# Government Stakeholders:

**Stakeholder name:** **Department of Information and Communications Technology (DICT), Government of the Philippines**

**Overview:**  
The Department of Information and Communications Technology (DICT) plays a pivotal role in driving smart city initiatives in the Philippines. The department's efforts are focused on leveraging digital technologies to enhance urban functionality, sustainability, and livability. This report provides a comprehensive analysis of DICT's existing plans, leadership vision, established mechanisms, allocated resources, and priority areas related to smart city development.

## Detailed Analysis

### Existing plans and projects:

DICT has several ongoing and planned initiatives aimed at transforming cities into smart and sustainable communities.

* **Digital Cities Program:** This program aims to transform various cities into thriving hubs for digital innovation, attracting investments and creating job opportunities. As of 2023, the program has established 14 Digital Cities with completed roadmaps and is working towards setting up IT-BPM locators in these cities by 2025.
* **Digital Innovation for Regional Ecosystem and Countryside Transformation (DIRECT) Programme:** This program encompasses various components such as Regional ICT Summits and Exhibitions (RISE), Digital Career Expo, Digital Communities Plus, D4D Summits, and Digital Inclusion Programmes. These initiatives are designed to promote digital literacy and stimulate economic growth in local communities.
* **eGov SuperApp PH:** This initiative is part of the Philippine government’s larger effort to establish a Digital Philippines. The app aims to transform and streamline the delivery of government services, enhancing convenience and efficiency.
* **Universal Internet Subscription for Geographically Isolated and Disadvantaged Areas (UISGIDA) programme:** This program aims to bridge the digital divide by providing access to digital resources and skills training in underserved areas.

### Leadership vision:

The leadership within DICT demonstrates a strong vision and commitment to smart city development.

* **Undersecretary Jocelle Batapa-Sigue:** She has been instrumental in promoting the Digital Cities Program and emphasizing the role of digitalization in developing smart and sustainable communities. Her leadership has been crucial in fostering collaboration between government, industry, and academia.
* **DICT Secretary and Undersecretaries:** The department's leadership, including Secretary Dr. Renato U. Solidum and Undersecretary Sancho A. Mabborang, have consistently highlighted the importance of science, technology, and innovation in community development and smart city initiatives.

### Mechanisms and partnerships:

DICT has established several mechanisms and partnerships to support its smart city initiatives.

* **Collaboration with Other Departments:** DICT works closely with other government departments such as the Department of Science and Technology (DOST) and the Department of the Interior and Local Government (DILG) to align their initiatives and support smart city development.
* **Industry Partnerships:** The department collaborates with industry associations like the IT & Business Process Association of the Philippines (IBPAP) and other sector-specific associations to drive ICT growth and digital transformation.
* **Non-Profit Organizations:** DICT partners with non-profit organizations such as the Smart City Network (SCN) to support smart city initiatives through knowledge sharing and collaborative efforts.
* **International Collaborations:** DICT engages in international collaborations to leverage expertise and resources for smart city projects, as seen in the case of Carmona City.

### Allocated resources:

DICT allocates significant resources to support its smart city initiatives.

* **Financial Resources:** The department invests in various programs and projects, such as the Digital Cities Program and the DIRECT Programme, which include funding for infrastructure development, training, and digital literacy initiatives.
* **Technological Resources:** DICT focuses on adopting digital transformation systems and solutions, including the development of the eGov SuperApp PH and other digital governance programs.
* **Human Resources:** The department emphasizes the importance of talent development and digital literacy, which is reflected in its various training and capacity-building programs.

### Priority areas:

DICT's priority areas in smart city development are multifaceted and focused on several key aspects.

* **Digital Literacy and Inclusion:** Promoting digital literacy and bridging the digital divide are critical priorities, as evident from programs like the DIRECT Programme and UISGIDA.
* **ICT Industry Growth:** Fostering the growth of the ICT industry, particularly in the countryside, is a significant focus. This includes establishing IT-BPM locators and promoting digital cities as viable IT-BPM destinations.
* **Urban Sustainability and Livability:** Enhancing urban functionality, sustainability, and livability through the use of technology and innovation is a core priority.
* **Economic Growth:** Stimulating economic growth in local communities through digital innovation and job creation is another key priority.

## Key findings:

1. **Comprehensive Programs:** DICT has launched several comprehensive programs like the Digital Cities Program and the DIRECT Programme to drive smart city development.
2. **Strong Leadership Vision:** The department's leadership is committed to leveraging digital technologies for smart city initiatives.
3. **Extensive Partnerships:** DICT collaborates with various stakeholders, including other government departments, industry associations, and non-profit organizations.
4. **Significant Resource Allocation:** The department allocates substantial resources for infrastructure, training, and digital literacy initiatives.
5. **Focus on Digital Inclusion and ICT Growth:** Priority areas include promoting digital literacy, bridging the digital divide, and fostering ICT industry growth.

## Conclusion:

The Department of Information and Communications Technology (DICT) is at the forefront of smart city initiatives in the Philippines, with a clear vision and robust mechanisms in place. Through its various programs and partnerships, DICT is driving digital transformation, promoting economic growth, and enhancing urban sustainability and livability. However, challenges such as funding shortages and the need for integrated planning remain, requiring continued support and collaboration from all stakeholders.

## References:

1. **DOST Names 80 LGUs under Smart and Sustainable Program at the 2023 NSTW** - <https://jocellebatapasigue.com/2023/12/01/dost-names-80-lgus-under-smart-and-sustainable-program-at-the-2023-nstw-dict-aligns-digital-cities-for-countryside-empowerment/>
2. **Inclusive Digital Transformation in the Philippines: Smart City Drive** - <https://opengovasia.com/2024/04/29/inclusive-digital-transformation-in-the-philippines-smart-city-drive/>
3. **5 More Digital Cities Launch Roadmaps to Drive Philippines' ICT Growth** - <https://jocellebatapasigue.com/2023/07/04/5-more-digital-cities-launch-roadmap-to-drive-philippines-ict-growth/>
4. **DICT, DILG should help LGUs transition into smart communities** - <https://opinion.inquirer.net/160519/dict-dilg-should-help-lgus-transition-into-smart-communities>
5. **Smart City Solutions: Shaping the Filipino Cities of Tomorrow** - <https://blogs.worldbank.org/en/eastasiapacific/smart-city-solutions-shaping-filipino-cities-tomorrow>

**Stakeholder name: Department of Science and Technology (DOST), Government of the Philippines**

**Overview:**  
The Department of Science and Technology (DOST) in the Philippines is a key stakeholder in the country's smart city initiatives. DOST plays a crucial role in promoting science, technology, and innovation (STI) across various sectors, including urban development. This report provides a detailed analysis of DOST's existing plans, leadership vision, established mechanisms, allocated resources, and priority areas related to smart city development.

**Detailed Analysis:**

### Existing Plans and Projects:

DOST has several ongoing and planned initiatives aimed at transforming urban communities into smart cities. These include:

* **Smart City Projects:** DOST has committed an initial budget of about $1.8 million to transform 80 urban communities into smart cities through technology adoption.
* **OneLab Network, Setup, and CEST:** DOST is involved in research and development initiatives such as the OneLab Network, Small Enterprise Technology Upgrading Programme (Setup), and Community Empowerment through Science and Technology (CEST), which focus on empowering marginalized communities and supporting rural development.
* **Carmona City Smart City Project:** DOST, in collaboration with international partners, is supporting the City of Carmona in its journey to become a smart city through the Innovation, Science, and Technology for Accelerating Regional Technology-based Development Programme (iSTART).
* **Baguio City Environmental Project:** DOST recently delivered a P17 million smart city project to Baguio City, focusing on environmental concerns at tourist spots.

### Leadership Vision:

The leadership of DOST demonstrates a strong vision for smart city development and innovation. Key aspects include:

* **Secretary Renato Solidum Jr.:** The Secretary of DOST has been instrumental in collaborative endeavors, such as the partnership with the US-Asean Business Council, to advance STI projects.
* **Regional Directors:** DOST regional directors, such as Emelita Bagsit, are actively involved in facilitating the transfer of relevant technologies and providing training to local governments.

### Established Mechanisms and Partnerships:

DOST has established several mechanisms and partnerships to support smart city initiatives:

* **US-Asean Business Council Partnership:** DOST has a Memorandum of Understanding (MoU) with the US-Asean Business Council, which promotes government-driven research and innovation projects in the commercial sector.
* **Industry, Government, and Academia Collaboration:** DOST Region 10 is working with industry, government, and academia to incorporate technology and sustainability in urban areas.
* **Smart City Network (SCN) Collaboration:** SCN, a non-profit organization, collaborates with DOST-Calabarzon and local governments to support smart city initiatives through knowledge sharing and collaborative efforts.

### Allocated Resources:

DOST has allocated significant resources to support smart city projects:

* **Budget Allocation:** An initial budget of about $1.8 million has been committed for transforming 80 urban communities into smart cities.
* **Project Funding:** Specific projects, such as the P17 million smart city project in Baguio City, demonstrate DOST's financial commitment to smart city initiatives.

### Priority Areas:

DOST's priority areas for smart city development include:

* **Health and Nutrition:** STI interventions focus on health and nutrition, among other critical areas.
* **Sustainability and Livability:** DOST aims to enhance urban functionality, sustainability, and livability through smart city solutions.
* **Digital Transformation:** DOST supports digital transformation initiatives, including the growth of digital jobs in rural areas.
* **Environmental Concerns:** Projects like the one in Baguio City focus on environmental concerns at tourist spots.

