

MEDIA RELEASE

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Kirstein Will Give Insights Into The Future Of Asset Management And Share Risk Modelling Techniques To Determine Optimum Replacement Ages Of Physical Assets

Carl Kirstein, Director at Cherrystone Investments (Pty) Ltd and Manager, Physical Asset Management at Collaborit, will be one of the speakers at this year's South African Asset Management Association (SAAMA) Conference, which takes place at the CTICC in Cape Town from 16 to 18 May.

Kirstein will deliver two informative papers at this year's conference. His topics are:

- The future of asset management
- Risk modelling of physical assets to determine their optimum replacement age

Exxaro Resources Ltd instated an innovation programme in 2014 and appointed Kirstein to drive the physical asset management thrust. Since then he became an ardent futurist sharing his research with top management and other industry specialists interested in the future of asset management. Kirstein discovered that the stuff of science fiction was becoming prevalent and it is already mature enough to give demonstrations to others.

"It has never failed to wow", and the general comment after the gushing "wows" was: "I did not realise that this technology was already so mature", says Kirstein.

"I hope to bring the same "wow" to the conference delegates. I hope they will also be imbued with the same excitement that has gripped me during the past two years", Kirstein added.

According to Kirstein, there is a tsunami of new paradigms and technology that is about to come crashing by 2020. He adds: "Astounding things are happening in the world today that are imminent in our work places, crucial to our competitiveness, and so foreign to our current *modus operandi* that we better start the change management processes now if we hope to adopt to it within the next five years."

On the second topic, Kirstein explained that another topic he is passionate about is risk assessments. He feels that qualitative risk assessments are mostly mathematically unsound, subjective, inaccurate, and do not contribute sufficiently to capital decision making processes. He has done much research on this topic and developed a method that he wrote up in his masters dissertation.

"I will show how to use risk assessments that enable effective capital decision making, i.e. balance risk, costs, and performance of equipment as per the ISO 55000 intent. I am especially excited to share the uniquely developed methodology with the delegates. It will show delegates how you can apply prognostics in the absence of data" Kirstein added.

Delegates can look forward to the following "take away" points from Kirstein's presentations:

Future of asset management:

- Emergent technologies
- Emergent workforce and skills
- Emergent management paradigms
- How you can prepare for these emergent things

Risk modelling of physical assets to determine their optimum replacement age:

- How the optimum replacement age of assets is determined when considering cost, performance and risk
- How the risk and performance of assets are accurately quantified
- How accurate component failure data is obtained if it was not specifically gathered throughout the life of the asset in order to predict the end-of-life
- Whether the results are indeed useful to make capital decisions

Kirstein elaborated on the current challenges, but also the opportunities that await the physical asset management industry: "Our biggest challenge in our current economic climate is to use what we have more effectively and efficiently. Many companies are restructuring to reduce expenses and cannot afford additional capital to implement additional systems and solutions."

"I am of the opinion that many asset managers spend a lot of money on the implementation of solutions just to realise afterwards that these solutions are not delivering the desired results. The biggest disconnect I have seen lately is between what the management systems said happened and what actually happened. The biggest challenge is therefore to get an accurate picture of what is really happening to the assets, what their condition really is, and whether the resources are truly utilised well," Kirstein said.

According to Kirstein, the biggest opportunity for the asset management industry is automation of activities. He added: "UiPath, the vendor of Robotic Process Automation software that powers the intelligent process automation solutions, has recently published an article stating that up to 60% of office work can be automated. I have conducted a similar study and found that 56% of the activities in a maintenance organisation can be automated, and that is not even considering robots or drones doing hands-on-tool activities."

Companies will soon realise that automation is the way to go, which means that digitising and connecting their data as the next step is crucial. Digitised connected information will enable automation, predictive- and prescriptive analytics and machine learning.

"The world is on a verge of a change crisis. Banks and stock markets are looking to cryptocurrencies and digital asset management. Medicine and bioengineering are employing gene splicing procedures on humans and developing brain-computer interfaces. Entertainment is becoming immersive and personalised. Warehousing and transportation are driven towards full autonomy and industries are surging under the dawn of the industrial internet and artificial intelligence. These are indeed exciting times," Kirstein concluded.

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