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Designing an Agent-Based Model of SMEs to Assess Flood Response Strategies and Resilience

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Abstract : In the UK, flooding is responsible for significant losses to the economy due to the impact on businesses, the vast majority of which are Small and Medium Enterprises (SMEs). Businesses of this nature tend to lack formal plans to aid their response to and recovery from disruptive events such as flooding. This paper reports on work on how an agent-based model (ABM) is being developed based on interview data gathered from SMEs at-risk of flooding and/or have direct experience of flooding. The ABM will enable simulations to be performed allowing investigations of different response strategies which SMEs may employ to lessen the impact of flooding, thus strengthening their resilience.

Keywords: ABM, flood response, SMEs, business continuity

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