



**United  
Nations**

Department of  
Economic and  
Social Affairs



MINISTRY OF DIGITAL DEVELOPMENT,  
INNOVATION AND COMMUNICATIONS

**Capacity Development Workshop on  
National Data Governance  
Framework and Digital Government  
in Mongolia**

**Outcome Report**  
*December 2024*



**United Nations**

Department of  
Economic and  
Social Affairs



**MINISTRY OF DIGITAL DEVELOPMENT,  
INNOVATION AND COMMUNICATIONS**

Capacity Development Workshop on

# **National Data Governance Framework and Digital Government in Mongolia**

3-4 December 2024

## **Outcome Report**

## **United Nations Department of Economic and Social Affairs**

Rooted in the United Nations Charter and guided by the transformative 2030 Agenda for Sustainable Development, the UN Department of Economic and Social Affairs (UN DESA) upholds the development pillar of the United Nations. UN DESA brings the global community together to work towards common solutions to the world's most pressing problems. We help countries translate their global commitments into national action in the economic, social and environmental spheres. UN DESA is a pioneer of sustainable development and the home of the Sustainable Development Goals (SDGs), where each goal finds its space and where all stakeholders can do their part to leave no one behind. UN DESA is a leading analytical voice for promoting inclusion, reducing inequalities and eradicating poverty, and a champion for tearing down the barriers that keep people in poverty. UN DESA helps countries make informed decisions by providing a wealth of information through publications and databases and through support for international deliberations at the United Nations General Assembly, Economic and Social Council (ECOSOC), Commissions, Forums and other bodies. The Department undertakes complex work to support intergovernmental processes, produce research and analysis, and provide capacity development support.

## **United Nations Project Office on Governance**

The United Nations Project Office on Governance (UNPOG) is part of the Division for Public Institutions and Digital Government (DPIDG) of the United Nations Department of Economic and Social Affairs (UN DESA). Its principal mission is to strengthen the public governance capacities of developing the Member States in Asia, the Pacific, and beyond to achieve the 2030 Agenda for Sustainable Development. The operational work of UN DESA, and thus UNPOG, aims to strengthen the capacities of developing countries to translate internationally agreed policy frameworks into strategies and programmes at all levels of public governance. The focus on strengthening the capacity of public administration falls within the mandate of UN DESA's Division for Public Institutions and Digital Government.

## **Ministry of Digital Development, Innovation, and Communications. Mongolia**

Under Government Resolution No. 14, dated January 6, 2022, the Communications and Information Technology Authority, which served as a government coordinating agency, was dissolved. In its place, the Ministry of Digital Development and Communications was established. Subsequently, the Law on the Structure of the Government, approved on July 10, 2024, reorganized and renamed this Ministry to the Ministry of Digital Development, Innovation, and

Communications. The mission of MDDIC is to introduce advanced communication and information technology into Mongolia's social and economic sectors and build and develop an e-nation based on knowledge and intelligence.

## Workshop Objective

The Workshop was jointly organized by the Division of Public Institution and Digital Government (DPIDG) and its Project Office on Governance (UNPOG) of UN DESA and the Ministry of Digital Development, Innovation, and Communications of the Government of Mongolia. The objectives of the Workshop were:

- Build capacities in understanding and implementing UN DESA's e-government development framework, guided by the UN E-Government Development Index (EGDI).
- Explore the existing opportunity and gap assessments for proposed focus areas, emerging from dialogue and interaction among workshop participants, including the proposed UN DESA national data governance framework of 4 pillars and 6 elements.

### **Four (4) pillars:**

- Policy: existing policy and regulatory framework
- Institutions: existing institutional framework
- People: existing data ecosystem and mapping of stakeholders
- Processes: existing data processes

### **Six (6) elements:**

- Data standards and classification
  - Data sharing, exchange and interoperability, including open government data
  - Data security (in relation to overall national cybersecurity)
  - Data privacy (and ethics)
  - National data infrastructure (e.g., datacenter, cloud, data services, etc.)
  - Linking data governance to digital identity (or a lack thereof)
- Identify the next course of action in strategic planning and implementation for setting up a national data governance framework.
  - Engage stakeholders from different agencies and other non-government stakeholders to participate in the official dialogue and knowledge exchange on proposing a national data governance framework for Mongolia.

## Acknowledgements

The workshop was organized by UN DESA through its Division for Public Institutions and Digital Government (DPIDG) and its Project of Office on Governance (UNPOG), in collaboration with the Ministry of Digital Development, Innovation, and Communications of the Government of Mongolia. We extend our deepest gratitude to His Excellency Mr. Tsend Baatarkhuu, Minister of Digital Development, Innovation and Communications (MDDIC), Mongolia; Mr. Tapan Mishra, UN Resident Coordinator of Mongolia; Mr. Bat-Ulzii Batchuluun, Director General of Digital Development Policy Implementation and Coordination Department, MDDIC, Mongolia; Mr. Battulga Munkhdorj, Director, National Data Center, Mongolia; Ms. Tegshjargal Tsagaan, National Statistics Office, Mongolia; Dr. Baigal Dorj, Head of School of Public Administration, National Academy of Governance, Mongolia; and Mr. Sainbileg Mandakh, Chief Information Officer, Golomt Bank. We particularly acknowledge Mr. Munkhbat Perenlei, Advisor to the Minister of MDDIC in Mongolia, for his relentless support in making this workshop a reality.

We also extend our special thanks to Ms. Hyejeong Lim Principal Manager, National Information Society Agency (NIA), Republic of Korea. Finally, we recognize our national consultant, Ms. Anuujin Sanjaajamts, for her close support throughout the workshop.

We extend our sincere gratitude and special thanks to the workshop participants and stakeholders whose valuable contributions and insights were instrumental in shaping the national data governance framework of Mongolia, in alignment with UN DESA's Framework.

This report was prepared by Prabin Maharjan and Juho Lee, and guided and further refined by Wai Min Kwok and Hyeyoung Kim.

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# INTRODUCTION

## Background on Data Governance

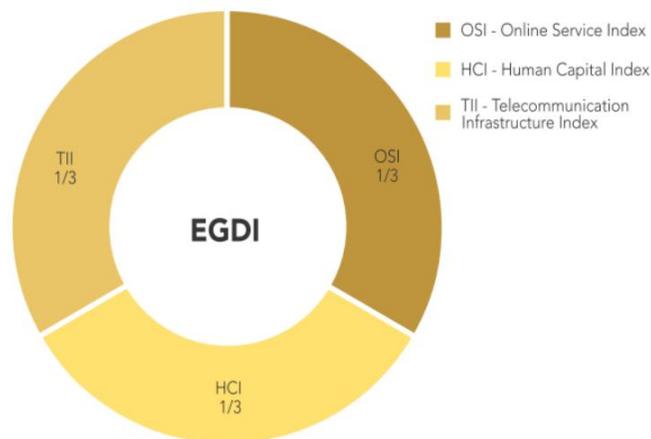
The boundaries between the physical, digital, and biological realms are becoming increasingly blurred due to the rise of digital technology. This transformative force is rapidly reshaping the way individuals lead their lives, conduct work, and engage in communication. Nowhere is this more evident than in the public sector, where traditional distinctions between government and e-government have become increasingly obsolete, encompassing policies, institutions, strategies, and tools.

Although almost every country is undergoing the process of digitalization, the degree of development achieved varies. While institutions across all levels are dedicated to modernization and digital transformation, the approaches and outcomes differ significantly. Not every country can attain equivalent sustainable development gains through e-government initiatives, leading to uneven benefits for communities and vulnerable segments of the population.

The COVID-19 pandemic has exacerbated existing e-government divides, both between and within countries, manifesting at the regional, national, and local levels. The COVID-19 pandemic also revealed the vitality of digital government and digital solutions to address isolation and keep people informed and engaged. Given that there are both immense opportunities and inherent risks on what digital transformation can bring about, the need to address emerging requirements, risks and challenges for digital public policies and to ensure inclusive multistakeholder engagement has become more critical, especially for countries with special needs, including the least developed countries (LDCs), small island developing States (SIDS), the landlocked developing countries (LLDC), and countries with transition economics.

The world is also moving closer to becoming a truly digital society. At the global level, the quantity of data is expected to increase more than fivefold from 33 zettabytes in 2018 to 175 zettabytes in 2025, with 49 per cent stored in the public cloud. But at the same, the various digital divides between and within developed and developing countries continue to widen, which is inhibiting developing countries from contributing to and benefiting from integration into the global economy. Governments are among the largest producers and consumers of data in many countries, and they also play a critical role in data regulation. Much of the operational activity in government is now data-driven, making it difficult, if not impossible, to function effectively without data. However, many developing countries lack the institutional capacity to fully implement data management frameworks and data strategy, impeding them to fully reap the benefits of data governance.

As a flagship research and capacity development tool of the United Nations Department of Economic and Social Affairs (UN DESA), the UN E-Government Survey evaluates how digital government can facilitate integrated policies and services across 193 UN Member States. The Survey supports countries' efforts to provide effective, accountable and inclusive digital services to all, bridge the digital divide and leave no one behind. The Survey measures e-government effectiveness in the delivery of public services, providing a snapshot of relative measurement of e-government development of all Member States.



