Virtual Regional Seminar on
Operationalizing the Integrated Geospatial Information Framework
in Asia and the Pacific

MONGOLIA: Operationalizing Integrated Geospatial Information Framework

Bayarmaa Enkhtur

Agency for land administration and management, geodesy and cartography, Mongolia

bayarmaa.e@gazar.gov.mn

25 November and 02 December 2020
10:00am to 12:00 noon (UTC+7, Bangkok time)
Videoconferencing

Introduction – IGIF Journey begins

2018

2019

2020

Integrated Geospatial Information Framework

- United Nations 11th Tranche Development Account
  - Project 1819D "***Strengthening Geospatial Information Management in Developing Countries towards Implementing the 2030 Agenda for Sustainable Development***" in Burkina Faso, Ethiopia, Fiji, **Mongolia,** Nepal, Kingdom of Tonga
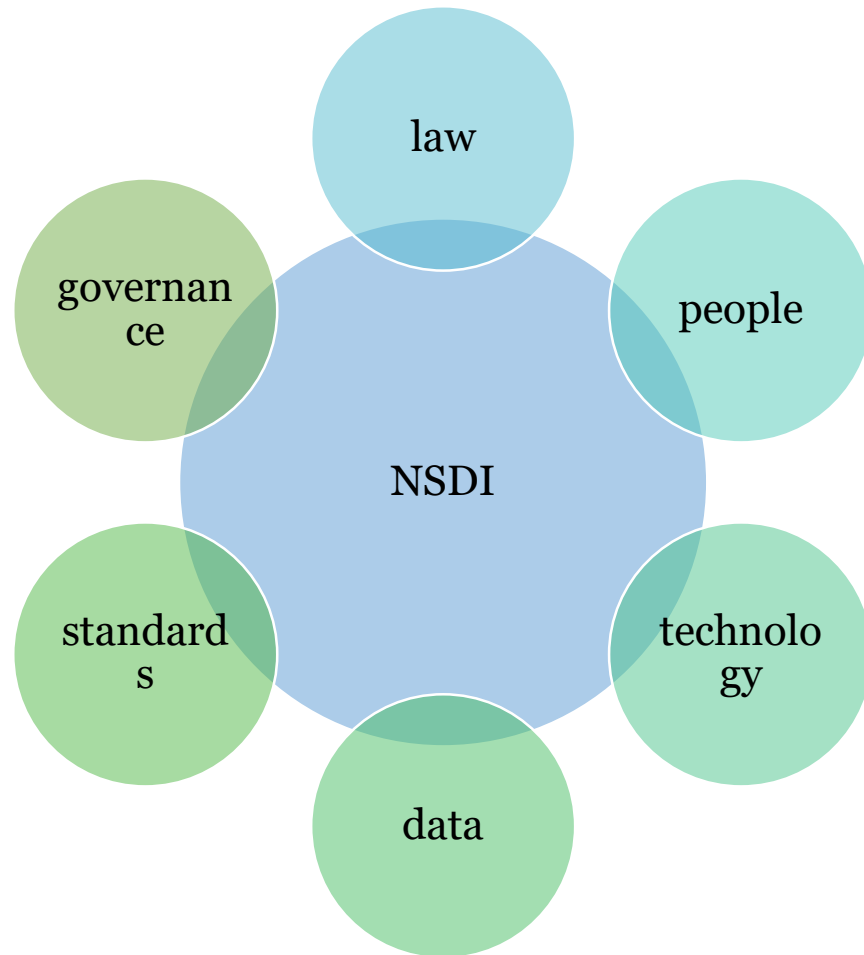- WB Technical Assistance to the Government of Mongolia for Geospatial information Management
  - ***National Spatial Data Infrastructure for Mongolia: Socio Economic Impact Analysis***
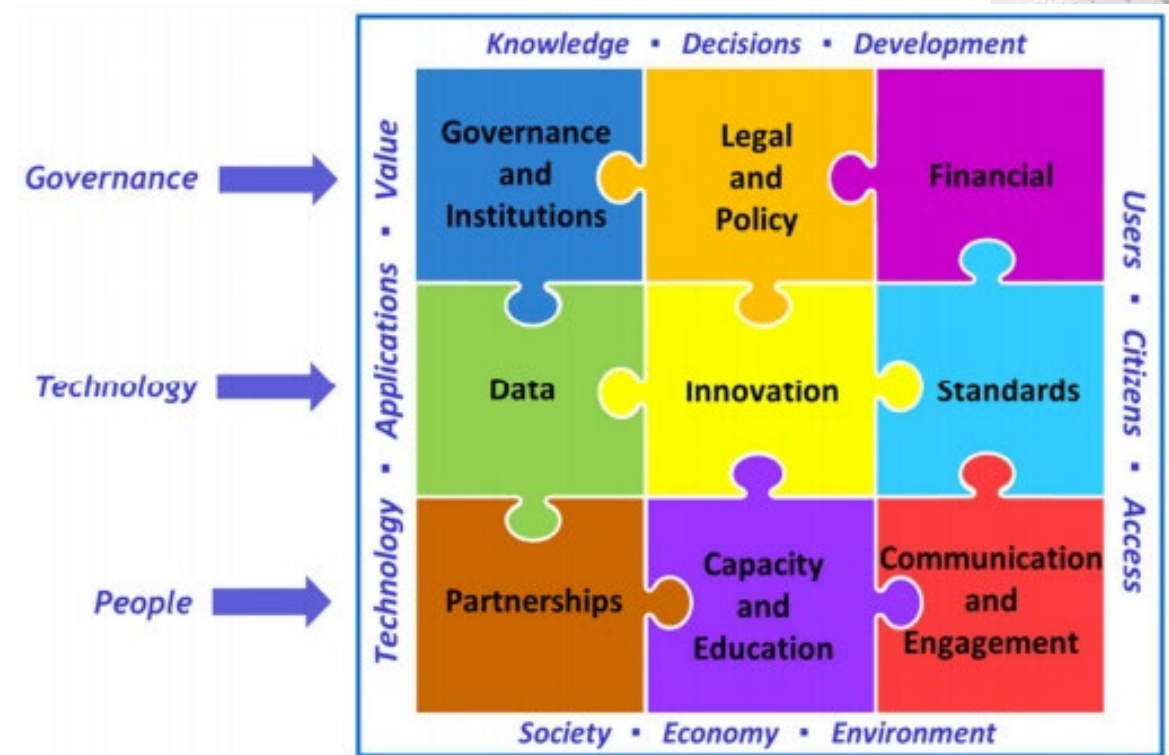   - within the World Bank Urban, Resilience and Land Global Practice (GPURL), Global Land and Geospatial Unit.
- NSDI ACTION PLAN
  - NSDI Implementation in Mongolia

