

OECD eXplorer: Making regional statistics come alive through a geo-visual web-tool

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Recent advances in web-enabled graphics technologies have the potential to make a dramatic impact on developing highly interactive Geovisual Analytics applications for the Internet. An emerging and challenging application domain is geovisualization of regional (sub-national) statistics. Higher integration driven by institutional processes and economic globalisation is eroding national borders and creating competition along regional lines in the world market. Sound information at sub-national level and benchmarking of regions across borders, therefore, has increased in importance in the policy agenda of many countries. In this paper, we introduce “OECD eXplorer” – an interactive tool for analyzing and communicating gained insights and discoveries about spatial-temporal and multivariate OECD regional data. This database is a potential treasure chest for policy-makers, researchers and citizens to gain a better understanding of a region’s structure and performance and to carry out analysis of territorial trends and disparities based on sound information comparable across countries. Many approaches and tools have been developed in spatial-related knowledge discovery but generally they do not scale well with dynamic visualization of larger spatial data on the Internet. In this context, we introduce a web-compliant Geovisual Analytics toolkit that supports a broad collection of functional components for analysis, hypothesis generation and validation. The same tool enables the communication of results on the basis of a snapshot mechanism that captures, re-uses and shares task-related explorative findings. Further developments underway are in the creation of a generic highly interactive web “eXplorer” platform that can be the foundation for easy customization of similar web applications using different geographical boundaries and indicators. Given this global dimension, a “generic eXplorer” will be a powerful tool to explore different territorial dimensions (countries, regions, cities, rural areas) according to the different needs of users.