**Summary:**  
The Department of Science and Technology (DOST) in the Philippines is actively engaged in various smart city initiatives. DOST's existing plans include transforming urban communities into smart cities through significant budget allocations and partnerships with international and local stakeholders. The leadership vision is strong, with a focus on innovation and sustainability. Established mechanisms and partnerships, such as the US-Asean Business Council and Smart City Network, support these efforts. Priority areas include health, sustainability, digital transformation, and environmental concerns. Overall, DOST's approach to smart city initiatives is comprehensive and collaborative, aiming to improve the quality of life in urban areas.

**Key Findings:**

1. **Comprehensive Budget Allocation:** DOST has allocated significant funds for smart city projects.
2. **Strong Leadership Vision:** DOST's leadership is committed to innovation and sustainability.
3. **Collaborative Partnerships:** DOST works closely with industry, government, and academia.
4. **Focus on Sustainability:** Priority areas include enhancing urban functionality and sustainability.
5. **Digital Transformation:** DOST supports the growth of digital jobs and digital literacy initiatives.

**Conclusion:**  
DOST's involvement in smart city initiatives is multifaceted and strategic, reflecting a commitment to leveraging technology and innovation to improve urban living. The department's collaborative approach and resource allocation underscore its dedication to creating sustainable and livable cities.

**References:**

1. **Boosting Smart Cities and Emerging Tech in the Philippines** - [https://opengovasia.com/2023/09/06/boosting-smart-cities-and-emerging-tech-in-the-philippines/]
2. **Science & Tech Agency Powers Up Smart & Sustainable Cities** - [https://www.linkedin.com/pulse/mindanao-philippines-rise-science-tech-agency-powers-kris]
3. **Innovative Technologies for Urban Infrastructure Development** - [https://events.trade.gov/TradeGov/InnovativeTechnologiesforUrbanInfrastructureDevelo/hotsite.php]
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**Stakeholder name: Department of the Interior and Local Government (DILG), Government of the Philippines**

**Overview:**  
The Department of the Interior and Local Government (DILG) plays a crucial role in the development and implementation of smart city initiatives in the Philippines. The DILG's involvement encompasses various aspects, including planning, leadership, partnerships, resource allocation, and prioritization of key areas. This report provides a detailed analysis of these aspects based on available research data.

**Detailed Analysis**

### Existing Plans and Projects

The DILG has several ongoing and planned smart city projects across various local government units (LGUs) in the Philippines. Key projects include:

* **Smart City Projects under ASCN:** The DILG has committed to completing six smart city projects, which were highlighted during the 4th ASEAN Smart Cities Network (ASCN) Annual Meeting. These projects include the Command Center Upgrade and E-government Services in Manila, Bus Rapid Transit System and Digital Traffic System in Cebu City, and Converged Command and Control Center and Intelligent Transportation and Traffic Systems with Security in Davao City.
* **Integration with National Initiatives:** The DILG is also involved in integrating smart city plans into the overall development masterplans of LGUs, ensuring that technological solutions align with urban planning and development.
* **Pilot Cities:** The DILG, in collaboration with other government agencies, has identified cities to pilot smart city initiatives. For example, four cities in Metro Manila (Muntinlupa, Caloocan, Pasig, and Quezon City) are part of the Department of Science and Technology's Smart Cities and Communities Program.

### Leadership Vision and Willingness

The leadership of the DILG demonstrates a strong commitment to smart city development:

* **Commitment to Completion:** Despite challenges posed by the COVID-19 pandemic, the DILG has expressed its commitment to completing the smart city projects, emphasizing their importance for improving government services and public convenience.
* **Promotion of Smart City Initiatives:** The DILG promotes smart city initiatives through various platforms, including the ASCN, highlighting the need for information and communication technology-based solutions to enhance urban resilience and economic recovery.
* **Support for LGUs:** The DILG provides support to LGUs in developing and implementing smart city projects, recognizing the importance of local leadership and innovation.

### Established Mechanisms and Partnerships

The DILG has established several mechanisms and partnerships to facilitate smart city development:

* **Collaboration with National Agencies:** The DILG collaborates with other national government agencies such as the Department of Science and Technology (DOST), Department of Information and Communications Technology (DICT), and the Public-Private Partnership (PPP) Center to support smart city initiatives.
* **Partnerships with International Networks:** The DILG participates in international networks like the ASEAN Smart Cities Network (ASCN), which provides a platform for cooperation and access to funding and technical support.
* **Smart City Champions:** The DILG supports the designation of smart city champions within LGUs to spearhead and coordinate smart city projects, promoting city visions and building networks.
* **Innovation Ecosystems:** The DILG and its partners focus on creating innovation ecosystems that extend beyond physical spaces, facilitating collaboration among ideas, technology, and people.

### Allocated Resources

The allocation of resources for smart city initiatives is a critical aspect of the DILG's strategy:

* **Funding Challenges:** Despite the commitment, funding shortages are identified as a major hurdle. The DILG and LGUs rely on various funding sources, including national government sponsorship, loans, and general funds.
* **Resource Allocation During Pandemic:** The COVID-19 pandemic has diverted local government resources towards pandemic response, impacting the implementation of smart city projects. However, efforts are being made to secure necessary resources and support.

### Priority Areas

The DILG prioritizes several key areas in its smart city initiatives:

* **Emergency and Crisis Response:** The design of smart city projects focuses on the need for efficient emergency and crisis response centers, particularly given the Philippines' location in the Pacific Ring of Fire.
* **Traffic Management and Transportation:** Improving traffic management and transportation systems is a priority, aiming to reduce travel trips and provide efficient mass transportation systems.
* **E-Government Services:** Enhancing e-government services to make government transactions more convenient and efficient is another priority area.
* **Data Security and Public Trust:** Ensuring data security and gaining public trust are crucial, with a focus on protecting data and using it responsibly.

**Summary:**  
The Department of the Interior and Local Government (DILG) is actively involved in promoting and implementing smart city initiatives across the Philippines. Key aspects include:

* **Commitment to Smart City Projects:** The DILG is committed to completing six smart city projects despite challenges posed by the COVID-19 pandemic.
* **Collaborative Approach:** The DILG collaborates with national agencies, international networks, and local government units to support smart city development.
* **Resource Allocation:** Funding remains a challenge, but the DILG seeks diverse funding sources to support projects.
* **Priority Areas:** The DILG prioritizes emergency response, traffic management, e-government services, and data security.

**Key Findings:**

1. **Commitment to Smart City Projects:** The DILG is committed to completing six smart city projects.
2. **Collaborative Approach:** The DILG collaborates with various stakeholders to support smart city development.
3. **Funding Challenges:** Funding shortages are a significant hurdle, but diverse funding sources are being explored.
4. **Priority Areas:** Emergency response, traffic management, e-government services, and data security are key focus areas.

**Conclusion:**  
The DILG's approach to smart city initiatives is characterized by a strong commitment to improving urban governance and services through technology and innovation. Despite challenges, the DILG's collaborative efforts and prioritization of critical areas position it as a key driver in the Philippines' smart city development.

**References:**

1. **Smart City Solutions: Shaping the Filipino Cities of Tomorrow** - <https://blogs.worldbank.org/en/eastasiapacific/smart-city-solutions-shaping-filipino-cities-tomorrow>
2. **How far have Philippine LGUs come in developing into smart cities?** - <https://pidswebs.pids.gov.ph/CDN/document/pidspn2207.pdf>
3. **PH committed to completion of 6 'smart city' projects: DILG** - <https://www.pna.gov.ph/articles/1152236>
4. **The Philippines to Expand Smart City Initiatives** - <https://opengovasia.com/2021/09/14/the-philippines-to-expand-smart-city-initiatives/>
5. **Four Metro LGUs to Pilot as Smart Cities in NCR** - <https://ncr.dost.gov.ph/four-metro-lgus-to-pilot-as-smart-cities-in-ncr/>

**Stakeholder name: National Economic and Development Authority (NEDA), Government of the Philippines**

**Overview:**  
The National Economic and Development Authority (NEDA) of the Philippines is actively involved in promoting smart city initiatives across various urban areas in the country. NEDA's efforts are focused on creating comprehensive master plans to guide the adoption of smart city solutions, enhancing sustainable infrastructure development, and fostering economic competitiveness.

**Detailed Analysis:**

### Existing plans and projects:

NEDA is preparing 13 sector-wide master plans for identified urban areas nationwide to facilitate the adoption of smart city solutions. These plans are designed for emerging megacities such as Metro Manila, Metro Cebu, and Metro Davao, as well as other growth centers like Baguio City-La Trinidad-Itogon-Sablan-Tuba-Tulay (BLISTT), Butuan City, Calapan City, General Santos City, Pagadian City, Metro Iloilo, and Metro Bacolod, among others. These master plans aim to integrate smart city principles in areas such as urban mobility, natural and built environment, sustainable energy, and economic competitiveness.

### Leadership vision:

The leadership vision of NEDA is aligned with the broader national goals of sustainable and inclusive development. By preparing these master plans, NEDA demonstrates a commitment to leveraging smart city principles to enhance the quality of life, economic competitiveness, and environmental sustainability of urban areas. The vision is to create sustainable infrastructure and promote smart city solutions that are integrated into the overall urban development strategy.

