

Project Management in the Danger Zone

Mark Reeson and Helen Green, RN

World disasters are Indiscriminate

Disaster can strike anywhere and at any time, these calamities can sometimes be predicted and prepared for due to the time of year or a change in atmosphere, yet mother nature with her majesty and mastery, has been and will be able to surprise the greatest minds when they least expect it. It is at the time when disaster strikes that people look directly or indirectly for guidance and support. It is at that time that the project manager and their team come to the fore and are at their best.

To place this importance into perspective and to give a general view of the scale of the situation that we are now addressing, a quick overview of 2016 paints a dark picture of what is happening and what continues to harm the environment and the population of the world. With a count of 109 earthquakes covering the globe, with a measurement of greater than 6.0 on the Richter scale, 6 hurricanes and 2 major hurricanes with immeasurable damage and with flooding, disease and hunger rife throughout the world, the biggest question has to be what can we do to protect and prepare ourselves next? Nothing is beyond human capability nor should it be beyond a future role for project management in relief, emergency management or disaster zones.

Much as the message is typically passed through industries that select their products and projects to gain profit or success, the same rules apply in this more emotive environment; you still need to handle the right disasters, with the right people, using the right method.

The Benefits of Project Management through the Phases of a Disaster

To best explain now how the project manager would suit the emergency management, relief or disaster environment and the work involved, it is best to break down the skills and competences into their appropriate uses through the phases of such a disaster much as in the life cycle of a project. To do this I chose to use the Faulkner Disaster Lifecycle and then to overlay the project management skill and competence sets for each stage.

The first of Faulkner's stages is called the **pre-event stage** which is the period when pre-planning and prior preparation has to be done. What could be more natural to a project manager than to prepare a prevention or protection plan for an approach to disaster management dependent upon the region and the type of disaster? The planning, preparation and early warning solution would include the identification and the analysis of any potential risks or the issues that currently exist within the living or working environment

and within the recovery of the incident make up some of the most fundamental skills of the project manager.

This need not and in many cases is not a technical stage but in actual fact, by having local knowledge and an understanding of the demographic, something as simple as an action board explaining the approach to any incident can be handled using the PESTLE environmental assessment to create a pre-planned checklist of processes and procedures. In addition, the opportunity at this stage to design and create various overview action plans to each of the proposed disasters can be drafted. The suggestion and the knowhow that it is in the quiet times when we should best prepare for disaster has never been more true than today.

Preparing and having an initial action plan gives you, the project manager and those around you (the locals, the government officials and the team members, yes your stakeholders) a greater confidence that should this plan ever be activated, there is guidance and a route map for survival and success to follow in the early days when so much more is happening around you. Once it is recognised that certain events trigger other certain occurrences, this overview plan can then be made more formal so allowing a delivery framework or process map to be drawn that gives greater credence and increased early warning to what, how and who will carry out what and so identifying the dependencies on how the necessary actions and services relate.

This careful preparation in stage one, should provide you and those located in the affected environment with a greater sense of control and confidence in both the plan and those tasked with delivering the plan should it ever have to be activated during the second stage of the disaster cycle.

Helen's view on the Health Perspective

In the area of reducing morbidity and injury prevention in a disaster zone the need for a PM before the disaster is widely agreed as positive, merely imperative. Disaster Medicine and Public Health Preparedness is crucial even before the disaster is a mere suggestion. It has been widely documented that Pre Education of potential disasters to the general population as a whole and specific roles and responsibilities nationally and locally through schools, healthcare awareness campaigns, mandatory health and safety at work training has a positive outcome on the morbidity rate and amount and type if injuries sustained in any disaster. Faulkner's pre event stage and the successful running of the stages of PM that come after count upon not only the impending disaster or disaster scenario and the 'analysis of any potential risks or issue that currently exist within the living or work environment,' but also of the analysis of the risks the impending disaster will pose to morbidity numbers, injury type and treatment by the disaster, after the disaster. This is no more apparent by the studies conducted in Earthquake Zones in remote, deprived areas of a country, where the morbidity and injuries of rescuers have been reported to be much higher

than in more affluent easily accessible areas where help is more readily at hand quickly and education may be more readily accepted.

Plans with a specific chain of command should be established and although having a time frame is welcome and prediction of events is projected, disasters natural or otherwise do not run to a time scale or organisational procedure. The dissemination of information up and down the chain of command from ground zero to base and from local and national stakeholders and the reverse is essential. This is so that everybody involved knows what everybody else is doing, what the plan of action is and what is potentially going to happen next.

