MAVImplant, an online tool for building a 3D mockup workplace for small enterprises

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Summary

- The workplace design, a critical juncture for SMEs
- An online 3D mockup tool
- A tool adapted to SMEs culture
- The implicit integration of Prevention
The stakes of dealing with OSH issues in SMEs

- (in France), micro, small and medium enterprises are not so well integrated in the OSH network as large companies
- They lack time and means to treat these issues
- But they group a large part of employees at the national level

Which strategies to address SMEs?

- Providing tools to comply with regulation requirements (risk assessment…)
- Creating and spreading communication adapted to SMEs
- …

Trying another way: providing a tool which may be useful for SMEs activities, in which Prevention would be introduced
Workplace design and SMEs

The construction of a new workplace or the renovation of existing premises is a vital project for the SME’s manager

- It is a considerable financial investment
- It is the opportunity to design his future production tool
- It will have a major influence on the employees “well being at work”

The SME’s manager lacks the arms necessary to carry out his project

- He has not the experience of a contracting authority
- He often lacks the technical and managerial competences regarding the project
- He relies on a subcontractor (architect)...who lacks technical competences regarding the trade requirements
- And the manager has no time to explain his trade, nor to formalize his own ideas for the project
The project design: a key step for Prevention

- A « good » spatial layout helps in avoiding accidents (crossings), useless manipulations
- Equipment access, secondary production areas (stocking, waste, lockers…) must be considered from the beginning
- Some risks can be anticipated (related to equipment…)

The design step allows upstream actions: more efficient, less expensive.
At the design step, Prevention goes along with productivity,
A tool for building a 3D mockup workplace helps for:

- management (carrying out a workplace design project),
- prevention (integrating good practices in OSH),
- dialogue (between the SME manager and the architect).

**MAVImplant is a software aiming to guide the SME’s manager along his workplace design project and to support exchanges between the parties.**
An online 3D mockup tool

- Project step menu
- Project steps
- Various views
- Objects to insert
- Objects menu
- Software parameters

Software general setup
A virtual mockup allows to appropriate the project

From an outside point of view...

...up to the worker view
A tool adapted to SMEs

- A customization by trade allows to « fit » to the SMEs situations
The trade customization

A software access through a trade dedicated Website…

The disposal of specific 3D objects

Guiding messages suited to the trade requirements
A tool adapted to SMEs

- A simple and interactive utilization

Help in the equipment positionning

Space reservations

Messages to help the user
A tool adapted to SMEs

- A stand-alone utilization

Direct access to quick help

Detailed software help on the Website

Project technical and methodological helps on the Website
A tool adapted to SMEs

- A free web application makes the use and the share easy

My projects

A written report for the architect

The project sharing

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A specific project progress taking into account the Prevention principles
The integration of Prevention

The workplace organization can be overviewed as a whole

- Functional links
- Working areas
- Traffic lines
- Equipment and workers
To spread OSH throughout SMEs, it is necessary to let them taking it into account directly (by themselves, with few time)

A simple and stand-alone tool may reach this target, as soon as it meets SMEs needs

The workplace design is a good opportunity which joins SMEs needs and OSHs efficiency

MAVImplant is an online tool for building a 3D mockup workplace which allows SMEs managers to build and share their project, and tahke into account SMEs issues

Such « managing » tools can be a next step in actions towards SMEs, following risk assessment and information actions