### Mechanisms and partnerships:

NEDA's smart city initiatives are linked to the ASEAN Smart Cities Network (ASCN), a collaborative platform where cities from the 10 ASEAN member-states work together towards smart and sustainable urban development. This partnership indicates that NEDA is engaging in regional cooperation to share best practices and leverage collective expertise in smart city development.

### Allocated resources:

There is limited information available on the specific resources allocated by NEDA for these smart city initiatives. However, the preparation of comprehensive master plans suggests a significant investment of time, expertise, and possibly financial resources. Further details on the exact allocation of resources are not provided in the available data.

### Priority areas:

The priority areas for NEDA's smart city initiatives include urban mobility, natural and built environment, sustainable energy, and economic competitiveness. These areas are central to the master plans being developed for various urban corridors across the Philippines.

**Summary:**  
NEDA is actively engaged in promoting smart city initiatives through the development of comprehensive master plans for several urban areas in the Philippines. The authority's leadership vision is focused on sustainable and inclusive development, leveraging smart city principles to enhance urban infrastructure and economic competitiveness. NEDA's involvement in the ASEAN Smart Cities Network highlights its commitment to regional cooperation and knowledge sharing. While the specific resources allocated for these initiatives are not detailed, the emphasis on key areas such as urban mobility, sustainable energy, and economic competitiveness underscores NEDA's strategic approach to smart city development.

**Key findings:**

1. **Comprehensive Master Plans:** NEDA is preparing 13 sector-wide master plans for various urban areas.
2. **Smart City Principles:** The plans integrate smart city principles in urban mobility, natural and built environment, sustainable energy, and economic competitiveness.
3. **Regional Cooperation:** NEDA is part of the ASEAN Smart Cities Network.
4. **Priority Areas:** Focus on urban mobility, natural and built environment, sustainable energy, and economic competitiveness.
5. **Resource Allocation:** Limited information available on specific resource allocation.

**Conclusion:**  
NEDA's approach to smart city initiatives is strategic and comprehensive, with a clear focus on sustainable and inclusive development. The authority's engagement in regional cooperation and its emphasis on key priority areas indicate a well-structured vision for smart city development in the Philippines.

**References:**

1. **NEDA Prepares Master Plans for Smart City Adoption in Emerging Megacities** - [https://www.orissa-international.com/business-news/neda-prepares-master-plans-for-smart-city-adoption-in-emerging-megacities/]

**Stakeholder name: Metro Manila Development Authority (MMDA), Government of the Philippines**

**Overview:**  
The Metro Manila Development Authority (MMDA) plays a crucial role in the development and implementation of smart city initiatives within Metro Manila. This report analyzes the existing plans, leadership vision, established mechanisms, allocated resources, and priority areas related to smart city initiatives for the MMDA.

**Detailed Analysis:**

### Existing plans and projects:

The MMDA is involved in various smart city projects aimed at enhancing the urban environment and improving the quality of life for residents. Key projects include:

* **Command Center Upgrades:** The MMDA is part of initiatives to upgrade command centers in cities like Manila, which is one of the pilot cities under the ASEAN Smart Cities Network (ASCN). These upgrades focus on improving disaster response and resilience management.
* **Digital Traffic Systems:** Efforts to implement digital traffic systems are underway, which align with broader smart city goals of enhancing traffic management and public safety.
* **E-government Services:** The MMDA supports the integration of e-government services, such as the "GoManila" mobile application launched by Manila City, which facilitates access to government services, bill payments, and e-commerce.

### Leadership vision and willingness:

While specific details on the MMDA's leadership vision are not explicitly mentioned in the sources, the overall commitment to smart city development is evident through the participation in national and regional initiatives. The leadership's willingness to adopt smart city solutions is reflected in the collaborative efforts with other government units and private sector entities to drive technological advancements and urban sustainability.

### Established mechanisms and partnerships:

The MMDA collaborates with various stakeholders to implement smart city projects:

* **Partnerships with LGUs:** The MMDA works closely with local government units (LGUs) to integrate smart city plans into their development masterplans, ensuring a cohesive approach to urban development.
* **International Collaborations:** The MMDA benefits from international collaborations, such as those facilitated by the U.S. Government, which provide technical assistance and grants for ICT projects, including command-and-control centers and integrated transport management systems.
* **Private Sector Partnerships:** The involvement of private companies like Iveda Philippines, which aims to modernize key infrastructure for improved public safety and city management, indicates a strong partnership mechanism.

### Allocated resources:

The allocation of resources for smart city initiatives in Metro Manila involves a mix of national government funding, private sector investments, and international grants:

* **National Funding:** LGUs receive funding from the national government to support smart city projects, although funding shortages remain a significant challenge.
* **Private Sector Investments:** Companies like Iveda Philippines are investing in smart city advancements, targeting $5 million in executed contracts over a year.
* **International Grants:** The U.S. Government provides grants to support ICT projects, including those related to smart city development.

### Priority areas:

The priority areas for the MMDA in smart city initiatives include:

* **Public Safety:** Enhancing public safety through advanced AI and surveillance technologies is a key focus, as seen in the initiatives by Iveda Philippines.
* **Disaster Response and Resilience:** Improving disaster response and resilience management is crucial, given the country's vulnerability to natural disasters.
* **Digital Governance:** Implementing e-government services and digital platforms to facilitate access to government services and improve urban management.
* **Sustainable Development:** Ensuring sustainable development through green features and innovative urban planning, such as in the New Clark City project.

**Summary:**  
The Metro Manila Development Authority (MMDA) is actively involved in various smart city initiatives aimed at enhancing urban living, public safety, and disaster resilience. The MMDA collaborates with local government units, private sector entities, and international partners to implement these projects. Key areas of focus include public safety, disaster response, digital governance, and sustainable development. However, challenges such as funding shortages and the need for continuous technological upgrades remain.

**Key findings:**

1. **Collaborative Approach:** The MMDA works closely with LGUs and private sector companies to implement smart city projects.
2. **Public Safety:** Advanced AI and surveillance technologies are being integrated to enhance public safety.
3. **Disaster Response:** Improving disaster response and resilience management is a priority.
4. **Digital Governance:** E-government services and digital platforms are being implemented to improve urban management.
5. **Sustainable Development:** Green features and innovative urban planning are integral to smart city projects.

**Conclusion:**  
The MMDA's approach to smart city initiatives is characterized by a collaborative and integrated strategy, focusing on key areas such as public safety, disaster response, digital governance, and sustainable development. Despite challenges, the MMDA's efforts reflect a commitment to leveraging technology to improve the quality of life in Metro Manila.

**References:**

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2. **Iveda Philippines:** "Iveda Philippines Targeting $5M in Smart City Advancements" - https://iveda.com/iveda-philippines-targeting-5m-in-smart-city-advancements/
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4. **World Bank Blogs:** "Smart City Solutions: Shaping the Filipino Cities of Tomorrow" - <https://blogs.worldbank.org/en/eastasiapacific/smart-city-solutions-shaping-filipino-cities-tomorrow>

**Stakeholder name: League of Cities of the Philippines (LCP), Government of the Philippines**

**Overview:**  
The League of Cities of the Philippines (LCP) plays a crucial role in the development and implementation of smart city initiatives across the country. As a key stakeholder, LCP works closely with various government agencies, local government units (LGUs), and private sector entities to enhance urban governance, improve citizen services, and foster sustainable development.

**Detailed Analysis:**

### Existing plans and projects:

The LCP is involved in several smart city initiatives, although specific plans and projects are often implemented in collaboration with other stakeholders. Key projects include:

* **Smart City Projects under ASEAN Smart Cities Network (ASCN):** Cities like Manila, Cebu City, and Davao City, which are part of the ASCN, are undertaking various smart city projects such as Command Center Upgrades, E-government Services, Bus Rapid Transit Systems, and Intelligent Transportation Systems.
* **Digital Infrastructure and Services:** Many cities, including those in Metro Manila, are enhancing their digital infrastructure, focusing on disaster risk mitigation, resilience management, digital health, education, and data center upgrades.
* **Pilot Programs:** The Smart Philippines Council, which may collaborate with LCP, has initiated pilot programs for cities and municipalities to modernize their digital infrastructure, health, transportation, education, finance, and urban development.

### Leadership vision and willingness:

The leadership vision for smart city initiatives in the Philippines is driven by a commitment to improve the quality of life, enhance prosperity, and ensure sustainability. While the LCP itself does not have a standalone leadership vision documented in the provided sources, the overall national vision is clear:

* **National Vision:** The Smart Philippines Initiative, supported by various government agencies, aims to increase the efficiency and cost-effectiveness of civic operations, promote economic growth, and create safer, more secure, sustainable, and livable communities.
* **Collaborative Efforts:** The willingness to collaborate is evident through the establishment of the Smart Philippines Council, which works with LGUs, national government agencies, and private sector entities to implement smart city projects.

### Established mechanisms and partnerships:

The LCP benefits from and contributes to several established mechanisms and partnerships:

* **Smart Philippines Council:** This council, which includes representatives from various government agencies, works to facilitate collaboration and cooperation among public and private stakeholders to implement smart city initiatives.
* **National Government Agencies:** The Department of Information and Communications Technology (DICT), Department of the Interior and Local Government (DILG), and Department of Science and Technology (DOST) are key partners in implementing smart city projects.
* **Private Sector Partnerships:** Private sector companies, including land developers and technology firms, are crucial partners in providing solutions and funding for smart city projects.
* **International Collaborations:** The Philippines also benefits from international collaborations, such as technical assistance programs from the U.S. Government, which support the development of smart city technologies.

