Oil and gas prices fell in the last half of 2008, and they remain low while exploration costs remain high, forcing operators to do more work with the same number, or fewer people, while they expect better performance in finding oil and gas and in field development.

Software companies listened to operators, assessed the need and they're coming up with answers that make sense. Paradigm, for example, introduced its Rock & Fluid Canvas 2009 | Epos 4.0 at the American Association of Petroleum Geologists annual conference and exhibition.

Simply, the company has world-class software with a long history of industry acceptance, software such as VoxelGeo and Geolog. Rock & Fluid Canvas is the integrated database management system that brings all of a company's exploration, drilling and production information into a common integrated package to let interpreters address challenges more easily and more effectively.

High exploration costs and a continuing need to replace reserves force companies to wring more production from their assets, to make the most of facilities in place while leaving a small environmental footprint, said James Lamb, Paradigm's executive vice president of the Americas.

"From us, they want the technology to let them do more for less; where to explore, how is the most efficient way to explore," he said.

Also operators are looking at the next generation of production, unconventional resources and hydrocarbons in hostile environments.

At the same time, the manpower demographics of the industry are changing as key technical people remain hard to find, and operators are looking for the tools that will take them successfully through the next 10 to 15 years, he added.

That equates to multiple disciplines working smoothly together through an integrated work flow that involves high-technology software, access to information anywhere in the world and the ability to distribute that information among involved parties.

The newest version of Rock & Fluid Canvas makes those workflow tools more intuitive and easier to use in integrated setting. It also contains management tools to assure secure data transfers and to back up and retrieve information.

It also allows customers to use their legacy data applications.

A key part of the new software is its ability to let companies establish or retain their own work flows. It doesn’t force the customer into a work flow pattern that requires retraining of employees or doesn’t fit the company’s quality or comfort requirements.

“We want to enhance their ability to work not tell them how to work,” Lamb said.