Building National Research Infrastructure for Geospatial Research and Education: Role of the University of Turku

Department of Geography and Geology of the University of Turku (UTU) has been an active force in the development of Geoportti - the Finnish Geospatial Research and Education Hub. This work has been supported by the Academy of Finland funded research infrastructure project FIRI-oGIIR (2016-19) and has close ties to the University’s profiling area Digital Futures.

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### Phase 1. Early steps

**Researcher community participation**

During spring and summer of 2016, multiple workshops were organized around Finland. The goal was to identify researcher’s needs and desires for a national infrastructure for supporting geospatial research. During this process, a distinct hub was identified as a key requirement for an efficient infrastructure.

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### Phase 2. Development

**General structure for the hub**

After an extensive investigation of existing services and best practices, and multiple iterations, four main sections were developed for Geoportti: Data, Tools, Community and Skills development. The leadership of the portal was handed over to FGI and UTU focused on the two latter sections of Geoportti.

**The initial idea of Geoportti**

The first version of Geoportti was developed by UTU Geospatial Labs with the help of ‘Paikkatietotaitoiset’, a group of students of UTU geography. The work was continued at UTU in close collaboration with the Finnish Geospatial Research Institute (FGI) and the Finnish IT Center for Science (CSC).

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### Phase 3. Launch

**Community & Skills development**

The community section presents the key actors and networks for geospatial research in Finland and internationally. The subsection News provides information on geospatial topics in Finland. The Community section works as the backbone for supporting interaction within the geospatial community.

The skills development section contains geospatial education and training materials, learning tools and links to external resources. They all focus at the level of skills needed in professional geospatial work. The materials are designed to be free for all, with exception of the teachers material repository which is shared by higher education teachers only.

In both of these Geoportti sections, the rationale is to enhance innovative research and a lively culture of knowledge sharing across-disciplinary boundaries.

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### Future development

University of Turku continues to have an active role in the development even after the launch of the Geoportti website. New services are constantly developed and the existing ones are continually adjusted, based on the feedback from active users. Constant engagement of the user community is crucial for the sustainability of this infrastructure.

The expected beneficiaries of the Geoportti infrastructure comprise a wide pool of geospatial research actors at universities and research institutes all over the country. Through Geoportti services, they can save time, avoid overlapping work, share materials and communicate best practices.

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The UTU team involved in this work was made by MSc Vesa Arki, prof. Risto Kalliola (PI), ass.prof. Niina Kåyhkö and the student group ‘Paikkatietotaitoiset’ (2017).