Generative AI becoming a concern for supply chain managers

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Lehigh's new, 74,000-square-foot Business Innovation Building located on East Packer Avenue. Credit: Christa Neu/Lehigh University

The results of the Lehigh Business Supply Chain Risk Management
Index for the second quarter of 2024 show cybersecurity is the biggest risk on supply chain managers' minds for the fifth straight quarter, increasing more than 5.5 points from last quarter.

"This is a significant jump," said Zach G. Zacharia, associate professor of supply chain management and director of the Center for Supply Chain Research at Lehigh. "The supply chain professionals are apprehensive of cyber-attacks, data corruption, data theft, system viruses and especially how generative AI might increase their companies' vulnerability."

"Generative AI seems to also account for technology risk moving into second place in the LRMI," said Zacharia. "This is the second quarter in a row that technology risk has peaked and it's at its highest ranking in the three years this report has been published."

Government intervention is the third highest risk, which could be related to apprehension about new regulations and geopolitical uncertainty with the Red Sea crisis and wars in Ukraine and the Middle East, explained Zacharia. Supplier risk jumped up to the fourth highest risk with worries about single/sole source suppliers, supplier quality issues and price volatility, according to the LRMI.

The average total risk index increased slightly, compared to last quarter, but remains low compared to the average risk historically.

The LRMI was launched in 2020 by the Center for Supply Chain Research at Lehigh and the Council of Supply Chain Management Professionals in order to rank 10 broad categories of supply chain risks. Zacharia says that the LRMI allows executives and supply chain managers to look ahead and prepare for risks that will become important in planning for the next quarter. The risk categories are cybersecurity
and data, customer, economic, environmental, government intervention, operational, quality, supplier, technological and transportation disruption.

A unique feature of the LRMI is the opportunity to compare across all 10 risk categories directly against each other, instead of scoring each individually. When supply chain professionals take that approach, the top four risks for the second quarter of 2024 are cybersecurity, economics, transportation disruption and customer.

Another important aspect of the LRMI is that the quarterly reports include a sampling of candid comments from supply chain managers about each risk category that takes you beyond the numbers. Comments from the new second quarter report include:

- As the world economy gets worse and AI gets stronger, cybersecurity risks will increase.
- There aren't enough examples of arrest and prosecution to deter cyber criminals, but there's a lot of press about breaches, ransoms and fraud.
- Technology is always a losing proposition. Gaining returns from the cost is becoming harder.
- The government's desire to "go green" is adding costs and unrealistic burdens to the trucking industry.
- The demands of the supply-base for increased quality, improved delivery, and lower costs does not align with the macroeconomics of labor and operating capacity. There are too few people doing too much, introducing increased opportunities for error.
- Q2 will see some snugged-up capacity. Still easy to cover freight. Many brokers and carriers have closed and continue to close. Less supply equals tighter capacity.

LRMI reports are available every quarter in March, June, September and
December.

More information: To get the latest report for free and to find out how supply chain managers can take the LRMI survey for the next quarter go to: business.lehigh.edu/LRMI.

Provided by Lehigh University

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