

# Interest Statement

## W3C Workshop on Device Independent Authoring Techniques

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### Contribution

As a researcher on Man-Machine Interaction for DoCoMo Communications Laboratories Europe GmbH, the presentation of Web-based content on handheld devices is a very relevant topic for me since it requires to consider the devices capabilities such as the screen real estate , the input mechanisms as well as the users' tasks, preferences and location (context-awareness).

The conception of usable devices based on technology standards would certainly reduce the need to create device-specific content.

User testing is a method often applied to understand how users interact with devices and what are the usability issues they are confronted to. As part of an iterative process, this method can finally lead to the design of usable devices or the improvement of existing devices.

Different usability experts such as Jakob Nielsen agree that the following features contribute to the improvement of handhelds usability:

- Handwriting recognition
- Touch screen (e.g. with pen input)
- Small joysticks
- Ear-plug
- Deck-of-cards form

The only existing products that correspond the most to this description are PDAs (e.g. Palm, Pocket PC). Because of their limited screen real estate and keypad, mobile phones are not considered as suitable as PDAs for presenting Web-based content.

More generally, it is often stated that keypad, roller, selection bar and micro-keyboards are not the appropriate features for enhancing the usability of handheld devices. Hence, this should be taken into consideration during the development of future handheld devices and while authoring content to be presented by these devices.

The second important point is that the web-based content delivered to the user should also be based on his or her location, preferences as well as context of use. The capability to determine the location of the user and his or her context of use can be defined as context-awareness.

Considering the physical capabilities of the devices and improving the context awareness could finally help to determine which type and quantity of information can be presented to the user.

## **Interested Discussion Topics**

According to these statements, I wish to see discussed how interaction, navigation and information presentation are considered by Device Independent Authoring Techniques? What kind of standardisation should be required for the content as well as the input and output mechanisms? To which extent a user-centered approach can be applied for the development of Device Independent Authoring Techniques?

In addition, it would be also very interesting to have discussions about the cost of device-specific authoring and the cost of services and devices difficult to use if the content is not correctly tailored for them.