

Doosan Babcock- Human Performance

Doosan Babcock, a specialist in the delivery of construction, aftermarket and upgrade services to the thermal power, nuclear, oil and gas, petrochemical and process sectors. Using the latest technologies, best-in-class engineering expertise and an industry-leading project management capability, the company builds, maintains and extends the life of customer assets worldwide.

Doosan Babcock is part of a powerful combination of companies united under the Doosan Group to deliver complementary technologies, skills and value to customers the world over. (Doosan Babcock website, 2014)

Case Study

Performance has always been at the top of the agenda at Doosan Babcock for efficient productivity within their industry. This case study will illustrate when and where Doosan started to focus on Human Performance within their training initiatives.

In 2009 a Senior Management steering group considered a statement that read:

“We still have events that have an adverse impact on our business and our people”

This statement empowered the business to explore ideas that could be incorporated into the company way of working that would benefit not only health and safety and performance but of that across all that they do. In doing so, Doosan looked at the work already achieved by the EDF Programme. From the knowledge and experience gained from that programme; Doosan devised their own specific ‘Human Performance’ programme branded focus2Zero - ‘An Error Prevention Journey’. This was initially launched in 2010 and supports the Powering Improvement theme of Human and Organisational Factors: Behavioural Safety and Personal Responsibility. It is aimed at focussing on human performance and standards and expectations, with the focus on error prevention and working towards excellence in business delivery.

The theme by Doosan highlighted areas of improvement that could be made by recognising human tendencies and weaknesses. Through this they were able to identify the principles of Human Performance:

- Humans are Fallible
- Error is predictable
- Organisation influences behaviour

- Behaviours are reinforced
- Events are avoidable.

To tackle some of these issues, their approach aimed to engender a preventative and effective approach to Error Prevention through the use of their Error Prevention Tools.

HUMAN PERFORMANCE
Error Prevention Tools

focus2ZER
An Error Prevention Journey

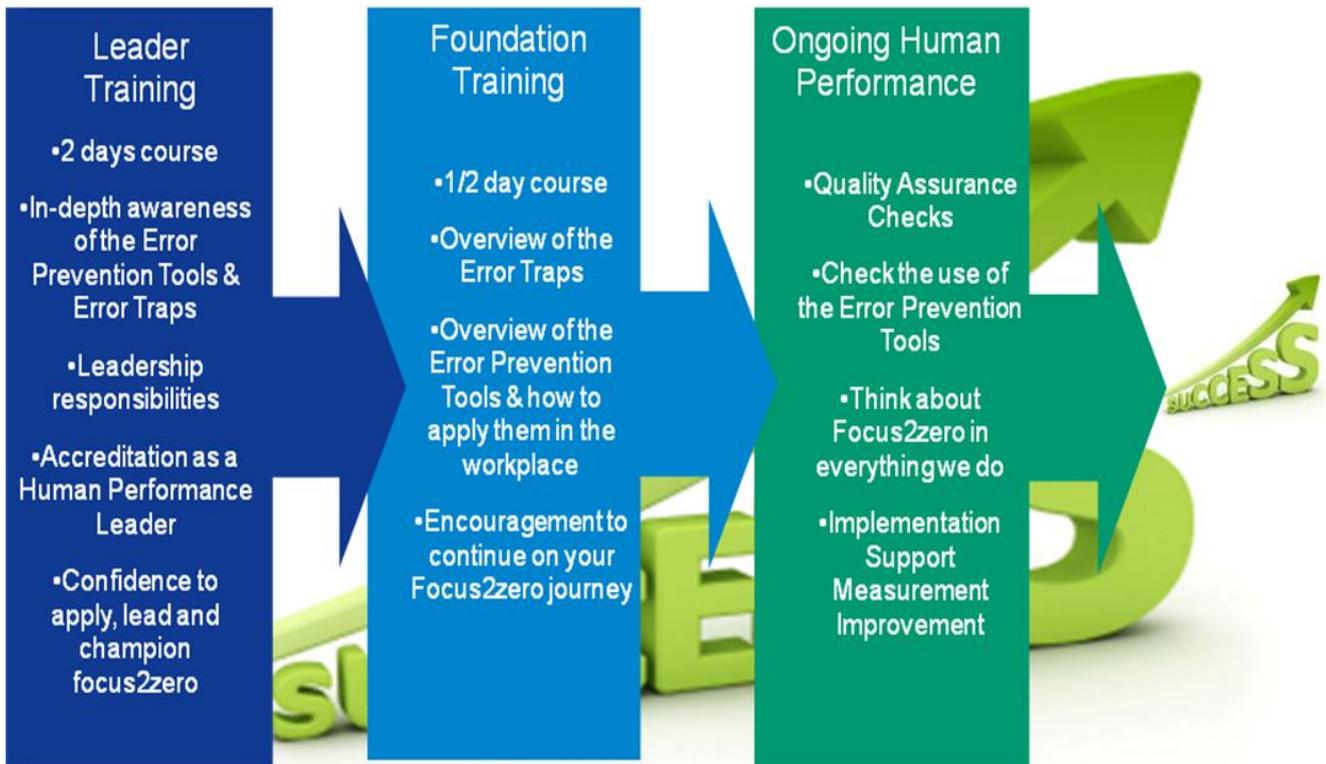
- Leadership
- Induction & Orientation
- Planning & Preparation
- Procedures (Use & Adherence)
- Pre & Post Job Briefing
- Risk Assessment
- Ownership & Accountability
- Questioning Attitude
- Intervention
- Lessons Learned & Best Practice
- Coaching & Mentoring
- Observation & Feedback