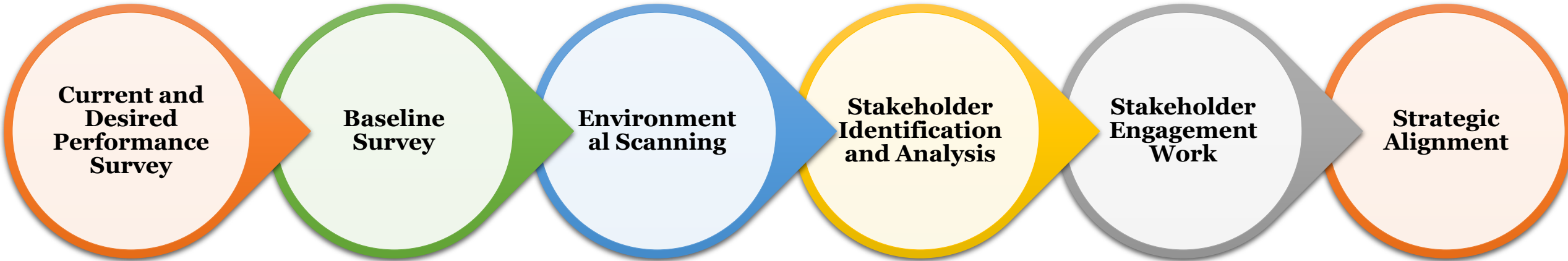# Integrated Geospatial Information Framework

Before IGIF

IGIF introduced

lian version

UN-GGIM Project 1819D – systematic guidance

| Current and Desired Performance Survey | Baseline Survey | Environmental Scanning | Stakeholder Identification and Analysis | Stakeholder Engagement Work | Strategic Alignment |

