



The Digital Transformation journey of Cebu City

By: Hon. Michael Lopez Rama
Mayor

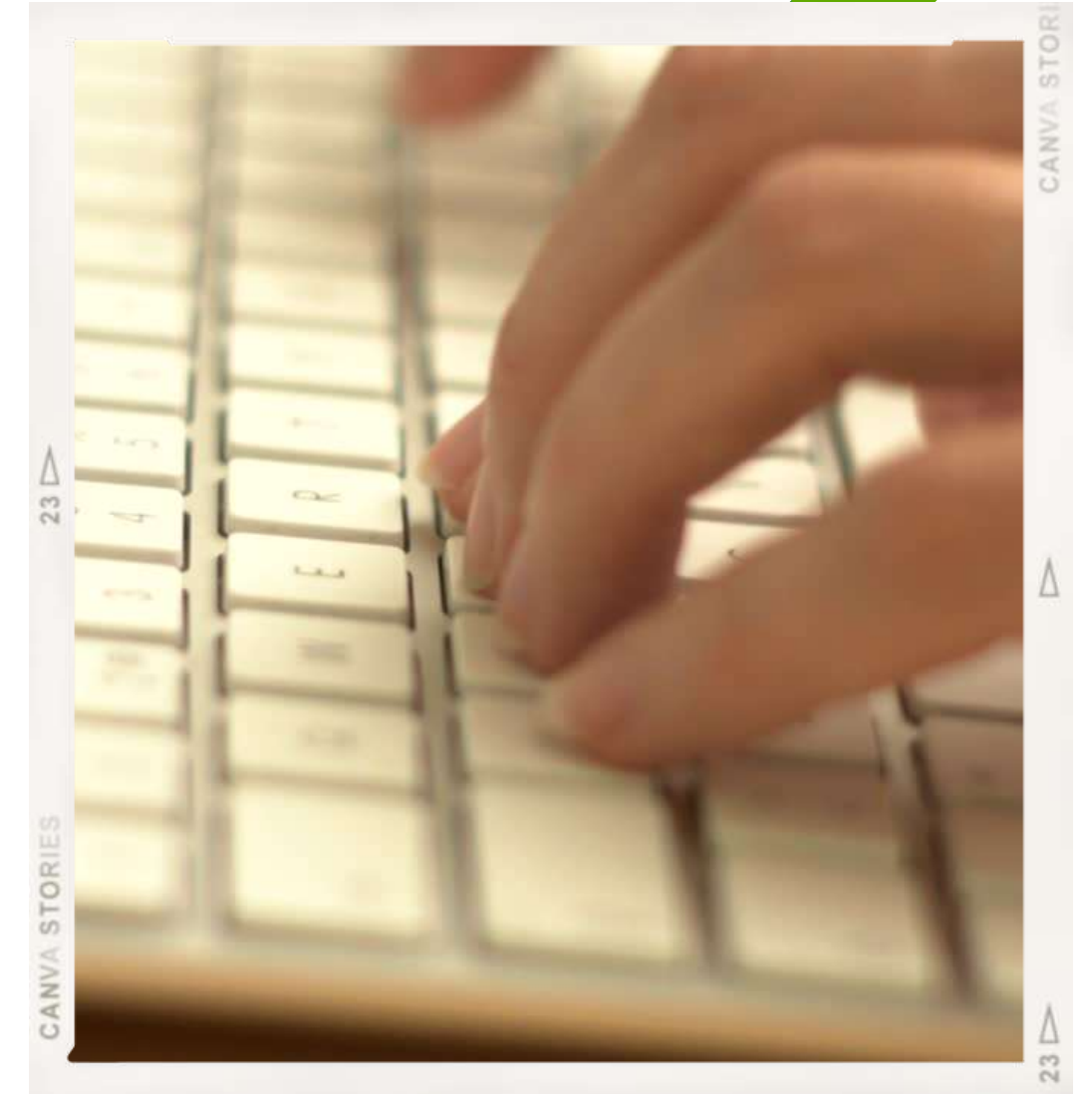




BRIEF HISTORY

1988: Journey started Electronic Data Processing Division

- Digitalization of Documents and Communications
- Start of Centralized Databasing

