UN-GGIM Kunming Forum

Smart City ---

Dynamic Data Handling for Decision Making

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- **Basic Intelligence**
  - detection - decision - action **(an automatic chain)**
  - detection - decision - action - feedback - improvement **(an automatic loop)**
  - detection - decision - action - feedback - optimization **(an automatic spiral)**

- **Advanced Intelligence**
  - awareness-preplan-action**(an autonomous chain）**
  - awareness-preplan-action-feedback-improvement **（an autonomous loop）**
  - awareness-preplan-action-feedback-optimization **（an autonomous spiral）**

- **Basic Smartness** —— ……deep leaning, horizontal learning…… **（known problem）**

- **Advanced Smartness** —— ……inheritance, evolution…… **（unknown problem）**

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Smart City Data Ecosystem

☐ **Cities of the future will be integrative data ecosystems**

☐ **Generating and consuming massive amounts of data**

- Mr. Greg Scott

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☐ **Multiple Scale**

■ **International, Regional, National, Provincial, Municipal, Local ......**

☐ **Multiple Dimension**

■ **Geospatial, non-geospatial, quantitative, qualitative, image, video ......**

☐ **Multiple Granularity**
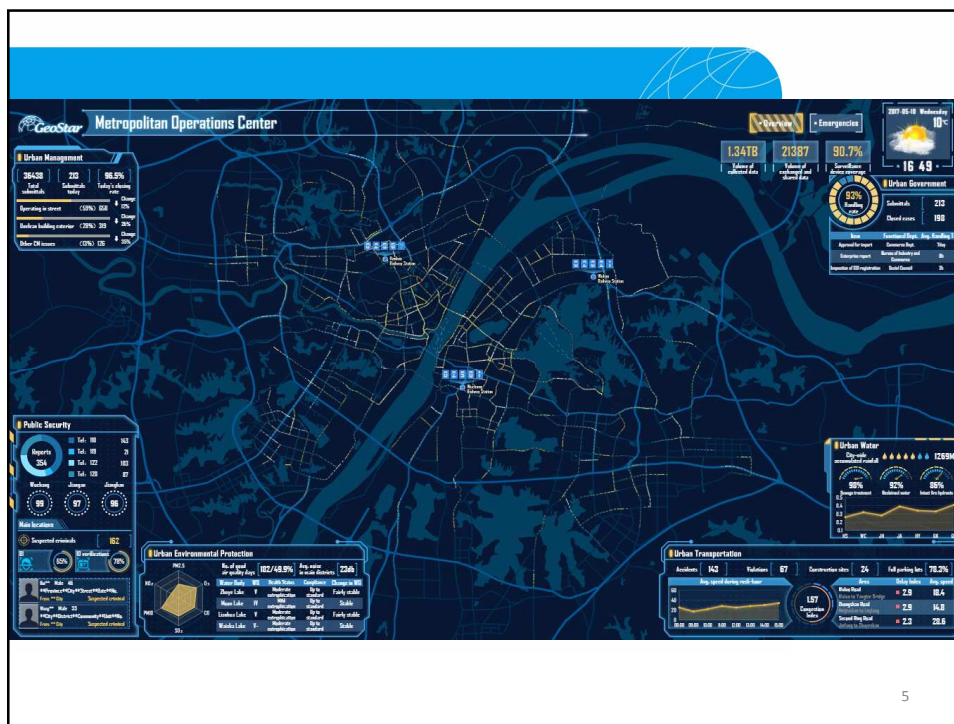
■ **Statistical, collective, samples, abstracts, streaming ....**

☐ **Multiple Sources**

■ **Remote Sensing, Physical Sensors, Social Sensors, ...**

☐ **Multiple Temporal**

■ **Static, Slow-changing, Quick-changing, Real-time, ...**

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	Spatial	Non-Spatial
Static	Buildings, Road Network, Fire hydrant, Infrastructures, District Population, Spatial Layouts……	
Slow-Changing	Schools, Residents, Medical Services, Number of elder/disabled people, economy…….	
Quick-Changing	Temperature, Pedestrian Flow, Police Deployment……	
Real-time	Fire, Social cases, wind, weather, ……	

智慧临潼 Smart Lintong

Challenges

☐ **Technological Challenges**

- Big data management, Data cleaning
- Real-time data fusion, streaming data processing, Visualization
- AI, deep learning for effective and efficient decision making

☐ **Policy Making and Management Challenges**

- Data policy
- Data safety
- Life cycle management of data ecosystem
- ......

谢 谢！