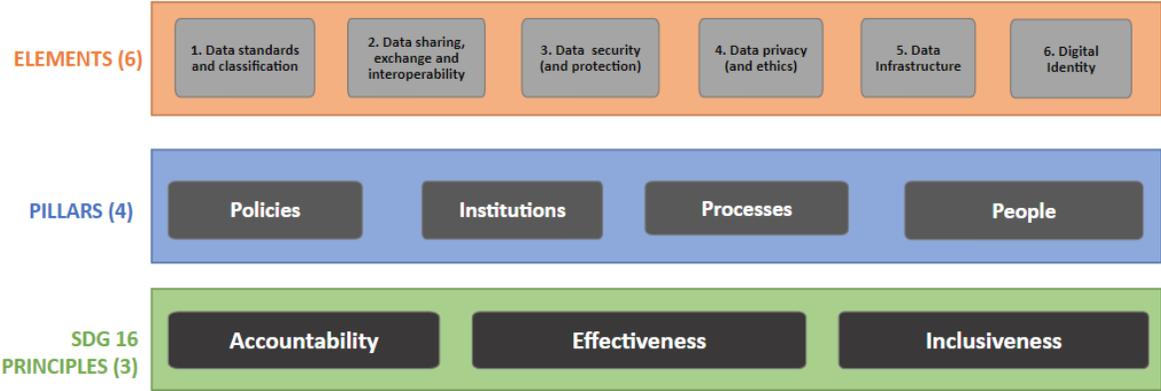
Methodologically, the EGDI is the weighted average of normalized scores on the three most important dimensions of e-government, namely: (i) the scope and quality of online services quantified as the Online Service Index (OSI); (ii) the status of the development of telecommunication infrastructure or the Telecommunication Infrastructure Index (TII); and (iii) the inherent human capital or the Human Capital Index (HCI). Each of these indices is a composite measure that can be extracted and analyzed independently.

In addition, UN DESA has also conceived the project supported by the UN Peace and Development Fund, entitled “Developing institutional capacities for digital data management and cooperation to advance progress toward the Sustainable Development Goals”, to support developing countries to assess key data management and governance challenges and strengthen government officials’ and stakeholders’ knowledge of sound and secure data management. This project seeks to address existing challenges and gaps in digital data management and cooperation, focusing on enhancing the institutional capacities of countries to utilize, manage and govern data in a comprehensive, objective and evidence-based manner, through regional and global cooperation.

Under the research framework established by UN DESA, data governance is supported by the three principles of Sustainable Goal 16 (accountability, effectiveness and inclusiveness) and examined through the lens of the four pillars (policy, institutions, people, and process) and six

elements (see following illustration). This allows for a comprehensive and holistic examination of the various procedural components which together enable effective, accountable, and inclusive data governance.

### UN DESA' s National Data Governance Framework



### Development in Mongolia

Mongolia's public administration has aimed to develop a digital government since 2005 by implementing its first e-Mongolia National Program. During this time, establishing a core fibre optic network, technical infrastructure, a government database, delivering mobile licences, encouraging Wi-Fi coverage expansion, increasing state investments in the information communications technology sector, drafting key legal documents, and creating relevant institutions have required considerable effort. As a result, this has successfully improved the countries' e-government development index, which increased from 0.3962 in 2005 to 0.8457 very high EGDI values in 2024 (UN DESA, 2005, 2024). For instance, among the landlocked countries with very high EGDI values, Mongolia has experienced the most significant improvement in EGDI ranking, moving up 28 positions. Similarly, Mongolia is among the five leading landlocked countries with very high OSI values as indicated in the 2024 UN E-Government Survey.

In recent times, emerging technologies such as AI, IoT, and Big Data showcase an enormous number of challenges, technological disruption, and an increased digital divide worldwide. Like other countries, Mongolia faces a number of data governance challenges including the lack of a unified framework that integrates policies, standards, classifications, and guidelines. Inadequate data quality, characterized by problems with accuracy, completeness, consistency, and

timeliness, further hampers decision-making and policy implementation. Additionally, a digital divide persists, where disparities in access to digital technologies and data literacy create unequal opportunities for participation in the digital economy.

Limited infrastructure, particularly in rural areas, constrains the capacity for effective data governance. This challenge is exacerbated by a shortage of skilled personnel with expertise in data governance, hindering the development of robust policies and practices. Moreover, existing legal frameworks struggle to keep pace with the evolving complexities of data governance, especially concerning emerging technologies. Mongolia, therefore, could benefit from the UN data governance framework as a foundation for responsibly utilising emerging technologies, protecting its citizens from potential threats, and delivering better services to society.

In view of the above, UN DESA in collaboration with the Ministry of Digital Development, Innovation and Communications, Mongolia, hosted a workshop with representatives from governments, private, public sector, civil societies, academia and other key stakeholders, on the subject of digital data governance and digital government.

The Workshop provided a timely opportunity to engage government officials and other stakeholders, focusing on digital government and data governance with the objective of strengthening the capacity of public sector employees in the concerned governmental organizations with regard to understanding of how to improve the performance of digital government and strategize related initiatives.



### Thematic Areas and Guiding Questions

The primary thematic areas of the Workshop were as follows:  
*Four (4) pillars of National Data Governance: Policy, Institutions, People/Partnerships, Processes:*

Policy: existing policy and regulatory framework  
Institutions: existing institutional framework  
People: existing data ecosystem and mapping of stakeholders  
Processes: existing data processes

#### *Six (6) elements of National Data Governance:*

Data standards and classification  
Data sharing, exchange and interoperability, including open government data  
Data security (and data protection)  
Data privacy (and ethics)  
National data infrastructure (including e.g., datacenter, cloud, data services, etc.)  
Linking data governance to digital identity

#### *Guiding Questions for focus group discussions:*

Participants were divided into six groups for focus group discussions. Each group was assigned one of the following thematic areas:

- Data standards and classification
- Data sharing, exchange and interoperability
- Data security and data protection
- Data privacy and ethics
- Data infrastructure
- Digital identity and data governance

Each group considered their assigned topic in the context of the four pillars of a data governance framework: policies, institutions, processes and people. They then also identified specific recommendations in their focus area, with outlined actions and timelines.

## **Overview**

UN DESA and MDDIC convened a two-day Capacity Development Workshop on National Data Governance Framework and Digital Government in Mongolia from 3-4 December 2024. More than 60 representatives from government agencies, public sector organizations, private sector, international organizations and academic institutions discussed the need for greater collaboration between key agencies to develop a national data governance framework in Mongolia.

All presentations summarized below are available on the [Workshop webpage](#).

## SESSIONS

### Opening Remarks

**His Excellency Mr. Tsend Baatarkhuu**, Minister of Digital Development, Innovation and Communications (MDDIC), Mongolia, opened the workshop with a warm welcome to all participants. Mr. Baatarkhuu stated that the government of Mongolia has integrated data into circulation to facilitate the use of artificial intelligence in government decision-making processes. In accordance with the Law on Transparency of Public Information, a list of 691 open data held by the government has been approved for public disclosure. It is necessary to integrate this data, create a data architecture for use in government decision-making, and put it into economic circulation. In the future, preparations are being made to create a legal environment for artificial intelligence, he emphasized.



On behalf of **Mr. Juwang Zhu**, Director of the Division of Public Institutions and Digital Government at the United Nations Department of Economic and Social Affairs, Mr. Prabin Maharjan delivered the opening remarks. Mr. Zhu commended Mongolia's progress in digital transformation, highlighting its significant leap in the UN E-Government Development Index (EGDI) in 2024, placing the country in the "very high EGDI" group for the first time. This achievement is attributed to the establishment of robust legal frameworks, expansion of online government services, and the efforts of institutions like the Ministry of Digital Development, Innovation, and Communications (MDDIC). Mongolia's Vision 2050, prioritizing e-governance to enhance human development, has been instrumental in shaping its digital policy landscape, yet

challenges like digital divides, low e-government literacy, and data governance awareness remain.

Mr. Zhu emphasized the critical role of data as a resource for effective governance and its growing significance in the era of artificial intelligence (AI). He introduced UN DESA's capacity development project, supported by the UN Peace and Development Fund, which aims to help countries establish robust data governance frameworks to ensure data quality, access, and security. For Mongolia, the workshop serves as both a capacity-building initiative and a platform for consultation to advance digital data policies and strategies. He expressed gratitude to the participants for their commitment and encouraged action-oriented discussions to harness data for sustainable development, underscoring the transformative potential of digital technologies in public governance. He concluded by urging participants to engage in an honest, candid, and action-oriented discussion on the current challenges and opportunities in advancing digital data governance, so we can harness the vast potential of data for sustainable development in Mongolia.

In his keynote speech, **Mr. Tapan Mishra**, United Nations Resident Coordinator in Mongolia, emphasized the critical importance of effective data governance in a rapidly advancing digital society. He highlighted the exponential growth of global data, projected to reach 175 zettabytes by 2025, and the urgent need for governments to harness data and technology for evidence-based decision-making. Despite these opportunities, Mr. Mishra noted that developing countries, including Mongolia, face challenges such as the lack of unified frameworks, standards, and guidelines for data governance. The workshop's timing, he remarked, is essential for addressing these gaps and leveraging data to drive sustainable development.

Mr. Mishra announced Mongolia's participation in the global "Power of Data" initiative, which underscores the economic value of data, with every dollar invested generating a return of 32 dollars. To support this initiative, a national working group on data and statistics, led by the National Statistical Office with government and UN backing, is being established to strengthen coordination and partnerships. This effort aims to minimize fragmentation within the national data system and maximize synergies among ongoing initiatives. Mr. Mishra reaffirmed the United Nations' commitment to supporting Mongolia's data and statistical systems, expressing confidence that the workshop would yield valuable insights and innovative strategies to address pressing data governance challenges.



