



Natural Disaster Management
Deploy your resiliency parachute

India is vulnerable to a wide range of natural hazards, particularly flooding, cyclones, drought, extreme heat waves, landslides and earthquakes. Gujarat earthquake in 2001 damaged infrastructure and killed almost 20,000 people while 2.25 lacs people lost their lives in the 2004 tsunami along with major infrastructure damage. The recent instances of cyclones in Gujarat, Maharashtra and Bengal and earthquakes in Delhi NCR only elevates the seriousness of the threat.

Business considerations during a disaster



Facility

- Head Office
- Sales Offices / Distributors
- Research & Development (R&D)
- Manufacturing Unit
- Data Center
- Retail outlets



Equipment

- Assembly Lines
- Feeders & Blenders
- Laboratory equipment
- Packaging Equipment
- Warehousing Equipment



Information technology

- Applications for operations, financials and reporting
- IT Infrastructure / Data centers
- Virtualisation
- Cyber Security



People

- Senior Leadership
- Management
- Labor
- Contractors and retainers



Extended enterprise

- Material Suppliers
- Contract Manufacturers
- Product Distributors
- Logistics partners
- IT support & services vendors

Impact on assets and stakeholders

Damage to assets/infrastructure /equipment leading to operations disruption and high re-building cost

Destruction of critical infrastructure including roads, ports, railways, buildings, etc. Impact on utility services such as electricity, water supply, fuel, transportation and telecommunications.

Loss of data, critical applications and unavailability of IT infrastructure

Loss of senior leadership, Injury / loss of life and workforce dislocation.

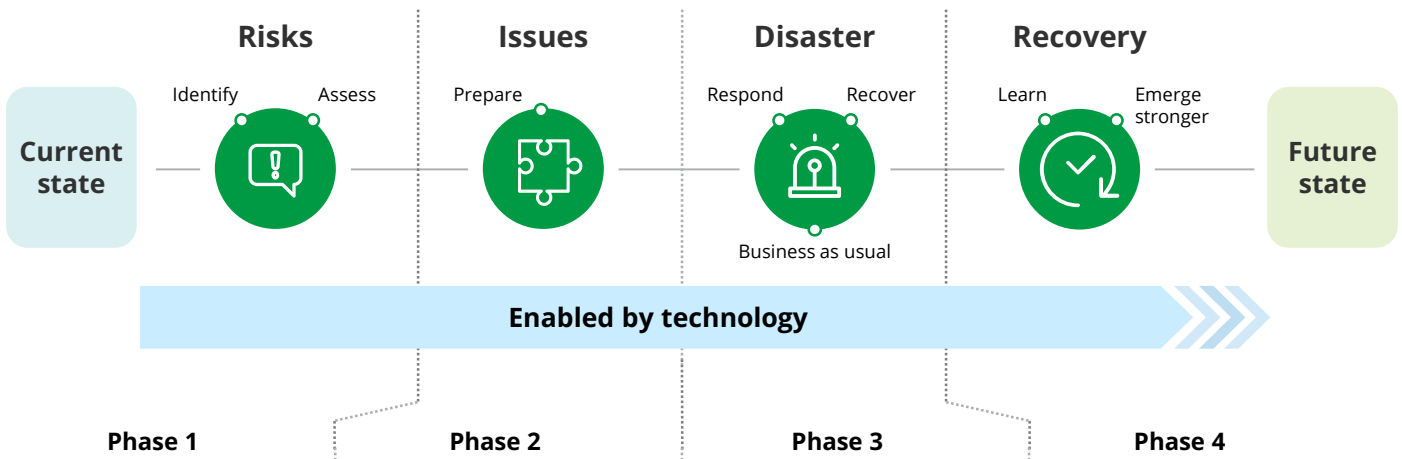
Postponed or paused deliveries, closed ports, canceled cargo flights, and unbalanced demand & supply in the economy.

Disaster management framework

Organisations need to approach disasters and plan for them in a manner that incorporates resilience against any natural calamity like earthquakes, cyclones, floods and more. Each organisation will have their own unique challenges, implementing a structure and framework in place will protect their physical and cyber assets and support a speedy recovery to business as usual. Sharing here our framework and approach to natural disasters

Building a disaster management capability is complex and requires an integrated approach across a range of disciplines and capabilities

Disaster management is not just about responding when something happens. A lifecycle approach to the discipline supports enhanced organisational resilience. Learning from events and delivering change as result helps organisations to emerge stronger.



Disaster Management lifecycle

Understanding the implications of the risk landscape	Manage issues, and prepare for the worst	Respond to, and recover from, disaster and keep operations running	Learn, rebuild, and emerge stronger
<ul style="list-style-type: none"> Assess risk from natural disasters to critical locations (Offices, Data Centers etc.) Leverage geological data and historic events to assess the likelihood of the event Record crisis indicators (repetitive events) and analyse its crisis potential Analyse the impact on critical operations, life safety and societal impact 	<ul style="list-style-type: none"> Document disaster management procedures, playbooks and checklists. Identify and implement mitigating controls (evacuation procedures, early warning systems, mass communication tools etc.) Periodically assess the effectiveness of these controls. Implement corrective measures emerging out of learnings from recent events. Rigorously train employees and first responders in emergency response. 	<ul style="list-style-type: none"> Invoke disaster management protocols once the disaster strikes setting the response and recovery teams in action. Liaise with relevant authorities. Initiate response protocols to prioritise people's safety, salvaging infrastructure, restoring IT & Connectivity and preparing for business continuity operations. Monitor the progress of the response efforts through the crisis command center and provide period updates to leadership. 	<ul style="list-style-type: none"> Invoke alternate work arrangements to support business continuity. Activate IT disaster recovery site, if necessary. Initiate crisis communication protocols to disseminate disaster management information to internal and external stakeholders. Keep leadership updated. Monitor the progress of the recovery and resumption efforts. Once ready for resumption, test the readiness and initiate phased resumption to business as usual.



Technology enablement



Crisis Command Centre

- Nerve Center for Response Efforts
- Vigilant 24/7 monitoring of crisis indicators
- Enabled by AI & Robotic Tools



Crisis Simulation

- Virtually simulate real-world crisis
- Engage remote teams in digital war rooms
- Analyse response through data analytics



Crisis Orchestration & Response

- Automated Crisis Playbooks
- Real-time response updates
- Intelligent dashboards for leadership



Digital Learning

- Learning through gamification
- Virtual Reality
- Digital awareness campaigns

Conclusion

As the year unravels, we see the magnitude of uncertainty and anxiety that the increased level of natural disasters have brought along. It is important that we pay close attention to early warning signs, remain agile and adapt to these changing times, especially our approach to disaster management. We can stay ahead of the curve by adopting a more technology enabled approach.

One should adopt a core strategy to respond to the primary crisis at hand. Overall, it's important to constantly update your organisations crisis approach to natural disasters to ensure the desired outcome.

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