The plan of action has different steps and should when they happen kick the next level into action. It is important though that the flow of action or next step needs to be evaluated regularly and steps backwards or forwards can happen anytime within the process. The challenges that the disaster presents us with is never predictable and this is more so in the San Bernardino California Mass Shooting incident. It was reflected upon that although the Emergency Department were dealing with gunshot casualties they also had to re-evaluate their ways of working and where they worked after a suspected bomb found in the department believed to be linked to the gunmen.

Thought needs to be made as to how communication will take place. Restricted media presence, internet connection for officials only and communication devices for those involved in the rescue effort are important if the normal lines of communication are down. In recent documented evidence poor and conflicting information has led to an underuse of resources, time lost in triaging and treating patients and mass panic of loved ones looking for their relatives and those offering their help to the rescue relief effort.

Stage Two – Prodromal Stage – Heading to Unavoidable Disaster

In Faulkner's second stage, known as the prodromal stage, the situation becomes obvious that a potential disaster is nearing and is very likely to be unavoidable. Having done the analysis and the planned responses to a set risk or issue, this earlier escalation of the level due to the change in the circumstances means having to put in place the final preparations for the impact of that said situation.

It is here with the strength of a good project manager and their ability to demonstrate situational awareness and leadership that keeps this deteriorating situation under control. Here all the preparations for the qualification and quantification of the potential disaster and comparison to the expected damage can be put in place so that then any final preparation work that might be able to minimise the impact of the approaching disaster, if and where possible, can be put into action. Having now called together the preparation and emergency services in to stand by, the project manager now has the task to start the initial formulation of their team. This is no different than the importance in understanding the

defined roles and responsibilities that certain groups, team members or individuals play on any project. It is in this key stage of final preparation that those selected are briefed and as necessary, trained on what their key responsibilities and assignments are once the imminent occurrence shows its first signs of happening. This identification of key posts and the relevant levels of authority that these individuals and team members have can shape the project towards a more likely chance of success even prior to impact. Having those in authority understanding how and who they will direct and affect during the impending situation and having them understand the importance and impact of their strong and timely decision coupled with the leadership they must possess and demonstrate is critical.

Having the right role aligned to the right individual in the right situation is a clear demonstration of the project manager putting into action their understanding of what key success factors are needed leading to a more successful team performance. Once the team leaders and the key posts have been briefed, the project manager must ensure that they have established a clear and concise line of communication throughout and beyond the team. A project's success is based on good communication and in a potentially hazardous situation of disaster management and even more apparent devastation this has never been more true. So can a project manager manage such a situation under such pressure? Of course they can, it is more about their ability to adapt to the changing situation and relating those softer skills of stakeholder engagement and leadership that keep the focus on communication, therefore forming the combined and collaborative bedrock to achievement and success.

Having the right role aligned to the right individual in the right situation makes for a more successful team

Helen's view on the Health Perspective

A visible chain of command, for example different coloured aprons in the Emergency Department or job role badges in ground zero, help to identify roles and responsibilities within the many areas of the rescue effort. This is needed as it brings together many people with a diverse range of knowledge and experience working together within the same area or team for the good of the rescue effort. Everybody knows who everybody is and what they can expect from each other.

Stage Three – Emergency Stage – Time to Enter the Danger Zone

Faulkner's third stage is called the Emergency stage. Disaster or the pending incident has now and is now occurring and the event, whichever of the emergencies, is now unfolding or is immediately following impact. This stage is usually characterised by the sights and sounds of search and rescue and emergency medical relief activities. Ensuring that the right responses occur in the most time efficient and effective manner is paramount and the cybernetic or instinctive thinking process to decision making is key for the leaders on the ground. This fast thinking and adaptable and constantly changing environment makes this the ideal environment for a project manager and the skills associated with their discipline.

At this time what is needed in relation to the event is an understanding of the requirements of the situation and then a method of rapidly capturing this information so that it can be processed and then more clearly understood so that key decisions can be made swiftly and decisively at this early stage, this is vitally important. The skills once again of being able to bring together those people and team members that know the answers, your team, your stakeholders and then evaluating that information for the next steps forward relieves the pressure on the emergency services in the workforce and the people affected that are most effected, therefore potentially lessening the impact.