## Session 1: Data Governance and Digital Government Trends

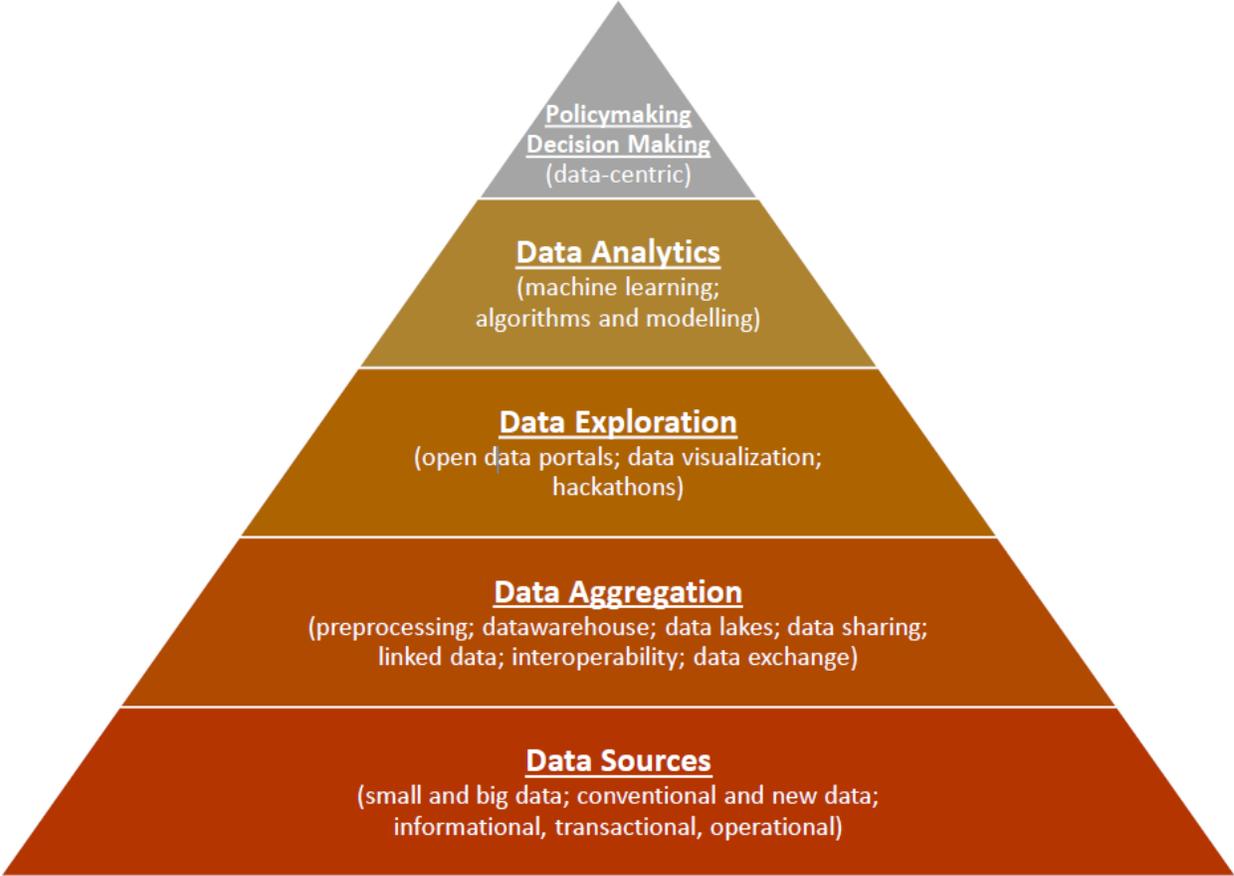
### Global Data Governance and Digital Development Trends

**Mr. Wai Min Kwok**, Acting Chief of Staff, OUSG, UN DESA, kicked off his presentation by introducing the UN E-Government Survey. He underscored its assessment of how ICTs are reshaping the public sector, advocating for a hybrid-digital future that integrates both whole-of-government and whole-of-society approaches. Mr. Wai Min emphasized the transformative potential of data, AI, and emerging technologies, stressing the necessity of a robust national data governance framework to underpin effective digital government strategies. Mr. Wai Min discussed Mongolia's performance in various indices related to e-government as reported in the UN E-Government Survey of 2024, highlighting the country's overall ranking and progress in the context of global e-government development.

Highlighting the foundational importance of data governance, Mr. Wai Min noted its precedence over digital governance, AI governance, and other emerging technologies. He emphasized that national data governance precedes global data and AI governance, advocating for governments to adopt holistic approaches encompassing policies, institutions, people, and processes—a framework outlined in UN DESA's approach to Data Governance. Mr. Wai Min explained UN DESA's data governance approach, which supports in achieving the Sustainable Development Goals (SDGs) by transitioning from a whole-of-government to a whole-of-society perspective. He elaborated that this approach is grounded in three SDG principles, four pillars, and six elements, with a strong focus on policies, institutions, processes, and people across various levels of multilevel governance. Additionally, the approach prioritizes building data literacy at both institutional and individual levels.

Mr. Wai Min, based on data, information, knowledge and wisdom pyramid the concept of data in Digital Government and Digital Transformation.

Data in Digital Government and Digital Transformation  
Sources → Aggregation → Exploration → Analytics → Policymaking



## Pillars and Elements of National Data Governance Framework

**Ms. Anuujin Sanjaajamts**, UN DESA's National Consultant, highlighted that as emerging technologies like AI increasingly blur the lines between physical and digital systems, the challenges and complexity of data governance grow significantly. She outlined the National Data Governance Framework developed by UN DESA, which is guided by three principles: accountability, effectiveness, and inclusiveness. These principles are supported by four foundational pillars — policy, institutions, people, and processes—and six essential elements, including data standards, data sharing, security, privacy, infrastructure, and digital identity. She highlighted the increasing interconnection between physical and digital systems due to advancements like AI, stressing the need for robust governance to address the complexities of data management.

Ms. Anuujin elaborated on the practical aspects of data governance in Mongolia, emphasizing the significance of standardized data and interoperable systems to improve policymaking and e-governance. She discussed recent advancements, such as Mongolia's data privacy law and biometric-based digital identity initiatives, while underscoring the importance of public trust through data security and privacy. Calling for a unified adoption of the National Data Governance Framework across institutions, she highlighted its potential to promote seamless data exchange, support evidence-based decision-making, and drive sustainable development. She concluded by urging participants to utilize the framework's principles, pillars, and elements for building a cohesive national strategy.

## Session 2: Current Landscape of Data Governance in Mongolia

**Mr. Tapan Mishra**, United Nations Resident Coordinator in Mongolia, drawing from over five years of experience in Mongolia, emphasized the need for a broader vision and constructive critique to address the country's challenges. Mongolia's Vision 2050, the SDGs, and the Government Action Plan (2024-28) were highlighted as frameworks to achieve long-term aspirations. Despite transitioning from a socialist system to a dynamic democracy, Mongolia faces governance challenges due to frequent changes in government and instability in policies. The country struggles with urbanization issues, particularly in Ulaanbaatar, where inadequate infrastructure exacerbates economic and social inequalities. Mr. Tapan identified four pillars for progress: regional development, human development, economic growth with environmental preservation, and robust governance. Emphasizing institutional stability, Mr. Tapan advocated strengthening civil services and fostering a culture of accountability and inclusion.

Mr. Mishra also underscored Mongolia's potential for digital transformation as a pathway to sustainable development. Positioned between major economies, the country can leverage digital technologies to enhance socioeconomic growth and regional integration. Mr. Tapan called for a clear vision, integrated strategies, and systemic reforms to address siloed governance and

inefficiencies. Highlighting opportunities in value-added industries, sustainable tourism, and renewable energy, he stressed the need for mindset shifts to seize these opportunities. Effective governance and human capital development were presented as pivotal for creating a resilient digital economy.

### **The Role of Data/Data Governance in Policy Development and Good Governance in Mongolia**

**Mr. Bat-Ulzii Batchuluun**, Director General of the Digital Development Policy Implementation and Coordination Department, MDDiC, emphasized the critical need for integrating big data and AI into public governance to enhance transparency, efficiency, and decision-making. He highlighted the progress achieved, including the legal framework amendments facilitating digital signatures, contracts, and data-sharing protocols. Efforts to classify and manage public data—open, limited, and closed—were detailed, along with the establishment of the "KHUR system" for inter-agency data exchange. Despite progress, gaps remain in managing and leveraging big data, as the current infrastructure faces capacity challenges. He urged the alignment of governance structures with technological innovations to meet growing data demands effectively.

Key discussions focused on the value of open data for public oversight and the necessity of anonymized data for privacy. Mr. Bat-Ulzii cited ongoing efforts to digitize governance and integrate AI into decision-making, although noted that AI development remains at a nascent stage. He shared aspirations to build a robust data ecosystem, emphasizing collaboration with international experts and the private sector. Successful examples like Singapore's cloud-based governance were referenced to underscore the need for actionable steps towards a more data-driven public administration.

The workshop underscored the importance of collective action to transition to a data-centric governance model. With the potential to significantly improve public and private sector performance, leveraging big data and AI requires substantial investments in infrastructure, capacity building, and policy alignment. Mr. Bat-Ulzii concluded by calling for unified efforts and support from international bodies like UN DESA to build sustainable solutions that align with the nation's digital development goals.

### **National E-Government Trends and Development in Mongolia**

**Mr. Battulga Munkhdorj**, Director of the National Data Center, Mongolia, emphasized the critical role of collaborative action in advancing Mongolia's digital governance and AI strategy, with the MDDiC leading efforts alongside stakeholders like the National Statistical Office (NSO). Despite progress in creating legal frameworks for data transparency, cybersecurity, and digital signatures, gaps persist, particularly in AI governance. Mr. Battulga called for collective efforts to address these challenges and invited further collaboration to refine policies and develop Mongolia's digital infrastructure, including an integrated data governance strategy.

Mr. Battulga highlighted Mongolia's journey in digital governance, from establishing foundational systems like the "KHUR System" for government data exchange to creating the National Data Center in 2009. These initiatives support digital transformation, providing services to millions of

users and integrating over 800 public and private systems. Mr. Battulga noted, however, that the current infrastructure faces capacity and integration challenges, particularly in managing big data and providing comprehensive data-sharing capabilities. Moving forward, the establishment of a national data governance and enhanced capacity for the public data center were identified as key priorities to advance Mongolia's digital governance and ensure effective collaboration across sectors.

### **National Data Governance Roadmap and Action Plan**

**Ms. Tegshjargal Tsagaan**, on behalf of **Mr. Ariunbold Shagdar**, Director General of the Census and Data Analysis Department, National Statistics Office, Mongolia, introduced Mongolia's initiative to develop a comprehensive National Data Governance Roadmap, supported by the Asian Development Bank. Highlighting the increasing demand for high-quality data in line with global trends, such as the SDGs and economic systems, Ms. Tegshjargal emphasized the importance of treating data as a national asset. The roadmap aims to address key areas such as governance structures, data integration, risk mitigation, and the creation of standards for quality and privacy. Notably, Mongolia plans to amend its Statistics Law and improve its legal and technical frameworks to better regulate data collection, integration, and security while ensuring ethical data usage.

