

Enhancing Disaster Preparedness using Murphy's Law

Joy R.A Otololo¹

¹ Masinde Muliro University of Science and Technology

Received: 9 December 2013 Accepted: 31 December 2013 Published: 15 January 2014

Abstract

Murphy's Law is commonly expressed that "if anything can go wrong it will" and is believed to have been founded between 1940 and 1950. This law has been associated with many problems and failures. Murphy's Law can at times be seen as a threat of impending dangers and disasters since disasters can strike anytime and anywhere. Disasters can include workplace violence, fires, arson, and flooding, drought, terrorist acts, hazardous material spills e.t.c. Murphy's Law can be a reminder for a holistic and integrated approach to disaster preparedness and mitigation so that communities participate in the process using local materials and being part of the process. This makes the communities resilient. At work place, implementing a continuous programme of testing and role-playing, safety and security professionals involved in contingency planning can dramatically improve their organizations chances of cutting loss when a disaster strikes. Strategic planning and contingency plans have come about so that Murphy's Law does not prevail. However, Murphy's Law can prevail if there is no disaster preparedness, mitigation and when contingency plans are filed away in cabinets and forgotten.

Index terms— murphy's law, disasters, holistic, integrated approach, disaster preparedness, mitigation, contingency plans, strategic planning.

1 Introduction

Murphy's Law was founded between 1949 and 1950. All disasters, calamities and failures are attributed to this law. In this essay the origin of Murphy's Law and its definition will be explained. Then its relationship to disasters will be examined showing whether it is true in today's technology and disaster risk reduction and contingency planning or not. Contingency planning is important with Murphy's Law since strategic planning if well implemented can make Murphy's Law not to prevail.

2 II. Definition

Murphy's law is commonly expressed as, "if anything can go wrong it will" or "Everything that can go Author ? ? : Centre of Disaster Management and Humanitarian Assistance Masinde Muliro University of Science and Technology, KAKAMEGA, Kenya. e-mail: joyotolo@gmail.com wrong, will go wrong". Many problems, failures, and annoyances are attributed to Murphy's Law (Harris, 2011, Smith, 2011). In relation to disaster occurrences then Murphy's Law would imply that disasters cannot be stopped. That is, if disasters are to occur then they will happen.

3 III.

4 Origin of Murphy's Law

Most people do not know the origin of Murphy's law (Harris, 2011 (Harris, 2011)). Aerospace manufacturers picked up Murphy's Law and used it widely in their advertisement during the next few months, and soon it was being quoted in many news and magazine articles. At that point Murphy's Law was born (Smith, 2011).

5 IV.

6 Murphy's Law and Disasters

Everything that can go wrong will go wrong is what Murphy's Law states. This may at times be seen as a threat that something will go wrong and it cannot be stopped. It is important to believe and accept that the threat is real, since this can make citizens take action. Denial is a common thread among most of the law breakers and can make one be in denial throughout. It is one thing to be ignorant and innocent of the dangers that might be caused by disasters and another to be aware of them. It is good to be aware of a potential impediment so that it can be mitigated for the success of a project and saving of life and assets. However, to consciously ignore borders on the criminal since when the calamity/disaster occurs, it causes a lot of damage.

Murphy's Law may not prevail in all cases and can be handled through the process of Disaster Risk Reduction. The risk reduction process starts with risk identification followed by risk assessment and then risk mitigation. The potential of risks is identified then the potential of the occurrence of the risk event and its impact is identified should the event occur. Without mitigation, the project may be vulnerable and fail. Risk mitigation involves identifying actions that can be taken to lessen the deleterious effect of risk events or alternatives to avoid or lessen the risk mitigation. Planning often involves some upfront costs to lessen the effect of costs if the unmitigated event occurs. Risk can be diffused by implementing a structured risk management process and in such a case Murphy's Law may not prevail.

Also, in relation to hazards some hazards can be prevented depending as to whether they are geological, natural, hydrological, meteorological or manmade. For example a manmade hazard that may cause an accident can be prevented by careful driving, observing of the traffic rules and the traffic police being vigilant. Other disasters can be mitigated by training the community members, equipping the disaster managers, having accurate early warning systems, active emergency systems that can be alert and ready in an event of a disaster. Some hazards like earthquakes and cyclones which are natural may happen but still the impact can be reduced.

Murphy's Law states that if anything can go wrong it will. However, in occurrence of hazards that may lead to disasters, this law may not prevail. This is because there is disaster risk reduction and management. In natural hazards which may be as a result of increase in natural disaster due to uncontrolled development, unregulated land use practices such as deforestation and slope mining on the hill above the land can create a hazardous situation that can be avoided since people and their resources can be protected against these disasters by anticipating potential catastrophes.

Also low lying countries in Northern Europe for example the Netherlands are famous for constructing an extensive system of sea dykes that have both reclaimed land and protected inhabitants from flooding since the 18th century (UNISDR, 2004) this then means that Murphy's law has not prevailed in this instance and what will happen does not happen. Also embankments in Shanghai, China, Singapore have protected lucrative commercial and port activities since the middle of the 19th century thus making Murphy's Law none prevailing.

UNISDR (2004) further observes that in Vietnam, Villagers have been obliged over the centuries to clean, repair and strengthen their crucial irrigation channels and sea dykes prior to the start of every annual cyclone season. This has been recognized as a necessary precaution to ensure the continued cultivation of rice, on which the society has always depended.