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Doosan approached a number of external organisations that specialised in specific programme training to aid them with their training courses, such as:

- The Keil Centre- limited company of Chartered Psychologists and Registered Ergonomists.
- eOrigen- A market leader in eLearning.
- tdr- A professional training and development company.

Some of the training that was provided to employees (including senior management) was undertaken in a specific manner to suit the 'focus2Zero' journey. It is implemented through training staff in the principles of human behaviour and error/violation theory. It is therefore important to first devote sufficient resources to foundation training for all staff and leadership training for managers; this provides the environment for all staff to develop an understanding of active and latent error, error traps and the prevention tools that can be implemented to help mitigate such risks.



One of the key concepts conveyed during training is helping employees to learn the concept of ‘Error Traps’ and understand how they can be avoided in work scenarios.

‘Error Traps’ is a phrase Doosan Babcock use developed to describe anything that allows an error to become more prevalent or likely to occur, through either intentional or unintentional behaviour.

HUMAN PERFORMANCE

Error Traps

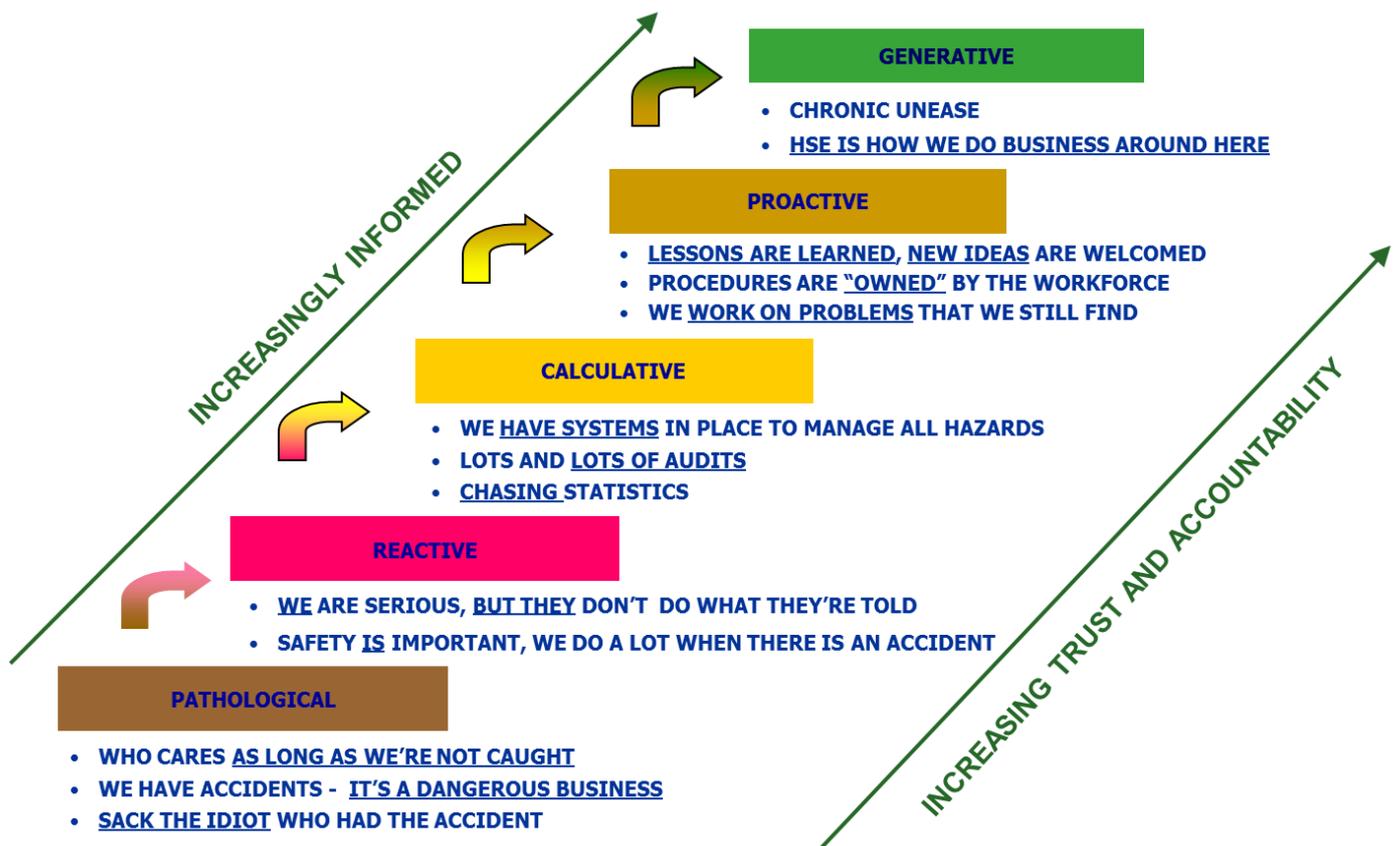
<ul style="list-style-type: none"> • Change • Lack of Planning & Preparation • Turning a Blind Eye • Acceptance of Poor Standards & Conditions • Inexperience • Taking Short Cuts: Bending the Rules • Poor Design 	<ul style="list-style-type: none"> • Lack of Pride & Ownership: Complacency • Time Pressures • Poor Communication • Lack of Assertiveness & Challenge • Favours Without Thought • Lack of Awareness & Understanding
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Doosan Power Systems