The roadmap identifies four pillars - policy and coordination, institutional leadership, human resource development, and technological infrastructure. Specific gaps were noted, such as the need for clear regulatory structures, robust data quality management systems, enhanced security measures, and training programs for civil servants. Key components include an integrated government database, metadata management systems, and risk mitigation frameworks to address potential vulnerabilities. The roadmap also stresses creating interoperable systems and refining the existing government data exchange platform to optimize public service delivery and decision-making.

To ensure effective implementation, the NSO has devised an action plan (2024–2028) focusing on institutional reforms, capacity building, and infrastructure enhancement. Strategic goals include establishing a national data committee, advancing data-driven governance, and fostering partnerships. Training civil servants in data science and promoting a culture of data literacy are prioritized to meet future demands. The roadmap ultimately aims to modernize Mongolia's statistical systems, support data-driven policymaking, and contribute to the growth of a robust, data-driven economy.

### **Session 3: Sharing Countries' Experiences**

#### **Smart Nation, Digital Government, and Data Ecosystem Development**

**Mr. Wai Min Kwok**, Acting Chief of Staff, OUSG, UN DESA, introduced the Government Technology Agency of Singapore (GovTech), highlighting its scale and impact for a country of 6 million people. He outlined the agency's three primary functions: engineering innovative

products, delivering integrated government services, and establishing robust governance policies, especially in cybersecurity. Singapore's "Smart Nation" initiative exemplifies its whole-of-government approach, focusing on three pillars: the digital economy, digital government, and digital society. The digital readiness blueprint enables citizens to adopt digital tools seamlessly into daily life. These strategies align with Singapore's vision of a cohesive and efficient digital infrastructure.

GovTech's achievements include digitizing 94% of government services, with 96% supporting e-payments, and training over 20,000 public servants in data analytics. William emphasized the importance of Singapore's National Digital Identity (SingPass), which serves as a trusted, user-friendly platform for over 2,700 services, with biometric and AI features enhancing its security and usability. GovTech also employs cutting-edge architecture, such as the Singapore Government Technology Stack and Codex, to streamline inter-agency operations, improve data sharing, and reduce response times for service delivery.

Mr. Wai Min acknowledged challenges like talent retention and the need to address brain drain, emphasizing government-private sector collaboration and targeted recruitment strategies. Initiatives include engaging young talent through universities, building skills pipelines, and attracting Singaporeans abroad to return for impactful projects. Additionally, the creation of Chief Digital Strategy Officers and Chief Data Officers ensures leadership in digital transformation across agencies. Singapore's rigorous Public Sector Governance Act underpins these efforts by safeguarding data integrity and privacy, fostering trust, and combating misinformation and unauthorized data use. This robust framework enables Singapore to remain a global leader in digital governance and innovation.

### **South Korea's Data Ecosystem Development and Its Future**

**Ms. Hyejeong Lim**, Principal Manager of the National Information Society Agency (NIA), Republic of Korea, highlighted Republic of Korea's progressive framework for open government data, supported by three fundamental laws: Information Disclosure Law, Open Government Data Law, and Data-Driven Administration Law. These laws ensure a robust structure for public data management, enabling transparency and innovation. Ms. Lim shared an anecdote about a citizen-developed app in 2012, which underscored the shift toward embracing open data after initial resistance. By 2020, Korea had established a comprehensive metadata platform allowing public institutions to share and search data efficiently, promoting a centralized, accessible repository to enhance data utility.

Korea's Open Data Strategy Council, chaired by the Prime Minister and private representatives, reflects a commitment to public-private collaboration. The council oversees policies and evaluates open data initiatives to strengthen cooperation between sectors. Mechanisms like the Open Data Mediation Committee provide legal recourse for citizens denied access to datasets, ensuring transparency and accountability. Ms. Lim highlighted initiatives such as the National Core Data Project, which focuses on high-demand datasets with significant public and private

sector utility, and the establishment of rigorous standards for data storage and release to ensure consistency and usability across institutions.

Ms. Lim emphasized fostering innovation through private-sector partnerships, preventing duplication by public agencies, and supporting startups with resources like the Open Data Square. Korea's commitment to open data has led to a dramatic increase in available datasets and services, elevating its global standing in open data readiness. Centralized infrastructure, strong legal frameworks, and public-private collaboration were underscored as essential to fostering transparency, innovation, and inclusive development. Ms. Lim encouraged other governments to adopt a one-stop data portal model and prioritize quality and partnerships to maximize data utilization.

## Session 4: Collaboration in Data Governance - Regional and National Experience

### Data Governance for Digital Transformation: Regional Collaboration on Data Governance

**Dr. Baigal Dorj**, Head of School of Public Administration, National Academy of Governance, Mongolia, highlighted the Mongolian government's digital transformation goals that focus on enhancing the speed, accessibility, and efficiency of public services while fostering a culture of innovation and ensuring the continuity and consistency of government operations. Key objectives include developing data-driven, evidence-based policies, improving communication with citizens, and establishing a secure digital infrastructure. These efforts also emphasize cost-saving, resource efficiency, and equipping public servants with the necessary digital literacy to drive these changes. Digital transformation goes beyond technology, requiring a fundamental rethink of processes and governance structures.

The 2024-2028 Mongolian Government Operational Program outlines initiatives to utilize big data and artificial intelligence across various sectors. These initiatives include redesigning Ulaanbaatar's bus network, improving poverty and unemployment measurement methods, expanding digital social insurance services, and optimizing educational and healthcare policies. The program also emphasizes strengthening cybersecurity, advancing AI and big data applications in government operations, and developing data governance systems at international, regional, national, and organizational levels. Additionally, the Academy of Management plays a critical role in training civil servants, focusing on enhancing professional skills, conducting research, and offering policy advice, with programs aligned with EU standards and supported by JICA.

### Data Governance Policies on Innovation and Business Growth

**Mr. Sainbileg Mandakh**, Chief Information Officer, Golomt Bank, outlined the evolution of data management, emphasizing the importance of data governance in modern business. Data governance ensures effective data management through principles, policies, and standards, enhancing efficiency, security, and decision-making. Golomt Bank has established a robust data

governance framework, involving the Board of Directors, executive management, and IT departments, supported by policies, procedures, and advanced tools like Business Intelligence systems and AI.

Golomt Bank leverages AI to improve various aspects of its operations, including document recognition, customer segmentation, and customer service through AI chatbots. These AI applications enhance operational efficiency, decision-making, and customer experience, demonstrating the bank's commitment to innovation and data-driven growth. Mr. Sainbileg concluded by highlighting the bank's focus on continuous improvement and leveraging technology to stay competitive in the digital age.

## **Session 5: National Data Governance Framework – Mongolia**

**Ms. Anuujin Sanjaajamts**, UN DESA's National Consultant, introduced "Advancing Data Governance in Mongolia: Baseline Study Insights and Initial Findings," conducted by UN DESA. The objective of the baseline study is to assess key challenges in data governance in Mongolia while strengthening the knowledge of government officials and stakeholders on secure and effective data governance. Using a mixed-methods approach, including surveys and interviews with government, private sector, and academic stakeholders, the study highlights key issues such as the lack of a comprehensive data governance framework, inadequate data quality, digital literacy gaps, infrastructure challenges, and a shortage of skilled personnel. The findings will emphasize the importance of data standardization, sharing, security, privacy, and infrastructure, aligned with UN DESA's six-element framework and four pillars of policy, institutions, people, and processes. The study aims to strengthen Mongolia's data governance capabilities to support transparent, efficient, and accountable public sector operations, ultimately driving socio-economic development.

## **BREAKOUT FOCUS GROUP DISCUSSIONS**

### **Key Highlights – Breakout Group Discussions**

Participants were divided into six groups, each of which considered a specific thematic area of data governance – specifically opportunities and challenges recommendations, actions and timeframes on how to move forward. Each group focused on specific elements within four key pillars, examining current opportunities and challenges. The outcomes of each focus group are summarized in the tables below (as completed by the focus groups themselves).

**Focus Group 1 - Data standards and classification**

**Present status and challenges**

<b>Policies</b>	<b>Institutions</b>	<b>Processes</b>	<b>People</b>
<p>There are standards for forms.</p> <p>There are procedures for archival and record management.</p> <p>There are classifications and codes for the statistical sector.</p> <p>However, data standards are absent.</p>	<p>Standardization and Measurement General Authority</p> <p>National Statistical Committee</p> <p>General Archives Authority</p>	<p>State organizations develop and approve standards within their respective fields.</p> <p>The National Statistical Committee approves unified classifications and codes for statistical purposes, collects classified and coded information from state organizations in accordance with these standards, and oversees their implementation.</p>	<p>There is a lack of sufficient human resources responsible for standards and classifications, and there is a shortage of expertise.</p>
<p>Data governance is underdeveloped.</p>	<p>It is currently unclear which organization is leading, overseeing, and processing the data standards. Each organization has its own classifications and codes, which are not aligned with one another.</p>	<p>Due to the lack of standards, information is being collected through various systems.</p> <p>Approved classifications and codes are not being utilized, understanding is weak, and consolidation is challenging. For example, address standards.</p>	<p>Officials who understand the importance of classifications and codes are lacking.</p>

**Recommendations & Actions**

<b>Item</b>	<b>Description</b>	<b>Timeline</b>
<p><b>Policies</b></p> <ul style="list-style-type: none"> <li>Develop unified data standards</li> </ul>	<p>Develop common standards for data - for example, addresses</p>	<p>2026</p>
<p><b>Institutions</b></p> <ul style="list-style-type: none"> <li>Establish a national data council or committee</li> </ul>	<p>Led by the MDDIC, with participation from other organizations</p>	<p>2025</p>

Item	Description	Timeline
<ul style="list-style-type: none"> <li>Establish a unit responsible for overseeing data operations</li> </ul>		
<b>Processes</b> <ul style="list-style-type: none"> <li>Improve the management of the metadata repository</li> <li>Develop a data quality control system</li> </ul>	Led by the National Data Office, with participation from other organizations	Continuous
<b>People</b> <ul style="list-style-type: none"> <li>Increase, train, and enhance human resources for data processing and integration.</li> </ul>	Train specialists in data science at major universities, and provide short- and medium-term professional development	Continuous

