REPORT OF RESEARCH PAPER

ON

“RFID use in natural disaster management system”

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Akbar Badpaa *et.al* assume on the bases of some experiences through different disasters, notably earthquakes in Iran the main problem is lack of a precise and economical identification system through that the victims, particularly all those below the debris is Identified. The discussed some type of knowledge related to disaster and relevant technique to handle knowledge that can be helpful in search, relief, rescue and a hole. They suggest RFID use in suitability with DBMS (Data base management system) and a network.

Introduction

Disaster: Disasters are hazards that cause destruction or environmental changes.

Natural Disaster: A natural disaster is the effect of a natural hazard

List of 10 Natural Disasters

1.	**Cyclone:** Cyclones flip counter-clockwise within the hemisphere and dextrorotary within the hemisphere. this is often as a result of it follows the rotational movement of the earth.
2.	**Earthquake:** It is the results of a unforeseen unharness of energy from the earth's crust that makes seismic waves.
3.	**Tornado:** A tornado could be a fast rotating of air that's touching each the bottom of earth and a cumulonimbus.
4.	**Volcanic Eruption:** A volcano is a gap during a planet's surface that permits hot stone to flee from below the surface.
5.	**Tsunami:** Tsunami is harbor wave that because by the displacement of an outsized body of water
6.	**Flood:** Flood are caused of water over flows from a water body.
7.	**Wildfire:** A wildfire is any uncontrolled fire .
8.	**Drought:** A drought is a long period of time there is a certain zone receives a shortage of water.
9.	**Avalanche:** An avalanche may be a abrupt and forceful drop of snow .
10.	**Landslide:** A landslide may be a movement within the ground and a shallow flow of rubble.

Literature Review

According to Akbar Badpaa *et.al* The construct of victimization the data technology in disaster affected areas became the Point of importance because in Japan's nice Hanshin Awaji Earthquake in 1995. All info Related to the human, and non-human entities is announce and communicated at intervals disastrous space. many researchers emphasize the importance of frequency Identification (RFID) technology, information sharing and conversion, commanding management involvement in 3 phases of Disaster Management , namely pre, throughout and post . Their contribution and coordination will have a major impact on managing the disasters and save several lives. Thus, they have analysis in his research paper, the main focus is on 3 main parts of this study, together with information management system for Disaster Management by RFID technology, that area unit mentioned in their several following sections. Finally, at the top a planned model, that is predicated on these connected associated coordinated dimensions to contribute to the sector of Disaster Management to attenuate the quantity of casualties through an economical decision-making method with a right and timely information in hand, are going to be introduced

According to Zhiwu Dou *et.al* RFID can be perform main role for The Slop Disaster Early Warning System Of Fiber Bragg Grating Anchor Bar Sensor They suggested warning system can monitor slope disaster and early warn, which has the advantage of small affected by weather and environment, monitoring results accurate, large-scale monitoring and remote monitoring and others. Things of network and FBG technology are the future popular monitoring technology in slope hazards and geotechnical engineering field. Combing geographic information system and virtual reality technology, the system can also be used for the visualization monitoring and analysis of engineering on internal structure. The technology has strong vitality and broad application prospects with its own advantages and technical characteristics.

.According to Heng Wang, et.al RFID are often Applied supply Chain logistic in Disaster Recovery. RFID has been with success incontestable to boost supply chain supplying in producing and transportation industries. This technology offers extensive promise within the industry, notably for disaster recovery. Natural disasters, terrorist attacks, and extreme atmospheric condition will cause important harm to native communities and disruptions to the native offer chain. The effective movement of resources throughout disaster recovery operations is crucial in an exceedingly post disaster recovery setting, and integration RFID technology into the development comes throughout the reconstruction activities holds important promise. The paper reviews RFID applications in different sectors and assesses the potential for this technology within the industry, notably throughout disaster recovery. Current RFID technology may well be employed in the development trade in areas to automate material pursuit in off-site warehouse of construction companies or suppliers, to determine initial location of fabric received on construction sites, to trace materials that ar being shared and in common areas for multiple construction sites, to restock material in laydown or warehouses, to attenuate material over ordering with higher pursuit of amount info, to cut back loss from larceny and support web site security measures, and to help web site instrumentality and fuel management

