

## Industry X.0 defines a new roadmap for mining

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The mining industry, both locally and abroad, has endured a tumultuous period due to commodity price volatility, rising input costs, and shifting operational requirements. Today, miners look to create greater efficiencies to ensure their sustainability and profitability. More specifically in the South African context, historical inequality has created a difficult labour relations environment and the industry has seen multiple large-scale accidents in the last few years.

To address the prevailing challenges and meet their growth mandate, many mining companies around the world have turned to digital technologies to decrease costs, pivot operational processes, or forge new revenue streams to drive growth and unlock lasting value.

According to Accenture research, 46% of business leaders believe digital is the biggest factor in driving innovation. Under the broad banner of Industry 4.0, businesses are striving to become increasingly automated, allowing the asset-intensive industry to reinvent itself. The confluence of Cloud, the Internet of Things (IoT) and Artificial Intelligence has led to the emergence of pilots and proof of concepts (POC's) to try and unlock the trapped value in the Mining Value Chain. The resulting chasm between POC's and Integrated Operations is preventing mining companies from realising these trapped values.

Miners need to look beyond the siloed implementation of Industry 4.0 technologies, to create efficiencies by adding smart, connected, living and learning experiences to unlock value. The key to bridging this chasm is to underpin the technology implementations with strong people and process changes. Even though technologies are maturing at a rapid rate, the application of these technologies to existing and new business processes and the adoption from employees will define success or failure.

The Accenture Industry X.0 framework works to assist mining companies to not only implement these maturing technologies but looks to rotate the core business to the new digital way of operating. Industry X.0 businesses achieve this by incorporating Industry 4.0 technologies to create core operational efficiencies and ensure that physical machines and software systems are synchronised to unlock previously-unseen cost efficiencies, which also helps to drive up investment capacity. The synchronisation of these machines and software provides the foundation for employees to drive up productivity by adapting to their new business processes.

Underpinning our Industry X.0 framework are our 6 pillars to assist our clients in transforming to the new:

- **Transform the Core** – Digitise and integrate engineering, production, and support for new efficiencies.
- **Focus on Experience and Outcomes** – Create hyper-personalised value to differentiate the employee experience to ensure rapid adoption.
- **Re-architecture the new ecosystem** – Assemble and refresh the right partners to drive new innovations and new capabilities.
- **Innovate new business models** – Invent new revenue streams for new sources of value.
- **Build the workforce** – Source, enable, upskill and protect the next generation of talent.
- **Manage the wise pivots** - Continually balance investment and resource allocation between the core and the new.

Becoming an Industry X.0 business is a journey. It starts by taking steps to become smart, connected, living and learning. It then culminates in the digital reinvention of industry. Companies that embark on this journey today will emerge as the digital winners of tomorrow.