

How small and medium sized enterprises respond to, and recover from, flood events

Researchers

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The challenge

Changing weather, including different patterns of rainfall and more frequent localised extreme weather events, means that the risk of flooding has increased in scope and frequency in recent years. Businesses which may not have previously seen flooding as a risk may now find that flood events present a real threat to continuity of their operations. For small and medium sized enterprises (SMEs) a flood event can present not simply a disruption to operations, it may impact upon the survival of the business in the longer term. SMEs are the backbone of the UK economy and many local communities as well as accounting for £1.2 trillion or 33% of private sector turnover (BIS, 2014). The sector itself is highly heterogeneous with firms ranging widely in scale, scope and market focus. However, despite its importance to the UK economy, relatively little is known about SMEs' resilience to a major disruption, such as a flood.

Aim

Working as part of the EPSRC-funded SESAME project, our aim is to achieve a better understanding of business continuity processes and how private and public sector organisations behave and interact with each other, and with communities, in the immediate, short-term, and longer-term aftermath of flood events. In so doing, we seek to identify and promote best practice for business continuity management.

Approach

Our approach is to engage directly with SMEs which have been flooded in order to gain an understanding of their decision making and actions around that experience. We have selected six case studies around the UK to capture different types of flood events (fluvial, pluvial and coastal storms) across different time frames (2007-14). To date we have conducted interviews with more than 80 SMEs ranging across industries and sectors as well size (micro, small and medium-sized). The rich data generated through these interviews provides insights into business perceptions of the different stages of the flood event: from pre-event normal operations and existing levels of preparedness; through immediate response; medium-term recovery; and elements of longer-term learning.

Findings

Whilst there is a range of guidance available to SMEs, from organisations such as the Environment Agency, we find that few SMEs have formal planning and preparedness for flood risk. Reasons that businesses cite for limited formal planning include a lack of knowledge about how to do this planning, even though they may be aware that the guidance exists, as well as resource limitations such as time and cost. Even after the, often traumatic, experience of being flooded, many businesses we interviewed have not implemented formal preparedness measures as recommended in guidance aimed at their sector.

Nonetheless, the businesses that we have spoken with have all demonstrated, to some degree or another, resilience to a flood event. If formal preparedness does not underpin this resilience; what factors do, and what lessons might there be for promoting best practice in business continuity management for SMEs? What follows are some of the key factors emerging from the data.

SMEs' day-to-day experience is often characterised by resource limitations as they do not have the scale of assets available to their larger counterparts. Consequently, we find many businesses have developed capabilities, over time, to optimise the limited resources that they have for running their normal operations e.g. flexibility, quick decision making and innovative approaches to problem solving. These are powerful tools in aiding resilience to a flood event.

More specifically, we find that this skills set is also strongly influenced across different levels, such as, the industry or sector paradigm and the SME's own past experience. In other words, key attributes such as innovation and flexibility can be highly path dependent. As an example, the picture opposite shows how an one engineering/manufacturing firm fixed a high tension wire across a flooded street adjacent to their premises to enable stranded staff to make their way to safety.



Firstly, this illustrates the way in which one business brought their engineering approach to problem solving. It also shows them utilising their product in a novel way to solve the problem faced by some of their employees. The latter arguably reflects the firm's pre-existing mind set of searching for new ways to deploy their products in order to unlock new markets for the business.

Insurance for flooding emerges as a major issue for SMEs at all stages of the flood cycle. Some businesses, which had not previously perceived themselves to be vulnerable to flood, were not sure whether they had cover for losses arising from flooding until they spoke to their broker, or insurer, in the immediate aftermath of the event. The speed of claims settlement and how soon insurance payments are received is important in the length of time that it takes for the firm to return to normal operations. A flood event typically impacts upon a number of businesses in a locale at the same time. This can create pressure upon brokers and insurers due to the volume of inquiries and claims within a short time frame, and some businesses felt that this impacted upon their ability to recover as rapidly as possible. A number of firms cited good relationships with insurance brokers as key in facilitating quick and fair claims settlement whilst others experienced delays arising from their inability to quickly provide evidence required by their insurers.

Benefits to users

Our data suggests that there is little take up of existing guidance as SMEs may not be aware of it or they do not feel that they have the resources needed to implement it. Through the insights that we are gathering into SMEs' behaviour in response to actual flood events and what factors impact upon effective recovery, we can identify good practice. Some of this data is then fed into the agent-based modelling carried out within the broader SESAME project. The insights generated from our data also allow us to consider how we might best disseminate good practice information to SMEs in a form with which they are more likely to engage.

More information

Please visit our website at <http://sesame.uk.com> or contact Dr Martina McGuinness (m.mcguinness@sheffield.ac.uk) for more information.

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