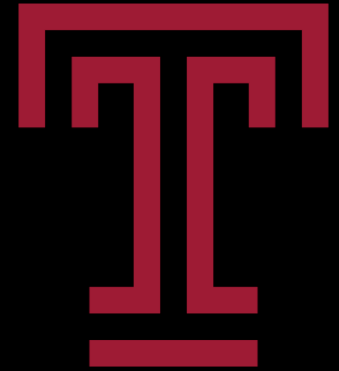


Deloitte.



FEMA: Hurricane Disaster Resource
Allocation

By: MIS Movement

In 1845, Deloitte started
with one individual

**Power
to the
Ones**

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Logistics

Josh Kim

Damage Inspection

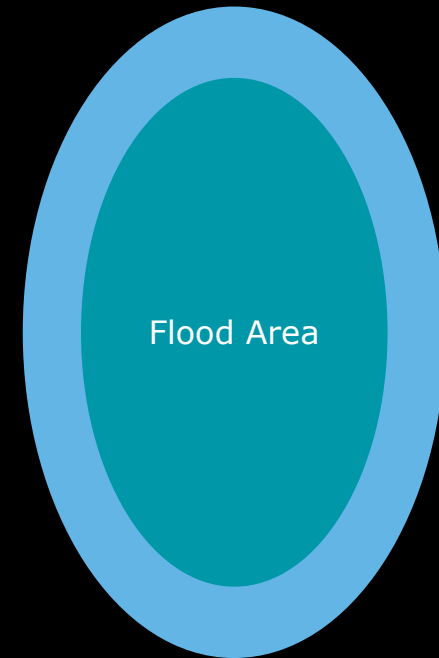
The Question: How can FEMA use modern technologies to ensure established inspection response processes and procedures are optimized and scalable?

Problems

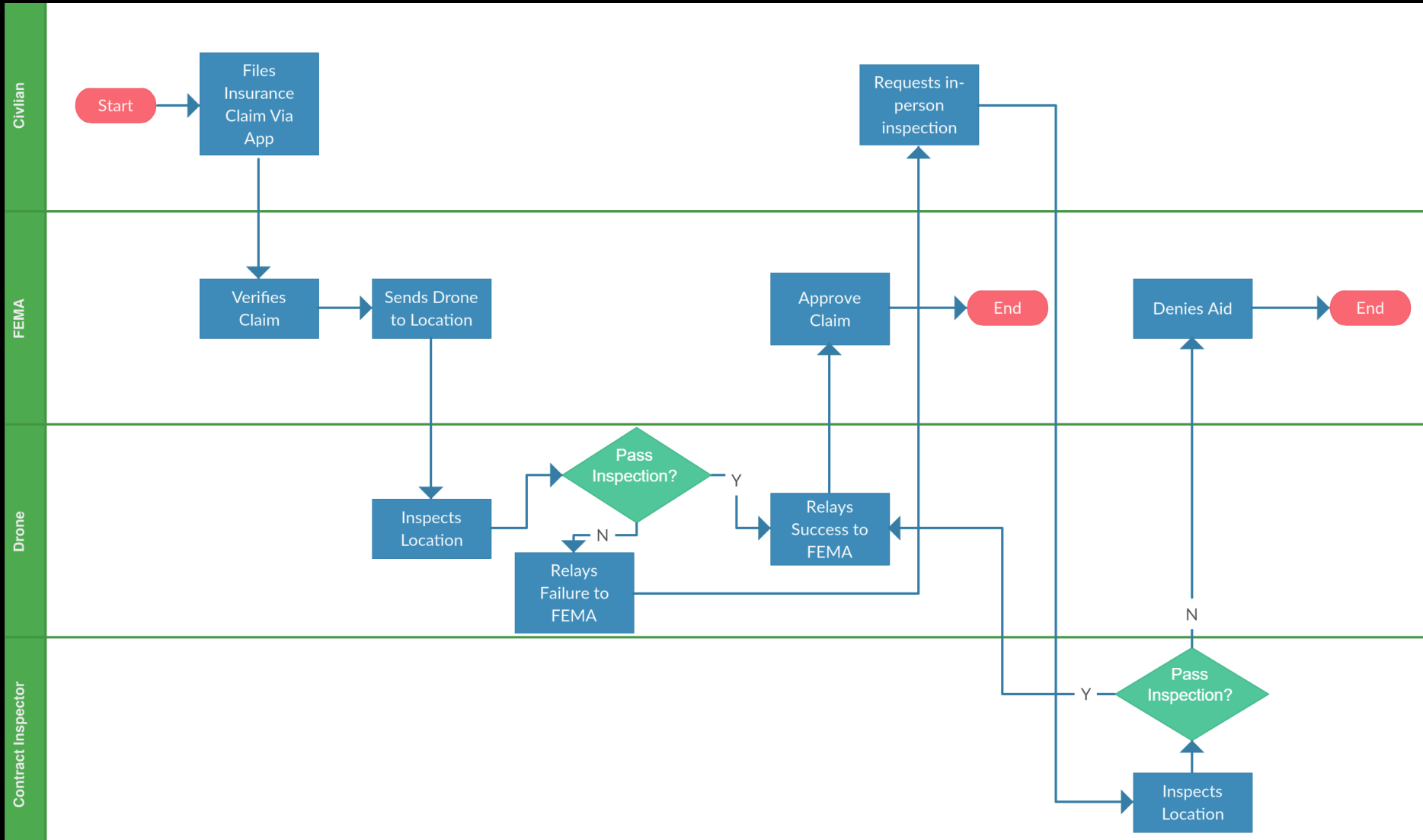
- I. Massive backlog in inspecting damaged properties
- II. Long wait times for callers

