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Sustainable adoption of technology: A people-centric approach within the South African mining industry

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**Abstract**

Understanding and clarifying the critical success factors (CSFs) that either support or inhibit the sustainable adoption of technological solutions, is required to improve the maturity of change leadership in the South African mining industry's (SAMI) modernisation journey. Technology is seen as an enabler for solving the everyday problems of multiple stakeholders within the mining value chain. Previous work has been conducted in the Successful Application of Technologies Centred Around People (SATCAP) programme of the Mandela Mining Precinct and at the Gordon Institute of Business Science towards demystifying these CSFs, which leads to the successful design, selection and diffusion of technologies within the context of modernisation. The technologies deployed in the SAMI's operations must be purposeful and ready to serve the industry's multiple stakeholders' needs and realities. The diffusion process should be people-centric, facilitating upskilling and reskilling, as skills transformation is required for the sustainable adoption of technological solutions. Mature change leadership is needed and practised intentionally and systemically; this approach will ensure that the diffused technologies achieve their purpose, namely value creation. Considering the CSFs within a people-centric change approach will accelerate the SAMI's modernisation journey, and leverage technology as an enabler of change. The sustainable adoption and diffusion of purposeful technologies as the means will accelerate the SAMI's various stakeholders into a modernised world of work.