Summary: e-tools event – OSH phone apps held 9 June 2015, Bilbao

Prepared by e-tools team (EU-OSHA)

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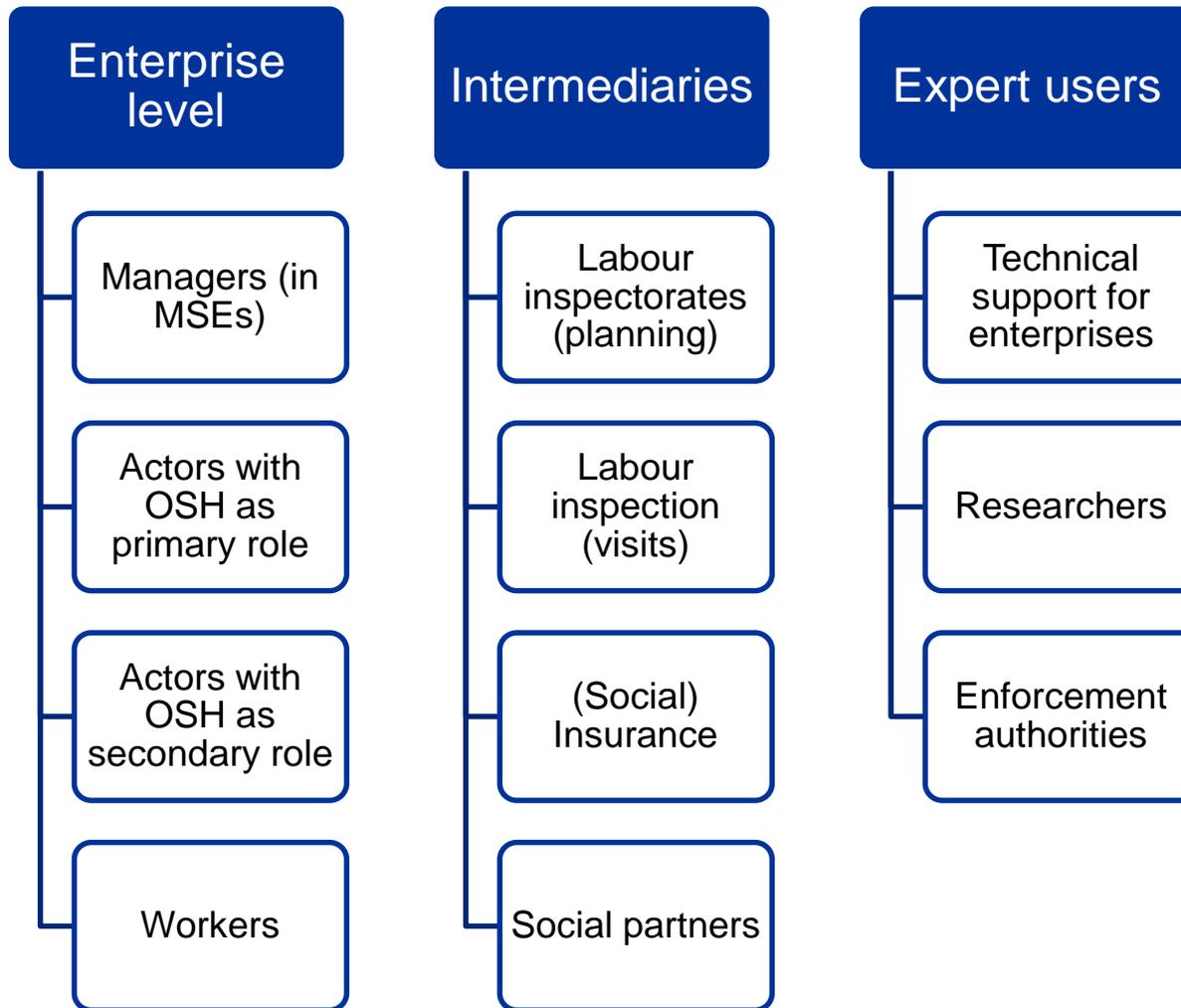for Safety and Health
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Working definition of an "app"

- **A tool with a mobile component that through the input of work-environment or other data allows the identification of targeted potential solutions. This may include identification of issues through analysis of individual issues or the use of metadata to identify issues in the workplace. Data input may include:**
  - Noise or light readings
  - Health data (e.g. heartrate)
  - GPS data
  - Vehicle performance data
  - Substances in use in the workplace
  - Exposure data

General considerations

- **Considerable overlap to areas outside OSH**
  - Public health, maintenance, environment, human resources
- **Wide range of tools to match variety of end-users / needs**
- **(Communication platforms are not tools)**
- **OSH apps have the potential to reach "new" audiences (that wouldn´t be reached through the more traditional channels)**

Target audience

Enterprise level
- Managers (in MSEs)
- Actors with OSH as primary role
- Actors with OSH as secondary role
- Workers

Intermediaries
- Labour inspectorates (planning)
- Labour inspection (visits)
- (Social) Insurance
- Social partners

Expert users
- Technical support for enterprises
- Researchers
- Enforcement authorities

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General user needs

- **Need for specific tools by:**
  - Task
  - Sector
  - Specific user

- **Need for tools taking into account how *"tradespeople think, feel and behave and above all what influences and motivates them to act"***

- **Tested at workplace level before launching a tool**
  - Must be user-friendly and meets needs of end-user

Priority end-user: MSEs

- **With the changing patterns of employment – in particular the large number of MSEs and the move to goal-setting legislation, there is an increased need for support to enterprises**

- **The end-user needs accessible, easy-to-use, specific and relevant tools to help them comply with the relevant legislation**

- **Tools for MSEs to facilitate compliance should be free (or at least have a version free to end-users)**