Flood Area

- I. Inside: 100% flood-damaged houses
- II. Outside layer: Houses that could be affected by flood damage



Damage Inspection Swimlane



RFID System

The Question: How can FEMA use modern technologies to better track the transportation of resources from their distribution centers to disaster relief locations? What approval processes are in place to ensure implemented solutions are compatible with partner resource tracking technologies?

Problems

Lack of automated interfaces

Can't track 'partner organizations' shipments

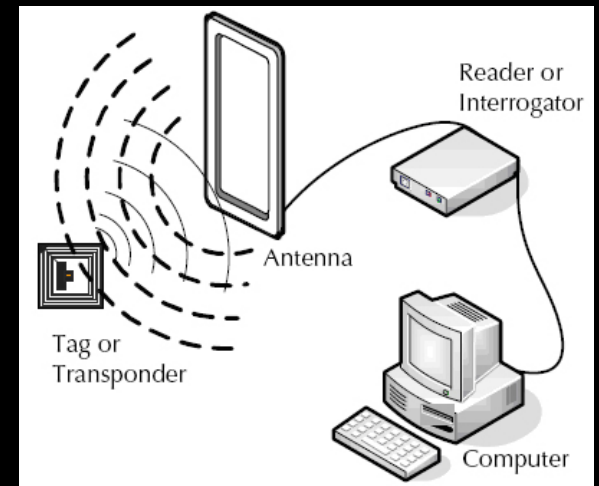
In-transit real-time location not tracked

Computers automatically input data

Universal RFID Implementation

Tags allow for real-time location tracking

Solutions



Disaster Relief Fund

The Question: How do state relief approval and resource estimation processes affect FEMA's ability to distribute resources to the proper locations?

Problems

Reactiveness →
Being unprepared
and overspending

Inaccurate
Estimations → State
relief approval delay

Not enough money
set aside for DRF

Utilize data more
effectively

Allocate resources
based on data

Effective data
visualization

Solutions

Financial Allocation

Ronan Gleeson

Financial Allocation

The Question: What factors adversely affect the process of distributing relief funds and insurance claims to hurricane and flood victims?

