What is an Emergency Operating Center (EOC)?

EOCs organize the response to natural disasters by analyzing data from the field using data management software.

What is Data Management Software?

In the context of EOCs, data management software refers to the programs used by EOC staff to take in and process data.

What kind of EOC software is used now?

WebEOC, Veoci, and D4H are the largest industry leaders, but many other custom and commerical softwares exist.

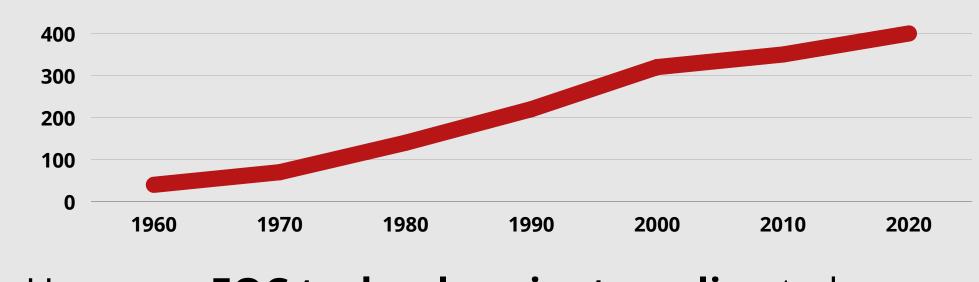
What data do EOCs use?

CrisisVision

How might we improve information sharing among **Emergency Operating Centers to enhance their** situational awareness during disaster response?

The Problem

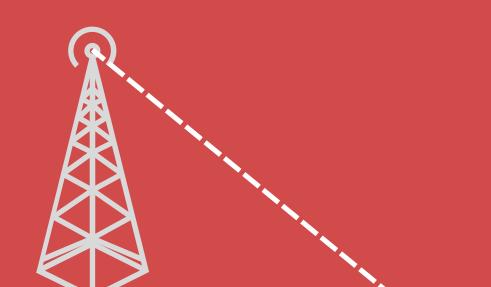
The frequency of natural disasters has increased **10x** since the 1960s.



EOCs intake the status of responders and infrastructure, as well as weather and demographic data. They use this to coordinate resources and better understand the developing situation.

What is EDXL?

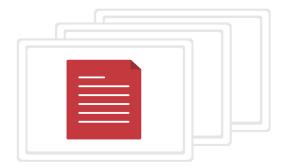
EDXL, or Emergency Data Exchange Languages, is a proposal by government researchers to standardize the way that information is stored in emergency management software.



50%

However, **EOC technology is struggling** to keep up.

Large-scale disasters bring a large amount of data to be processed.



Different EOCs use different software that are incompatible, causing slow data sharing.

Slow information sharing \rightarrow Slow response \rightarrow More lives lost

The Solution



CrisisVision is a desktop application that integrates with existing EOC software

50% of experiment participants indicated that a conversion mechanism improved data sharing significantly.

to convert between incompatible data formats.

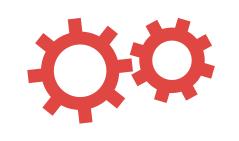
CrisisVision Standardizes

file formats used by EOC software to a standard EDXL format through "bridging protocols"

EDXL

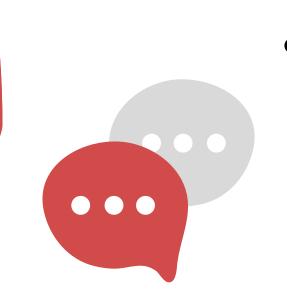
CrisisVision Automates

the normally manual process of entering data or converting it to another file format.



The Plan

There is **no current software** that standardizes EOC data and automates the process of communication; the only existing solution is manual conversion.



• Further our connections with **GDOT** and the Lousiana Office of Homeland Security to

begin solution

integration



• Solution financed via a **subscription model** to maintain server upkeep and enable future development





Grand Challenges PM Team 16

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