Technology dimension

- **New technologies – particularly relating to the use of mobile technologies – are producing new opportunities for tools to support MSEs**

- **Technological change is likely to make tools increasingly important to achieve prevention and compliance**

- **There is a spectrum of apps for phones:**
  - "Stand alone" apps (no internet needed)
  - Tool interacting with stored web data (internet needed)
  - Mobile versions of webpages (internet needed)

- **Some apps use mobile devices to collect data, others use mobile devices to share information**

Technical issues relating to apps

- **Important technical aspects to consider at the start of the planning**
  - Hosting, maintenance, multiple devices, operating systems, …

- **Development and maintenance costs**
  - Development costs are generally low compared to books
    - Printing, distribution, storage costs
  - As the tool is developed, new functionalities (e.g. greater interactivity) become apparent. Development of these will add to time and cost
  - Maintenance and updating costs must be foreseen

- **Web application versus mobile application**
  - Some etools are "stand-alone" on a phone and do not require internet connection
  - Other tools are a form of responsive website that need internet connection
  - User needs should be taken into account when deciding which approach to take
  - Easier to evaluate the success of responsive websites compared to mobile apps

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Legal / copyright issues for tool development

- **Often implies the use of new types of contractors**
  - With the related difficulties for setting / defining the technical specifications / the contract
- **Often implies transfer of property rights**
  - Uncertainty, difficulties about who owns the property rights
- **Copyright issues (software, content, photos, …) have to be cleared**
  - Copyright on paper publications ≠ copyright on tools
  - Very usually lawyers have to be consulted to help clarify these issues

Costs and benefits

- **Tools can be expensive to maintain / to keep updated but by shared knowledge and use of common approaches, costs can be minimised**

- **There is a range of income generation approaches that now exist, these include:**
  - Subscription
  - In-app purchase
  - Differentiated target audience (e.g. free to MSEs, priced for larger enterprises)
  - Freeware and premium ware
  - Training / support for purchase

Actors in tool development

- **"Content developers" – those who have expert knowledge that can be used by technology to transmit to end users**

- **"Technology developer" – experts in the technology that is the vehicle for the transmission of solutions**

- **Funding sources**

- **Publishers and disseminators – Those who may publish, host, or disseminate tools**

Institutional challenges in tool development

- **Some organisations may require a move from traditional concepts (e.g. paper-based publishing) to a more dynamic electronic publishing**

- **Some organisations may require the development of a more dynamic innovation culture**

- **New skills will be required in the organisation, demanding change management**
  - E.g. ICT (contract) management, tool design and usability, evaluation and testing procedures

- **There is a benefit for institutions / organisations investing in apps to share experience**

Commercial and non-commercial tools

- **Traditional revenue-generation models may no longer apply**
- **The borderline between "priced" and "free" is now blurred**
- **Some tools may be "not for profit" or "non-comercial" even if there is a charge for their use**
- **Legal issues for the organisations linked to providing commercial products (taxes)**
- **Companies are not willing to / cannot pay for such tools, especially MSEs**

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Tools: Striking the right balance

- **Between being user-friendly against providing sufficent content to meet user (legal) needs**

- **Between being simple while avoiding superficiality when tackling complicated topics**

- **Tools should use simple language and graphics to maximise accesibility and applicability**

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Tools: Limitations

- **Tools must be clear in their purposes and limitations and have to be properly "branded and promoted"**

- **Apps should be presented as part of a bigger project / scheme**
  - E.g. More or complementary information on related website (with link in tool)

- **Apps can be divided into "expert" and "non-expert"**
  - Apps cannot be seen / promoted as replacing experts tools
  - Non expert tools are generally intended:
    - To raise awareness of OSH issues in general (or specific ones)
    - To indicate potential issue that needs further investigation

- **Disclaimers should be clear and prominent**

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Quality tools / assurance and credibility

- **Credibility of tools is guaranteed by the organisations developing them.**
  - E.g. Labour Inspectorates / Ministries, OSH national institutes or equivalent, International organisations / Large enterprises
  - A bad tool may lose the organisation credibility
- **Tools MUST be good quality**
  - Must do what they claim to do and be reliable
- **The organisation developing the tool has to guarantee sufficient resources to maintain the quality (over time)**
- **Apps (as any other tool) can be misused by the end-users, no form of quality assurance can prevent this**
- **Ensuring credibility of apps will need to be considered at the start of the project**

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Promotion and Communication (1)

- **Tools may need to be promoted (mainstreamed) within the developing/sponsoring organisation before launching to end-users**
  - Especially if particularly new technology

- **A mix of new and traditional communication channels is required for promoting tools**

- **Key intermediaries who are trusted by end users and end-users need to be engaged**

- **Tools are best promoted as part of a wider package**
  - Awareness-raising, training, compliance requirements

- **A tool can greatly promote the image or "Brand" of the organisation**

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Promotion and communication (2)

- **New promotion and communication channels exist to provide added value to promotion**
  - Apple and Google stores
  - Virus distribution
  - Social media (Twitter, Facebook, LinkedIn)

- **Organisations developing apps have to be prepared to manage negative feedback as well as positive feedback**

- **Feedback is instant in social media and app stores**
  - Need to be able to respond rapidly

- **Need to maintain interest in an app once it has been downloaded**
  - User should be opening the tool on regular basis

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EU-OSHA role in e-tool development

- **The stimulation of tool development through networking**
  - Exchange of good practices
  - Identification of challenges in tool development
  - Support of annual meetings
  - Dissemination of information on how to make tools transferable

- **Support for the promotion and dissemination of tools**
  - Promotion of tools through OSHwiki articles / web feature
  - Acting as a cross-promotion platform (etools contained/promoted in other projects/campaigns)
  - Supporting the translation of tools (dependent on demand and resources)

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