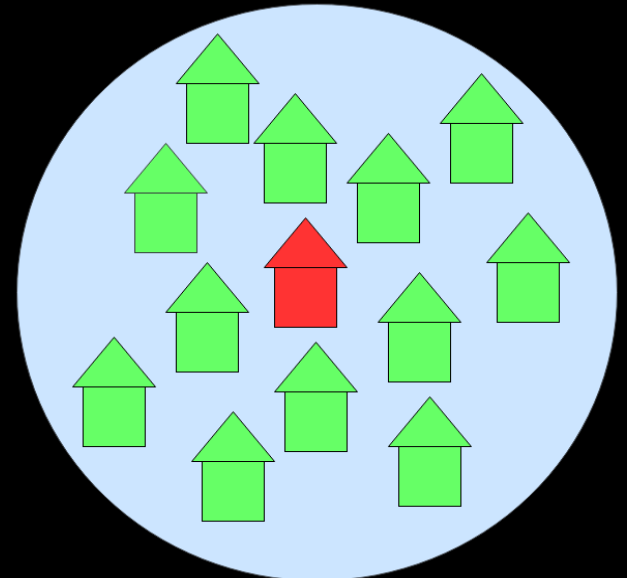
Problems

- I. Overwhelming number of in-person applications filed post-natural disaster
- II. Fraud

The Question: What is the effect of limited financial transparency to both FEMA and federal taxpayers?

Problems

- I. FEMA is unable to hold private insurance companies accountable
- II. Gives away money faster than it can account for
- III. Taxpayers do not know how their money is being spent



Blockchain

The Question: What are potential risks implementing a new technology, such as Blockchain in financial government processes? How might these risks be mitigated?

Downsides

Still very young

Not readily accessible to large parts of population, especially in times of disaster

Cryptocurrency is very volatile and uncertain

Benefits

Instant Currency and Information Sharing

Provides unparalleled financial transparency through public ledger

Allows FEMA to track every dollar handed out

Data Management

Shawn Biju

Social Media Implementation

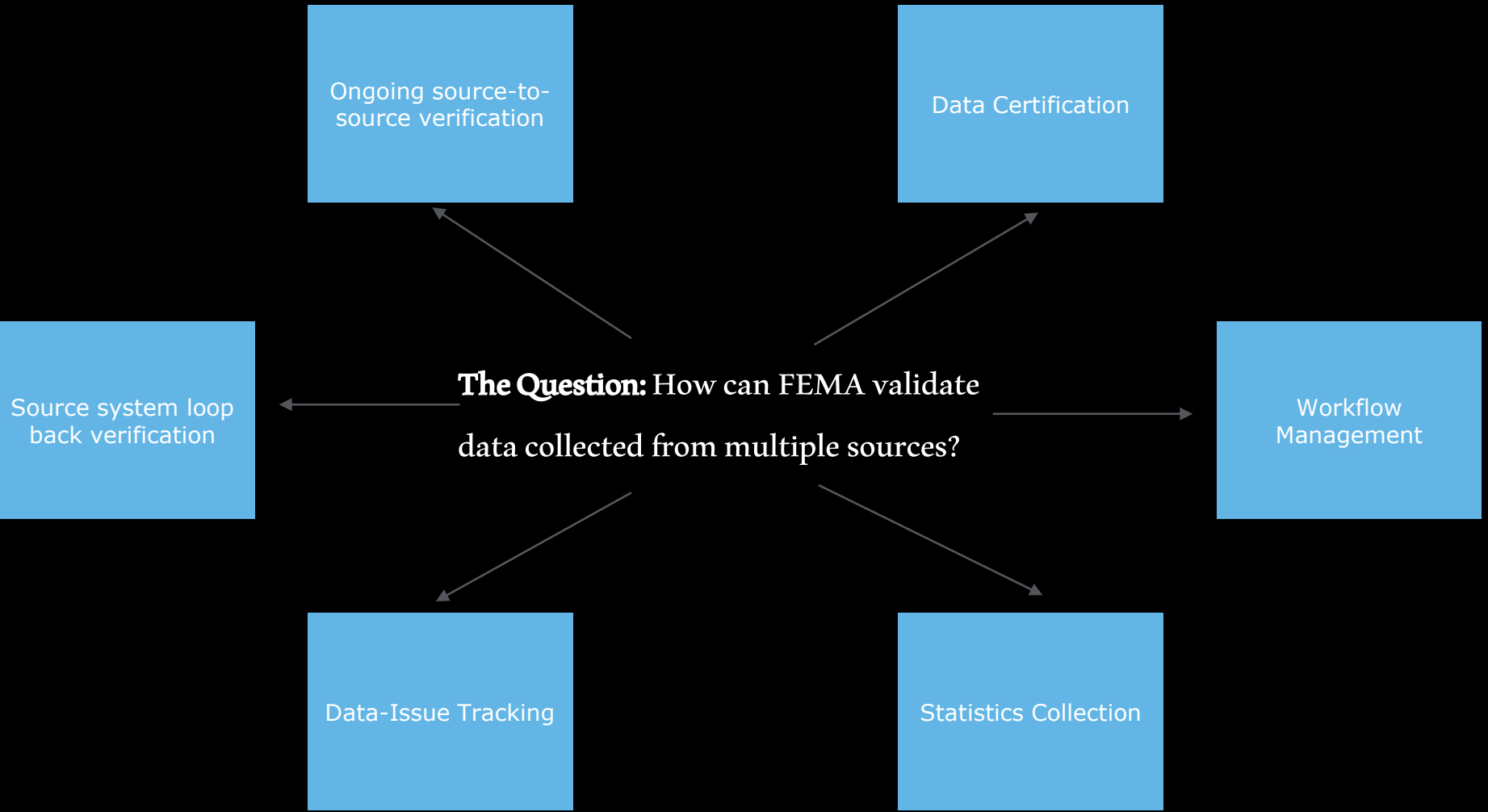
The Question: How can FEMA utilize information collected from various social media platforms to perform robust data analysis?