Once this information has been gathered and the full extent of the event has been established, at this point the project manager truly initialises the development phase of their project and starts to develop the original action plan into something with greater detail, identifying the certain accountabilities both attached to them and the others around them. The well-known method of rolling wave planning or progressive elaboration is highly effective in this environment focusing on what is happening now but with a view towards the next stage or phase of the developing situation, so that control is established but also so that structure remains integral to the project moving forward. In many environments it is argued that there is never enough or no time to plan only, only simply to act, but this is not and has never been true.

No matter how long or short a period or breather in the activities, time to think through the next steps is time well spent. The key resource at this moment in the event or project is time, so using this resource valuably is the main factor to success. This stage is generally one of the shortest, although the most devastating and the project manager should never lose focus on the fact that tomorrow will come and that on that day they will still be asked to lead and deliver. Whether it is the overall coordination of the emergency services or the rescue and recovery teams, keeping a sound and level head at such a key stage is imperative to the project manager.

After all, when the devastation has impacted and the calm settles, it is the project manager that people will turn to and ask, 'What do we do now?' He or she must now be ready to move into the fourth stage with a robust and sustainable plan.

As an aid to the changing situation and as a guide for the project leader or manager at this stage, there are a few vital aspects of situational awareness that hold true at this moment in time:

- **Don't panic** – at this time a clear mind and a sure approach will allow you to see what you want to achieve whilst also allowing those around you to trust and support your decision making
- **Make sure you are in a safe position to offer help** – Do not attempt to assist victims if you are placing you or your team in danger. It is at this time when the protection of your team and the emergency services that will support you after is key

- **Remember the ABCs of Life Support** – At this point in time it is the first aid and immediate response to victims and to situations that will save lives and so having the right team around you to make the assessments and then where necessary and essential moving the victims to safety in a safe manner is vitally important
- **Look for signs of shock** – This is not only in the victims, watch for your team as well. Even the most skilled and trained individuals can be affected by a changing situation and so regular checks on the team members and the emergency services during this stage of the disaster can be highly beneficial at a later stage
- **Check for emergency medical identification on the victims** – It is important that at this time even though so much can be going on that where possible a record of all those victims in the event are being logged to make sure after the event has passed locations and numbers can be made more accurately and simply for those that are presumed missing, injured or dead

This stage is crucial to you as the project manager and so whether you see this stage as an exercise in survival, in registration or as a form of asset control, your focus has to be on the protection and prevention of life both of the community suffering during the event but equally of your team for the future stages post event.

Helen's view on the Health Perspective

I agree in principle with these situational awareness principles, 'don't panic' etc.

I question why you would have to consider your position of being able to help or not. As a PM you are the head of the horse and should have prepared to be in a position to help when disaster strikes otherwise why would you be there at all? If as a stakeholder e.g. a hospital and the building had been badly destroyed, arguably I would still have the resources to give to the rescue effort e.g. bandages, staff and such but I may have to think about where I put them storage wise or where I treat patients. The certainty is not can I help because I have prepared but how can I help now my own situation has changed.

ABC'S, agreed lifesaving is a priority however it needs to be evaluated that it will be of benefit. E.g. aftershocks and unstable rubble may injure rescuers and cause further casualties than if I had listened to my stakeholders in the building and firefighting groups and waited until the area was safe for me to send in the rescuers. Damage limitation is key in all areas, including life. A clear decision making process is crucial here in the accountability and justifications of actions or no actions at a present time – the Russian Radio Active Sub and the Coal Mining Disaster in Chilli are examples of these situations.

SHOCK, agreed, look after your team!

IDENTIFICATION, agree with whole heartedly for families, friends looking for loved ones but also for quality assurance reviews post disaster of morbidity rates, injury types and numbers, the making of future action plans and lessons learned in the future.

Stage Four – The Intermediate Stage – Dealing with the Aftermath

During Faulkner's fourth, or intermediate stage, it is a priority that utilities are restored and efforts are being made to prepare for the return the community to try and achieve normality as quickly as possible. By identifying the key benefits to and early restoration of the facilities and utilities, the project manager and the recovery team will gain a greater understanding of the prioritisation of the work requirements ensuring that every ounce of energy is directed to the areas that need essential help first.

Assessing and then defining the full portfolio of projects and work packages that exist now will be needed in such a devastated area and it will take more than one sole individual. It is at this time that the team now requires fully to understand what specialisms exists inside the region and how much of that resource can be made available to them at this time.

