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Technology Is the best way to reduce the Impact of an earthquake. To what extent do you agree with this view? Technology can be used In a variety of ways. It can be used to manage the hazard as well as the vulnerability and loss. Despite the fact that unlike volcanoes, there Is no definite or set method on predicting earthquakes, technology in terms of seismographs and tilt meters are used to give a slight clue. One method of reducing the impact is by managing the vulnerability. One of the main uses of technology is the prediction of when and where an earthquake will occur.

In terms of earthquakes it is very hard to predict when an earthquake will occur. However, there are tell-tale signs that give a nonetheless small idea. Technology here plays an important part; seismographs probably being the more common use. Little movements/ tremors under crusts are measured by seismographs and tilt meter; this information is looked at and then used to predict when. Radon gas Is released which Is measured by spectrometers. Water levels are also tend to rise before an earthquake Glenn a big hint. In addition to this land use landing uses GIS.

This way the government can build Important buildings such as official governmental offices In areas that are not risk prone. Earthquakes often require data to be collected from a variety of locations very quickly under adverse conditions. GIS is used to assess the risk and hazard prone areas in terms of population, property and natural resources. It can also be used to determine how and where aid should be assigned. It can also be used to assess short term and long term recovery operations. In Japan, the 6. 8 magnitude Niagara Chutes earthquake in 004 used GIS to develop three applications of GIS that were important to the response.

Another technique of managing vulnerability Is community planning. Education and preparation are cost effective. The government can plan evacuation routes, and educate people. Even though education Is not technological It still helps In decreasing the Impact. Services use technology to plan point where the most urgent area Is and are educated on what to do, what evacuation route to take. Many schools and workplaces In risk prone areas have earthquake drills I. E. Kobo, every household, office, school have emergency packs at hand. Recreational areas are built to reduce the stress the crust faces.

In addition a higher population density and a lot of buildings increase the death toll; making the disaster worse. The hazard could also be managed using technology by improving the buildings. Many areas that are prone to earthquakes quite frequently have many buildings that are hazard resistant, mainly due to the fact that it is not the earthquake itself that kills but the collapsing buildings. Earthquake-proof buildings have rubber shock absorbers, crisis- cross steel structure, counter-weights on roofs. The buildings often have shutters over the windows to prevent shattering of the glass.

The walls are also slanted walls which gives them a low centre of gravity. This means when an earthquake occurs the building sways but never falls. Technology Is used to decide the geology of buildings maybe even using GIS. For Leeds it is a big problem as they are not developed earthquake in Iran on the 26th December 2003 is a clear example of why hazard resistant buildings are important. Many of the buildings in Iran are made out of straw, mud and clay. 90% of the city was razed to the ground with 70% being

stored. The roofs were heavy so when they collapsed they suffocated those inside.

In addition lack of communication meant that only 4 rescue teams turned up within the first 48 hours which is abysmal when compared to the 1. 2 volunteers of Kobo. Kobo, in my opinion was the best dealt quake disaster that used technology to save lives. The Kobo earthquake was at a magnitude of 7 in 1995 and killed 6000 people. Despite the impacts of the quake; port destroyed, businesses burnt, many homeless and 12 trains derailing, if it was not for Kabob's quick responses it would've been much rose. Communication and technology meant that response to the disaster was fast. . 2 million volunteers were quickly enlisted to distribute aid and help with rescue efforts. Using GIS they also denominational the Hansson Expressway so only aid and emergency vehicles could pass. Despite have hazard resistant buildings many of the roofs were built to withstand typhoons which led to many people being crushed to death due to falling roofs. One famous case concerning the use of technology is the Liquate earthquake in 2009. The Liquate earthquake being located in an MEDIC achieved major criticisms by its own residents.

The death toll was high (297 died) and the scientists were prosecuted for not predicting the earthquake accurately. Despite having seismographs and various equipment's they predicted an earthquake would occur but not at that specific time and day. For this reason some people may look at this case and argue that despite having the technology it was not very effective and that sometimes it can cause impacts to be severe. An example is the Japan

earthquake in 2011. It destroyed the generators at the Fuchsia plant causing it to explode and spread worldwide fear.

To conclude I think that technology can be used to reduce the impact. Others may disagree and argue that it gives a false sense of security. If a country has the knowledge and technology to predict/respond to an earthquake, residents will feel safe. However when an earthquake does happen many people will feel let down and not know to do. We are living in a society where the exponential increase in technological advancement will continue to grow. It is no doubt that there will be more management methods, more building designs and maybe it will stretch as far predicting earthquakes.