Steps

1. Establish social media presence
2. Manage expectations
3. Establish concept of operations
4. Distribute operations timely and frequently
5. Coordinate with partnering organizations
6. Actively monitor and evaluate social media content
7. Utilize maps
8. Improve community awareness
9. Plan for loss of connectivity
10. Engage with community members post-incident



Data Validation



Partnerships

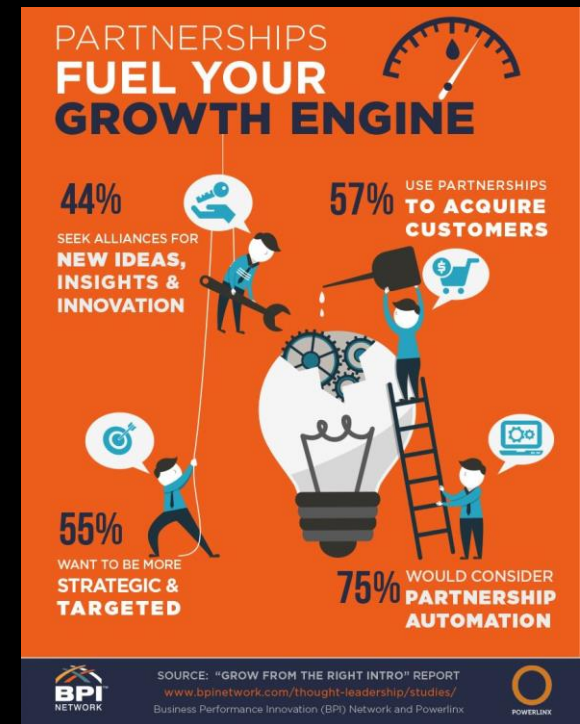
The Question: What factors should FEMA consider to evaluate partnership opportunities with third party organizations? Benefits + challenges to both developing the technical solution in-house and outsourcing the solution development?

