

# **THE SOPHISTICATION AND TECHNOLOGICAL CHALLENGES OF THE PETROLEUM INDUSTRY**

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*Abstract. At the heart of our modern technological petroleum industry lies an unacknowledged paradox. Although the petroleum industry is increasingly defined by and dependent on technology and is adopting new technologies at a breathtaking pace, it is not credited as a high tech industry. As an industry, we are not even fully aware of or conversant with the technologies we use. In short, we are not "Technologically Savvy". We "Travel" to the subsurface structures to produce hydrocarbons, and we transport it across oceans from continent to continent. Yet, the industry is largely perceived as a semi-primitive and greedy industry. Available evidence show that the public has a poor understanding of the essential characteristics of technology utilization and creation, how it influences the industry, the society, and how the petroleum personnel can and do affect its development. Neither the educational system, nor the management apparatus has given the necessary emphasis to acknowledge technological sophistication of the petroleum industry. Thus the paradox: Even as technology has become increasingly important in our industry, it is receded from view. The management has not provided an adequate leadership. Although our use of technology is increasing apace, there is no sign of a corresponding improvement in the industry's ability to deal with issues relating to technology.*