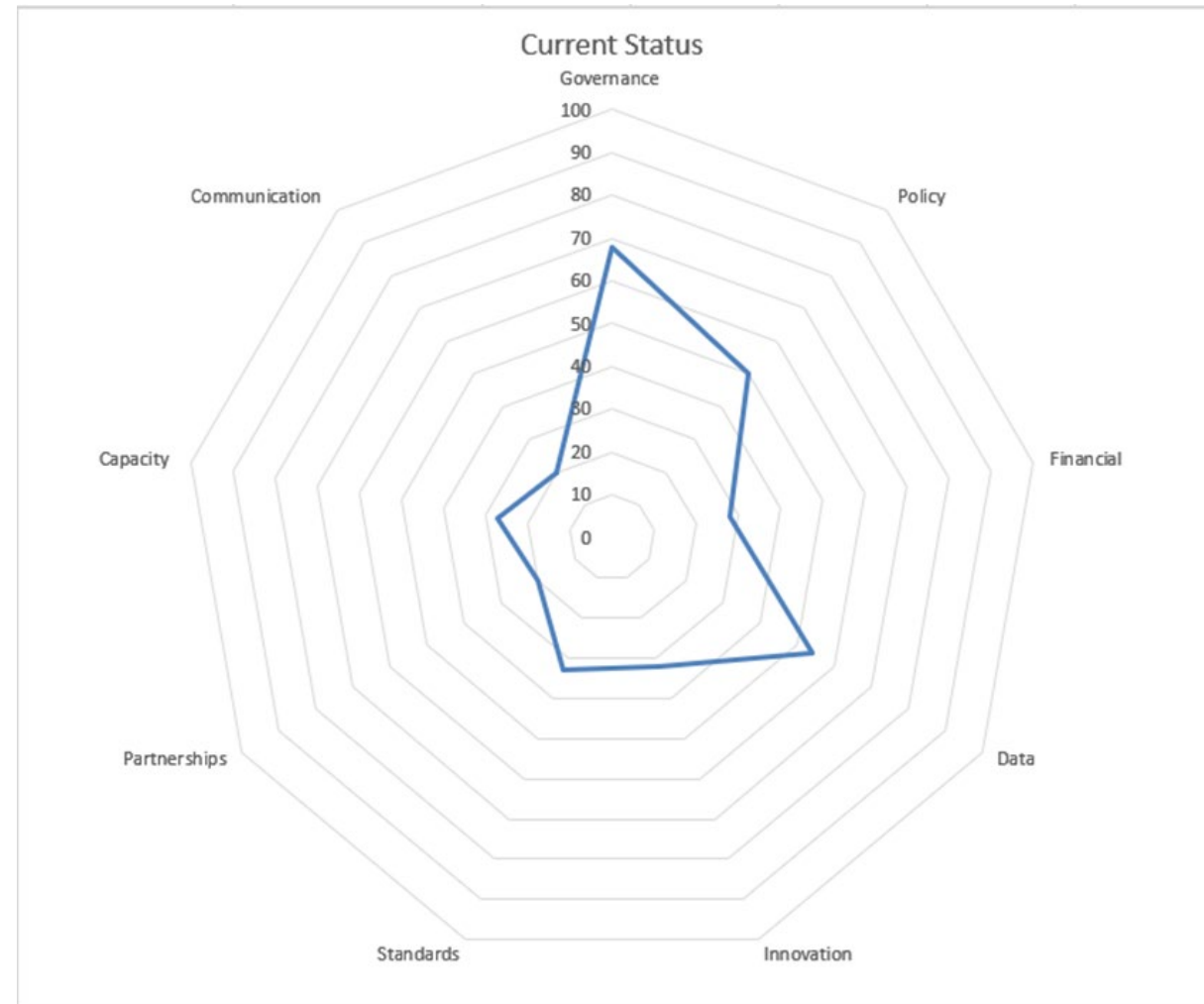Governance and Institutions

Working group on GIM

Current status

Scores for the individual Strategic Pathways
- Governance and Institutions 68
- Policy and Legal 50
- Financial 28
- Data 54
- Innovation 32
- Standards 10
- Partnerships 20
- Capacity and Education 27
- Communication and Engagement 20

National Spatial Data Infrastructure for Mongolia: **Socio Economic Impact Analysis**

- WB Technical Assistance to the Government of Mongolia for Geospatial information Management
    - *National Spatial Data Infrastructure for Mongolia: Socio Economic Impact Analysis*
        - interviews with more than **25 stakeholder** organizations, including Mongolian Government Ministries, agencies, State-owned enterprises and private sector companies,
        - the team identified over **50 use cases** where there are demonstrable benefits from the implementation of GIS technology requiring foundation geospatial data
        - Calculated **socio-economic benefits** and investment plan

Зардал-үр ашгийн шинжилгээ

Төслийн насжилт
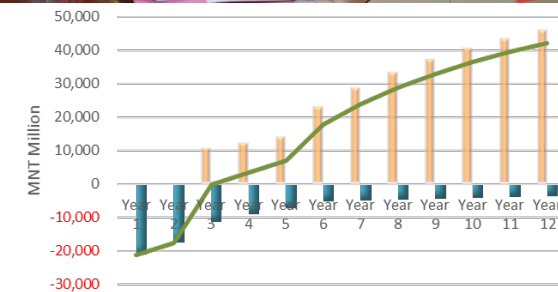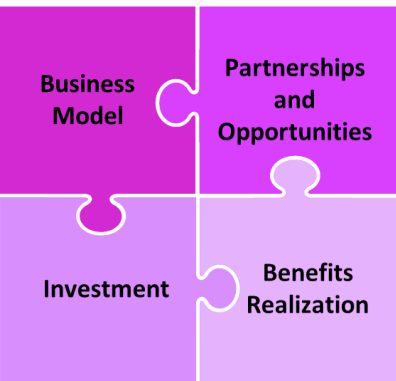
Task force for NSDI established

UN-GGIM & WB: NSDI Action plan

Vision, Mission and Goals

Leaving no SPs behind

Action plan

Vision

Geo-driven eGovernment and innovation that empowers efficient and effective use of geospatial information towards national sustainable development.

