# Collaborative Planning for Computer Science Activities and

RESEARCH IN GANDAKI PROVINCE

March 12, 2023

- 1 Introduction
- 2 Key Discussions

#### GPAST INTERACTION WITH STAKEHOLDERS

Title: Collaborative Planning for Computer Science Activities and Research in Gandaki Province

# Major Agendas

- 1. Identifying Priority Areas
- 2. Develop a strategic Plan
- 3. Building research Capacity
- 4. Supporting Innovation
- 5. Foster Partnership/Entrepreneurship

# Session 2 Outline

- 1 Introduction
- 2 Key Discussions
  - Open Data Program
  - Infrastructure Management Process
  - Challenges with Smart Cities Initiatives
  - Perceived Challenges to talent management in Service industry
  - Challenges in Adoption of Cloud Computing in Government Systems
  - Designing of Governance Indicators
  - Al in Public Sector
  - Business Development Challenges in Rural Municipalities
  - Challenges in Community Managed Projects
  - Research Core Facility

#### Sub-Session 2.1 Outline

1 Introduction

#### 2 Key Discussions

- Open Data Program
- Infrastructure Management Process
- Challenges with Smart Cities Initiatives
- Perceived Challenges to talent management in Service industry
- Challenges in Adoption of Cloud Computing in Government Systems
- Designing of Governance Indicators
- Al in Public Sector
- Business Development Challenges in Rural Municipalities
- Challenges in Community Managed Projects
- Research Core Facility

#### OPEN DATA PROGRAM

# Expectation

- Availablity of data formats (csv, json, xlsx)
- 2. Meta-Data
- 3. API Functionality
- 4. DataSets

### Challenges

- 1. Low Data Availability
- 2. Outdated DataSets
- 3. Limited API Functionalities
- 4. Proprietary Data Formats
- 5. Lack of Meta Data
- 6. Untidy DataSets

#### Sub-Session 2.2 Outline

1 Introduction

#### 2 Key Discussions

- Open Data Program
- Infrastructure Management Process
- Challenges with Smart Cities Initiatives
- Perceived Challenges to talent management in Service industry
- Challenges in Adoption of Cloud Computing in Government Systems
- Designing of Governance Indicators
- Al in Public Sector
- Business Development Challenges in Rural Municipalities
- Challenges in Community Managed Projects
- Research Core Facility

#### Infrastructure Management Process

#### Current Scenario

- Government data is complex information that needs to be generated and exchanged. Difficulty is to streamline and coordinate these inter-dependent processes.
- Governments have made significant investments in implementing software tools. Ironically it exacerbated the negative impact of process fragmentation by creating information gaps between the processes. Result: Isolated Silos of Information and Data Fragmentation within and across departments

# GOVERNMENT INFRASTRUCTURE MANAGEMENT

#### Challenges

- 1. Assimilation of Multitude of data, processes and software systems.
- 2. Systematization and Coordination of Work Processes
- 3. Development of Centralized Shared Data Repositories based on Non-proprietary Integrated Data Models
- 4. Organization and Integration of Distributed Software Tools into a modular and Extensible Enterprise-wide Software Environment

# Sub-Session 2.3 Outline

1 Introduction

# 2 Key Discussions

- Open Data Program
- Infrastructure Management Process
- Challenges with Smart Cities Initiatives
- Perceived Challenges to talent management in Service industry
- Challenges in Adoption of Cloud Computing in Government Systems
- Designing of Governance Indicators
- Al in Public Sector
- Business Development Challenges in Rural Municipalities
- Challenges in Community Managed Projects
- Research Core Facility

# MUNICIPAL DECISION MAKERS' PERSPECTIVE - SMART CITIES

# Driving Needs on Smart City

- 1. Growing Population
- 2. Trending Urbanization
- 3. Significant Environmental Concerns
- 4. Significant Social Concerns

#### Municipal Challenges with Smart Cities - Gandaki Province

- 1. Achieve a strategic alignment between the key stakeholders of smart city development: **People, Technology and Institutions**
- 2. Major Difficulties are: stakeholder and citizen participation (IBID), interoperability of systems, privacy and security concerns.

# Sub-Session 2.4 Outline

1 Introduction

# 2 Key Discussions

- Open Data Program
- Infrastructure Management Process
- Challenges with Smart Cities Initiatives
- Perceived Challenges to talent management in Service industry
- Challenges in Adoption of Cloud Computing in Government Systems
- Designing of Governance Indicators
- Al in Public Sector
- Business Development Challenges in Rural Municipalities
- Challenges in Community Managed Projects
- Research Core Facility

# Perceived Challenges to talent management in Service Industry

#### **Current Status**

- 1. Failure to retain key talent
- 2. Lack of employee recognition
- 3. Succession Planning and Management Problems
- 4. Sluggish

# Perceived Challenges to talent management in Service

#### Challenges and Opportunities

- 1. Higher Education in Computer Science
- 2. E-governance (Accountability & Transparency)
- 3. Job Market for CS graduates
- 4. IT Park

#### Sub-Session 2.5 Outline

1 Introduction

- Open Data Program
- Infrastructure Management Process
- Challenges with Smart Cities Initiatives
- Perceived Challenges to talent management in Service industry
- Challenges in Adoption of Cloud Computing in Government Systems
- Designing of Governance Indicators
- Al in Public Sector
- Business Development Challenges in Rural Municipalities
- Challenges in Community Managed Projects
- Research Core Facility

# Challenges in Adoption of Cloud Computing in Government Systems

# Sub-Session 2.6 Outline

1 Introduction

- Open Data Program
- Infrastructure Management Process
- Challenges with Smart Cities Initiatives
- Perceived Challenges to talent management in Service industry
- Challenges in Adoption of Cloud Computing in Government Systems
- Designing of Governance Indicators
- Al in Public Sector
- Business Development Challenges in Rural Municipalities
- Challenges in Community Managed Projects
- Research Core Facility

# Sub-Session 2.7 Outline

1 Introduction

- Open Data Program
- Infrastructure Management Process
- Challenges with Smart Cities Initiatives
- Perceived Challenges to talent management in Service industry
- Challenges in Adoption of Cloud Computing in Government Systems
- Designing of Governance Indicators
- Al in Public Sector
- Business Development Challenges in Rural Municipalities
- Challenges in Community Managed Projects
- Research Core Facility

#### Sub-Session 2.8 Outline

1 Introduction

- Open Data Program
- Infrastructure Management Process
- Challenges with Smart Cities Initiatives
- Perceived Challenges to talent management in Service industry
- Challenges in Adoption of Cloud Computing in Government Systems
- Designing of Governance Indicators
- Al in Public Sector
- Business Development Challenges in Rural Municipalities
- Challenges in Community Managed Projects
- Research Core Facility

# Sub-Session 2.9 Outline

1 Introduction

- Open Data Program
- Infrastructure Management Process
- Challenges with Smart Cities Initiatives
- Perceived Challenges to talent management in Service industry
- Challenges in Adoption of Cloud Computing in Government Systems
- Designing of Governance Indicators
- Al in Public Sector
- Business Development Challenges in Rural Municipalities
- Challenges in Community Managed Projects
- Research Core Facility

# Sub-Session 2.10 Outline

1 Introduction

- Open Data Program
- Infrastructure Management Process
- Challenges with Smart Cities Initiatives
- Perceived Challenges to talent management in Service industry
- Challenges in Adoption of Cloud Computing in Government Systems
- Designing of Governance Indicators
- Al in Public Sector
- Business Development Challenges in Rural Municipalities
- Challenges in Community Managed Projects
- Research Core Facility