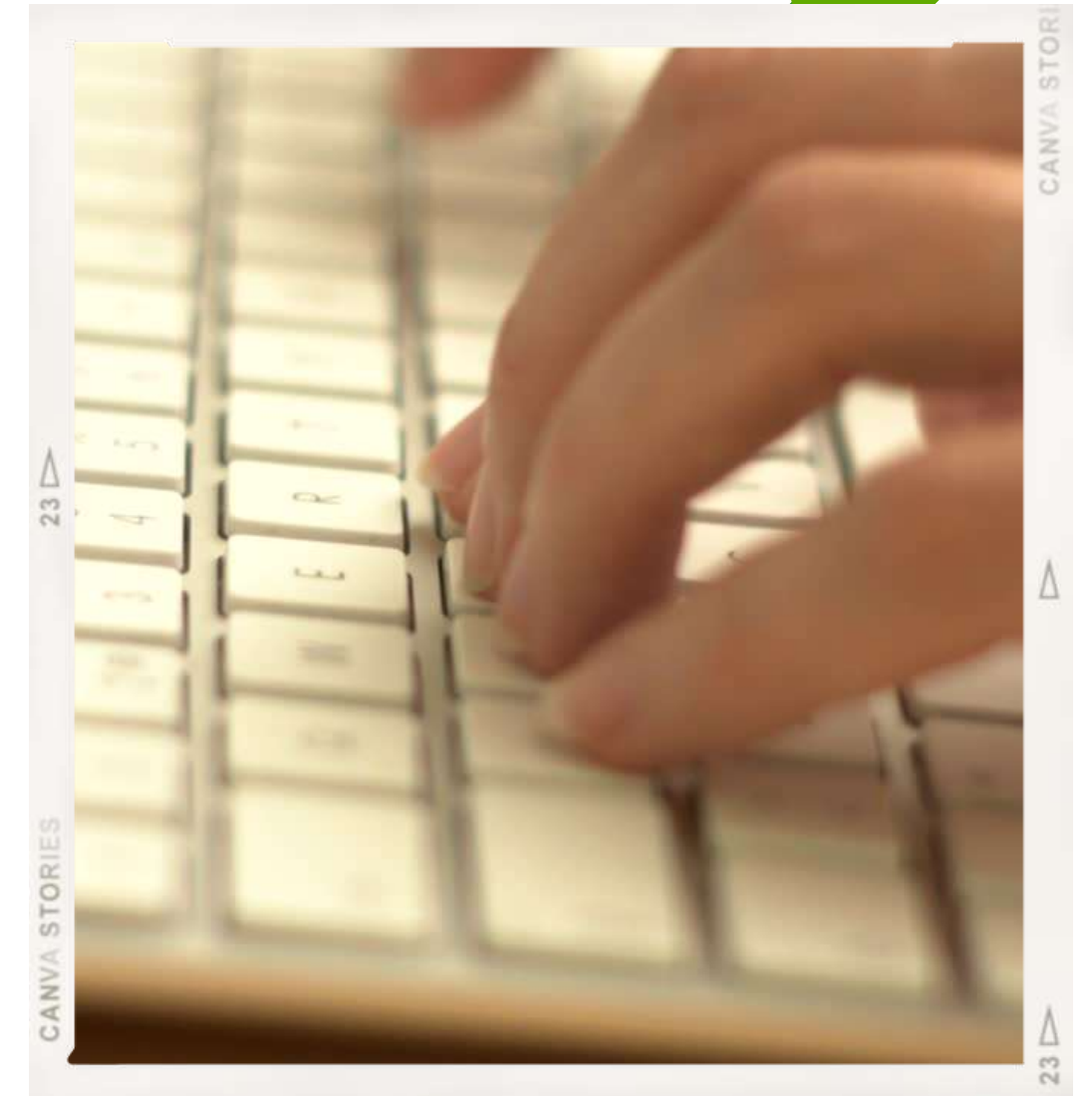




BRIEF HISTORY

1989: Established as a department MANAGEMENT INFORMATION AND COMPUTER SERVICES

- Computerize Transactions
- Develop Management Information Systems
- Optimized Computerization of Offices

