## New business models for mining industries

Joan Magretta, now a Senior Institute Associate at Harvard Business School's Institute for Strategy and Competitiveness explains a business model as having two parts: "Part one includes all the activities associated with making something: designing it, purchasing raw materials, producing, manufacturing, and so on. Part two includes all the activities associated with selling something: finding and reaching customers, transacting a sale, distributing the product, extracting as much value as possible or delivering the service. A new business model may turn on designing a new product for an unmet need or on a process innovation. That is it may be new in either end."

In the mining sector, apparently, there has been little innovation in the business model. However, it is noted that companies have employed a range of innovative business strategies to manage societal expectations, avoid resource nationalism, and secure a "social license" to operate with enhanced value and cyclical profits.

Social license as a threat and understanding unexploited value chain propositions have brought in the global mining sector one business model under trial: local procurement the purchase of goods and services used in the mining process from suppliers within the region — as an important strategy to broaden the economic impacts of the mining activity. Newmont, which owns 51.3 per cent of Yanacocha, the largest gold mine in Peru, created a programme to strengthen small, medium enterprise (SMEs) including transportation, maintenance, and construction companies located within the region of the mine. As a result of the collaborative partnership, SMEs bidding for contracts with the mine increased sales by over 60 per cent, and 6000 new jobs were created within the region. In addition, Newmont decreased costs in critical areas like maintenance, transportation, and other support services by 10-15 per cent. Similar efforts by BHP and Codelco, at the end of 2012, included 36 suppliers with a combined total of more than 5000 employees and \$400 million in sales. These suppliers have benefited from new revenue generation opportunities, increased efficiency and innovation, and greater access to finance and diversified markets. There have also been benefits for the mining companies with BHP reporting approximately \$121 million in direct savings in the cost of inputs, goods, and services.

Another uncharted, yet significant value chain activity can happen at the middle or after completion of mining activities. Consider how a mining enterprise can produce value chain activities that can both earn it a name as well as a reasonable profit. Western Coalfields Limited, a subsidiary of Coal India tried selling bottledwater, after treatment of the water in the mines, however, without a strong business model..

Another realization must dawn to the mining companies – to progress from indifferent environment protection to biodiversity protection as a value proposition. The value chain activities can be biodiversity offsets, regeneration of forests, creeks, water bodies and reinstallation of dominant top of the pyramid species including supportive floral, faunal, avian and insect species. A stewardship in this direction will provide economic and social benefits. The business model from the captains of the industry awaits!

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**References and suggested reading:** 1. Scott Dunbar W., et al. Mining needs new business models, The Extractive Industries and Society, Available online 17 August 2019 and 2. Ananth Seshan and B.K. Gorain, Chapter, "An Integrated Mining and Metallurgical Enterprise Enabling Continuous Process Optimization, Innovative Process Development in Metallurgical Industry, 2016.