Factors to consider:

- I. How big is third party company
- II. How much money is given to contract partner
 - Smaller chunks → Small, local businesses
 - Big companies:
 - Offers cheap labor from outside disaster zone
 - Fails to provide functioning public services

Example of Ideal Partnership: One Concern

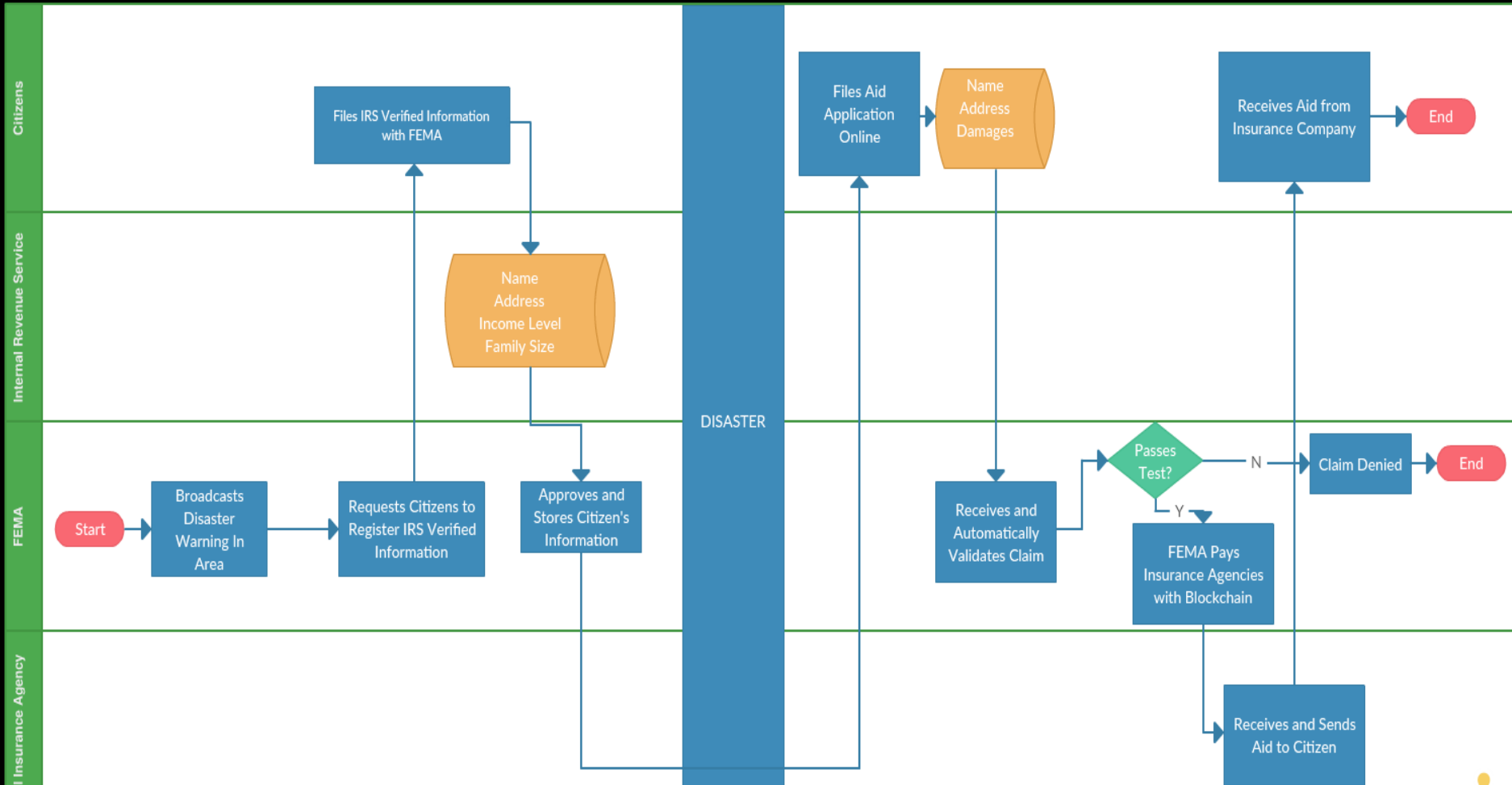
- Can provide minute-by-minute information post-disaster
- Using public and private infrastructure datasets
- Constructs model predicting damage and loss of life



Final Implementation

Ronan Gleeson

Final Implementation



Thank you

Contact us

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