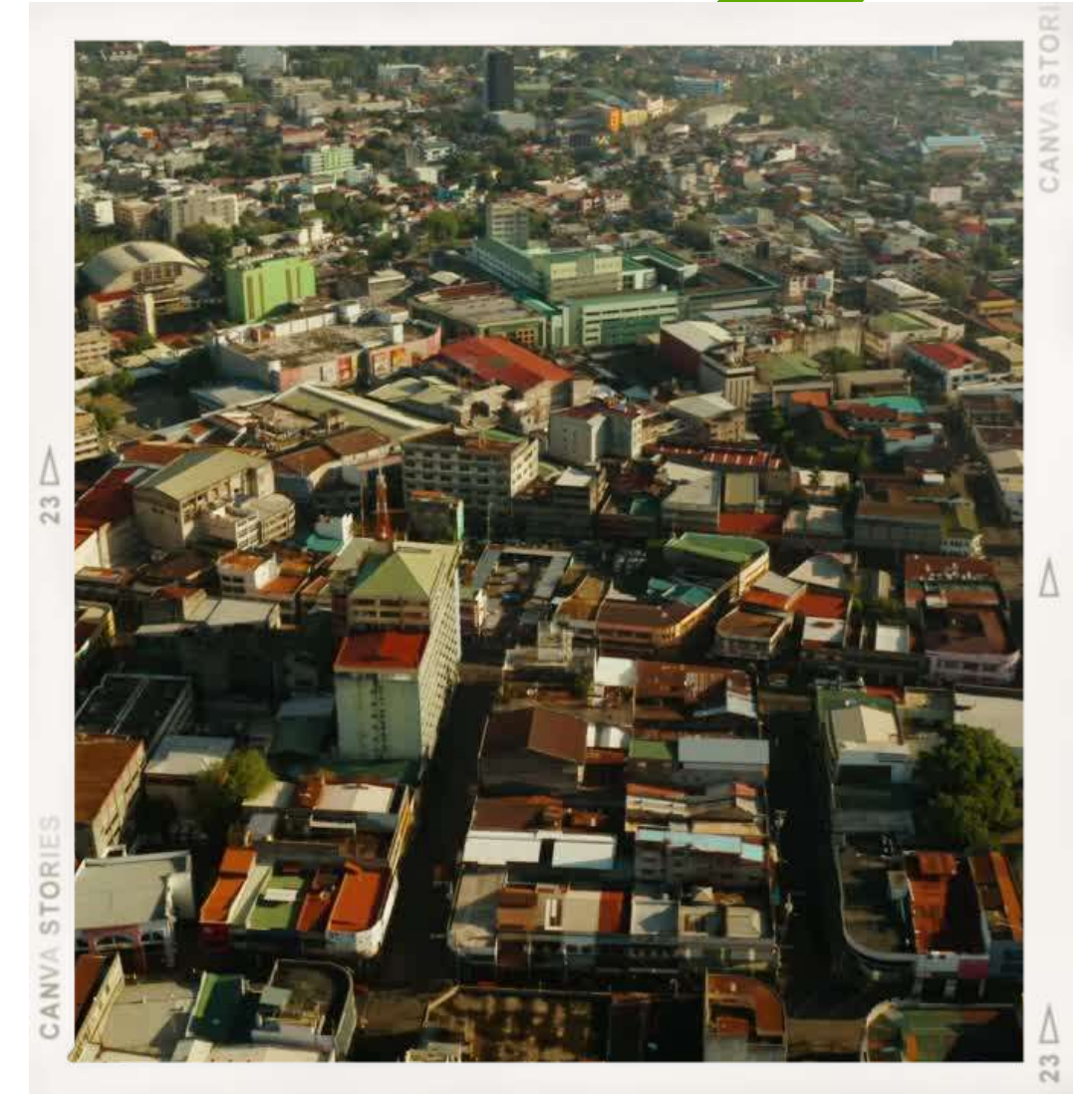




BRIEF HISTORY

1994: Creation of Geographic Information System (GIS)

