



Industrial animations

By Stephen Samuel

What is the value of industrial animations to inventors? In general, inventors are long on ideas and short on money to make those ideas a reality. It's natural and commonplace for creative, bright and interesting people to be preoccupied with innovation, technology and inventing, and not so much with law and finances. People who invent wonderful devices and techniques that enhance the state of being for the rest of us have a gift that is compelling and wonderful. In many cases, this gives them an aversion to the day-to-day humdrum of getting capital for their ideas.

The next step, then, is to look for investors. This can become a chicken-and-egg situation. Investors don't always have the vision required to understand a new invention or believe that it can be of value. In many cases, they need and want a prototype to show them how an idea can be executed and to show them that the inventor is serious and committed. But, prototypes can be expensive, especially since a lot of the engineering has to be done to make a good prototype.

A partial solution can be found by using industrial animations. With a well-done industrial animation, an inventor can confidently present a complex idea to a potential investor. Due to the level of detail that an industrial animation can provide, investors are far more prone to trust the new idea.

For example, here at Design Visionaries, we have a client from an extremely successful oil field company. The client had an idea to create a robot that would be able to traverse the distance to the bottom of an oil well and perform a certain function. The robot was a new innovation that our client knew would require a massive outlay of capital to become a product. Our client asked us to perform an industrial animation in order to communicate the idea. We began by creating solid models that were "placeholders" for the actual geometry that would be required. Things like drive motors were represented with simple cylinders. Struts were drawn in as simple bars; they did not have the complex shape that they would in real life. However, we modeled to a level of detail that was adequate to illustrate the motion and use of the device without betting the farm on detailed design. Once the initial CAD work was done, we used a variety of tools to take the CAD geometry and bring it to a virtual demonstration of the product.

Prospective investors were able to see the product in action; they were able to see chips of concrete flying off the cutting head. In effect, the animations gave the impression that much of the detailed design had already been done. The animation was such a great success that funding was granted.