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## Walmart's Blockchain Quest: Integrating New Technology into a Complex Supply Chain

Frederick Durmot<sup>i</sup> paced around his office. It was late 2017 and Walmart's director of food safety was preparing for a speech. In one hand he held flashcards with talking points. In the other he gripped a steaming cup of coffee. Durmot's speech to Walmart's food safety department and supply chain team was in less than one hour, and he still had lingering questions about the company's new blockchain initiative with IBM.

The year had been truly exemplary for Durmot and his Walmart food safety colleagues. They had entered into two pilot programs using IBM's blockchain technology to trace pork and imported animal protein in China and better understand their sliced mango supply chain. As 2017 came to a close, the pilot programs had been completed and Durmot had been impressed with the results and findings. He was convinced expanding the programs into full-blown production and collaborating with other suppliers was the right path. But he knew some of his team remained skeptical. Many were resistant to the complex new blockchain technology, which had been hampered by hardware and connectivity issues. Blockchain requires internet access, and many of Walmart's rural suppliers did not have easily accessible wireless connections. Blockchain would also demand enhanced tracking, data quality adherence, and software capabilities. While suppliers were increasingly likely to have smart devices and internet, blockchain's advanced technology requirements still posed a significant hurdle.

Transparency was another primary issue. Durmot believed Walmart should be up-front about its supply chain to encourage trust among its suppliers and customers, but he knew the strategy carried risks. While many in the food industry outwardly lauded collaboration through data sharing and transparency, in practice they were concerned about sharing sensitive information and revealing industry secrets. Durmot himself was nervous that blockchain technology and increased supply chain interconnectivity could unearth damaging information about Walmart's suppliers and reflect poorly on the company.

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<sup>i</sup> Frederick Durmot is a fictional character.

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