

Research on Usability Testing and Cognitive Issues of Cartographic Visualizations in the Context of Different Groups of Users

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SUMMARY

Maps are commonly known as an effective way for transferring geoinformation to a wide variety of user groups. Cartographic products are generally employed by more users who need to obtain required information as quickly as possible, with an appropriate level of accuracy and in a comprehensible way. Nevertheless, cartographic products have not always been created strictly according to its purpose and needs of specific groups of users. It is clear that any decision-making, which is based on an unappropriate cartographic visualisation, will make the map reading process more difficult. These decisions based on unclear cartographic visualisation could lead even more to diverse misunderstandings, which could cause weighty losses. From these reasons it is necessary to get a feedback via evaluation of the usability of the particular cartographic visualization. This process requires to cover all relevant cognitive aspects influencing the perception of map information and must consider the exact group of users according to the map purpose. A very special care must be taken in the applications used in crisis management. Cartographic visualizations and tools used in this field must reflect not only the personality of the user, but these tools and the general cartographic approach should be adapted simultaneously also for specific situations (work under time pressure etc.). Inappropriate maps could negatively influence the user's performance or eventually even increase the level of the stress. This work was supported by the project „Employment of Best Young Scientists for International Cooperation Empowerment“ (CZ.1.07/2.3.00/30.0037) co-financed from European Social Fund and the state budget of the Czech Republic.