

Global Geophysical Trends

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Summary

Forces internal and external to the petroleum industry have shaped the direction of the science of geophysics. New ideas and algorithms continue to have an impact, while lower computing costs enable processes that were not economic in the past.

The cost of storage, speed and bandwidth has been falling about on order of magnitude every five years. This technology disruption has provided significant benefits for the petroleum industry.

Computer gaming and medical imaging innovations have lowered the cost and improved the performance of visualization hardware and software. Parallel computing, faster networks and cheaper storage have led to advances in reservoir geophysics, seismic imaging, seismic acquisition and data management. Organizations that understand these trends and capitalize on them will be better prepared to compete in the future.