

# **COLLABORATIVE PLANNING FOR COM- PUTER SCIENCE ACTIVITIES AND RESEARCH IN GANDAKI PROVINCE**

MARCH 12, 2023



**1** Introduction

**2** Key Discussions

## **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

## 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
- AI 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

### ■ AI in Public Sector

### ■ Business Development Challenges in Rural Municipalities

### ■ Challenges in Community Managed Projects

### ■ Research Core Facility

# OPEN DATA PROGRAM

## Expectation

1. Availability 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 Outdated DataSets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
- AI in Public Sector
- Business Development Challenges in Rural Municipalities
- Challenges in Community Managed Projects
- Research Core Facility

## Current Scenario

1. Government data is complex information that needs to be generated and exchanged. Difficulty is to streamline and coordinate these inter-dependent processes.
2. 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**



## 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
- AI 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

## 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
- AI 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 Career Management Strategies

## Possible Reasons

1. Pay Satisfaction
2. Turnover and Intention to turnover theories
3. Organizational Commitment
4. Employee Engagement and Motivation

# 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

## 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**
- AI 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

## Challenges and Issues

1. Effective Network
2. Data Storage Location
3. Availability of Different Service Providers
4. Policy Makers
5. Limited understanding of the cloud and business transformation
  - 5.1 On-Demand Self Service
  - 5.2 Broad Network Access
  - 5.3 Resource Pooling
  - 5.4 Rapid Elasticity
  - 5.5 Measured Service



# SUB-SESSION 2.6 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
- **AI in Public Sector**
  - Business Development Challenges in Rural Municipalities
  - Challenges in Community Managed Projects
  - Research Core Facility

## Sectors

1. Public Sector
  - 1.1 ChatBots about procedures and queries
  - 1.2 Fraud Detection
2. Private Sector
  - 2.1 Autonomous Vehicles
  - 2.2 Business Values of AI
  - 2.3 Internal Resource Management

# SUB-SESSION 2.7 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
- AI in Public Sector
- **Business Development Challenges in Rural Municipalities**
- Challenges in Community Managed Projects
- Research Core Facility

# SUB-SESSION 2.8 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
- AI in Public Sector
- Business Development Challenges in Rural Municipalities
- **Challenges in Community Managed Projects**
- Research Core Facility

# SUB-SESSION 2.9 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
- AI in Public Sector
- Business Development Challenges in Rural Municipalities
- Challenges in Community Managed Projects
- Research Core Facility