

# The answer isn't always $\Phi=25^\circ$ : Why reducing consultant input during downturns can hurt the Australian iron ore industry

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## **ABSTRACT**

This is a discussion piece on the authors experiences as a consultant in mine geological-engineering compared to site-based peers. The title is derived from a factious comment made by a former colleague while “negotiating” the use of staff: “the inter-ramp slope angle of McRae Shale is  $25^\circ$  - there job done, now can I have your staff?” The comment stayed with the author as time and again sound geological engineering showed this was not the case. The end of the iron ore “boom” saw consultant input significantly reduced, but also resulted in redundancies being taken by many miners. Experienced consultants are biding their time gaining experience the east coast of Australia in the tunnelling and infrastructure sector, often applying knowledge gained in the mining sector to the benefit of the tunnels. Conversely while some miners continue in their site-based or project-based roles, others have been forced to find work elsewhere, often in different commodities, while others have taken the opportunity to move to a new sector and have been lost to iron ore forever. Pre-, during- and in some cases post-“boom”, consultants were gifted with time and space. They took the time to concentrate on developing a full understanding of the site geology through desk studies, through summarising the data rather than collecting it, through building the models and experienced a wider range of geological and engineering conditions from visiting many sites. Due to the necessity of maintaining a viable mining operation, daily duties take up the majority of a miners’ time. Additionally, many would reside at one site for years. A huge component of experience and understanding of the Pilbara iron ore geology and engineering resides in the brains-trust of consultants waiting to be called on once more.