

Entrepreneurial

Lee Miles examines the importance of innovation in disaster management, saying that entrepreneurial resilience **plays** an important contribution towards ensuring an organisation is fully agile and adaptive in an emergency

In many ways 'integration' has become an explicit watchword, influencing key thinking on crisis and disaster management today, and identified as a key feature of any successful Integrated Emergency Management System (IEMS). It is also a common red thread that never runs far below the surface regarding the mitigation, preparedness, response and recovery phases of (traditional) crisis and disaster management (see Coppola, 2011). Most commentators would agree that an essential ingredient of crisis and disaster management remains integration within, and between, these respective phases.

Such emphases on integration can also be found horizontally; in the aims and objectives of emergency plans, and in the development and synchronisation of the multi-agency co-ordination that is critical to implementing them.

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Integration extends even further. It has shaped the important co-operation of public and private sectors – informally and/or as part of emergent public-private partnerships (PPPs) – that are notable characteristics of resilience itself. The phenomena, narrative and value of resilience, for example, have been practically translated into greater linkages and roles for community and individual resilience, not least since the public/private sectors have limited their obligations against a backdrop of increasing pressure on operating budgets in the current age of austerity.

The footprint of integration is also detectable vertically. Disasters – from typhoons in the Philippines to Ebola in West Africa and earthquakes in Nepal, Japan and Ecuador – regularly illustrate how practical crisis/disaster management necessitates integrated co-operation between regional, national and international levels, especially when international disaster assistance is called upon. Indeed, international norms and standards, for instance those most recently outlined in the UN Sendai Framework for Disaster Risk Reduction (2015–2030) regularly stress the need for co-operation among these respective levels of disaster governance. In simple terms, the concept of integration remains a guiding light that shapes, to some extent, how we see both the depth and breadth of the shadows of crisis and disaster management.

Alongside integration, crisis and disaster management have become focused increasingly on aspects of

learning and review, particularly in identifying key lessons from the experience of disasters at every opportunity, converting them into lessons learnt that can be captured again and again via risk analysis and assessment, and absorbing them into review, auditing, simulation, exercising and training. **Indeed, much** of the work of the emerging crisis business sector has been preoccupied with this part of the business of crisis. The practical reality of crisis and disaster management is that it is, and remains, dynamic, learning continually from incidents, crises and disasters.

Yet, from this, comes an important reflection in itself – we never really bounce back to the same almost static position akin and prior to, the incident, crisis or disaster event.

Rather, as part of these key review, simulation and training processes, crises or disasters represent not just calamities or burdens, but also opportunities to invoke lessons and conduct change so that there is a more assertive disposition towards bouncing forwards.

In this sense, future mitigation and preparedness are conducted more efficiently and effectively and stronger all round resilience is achieved. Assuming this to be the case, then innovation is a key bedfellow of integration in conducting crisis and disaster management in both theory and in practice.

In one sense, innovation is also



resilience

already apparent in practical disaster management. The area is often one of the first domains exposed to new patents, copyrights and technologies and they are regularly applied to, and tested in, the field. Crisis and disaster managers are often quick to appreciate that new technological innovation might capture new ways to save lives, reduce casualties and protect property in times of major emergency. For some, a month does not go by without first responders, emergency planners, and crisis and disaster managers being introduced to new technological innovations and applications – from UAVs, drones and advanced robotics, early warning sensors and detectors, to the use of communications systems and software applications – that seek to make humans more effective in conducting disaster management activities.

These types of innovations aid understanding the 'what' and the 'where' of progress in crisis and disaster management

Yet innovation is not just about ICTs: the human factor remains central to the conduct of disaster management. Most organisations are very much

aware of how important the strengths of the staff

bases are in aiding response to – and recovery from – emergencies. Equally, as tragedies like the German Wings air crash in 2015 illustrate, human weaknesses, deficiencies and errors are also often central to the way blame or failure is associated with a disaster. Disasters have fundamentally human qualities and so does innovation.

