Mechatronic convention

Keynote Speaker: Morne Moolman – Automation and Mechatronic Solutions, Krugersdorp South Africa

Presentation: Employing and working together with multi disciple teams - Mechatronics

Abstract:

Spending nearly twenty years working in several industries, as an employee, has provided me with a fair number of problems to deal with. Fortunately, the majority of these problems were of a technical nature, and tested me and the teams that I formed part of. I am grateful for these problems as they allowed me to gain experience in real world situations.

In 2021, I embarked on the journey of entrepreneurship. This journey brought with it a completely different set of challenges. These included having to question whether my technical problem-solving skills had become redundant as I learnt about many new products and techniques, as well as, how would my methods compare to other successful leaders when approaching opportunities and people. You may be asking yourselves how does this relate to Mechatronics?

I truly believe that there are unique advantages that Mechatronics has brought to the table, and will continue to do so in the future. Challenges of new technology in manufacturing, installation, maintenance, repairs etcetera can greatly benefit from Mechatronics. During this convention, there will be many speakers that will explain these advantages, but today I bring the perspective of the employer, and how valuable the Mechatronic skill-set is to a business.

Based on the data from a short study that I have conducted, I have noticed a few similarities among various types of people. I believe that anyone that is, or has been, in a position whereby they are responsible for a team would have noticed either the same, or similar trends that this data brings to light.

This raises the point that if you have employees that are very good at one or two skills, they will obviously remain relevant to the company for as long as company needs those one or two specific skills. The problem is that industries where one or perhaps two skills, that cannot be replaced by something other than a human are becoming less.

The industries where technology is involved in, which is basically all of the industries that we know today, these skills that we once thought of as secure, are being replaced by either new skills or something other than us as humans, like machines and robots. This is unfortunately the price that we, as a society, pay in order to become more efficient at what we do.

Furthermore, where humans still interact with equipment and objects, specialists are great to have. However, it becomes really difficult to justify their position, over an extended period of time, in a company as technology progresses, and everybody is already well aware of the pace at which technology is progressing.

Let’s take an extreme example. Blacksmiths. They have essentially become either a small niche or a community of hobbyists. This is why I have a strong belief in that an employee with a multi-skill qualification like that of Mechatronics, becomes a really appealing prospect.

Think about it for a moment as a business owner, or a team leader in a company.

- A worker that can shifted between dissimilar trades with confidence.
- A person that has, at the very least a basic understanding of several fields.
- An employee that can quickly add specific information to an already wide knowledge base.
- These are the people that have advantages over specialists in a single field or trade and have the potential to become really effective problem solvers in a shorter period of time.