

A Strategy for Virtually Sharing of Geographic Information by Botswana National Mapping Agency

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SUMMARY

National Mapping Agencies (NMAs) are internationally recognized as critical in collection, processing, modelling and distribution of geospatial data within home countries. Their roles are entrenched as main suppliers of base geospatial data sets. In Botswana, the prevailing NMA is known as Department of Surveys and Mapping (DSM) established under Botswana Land Survey Act CAP 33:01. This NMA, in 2004 responded to geospatial technological advancements through a wide scoped project dubbed Integrated Geographic information System (IGIS). This project was styled to have a number of modules relating to geodatabase development, digital archiving and geospatial information distribution. Its overarching purpose was to integrate cadastral, geodetic, and topographic databases within the NMA to facilitate the provision of geographic information and discoverability for cost-effective use within Botswana economy. Though some parts of this system have been developed, they are operational and available only internally within the NMA and are still not available for a wider access by external stakeholders through technological platforms. The unavailability of virtual access for external stakeholders' points to difficulty in sharing and exchange of the MNA's geospatial data and information in the midst of unfolding technological advancements and other sudden and explosive trends such as COVID-19. Through this paper, the intention is to explore the efforts made by Botswana Department of Surveys and Mapping (BDSM) in embracing geospatial technologies, deduce problems encountered and suggest the strategies that could be employed to successfully share and exchange geospatial information virtually in Botswana. The strategy is aimed at reflecting technological changes which have occurred, coupled with current concepts such as National Spatial Data Infrastructure (NSDI) which are critical in geospatial information sharing and exchange.

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