- Geo located Information
- Digitalized recording of Geographical Data





Some of MICS Developments

PUBLIC SERVICE SYSTEMS

- Real Property Tax Assessment
- Business Permit Processing
- Civil Registry Information
- Online Building Permit Processing
- Online Occupancy Permit
- Online Appointment

COMPUTERIZATION INFRASTRUCTURE

- Data Infrastructure for the Executive Building
- Data Infrastructure for the Legislative Building
- Wide Area Network for 6 Facilities
- Internet Connection Management for the 6 Facilities
- Computer Network Management
- On-Premise Data Center

INTRA ORGANIZATIONAL SERVICE

- City Financial Dashboard
- Hospital Information System for CCMC
- Human Resources Information System
- P.I.T.C.H Employees Online Portal





Awards Received

- 2nd Place - 2020 Digital Governance Awards LGU'S Best Practices in ICT -Best in eGov
- Outstanding Dept 2022
- eGov Inter-operability Award 2017 G2G 2nd Place
- LGU e-Readiness Leadership Award 2017
- Best in eGov Customer Empowerment (G2C) 3rd place 2017
- Inter-Department Services Showcase 2011
- Best Department in Support Services Cluster
- 2020 Digital Governance Awards
- LGU'S Best Practices in ICT 3rd Place -Best in eGov Inter-Operability Awards

- Best in eGov Business Empowerment (G2B)
- DOST 2014 e-Readiness Leadership Award
- Government Financial Management Innovators Circle (GFMIC) INC Grassroot Implementer Award 2019
- eGov D2G 2017 Champion
- Digital Cities PH Awards Champion
- Best in Global Competitiveness 2016 (D2G)
- Digital Cities PH Awards Champion
- Best in eGov Data-Driven Governance 2016 (D2G)
- eGov Customer Empowerment (G2C 2013)
- Digital Governance Awards Covid19 Pandemic Response
- eGov Government Inter-operability Award G2G 3rd Place
- eGov G2C 2017 3rd Place

