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SURVIVING AND THRIVING IN A COVID-19 ECONOMY

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ABSTRACT

IMPACTS OF BLOCK CHAIN TRACK AND TRACE ON CONSUMER PURCHASES: A NATURAL EXPERIMENT

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Blockchain is one of the major emerging technology trends today. While the block chain is widely touted to have the potential to fundamentally transform business processes and transactions in many industries, the real impacts of the blockchain have not been clearly demonstrated. In the recent years, firms have started to use blockchain technologies in supply chain processes, example applications including track and trace, and food safety. In B2C ecommerce, Blockchain track and trace (BCT) information is displayed on the product page to inform consumers that the product they are viewing is tracked and traced using blockchain technologies. Using transaction data from a leading global e-retailer, we design a natural experiment to estimate the effect of BCT on customer purchases of food and nutrition products. Our analyses suggest that products traced by block chain technologies received significantly more orders from new customers than comparable products not traced by block chain technologies. Further, products with unclear consumer reviews (i.e., those with neither consistently high nor consistently low consumer reviews) experienced greater sales increase from new customers. Our study shows that the benefits of blockchain technologies can go beyond the supply chain processes to directly boost consumer purchases. Our findings regarding the types of products that can benefit greatly from BCT directly inform e-retailers and their supply chain partners in choosing the right product supply chain to deploy BCT and signal the BCT to consumers.