One of the most effective and still simplest methods of prioritisation still remains as effective today and as long as the pre-defined parameters defining the suitable levels of understanding are applied, is the MoSCoW theory. This approach, allowing the team and the authorities to understand the work that it **MUST DO**, **SHOULD DO**, **COULD DO** and **WON'T DO** helps the whole community be communicated to and then appreciate the selection order.

The **MUST DO** implications that are identified at this time could be determined by loss of life or supplies that if they are not re-established could lead to further harm or potential fatal diseases. By setting these category parameters it becomes much clearer to see in such a dire environment the highest priority work that needs to be done and why it is necessary. However, just as in the business world, situations and perspectives change all the time and so the project manager and their team should be ready to adjust and to redeploy their resources as the situation improves or worsens.

Helen's view on the Health Perspective

MOSCOW can be applied to the Faulkner model idea of rebuild or restore. Restoring the utilities may mean just that with a mend and make do approach being more appropriate initially than a rebuild one.

Rebuilding could arguably come in stage 5.

Stage Five – The Recovery Stage – Rebuilding for the Future

Faulkner's fifth stage, the long-term or recovery stage is characterised by rebuilding, reflection, and analysis. It is during this stage that the reunited community has an

opportunity to redefine or reposition itself, and can start to make changes to the local environment. Often, these changes are made with regard to establishing a more sustainable future and reducing any further environmental impact. In this way Faulkner's fifth stage is very similar to the newly recognised SMART Sustainability Model where the community now learn to change and overcome the experience of the disaster to reshape a new direction. By taking a tranche or phased approach to the redevelopment work and by planning the long term schedule of improvements, these activities then start to more commonly resemble our triple constraints. The project manager can use this time to communicate how the local area will develop, change and improve whilst also demonstrating how these changes will benefit the community, when the changes and improvements are likely to occur and how the community can help to make this happen more smoothly.

Being able to assist the community with moving back into their area is essential to this change being a real success. At this time, focus on the improvements turn to cost and to quality. By understanding the community's needs and wishes and what they want to make of their home and region to gaining the commitment of the returning community to support the values it holds and respecting the traditions it has maintained for so many years, whilst also moving the damaged area forward to learn the most from the actions and reactions to the disaster. Once this understanding is in place, setting out a new implementation plan, whether in tranches or phases and stages will promote, advertise and communicate both within and to a wider audience outside, how the community is returning to normal life again.

Whether the priority of the people is their church or their businesses, they can start to identify with the changes and see when things appear encouraging their buy-in to try to get them to take ownership and accountability to finally make the area regain its previous and new look, as one. One lesson that seems to have been constantly missed throughout so many incidents is to truly understand the effect the incident and its impact has had on the mental state of the victims. Here, the opportunity for counselling and support is key to making a real lasting change to the returning community. On many occasions emergency and medical staff have reported dealing with the physical injuries at the early emergency stages and yet not until much later, truly understood the post disaster mental scars of the community and those treating them so that this can be reduced or treated. These deep scars can affect the responses to the changes made by the project team for the future, so early indication of any community unrest or signs of erratic individual behaviour beyond the norm, should be helped, supported and assisted immediately. This fifth stage has no time constraints, it takes as long as it takes to rebuild and strengthen the area and its community. However, once properly established the community can thrive and grow once again.

Helen's view on the Health Perspective

It is great to think that one can build a new future, new buildings to withstand a reoccurrence, but reality of availability of money and resources and manpower are

limitation factors to achieving this. PM must be objective, not driven by large stakeholders, government agencies etc. expecting gold from chocolate!

Money may have to be borrowed from neighbouring countries and global finances for example third world countries who may have relied on the tourist trade for their income now can't rely on that because the tourists wont visit for months or even years to come lengthening the recovery stage immensely.

Agree with the long term mental health issues.

Stage Six – The Resolution Stage – Learning from Chaos to Create Restoration

The sixth and final stage in Faulkner's disaster lifecycle is known as the Resolution stage. By now, routine business has been restored and a new, improved state may have been achieved. At this point, the project manager typically identifies this as a handover and closeout phase, as they are now required to clear up the final elements of their project and to ensure that whomever or whatever authority has taken responsibility for the local environment and the businesses, therein reclaims ownership in a structured and formal manner to create a sustainable and safe environment for the future. This cycle typically also formulates the initial work that will be required in a new pre-event and preparation stage to bring together the lessons that have been learned from both this and other disasters to better improve the survival chances should such a disaster strike their community again.

