

**ASEC 2008
ABSTRACT**

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| Title of abstract: | Structural Failures – the Social Context |
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| Abstract: | <p>1. Causes of Structural Failures Some 80% of all structural failures appear to be due to some form of human error or error chain, "Structural failure" in this context, signifying that the structure (or part thereof) does not, or does no longer, fulfil the requirements of ultimate strength, serviceability and/or durability.</p> <p>2. Human Error The prevailing Management attitude towards human error in the workplace appears to be that of detection and rectification, with the accent on early detection in order to minimise the rectification cost, a reactive approach. The questions seldom asked are: "Why do people make errors in their work?" and subsequently: "What actions may be taken to improve quality performance by reducing the incidence of errors?" Seeking answers to these questions would constitute a proactive approach. Consideration of this problem clearly is in the realm of occupational psychology, a subject in the social sciences. The paper will deal in detail with the following emerging facets:</p> <ul style="list-style-type: none"> • The workplace "culture" prevailing in the construction industry, • Tender evaluation practices, • Leadership practices in the construction industry. <p>3. Remedial actions The paper will recommend the following policy initiatives:</p> <ul style="list-style-type: none"> • Commencing a dialogue embracing the whole construction community with a view to replacing the prevailing adversarial culture by a co-operative one. • Replacing tender evaluation practices based on minimum tender price by ones based on maximum project value. • Replacing the present, mostly autocratic, cost-centred management style by a more democratic, value-centred one. |