

Safety: Management of critical (safety) parameters

Change is happening

- 1980: Industry 3.0 (Advances in technology)
 - Analog electric and mechanical => digital technology (PC, internet, ICT, networks and protocols,...)
- 2015: Industry 4.0 (Advances in communication and connectivity)
 - Robotics, AI, IoT, blockchain, big data,...
 - Improve efficiency of business and organizations
 - Improve human communication and conflict resolution

Mentimeter

PRODUCTIE PROCES
AUTOMATISERING

PPA 19



29-01-2019 • Hart van Holland in Nijkerk

Industrie 4.0 Cyber Security
Industrial Internet of Things Data
Cloud IT/OT Integration

Critical Parameters #today!

Paper



83%

Events



8%

List



5%

Displays



3%

Lock

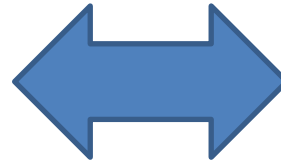


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Disadvantages

- Time consuming manual actions
- No overview for operators and/or management
- Not uniform
- Verification after the facts
- Difference procedure-reality
- No analyze-history-logging



METEN

MAAR SOMS
WIL IK HET
HELEMAAL NIET
WETEN

Possibilities when better using proven technologies

- Big data -> smart data (connecting, web based, apps,...)
- Enforce use of adapted IEC61511
 - Timings and corrective actions
- Enforce procedures
- Analytics
- Default information: requests, notifications, approvals, groups, ...
- Improve automation configuration
- Eliminate human errors

Results

- Increased safety
- Increased reliability and more lean
- Minimize overhead

- Vragen?
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