Human Factors Integration into the Facility Design Process

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Why write this paper?

There is HF integration guidance available.

So, having implemented HF throughout a facility design process, what have we learned?
Where does HF fit in?

“If an HF issue is not dealt with early enough, problems found downstream will be more expensive to resolve. Conversely, if detailed HF activities proceed too early, they may miss out on technical constraints that only emerge as technical developments unfold.”
Case study: Chevron Frade FPSO
HFE successes: alarm rationalization

- Eliminate unnecessary alarms
- Optimize CRO workload especially under abnormal conditions

Effect of alarm rationalisation on alarm count

- EEMUA High
- EEMUA Avg
- EEMUA Low
HFE successes: Noise attenuation
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Issues to resolve: escape routes
From design to construction: Production Hydrocyclone
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Important points to consider

- Project team must buy into the HF process
- HF must proceed in parallel to technical development
- Apply HF where it is most needed and can achieve most added value
- Contracts with contractors and vendors must consider HF requirements
Thank You!