## **Focus Group 2 - Data sharing, exchange and interoperability**

### **Present status and challenges**

Policies	Institutions	Processes	People
<p>Several decisions have been made, such as government resolutions on laws and big data.</p> <ul style="list-style-type: none"> <li>Administrative organizations responsible for data are informed.</li> <li>Stakeholders are not widely included.</li> <li>Legal understanding and implementation are incorrect.</li> </ul>	<p>The National Data Center, E-Mongolia Academy, ICTPA... The Ministry of Digital Development and Communications is addressing the issue of information exchange through the G2G system.</p>	<p>There is no responsibility for regulating data sharing, exchange, and interoperability (internal coordination).</p> <p>The G2G system provides unit services. There is no possibility to analyze data in bulk and create new services, for example, AI.</p> <p>The government and private sector have started exchanging data through the G2G system. Interest is increasing.</p>	<p>At the executive level, there are resources and experience to create information repositories.</p> <p>There is a shortage of personnel and positions responsible for data.</p> <p>There is an insufficient number of professionals with specialized skills.</p>

<b>Policies</b>	<b>Institutions</b>	<b>Processes</b>	<b>People</b>
<p>Challenges:</p> <ul style="list-style-type: none"> <li>• Implementation of open data and data handling practices is weak.</li> <li>• There is no regulation for collecting and processing bulk data.</li> <li>• There is no plan for generating and utilizing big data.</li> </ul>	<p>There is no responsibility for regulating data sharing, exchange, and interoperability (internal coordination).</p>	<p>The peer-to-peer links (agreements) between data-exchanging organizations need to be modified.</p> <p>When exchanging data, it is necessary to create an environment that protects sensitive information and prevents its transfer to third parties.</p> <p>Data inconsistency.</p>	<p>Leadership is needed.</p> <p>Address trust and ethical issues that arise in data sharing.</p> <p>There is a lack of training and capacity building for stakeholders involved in data exchange and sharing (short-term programs for secondary schools, universities, workers, and programs for seniors).</p> <p>Middle managers lack understanding, skills, and motivation</p>

### Recommendations & Actions

<b>Item</b>	<b>Description</b>	<b>Timeline</b>
<p><b>Policies</b></p> <ul style="list-style-type: none"> <li>• Data exchange policy</li> <li>• Revise legal perspectives</li> </ul>	<p>Incorporate the concepts of sharing, exchange, and interoperability into the law, and reuse data</p>	<p>18 months</p>
<p><b>Institutions</b></p> <ul style="list-style-type: none"> <li>• Establish a data governance committee</li> </ul>	<ul style="list-style-type: none"> <li>• Oversee data governance regulations</li> <li>• Directly engage in the work</li> </ul>	<p>3 months</p>

Item	Description	Timeline
<ul style="list-style-type: none"> <li>Assign the role of data governance implementation to an existing organization</li> </ul>		
<b>Processes</b> <ul style="list-style-type: none"> <li>Develop a big data system</li> <li>Methodology, classification codes, standards...</li> <li>Establish a data management system</li> </ul>	<ul style="list-style-type: none"> <li>Data custodians, registries, owners, and decision-makers</li> <li>Metadata, systems for storing, distributing, integrating, and computing data, data platform</li> </ul>	12 months
<b>People</b> <ul style="list-style-type: none"> <li>Organize data governance training for middle managers</li> <li>Universities to prepare human resources in data science/governance fields</li> </ul>	<ul style="list-style-type: none"> <li>In addition to training at all levels, prepare leaders</li> <li>Begin preparing the necessary human resources for the near future</li> </ul>	- 6 months - 4 years

### Focus Group 3 - Data security and data protection

#### Present status and challenges

Policies	Institutions	Processes	People
<ul style="list-style-type: none"> <li>Law on Cybersecurity,</li> <li>Law on Protection of Personal Information,</li> <li>Law on Transparency of Public Information,</li> <li>Law on National Security,</li> <li>Law on Electronic Signatures,</li> <li>National Cybersecurity Strategy,</li> </ul>	<ul style="list-style-type: none"> <li>Cybersecurity Council,</li> <li>Secretariat of the Cybersecurity Council,</li> <li>Ministry of Digital Development and Communications,</li> <li>3 centers for combating cyberattacks and violations,</li> <li>National Data Center ICTPA,</li> <li>CERT</li> <li>Other CERTs</li> </ul>	<ul style="list-style-type: none"> <li>Exchange information on attacks and violations,</li> <li>Receive information on cyberattacks and violations,</li> <li>Detect and confirm cyberattacks and violations,</li> <li>Respond to cyberattacks and violations,</li> <li>Restore systems and networks affected by cyberattacks,</li> <li>Prevent,</li> <li>Raise awareness,</li> <li>Conduct research and analysis,</li> </ul>	<ul style="list-style-type: none"> <li>Citizens,</li> <li>Organization employees,</li> <li>Management,</li> <li>Public servants,</li> <li>Employees of organizations with critical information infrastructure.</li> </ul>

Policies	Institutions	Processes	People
<ul style="list-style-type: none"> <li>National Security Policy,</li> <li>Criminal Law,</li> <li>Law on Violations,</li> <li>13 accompanying resolutions and regulations.</li> <li>Legal measures GCI 20 – 19.18</li> </ul>		<ul style="list-style-type: none"> <li>Receive audit and risk assessment reports, provide recommendations and requirements.</li> </ul>	
<ul style="list-style-type: none"> <li>Introduce amendments,</li> <li>Ensure the implementation of laws.</li> </ul>	Technical Capability 2020 – 6.02 2024 – 6.64 Collaboration 2020 – 6.82 2024 – 6.49 Shortage of Human Resources	Investment; Collaboration; Policies and procedures; Data backup (ransomware);	<ul style="list-style-type: none"> <li>Human resource capability,</li> <li>Practical exercises and simulations,</li> <li>Digital skills.</li> </ul>

**Recommendations & Actions**

Item	Description	Timeline
<p><b>Policies</b></p> <p>Implement quality control in professional activities such as cybersecurity risk assessment and information security audits.</p> <p>Establish benchmark pricing.</p> <p>Add economic classification.</p> <p>Allocate a specific percentage of the budget.</p> <p>Rapid technological development.</p> <p>Information exchange.</p>	<ul style="list-style-type: none"> <li>Preventive inspections conducted by legal entities authorized to perform information security audits lack legal compliance and professional oversight.</li> <li>Separate the cybersecurity budget from the information security budget.</li> <li>By 2028, losses are projected to reach \$64.4 billion; Quantum computers will be able to break digital signatures in 300 seconds</li> </ul>	Mid (12 months)

Item	Description	Timeline
<p><b>Institutions</b></p> <p>Enhance technical capability (UEA 20, Mongolia 6.64) – Utilize international loans, aid, and investments.</p> <p>Strengthen human resources (3.4 million globally, 2.7 million in Asia-Pacific countries) – Collaborate with international organizations and exchange experiences.</p> <p>Collaboration (2020-6.82, 2024-6.49, both internal and external collaboration).</p>	<p>Enhance technical capability (UEA 20, Mongolia 6.64) – Utilize international loans, aid, and investments.</p> <p>Strengthen human resources (3.4 million globally, 2.7 million in Asia-Pacific countries) – Collaborate with international organizations and exchange experiences.</p> <p>Collaboration (2020-6.82, 2024-6.49, both internal and external collaboration).</p>	<p>Long term (24 months)</p>
<p><b>Processes</b></p> <p>Establish resource centers and back up data.</p> <p>Facilitate information exchange and collaboration.</p> <p>Clarify the processes for conducting information security audits and cybersecurity risk assessments.</p>	<p>Ensure legal compliance (Ministry of Culture, Sports, Tourism, and Youth).</p> <p>Information exchange system.</p> <p>PGP email.</p> <p>Official documents.</p>	<p>Mid (18 months)</p>
<p><b>People</b></p> <p>Improve public digital skills, particularly cybersecurity knowledge and understanding; Enhance the digital skills of public servants; Improve the knowledge and understanding of employees in organizations with critical information infrastructure; Update the content of the ICT curriculum in general education schools.</p>	<p>A 2022 survey of 9,144 citizens from 6,500 households revealed that 73.8% lack cybersecurity skills.</p> <p>A survey of 67 government organizations showed that 70.59% had not been attacked or were unaware of attacks, and 56.67% lacked any documentation to ensure information security.</p> <p>Leadership knowledge and understanding are insufficient.</p>	<p>Long term</p>

**Focus Group 4 - Data privacy and ethics**

**Present status and challenges**

Policies	Institutions	Processes	People
<ul style="list-style-type: none"> <li>• Law on Transparency of Public Information</li> <li>• Data Protection Law</li> <li>• Law on Privacy</li> <li>• Open Data List</li> <li>• Internal regulations of information custodians</li> <li>• Technical security requirements and procedures for processing sensitive human information, including genetic and biometric data</li> <li>• Laws of relevant organizations</li> </ul>	<p>Information custodians:            Ministry of Digital Development and Communications            National Security Council            National Data Center            E-Mongolia Academy            ICTPA            National Human Rights Commission</p>	<p>Regulation is being carried out by law</p> <p>There is no unified standard for information confidentiality</p> <p>Improvement of the notification delivery system</p>	<p>Overall, public servants lack knowledge on handling personal information</p> <p>Enhance oversight for organizations granted authority by law</p> <p>Foster a culture of compliance</p>
<p><b>Challenges</b></p> <ul style="list-style-type: none"> <li>• The right to access data is regulated by multiple laws, creating confusion among the public.</li> <li>• Weak coordination.</li> </ul>	<p>Single source of information: Who is responsible when names change?</p> <p>Establish an independent organization responsible for data governance.</p>	<p>Data anonymization methods are unclear.</p> <p>Lack of regulatory framework for rights – Accessibility.</p> <p>Re-engineer the transition process from traditional methods to digital applications and standardize the architecture.</p> <p>Data ownership and</p>	<p>Improve digital skills.</p> <p>Enhance understanding of cybersecurity in the digital environment - Mitigate harm in the digital space.</p>

<b>Policies</b>	<b>Institutions</b>	<b>Processes</b>	<b>People</b>
		accountability – Single source of information. Integrate systems and data.	

