

## Computer Technology and the Petroleum Geologist, 1999

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Computer technology has evolved so rapidly that it has left some geologists overwhelmed and frustrated. To make matters worse, some of those geologists have horrible memories of early computer mapping (circa 1980) and therefore are reluctant to try the new computer tools. For those that already use a computer to help them conduct geologic work, knowledge of the latest technology is important to them if they want to stay at the cutting edge.

There are three compelling reasons for geologists to use computers in their work: (1) manipulate and process a large volume of data quickly and easily; (2) accommodate changes during the interpretation process; and (3) visualize three-dimensional features. A cost/benefit analysis of using a computer further emphasizes the importance of this new technology to petroleum geologists.

New technology does not necessarily indicate tremendous expense; today's powerful personal computers and dozens of sophisticated PC applications make it affordable for even the smallest company. It is useful to provide an overview of software applications such as mapping, digitizing, and log analysis in terms of capabilities versus cost. For example, geologic-mapping software ranges from \$0 to \$55,000; what is the reason for this vast difference in price?

Geologists interested in getting started in this technology require guidelines for buying or upgrading a computer, sources of software training, and knowledge of the Internet as a tool for accessing data, research, news, and networking.