“The only sustainable competitive advantage requires differentiating Innovation”. While on the surface everyone would immediately agree that there is a lot of truth in this statement, when pressed with the meaning of Innovation, we see very divergent views and quite frequently contradictory. Many papers and books have been written expounding on the concept of Innovation and in engineering it has been used as synonymous to scientific or technological innovation. In this presentation I would like to address this question and link it to the main theme of competitiveness that we face in this country in the 21st century. I will argue that in a product-based chemical industry of this century, Innovation is the first successful commercialization of a new idea, a process in which people are the essential assets for success. These people must integrate the following four spirits: The discovering curiosity of a Scientist; the creative problem-solving ability of an Engineer; the value-seeking need of an Entrepreneur; and the moral backbone of a Humanist.

To illustrate these points I will use a series of real-world examples from my personal experience that span both the academic and industrial worlds of chemical engineering. I will also discuss the implications of these ideas in education, research and industrial practice.