing with Paola)
- Do you have any questions before we start?

Questions *(prioritized questions)

- What are your daily job responsibilities?
 - How much of your time is spent in front of a computer vs offline tasks?
 - How many emails are waiting in your inbox? Are there important incident notifications that come through email?
 - How often are you in Chime meetings / messaging?
 - Do you use your phone for work tasks? Which tasks? How often? (SMS or Chime)
 - Are there ever connectivity issues working on your computer or mobile?
- How much of your work is split between incident response and other tasks?
- What tools do you have open or frequently use to perform your job duties? (Walkthrough)
- How often do alarming events happen?
- What are the steps you take to respond to an incident onsite? (Walkthrough v)
- What are the ways you currently are informed of health & safety incidents that happen onsite?
 - How long does it take between an incident happening and LP becoming aware of it?
 - How does the response vary over the type of incident happening?
- Do you experience "false alarms" that take up your work time?
- How often do incidents happen that you don't get informed of?
- What process do you go through to report an incident after initial response?
- Where do you manage and track current open investigations?
- At what point do you feel comfortable closing an incident? How long does an incident stay open for investigation on average vs outliers?
 - Do you ever need to reopen an incident?
- What levels of severity do you use to prioritize incidents onsite?
- What are ways you try to take a proactive approach in preventing incidents?
- Describe the tools and modes you use to communicate incident information to other interested parties.



- Do you often delegate other parties (internal or external) to respond to an incident? How does that process work?
- Does any investigation data need to be handed over to law enforcement/legal cases? How does that happen?
- Do some incidents need to be escalated before response?
- Permissions

For Loss Prevention:

- Share screen and describe current workflow using Milestone. (Walkthrough v)
- How long is video footage retained in Milestone?
 - Are there incidents that require you to store footage for longer than that timeframe? How do you store it then?
- Describe any frustrations you encounter while using Milestone.
- How familiar are you with the video camera naming or locations on the site(s) that you manage?
 - How many cameras are in your site?

For EAP:

- Since Environmental Managers do not have access to Milestone video feeds, how do you monitor, learn of, and investigate environmental incidents that happen onsite?
- Compliance
 - Do you currently have to visit a site in person to assess compliance?
 - Do you need video/image evidence to prove compliance? Legal uses?
 - In employee hurt from spill, how do you know how it was handled?

For managers:

- What metrics/reports are you interested in regarding onsite events?
 - Where do you currently go to find these metrics?
 - What do you use these metrics for? What actions do these metrics inform?
 - Are you missing any metrics that you would like to have?
 - Are you interested in different metrics than onsite specialists?
- Represent your team's onsite tasks and experiences
- What problems do the specialists face onsite in the team you manage?
- Admin functionality, permissions



For onsite folks:

- Are you interested in different metrics than managers?

Wrap-Up

- Stop recording
 - Thank you for your time
 - Do you have any questions for me?
 - Able to contact again for usability testing with prototype or beta site?
-

Timeline

Sourcing interview candidates: Mar 2-8, 2022

Research plan documentation: Mar 4-8, 2022

Interviews: Mar 9-15, 2022

Interview reviews, final report: Mar 9-18, 2022

Documentation

[Video Anomaly Detection System - User Research Report](#)

[Video Anomaly Detection System wiki](#)

[Video Anomaly Detection System- BHAG](#)

[Video Analytics Use Cases/Requirements Consolidated](#)

[UX Design Task Tracker - Kendra Raczek](#)

