



Goldcorp

JOHN BESSANT
Managing Innovation

Goldcorp

A fascinating story about turning conventional wisdom on its head and how a business profited from utilizing the brain-trust of the whole world.

In January 1848, a work crew at John Sutter's mill, near Sacramento, California, came across a few nuggets of gold. Before long, prospectors arrived there seeking instant riches. The gold rush was on!

153 years later, another gold rush broke out at an old mine called Red Lake, in northwestern Ontario. This time, the fortune hunters wielded geological-modelling software and database mining tools rather than picks and shovels. The big winners were from Australia, and they had never even seen the mine.

Rob McEwen, chairman and CEO of Goldcorp Inc., based in Toronto, had triggered the gold rush by issuing an extraordinary challenge to the world's geologists: We'll show you all of our data on the Red Lake mine online if you tell us where we're likely to find the next 6 million ounces of gold. The prize was a total of \$575,000, with a top award of \$105,000.

The mining community was shocked. "We've seen very large data sets from government surveys online," says Nick Archibald, managing director of Fractal Graphics, the winning organization from Perth, Australia. "But for a company to post that information and say, 'Here I am, warts and all,' is quite unusual indeed."

McEwen knew that the contest, which he called the Goldcorp Challenge, entailed big risks. For one thing, it exposed the company to a hostile-takeover bid. But the risks of continuing to do things the old way were even greater.

McEwen had one big advantage over his slow-footed competitors: He wasn't a miner and he didn't think like a miner. So he wasn't constrained by a miner's conventional wisdom.

As a young man, McEwan went to work for Merrill Lynch, following his father into the investment business. But his father also had a fascination with gold, and McEwen grew up hearing tales of miners, prospectors, and grubstakes at the dinner table. Soon he was bitten by the gold bug too, and he hammered out a template of what he thought a 21st-century gold-mining company should look like. In 1989, he stepped into a takeover battle and emerged as majority owner of an old and underperforming mine in Ontario.

It was hardly a dream come true. The gold market was depressed. The mine's operating costs were high. The miners went on strike. McEwen even got a death threat. But the new owner knew that the mine had potential. "The Red Lake gold district had 2 operating gold mines and 13 former mines that had produced more than 18 million ounces combined," he says. "The mine next door had produced about 10 million ounces. Ours had produced only 3 million."

McEwen believed that the high-grade ore that ran through the neighboring mine was present in parts of the 55,000-acre Red Lake stake — if only he could find it. His strategy began to take shape at a seminar at MIT in 1999. Company presidents from around the world had come there to learn about advances in

technology. Eventually, the group's attention turned to the Linux operating system and the open-source revolution. "I said, 'Open-source code! That's what I want!'" McEwen recalls.

His reasoning: If he could attract the attention of world-class talent to the problem of finding more gold in Red Lake, just as Linux managed to attract world-class programmers to the cause of better software, he could tap into thousands of minds that he wouldn't normally have access to. He could also speed up exploration and improve his odds of discovery.

At first, Goldcorp's geologists were appalled at the idea of exposing their super-secret data to the world. It was totally unconventional. But in March 2000, at an industry meeting, McEwen unveiled the Goldcorp Challenge. The external response was immediate. More than 1,400 scientists, engineers, and geologists from 50 countries downloaded the company's data and started their virtual exploration. When the entries came in, the panel of five judges was astonished by the creativity of the submissions. The top winner was a collaboration by two groups in Australia: Fractal Graphics, in Perth, and Taylor Wall & Associates, in Brisbane, which together had developed a powerful 3-D graphical depiction of the mine.



For McEwen, the contest itself was a gold mine. "We have drilled four of the winners' top five targets and have hit on all four," he says. "But what's really important is that from a remote site, the winners were able to analyze a database and generate targets without ever visiting the property. It's clear that this is part of the future."

Nick Archibald knew that winning this challenge would give a boost to his own hopes for expansion funds. The publicity has boosted the firm's business. Archibald says "It would have taken us years to get the recognition in North America that this project gave us overnight."

Between the new high-grade discoveries and the mine's modernized facilities, Red Lake is performing along the lines that McEwen had envisioned. In 1996, Red Lake was producing at an annual rate of 53,000 ounces at \$360 an ounce. By 2001, the mine was producing 504,000 ounces at \$59 an ounce. The grade of the ore at McEwen's mine is extraordinarily high, confirming his suspicion that the vein that ran through the neighbouring mine continues through Red Lake.

For McEwen, whose passion for gold is evident from the 82-pound sample rock containing 300 ounces of gold that he displays in his office and the dazzling gold, diamond, and lapis wedding ring that he sports on his finger, it doesn't get much better than this. "When you first pick up a piece of gold and hold it in your hand, when you feel the weight and see the lustre, you feel like this is something special," McEwen says. "It's different than mining coal."

The Challenge has opened the industry's eyes to a new way of doing exploration.

What can we learn from the Goldcorp Case Study?