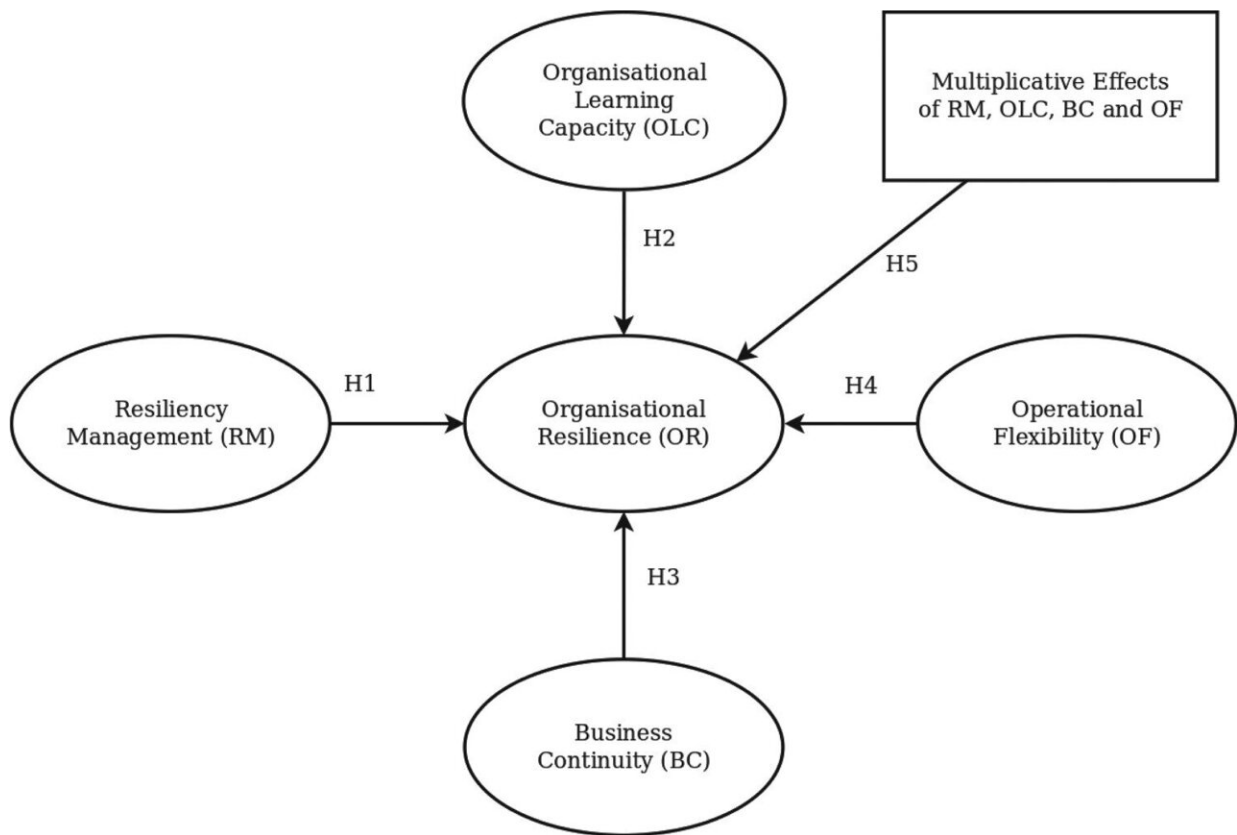


New organizational resilience index to improve supply chain resilience

January 31 2024



Proposed organizational resilience construct model. The diagram shows a model of organizational resilience with four bubbles showing organizational learning capacity, resiliency management, operational flexibility and business continuity all pointing to a central bubble that shows organizational resilience. The arrows from the bubbles are labeled H1, H2, H3 and H4. The multiplicative effects of RM, OLC, BC and OF are in a box with an arrow pointing to organizational resilience labeled H5. Credit: *International Journal of Production Research* (2023). DOI: 10.1080/00207543.2023.2296018

Researchers from the University of Sheffield, led by Professor Lenny Koh, in collaboration with Rolls-Royce have unveiled a comprehensive approach to quantifying and enhancing organizational resilience. In a paper, titled "[Quantifying Organizational Resilience: An Integrated Resource Efficiency View](#)," published in the *International Journal of Production Research*, researchers introduce the Organizational Resilience Index (ORI).

Utilizing the Integrated Resource Efficiency View (IREV) framework, the study identifies four key levers crucial for organizational [resilience](#). The results underscore a strong correlation between a composite index encompassing these levers and heightened organizational resilience. The ORI provides leaders and [decision-makers](#) with a practical [tool](#) to assess and improve resilience effectively.

In tandem with this research, a cutting-edge tool has been developed in partnership with Rolls-Royce, aimed at bolstering resilience and efficiency in high-value manufacturing industries such as aerospace, automotive, and rail.

The tool, born out of Project FPSCRS (Future Proof Supply Chain Resilience and Security), establishes a Resilience Index Scorecard System hosted online, offering a quantitative scale for resilience measurement and qualitative insights.

Already implemented at Rolls-Royce, the tool, co-developed by industry leaders and academic experts, has demonstrated a significant increase in performance. Professor Lenny Koh expressed excitement about the achieved milestones, emphasizing progress to the next phase of collaboration with Rolls-Royce.

The University of Sheffield, through the Sheffield University Management School (SUMS), is engaged in multiple research studies with Rolls-Royce focusing on resilience within the [supply chain](#). The first phase concentrates on Rolls-Royce's internal supply chain, with the aim of extending resilience measurement methods to the broader supply chain.

Given the global shocks affecting supply chains, from the COVID pandemic to geopolitical events, the need for resilience alongside [risk management](#) is more critical than ever.

"We are privileged to have co-championed this pioneering work on resilience measurement with Rolls-Royce which have been proven to have led to tangible positive outcomes and significant reach and global impact. Disruptions are the new norm, so we forecast a significant demand for resilience measurement. We look forward to supporting decision makers and leaders using our FPSCRS and ORI methodology and tool for resilience measurement in order to build a resilient system and future," says Professor Lenny Koh.

Peter Ralph, head of security and resilience, Rolls-Royce plc, said, "Organizational resilience is the foundation for supply chain resilience. The FPSCRS and ORI methodology and tool have supported Rolls-Royce and pioneered industry standards on resilience measurement to future proof against disruptions and risks, while improving integrated resource efficiency, resiliency and performance."

"This pioneering work has shaped organizational improvement which led to excellent performance, and support management leadership in complex and advanced manufacturing industry as well as wider sectors globally towards resilience measurement."

More information: S.C. Lenny Koh et al, Quantifying organisational

resilience: an integrated resource efficiency view, *International Journal of Production Research* (2023). [DOI: 10.1080/00207543.2023.2296018](https://doi.org/10.1080/00207543.2023.2296018)

Provided by University of Sheffield

Citation: New organizational resilience index to improve supply chain resilience (2024, January 31) retrieved 27 April 2024 from <https://phys.org/news/2024-01-organizational-resilience-index-chain.html>

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