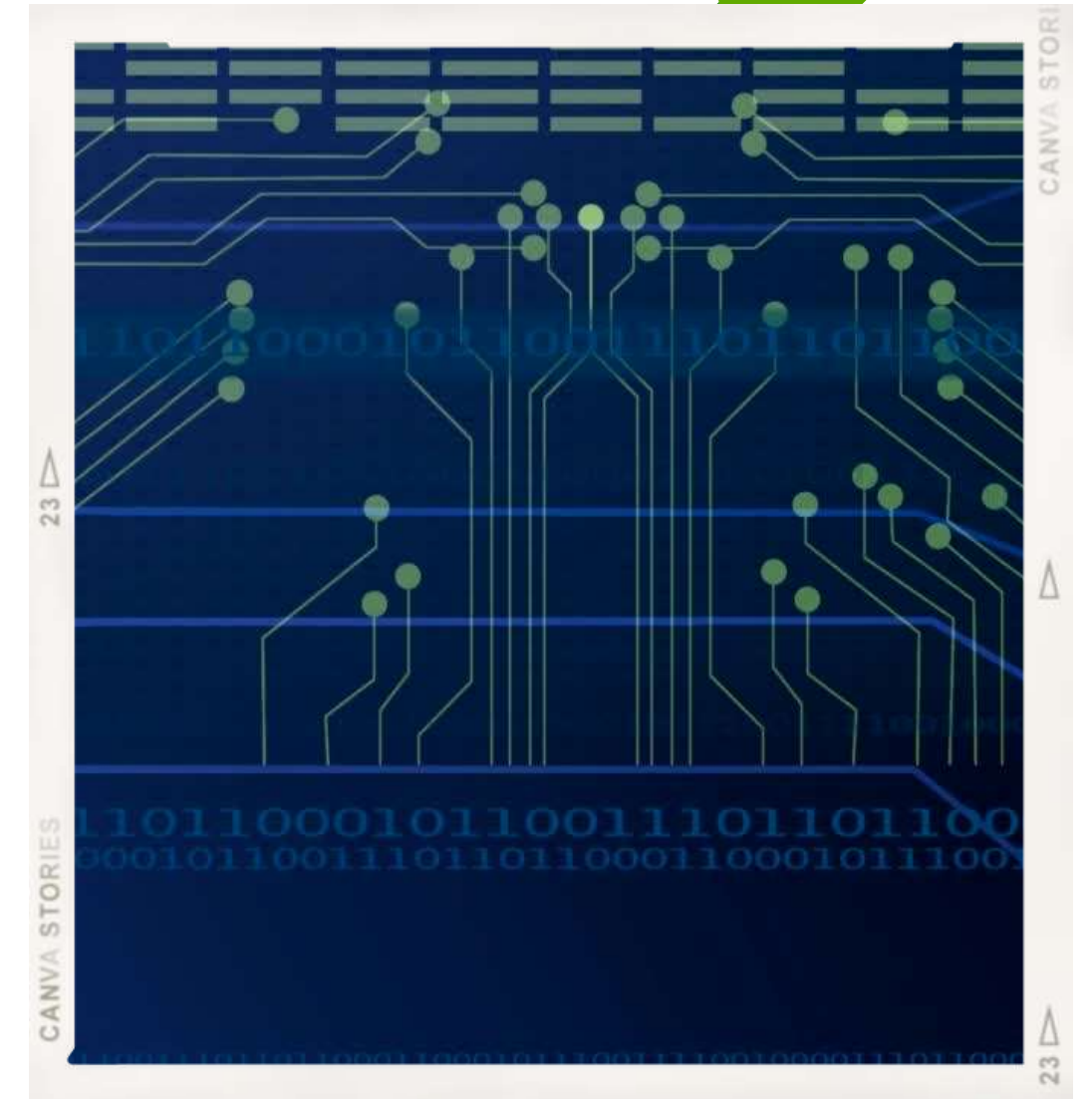




SMART GOVERNANCE

USING DATA ANALYTICS AND ARTIFICIAL INTELLIGENCE

The ability of the Local Government to utilize, analyze and synthesize data into invaluable information and relevant advice for proper feedback and formulation of appropriate programs.





Leadership thrust of Mayor Mike Rama Singapore-like Cebu City





Singapore-like Cebu City

Establish smart governance systems that would address 8 key areas of sustainability

8 KEY ASPECTS OF SUSTAINABILITY

Stabilized Public Safety

Optimized Health Care

Bridged Education

Enhanced Infrastructure

Sustained Environment

Organized Social Services

Accelerated Business Dynamism

Smartified Governance

8 KEY ASPECTS OF SUSTAINABILITY

Stabilized Public Safety

The safety and security of citizens is fundamental. We utilize smart technologies to enhance accessibility to response & improve response time. Artificial intelligence shall help existing technologies and tools to avoid, prevent, pre-empt threats, hazards and disasters.

Optimized Health Care

Bridged Education

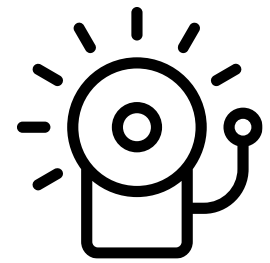
Enhanced Infrastructure

Sustained Environment

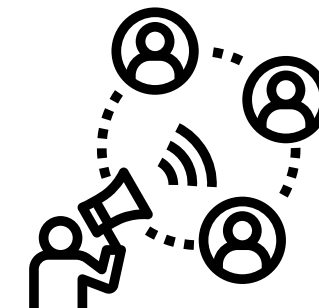
Organized Social Services

Accelerated Business Dynamism

Smartified Governance



Response Optimization



Communication Integration



Fire and Crime Prevention and Pre-emption



Responder Health And Tracking

8 KEY ASPECTS OF SUSTAINABILITY

Stabilized Public Safety

Bridged Education

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Sustained Environment

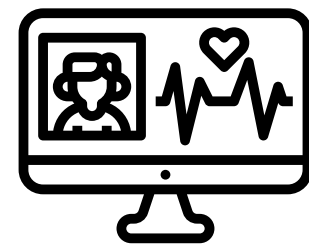
Organized Social Services

Accelerated Business Dynamism

Smartified Governance

Optimized Health Care

Utilize Data Analysis tools to track the general health of the population, anticipate the medical requirements for the city and even to formulate new interventions for the prevention and mitigation of diseases.