### Allocated resources:

The allocation of resources for smart city initiatives involves both financial and technical support:

* **Budget Allocation:** Many LGUs have allocated budgets to support smart city projects, reflecting a firm commitment to prioritize their smart city agendas. However, funding remains a concern for 67% of the respondents in a recent survey.
* **Technical Support:** The Smart Philippines Council provides technical support and expertise to cities and municipalities to enable them to modernize their digital infrastructure.
* **Grants and Assistance:** The U.S. Government offers grants to assist in the implementation of smart city projects, such as those for the City of Davao’s command-and-control center and integrated transport management system.

### Priority areas:

The priority areas for smart city initiatives in the Philippines, as reflected in the activities of the LCP and other stakeholders, include:

* **Governance, Safety & Security:** These are top themes where LGUs believe they could benefit significantly from smart city projects.
* **Infrastructure and Urban Planning:** Upgrading infrastructure and integrating smart city plans into overall urban planning are key focus areas.
* **Disaster Risk Mitigation and Resilience Management:** Given the country’s vulnerability to natural disasters, these areas are critical for smart city development.
* **Digital Health and Education:** Enhancing digital services in health and education is another priority, especially highlighted during the COVID-19 pandemic.

**Summary:**  
The League of Cities of the Philippines (LCP) is actively involved in the development and implementation of smart city initiatives. The existing plans and projects are aligned with national and international collaborations, such as the ASEAN Smart Cities Network and the Smart Philippines Council. The leadership vision is focused on improving civic operations, promoting economic growth, and ensuring sustainability. Established mechanisms include partnerships with national government agencies and private sector entities, with allocated resources coming from both budget allocations and technical support. Priority areas include governance, safety, infrastructure, urban planning, disaster risk mitigation, and digital health and education.

**Key findings:**

1. **Collaborative Approach:** The LCP works closely with various stakeholders, including national government agencies and private sector entities.
2. **National Vision:** The Smart Philippines Initiative drives the overall vision for smart city development.
3. **Resource Allocation:** Despite funding concerns, many LGUs have allocated budgets for smart city projects.
4. **Priority Areas:** Governance, safety, infrastructure, urban planning, disaster risk mitigation, and digital health and education are key focus areas.

**Conclusion:**  
The League of Cities of the Philippines plays a vital role in the country’s smart city initiatives, leveraging national and international partnerships to drive sustainable urban development. While challenges such as funding and technical competencies persist, the commitment to smart city projects is evident through the various initiatives and collaborations.

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# Private Stakeholders:

**Stakeholder name: PLDT Inc.**

**Overview:**  
PLDT Inc., a leading integrated telco network in the Philippines, is actively involved in driving digital transformation and smart city initiatives across the country. The company's efforts are focused on enhancing the digital capabilities of local government units (LGUs) and fostering economic growth and improved quality of life for Filipinos.

**Detailed Analysis:**

### Existing Plans and Projects:

PLDT Inc. has several ongoing plans and projects aimed at transforming local government units into smart cities. Key initiatives include:

* **Digital Transformation of LGUs:** PLDT is intensifying its support for LGUs to become smart cities, leveraging technology to enhance governance and public services.
* **Cloud Initiatives:** The establishment of a Cloud Center of Excellence (CCOE) is a significant project, aimed at enhancing cloud expertise and customer focus. This initiative involves utilizing cloud platforms to boost workforce agility, operational excellence, and the rollout of innovative products and services.
* **#LipadLGU Initiative:** This initiative is part of PLDT's broader strategy to digitally enable LGUs nationwide, aligning with the company's vision for a Digital Philippines.

### Leadership Vision:

The leadership at PLDT Inc. demonstrates a clear vision and commitment to digital transformation and smart city development. Key statements from leadership highlight their focus on:

* **Future Growth:** Robin Ramos, First Vice President and IT Officer-in-Charge, emphasized the importance of cloud initiatives in preparing the company for future growth.
* **Customer Experience:** Gilbert Gaw, First Vice President and Transformation Office Officer-in-Charge, underscored the commitment to elevating customer experience through cloud technology.
* **Economic Growth and Quality of Life:** PLDT Enterprise envisions digital transformation as a means to foster economic growth and enhance the quality of life for Filipinos.

### Mechanisms and Partnerships:

PLDT Inc. has established several mechanisms and partnerships to support its smart city initiatives:

* **Cloud Center of Excellence (CCOE):** This center is crucial for enhancing cloud expertise and customer focus, supported by ePLDT, a leading provider of secure multi-cloud solutions.
* **ICT Subsidiary Support:** ePLDT plays a vital role in providing the necessary cloud infrastructure and capabilities required for PLDT's initiatives.
* **Collaboration with LGUs:** PLDT is actively collaborating with local government units to drive digital transformation and smart city development.

### Allocated Resources:

PLDT Inc. has allocated significant resources to support its smart city initiatives:

* **Cloud Infrastructure:** The establishment of the CCOE and the support from ePLDT indicate substantial investment in cloud infrastructure.
* **Workforce Development:** The company is committed to enhancing the cloud expertise of its workforce, which suggests investment in training and development programs.
* **Technological Resources:** PLDT is leveraging advanced cloud features to boost operational excellence and innovation, indicating a focus on technological resources.

### Priority Areas:

The priority areas for PLDT Inc.'s smart city initiatives include:

* **Digital Transformation of LGUs:** A primary focus is on digitally enabling local government units to enhance governance and public services.
* **Cloud Technology:** The company is prioritizing cloud initiatives to enhance operational excellence, workforce agility, and customer experience.
* **Economic Growth and Quality of Life:** PLDT aims to foster economic growth and improve the quality of life for Filipinos through its digital transformation efforts.

**Summary:**  
PLDT Inc. is actively engaged in driving smart city initiatives in the Philippines, with a strong focus on digital transformation, cloud technology, and collaboration with local government units. The company's leadership vision is aligned with enhancing customer experience, fostering economic growth, and improving the quality of life. Key initiatives include the establishment of a Cloud Center of Excellence, the #LipadLGU program, and significant investments in cloud infrastructure and workforce development.

**Key Findings:**

1. **Digital Transformation:** PLDT is intensifying support for LGUs to become smart cities.
2. **Cloud Initiatives:** The company is establishing a Cloud Center of Excellence to enhance cloud expertise.
3. **Leadership Commitment:** Leadership emphasizes future growth, customer experience, and economic development.
4. **Partnerships:** Collaboration with ePLDT and LGUs is crucial for these initiatives.
5. **Resource Allocation:** Significant investments in cloud infrastructure and workforce development.

**Conclusion:**  
PLDT Inc.'s approach to smart city initiatives is comprehensive and well-structured, with a clear focus on digital transformation, cloud technology, and collaboration. The company's commitment to enhancing customer experience, fostering economic growth, and improving quality of life aligns with its vision for a Digital Philippines.

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4. [PLDT, Smart ramp up cloud initiatives]
5. [PLDT paves the way for a Digital Philippines with #LipadLGU]

**Stakeholder name: Globe Telecom, Philippines**

**Overview:**  
Globe Telecom, a leading digital platform in the Philippines, is actively involved in various smart city initiatives. The company's efforts are focused on leveraging technology to enhance urban functionality, sustainability, and livability. This report provides a detailed analysis of Globe Telecom's existing plans, leadership vision, established mechanisms, allocated resources, and priority areas related to smart city development.

**Detailed Analysis**

### Existing Plans and Projects

Globe Telecom has several ongoing and planned initiatives that align with smart city development:

* **Network Expansion and Energy Efficiency:** Globe has expanded its network coverage, doubling its 5G footprint to provide faster network speeds in 70 cities and towns across the Philippines. The company has also implemented Nokia's AVA Energy Efficiency software to reduce network power consumption, aiming for a 3-6% annual power savings.
* **API Integration:** Globe has joined the GSMA Open Gateway initiative, which involves developing common open-source APIs to enable faster deployment of new services. This partnership aims to improve interoperability and deliver more value to customers through real-time access and interconnection with open global APIs.
* **Smart City Solutions:** Globe is part of the broader ecosystem of companies contributing to smart city development in the Philippines. For instance, Globe's 917Ventures, along with Ayala Corporation and Gogoro Inc., launched Gogoro Smartscooters and battery-swapping in the Philippines, promoting sustainable mobility solutions.

### Leadership Vision

Globe Telecom's leadership demonstrates a clear vision and commitment to smart city initiatives:

* **CEO's Statement:** Ernest Cu, Globe's president and CEO, highlighted the importance of the GSMA Open Gateway initiative, noting it as a "groundbreaking effort" that opens up opportunities for delivering more value to customers and generating new revenue streams.
* **Sustainability Commitment:** Yoly Crisanto, chief sustainability and corporate communications officer of the Globe Group, emphasized the company's strategic imperative for efficient energy consumption and network decarbonization, underscoring Globe's commitment to environmental sustainability.

