Digital’s impacts on work and occupational health

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Presentation Outline

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2017/03/30

1. Context & Challenges
2. Needs & Issues
3. Methodology
4. Results
5. Recommendations
6. Discussions
Context & Challenges

Digitalization: Replacement current/past tool by ICT in workplace

From informatics management to information production

Any economics fields

“To give sense and enjoy life at work”
Digital’s impacts on work AND occupational health?

Mixed results/assessment between
SS (top-down)
and
HS (bottom-up)

✔ Right

❓

✗ Wrong

SOCIAL SCIENCES (SS)

Benefits to...
... well-being at work
... service relationship

HUMAN SCIENCES (HS)

Workload intensification
Lack of confidence
Time pressure
Methodology

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4 methods

4 factors

4 trap lines
Results

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Dematerialization’ impacts

Reduction of task with low added value ▶ Uniformity

Increase of informatics usage

3 levels of consequences:

- **Objective**: Visual and Musculoskeletal disorders

- **Subjective**: Job relationship (interest/complexity, Sense/Goals, Values)

**Task' variety**

Importance:

Reduce

0 h/day

8 h/day

Time of display screen

Environment

Equipment

Technology

Age

Prescription

Organization

Skills

30 workers studied

2017/03/30
Results

Categorization of iPad ® users’ profile

<table>
<thead>
<tr>
<th>PROPONENTS</th>
<th>MODERATES</th>
<th>REFRACTORIES</th>
</tr>
</thead>
<tbody>
<tr>
<td>25%</td>
<td>50%</td>
<td>25%</td>
</tr>
<tr>
<td>ICT' adopters</td>
<td>Mainly ICT use at work</td>
<td>Few usages of ICT outside work context</td>
</tr>
<tr>
<td>iOS familiar</td>
<td>Practices standardization</td>
<td>Efficiency at work based on personal job core skill</td>
</tr>
<tr>
<td>Interested beyond job practice</td>
<td>Tool perceived as half added-value but in favour to adopt it in following work prescription</td>
<td>Tool enter in direct confrontation with process and work organization from their standpoint</td>
</tr>
<tr>
<td>Innovative usages</td>
<td>Tool consideration as a benefit to the service relationship, an added-value to service quality</td>
<td></td>
</tr>
<tr>
<td>25% workers studied</td>
<td>60 workers studied</td>
<td></td>
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</tbody>
</table>

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Social effects on customer relationship

From diversity of case studies to complex issues that may lead to violence

Number of external violence events in 2015 (blue) and 2016 (red)

20 workers studied
Cognitive effects of dematerialization and double screen’ usages

From document analysis to documentary completion by disclosure data

20 workers studied
From work adaptation to transform condition of work exercise

How to build a work capacitive environment?

1. To identify capabilities and its limits (Zone of Proximal Development)
2. To bring situated social and cognitive resources (colleagues, tutorial, on-line support)
3. To follow the real usages (on-line indicators, log-files)
4. To adapt work organization and tools

Toward a new framework of work organization definition based on agility
Changes introduce by digitalization…

… founding units of work relationship
(time, location, task, knowledge)

… limits of management models
(from ordering chief to coach, personal facilitator, regulator)

… collaboration between workers and working group

… organizational flexibility in face of quick, continue technological changes

… perimeter and content of quality of life at work
FEBC Conference

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Brussels, June 26 & 27, 2017

Information: http://ergonomics-fees.eu/node/207
Registration: https://goo.gl/forms/uf11x3nBBbN63CDB2
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