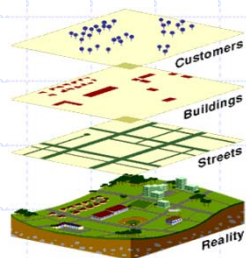


Assessment of GIS Adoption in Saudi Arabia: Obstacles and Challenges

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GIS Adoption in Saudi Arabia

- ◆ Numerous public and private agencies have adopted GIS in the country

- ◆ GIS Adoption is at:
 - The national and
 - The local levels

GIS Adoption at the National Level

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- ◆ Ministry of Municipal and Rural Affairs (MOMRA)
 - First agency at the national level to use GIS (since 1988)
 - MOMRA's first project was intended for Land Records Management

◆ Ministry of Transportation

- GIS Database for Bridges Maintenance

◆ Ministry of Water & Electricity

- Water and Sewer Directorates of the Ministry
 - ◆ Riyadh, Dammam and Jeddah core areas

◆ Ministry of Education

- GIS Database of Schools GIS nation-wide



Ministry of Interior

- Ministry-wide GIS Project



General Authority of Tourism & Antiquities

- GIS Data base about Points of Attractions & Archeological Sites nation-wide

GIS Adoption at the Local Level

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- ◆ High Authority for the Development of Riyadh
 - First in at the local level to use GIS (since 1986)
 - Created a Digital Base Map of Riyadh

- ◆ Dammam Municipality:
 - Municipality-wide GIS Project (started 2004)

- ◆ Riyadh Municipality
 - Municipality-wide GIS

- ◆ Holy City Municipality
 - in progress since 2003
 - through Municipality GIS Center

- ◆ Royal Commission in Jubail & Yanbu
 - GIS activities started 1994



◆ Hasa Irrigation and Drainage Authority (HIDA)

- A comprehensive GIS project.
- First Phase: build base map of the agricultural oasis with the help of UN FAO

◆ King Faisal Specialist Hospital

- GIS Project to track spatial pattern of spread of cancer
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Private Sector

- ◆ Saudi Electricity Company (SEC)
 - On-going Company-wide GIS Project
 - Covering: Eastern ; Central; Western; and Southern Regions

- ◆ ARAMCO e-Map Project:
 - An ARAMCO-wide GIS Project
 - in progress since 2001

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- ◆ Saudi Telecommunication Company (STC)
 - GIS Project to geo-reference mobile towers

Challenges of GIS Adoption in Saudi Arabia

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◆ Lack of Leadership and Coordination

- Too many projects in the country with no coordination or cooperation
- Leads to loss of efforts & resources

◆ Lack of Data

- Leads to collect data from scratch
- A major challenge in terms of cost and time
- Constitute about 80% of total expenditure

Recommendations

- ◆ Increase awareness of GIS
- ◆ Establish a GIS National Steering Committee or Commission
- ◆ Secure human resources in GIS through
 - specialized GIS curricula & training in universities

Thanks for Listening