

## Viewpoints



From my days as a research chemist, I remember the brick wall that all too often separated R&D from sales & marketing.

Today, I have a different vantage point: sitting on the brick wall rather than behind it. The wall is lower than it was, but it still exists in many companies.

At Kline, we spend time reconciling the varying perspectives of different parts of our clients' organizations, while challenging them based on changing industry demands.

That's one of the ways we add value to our clients.

**Gillian Morris**  
Senior Industry Manager

## Navigating Nanotechnology: Mega Risks and Nano Profits?

**Gillian Morris, Senior Industry Manager, Kline Research**

You've seen the term "nanotechnology" everywhere: not just in industry journals, but on the front pages of newspapers and in glossy magazines. Although it seems obvious that major technology strategy and investment decisions should not be influenced by magazine articles, many such decisions are based on insufficient information and analysis, and reflect external pressures rather than a strong business case.

Nanotechnology is particularly vulnerable to hype. On the one hand, the potential of nanotechnology is defined in terms of breakthrough technologies and applications, often with overoptimistic growth projections; on the other, the definition of nanotechnology includes existing technologies such as the use of microparticles in cosmetics and ultrafine dispersed catalysts. These contrasting definitions of nanotechnology are confusing. They lead to projections showing that nanotechnology applications will grow exponentially over the near term from an already sizeable base, and they raise the expectations of the public at large and of shareholders in particular.

Another major issue is the nature of market demand for nanotechnology. One illusion that surrounds nanotechnology is that it has commercial value in and of itself. In other words, that simply investing in and developing the tools to create and manipulate nano-scale particles and devices will have commercial value. In reality, value is only created when companies can leverage these tools to create products and services that satisfy market demand. A closer look at technology portfolios and how R&D activities are organized frequently highlights a lack of integration between technology development and market-directed product development, resulting in extended timeframes for commercialization.

Overcoming the hype that surrounds nanotechnology, and the resulting expectations for rapid returns on R&D, may be difficult but it is far from impossible. There are three ways to minimize the influence of hype when making both technology and business decisions: realize that nanotechnology is simply an enabler; only fund investments in this area to the extent justified by the overall R&D portfolio; and manage stakeholder expectations so that targets are achievable.

**To discuss this abstract, or for a full copy of this paper, contact Gillian Morris at +1-973-435-3432 or [gillian\\_morris@klinegroup.com](mailto:gillian_morris@klinegroup.com).**

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