From Policy to Operation: Exploring the Drivers and Success Factors of AI-enabled Medical Drone Adoption in Public Healthcare Supply Chain

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Abstract

The rise of AI is viewed as the next important technology in human history that would serve as a driver for sustainable development. Accordingly, several organizations have incorporated AI into their operations – including healthcare, hence, attracting extant literature to AI discussions. However, AI literature in healthcare has focused on medical diagnosis, operations, and prescriptions – to the neglect of supply chain (SC). This study bridges this knowledge gap by exploring the drivers and success factors of AI-enabled medical drones' adoption in public healthcare SC. Drawing on data from the world's largest medical drone programme in Ghana, we find that the need to make the public healthcare SC efficient with the aim of improving the socio-economic life of the citizens is the main driver of the policy adoption. Several success factors are identified and categorized into three phases – policy, project, and operation. Long-term policy and operating sustainability are delineated.

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