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## **Adaptive Risk Management: Powered by Network Science**

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# Adaptive Risk Management: Powered by Network Science

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## Abstract

Adaptive risk management harnesses social intelligence to identify emerging risks.

We have entered an *age of disruption* where exponential technologies are transforming every industry. The ability to pivot in a rapidly evolving ecosystem is essential. Centralized “predict and control” paradigms will increasingly fail as complex interactions drive phase transitions. Successful organizations will harness *social intelligence* to “sense and respond” to giant waves of change.

Maps amplify intelligence to help us navigate challenging terrain. Maps play a central role in all command centers, enabling rapid risk identification with a shared visual language. Interactive *financial network maps* allow analysts to explore and diagnose systemic fragilities and mitigate critical vulnerabilities. Dynamic financial maps can also build visual intuition to detect escalating risk patterns. After observing early warning signals, analysts can apply network analytics to estimate likely second-order effects. This allows organizations to proactively manage emerging risk before tipping points are crossed.

Furthermore, to manage global systemic risks, we must find ways to cooperate across boundaries. Systemic risk maps can serve as mass collaboration platforms to spark network intelligence and coordinate effective joint actions.