Mission

Strengthen integrated geospatial information management and promote the value of geospatial information through leadership, coordination, partnerships, advanced technology, and geo-standards.

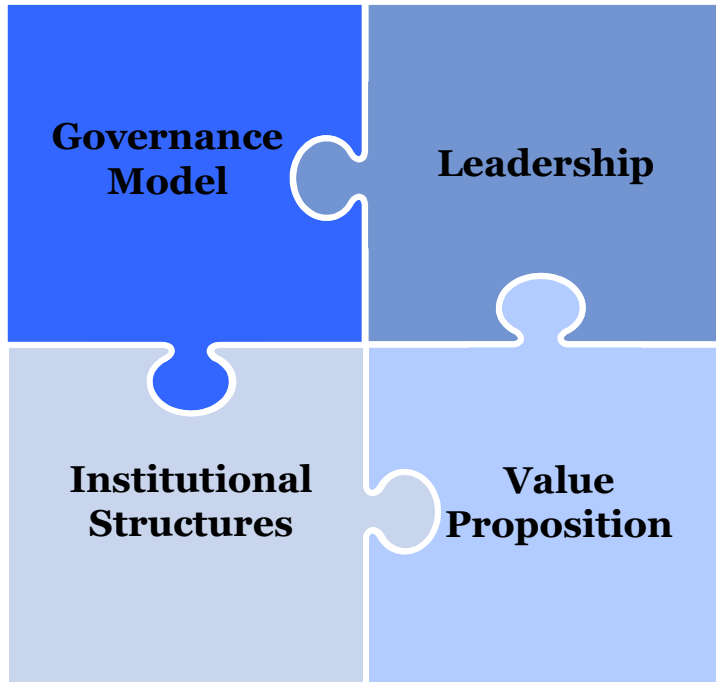**Goal 1: Quality Information**

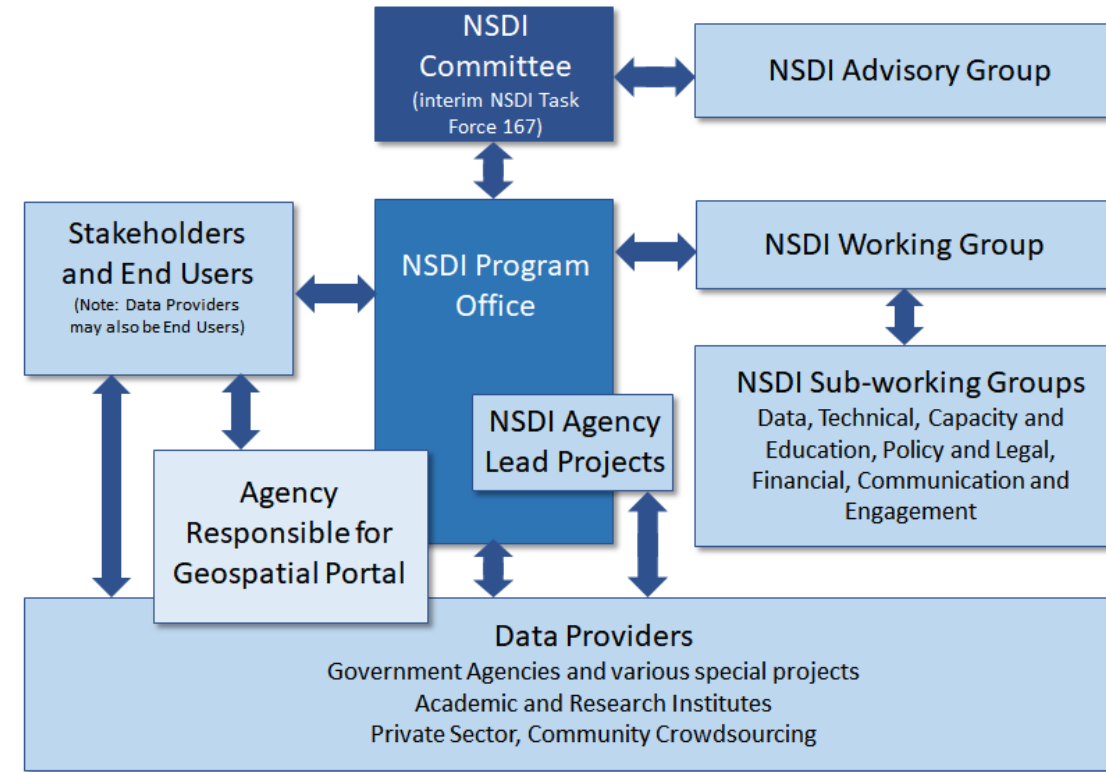**Goal 2: Accessible and Useful**

Goal 3: Good Governance

Goal 4: Innovation and Capacity

SP1 **Governance and Institutions**

Current

Desired

SP2 Policy and Legal

Legislation

Norms, Policies and Guides

Implementation and Accountability

Data Protection and Licensing

- Endorse SDI LAW
  - Reflecting SPs
- Implement Action plan
- Draft Data release and licensing regulation

