

*Keynote Speech*

**The Disruptive Evolution and Influence of Graphical Ventilation Modelling Software**



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**Abstract**

Ventilation modelling software started transitioning from text based mathematical models to graphical scaled representations of mine plans in the early 1990s. The visual approach, driven by advances in computer capabilities and increasing mine complexity, was considered a radical change of methodology at the time but is now used in nearly all commercially available software and has significantly changed the way mine ventilation is educated, designed, communicated and implemented.

This presentation chronicles the early transition period of software to visual interfaces and references some of the early pioneers of the field and their introduction into a rigid industry environment familiar with only using traditional text based simulators. Insights are provided into key software design changes that contributed to the popularity of the new methodology. Lessons learned can potentially be applied to other developing products and to aspiring researchers and entrepreneurs.

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