In the business world, innovation is largely defined as the activity or process of making changes to something by introducing something new, whether radical or incremental. Innovation is thereby usually associated with helping organisations to grow or to do things better. Of course, in the business world, such innovations are normally measured in terms of their impact on turnover and profit, but equally, and most importantly for the context of this article, innovation can be measured in terms of contributions to knowledge, human experience, efficiency and quality. In other words, innovation can be measured in terms of value added and cost minimising that goes beyond, and can be separated from, monetary value or financial calculations.

Innovation then can be applied at all levels of an organisation and even to the realms of the individual. If this is appropriate, then innovation in disaster management can influence the effectiveness of the human factor and reduce potential human error and single points of failure that are often indicative

features of disaster management failure – or success.

If this is the case, then notions of entrepreneurial skills of disaster managers and personnel are worth further examination, not least because one normal recognised aspect of entrepreneurs is that they grasp opportunities without always regarding the resources currently under their control. In simple terms, they will think outside the box and utilise existing resources in innovative ways. Hence, if innovation and entrepreneurship in disaster management can be understood as representing not profit or money, but extra value added and the minimising of costs, which aid bouncing forwards and resilience, then there is need to understand, observe and even measure the importance of entrepreneurial skills sets as part of best practice and enabling change in crisis and disaster management. At its heart, this is the key dimension of what this article labels as 'Entrepreneurial resilience'.

The implications are obvious and, ultimately, very practical. For example, if as Alexander (2002) argues, emergency plans provide normalcy and planning to handle abnormal, unexpected situations, then these skeleton frameworks are often far from comprehensive. In practice, they are often more of a working guide than a comprehensive bible. In their normal roles, crisis and disaster managers actively interpret emergency plans and fill in the gaps, especially during onset and recovery from a crisis. These gaps represent what this article calls entrepreneurial

*Nus, imoluptat voluptaque
doluptat etur molorpore netus
eosam, sendem et quam
simus unt milit ipsam rerunt*

spaces where, in times of crisis, key managers and staff are required to use some flexibility, interpretation and even discretion to guide their actions when windows of opportunity emerge.

In some instances, these managers innovate – reinterpreting, tweaking and changing emergency plans entrepreneurially on the spot when these are no longer deemed appropriate or fit for purpose. Innovation is, at various times, a key part of practical resilience measures, operating within, and complementing, the integration of emergency planning systems. Since disaster management is not really driven by profit motives, innovators in crisis and disaster management represent a particular type of entrepreneur; they are change agents, entrepreneurs and innovators of policy, both in terms of response and implementation. They can thereby be called 'policy entrepreneurs in crisis and disaster management' in this context.

As Egli (2014) argues, resilience thinking: "Requires

► expanding the talents and capacities of our teams.” Resilience does, therefore, have human entrepreneurial aspects, explaining ‘when’ and ‘how’ key staff can use their entrepreneurial skills to fill the gaps in emergency response to remedy deficits that appear when the chips are down.

The skills of staff are critical to the success of innovation in these entrepreneurial spaces. Understanding, simulating, measuring and valuing these skill sets offer extra added value, which might – when the cold or hot winds of disaster are blowing – determine success and failure in emergency response and recovery.

So what is looked for in terms of the entrepreneurial skill sets of policy entrepreneurs? And are these the kind of skill sets that we would like crisis and disaster managers to have? Do they differ from particular management or business continuity skills that often go with professional management techniques?

Let us take one example – many reviews of the performance of emergency planning during and after Hurricane Katrina in 2005 have commonly shown leadership failure as overwhelming. Studies have identified these key leadership issues as enabling factors that will also make emergency planning in New Orleans more agile and adaptive should disaster strike again. Landford et al (2010), for example, identify the following as critical: Avoiding complacency about new situations; integrating and recognising transitions in leadership as events evolve; identifying individuals who matter at key junctures; and negotiating

politically arduous territory and setting boundaries on what is ‘doable’. When these key leadership aspects are combined with work from policy analysis (Mintrom, 1997) and that of disaster management (Miles and Petridou, 2015) focusing on policy entrepreneurs, then a particular skill set – which has particular resonance during periods of high intensity and pressure – that addresses these leadership deficiencies can be identified. A skill set that combines the handling of the intensity and scope of disasters, embodies the innovative side of disaster management and enables those who seek and initiate dynamic, transformative policy change during crisis and disaster response and recovery to:

- Be creative and insightful in handling new situations under pressure;
- Be socially perceptive in recognising who needs to be worked with to solve problems under pressure;

- Be able to mix in variety of political and social setting to build trust and confidence;
- Argue persuasively to provide effective communication;
- Be able to build new strategic team to handle emerging problems; and
- Be able to lead by example.

