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Research and Development Project Management in the Automotive Industry

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It should be any company's objective to grow or to at least sustain itself in a very competitive technological driven market. With the rapid technological advances and associated complexity of challenges associated with keeping pace with the 4th Industrial revolution, more attention is being focused on efficient and effective management of R&D projects. Time is always important and delays in getting new products to the market can result in not only financial loss but loss of market share. Many of the leading manufacturing and development organizations in the world today apply project management in their research and development projects as part of the innovative approach of introducing the latest technology into their designs. However, some companies still refrain from implementing project management processes because of the cultural changes required (Geng, 2004). In the very competitive technological driven automotive industry, strategic planning and decisions on process and product upgrades and smart technology enhancements, require rapid feasibility studies to determine if these are economically viable and worth developing. These studies must be fast-tracked and can be managed as projects to investigate if the proposed process, product or upgrade will be practical and feasible in terms of meeting the customer's expectations, reduced maintenance, increased efficiency, a lower carbon footprint with an associated reduction in the life cycle costs and an enhanced Return on Investment (ROI). These factors are geared to place the organization ahead of its competitors. Once the feasibility project is completed and implementation approval is given, the R&D process can be accelerated applying Project Management processes to keep research and development on schedule and budget targets. This paper focuses on the above arguments and shows that R&D processes in the automotive industry can be significantly enhanced by using project management processes.

Biography

Deon Kruger has worked as an engineer for a major South African construction company prior to joining the academic staff of the Rand Afrikaans University which later merged with the Technikon Witwatersrand to form the University of Johannesburg. He is registered as a professional engineer by ECSA, the professional body for engineers in South Africa. Deon started the research group for polymers in concrete at RAU and apart from publishing numerous papers on this subject in accredited journals and international conference proceedings, he organized a series of four international workshops and conferences attracting delegates from all over the globe. Deon has achieved significant national and international acknowledgement of his input in the teaching of engineering as well as his research and contribution to the science of the use of polymers in concrete. He was elected as Fellow of the South African Institute of Civil Engineers, he was awarded the Concrete Achiever of the Year award by the Concrete Society of South Africa and he was elected as Vice-President of the influential International Congress on Polymers in Concrete (ICPIC) during the 14th ICPIC Congress in Shanghai.