

# To err is human

Two dreadful accidents marred the start of the year - one near Kroonstad and one near Germiston. In a news article in [The Citizen](#), Prasa ascribes the cause to human error in the signalling process. 'Human error' is considered by many to be a reasonable explanation for the causes of failure; no more analysis required! This mindset sabotages proper investigation.



Trevor Kletz, a prolific British author on the topic of chemical engineering safety, has a strong view on 'human error'. He states in his book 'Lessons from Disaster' that

***“Listing human error as the cause of an accident is about as helpful as listing gravity as the cause of a fall. It may be true, but it’s not very useful.”***

When a bridge collapses, the incident investigation report does not say, “The accident was the result of the force of gravity.” It is understood that gravity is a fundamental property that the design must consider. The accident report could refer to improper steel specification or an inadequate support structure for example; gravity would not be listed as the cause, because it is obvious that given the right conditions all things succumb to gravity.

Fortunately safety authorities and even politicians are not accepting 'human error' as an explanation. It seems that Prasa had previously ignored two prohibition directives from the Railway Safety Regulator which ban manual signalling because of the dangers it poses. As Fred Nel (the DA's Gauteng Shadow MEC for Roads and Transport) observed, Prasa's safety issues run far deeper.

Prasa management further claimed that the signalling errors resulting in the collision near Germiston were caused by cable theft and vandalism. The fact is, cable theft and vandalism are not new phenomena and one could reasonably have expected Prasa to have contingencies in place to deal with it.

A well designed control system should prevent these types of accidents, even when 'human error' occurs. The cause here goes far deeper than that, and that is what Prasa crucially needs to address.

Does your management team accept 'human error' as a reasonable explanation for failure? If that is the case, you are heading for trouble.

Harold Robinson is a consultant and trainer in operations management.



He specialises in continuous improvement and offers both in-company and public training in Root Cause Analysis. Reliability/Maintenance/Asset Management and Lean manufacturing.

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