### Established Mechanisms and Partnerships

Globe Telecom has established several mechanisms and partnerships to support its smart city initiatives:

* **GSMA Open Gateway:** Globe joined the GSMA Open Gateway initiative, which includes 241 MNOs and MVNOs, to improve interoperability and service delivery.
* **Nokia Partnership:** Globe partnered with Nokia to implement AVA Energy Efficiency software, leveraging AI and machine learning to reduce network power consumption.
* **Collaborations with Other Stakeholders:** Globe is part of a broader ecosystem that includes other major players in the smart city market in the Philippines, such as Ayala Corporation, PLDT, and various technology companies.

### Allocated Resources

Globe Telecom has allocated significant resources to support its smart city initiatives:

* **Network Infrastructure:** The company has invested in expanding its 5G footprint and improving network infrastructure to address the growing demand for high-speed broadband.
* **Software and Technology:** Globe has implemented advanced software solutions like Nokia's AVA Energy Efficiency software to optimize network operations and reduce energy consumption.
* **Financial Resources:** While specific financial details are not provided, Globe's participation in various initiatives and partnerships suggests a significant allocation of financial resources towards smart city development.

### Priority Areas

Globe Telecom's priority areas in smart city initiatives include:

* **Network Efficiency and Sustainability:** The company is focused on reducing network power consumption and improving energy efficiency, aligning with its sustainability goals.
* **Interoperability and Service Delivery:** Globe's participation in the GSMA Open Gateway initiative highlights its priority on improving interoperability and delivering more value to customers through advanced APIs.
* **Innovative Solutions:** The company's involvement in launching Gogoro Smartscooters and battery-swapping systems indicates a focus on innovative solutions for sustainable mobility.

**Summary:**  
Globe Telecom is actively engaged in various smart city initiatives, focusing on network expansion, energy efficiency, interoperability, and innovative solutions. The company's leadership vision emphasizes sustainability and customer value, supported by partnerships with key stakeholders like Nokia and GSMA. Globe's allocated resources are directed towards improving network infrastructure and implementing advanced software solutions. The priority areas include network efficiency, interoperability, and innovative solutions for sustainable urban development.

**Key Findings:**

1. **Network Expansion:** Globe has doubled its 5G footprint to provide faster network speeds.
2. **Energy Efficiency:** Implementation of Nokia's AVA Energy Efficiency software to reduce power consumption.
3. **API Integration:** Participation in the GSMA Open Gateway initiative for improved interoperability.
4. **Sustainability Commitment:** Clear leadership vision on sustainability and network decarbonization.
5. **Partnerships:** Collaborations with Nokia, GSMA, and other stakeholders in the smart city ecosystem.

**Conclusion:**  
Globe Telecom's approach to smart city initiatives is characterized by a strong commitment to sustainability, innovation, and customer value. The company's strategic partnerships and resource allocations underscore its role as a key player in the Philippines' smart city development.

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**Stakeholder name: Ayala Corporation, Philippines**

**Overview:**  
Ayala Corporation, a leading Philippine conglomerate, is actively involved in various smart city initiatives, focusing on sustainable development, innovative technologies, and collaborative partnerships. This report provides a detailed analysis of Ayala Corporation's existing plans, leadership vision, established mechanisms, allocated resources, and priority areas related to smart city development.

**Detailed Analysis**

### Existing Plans and Projects

Ayala Corporation is engaged in several projects that align with smart city initiatives:

* **Sustainable Transportation:** Ayala Corporation, in partnership with Globe Group's 917Ventures and Gogoro Inc., launched Gogoro Smartscooters® and a battery-swapping pilot in Metro Manila. This initiative aims to introduce sustainable mobility solutions, reducing carbon emissions and addressing commuter woes.
* **Real Estate Development:** Ayala Land, a subsidiary of Ayala Corporation, is committed to sustainable real estate development. They integrate eco-friendly practices into their projects, focusing on green building design, energy efficiency, and sustainable construction practices.
* **Innovation Ecosystems:** Ayala Corporation is part of the broader ecosystem that supports innovation in smart city development. This includes collaborations with other stakeholders to create platforms for testing new concepts and developing local talent.

### Leadership Vision

The leadership of Ayala Corporation demonstrates a strong commitment to sustainable development and innovation:

* **Commitment to Sustainability:** Ayala Land's leadership emphasizes the importance of sustainable practices, aligning their development strategies with the United Nations Sustainable Development Goals. This commitment is reflected in their dedication to reducing environmental harm and improving community well-being.
* **Innovation and Collaboration:** The partnership with Gogoro and Globe Group's 917Ventures highlights the leadership's willingness to collaborate and innovate, bringing new technologies and solutions to the market.

### Established Mechanisms and Partnerships

Ayala Corporation has established several mechanisms and partnerships to support their smart city initiatives:

* **Partnerships:** Key partnerships include collaborations with Globe Group's 917Ventures and Gogoro Inc. for sustainable transportation solutions. Additionally, Ayala Corporation works with various stakeholders, including government agencies and other private sector entities, to foster innovation ecosystems.
* **Governance and Committees:** Ayala Land has a governance structure that oversees sustainable development initiatives, ensuring prudent management of resources and engagement with stakeholders.

### Allocated Resources

The resources allocated by Ayala Corporation for smart city initiatives include:

* **Financial Resources:** While specific financial details are not provided, the launch of Gogoro Smartscooters® and battery-swapping systems indicates significant investment in sustainable mobility solutions.
* **Human Resources:** Ayala Corporation's commitment to developing local talent and fostering innovation ecosystems suggests a focus on human resource development.

### Priority Areas

The priority areas for Ayala Corporation in smart city development are:

* **Sustainable Mobility:** The introduction of Gogoro Smartscooters® and battery-swapping systems highlights a focus on sustainable transportation solutions.
* **Sustainable Real Estate Development:** Ayala Land's emphasis on green building practices, energy efficiency, and sustainable construction practices underscores their priority on sustainable real estate development.
* **Innovation and Collaboration:** The company's involvement in innovation ecosystems and partnerships with other stakeholders indicates a priority on collaborative innovation.

**Summary:**  
Ayala Corporation is actively engaged in smart city initiatives, with a strong focus on sustainable development, innovative technologies, and collaborative partnerships. Key initiatives include the launch of sustainable transportation solutions with Gogoro and Globe Group, and sustainable real estate development through Ayala Land. The leadership vision is aligned with sustainability and innovation, supported by established mechanisms and partnerships. While specific financial details are not provided, the company's investments in these areas indicate a significant commitment to smart city development.

**Key Findings:**

1. **Sustainable Mobility:** Launch of Gogoro Smartscooters® and battery-swapping systems.
2. **Sustainable Real Estate:** Integration of eco-friendly practices in real estate development.
3. **Innovation and Collaboration:** Partnerships with Globe Group and Gogoro, and focus on innovation ecosystems.
4. **Leadership Commitment:** Strong leadership vision aligned with sustainability and innovation.
5. **Governance and Resources:** Established governance structure and allocation of resources for sustainable development.

**Conclusion:**  
Ayala Corporation's approach to smart city initiatives is characterized by a strong commitment to sustainability, innovation, and collaboration. Their involvement in various projects and partnerships underscores their leadership's vision for a more sustainable and livable urban environment.

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**Stakeholder name: SM Prime Holdings, Philippines**

**Overview:**  
SM Prime Holdings, a leading integrated property developer in the Philippines, is actively involved in smart city initiatives, particularly through its ambitious SM Smart City project in Pasay. This report provides a detailed analysis of SM Prime's existing plans, leadership vision, established mechanisms, allocated resources, and priority areas related to smart city development.

**Detailed Analysis**

### Existing Plans and Projects

SM Prime is currently undertaking a significant smart city project known as SM Smart City, a 360-hectare development in Pasay City. This project is part of a joint venture with the local government unit (LGU) of Pasay and aims to create a vibrant business district featuring world-class amenities such as malls, offices, residences, an entertainment arena, a five-star hotel, and a convention center.

* **SM Smart City:** The project began two years ago and is expected to be completed within five years, with the land portion targeted for completion by the end of 2025. The development will be connected to the Mall of Asia (MOA) complex, leveraging the success of the MOA reclamation project.
* **Infrastructure Development:** After completing the land reclamation, SM Prime will focus on infrastructure development, including roads, utilities, and piping. The company emphasizes the importance of thorough planning for electrical, water, waste management, and transportation systems.

### Leadership Vision

The leadership of SM Prime, particularly Executive Committee Chairman Hans Sy and SM Engineering Design & Development Corp. President Hans Sy Jr., demonstrates a strong commitment to sustainable and resilient urban development.

* **Commitment to Sustainability:** Hans Sy emphasizes the importance of climate adaptation and resilience, highlighting that "resilience is not just a word, it is a way of life".
* **Collaborative Approach:** The leadership advocates for partnerships and collaborations, recognizing that the future of business involves working together with other developers and stakeholders.
* **Vision for Urban Planning:** Hans Sy Jr. underscores the need for long-term urban planning, aiming to apply lessons learned from the MOA complex to create a better and larger project.

### Mechanisms and Partnerships

SM Prime has established several mechanisms and partnerships to support its smart city initiatives.

* **Joint Venture with Pasay LGU:** The SM Smart City project is a joint venture with the Pasay City local government, ensuring collaborative efforts in land reclamation and development.
* **Partnerships for Development:** SM Prime is open to partnering with other developers to complete the development phase of the project after the land reclamation is finished.
* **International Collaborations:** Hans Sy's involvement in the ARISE Private Sector Alliance for Disaster Resilient Societies of the United Nations and his role as co-chairman of the National Resilience Council indicate a broader commitment to international best practices in disaster resilience and sustainability.