### Recommendations & Actions

<b>Item</b>	<b>Description</b>	<b>Timeline</b>
<b>Policies</b> Improve the legal environment  Develop standards  Update internal organizational regulations	Clarify certain legal environments, make it clear who has access to whose rights and under what authority  Data standards – Open data standards, Personal data protection standards  Procedures for collecting, processing, storing, using, and exchanging information	1-2 years  1 year  1 year
<b>Institutions</b>  Information custodian organization - National Data Center	Enhance leadership, unify understanding  Improve infrastructure, ensure continuity	1-2 years  1-2 years
<b>Processes</b> Develop systems  Ensure implementation of laws and regulations  Complaint monitoring and resolution procedures?	Establish an independent notification delivery system and unified log records, create access rights  Coordinate improvements with relevant organizations  Ensure independent oversight by relevant organizations	1-2 years  1-2 years  1 year
<b>People</b>  Training	Develop all participating stakeholders	Ongoing

### Focus Group 5 – Digital Infrastructure

#### Present status and challenges

Policies	Institutions	Processes	People
<p>Soft / Hard</p> <ul style="list-style-type: none"> <li>Ministry of Digital Development and Communications (MDDC): Establish procedures for providing services from the organization responsible for the state electronic information repository.</li> <li>Basic and specialized information repositories.</li> </ul>	<p>Responsible for unified repository</p> <p>Metadata: NSO</p> <p>Where to generate: NSO, DATACENTER</p>	<p>CLOUD - Addressing overlapping resources, investments, human resources, and security issues.</p> <p>G2G, DAN</p> <p>Basic and specialized Information repository copies</p> <p>Fiber system</p>	<p>Human resources!!!</p> <p>Skilled, professionals</p>
<p>Challenges</p> <ul style="list-style-type: none"> <li>Clarify the legal framework for creating, storing, and processing a unified data repository.</li> <li>Identify and designate the organization responsible for managing the unified information repository.</li> <li>LEADERSHIP</li> </ul>	<ul style="list-style-type: none"> <li>Determine whether the National Statistical Office or the Data Center will take the lead.</li> <li>Ensure that the Ministry of Finance and other organizations utilize and process information effectively.</li> </ul>	<ul style="list-style-type: none"> <li>Resolve infrastructure issues.</li> <li>Implement solutions such as Data Warehouse, Data Lake, and Big Data.</li> <li>Establish robust computing infrastructure, including GPU cloud.</li> <li>Introduce data-at-rest encryption solutions for databases (Ransomware protected).</li> </ul>	<ul style="list-style-type: none"> <li>Prepare and involve human resources in training programs.</li> <li>Provide understanding and information to government organizations about data storage and processing standards.</li> </ul>

Policies	Institutions	Processes	People
		<ul style="list-style-type: none"> <li>• Implement audit logs, backups, and recovery systems.</li> <li>• Address licensing costs.</li> </ul>	<ul style="list-style-type: none"> <li>• Develop skilled personnel.</li> <li>• Formulate sector-specific human resource policies.</li> </ul>

### Focus Group 6 – Digital Identity

#### Present status and challenges

Policies	Institutions	Processes	People
<p><b>What works well:</b></p> <ul style="list-style-type: none"> <li>• Civil identification: <ul style="list-style-type: none"> <li>○ Law on Electronic Signatures,</li> <li>○ Law on Public Information (civil identification and verification system, DAN system).</li> </ul> </li> </ul> <p><b>What is not working well:</b></p> <ul style="list-style-type: none"> <li>• Legal entities, businesses, and government organizations lack a unified classification and code standard for identification.</li> </ul>	<p><b>What works well:</b></p> <ul style="list-style-type: none"> <li>• Ministry of Digital Development and Communications (MDDC),</li> <li>• e-Mongolia Academy,</li> <li>• National Data Center,</li> <li>• Private sector organizations are identifying and verifying citizens using methods beyond those specified by law (e.g., mobile numbers, social media accounts, OTP, RFID, Face liveness).</li> </ul>	<p><b>What works well:</b></p> <ul style="list-style-type: none"> <li>• Gsign (mobile app, digital certificates),</li> <li>• DAN (G2G).</li> </ul> <p><b>What is not working well:</b></p> <ul style="list-style-type: none"> <li>• There is no mechanism to monitor civil identification in transactions between citizens.</li> <li>• National ID card (digital certificates).</li> </ul>	<p><b>What works well:</b></p> <ul style="list-style-type: none"> <li>• Citizens' support for and use of digital activities and services has improved.</li> </ul> <p><b>What is not working well:</b></p> <ul style="list-style-type: none"> <li>• The process is not user-friendly,</li> <li>• Access to devices and digital literacy is limited.</li> </ul>

<b>Policies</b>	<b>Institutions</b>	<b>Processes</b>	<b>People</b>
<ul style="list-style-type: none"> <li>There is a need for such standards.</li> </ul>			
<b>Challenges:</b> <ul style="list-style-type: none"> <li>The use and regulation of Digital Identity for B2B, C2C, and B2C interactions between the government and citizens are unclear (lack of unified regulation).</li> </ul>	<b>Challenges:</b> <ul style="list-style-type: none"> <li>At the level of courts and enforcement agencies, the process of validating and proving digital identity is inconsistent, and there is no standard mechanism or method for verification.</li> </ul>	<b>Challenges:</b> <ul style="list-style-type: none"> <li>Limited opportunities for implementing digital identification in interactions between citizens.</li> </ul>	<b>Challenges:</b> <ul style="list-style-type: none"> <li>Building public trust and confidence.</li> </ul>

### Recommendations & Actions

<b>Item</b>	<b>Description</b>	<b>Timeline</b>
<b>Policies</b> Identification of businesses and government organizations (unified classification and code standards).	Develop rules, procedures, and regulatory documents for establishing unified classification and code standards for identifying businesses and government organizations.	12 months
<b>Institutions</b> Maintaining digital identity master data.	Create a structure for maintaining digital identity master data (governing council).	12 months
<b>Processes</b> Create mechanisms to implement and enforce laws and standards.	Align new and existing operations, and update and organize standards and procedures.	18-24 months
<b>People</b> Promote the use and adoption of digital services.		

Item	Description	Timeline

## CONCLUSION AND WAY FORWARD

In her closing remarks, Ms. Hyeyoung Kim, Head of the United Nations Project Office on Governance (UNPOG), expressed gratitude and optimism for the successful completion of the two-day workshop. She highlighted Mongolia's impressive progress in digital governance, particularly in improving its EGD ranking and digital capabilities, which serves as an inspiration for other landlocked developing countries. However, she acknowledged that there are still challenges ahead, emphasizing the need for strong teamwork, careful planning, and collaboration to build effective data governance systems.

Ms. Kim emphasized that effective data governance goes beyond infrastructure and requires fostering a culture of accountability, inclusiveness, and transparency. She encouraged all stakeholders to build on the workshop's outcomes to strengthen institutions, form partnerships, and translate strategies into actionable, inclusive steps. She concluded by expressing gratitude to the partnering organizations and reminded participants that digital transformation is a continuous journey. By working together, she believes the power of digitalization can be harnessed to create a more equitable and sustainable future.

## ANNEXES

### Website of the Workshop

For more information and access to all documentation, please refer to the [event website](#).

### Agenda of the Workshop

## Mongolia National Workshop “Capacity Development Workshop on National Data Governance Framework and Digital Government in Mongolia”

### AGENDA

Date: 3-4 December 2024

Venue: Blue Sky Hotel - Crystal Hall, Ulaanbaatar, Mongolia

Tuesday, 3 December 2024	
Time (GMT+8)	
09:00 - 09:30	<b>Registration</b>
09:30 - 10:00	<p><b><u>Opening Session</u></b></p> <p><b><i>Opening remarks:</i></b></p> <ul style="list-style-type: none"><li>● <b>H.E. Mr. Tsend Baatarkhuu</b> Minister of Digital Development, Innovation and Communications (MDDIC), Mongolia (5 min)</li><li>● <b>Mr. Juwang Zhu</b> Director, Division for Public Institutions and Digital Government (DPIDG), United Nations Department of Economic and Social Affairs (UN DESA) (5 min)</li></ul> <p><b><i>Keynote:</i></b></p> <ul style="list-style-type: none"><li>● <b>Mr. Tapan Mishra</b> Resident Coordinator, UN Resident Coordinator (UNRC), Mongolia (5 min)</li></ul> <p><b>Moderator: Ms. Hye Kyung Choi (Shelley)</b>, Senior Programme Management Assistant, UNPOG/DPIDG/UN DESA</p>

10:00 - 10:30	<p><b><u>Photo Taking Opportunity</u></b>  <b><u>Health Break</u></b></p>
10:30 - 11:30	<p><b><u>Session 1: Data Governance and Digital Government Trends</u></b></p> <p><b>Topic: Global Data Governance and Digital Development Trends</b>  <b>Mr. Wai Min Kwok</b>  Acting Chief of Staff, OUSG, UN DESA (20 min)</p> <p><b>Topic: Pillars and Elements of National Data Governance Framework</b>  <b>Ms. Anujin Sanjaajamts</b>  Consultant, DPIDG, UN DESA (20 min)</p> <p><b>Interactive Discussion (20 mins)</b></p> <p><b>Moderator: Mr. Junho Lee</b>, Associate Expert, DPIDG, UN DESA</p>
11:30 - 12:30	<p><b><u>Session 2: Current Landscape of Data Governance in Mongolia</u></b></p> <p><b>Topic: The Role of Data/Data Governance in Policy Development and Good Governance in Mongolia</b>  <b>Mr. Bat-Ulzii Batchuluun</b>  Director General, Digital Development Policy Implementation and Coordination Department, MDDIC, Mongolia (15 min)</p> <p><b>Topic: National E-Government Trends and Development in Mongolia</b>  <b>Mr. Battulga Munkhdorj</b>  Director, National Data Center, Mongolia (15 min)</p> <p><b>Topic: National Data Governance Roadmap and Action Plan</b>  <b>Ms. Tegshjargal Tsagaan</b>  <b>On behalf of Mr. Ariunbold Shagdar</b>, Director General, Census and Data Analysis Department, National Statistics Office, Mongolia (15 min)</p> <p><b>Interactive Discussion (15 mins)</b></p> <p><b>Moderator: Mr. Prabin Maharjan</b>, UNPOG, DPIDG, UN DESA</p>
12:30 – 14:00	<p><b>Lunch</b></p>
14:00 - 15:00	<p><b><u>Session 3 - Sharing Countries' Experiences</u></b></p>