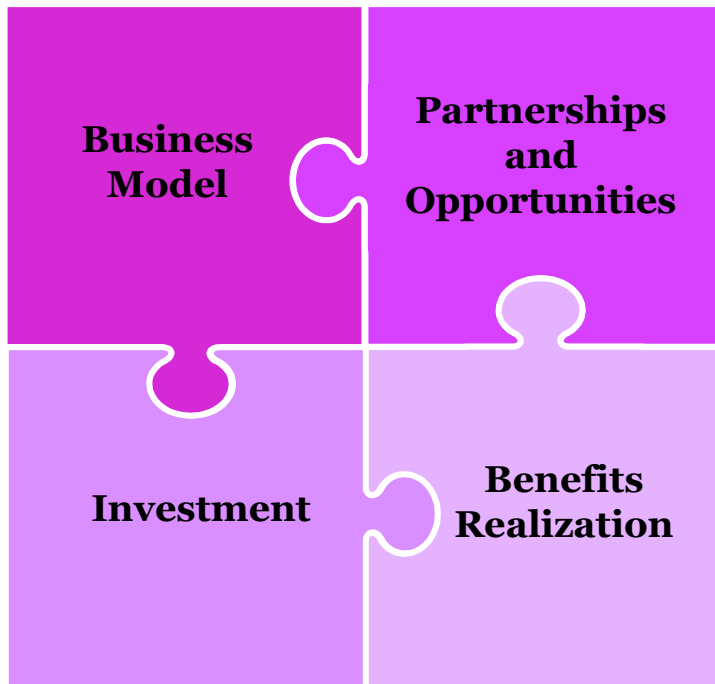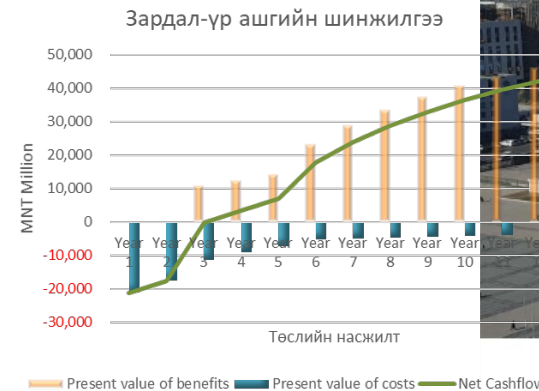Authorized   Timely   Innovative   Citizen-centered   Availability

SP3 Financial

- National Spatial Data Infrastructure for Mongolia: Socio Economic Impact Analysis
- Investment plan