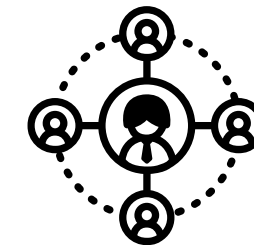
Patient Monitoring



Disease Tracking



Medicine Availability



Facility Interconnection /
Coordination

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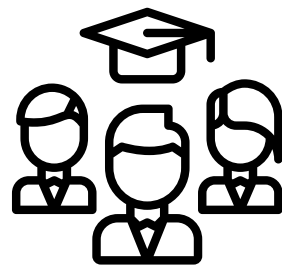
Organized Social Services

Accelerated Business Dynamism

Smartified Governance

Bridged Education

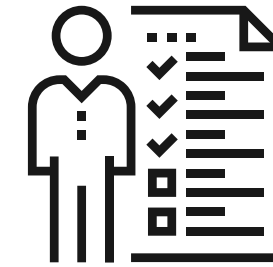
For Cebu City to thrive in this age of globalization, it is not enough to have an educated population. International competitiveness and relevant skills are imperative. On top of improving student retention through the provision of multiple tracks of education.



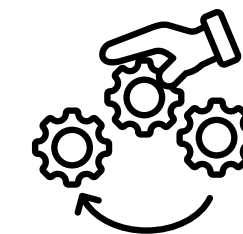
Student Tracking



Industry Tracking



**Skills and
Competitiveness
Tracking**



Intervention Advisory

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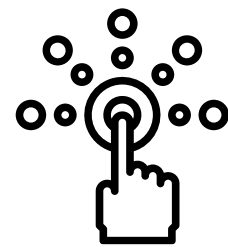
Organized Social Services

Accelerated Business Dynamism

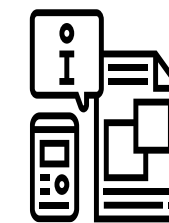
Smartified Governance

Enhanced Infrastructure

Transportation, Communications & Power are the limiting factors that business and industries consider apart from determining the carrying capacity of the city. Infrastructure development is a top priority for the administration.



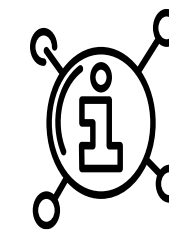
**Ubiquitous
Communication**



Smart Traffic Management



**Utilities: Supply and
Demand Analysis**



**Highway and the road Network
Analysis**



Geographic Analysis



Business Data Availability

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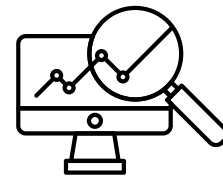
Organized Social Services

Accelerated Business Dynamism

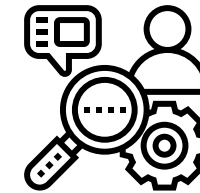
Smartified Governance

Sustained Environment

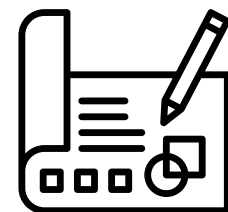
A clean and sustainable environment is crucial for the health and well-being of citizens. A Smart City should use technology to monitor and manage environmental conditions, such as air quality, water quality, waste management, and energy efficiency.



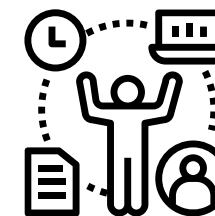
**Resource Tracking
and Monitoring**



**Environmental Impact
Projections**



**Environmental
Dashboard**



**Environmental Management
Systems**

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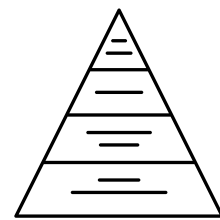
Sustained Environment

Accelerated Business Dynamism

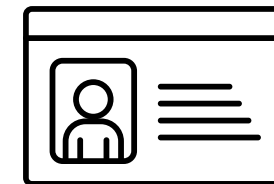
Smartified Governance

Organized Social Services

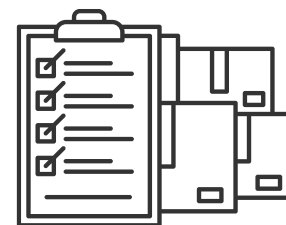
Implementing technology-based initiatives that improve the efficiency and effectiveness of social services delivery in the city, making them more accessible, affordable, and responsive to the needs of the community.



