

eMarket Services makes it easier for you to use
electronic marketplaces for international business

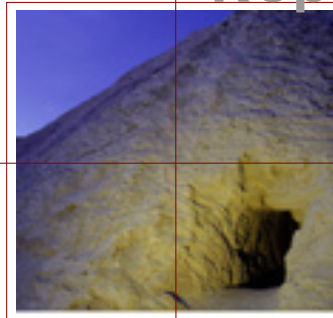
THE GLOBAL MINING INDUSTRY

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Report



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Abstract

A recent report by PWC indicates that the global mining industry is in good shape. In 2004 revenue increased by 39% to US\$184 billion and net profit increased for the second year consecutively by 15% up from 10% in 2003.

The number and value of mergers and acquisitions has also been on the increase since 2001 as mining companies try to maintain future capacity. This M&A activity has led to a consolidation of the industry with the larger companies 'gobbling' up the smaller players.

China's thirst for mineral resources saw its mineral imports reach US\$102 billion in 2003 making it the third largest minerals importer. This growth is expected to increase and continue as China relies on these imports (particularly iron ore, platinum, and nickel) for the supply of its commodities. China's imports of ores and metals have quadrupled from 1995 to 2003.

The Australian Mining Industry

Australia has the world's third largest minerals sector, by value of production, after the US and South Africa. Australia exports minerals and mining equipment, services and technologies.

- A summary of Australian mining;
- Top global producer of bauxite, alumina, diamonds [by volume], ilmenite, rutile and zircon; (ahead of the Democratic Republic of Congo and Botswana).
- Second largest producer of zinc ore (after China).
- Third largest producer of iron ore (after China and Brazil), nickel (after the Russian Federation and Canada) and gold (after South Africa and the USA).
- Fifth largest producer of aluminium (after the USA, Russian Federation, China and Canada) and coal (after China, USA, India and former Soviet Union).
- World's largest resources of low-cost uranium.
- Largest exporter of gold, iron ore and black coal in the world.

E-marketplaces in the Mining Industry

It is understood that e-markets work best for standardised products. If we focus our attention then on the mining industry we find that generally there are five principal types

1. New capital equipment
2. Used capital equipment
3. Consumables
4. Professional services
5. Support services.

From the five categories above really only Consumables and to lesser extent Capital equipment fit the 'standardised products' mould. For the others, there is an additional involvement or 'value-add' that does not fit neatly within an automated e-business solution such as an e-market, nor is the purchasing decision dictated by price.

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It has been demonstrated by PriceTrak across a range of mining categories that there is no simple relationship between price and volume, with sometimes the biggest buyers paying the higher prices. Another trend counter to e-marketplace model is the devolution or decentralisation of purchasing. PriceTrak in 2003 identified that outside commoditised consumables factors such as engineering preference and value add services are influencing purchasing decisions more than prices. But a recent interview with a West Australian supplier to the mining industry, Hofmann Engineering, indicates that their success/failure with buyers via e-marketplaces has been determined by price competitiveness.

For the mining industry, Quadrem is by the far the most significant e-marketplace. Quadrem was established in 2000 by the world's largest minerals companies including BHP, Rio Tinto and Newmont and continues to thrive today while other large vertical e-marketplaces have closed.

The role of an e-marketplace in the Mining industry

The mining and minerals industry is very capital intensive with hard assets focus (machinery, drills, trucks etc). Ecommerce (e-marketplaces) allows companies to manage the usage, maintenance, and supply of these hard assets by electronically linking suppliers to the mining industry into the buyers' maintenance management and ERP systems, automating the parts ordering process.

As Pierre Mitchell, VP Research AMR states;

"They (e-marketplaces) used to define themselves as a destination for trade. What they are doing now is providing hosted applications and content and connectivity and they allow a buyer to hook up with many suppliers".

What Pierre Mitchell is describing is e-procurement, of which an e-marketplace is one component. Quadrem has survived and even prospered because it is offering an integrated procurement approach. According to the Quadrem website, reverse auctions now barely make up 5% of its total business.

E-procurement brings economies of scope to the mining industry across a wide range of operations from being able to standardise equipment across a company's operations and benefit from the central procurement of that equipment, from better coordination of shipping and marketing activities, from the availability of opportunities to exploit geographical diversification, and from being able to share back-office services amongst several operations. Companies can make the whole add up to more than the sum of parts, leveraging the entire value chain through from supplier to customer.

According to McKinsey the speed with which an electronic marketplace develops for any industry depends on the inefficiency of transactions and the sophistication of buyers. The mining industry is one where traditionally the transaction efficiency is on the low side where the sophistication of buyers is high.

An example is Rio Tinto who has developed an integrated procurement set-up with a supplier using Quadrem to connect their back-end systems. A result of this is the synchronisation of electronic catalogue data with updates occurring daily instead of monthly, over 6000 line items. Other benefits include;

1. Orders are filled in the supplier's warehouse within moments of the order coming from Rio Tinto
2. 90% of the orders are processed by the supplier without any manual intervention (benefit is improved order accuracy)
3. Shift in focus in buyer/supplier relationship away from order fulfilment to more strategic and value add issues.

The large companies may set up contracts with key suppliers for consumables or commodities but ensuring that the hundreds of employees across different business units in several operations to follow the contract and purchase from the accredited suppliers can be difficult. E-procurement tools and processes can reduce such off-contract spending by up to 64%.

Looking again at Quadrem, the mining e-marketplace has come along way. In June 2001 Quadrem has signed up 198 suppliers and had established market hubs in Australia, South Africa, Brazil and Canada. The revenue throughput was around \$1 billion. The Quadrem of today has established operations in Africa, Asia, Australia, Europe, Middle East, North America, and South America. Quadrem is the Global e-marketplace for the mining industry. It connects more than 24,500 suppliers and 422 buyers, handles more than \$6.8 billion in orders, which equates to about 350,000 orders, invoices and shipping notes per month.

But, as is often the case, the reality for the small to medium sized companies paints a different picture altogether. Read the eMarket Services case study on Western Australian engineering company Hofmann Engineering, a supplier to Rio Tinto, titled 'A snapshot of an Australian company. What do small suppliers really think when their decision to join an e-marketplace is driven by their buyers?' Their viewpoint is very different indeed.

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