Business Model

Partnerships and Opportunities

Investment

Benefits Realization

Зардал-үр ашгийн шинжилгээ

MNT Million

50,000
40,000
30,000
20,000
10,000
0
-10,000
-20,000
-30,000

Year 1 Year 2 Year 3 Year 4 Year 5 Year 6 Year 7 Year 8 Year 9 Year 10 Year Year

Төслийн насжилт

Present value of benefits   Present value of costs   Net Cashflow

SP4 DATA

Fundamental Geospatial Data Service via GEOPORTAL
geoportal.nsdi.gov.mn
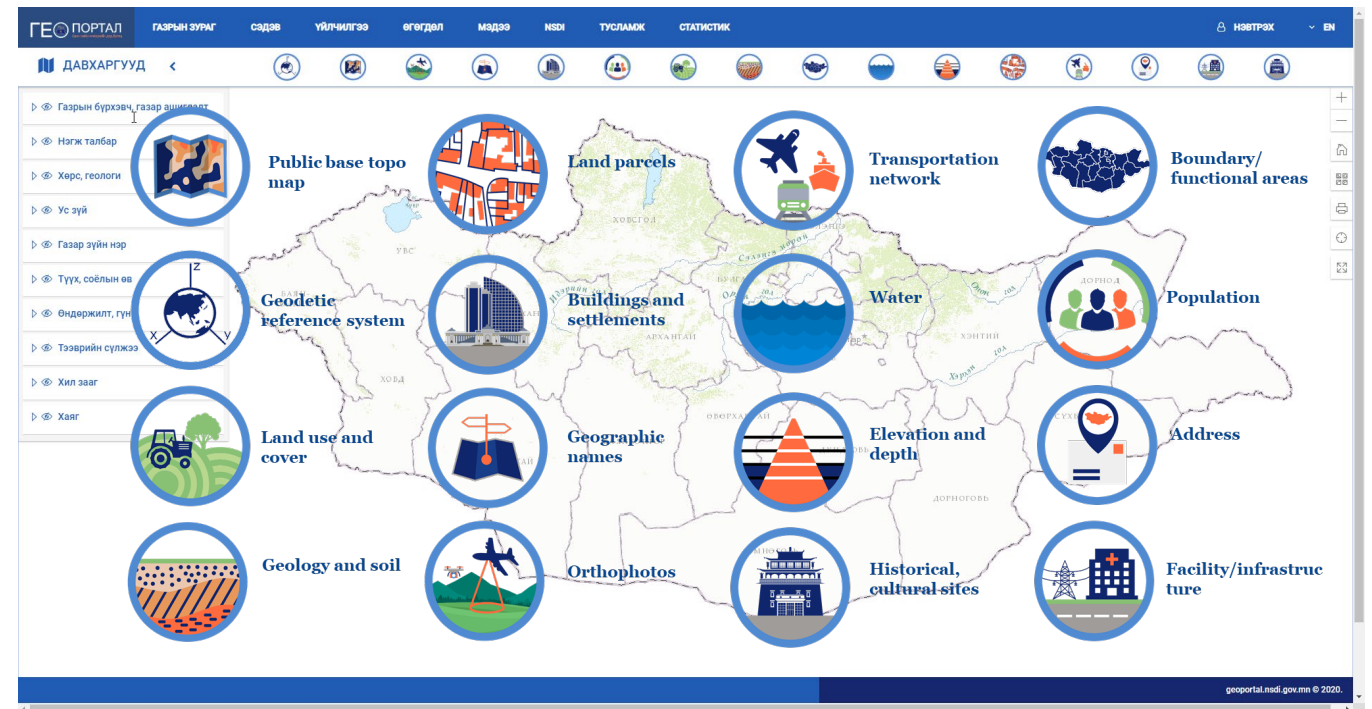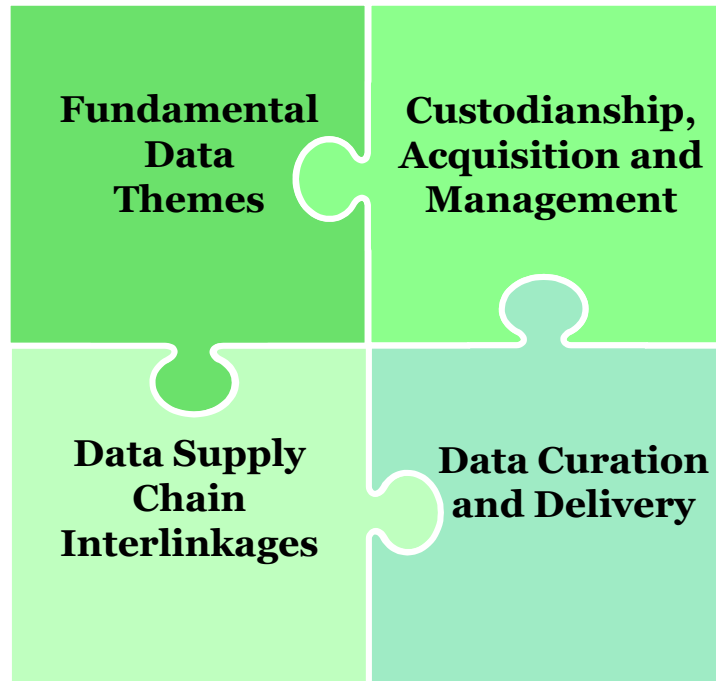
16 fundamental theme /more than 250 subtheme/
Management
Geoportal

SP5 innovation SP6 Standards

SP5 Innovation

Technological Advances	Process Improvement
Promoting Innovation and Creativity	Bridging the Digital Divide

