



Mine over matter:
Micromine technical manager Ivan Zelina has no option but to succeed

Use your resources

A mining software developer dedicates a substantial budget to research and development to keep it at the cutting edge. Report: Jessica Gardner

● Sometimes innovation is born out of necessity. With customers in 90 countries, Perth mining and exploration software developer Micromine is often adding different languages to its products. It signals a focus on innovation that even this task can be done quickly and efficiently.

“The way we develop the software makes it very easy to add a new language,” technical manager Ivan Zelina says. Micromine, he says, simply sends “a bunch of files” to a translator with knowledge of mining and geology.

Software engineers have minimal involvement and the company’s flagship product, also called Micromine, is available in English, Russian, Spanish, Portuguese and simplified Chinese. Other languages are to come.

Founded in 1986, Micromine originally developed software for exploration only. It has expanded its offerings in the past 25 years to cover exploration data collection and analysis, mine design, resource modelling and production optimisation. The company earns 70 per cent of its revenue in overseas markets and has offices in 15 countries, including China, Mongolia,

Kazakhstan and the United States. The overseas offices have presented a challenge for Zelina and his team of 30 software engineers, who update the company’s offerings from Perth.

“Each of the regional office managers will have their own list of things they’d like to get done with the product,” Zelina says. “We have a repository of ideas. There’s hundreds sitting there. The challenge is with every release trying to satisfy all the regions, all the customers.”

Each year Micromine dedicates 30 per cent of its revenue to research and development, a clear indication it is serious about innovation. The company ranked 51 on the *BRW Fast 100* list in 2008 with annual revenue of \$25 million and 68 per cent growth (but declined to release more recent figures).

Heading up the company’s R&D effort, Zelina is thankful for the budget but says it’s not play money. “There’s no option not to succeed,” he says. “We are a privately funded company and when the money is put into it, you cannot have [a lack of results].”

Another challenge is balancing risk with commercialisation. “We never have a single

release which only has risky ideas which might not take off,” Zelina says. “We can’t afford it. Our R&D has to be [able to be] commercialised.”

On the other hand, without some element of risk, innovation falters, Zelina says. “If everything is safe and predictable, then everyone can do it. That’s not what gives you the differentiation of product.”

Commercial success often comes from using ideas sourced in the marketplace, Zelina says.

For example, a suggestion from a large Australian mining client to incorporate a safety monitoring function into Micromine’s Pitram software has been met with appreciation from other clients. When underground miners are working in particularly dangerous situations, they need to call the control office at regular intervals. This information is usually managed through simple Microsoft Excel spreadsheets or even just a whiteboard.

However, through software monitoring, automatic alarms can be raised when a miner hasn’t maintained contact. “Every site we’ve presented it to has said, ‘Oh, we’ve needed this for so many years,’” Zelina says.

To further encourage ideas from the field, a “send feedback” button is available in Micromine software. “[Customers] know we are not shy on receiving and acting on [feedback],” Zelina says.

Keeping his people happy is imperative for maintaining progress, he says. Many of Micromine’s engineers have worked more than a decade with the company and “are carrying all this IP in their head about the product”. **BRW**