The development of science and technology can save lives and assets when they are linked to effective early warning systems and evacuation procedures. For example scientific monitoring showed an immediate threat posed by the possibility of Mount Pinatubo's Crater Lake breaking its walls and disastrously flooding villages on the flanks of the volcano. This early warning allowed Philippine officials to drain the lake safely in a controlled manner, with full public awareness and preparations for evacuation had it been necessary (UNISDR, 2004). Thus early warnings of impending disasters and their effective dissemination are key factors to successful disaster prevention and preparedness.

Currently there is more emphasis on the identification and management of risks as part of development planning. Additional human and material resources are slowly being allocated to risk reduction activities from sources other than emergency contingency funds. There is also implementation of disaster reduction policies and measures to enable societies to be resilient to natural hazards and ensure that development efforts do not increase vulnerability to those hazards.

In the recent past there is working at building a culture of prevention of disasters. While natural phenomena causing disasters are in most cases beyond human control, vulnerability is generally a result of human activity. Therefore society must recognize and strengthen traditional methods and explore new ways to live with such risks, and take urgent actions to prevent as well as to reduce the effects of such disasters by the available

capacities. These preventive measures are most effective when they involve participation at all levels from the local community through the national government to regional and international level (UNISDR, 2004).

Vulnerability can be reduced by the application of proper design and patterns of development focussed on target groups by appropriate education and training of the whole community. Environmental protection as a component of sustainable development consistent with poverty alleviation is imperative in the prevention and mitigation of natural disasters. Also knowledge development and research are contributing to disaster risk reduction.

V.

7 Contingency Planning and Murphy's Law

Disaster planning is about anticipating the types of disaster that may occur and the effect on communities. Disaster management planning is a collective responsibility by the government, private sector and the community (UNISDR, 2004). They need to work together so that knowledge, resources and effort are used to minimize effects of disaster on communities, the economy and the environment. This then calls for contingency planning in disaster management.

Disasters can strike anytime, and anywhere. Implementing a continuous programme of testing and role-playing, safety and security professionals involved in contingency planning can dramatically improve the organizations' chances of cutting loss when a disaster strikes (UNISDR, 2004). Many government departments, organizations and businesses understand that contingency planning is vital, and more often than not they already have established such plans. Policies, procedures have been created; estimates on duration and cost of potential incidents have been worked out; and contact lists, protocol, and procedures for obtaining outside resources have been put in place. The final draft of the plan has been approved, printed, and returned for distribution; copies have been circulated, and everyone feels confident that the organization will be prepared to cope with any emergency.

However, more often than not this is the end of the process since the contingency plan ends up being filed in a cabinet behind other documents and it is eventually forgotten until the disaster actually occurs. It is when a functioning plan is most needed, that Murphy's Law will prevail: "Everything that can go wrong will go wrong." Contingency planning in Kenya has been an issue and many disasters that can be prevented have caused havoc. Examples are the frequent floods in budalangi, Nyando flood plains, and along river Tana. The fires in the Nairobi slums for example deep sea, Kibera, Mathare and the destructive fires in the Aberdare forests are a result of lack of disaster preparedness and management. There have been several collapsed buildings that have not been structurally designed and poor land use that has led to landslides, soil erosion and floods. The perennial droughts in Turkana, Pokot and North Eastern parts of Kenya have made the communities vulnerable and to rely on relief food instead of working on disaster prevention and mitigation programmes are partly as a result of not implementing strategic plans or having none.

The terrorist attacks at Westgate, bus terminals, churches and other parts of the county are examples of disasters that have struck leading to loss of lives due to lack of early warnings by the intelligence service units, poor coordination by the rescue units and other disaster management mechanisms. This has caused insecurity and led to injuries, loss of life, property and assets valued at millions of shillings not forgetting the trauma and psychological effect on the victims as a result of the disasters.

8 VI.

9 Conclusion

Murphy's Law says that, "Everything that can go wrong, will go wrong" was mostly relevant and applicable in the 1940's. However, now Murphy's Law can prevail if structures are not put in place and implemented. It is important to believe and accept that the threat is real since this can make citizens take action such that Murphy's law does not prevail.

10 VII.

11 Recommendations

Putting strategic plans in place and of Murphy's Law. In the 21 st century with the development of technology, the building of capacities of citizens, research in the field of disaster and its management, and implementation of policies is crucial so that Murphy's law may not prevail at all times. Hazards can be mitigated and they can only cause disasters when they find a vulnerable situation. Vulnerability can be reduced by drawing policies, implementing them, building capacities and by the application of proper designs and patterns of development focussed on target groups. Therefore provision of appropriate education and training of the whole community is crucial in disaster prevention.

The governments can use public investments to improve their countries infrastructure and to promote physical environment where a disaster is less likely to occur. All these efforts are aimed at making sure that Mutphy's Law does not prevail.

Figure 1:

-
- 151 [Smith ()] , J Smith . <http://www.murphys-laws.com/murphy/murphy-true.html> 2011.
- 152 [Unisdr ()] *Living with Risk -Focus on disaster risk reduction*, Unisdr . [http://www.unisdr.org/eng/](http://www.unisdr.org/eng/mdgs-drr/undp.htm)
- 153 [mdgs-drr/undp.htm](http://www.unisdr.org/eng/mdgs-drr/undp.htm) 2004.
- 154 [Harris ()] *What is Murphy's Law?*, B Harris . <http://www.wisegEEK.com/what-is-murphys-law.htm>
- 155 2011.