Geo-enabled Digital transformation
  E-Mongolia -> GeoMongolia
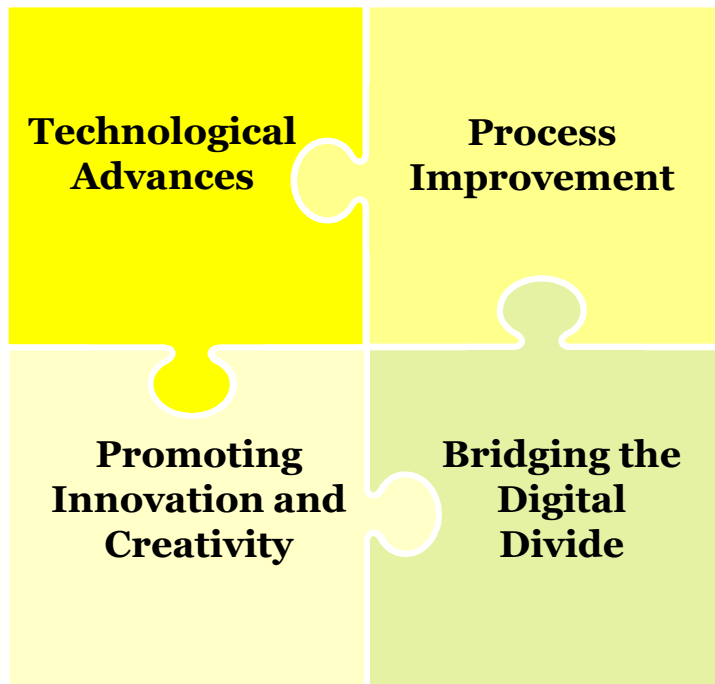 Egovernance –> GeoGovernance
  OpenGov -> OpenAPI

SP6 Standards

Legal Interoperability	Data Interoperability
Semantic Interoperability	Technical Interoperability
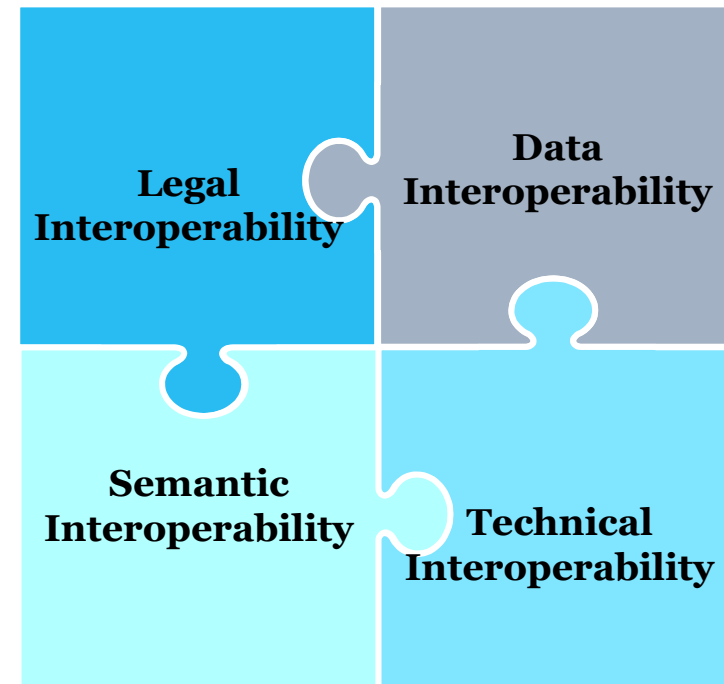
Adopt ISOTC211 Standards
  Data Specification on Fundamental data theme
  Interoperability

SP7 Partnership

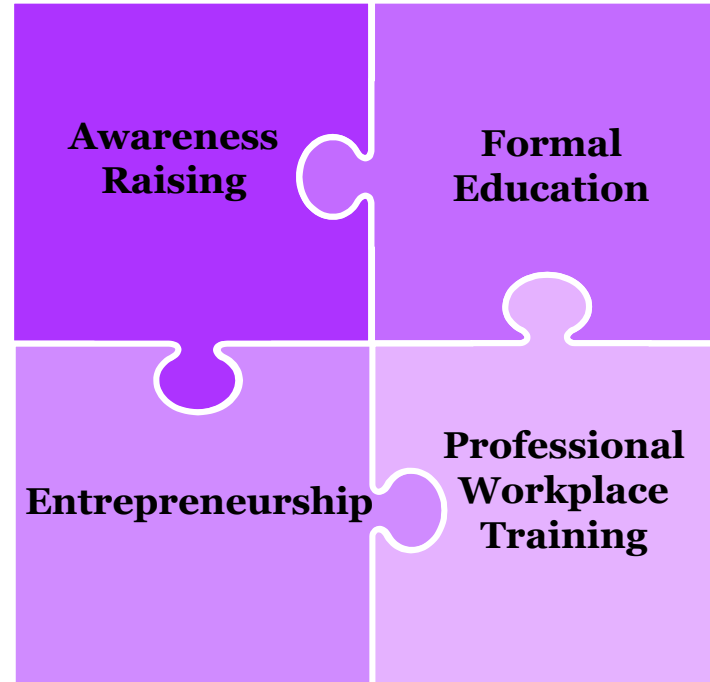|	
Cross-sector and Interdisciplinary Cooperation	Industry Partnerships and Joint Ventures
Community Participation	International Collaboration

SP8 Capacity and education

Awareness Raising	Formal Education
Entrepreneurship	Professional Workplace Training

