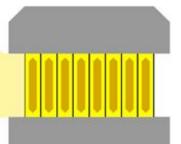




Dr.-Ing. Peter G. Schmelzer, Bayer HealthCare AG Chairman CEFIC Issue Team Process and Plant Safety





# Session IV Navigating ahead with leading indicators

# **Answer KEY Question Working Session 4**



- What are the success factors and pitfalls to consider when implementing leading indicators?"
- To prescribe or not to prescribe Leading Indicators?
- Pro's
  - Workforce involvement and ownership
  - Not a push from above
- Con's
  - Reliant on experience and maturity of site
  - Staff retention issues has impact
  - They may not know what the don't know. Examples given of issues only being uncovered by direct questioning

### **Answer KEY Question Working Session 4**



- What are the success factors and pitfalls to consider when implementing leading indicators?"
- Can standard leading indicators be set?
- Survey of those companies where this has been shown to work to investigate
- Definition of KPIs
- Leading yes, but exactly what to measure i.e. what should maintenance backlog include?
- Automation of KPI's can and should still involve the workforce
- Staff still need to be involved in setting and reviewing KPIs
- Leading indicators should be predictive and tested against this criteria
- Culture is key, know what to report and then what to do
- Monthly frequency may be too late
- Debate on 5 KPIs or 300?



- What indicators are most commonly chosen by major hazard operators?
- Mechanical integrity
  - Inspections & Testing
- Follow Up and close out
  - Accident investigations
  - Audits
- Competence
  - Shift handover



- 2. What differences are apparent in the type of indicators?
- Measures of safety activity
- Failures revealed by safety activity
- Failures in use
- Legal compliance not an explicit measure but demonstrated through safety activity and follow up actions

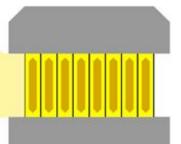


- 3. Is there a suggested model path to implementation?
- No but requires basic hazard awareness and competence to manage those hazards before introduction of leading indicators – a semblance of safety culture
- Implementation of leading indicators might provide antidote to safety performance plateau



- 4. What are the costs and the benefits?
- Costs depends on type of approach be it local decentralised or standardised centralised approach – both require significant initial investment –esp. winning senior management support and workforce engagement





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