Worldwide Adoption of 3G Technology and Inventory Stockpiling

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Abstract: We find that the global adoption of third-generation mobile broadband (3G) networks is followed by a significant reduction in inventory stockpiling. This effect is driven by managers' ability to access customer feedback and real-time information through mobile internet, enabling more accurate demand forecasting and efficient inventory management. To validate managerial learning as an underlying mechanism, we document a significant increase in the likelihood, frequency, and accuracy of management earnings forecasts following 3G adoption. Furthermore, the impact of 3G adoption on inventory management efficiency is more pronounced for firms facing higher demand uncertainty. Robustness checks, including employing alternative measures of social media penetration and analyses using the U.S sample, further support our findings. Overall, our results highlight that 3G networks enhance managers assimilating information for demand forecasting, and thus increase inventory management efficiency.