### Allocated Resources

SM Prime has allocated significant resources to its smart city initiatives.

* **Budget for Reclamation:** The budget for the reclamation project is approximately P150 billion, which covers the land component of the development.
* **Capital Expenditures:** SM Prime allocates a significant portion of its capital expenditures to incorporate resiliency and sustainability into its infrastructure designs.
* **Job Creation:** The project is expected to generate thousands of job opportunities, contributing to both local and national development.

### Priority Areas

The priority areas for SM Prime's smart city initiatives include:

* **Sustainability and Resilience:** Ensuring that all developments are resilient to natural hazards and incorporate sustainable practices is a key priority.
* **Urban Planning:** Effective urban planning to manage infrastructure, utilities, and transportation is crucial for the success of the project.
* **Economic Growth:** The projects aim to catalyze economic growth by delivering innovative and sustainable lifestyle cities.
* **Community Protection:** Protecting surrounding communities from natural hazards, such as flooding, through innovative infrastructure like rainwater catchment basins and elevated structures.

**Summary:**  
SM Prime Holdings is actively engaged in smart city development, particularly through the SM Smart City project in Pasay. The company's leadership is committed to sustainability, resilience, and collaborative urban planning. Key mechanisms include joint ventures with local governments and partnerships with other developers. Significant resources have been allocated to ensure the project's success, with a focus on sustainability, urban planning, economic growth, and community protection.

**Key Findings:**

1. **Ambitious Smart City Project:** SM Prime is developing a 360-hectare smart city in Pasay, connected to the MOA complex.
2. **Strong Leadership Vision:** The leadership emphasizes sustainability, resilience, and collaborative urban planning.
3. **Established Partnerships:** Joint ventures with local governments and openness to partnerships with other developers.
4. **Substantial Resource Allocation:** Approximately P150 billion allocated for the reclamation project.
5. **Priority on Sustainability and Urban Planning:** Focus on sustainable practices and effective urban planning.

**Conclusion:**  
SM Prime Holdings demonstrates a robust commitment to smart city initiatives, driven by a clear vision for sustainable and resilient urban development. The company's approach, which includes significant resource allocation and strategic partnerships, positions it as a leader in the development of innovative and sustainable lifestyle cities in the Philippines.

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**Stakeholder name: Manila Electric Company (Meralco), Philippines**

**Overview:**  
Meralco, the largest distribution utility in the Philippines, is actively involved in smart city initiatives through its advanced smart grid roadmap and various technological innovations. This report analyzes Meralco's existing plans, leadership vision, established mechanisms, allocated resources, and priority areas related to smart city development.

**Detailed Analysis:**

### Existing Plans and Projects:

Meralco has several ongoing and planned projects aimed at enhancing its smart grid capabilities and contributing to smart city development.

* **Advanced Metering Infrastructure (AMI) Program:** Meralco is piloting the rollout of 5,000 smart meters as part of its AMI program. This initiative aims to modernize its network, improve operational efficiency, and empower customers to better manage their energy consumption. The pilot project will be deployed in areas with good communication networks, such as Manila and Pasig City.
* **Smart Grid Roadmap:** Meralco is embarking on a long-term smart grid vision, starting with prepaid smart metering. This roadmap includes integrating "smart intelligence" into the electric distribution network to enhance customer experience, energy efficiency, and reliability.
* **Previous Rollouts:** Meralco has already rolled out 140,000 prepaid smart meters under its prepaid electricity program, which is part of its broader smart grid initiatives.

### Leadership Vision and Willingness:

Meralco's leadership demonstrates a clear vision and commitment to smart city initiatives.

* **Commitment to Innovation:** Meralco's leadership, including Ronnie Aperocho, Chief Operating Officer, and Alfredo Panlilio, Head of Customer Retail Services and Corporate Communications, emphasize the importance of adopting new technologies to improve energy service and customer experience.
* **Strategic Partnerships:** The company's willingness to partner with global leaders like GE and Trilliant underscores its commitment to leveraging advanced technologies for smart grid development.

### Established Mechanisms and Partnerships:

Meralco has established several mechanisms and partnerships to support its smart city initiatives.

* **Partnerships with Technology Providers:** Meralco is collaborating with GE and Trilliant to implement its smart grid platform. These partnerships provide the necessary technological expertise and infrastructure for advanced metering and smart grid capabilities.
* **Regulatory Engagement:** Meralco is working closely with regulatory bodies like the Energy Regulatory Commission (ERC) to ensure the approval and successful implementation of its AMI program.

### Allocated Resources:

Meralco has allocated significant resources to support its smart city projects.

* **Financial Resources:** The company is investing in the rollout of smart meters and the development of its smart grid infrastructure. Although the exact investment cost for the pilot project is not specified, Meralco is capable of shouldering the expenses.
* **Technological Resources:** Meralco is leveraging advanced technologies provided by its partners, such as GE's Digital Energy business, to enhance its smart grid capabilities.

### Priority Areas:

Meralco's priority areas focus on improving operational efficiency, customer experience, and energy management.

* **Operational Efficiency:** The AMI program aims to increase operational efficiency by enabling two-way communication between utilities and customers, faster outage detection, and better management of distributed energy resources.
* **Customer Empowerment:** Meralco prioritizes empowering customers to manage their energy consumption more effectively through smart meters and advanced data management systems.
* **Energy Efficiency and Reliability:** The company's smart grid initiatives are designed to enhance energy efficiency and reliability, contributing to a better overall customer experience.

**Summary:**  
Meralco is actively engaged in smart city initiatives, particularly through its advanced smart grid roadmap. The company's existing plans include the rollout of smart meters and the integration of smart intelligence into its distribution network. Leadership vision is strong, with a commitment to innovation and strategic partnerships. Meralco has established mechanisms and partnerships with technology providers and regulatory bodies to support its initiatives. Significant resources are allocated to these projects, focusing on operational efficiency, customer empowerment, and energy efficiency.

**Key Findings:**

1. **Advanced Metering Infrastructure (AMI) Program:** Meralco is piloting 5,000 smart meters to enhance operational efficiency and customer experience.
2. **Smart Grid Roadmap:** The company is integrating smart intelligence into its distribution network for long-term benefits.
3. **Leadership Commitment:** Meralco's leadership is committed to innovation and strategic partnerships.
4. **Partnerships:** Collaborations with GE and Trilliant are key to Meralco's smart grid development.
5. **Resource Allocation:** Significant financial and technological resources are dedicated to these initiatives.

**Conclusion:**  
Meralco's approach to smart city initiatives is comprehensive and forward-looking, with a strong focus on technological innovation, customer empowerment, and operational efficiency. The company's commitment to partnerships and regulatory engagement further underscores its dedication to successful smart grid development.

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**Stakeholder name: Grab Philippines**

**Overview:**  
Grab Philippines is actively involved in various smart city initiatives, focusing on enhancing mobility, safety, and convenience for its users. The company's efforts span multiple areas, including transportation, food delivery, and safety features, all aimed at creating a more seamless and efficient urban experience.

**Detailed Analysis:**

### Existing plans and projects:

Grab Philippines has several ongoing and planned projects that align with smart city initiatives:

* **Smart Mobility Solutions:** Grab is developing and implementing various mobility solutions to ease traffic and enhance transportation efficiency. This includes the introduction of cost-saving features like GrabCar Saver and GrabShare, which offer affordable ride-hailing options.
* **Traffic Management:** In collaboration with other stakeholders, Grab is working on real-time traffic surveillance systems and multi-modal transport initiatives. Although this specific partnership is mentioned in the context of Vietnam, it indicates Grab's broader commitment to smart traffic management.
* **Safety and Security:** Grab has introduced new safety features such as the Emergency SOS Button, Fatigue Nudge, and Real-Time Overspeeding Alert to ensure a safer environment for commuters.

### Leadership vision:

The leadership at Grab Philippines is committed to transforming the urban experience through innovative solutions:

* **Brian Cu, Country Head of Grab Philippines:** Emphasizes that Grab is more than just a ride-hailing app; it aims to be an everyday app that complements daily essential needs, including mobility, food delivery, and financial services.
* **Grace Vera Cruz, Country Head of Grab Philippines:** Highlights the company's vision to enrich the lives of Filipinos by providing safe, reliable, and convenient services, making smart and affordable living a reality.

### Established mechanisms and partnerships:

Grab Philippines has established several mechanisms and partnerships to support its smart city initiatives:

* **Partnerships with Law Enforcement:** Grab has strengthened its partnership with the Philippine National Police (PNP) to enhance safety and security measures.
* **Strategic Partnerships:** Although specific to Vietnam, Grab's partnership with FPT to develop smart city solutions indicates its willingness to collaborate with technology firms to advance urban infrastructure.

### Allocated resources:

While the research data does not provide detailed financial figures, it is clear that Grab Philippines allocates significant resources to:

* **Technology Development:** Grab invests in technology to enhance its platform, including the development of new features and services.
* **Safety and Security Measures:** The company allocates resources to implement and maintain safety features such as the Emergency SOS Button and driver fatigue management.