Once departed, the project manager needs to ensure that everything that occurred and all of the lessons learned during the entire incident, are well documented. The life cycle started with the pre-planning, keeping a log from the first days is essential so that you can now ensure that each lesson as small and insignificant as it may have seemed at the time is recorded, so as to take forward to other such projects and other world disasters, helping to protect and then to repair in the future in a more effective and efficient way.

Helen's view on the Health Perspective

Data collected at the time must be reviewed, plans of action tweaked and lessons learned from the disaster. Information must be shared locally, nationally and globally for all to benefit.

Summary

Project management is a life skill that we practice every day of our lives, most of the time without giving it a second thought, so with a little structure and the human instinct for survival, bringing these two elements together seemed natural. With the support of a simple structure and sense of planning we can all help in our individual and combined futures. Understanding that the right people need to do the right jobs in our work place seems natural and so it is important, possibly vitally important, that when disaster is upon

us, we are properly prepared for it and we do what we can to prevent and then defend against the loss of life, the ultimate price we can pay. There is certainly no one right way of doing this and certainly no golden charm or silver bullet that can solve these problems, but with time, with thought and with proper planning, we can make the future for us, our children and the rest of the world a safer and a more secure place to live. When a disaster strikes, those affected are thirsty for leadership and direction. The project manager is that man or woman that steps into that danger zone, inspires confidence and leads those that are in the greatest need, so the initial impact is minimized and their eventual recovery is maximised.

Project management is an activity that we do every day in our lives

About the Authors



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Professor Mark Reeson is a project management specialist with over thirty years' experience. A Fellow of the Association for Project Management, he has been involved in many project and programme consultative roles. Most recently Mark has been working with the Saudi Arabian Municipality of the Eastern Province to change the way that project management is carried out within the region, using his newly recognised SMART Sustainability Modelling for project and business management.

He was appointed a Professor of Project Management at the University of Business and Technology, Jeddah, Kingdom of Saudi Arabia which was a culmination of his work in training and consulting in the region on matters that relate to project management, supply chain management and sustainability modelling. Having previously held the position of a specialist Sustainability Management Global Advisor he has moved forward from that position and now regularly supports businesses and projects alike in streamlining their approaches to change and strategic development providing greater longevity in their business planning.

Having started his career in the Royal Air Force, Mark has continued to develop by working and delivering projects in multiple fields of industry ranging from the nuclear environment, into pharmaceuticals, finance and also the international sporting fields.

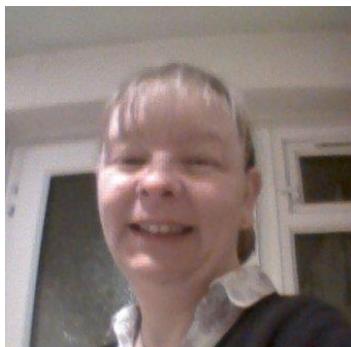
Mark has developed his role within project management through further experience with the nuclear industry and is now the owner of M R Project Solutions Limited where he has fulfilled the role of Project Management Advisor for the last three and a half years covering every continent. His role is very much client facing and Mark now almost permanently travels the world meeting clients, developing solutions and providing training for their project families either directly through his own organisation or in support of others. Mark's main role is the development and the consultation with many organisations on ensuring they choose the right approach or methodology to deliver their projects and then follows this up with the correct bespoke training programmes for how their company wants to share this learning with their staff members.

Mark has changed the approach to learning by the ongoing development of his original 'Living Learning' programme by introducing a new learning experience for all taking the classroom format and making it come to life with his popular and original 'Applied Learning' simulation training and coaching technique. He has taken this forward over the past few years to introduce this training style so that project management learning and behaviour has now started to be delivered into the schools and colleges looking to develop the technical, behavioural and contextual skills and attitudes of their students.

As a regular public speaker Mark now shares his experience, knowledge and commitment with those associations wanting to move forward in a more sustainable and successful manner.

Mark's next aim is to develop this further and to spread project management knowledge and competency to many more organisations worldwide, having already started with successful deliveries globally.

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Helen Green is a Registered Nurse (adult) with over 20 years' experience within the NHS. Her specialism is in Surgical and Theatre Nursing.

Helen has interests in Health and Fitness and is currently studying to qualify as a Health, Fitness, Nutritional and Lifestyle Coach.

This is Helen's first piece of advisory and collaborative work, and publication with the Project Management community, and hopes that the two elements of health and project management both benefit from her involvement in the future.

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