

Transport and Logistics: ICT and Business Strategies

Occupational Health and Safety Consequences

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Context and purpose

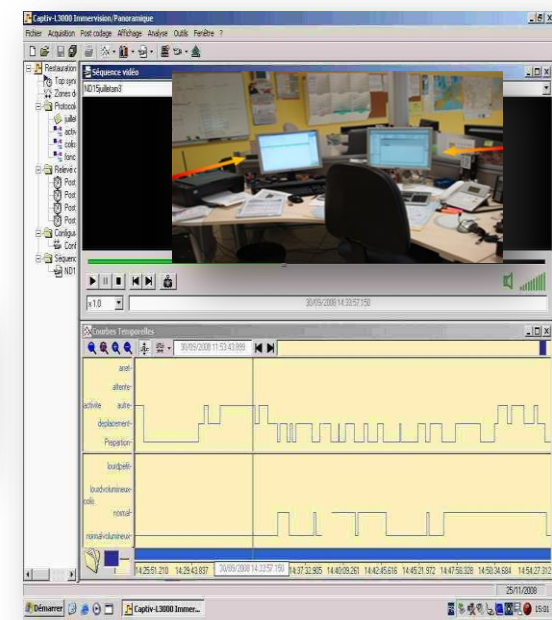


- Road haulage transport
 - An important part of economic and social development in France
 - Subject to strong competitive pressures within continuous changing socio-economic and regulatory contexts
- Companies choose business strategic which
 - Define organisation, employee's activity and the way to use information system
 - Impact on occupational health and safety
- Purpose
 - Identify effects of these business strategies and organisation on activity

Method

- Ergonomic based research method
 - 2 road haulage transport companies were compared
 - Interviews with the executive management, the management and the planners
 - Focus on the planner's activity
 - > Observed and formalised

- Business strategy
 - Porter's classification
 - > Cost leadership strategy (volume, intensification)
 - > Differentiation strategy
 - > Focus strategy



Results : strategy, organisation and tools

Company A

- Cost leadership strategy (volume, intensification of the production)
→ organisation of work is taylorist

Company B

- Business strategy based on differentiation to offer customers a personalised and flexible service → learning organisation of work

- Planners working in pair
 - Same informatic tools
- Same Information and Communication Technology
→ an on-board computer system (OCS)



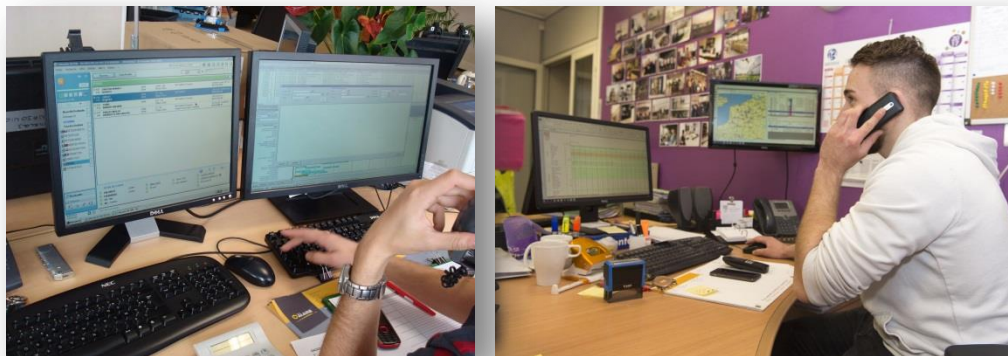
Results : planners' activity (1)

Company A

Company B

- **Same results for both companies**
 - Activity : same repartition of operations, same duration (less than 1 min)
 - Communication represents 50% of the overall activity, wich is partially done in parrallel with other operations
 - Informatic tools :, same use in terms of frequency and duration (switch every 30 sec on average)

→ ***Segmented activity, dual tasks, tool use is intensive and brief***



Results : planners' activity (2)

Company A

Company B

Differences



- **Tracking activity** (14%) : to control the drivers' activity



- **Communication between the planners working in pair** (14%) : limited to the necessary coordination

- **Tracking activity** (22%) : to update their knowledge about the rounds in progress, to prepare the construction of the following rounds and to support the drivers (management of unforeseen events)

- **Communication between the planners working in pair** (23%) : to share information, to support colleagues and to manage unforeseen events

The strategy and the organisation define the way of using the tool
A tool to monitor the activities (of the planners and the drivers)
A collaborative tool (which supports the planners and the drivers)

Conclusion

- About the results
 - Planners' activity
 - > Highly intense levels of work and work overload were risk factors in both companies
 - > Operators are subject to stress, psycho-social risks and musculoskeletal disorders
 - Consequences of the strategy
 - > The "cost leadership strategy " potentiates other risk factors, such as a weakening of interpersonal relations and monitoring reinforcement
 - > The "differentiation strategy" proves to be a factor of protection against exposure to stress and psycho-social risks since it supports group reinforcement
 - > The same tools (on the same activity) are used with different purposes (control or support)
- To remember
 - Integrate the business strategy into the analysis

Thank for your attention



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