What does IoT/Industry 4.0 mean for Manufacturers?

Johannesburg, 18th June 2018; Running alongside this year's Manufacturing Indaba is the IoT (Internet of Things)/Industry 4.0 Conference, being presented as a side event of the Indaba. Influential industry and trade leaders, government officials, policy makers, academics and potential investors of the sector will explore the prevalent Industry 4.0, also known as the "4th Industrial Revolution". IoT, together with Industry 4.0 represent innovative technologies fundamental to the digital transformation process currently sweeping across the manufacturing industry.

Industry 4.0 represents the complete digitisation of factories and manufacturing facilities that will ultimately merge with the unique needs of individual customers, resulting in benefits such as customised product design, manufacturing processes and final delivery to maximise customer satisfaction levels. Furthermore, Industry 4.0 brings with it a multitude of other benefits for industrialists such as cost, productivity, profitability and operations that manufacturers are striving to control, streamline, optimise or enhance.

The onset of Industry 4.0 and IoT has introduced the era of smart devices which empower industrialists to autonomously manage manufacturing and distribution operations. Manufacturing units can now retrieve critical, real time data by monitoring efficiency and productivity levels of employee, machinery and business operations. This enables manufacturers to constantly carry out accurate assessments, along with improved collaboration and integration amongst stakeholders throughout the entire manufacturing value chain.

New insight into manufacturing efficiencies, customer perceptions and behaviours as well as pioneering product innovation equips manufacturers with revolutionary competitive advantages. These advantages allow for the replacing of traditional manufacturing operations with advanced material requirements planning (MRP) models as well as cloud manufacturing execution systems to name a few.

Furthermore, Industry 4.0 and IoT initiatives offer industrialists opportunities for improved implementation of safety standards in the manufacturing process. People have limited capabilities in hazardous situations, while the competence and efficiency of machines have proven far superior in such environments. Successful assimilation of these revolutionary solutions into their operations allows manufacturers to increase industrial safety, ultimately sparing them unfortunate workplace accidents and costly Workman's Compensation claims. This translates into a reduction of downtime, consistently high productivity levels and savings on long-term capital expenses.

The advent of Industry 4.0 brings with it an automated closed-feedback loop that significantly reduces time-consuming feedback accumulation efforts on products and services. This ultimately results in meticulous record-keeping and tracking capabilities, while controlling liabilities, warranty expenses and recalls.

To remain relevant into today's rapidly changing and competitive business environment, industrialists in both developed and emerging markets will need keep pace with the mounting changes presented by the 4th Industrial Revolution. By familiarising Sub-Saharan Africa's manufacturing stakeholders with Industry 4.0 and IoT principles, the **Manufacturing Indaba 2018**, together with the IoT/Industry 4.0 Conference, intends to educate business owners within the sector on how to efficiently apply these ground-breaking techniques to their industrial facilities. These techniques will enable manufacturers to streamline production while gaining

competitive advantages associated with the adoption of this digital transformation process.