In Table 1, these skill sets are mapped against the leadership deficits observed in disaster to provide a matrix of identifiable

entrepreneurial skills that organisations want their crisis management staff to acquire.

It seems advantageous to understand and be able to measure the extent of these entrepreneurial skills sets present among existing staff in emergency rooms, command centres and in joint information centres. In addition, they have particular bearing on how emergency organisations might seek to improve the training of their staff to handle incidents. At the very least, these skill sets should be factored more readily into the criteria of exercises and simulations. The testing and assessment of these skill sets provide greater insights into the appropriate configuration of staff complements and rotas in, for example, crisis and command rooms.

There is more work to be done here. There is even greater potential to see the training of these skill sets being incorporated into the permanent, and more residual, career and staff development schemes of the organisations themselves, so that those who excel in disaster management training and simulations are rewarded as part

of their normal career trajectories. If this is done more effectively, entrepreneurial and innovative aspects of resilience will be integrated into crisis and disaster management systems over time. It is then time to recognise fully that integration and innovation are twin valves in the beating heart of successful crisis and disaster management in practice. Above all, it is necessary to recognise and reward innovation as much as integration as critical aspects of successful crisis and disaster management. Entrepreneurial resilience should make an important contribution if organisations are to become fully agile and adaptive.

C+Rj

Entrepreneurial resilience: Understanding the role of policy entrepreneurs in crisis and disaster management

Disaster ► Pressure for change ► Entrepreneurial space ► Policy entrepreneurs

Table 1: Mapping skills of entrepreneurial resilience

Resilience context (why)*	Policy Entrepreneurship (how)**
Handling complacency, undertaking change	Policy entrepreneurs as change agents; actors focused on transforming the status quo
Integrating leadership, transition in leadership	Establishing organisation culture Coalition formation (co-operation, clear lines of communication) Persuasive arguments Lead by example
Identifying individuals who matter	Coalition formation/groups Identifying opportunities Creativity/insightfulness
Negotiating politically arduous territory	Argue persuasively Familiarity with settings Lead by example Taking risks Mobilising resources
Setting limitations and boundaries for the doable	Argue persuasively Coalition forming/groups Identifying problems and/or solutions Setting the agenda

- See Miles L and Petridou E (2015); *Entrepreneurial resilience: The Role of Policy Crisis Management in Bhamra R (ed), Organisational Resilience (CGC Press)*
- *Landford, Covarrubias, Carriere and Miller (2010)
- ** Mintrom (2000)

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Sources/Bibliography

- Alexander, D (2002): *Principles of Emergency Planning and Management (Terra: Dunedin);*
- Coppola, P D (2011): *Introduction to International Disaster Management (Butterworth-Heinemann: Burlington MA);*
- Egli, D S (2014): *Beyond the Storms: Strengthening Homeland Security and Disaster Management to Achieve Resilience (M E Sharpe: New York);*
- Landford, T C, Covarrubias J, Carriere B and Miller J: (2010) *Fostering Community Resilience: Homeland Security and Hurricane Katrina (Palgrave: Houndmills);*
- Miles, L and Petridou, E (2015): *Entrepreneurial Resilience: The Role of Policy Entrepreneurship in the Political Perspective of Crisis Management, in Bhamra, R (eds.) Organisational Resilience (CRC Press: London);*
- Mintrom, M (1997): *Policy Entrepreneurs and the Diffusion of Innovation, American Journal of Political Science, 41: 738-770;*
- Zebrowski, C (2016): *The Value of Resilience (Routledge: London).*