Disaster management

there is some phases allocate for disaster management

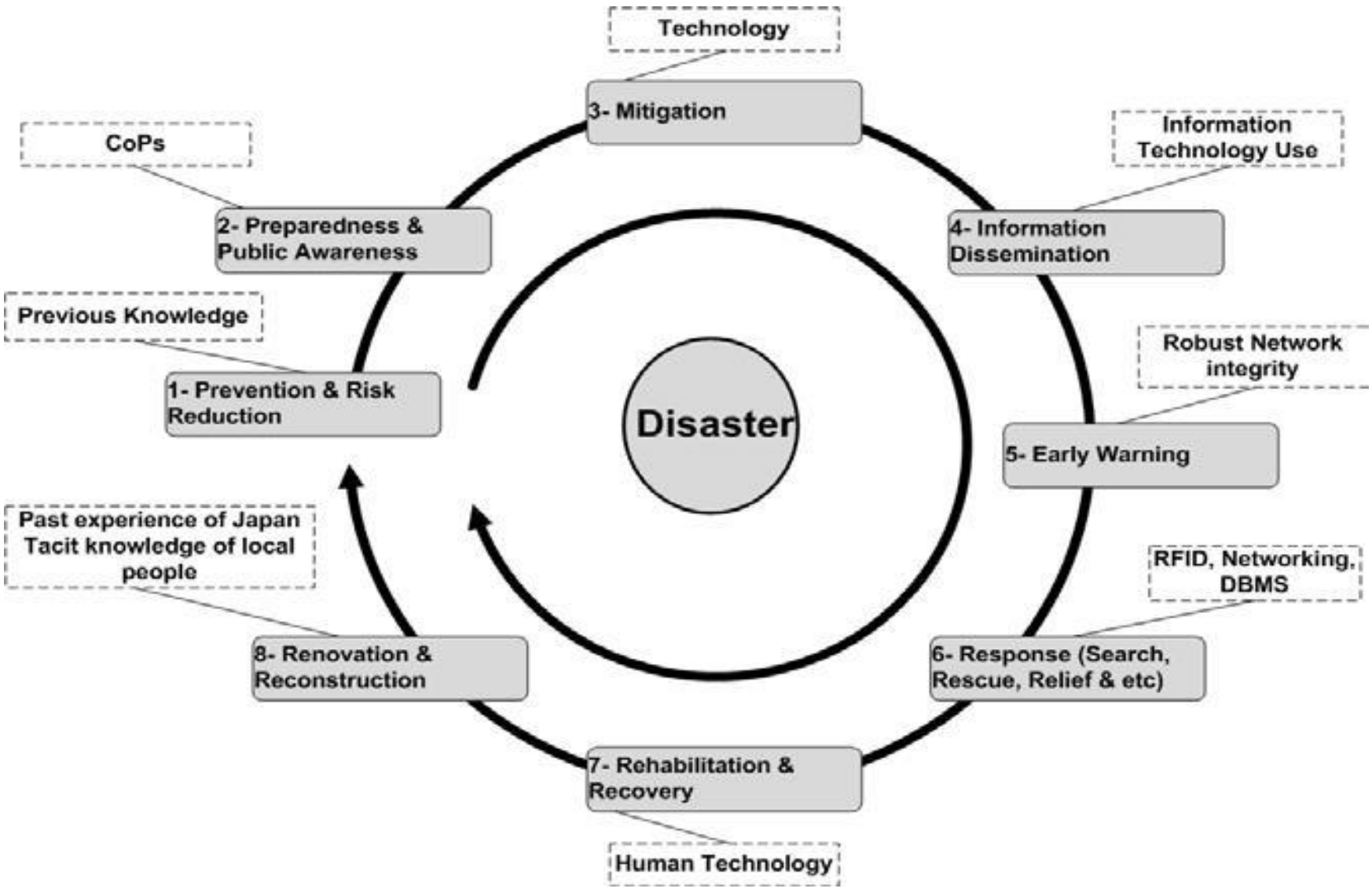

Fig:1 Different Phases of disaster management

- Prevention & risk reduction
- Preparedness & public Awareness
- Mitigation
- Information dissemination
- Early warning
- Reason
- Rehabilitation & recovery
- Renovation

RFID use in disaster management

The information required for disaster management are analysed in 2 categories:

1. **Re-disaster activities**.
2. **Post-disaster activities**.

