**Taking ownership of our future: the case for cooperative research and technology development in the mining industry**

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***Abstract***

Experience as a technology developer and educator within the mining industry leads to the observation that we lack adequate sharing of knowledge and technology. An aspect of this is the desire to develop a competitive edge through knowledge ownership. In an environment where the commodity price is externally determined, each mine is competing less with other mines than with maintaining a profit margin based off capital investment, ore grade, production costs, and recovery for an ever-changing market value of the metals and minerals that are produced. Ever-improving capability across the industry is required to succeed in this scenario, or unexpected new players may displace our traditional mining companies. Pathways to the cooperative sharing and progressive building of knowledge within the industry are explored as a basis to lifting the technology capability at ground level in mining.

Progressive productivity improvement is an important aspect of increasing profitability of business, but this area is inadequately shared, and often locked up in consulting company know-how to provide them with a business differentiator. Sharing of experience, failures as well as successes, is important in enabling improvements across the industry, with industry conferences and associated publications being an important pathway. Education integrated with process consulting offers another pathway to uplifting skills and overall operating baseline. Cooperative development of expensive and risky technology can provide a viable path to accelerating and disseminating the new technologies our industry desperately needs to address the mounting challenges of maintaining a profitable business while responsibly providing the essential resources to society. Forming global linkages of research groups and specialist consultants that are actively supported by the industry builds a platform that can provide reliable expert support to the industry. The author is pursuing all these avenues and will share his experiences and positive view of our future potential rapid evolution to a 21st century industry.