### Priority areas:

The priority areas for Grab Philippines in smart city initiatives include:

* **Mobility and Traffic Management:** Enhancing transportation efficiency and reducing traffic congestion through innovative services like GrabCar Saver and real-time traffic surveillance.
* **Safety and Security:** Ensuring a safe and secure environment for users through features like the Emergency SOS Button and driver safety alerts.
* **Convenience and Affordability:** Providing affordable and convenient services that cater to daily essential needs, such as food delivery and financial services.

**Key findings:**

1. **Comprehensive Mobility Solutions:** Grab Philippines offers a range of mobility solutions aimed at reducing traffic congestion and enhancing transportation efficiency.
2. **Strong Leadership Vision:** The leadership is committed to transforming the urban experience through innovative and affordable services.
3. **Strategic Partnerships:** Grab collaborates with law enforcement and technology firms to advance its smart city initiatives.
4. **Safety and Security:** The company prioritizes safety and security through various features and partnerships.
5. **Convenience and Affordability:** Grab focuses on providing convenient and affordable services that cater to daily essential needs.

**Conclusion:**  
Grab Philippines is actively engaged in smart city initiatives, with a strong focus on mobility, safety, and convenience. The company's leadership vision, strategic partnerships, and allocation of resources all contribute to its goal of creating a more efficient and livable urban environment. While some specific details on resource allocation are not provided, the overall commitment to smart city solutions is evident.

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# Academic Stakeholders:

**Stakeholder name: University of the Philippines, Philippines**

**Overview:**  
The University of the Philippines (UP) is a key institution in the Philippines that has been involved in various initiatives related to smart city development, particularly through its role in education and research. This report analyzes the existing plans, projects, leadership vision, established mechanisms, partnerships, allocated resources, and priority areas related to smart city initiatives for UP.

**Detailed Analysis:**

### Existing plans and projects:

While the provided sources do not specifically detail UP's smart city projects, there are indications of broader national and educational initiatives that UP might be involved in or influenced by. For instance, the Republic Act # 11494 or the Bayanihan We Heal as One Act, allocated Php 3 billion for the ICT infrastructure of State Universities and Colleges (SUCs), which could indirectly benefit UP in terms of digital infrastructure development. However, specific smart city projects directly attributed to UP are not mentioned in the available data.

### Leadership vision and willingness:

There is no direct information available on the specific leadership vision of UP regarding smart city initiatives. However, the broader context suggests that educational institutions in the Philippines are encouraged to adopt smart city concepts, particularly in enhancing teaching and learning through digital technologies. This implies a general willingness to adapt to technological innovations, but specific leadership visions or statements from UP are not provided.

### Established mechanisms and partnerships:

UP, as a part of the higher education system in the Philippines, is likely to benefit from national initiatives and partnerships aimed at enhancing digital infrastructure and smart city development. For example, the Department of Science and Technology (DOST) and other government agencies are actively involved in promoting smart city initiatives across various sectors, including education. However, specific partnerships or mechanisms directly involving UP are not detailed in the available data.

### Allocated resources:

The allocation of resources specifically for UP's smart city initiatives is not explicitly mentioned. However, the national allocation of Php 3 billion for ICT infrastructure under the Bayanihan We Heal as One Act could potentially benefit UP and other SUCs in terms of digital infrastructure development.

### Priority areas:

The priority areas for UP in the context of smart city initiatives are not clearly defined in the available data. However, the broader national focus on enhancing urban functionality, sustainability, and livability through smart city solutions suggests that UP might prioritize areas such as digital literacy, innovative teaching methods, and sustainable development goals.

**Summary:**  
The University of the Philippines is part of a broader national effort to enhance digital infrastructure and adopt smart city concepts, particularly in the education sector. While specific plans, projects, and leadership visions for UP are not detailed, the institution is likely to benefit from national initiatives and partnerships aimed at promoting smart city development. Key areas of focus might include digital literacy, innovative teaching methods, and sustainable development goals, although these are inferred from broader national trends rather than specific UP initiatives.

**Key findings:**

1. **National Support:** UP benefits from national initiatives such as the Bayanihan We Heal as One Act, which allocates funds for ICT infrastructure.
2. **Broader Context:** UP is part of a broader educational sector that is encouraged to adopt smart city concepts.
3. **Lack of Specific Data:** There is a lack of specific data on UP's smart city plans, projects, leadership vision, and allocated resources.
4. **Inferred Priorities:** Potential priority areas for UP might include digital literacy and sustainable development goals, based on national trends.

**Conclusion:**  
The University of the Philippines is positioned to benefit from and contribute to the broader national efforts in smart city development, particularly in the education sector. However, more specific information is needed to fully understand UP's direct involvement and priorities in smart city initiatives.

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**Stakeholder name: Ateneo de Manila University, Philippines**

**Overview:**  
Ateneo de Manila University is actively involved in various initiatives that contribute to smart city development, focusing on sustainable practices, innovative technologies, and community engagement. The university's efforts are aligned with the United Nations' Sustainable Development Goals (SDGs), particularly SDG 11: Sustainable Cities and Communities.

**Detailed Analysis:**

### Existing Plans and Projects

Ateneo de Manila University has several ongoing and recent projects that align with smart city initiatives:

* **Smart Agriculture:** The Ateneo Innovation Center has developed a smart agriculture setup using precision farming techniques, including hydroponics and LoRa-based sensors. This project aims to improve crop yields and mitigate challenges such as unpredictable weather and soil-borne diseases.
* **Climate Change and Disaster Resilience:** The university has been involved in projects related to climate change and disaster resilience, including the deployment of smart phototherapy systems in healthcare facilities and the development of clean water systems.
* **Sustainable Transportation:** Ateneo promotes sustainable commuting through initiatives like the E-Jeep program, bike lanes, and walkways, and encourages the use of eco-friendly transportation options.
* **Community Engagement:** The university engages in community development projects, such as the Communal Solar-Powered Clean Water System in Talanay, Quezon City, and collaborations with local schools to introduce advanced technologies like smart greenhouses.

### Leadership Vision and Willingness

The leadership at Ateneo de Manila University demonstrates a strong commitment to sustainable development and smart city initiatives:

* **SDG Alignment:** The university's strategic plans and initiatives are aligned with the SDGs, particularly SDG 11, indicating a clear vision for sustainable cities and communities.
* **Innovation and Research:** The Ateneo Innovation Center plays a pivotal role in driving innovative solutions, showcasing the university's willingness to invest in research and development that benefits both the community and the environment.
* **Community Focus:** The university's leadership prioritizes community engagement and development, ensuring that their initiatives are inclusive and beneficial to the broader community.

### Established Mechanisms and Partnerships

Ateneo de Manila University has established several mechanisms and partnerships to support its smart city initiatives:

* **Ateneo Innovation Center (AIC):** The AIC is a key mechanism for driving innovation, collaborating with various stakeholders such as Coastal Cities at Risk in the Philippines, the National Resilience Council, and the Manila Observatory.
* **Community Collaborations:** The university collaborates with local schools, healthcare facilities, and community organizations to implement and test innovative technologies.
* **Partnerships:** Ateneo engages in partnerships to support its initiatives, such as the collaboration with Gawad Kalinga Sta. Rita to address water supply issues.

### Allocated Resources

The university allocates significant resources to support its smart city initiatives:

* **Financial Resources:** Ateneo allocates substantial funds for initiatives such as sustainable practices, arts and heritage, and innovative projects. For example, the university uses grants and prize money from competitions like the Smart Sweep Innovation and Excellence Award to upgrade teaching equipment and support student projects.
* **Human Resources:** The university invests in human capital through skill enhancement workshops, continuing education training programs, and research collaborations.
* **Infrastructure:** Ateneo has invested in sustainable infrastructure, including eco-friendly transportation options, green buildings, and advanced technology systems like LoRa-based sensors.

### Priority Areas

The priority areas for Ateneo de Manila University's smart city initiatives include:

* **Sustainable Practices:** The university prioritizes sustainable practices, including sustainable transportation, waste management, and energy-efficient buildings.
* **Innovation and Technology:** Ateneo focuses on developing and implementing innovative technologies to address community challenges, such as precision agriculture and clean water systems.
* **Community Development:** The university prioritizes community engagement and development, ensuring that its initiatives benefit the broader community and promote inclusive planning.
* **Disaster Resilience:** Ateneo emphasizes disaster resilience through projects that enhance community preparedness and response to natural disasters.

**Summary:**  
Ateneo de Manila University is actively engaged in smart city initiatives, with a strong focus on sustainable practices, innovative technologies, and community development. The university's leadership vision is aligned with the SDGs, particularly SDG 11, and it has established robust mechanisms and partnerships to support its initiatives. Significant resources are allocated to these efforts, and the priority areas include sustainable practices, innovation, community development, and disaster resilience.

**Key Findings:**

1. **Strong Commitment to SDGs:** Ateneo's initiatives are aligned with the SDGs, particularly SDG 11.
2. **Innovative Technologies:** The university develops and implements innovative technologies such as precision agriculture and clean water systems.
3. **Community Engagement:** Ateneo prioritizes community engagement and development.
4. **Sustainable Practices:** The university focuses on sustainable practices, including sustainable transportation and waste management.
5. **Robust Partnerships:** Ateneo collaborates with various stakeholders to support its initiatives.