SP9Com. and engagement

Stakeholder Identification	Integrated Engagement Strategies
Planning and Execution	Monitoring and Evaluation

7 Partnerships

- Strengthen and Formalize Partnerships within Mongolia
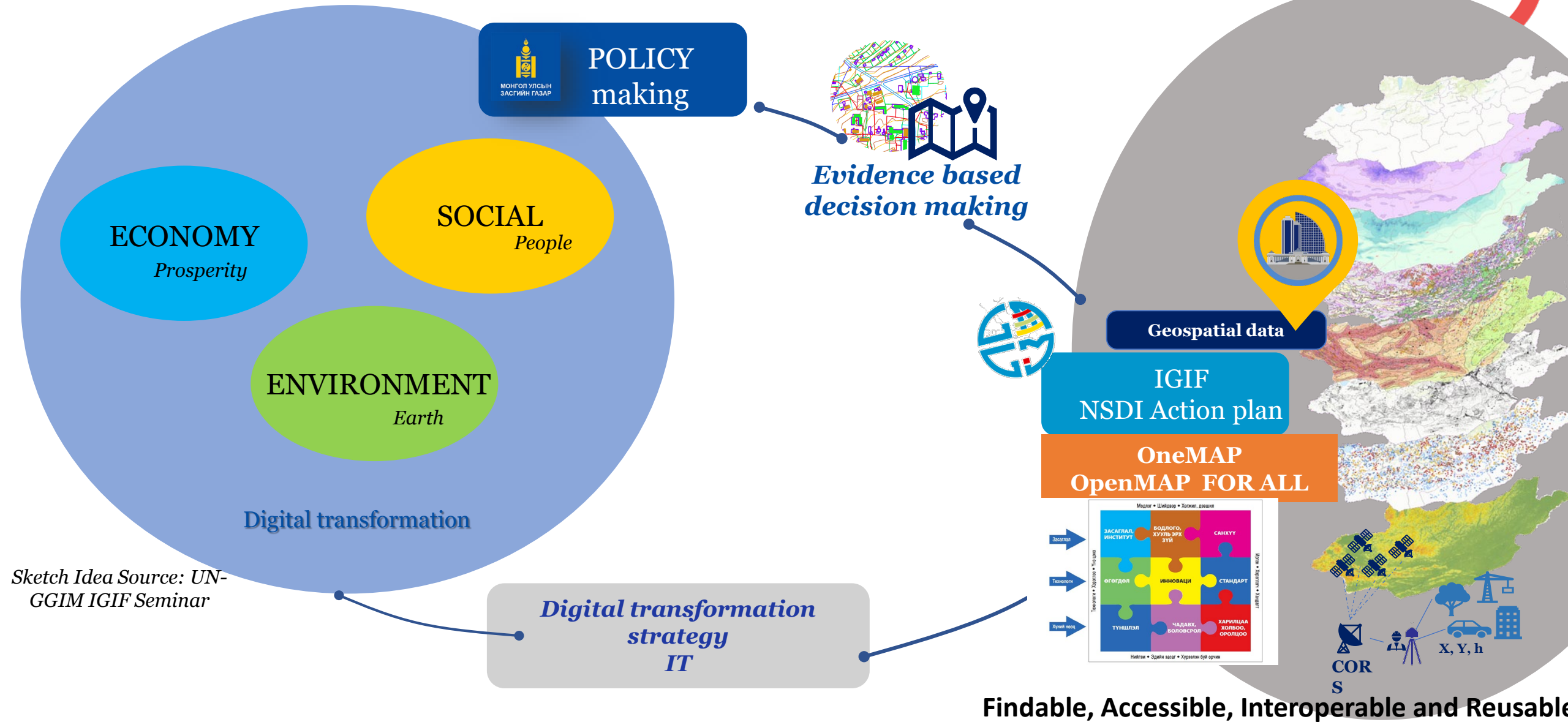- International Collaboration

8 Capacity and Education

- Develop an NSDI Capacity Building and Education Strategy
- Conduct an NSDI Skills Gap Analysis
- Enhance Capabilities in Tertiary Level Education
- Enhance Teaching and Awareness of Geospatial Information School Curricula

9 Communication and Engagement

- Develop an NSDI Communication and Engagement Strategy and Plan
- Create Outreach Group (High Priority)

NSDI Action plan is for
Geo-enabled Digital transformation in Mongolia

POLICY making

Evidence based decision making

ECONOMY
Prosperity

SOCIAL
People

ENVIRONMENT
Earth

Digital transformation

Sketch Idea Source: UN-GGIM IGIF Seminar

Geospatial data

IGIF
NSDI Action plan

OneMAP
OpenMAP FOR ALL

Digital transformation strategy IT

CORS

X, Y, h

Findable, Accessible, Interoperable and Reusable

Thank you for your kind attention