

Participatory Map Services Using Advanced Modelling

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SUMMARY

GIS Technology is ever advancing and is increasingly embedded in human society. Maps or map services are no longer the sole domain of GIS experts or a GIS department. Geospatial information is becoming the blood that flows through organisations and human society, enhancing data interoperability and communication between the various stake holders. Roles vary from actor to actor, and can include precise positioning, updating tabular states of geospatial objects, designing domain infrastructure and gaining insight in decision making processes. With crowd sourcing and volunteered geospatial information the era of participatory mapping has slowly emerged. With a wide range of new GIS technologies available the sky seems to be the limit. However, there exist a downside as well: the rapid appearance of a new technology may make recently embedded technology obsolete. As financial resources are limited embracing progress can therefore be challenging.

Organisations may become conservative in embedding new GIS technologies. Modeling geospatial information processes may help organisations in their continuous struggle for progress in GIS technology. Although modeling geospatial information processes is not new, the GIS technology has developed gradually in the last years, making its scope to provide GIS solutions significantly wider. Information flows can be easily adjusted and the batch processing of geospatial information may provide for affordable GIS solutions. Advanced models may become the backbone of GIS Technology in organisations. Moreover, regulation driven maps can easily be generated using advanced modeling of geospatial information processing on already existing geospatial datasets. Regulation driven maps can play an important role in providing information to, for example, stake holders that need insight in their situation. This paper discusses several advanced models that have introduced participatory map services for organisations in the Netherlands. Best practices are explained here. An emphasis lies on the generation of regulation driven maps. The models will be related to Water Management but can be applied to other themes as well.