**Conclusion:**  
Ateneo de Manila University demonstrates a comprehensive approach to smart city initiatives, combining innovative technologies, sustainable practices, and community engagement. The university's commitment to the SDGs and its allocation of significant resources underscore its dedication to creating sustainable and resilient communities.

**References:**

1. **Ateneo de Manila University project wins Smart Sweep Innovation and Excellence Award** - https://max.limpag.com/article/ateneo-de-manila-university-project-wins-smart-sweep-innovation-and-excellence-award/
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3. **Ateneo Innovation Center** - https://www.ateneo.edu/sose/aic
4. **Smart Agriculture | Projects | Ateneo Innovation Center** - <https://www.ateneo.edu/sose/aic/projects/smart-agriculture>

**Stakeholder name: De La Salle University, Philippines**

**Overview:**  
De La Salle University (DLSU) in the Philippines is actively involved in various smart city initiatives, leveraging its academic and research capabilities to contribute to urban development and sustainability. The university's efforts span multiple areas, including traffic management, environmental monitoring, and sustainable infrastructure.

**Detailed Analysis:**

### Existing plans and projects:

DLSU has several ongoing projects and initiatives aimed at enhancing smart city capabilities:

* **AI-Powered Traffic Management:** DLSU engineers, through the startup Intelligence System Inc. (ISI), have developed an AI-powered system called Catch-All. This system uses computer vision to detect erring motorists, analyze traffic data, and generate predictive analytics on traffic patterns. The system has been operational since 2019 and is currently used by several local governments in the Philippines.
* **Noise Pollution Monitoring:** The Advanced Research Institute for Informatics, Computing and Networking (ADRIC) at DLSU is involved in developing sustainable sensor-based smart city services, including dynamic noise mapping systems. This project aims to monitor and manage noise pollution in urban areas using wireless acoustic sensors.
* **Sustainable Infrastructure:** DLSU-Dasmariñas has prioritized the construction of smart buildings on campus, focusing on sustainability standards such as safety, waste management, water conservation, and green architecture. This includes buildings like the College of International Hospitality Management and the Information and Communications Technology Center.

### Leadership vision:

The leadership at DLSU demonstrates a clear vision for integrating technology into urban development and sustainability:

* **Innovation and Technology:** The development of AI-powered systems like Catch-All reflects the university's commitment to leveraging technology for public benefit. The CEO of ISI, Kerwin Billones, emphasizes the value of these systems in improving quality of life, indicating a leadership vision that prioritizes innovative solutions.
* **Sustainability:** The focus on sustainable infrastructure and green practices at DLSU-Dasmariñas aligns with broader global goals such as the United Nations 2030 Agenda and the Laudato Si’ Goals. This suggests a leadership vision that is environmentally conscious and forward-thinking.

### Mechanisms and partnerships:

DLSU has established several mechanisms and partnerships to support its smart city initiatives:

* **Collaborations with Government and Industry:** The Catch-All system is funded by the Philippine Council for Industry, Energy and Emerging Technology Research and Development, and it is being used by local governments such as Manila, Makati, Roxas City, and General Santos City. This indicates strong partnerships with government entities.
* **Research Collaborations:** ADRIC at DLSU collaborates with international organizations and conducts research in partnership with various stakeholders to develop smart city technologies. This includes collaborations for noise pollution monitoring and other urban sustainability projects.
* **Industry Partnerships:** DLSU's initiatives, such as the DLSU WISe system, involve partnerships with telecommunications companies like Globe Telecom and Smart Communications.

### Allocated resources:

DLSU allocates various resources to support its smart city initiatives:

* **Funding:** The Catch-All system is funded by the Philippine Council for Industry, Energy and Emerging Technology Research and Development. This indicates that external funding sources are available to support innovative projects.
* **Infrastructure:** DLSU-Dasmariñas has invested in constructing smart buildings and green infrastructure, which includes clinics, botanical gardens, and other sustainable facilities.
* **Human Resources:** The university's research institutes, such as ADRIC, employ experts in informatics, computing, and networking, which are crucial for developing smart city technologies.

### Priority areas:

The priority areas for DLSU's smart city initiatives include:

* **Traffic Management:** The development of AI-powered traffic management systems like Catch-All highlights the importance of efficient traffic management in urban areas.
* **Environmental Sustainability:** The focus on noise pollution monitoring and sustainable infrastructure indicates a strong priority on environmental sustainability and public health.
* **Innovation and Technology Integration:** The university's emphasis on leveraging AI, computer vision, and other technologies for urban development reflects a priority on innovation and technological advancement.

**Summary:**  
De La Salle University in the Philippines is actively engaged in various smart city initiatives, focusing on traffic management, environmental sustainability, and innovative technology integration. The university's leadership vision is aligned with global sustainability goals, and it has established strong partnerships with government and industry stakeholders. DLSU allocates significant resources to support these initiatives, including funding, infrastructure, and human resources. The priority areas include efficient traffic management, environmental sustainability, and the integration of innovative technologies.

**Key findings:**

1. **AI-Powered Traffic Management:** DLSU has developed an AI-powered system for traffic management.
2. **Environmental Sustainability:** The university prioritizes sustainable infrastructure and noise pollution monitoring.
3. **Strong Partnerships:** DLSU collaborates with government and industry partners.
4. **Resource Allocation:** Significant resources are allocated for funding, infrastructure, and human resources.
5. **Innovation Focus:** The university emphasizes the integration of innovative technologies.

**Conclusion:**  
De La Salle University's approach to smart city initiatives is comprehensive and forward-thinking, leveraging its academic and research capabilities to address key urban challenges. The university's commitment to sustainability, innovation, and partnerships positions it as a significant contributor to smart city development in the Philippines.

**References:**

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2. **Exploring sustainable sensor-based smart city services** - <https://animorepository.dlsu.edu.ph/events_diary/136/>
3. **Master in Smart Cities and Smart Grids Technologies** - <https://www.salleurl.edu/en/education/master-smart-cities-and-smart-grids-technologies>
4. **Initiatives - De La Salle University** - <https://www.dlsu.edu.ph/offices/its/initiatives/>
5. **Setting and Infrastructure | Sustainable DLSU-D** - <https://www.dlsud.edu.ph/sustain/programs/infrastructure.htm>

**Stakeholder name: Mapúa University, Philippines**

**Overview:**  
Mapúa University is a private research-oriented non-sectarian university in the Philippines, known for its technological and engineering programs. The university has been actively involved in various initiatives that align with smart city concepts, particularly through its partnerships and innovative projects in education and infrastructure.

**Detailed Analysis:**

### Existing plans and projects:

Mapúa University has several ongoing and planned projects that reflect its commitment to smart city initiatives, although these are more focused on educational and technological advancements rather than traditional smart city infrastructure.

1. **Digital Classrooms:** Mapúa University, in partnership with Cisco, has established the Philippines' first digital classrooms as part of Cisco's Country Digital Acceleration (CDA) program, UGNAYAN 2030. These classrooms are equipped with AI-powered collaboration tools, including Webex Meeting Suite, Webex Boards, and Meraki Wireless and Smart Cameras. This initiative aims to enhance hybrid learning experiences and make education more accessible and personalized.
2. **Smart Bridge Project:** Although not directly related to the current digital classroom initiative, Mapúa University has previously worked on the Smart Bridge project, which involved developing a wireless sensory network system to monitor the structural health of bridges. This project, funded by the Department of Science and Technology, demonstrates the university's capability in technological innovation relevant to infrastructure monitoring, a key aspect of smart city development.

### Leadership vision:

The leadership of Mapúa University has shown a clear vision and willingness to integrate technology into education and other areas, aligning with broader smart city goals.

1. **President's Vision:** Dr. Dodjie S. Maestrecampo, President and Chief Executive Officer of Mapúa University, has expressed his vision for transforming the learning experience through technology. He emphasizes the importance of hybrid learning, digital transformation, and lifelong education, which are crucial for fostering sustainable socio-economic growth.
2. **Innovation and Digital Transformation:** The university's leadership is committed to leveraging cutting-edge technologies to create inclusive and engaging learning environments. This commitment extends to making education accessible across borders and driving an internationalized education experience.

### Established mechanisms and partnerships:

Mapúa University has established several mechanisms and partnerships to support its smart city-related initiatives.

1. **Partnership with Cisco:** The partnership with Cisco under the CDA program, UGNAYAN 2030, is a significant mechanism for advancing digital education and infrastructure. This partnership includes the deployment of state-of-the-art technology for digital classrooms.
2. **Collaboration with Government and Industry:** The university's involvement in projects like the Smart Bridge initiative, which was funded by the Department of Science and Technology and coordinated with the Bureau of Design of the Department of Public Works and Highways, demonstrates its ability to collaborate with government and industry stakeholders.
3. **ICT Solutions Integrator Microdata:** The university also collaborates with ICT solutions integrator Microdata to support the integration of AI-driven collaboration tools and smart cameras in its digital classrooms.

### Allocated resources:

The resources allocated by Mapúa University for its smart city-related initiatives are primarily focused on technological infrastructure and training.

1. **Technological Infrastructure:** The university has invested in AI-powered collaboration tools, Webex Boards, Meraki Wireless, and Smart Cameras to create digital classrooms. These resources are aimed at enhancing hybrid learning experiences.
2. **Training Programs:** Mapúa University has developed training curricula for teachers to ensure they can effectively use the new technologies. This includes specialized training programs to support blended and hybrid learning.

### