



Working towards resilient organisations – insights from risk management and resilience research

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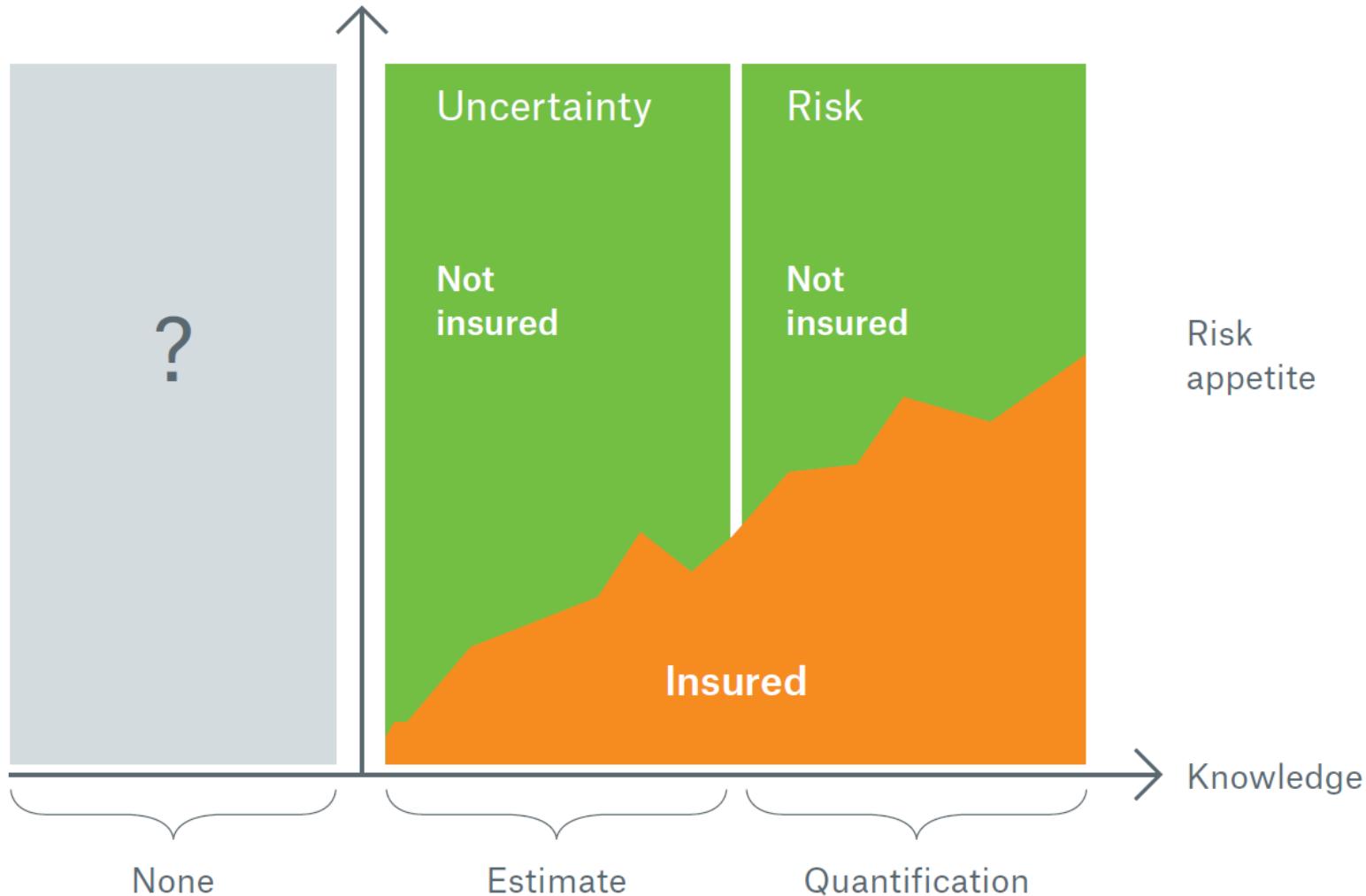
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Frequently used risk management principles:
“False precision and reckless approximation”



Two aspects of the unexpected – risk and uncertainty



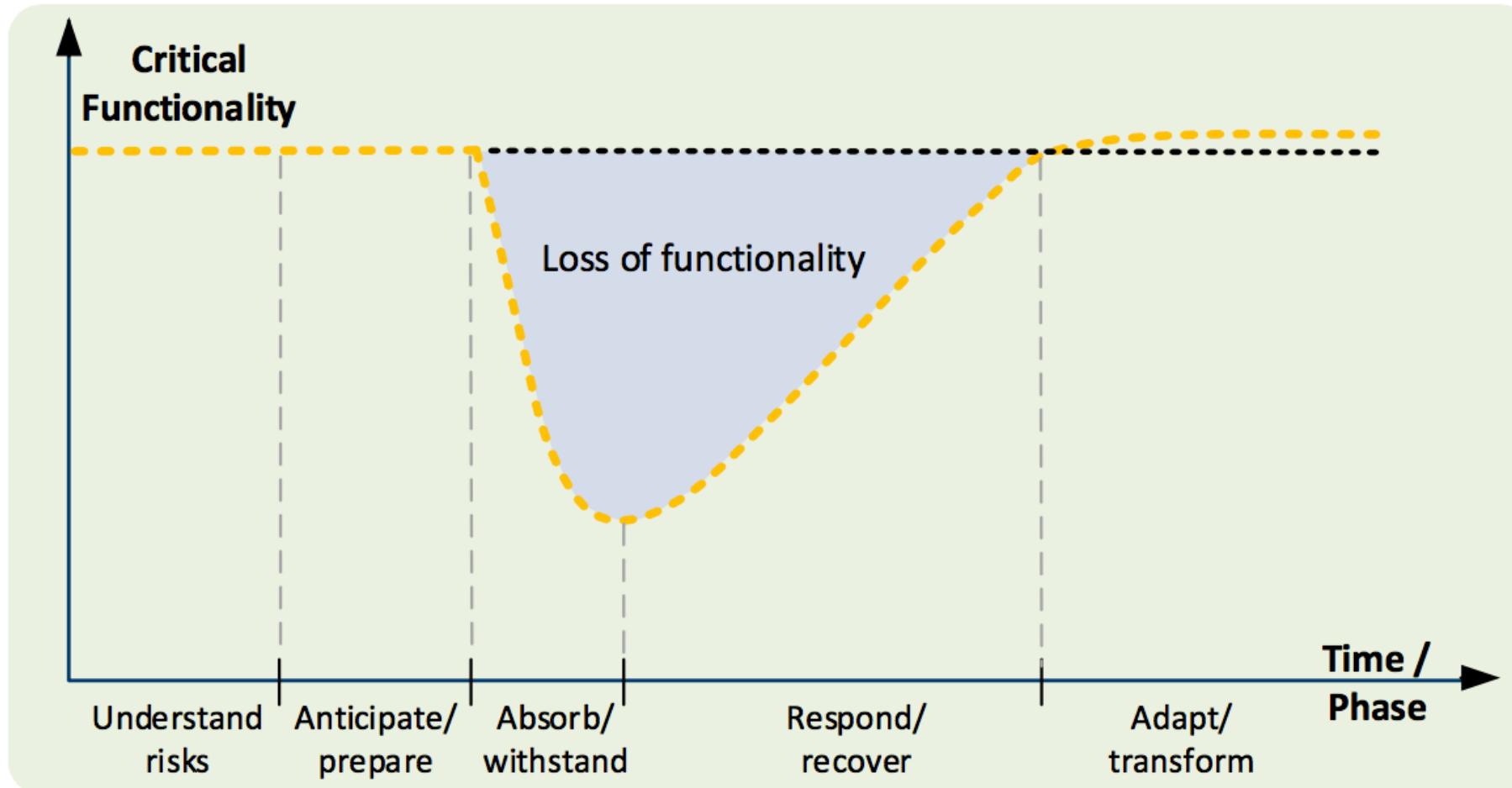
The challenge of critical infrastructure risks



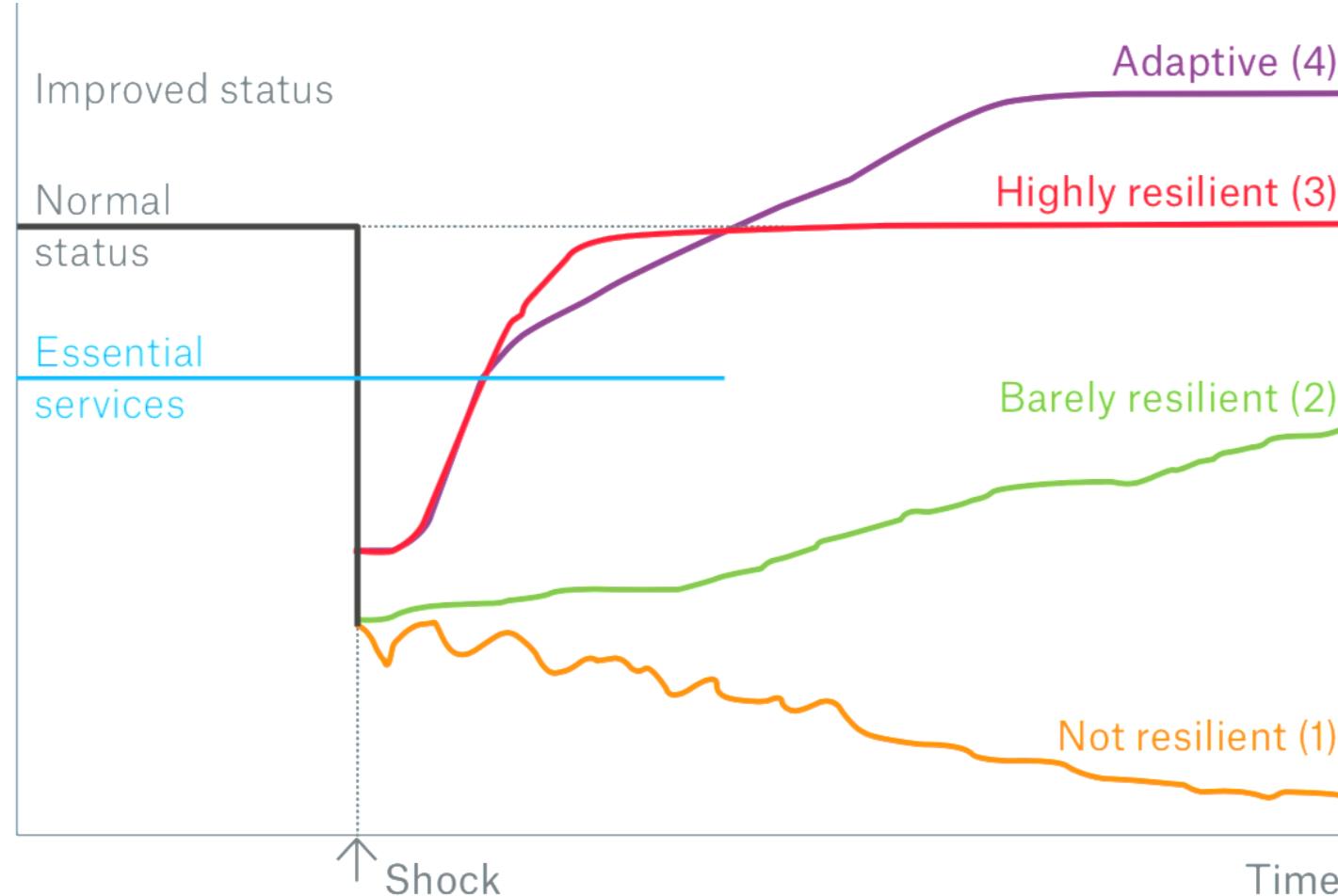
Photo by Marvin Meyer on Unsplash

- Multi-dimensional
 - Technology
 - Society
 - Politics/Regulation
 - Economic
 - Environment
- Connections - both visible and invisible
- Human factors
- Emergence of global effects from local causes
- Both lack and abundance of information and data
- Tipping points and spill-over effects

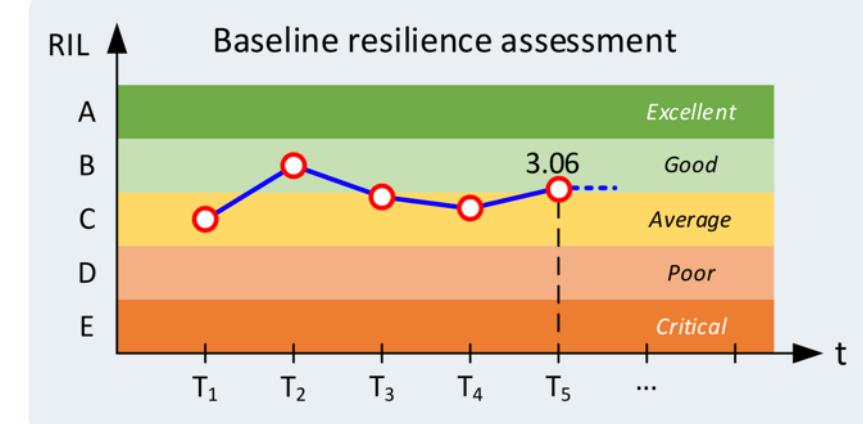
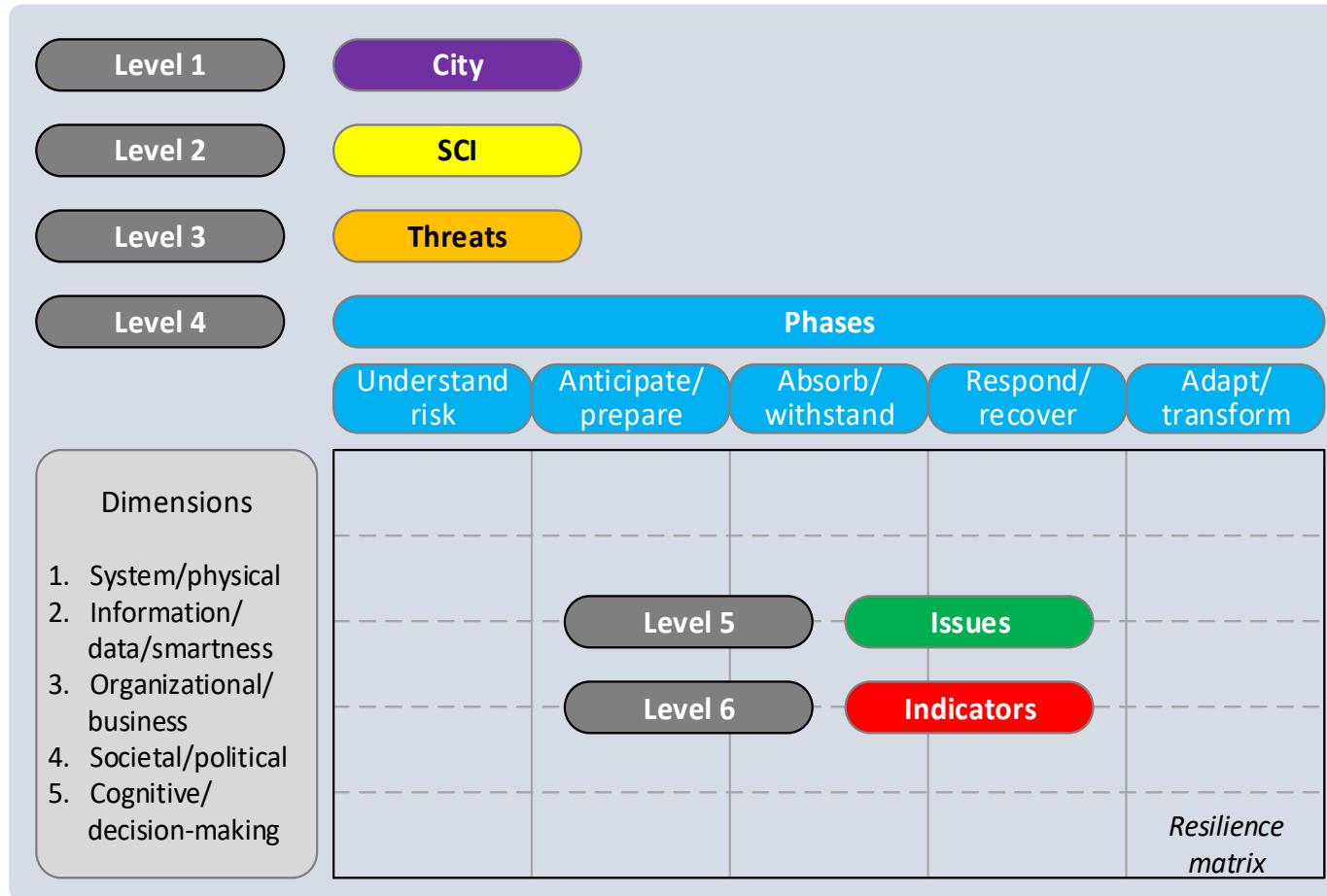
Risk management and the resilience perspective



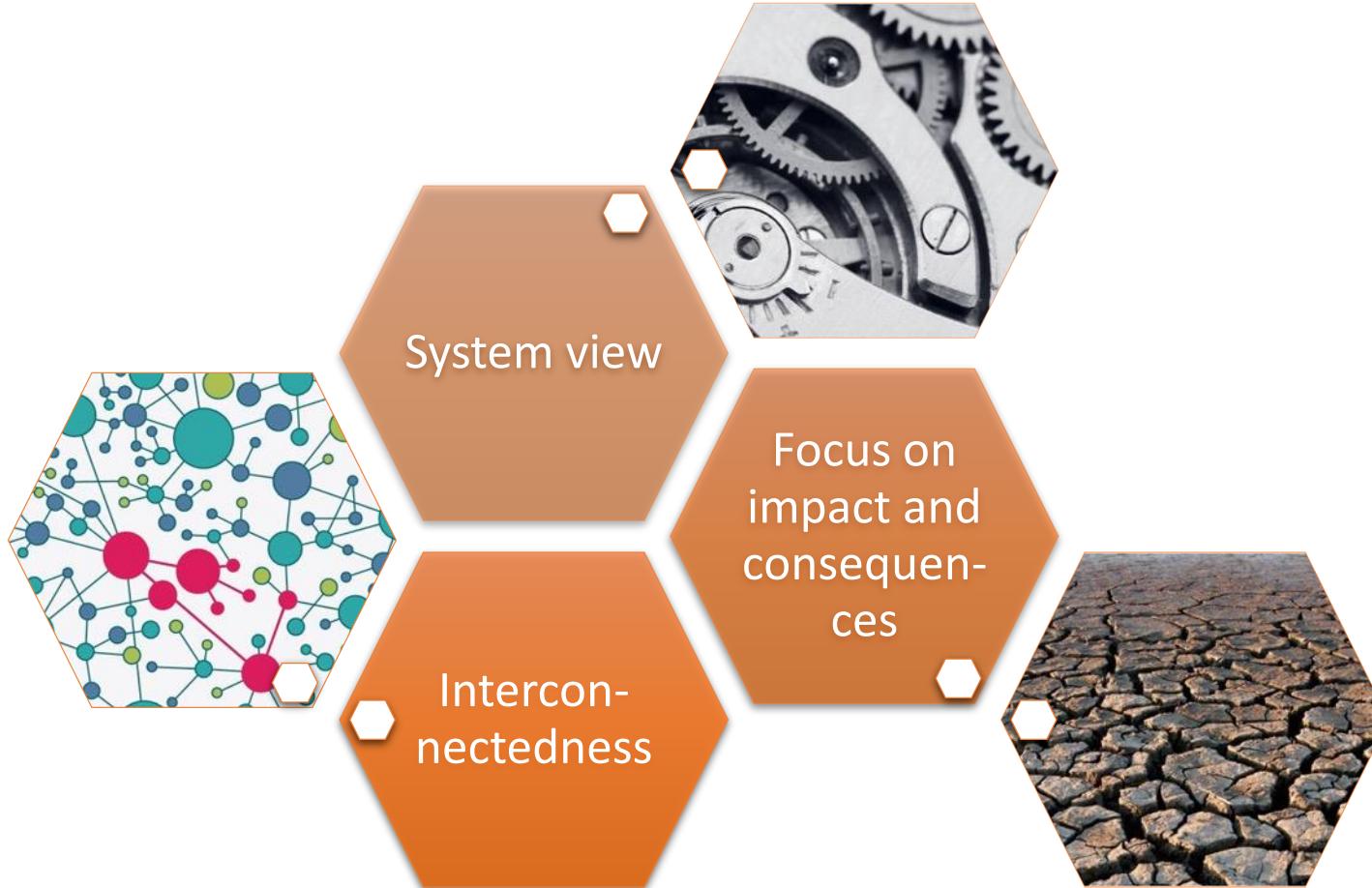
Functionality of systems with different resilience levels



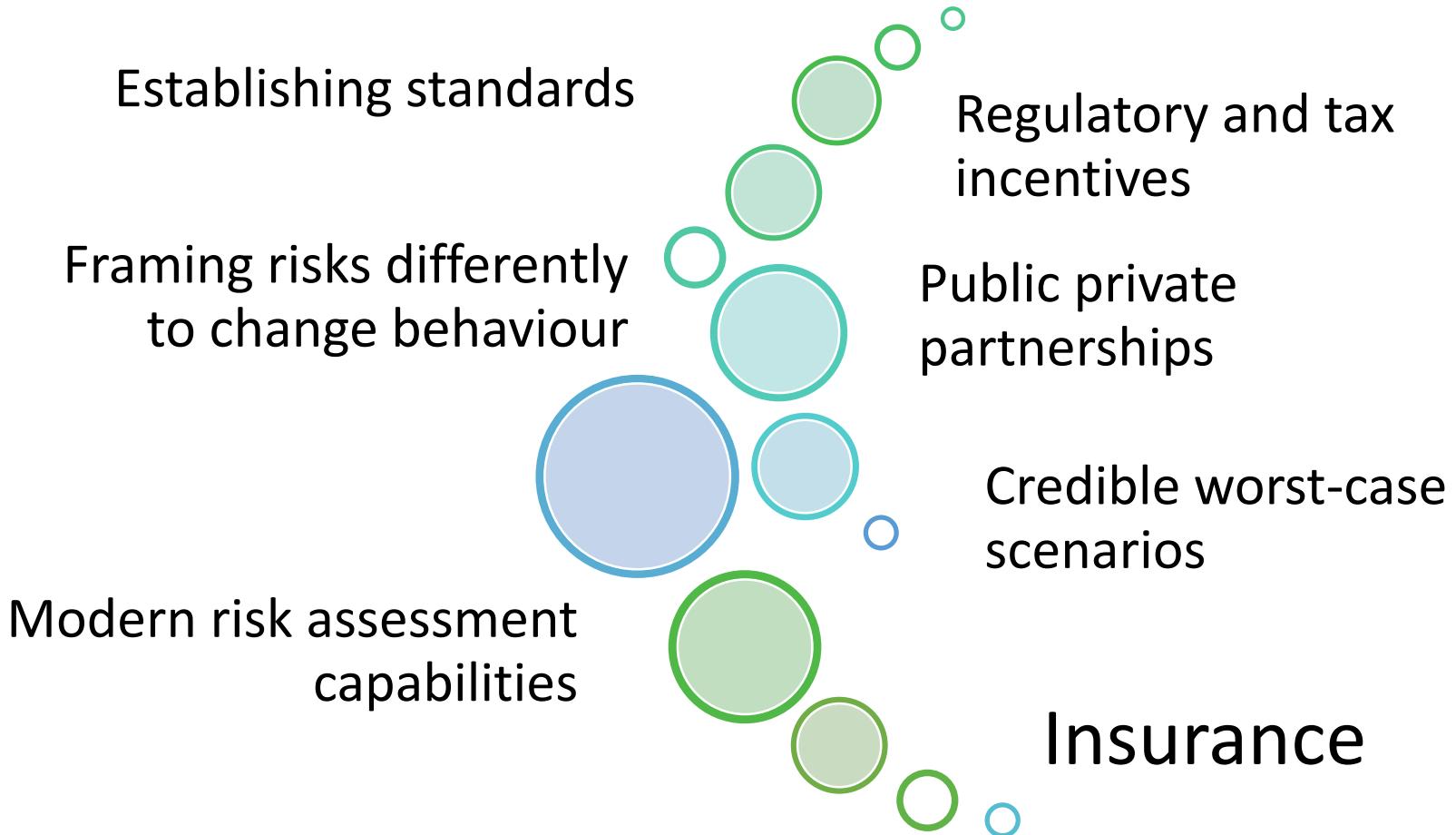
EU-Project SmartResilience – Critical Infrastructure Resilience Assessment Method



Resilience as an adequate answer to the changing risk landscape?



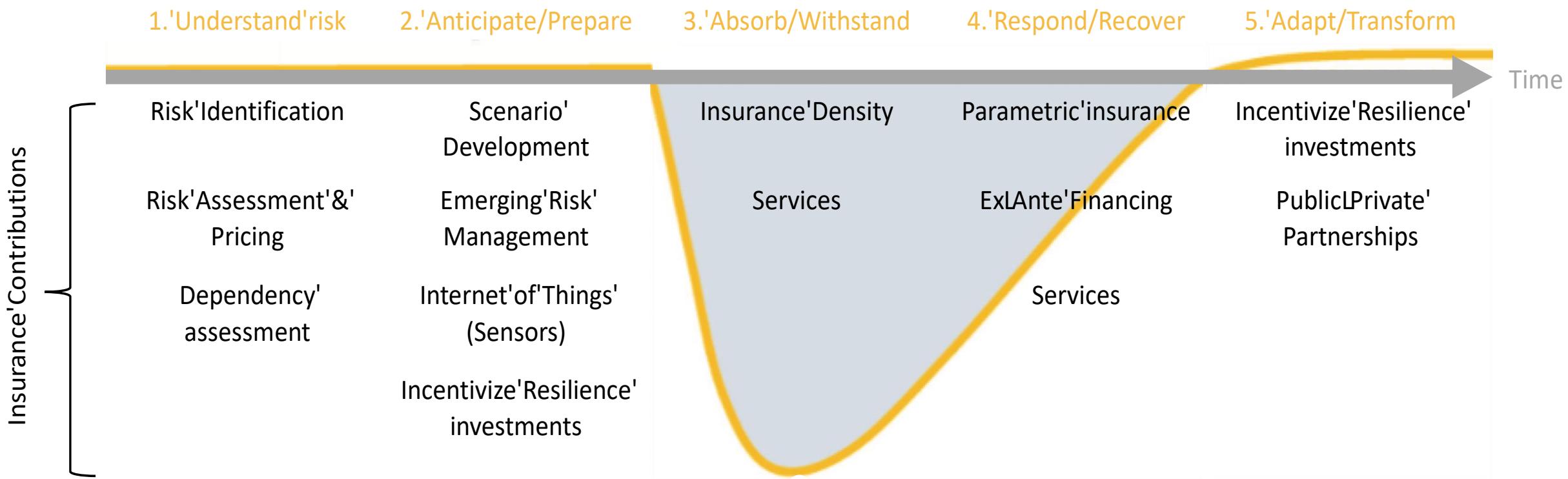
Improving infrastructure resilience through ...



Drivers of resilience in the insurance industry

Operations	Business	Investment	Reputation
<ul style="list-style-type: none">• Assess own resilience and understand systemic risks and accumulation in portfolios	<ul style="list-style-type: none">• Resilience as an opportunity for the insurance industry to offer new products and services to its clients	<ul style="list-style-type: none">• Measurement and mitigation of risks in long-term infrastructure projects creates investment opportunities	<ul style="list-style-type: none">• Resilience is perceived as something positive, in contrast to risk that is perceived negatively

Insurance contributes to resilience – already today



Requirements from insurance perspective

Insurance Need 1: Measure Resilience / Quantification

Insurance Need 2: Assess Portfolio Interdependencies and Systemic Risks

Insurance Need 3: Standardized methods

Insurance Need 4: Independent Rating Implementation

Insurance Need 5: Incentivize Continuous Improvements



Thank you very much!

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RESILIENCE**



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