The primary mostly focuses on the analysis and analysis for risk assessment, hindrance and state, whereas the second cluster is regarding effective response and recovery. Data technology is presently utilized for Disaster Management to a precise degree. However, with the rising RFID technology, Disaster Management data Systems gift an innovative increment potential in potency and effectiveness in response to and recovery of disasters. Concerning the Brobdingnagian applications of RFID systems, once a disaster happens, RFID are often applied to require benefits of this technology. to feature that a correct implementation of the RFID desires a well-established infrastructure as well as a speedy and strong networking system to supply timely association among stakeholders of the complete system. Additionally, oracle as software system tool is recommended thanks to its security level and hardiness. Thus, oracle information in an exceedingly deductive network within the sort of computer network will support the RFID implementation properly

Methodology:

We will use RFID in natural disaster management system in 3 parts

1. Identifying building position and collect damage building information with using a electronic nameplates and GPS A number of systems are researched and developed to support the gathering of Damage information within the field (Zama et al., 2001); (Fukuwa et al., 2001), with nearly all systems employing a GIS, as this technique permits entry of injury information whereas viewing a map. However, even with a map entry of building position info entry will be slow if the user isn't conscious of the native earth science. On the opposite hand, even GPS point information is correct solely to many tens of meters, creating it tough to spot a target construction among a series of adjacent buildings. to save lots oftime and energy in coming into point Information, therefore, info is drawn from the e-nameplates inside the Information sharing system. Matching surveyed building info on latitude and longitude, owner's name, address, and then on to a target building provides failsafe identification, up the potency of assortment of injury info. Additionally to positional info, alternative building details keep within the electronic plate can seemingly prove helpful within the gathering of knowledge at the time of a disaster.

2. Using RFID as a temporary storage device in the disaster management system RFID devices can be used to fetch information related to damage location. Specially, we will applied to a damage information task. There will be evolution of building damage on the basses of a process that is a process that is already in place used after earthquakes. The flow return from initial survey to nascent risk evolution to wreck classification to victim's certificate (victim classification), with many items of shared data among the steps. underneath these circumstances, providing Associate in Nursing RFID device for storage of harm evolution ends up in the sector can permit common information to be written or scan, drastically reducing fault , eliminating duplication, and making certain larger accuracy and potency in surveys.

3. Information assortment exploitation "e-nameplates" in traditional periods Above we tend to mentioned the uses of e-nameplates to see point information and to gather disaster information at the time of associate degree earthquake. Additionally to those applications, e-nameplates will realize varied applications in traditional periods. for instance, municipalities area unit needed to conduct urban coming up with or urban infrastructure development surveys, to update maps, or widen roads, for instance, or to perform field surveys for building or reconstruction permits. what is more, hearth departments should do surveys in response to changes in on the market water resources, additionally to field surveys for disaster prevention. These surveys will be efficient exploitation the injury info assortment system and electronic plate information.

Conclusion

This paper short discussed about natural disaster an use of RFID mentioned progress within the development of RFID writers/ readers to be used within the collection of harm information , likewise because the readying of this technology in information sharing and injury info assortment systems. Going forward, we will Required to conduct checking at a test web site, pursue larger convenience in sample , and study ways that to attain widespread use of e-nameplates whereas pushing ahead with system development. RFID scan capability has already begun, and realization of write capabilities and improvement of the communication distance of the passive devices area unit wit been the tech challenges we have a tendency to should face if we have a tendency to area unit to make sure broad application within the assortment of harm information.

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