	<p><b>Topic: South Korea’s Data Ecosystem Development and Its Future (20 min)</b></p> <p><b>Topic: Smart Nation, Digital Government, and Data Ecosystem Development</b></p> <ul style="list-style-type: none"> <li>• <b>Singapore (20 min)</b></li> </ul> <p><b>Interactive Discussion (20 mins)</b></p> <p><b>Moderator: Mr. Prabin Maharjan, UNPOG, DPIDG, UN DESA</b></p>
15:00 - 15:20	<b>Health Break</b>
15:20 - 16:00	<p><b>Day 1 Closing reflections</b></p> <ul style="list-style-type: none"> <li>• <b>Mr. Bat-Ulzii Batchuluun</b> Director General, Digital Development Policy Implementation and Coordination Department, MDDIC, Mongolia</li> </ul> <p><b>Moderator: Mr. Junho Lee, Associate Expert, DPIDG, UN DESA</b></p>
17:00 - 18:30	<b>Welcome Dinner</b>

<b>Wednesday, 4 December 2024</b>	
<b>Time (GMT+8)</b>	
09:00 - 09:30	Registration and Networking
09:30 - 10:30	<p><b>Session 4: Collaboration in Data Governance - Regional and National Experience</b></p> <p><b>Topic: Data Governance for Digital Transformation: Regional Collaboration on Data Governance</b></p> <p><b>Dr. Baigal Dorj</b> Head of School of Public Administration, National Academy of Governance, Mongolia (20 min)</p> <p><b>Topic: Data Governance Policies on Innovation and Business Growth</b></p>

	<p><b>Mr. Sainbileg Mandakh</b> Chief Information Officer, Golomt Bank (20 min)</p> <p><b>Interactive Discussion (20 min)</b></p> <p><b>Moderator: Mr. Prabin Maharjan, UNPOG, DPIDG, UN DESA</b></p>
10: 30 - 11:00	<p><b>Session 5: National Data Governance Framework - Mongolia</b></p> <p><b>Advancing Data Governance in Mongolia: Baseline Study Insights and Initial Findings</b></p> <p><b>Ms. Anuujiin Sanjaajamts</b> Consultant, DPIDG, UN DESA (15 min)</p> <p><b>Interactive Discussion</b></p> <p><b>Moderator: Mr. Prabin Maharjan, UNPOG, DPIDG, UN DESA</b></p>
11: 00 - 11:15	<b>Health Break</b>
11:15 - 12:30	<p><b><u>Breakout Focus-Group Discussion:</u></b> <b>Introduction of the Focus group (8-10 participants in each) <sup>1</sup></b> <b>(focused on the following elements against the four pillars)</b></p> <ul style="list-style-type: none"> <li>● <b>Focus Group 1</b> Data standards and classification</li> <li>● <b>Focus Group 2</b> Data sharing, exchange, and interoperability</li> <li>● <b>Focus Group 3</b> Data security</li> <li>● <b>Focus Group 4</b> Data privacy (and ethics)</li> <li>● <b>Focus Group 5</b> National data infrastructure</li> <li>● <b>Focus Group 6</b> Digital identity and data governance</li> </ul> <p><b>Guiding Questions: Mr. Junho Lee, DPIDG, UN DESA</b></p> <p><b>Facilitator(s):</b></p> <ul style="list-style-type: none"> <li>- Mr. Prabin Maharjan, UNPOG, DPIDG, UN DESA</li> <li>- Mr. Samuel Danaa, UNPOG, DPIDG, UN DESA</li> <li>- Ms. Anuujiin Sanjaajamts, DPIDG, UN DESA</li> </ul>
12:30 - 14:00	<b>Lunch</b>

<sup>1</sup> Each group comprises participants from Government, private sector, academia and civil society.

<p>14:00 - 15:30</p>	<p><b>Plenary Session</b></p> <ul style="list-style-type: none"> <li>▪ <b>Focus group 1: Reporting back and Q&amp;A</b> Ms. Tegshjargal Tsagaan Director General, Integrated Statistics Department, NSO, Mongolia</li> <li>▪ <b>Focus group 2: Reporting back and Q&amp;A</b> Mr. Bat-Ulzii Batchuluun Director General, Digital Development Policy Implementation and Coordination Department, MDDIC, Mongolia</li> <li>▪ <b>Focus group 3: Reporting back and Q&amp;A</b> Mr. Zolbayar Chuluuntsetseg Director, Office of Cyber Security Council, Mongolia</li> <li>▪ <b>Focus group 4: Reporting back and Q&amp;A</b> Mr. Myagmarnaran Bavuujav Director, e-Mongolia Academy, Mongolia</li> <li>▪ <b>Focus group 5: Reporting back and Q&amp;A</b> Mr. Battulga Munkhdorj Director, National Data Center, Mongolia</li> <li>▪ <b>Focus group 6: Reporting back and Q&amp;A</b> Mobicom Corporation, Mongolia</li> </ul> <p><b>Moderator: Mr. Junho Lee</b>, Associate Expert, DPIDG, UN DESA</p>
<p>15:30 - 15:45</p>	<p><b>Health Break</b></p>
<p>15:45 - 16:00</p>	<p><b>Workshop Evaluation</b></p>
<p>16:00 - 17:00</p>	<p><b>Closing session (the way forward)</b></p> <ul style="list-style-type: none"> <li>● <b>Ms. Hyeyoung Kim</b>, Head of Office, UNPOG, DPIDG, UN DESA</li> </ul> <p><b>Moderator: Ms. Hye Kyung Choi (Shelley)</b>, Senior Programme Management Assistant, UNPOG, DPIDG, UN DESA</p>

## List of Participants

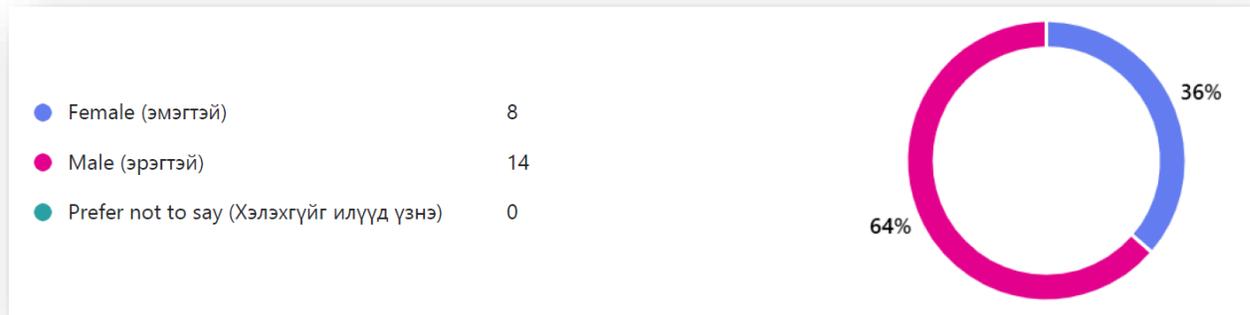
	Government	Given name Surname	Position	Division, Department
1	National Security Council of Mongolia	Baatarkhuyag Narantsogt	Director General	Cyber Security Department
		Zuchi Selengemoron	Referent	Cyber Security Department
2	Bank of Mongolia	Khosbayar B.	Director General	Information Technology Department
		Enkhbilguun Dashdondog	Senior big data officer	Office of Big Data
3	Cabinet Secretariat of Government of Mongolia	Bilegdemberel Badamdorj	Director General	Digital Development and Information Technology Department
<b>Ministries</b>				
1	Ministry of Mining and Heavy Industry	Budee A.	Director General	Human Resourse Division; Government Administration Management Department
2	Ministry of Environment and Tourism	Delgerbat D.	Director General	Government Administration Management Department
3	Ministry of Defence	Uuganbayar A.	Director General	Information Technology Division
4	Ministry of Education and Science	Dolgormaa Ganbaatar	Analyst	Digital Education Department
5	Ministry of Foreign Affairs	Ankhiluun J.	Attache	Multilateral Cooperation Department
6	Ministry of Family, Labour and Social Protection	Sukhbaatar Ts.	Senior Analyst	Digital Transformation and Big Data Policy Department
7	Ministry of Road and Transport	Gerelnyam D.	Director General	Information Technology Division; Policy Planning Department
8	Ministry of Finance	Lkhagva-Ochir B.	Director General	Financial IT Division
9	Ministry of Culture	Enkh-Amgalan Ch.	Director General	Digital Policy and Statistics Division; Public Administration Depratment
10	Ministry of Construction and Urban Development	Narantuya N.	Director General	Statistics Information Base
11	Ministry of Justice and Internal Affairs	Baatardash B.	Director General	Information Technology Division
12	Ministry of Food, Agriculture and Light Industry	Tsogtgerel E.	Director General	Digital Transformation and Statistics Department
13	Ministry of Economy and Development	Mungunsukh B.	Director General	Science plicy planning division; Public Administration Department
14	Ministry of Health	Myagmar-Ulzii E.	Deputy Director	Medical Innovation and Technology Division
		Tseren-Ochir.B	Senior Officer	Research and Planning Division