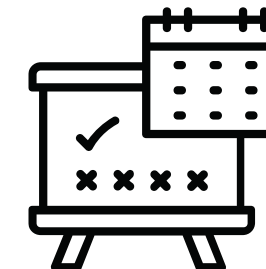
Intervention Management Systems



Beneficiary Management System



Inventory Optimization



Service and Outcome Dashboard

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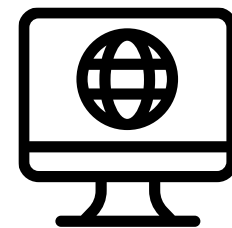
Sustained Environment

Organized Social Services

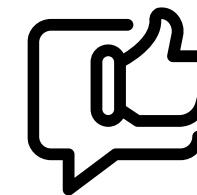
Smartified Governance

Accelerated Business Dynamism

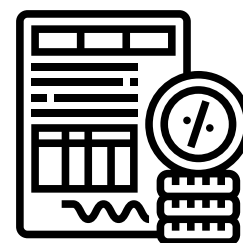
A thriving business community is essential for economic growth and job creation. A Smart City should provide a supportive environment for businesses to thrive, such as by creating a favorable regulatory framework and providing access to funding and resources.



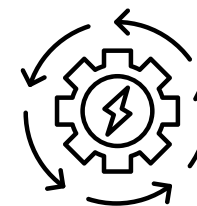
Virtualize Cebu City



Business Environment Dashboard



Tech Ecosystem Development



Infrastructure Appropriation

8 KEY ASPECTS OF SUSTAINABILITY

Smartified Governance

Transparent, efficient, and accountable governance is essential for the effective delivery of services and the well-being of citizens. A Smart City should use technology to streamline government operations and make services more accessible to citizens.

Stabilized Public Safety

Optimized Health Care

Bridged Education

Enhanced Infrastructure

Sustained Environment

Organized Social Services

Accelerated Business Dynamism



Governance Dashboard



Fiscal Efficiency and Effectivity Dashboard



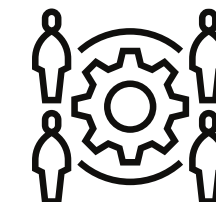
Citizen Health Monitor



Citizen Competitiveness Monitor



Fleet Management



Resource Management



Strategy & Phases of Development

STRATEGY

Phased Implementation and technological evolution in the utilization of intelligent tools.

Phase 1: Standardization and Certification of Data Management

Phase 2: Utilization of Cloud Technology for Data Integration

Phase 3: Utilization of Data Analytics Tools

Phase 4: Utilization of the Internet of Things and Smart Inputs

Phase 5: Utilization of Learning Systems and Artificial Intelligence



Strategy & Phases of Development

1. STANDARDIZATION AND SECURITY OF STORAGE

- Certification of Data Center
- Integration of Databases

2. MIGRATE TO CLOUD-BASED OPERATION

- Fully Online Operation
- Near 100% Systems Reliability
- Deployment of Containerized Services
- Establishment of Data and Measurement Mechanisms

3. Ecosystem Development

- First Technology Summit for the 8 Sustainable Areas with NGA, NGO, Tech Startups, VCs, Angels, CCCI, LGU Special Bodies
- Directory of all Tech Stakeholders
- Private Sector-led front-end solutions development

4. Data Analytics

- Formation of Data lake and analysis on key data points for each key area
- Deployment of integrated communications infrastructure

5. Intelligent Governance

- Formulation and Rollout of Agile Programs
- Real-time virtualization of Cebu City



THANK YOU!!

CEBU CITY