Once training had taken place for all employees the message of 'Human Performance' and 'Error Prevention' was then reiterated through the use of inspirational posters, these are now displayed across many Doosan sites, used to aid motivation amongst employees. Doosan also produced a handbook that could be given to employees on error prevention to help remind them of their training and what is expected from them at work. The handbook also included famous quotes from inspirational figures of the past, again to keep the programme entertaining and relatable. There are also Human Performance Leadership tours for senior management and a recently developed online system that allows Steering Groups to refine the programme and target support, promotion and effort. It also allows business areas to analyse their own application with the need to be clear on your standards and expectations



Change in auditing and recording also improved through this initiative with the use of 'Critical Task Analysis'. Doosan undertakes this activity where, if a failure were to occur, the outcome (severity) could very easily result in a very significant injury. A supervised audit would take place, and Take5 workforce assessments are carried out prior to commencement of a task.



2013/2014

To take the programme forward Doosan Babcock now have targeted work streams that will further embed the Human Performance strategy. The next stage will be to establish the degree to which changed attitudes and behaviours have had a positive impact on the business and assess whether the desired results on overall safety performance have been achieved. This will show how far up the 'Cultural Ladder' the organisation is, with the aim to maintain the proactive approach that generates the correct level of trust and accountability.

Summary

Through Doosan's Human Performance Programme they recognised that Human Error is predictable and preventable. Through their training they were able to raise awareness of Human Performance explaining why it was critical to the way they wanted to work in the future. Through this they train their employees to recognise common 'Error Traps' and how to recognise them in the workplace, by equipping their employees with Error Prevention Tools, they reinforce the message that Human Performance can be applied to all aspects of work.