

1. CUSTOMER SEGMENT(S) 6. CUSTOMER CONSTRAINTS

Awareness, education, preparedness, and The global GIS in disaster management market size stood prediction and warning systems can reduce at \$2.3 billion in 2019, and it is expected to reach \$9.4

billion by 2030, exhibiting a CAGR of 13.7% during the the disruptive impacts of a natural disaster

forecast period (2020–2030). The major factors on communities. Mitigation measures such supporting the growth of the industry include the as adoption of zoning, land-use practices, surging number of natural disasters, strong focus of

5. AVAILABLE SOLUTIONS

Planning to warn the people which will

minimize the effects of disasters

2. JOBS-TO-BE-DONE / PROBLEMS

9. PROBLEM ROOT CAUSE  
7. BEHAVIOUR

Analysis of public behavior plays an Natural disasters can cause great damage

on the environment, property, wildlife and

human health. These events may include

.Recovery and reconstruction.

government and emergency management organizations

on adopting advanced GIS solutions, high need for analyzing geospatial data, and increasing public awareness about reducing the socioeconomic impact of natural disasters. and building codes are needed, however, to

prevent or reduce actual damage from

hazards.

earthquakes, floods, hurricanes, tornadoes,

tsunamis, landslides, wildfires, volcanic

eruptions,extreme temperatures.

Property damage.

Structural damage to buildings.

Loss of utilities like electricity and water.

The lack of resources and capacities (e.g., financial, human and technical) and a low level

of knowledge and education emerged in all case studies as major root causes for several drivers of disaster risk.

*important role in crisis management,*

*disaster response, and evacuation*

*planning. Unfortunately, collecting*

*relevant data can be costly and finding*

*meaningful information for analysis is*

*challenging. A growing number of*

*Location-based Social Network services*

*provides time-stamped, geo-located*

*data that opens new opportunities and*

*solutions to a wide range of challenges.*

### 3. TRIGGERS 8. CHANNELS of BEHAVIOUR

Large economic losses, reduced accumulation of capital and infrastructure, long recovery period

after disasters.

### 10. YOUR SOLUTION

whether disaster risk reduction is being

8.1 ONLINE

*We demonstrate how to improve investigation by*

*analyzing the extracted public behavior responses from*

*social media before, during and after natural disasters,*

*such as hurricanes and tornadoes.*

Dissemination of information from nearby

Government agencies and NGO'S.

### 4. EMOTIONS: BEFORE / AFTER

Before the disaster, a positive association was found between place-identity

**Natural disasters cannot be prevented but they can be detected.**

We can measure disaster risk by analysing trends of, for instance, previous disaster losses. These trends can help us to gauge

and wellbeing, indicating that the stronger emotions participants evolved to

the place, as well as remembered more and thought about the place, the stronger wellbeing they experienced at the site. After the disaster, the strength of this relationship decreased more than twice, accounted for by

the weakening of the emotion-wellbeing link

**effective. We can also estimate future losses by conducting a risk assessment.**