15	Ministry of Energy	Enkhtulga B.	Analyst	Public Administration Department
<b>Agencies</b>				
1	General Authority for Archives	Buzmaa D.	Deputy Director	Information Technology Department
2	Mineral Resources and Petroleum Authority	Amartuvshin E.	Senior Officer	Exploration and Utilization Department
3	General Authority for Education	Demeddorj Bavuudorj	Deputy Director	Digital Transformation and Integrated Statistics Department
4	Customs General Administration	Munkhzul N.	Senior State Customs Inspector	Information Technology Department
5	Immigration Agency	Gereltuya G.	Senior Officer	Public Administration Department
6	Agency for Land Administration and Management, Geodesy and Cartography	Gal Janchivdorj	Director General	Spatial Data Infrastructure Department
7	Regulatory Agency of Government Digital Service	Batbaatar Purevjav	Director	-
8	Office of Cyber Security Council	Zolbayar Chuluuntsetseg	Director	-
9	Civil Aviation Authority	Enkh-Amgalan B.	Senior Planning Officer	Policy Implementation Division
10	Information Security Department	Khadbaatar E.	Director General	Information Security Department
11	State Social Insurance General Office	Lkhagvajav N.	Data Analyst Officer	
12	Intellectual Property Office	Erdenebayar Chuluun-Ochir	Senior State Inspector	Monitoring and Audit Department
13	General Staff of the Armed Forces	Otgontulga P.	Lieutenant Colonel	Policy and Strategic Planning Department
14	Civil Service Council	Batnasan Suvdaa	Referent	Information and Analysis Division
15	General Authority for State Registration	Ankhubayar Baatarkhuu	Director General	Database and Software Division; Information Technology Department
16	National Statistics Office	Tegshjargal Tsagaan	Director General	Integrated Statistics Department
17	General Agency for Labor Welfare Services	Davaajargal D.	Director General	Information Technology Department
18	National Police Agency	Munkhzul D.	Director General	Information Technology Division
19	National Agency Meteorology and the Environmental Monitoring	Batdorj Dashdondog	Director General	Archives and Databases Division
20	National Forensic Agency	Munkhbaatar D.	Director General, Police Captain	Department of Engineering and Technical Analysis
21	General Authority for Health Insurance	Munkhjargal B.	Senior Officer	Information Technology Division

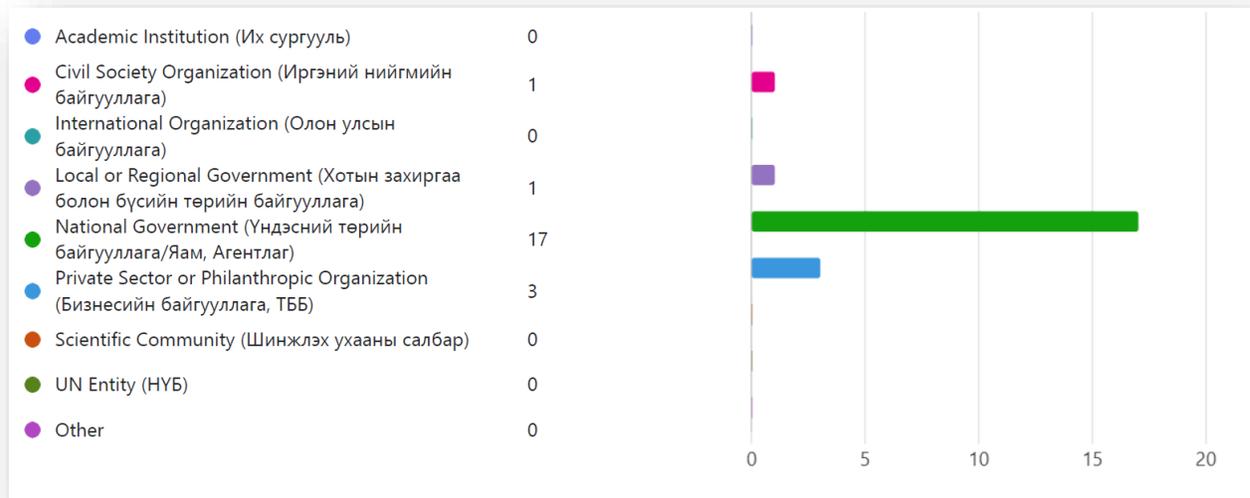
<b>Government organizations</b>				
1	Center for Educational Information Technology Center	Enkhbat Lkhagvasuren	Director	-
2	Center for Financial Information Technology Center	Batbileg T.	Director	-
3	Department of Digital Development and Information Technology, UB City	Davaanyam B.	Director	
4	e-Mongolia Academy	Myagmarnaran B.	Director	-
5	National Data Center	Battulga Munkhdorj	Director	-
6	National Road Transport Center	Bat-Amar A.	Senior Officer	Information Technology Department
<b>Academy and Universities</b>				
1	National Academy of Governance	Baigal Dorj	Head/Professor	School of Public Administration
2	MNU School of IT and Electronics	Amarsanaa Ganbold	Professor	Information and Computer Sciences Department
3	MNUST School of Information & Telecommunication Technology	Altangerel Ayush	Director General/Professor	Information Technology Department
<b>Private Industry</b>				
1	Golomt Bank	Sainbileg Mandakh	Chief Information Officer	-
2	Trade and Development Bank	Gankhulug D.	Senior Officer	Technology and Innovation Division
3	Mobicom Corporation	Mendbayar Baymba	Director General	IT Management Division; IT Sector
		Dugarmaa Ider	Advisor to the Executive Director	-
4	Unitel Group	Tegshbayar Norovjav	Director	Business Project
5	Skytel Group	Amarchinguun Gantumur	Chief Executive Officer	-
6	G-Mobile LLC	Khatantsetseg B.	Director General	Digital Development Division; Marketing Department
<b>NGO, Civil Societies</b>				
1	Mongolian National Software Association	Battamir	Chairman	-
2	Empowering Data Value NGO	Unutulga	Founder	-

## Evaluation of the Workshop

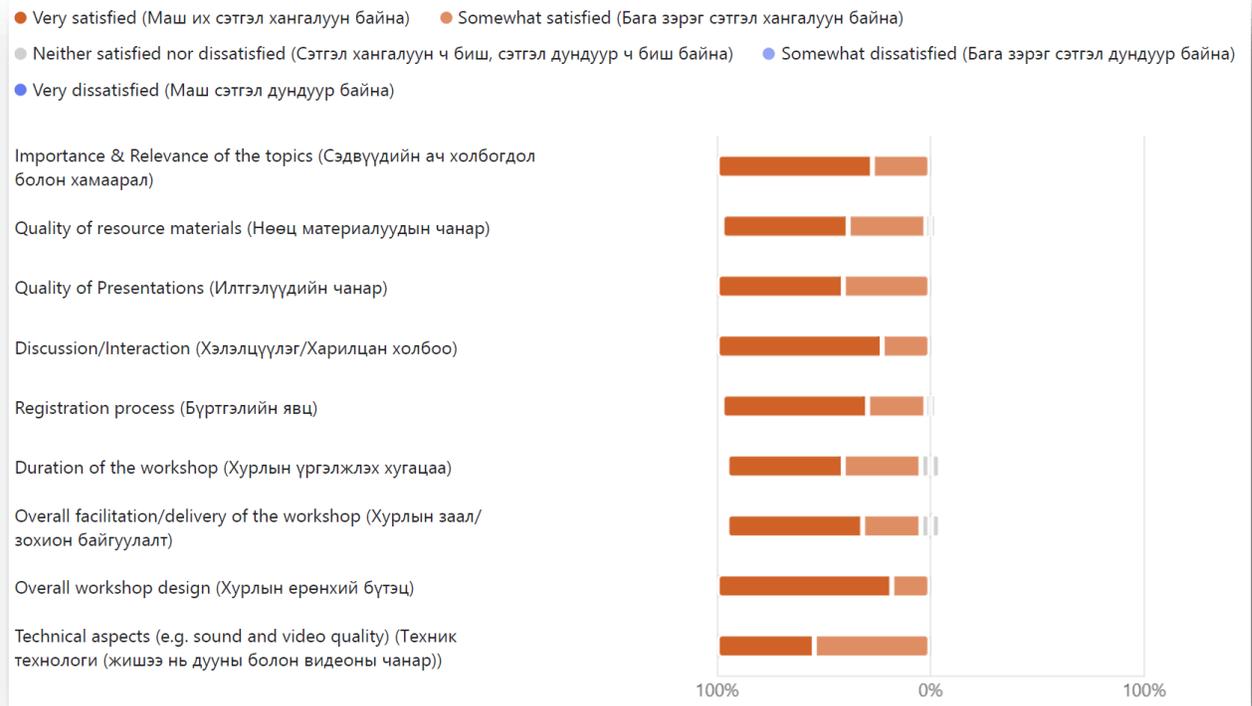
### Gender



### Type of your organization



## Level of satisfaction



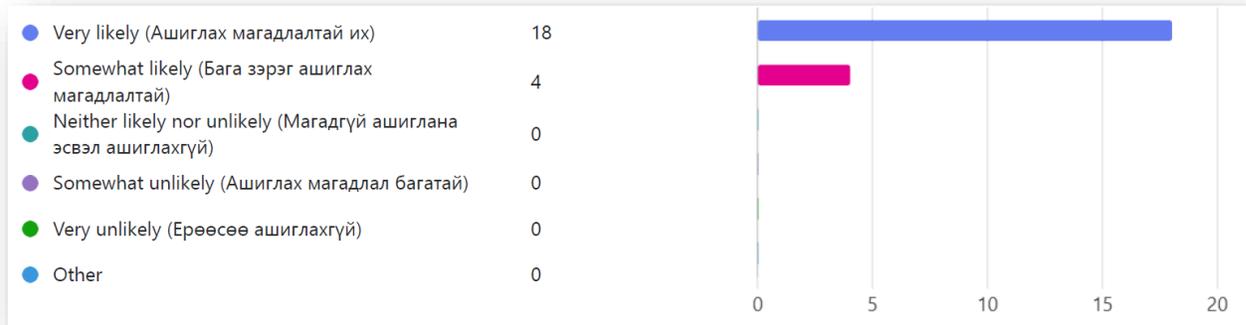
## The workshop increased your knowledge or awareness of data governance matters



## Overall Satisfaction



## Apply what you have learned in the Workshop



Event Photos are available [Here](#).