

The Challenges, Services and Real-time Capabilities of Mobile and Web GIS for Emergency Management in Nigeria

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SUMMARY

The advent of the Mobile and Web G.I.S are great milestones in the evolution of civilization. Everything that happens, happens somewhere. Knowing “what” is “where” and “why” it is there can be critically important for making decisions, action plans and development. G.I.S is the technology as well as the science for handling the “where” type of questions. This paper presents a framework of how Mobile and Web G.I.S have become embedded in many Location Based Services (LBS) applications, particularly in navigation functions and location awareness. Mobile and web G.I.S have taken advantage of technologies (wireless network, mobile devices and smart phones) to offer the possibility of exchanging and analyzing Spatial Information in real-time geographic world. The challenges faced in Nigeria include the affordability of mobile devices, network limitation, communication bandwidth and accessing multiple heterogeneous data sources using different transmission mechanism. This paper further reveals the potentiality of Mobile and Web G.I.S in managing emergencies in Nigeria as well as its technical / managerial flaws, Geo-spatial information free flow in enhancing, planning, implementation, modification and response in real-time operations for proper data management, analysis capabilities and spatial service sharing.