28 May - 1 June 2023 Orlando Florida USA

Protecting Our World, Conquering **New Frontiers** 

trategy for Virtually Sharing of **Geographic Information by Botswana National Mapping Agency** 

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## INTRODUCTION

- ■NMA is established under Land Survey Act CAP 33:01
- **DUTY GOVERNMENT AND STAKEHOLDERS**
- ☐ Technology Efforts by Department of Surveys and Mapping (DSM)
  - Several efforts have been done to digitalize DSM data
  - External stakeholders have never had direct access
  - Challenges in sharing and exchange of the MNA's geospatial data subsists
  - No available online platform











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## **DSM EFFORTS**

- ■Such efforts include;
  - Integrated Geographic information System (IGIS).
  - Cadastral Information System (CIS)
  - Digital Archiving System
  - National Spatial Data Infrastructure (NSDI)
- ☐ A question mark on DSM virtual presence?
- ☐ Is virtual presence strategy a necessity?











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## STUDY APPROACH

- ☐ A Stuqualitative Study using:
  - Document study and analysis
  - Online presence and portal searches
  - Interviews with DSM Officers











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#### **RESULTS**

- ■Documents: Number of Reports on digitalization efforts found
  - HOWEVER
    - Dissemination: Manual and highly conventional
    - No virtual dissemination
    - No dissemination strategy
- ☐ Web Presence: Insignificant
- ■National Spatial Data Infrastructure: attempts made but no outputs











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## **PROPOSED STRATEGY**

- ☐ Proposed strategy anchored on the following:
  - 1. DATA MANAGEMENT: internal frameworks and operations
  - 2. CONTENT MANAGEMENT: data management and publication content to any outlet
  - 3. CONTENT ENTERPRISE MANAGEMENT: Rethinking and establishing of convergence of Data Management (DM) and Content Management (CM)
  - 4. STAKEHOLDER VIRTUAL REQUIREMENTS: Data openness and Accessibility









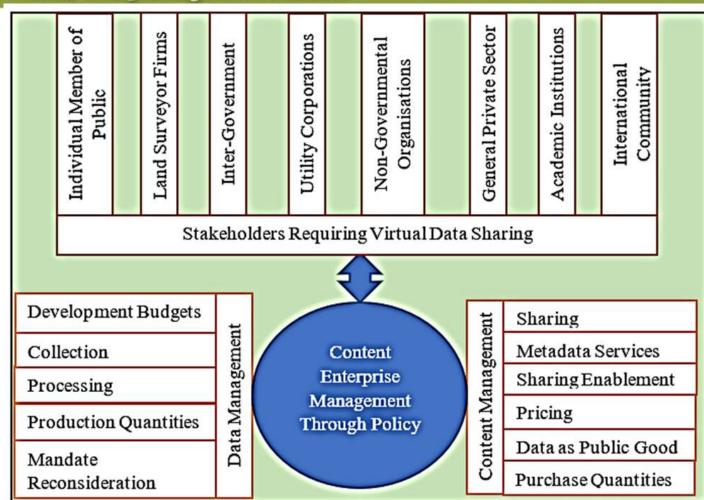


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# **Content Enterprise Management (CEM) Strategy**

- ☐ Policy as opposed to practice as is currently
- Codification
- ☐ Functional ECM Committee establishment within DSM Administrative Division
  - ECM Policy formulation
  - Datasets
  - Metadata service development
  - standards and guidelines on virtual access of DSM content by stakeholders
- Committee must meet monthly













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## **CONCLUSION**

□ Botswana Act Chapter 33:01 the Land Survey Act (DUTY to Government and Users
□DSM possesses massive Data. It has to be tapped to support various socio-economic and environmental interests – Health, Education, Social and Local Government, environmental management, utility management, Academic Research etc
☐Public has to demand quality spatial data from DSM
□DSM has duty to make the data it collects accessible to all (Data must be reliable, relevant, reasonable cost and timely)
☐Coordinated situational analysis and awareness within DSM must be done
□DSM must ensure security and authenticity of spatial data consumed in the country







