

Data management

-fema's cloud

- information includes people, volunteers, emergency responders
- local agencies
- insurance related stuff

-social media

- facebook, twitter
- warnings/ news/ updates

What information are we getting from social media?

- photos and videos that can be used to create crisis maps
- Mashups or Census-used to distribution of crisis, public health services, populations, fundings..
- short message service-send alerts

Advantages

- data can be pulled from different servers
- scalable
- collaboration
- storage data mining trend mapping information
- saves money from hardware

Risks

- implement cost/fixed cost
- security
- internet connection

Logistic

inspection process and procedures

- lack of training staff

solution:local representation (NRCC)

- Lack information of geography, demography, government-use mashup to tracking

- staff overwhelmed with demand seeking information

solution: using social aspect to disseminated accurate and consistent information

- resources and help demand greater than staff
- commodity distributio-dorem

Financial Allocation

#1. Fraudulent insurance claims

- 5,000 fraudulent claims related to Hurricane Irma
- Food For Florida(FFF) states that “ no method to check whether people asking for food had actually been affected by the storm”

Solution #1

Part 1.

- Hire local insurance agencies to perform insurance claim checks
- Local agencies must follow FEMA Guidelines for inspection and claim approval

Risk: Transparency and Unfair Bias

Part 2.

Processes for approving flood claims

Local inspected:

- Actually affected by natural disaster such as hurricane, flooding
- Verify not underpay or overpay

Social inspection:

- SSN verification tools
- Photo shared in FEMA app community
- Drones can be deployed
- Customer services

Part 3.

- Budget/ Funding
 - DHS (Department of Homeland Security) uses Blockchain tech
 - Focus on local companies
 - Create database local companies in disaster areas that they can allocate resources or respond to emergencies.
 - Donations through FEMA app or volunteers activities

Cloud computing

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Problems on *Logistics*

#2. Logistical tools and flood detection outdated

- 80% of natural disasters areas out of the flooding/covered areas where FEMA measure
- The flooding map is not accurate causing people to buy the outside map insurance and lose money
- People outside the “high risk areas” cannot get the payment from insurance

Solution #2

- Proactive Approach to Disasters
- Focus on developing Logistic Capability Assessment tool.

FEMA app

- Local News feed that connects people within same vicinity on FEMA APP
- Provides updated flood information
 - Outsource climate data collection to other companies
 - Helps with future policy changes
 - Detection of irregular natural disasters
 - Long term:Drones

Problems on *Data Management*

#1 data analysis from various social media platforms

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#2 data validate from various sources

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#3 data storage

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#4 advantages and disadvantages that FEMA cooperate with third party organization

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#5 benefits and challenges to both developing the technical solution in-house and outsourcing the solution development

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Using current weather data and environmental/climate trends to determine how much to fund FEMA.

Incentivizing states to use Loggista Assessment Tool.

the insurance payouts to flood victims.

Guidelines:

- Solution should address client problem and requirements and should be technologically feasible.
- Not limited to materials in the packet.
- Designate a team member to be in charge of navigating through the solution deck during the presentation.
- Bring 5 hard copies and allocate equal time to each team member.

What is FEMA's mission & vision? (6)

What is FEMA's goal? (6)

What are the challenges we seek to solve?

- FEMA struggling to meet it's mission because of unprecedented natural disaster that are putting a strain on it's resources. (6)
- Internal issues like; (6)
 - Incistent funding
 - Disjointed operational logistics
 - Ad-hoc data management

What is FEMA focusing on? (6)

- New technologies/ technological solutions to address;
 - Data management
 - Financial allocation
 - Logistics

Expected solutions should yield; (6)

- Actionable results after disasters have occurred and anticipate and prepare for potential disasters in the future
- Focus on infrastructure damage and flooding
- Ability to learn and prepare for natural disaster responses
- Optimize resource allocation

What are FEMA's priorities? (7)

- Human and technology-centric
- Situational awareness, communication and decision making

*** We must incorporate A in our solution ***

- Focus on reaching local officials before and during disasters
- Connect communities to create unified partnerships
- Strengthen organizational foundation through;
 - Improving their workforce
 - Utilizing advanced-analytics
 - Transparency in decision making
 - Aligning their strategy, resources and performance outcomes

Tasks:

Recommend innovative technical solution (7-8)

*** See 7-8 for solution guidelines ***

Research Questions:

- What are the risks of implementing technology like blockchain on government finances?
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