

Use of ICT and paper : a paradox Consequences on health and safety

Virginie GOVAERE, Liên WIOLAND
Working Life Department
INRS

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Context and purposes

- Expected benefits from the introduction of ICT
 - Time saving
 - Fewer data entries
 - Less paper to manage
- Purposes
 - Analyse the real benefits
 - Analyse the health and safety consequences



Method

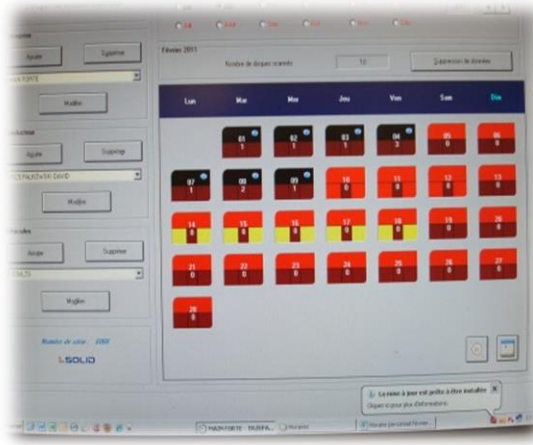
- Ergonomic approach
 - Six-year longitudinal study
 - Road freight transport company
 - Interviews and observations of different company stakeholders
 - Follow the development of the use of ICT (before it was introduced up until now)
 - On-board computer system (OCS) for :
 - > Communication between operators and drivers,
 - > Vehicle tracking...



Results

- Communication tools : email, telephone, freight exchange
- Management tools : pack office, transport software, Electronic Data Interchange (EDI)

Before the OCS



- Paper
 - > a paper trail
 - > a transition tool

Results (1/2)

Before the OCS

- Communication tools : email, telephone, freight exchange
- Management tools : pack office, transport software, Electronic Data Interchange (EDI)
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OCS
Deployment

- Change in the distribution of tasks
- Accelerated pace of work : from 1 minute 11 seconds to 53 seconds
- More communication : from 9 hours 16 minutes to 14 hours 35 minutes
- More time using paper : from 8 hours 29 minutes to 20 hours 46 minutes

- Double entry and consultation of information systems
- Need for coordination
- Multiple information structuring

- Acceleration of the pace (intensification)
- Higher information load

Results (2/2)

Between
2011-2016

- A major increase in the use of ICT and paper
 - Time of use: from 10 hours cumulated in 2011 to 16 hours 33 minutes in 2016
 - Frequency of use: twice as more paper and six times more installations of Pack Office ©
 - General intensification: 30 format changes per hour in 2011 compared to 70 in 2016




Conclusion

- Benefits for the company with ICT
 - Less paper to manage : NO
 - Fewer data entries : NO
 - Time saving : NO
- Report with ICT
 - An increase in information load
 - An intensification of the operator's activity

➔ **Health and safety consequences**



Questions ?

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