

A Guidance Tool for VGI Contributors

A System Design based on Motivations and Interests

The Need for a Guidance Tool

Many people are familiar with the VGI project OpenStreetMap (OSM), but there are many other projects that are not as well known to volunteers. What is needed is a tool that can **help volunteers match their motivations, interests and background to appropriate types of VGI projects.**

The starting point for the guidance tool is contributor **motivation**. If motivations are aligned with the goals of the VGI project, then volunteers will be more likely to participate and will be interested in providing better and more complete data. Much has been written on contributor motivations in various fields from volunteerism to user-generated content. A comprehensive list of motivations has been compiled by Budhathoki and Haythornthwaite (2012), from which we have selected a subset. We also identified a series of activities that might interest people.

Motivations and Activities

Learn new skills
Contribute to science
Financial rewards
Have fun
Altruism
Being part of a community
Positive self-image/reputation
Competing against others
Spotting & correcting errors

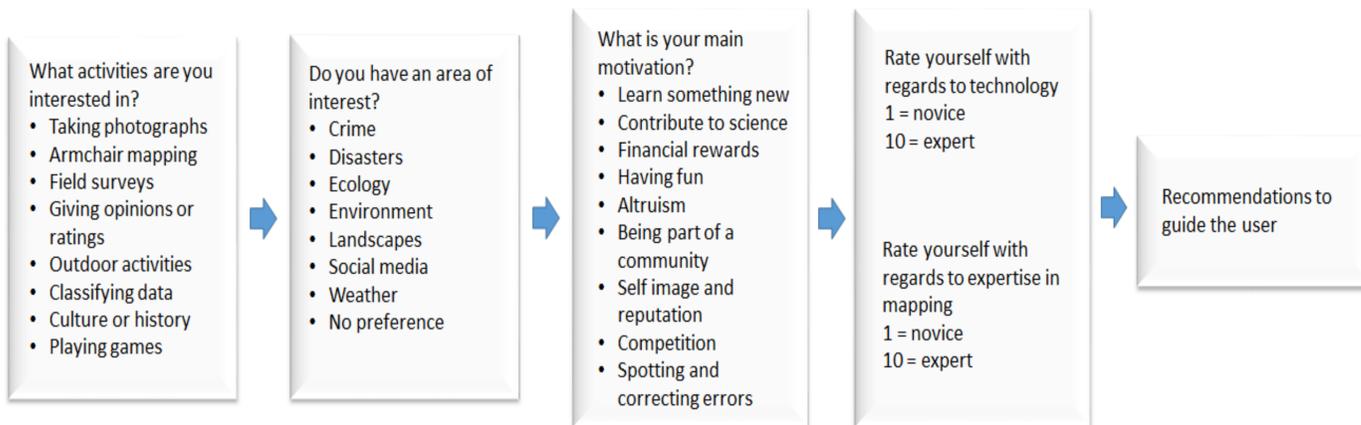
Taking photographs
Creating maps (digitizing)
Creating maps (field survey)
Giving opinions or ratings
Outdoor activities
Classifying data
Interests in culture/history
Interests in playing games

+

level of expertise and area of interest

Design of the Guidance Tool

We would envisage that the guidance tool would be a series of **questions arranged in a decision tree** that would lead to **recommendations** for what initiatives to contribute to or what websites to consult based on answers provided at each stage as shown below. For example, someone interested in taking photographs, wants to contribute to science and is interested in biodiversity might be directed to one of many different species identification applications, depending on level of expertise.



Hierarchical system for recommending VGI projects to users

Examples of Typical Users

Below are examples of user stories and how the guidance tool might help them find an appropriate project.

George is 12 years old, a **high school student** and, of course, a Pokémon Go player. Through Pokémon Go, he has become very **familiar with maps** on his Android phone. After playing Pokémon Go for several months, he decides he wants to play another **geo-enabled game**. The guidance tool leads him to FotoQuest Go (<http://fotoquest-go.org>), where he can undertake quests by providing **photographs** and possibly winning a tablet if he becomes one of the top contributors. The guidance tool will help volunteers with interests in gaming find some interesting apps for them.



Philippe is 45 years old, works in the private sector and in his free time he is a volunteer **firefighter**. As he strongly believes in **voluntarism**, he can easily become a crowdsourcing fan. Once a week he has to patrol the area as a volunteer firefighter. He participates in the "Fix my street" project (<http://fixmystreet.org>), where he reports problems in the road network. The guidance tool would combine **altruistic motivations** with activities that involve **providing a voice to citizens**, i.e. via a type of opinion, towards applications that see tangible impacts in the form of responses from local authorities.



Helen is 70 years old, retired, and has a **passion for photography and art**. She has a lot of free time and she wants to build a network of new friends. Helen is very nostalgic about the city in which she was born and where she has spent all her life. She hears about the Athens Sculptures Atenistas project (<http://www.athenssculptures.com/p/blog-page.html>) that aims to document the sculptures in Athens city with photos, geocoding on the map and addition of descriptions. By becoming a member of this VGI project, she has entered a new circle of colleagues and participated in the **recording of sculptures by providing photographs**. The guidance tool would help people like Helen to combine their love of photography with their interests in art.



Vyron Antoniou¹
Cidália Costa Fonte²
Marco Minghini³
Linda See⁴
Andriani Skopeliti⁵

¹ Hellenic Military Geographical Service, Greece, v.antoniou@ucl.ac.uk
² University of Coimbra & INESCC, Portugal, cfonte@mat.uc.pt
³ Politecnico di Milano, Italy marco.minghini@polimi.it
⁴ IIASA, Austria see@iiasa.ac.at
⁵ National Technical University of Athens, Greece, askop@survey.ntua.gr



Mapping and the Citizen Sensor



COST is supported by the EU RTD Framework Programme

Scan this QR code to download the poster!

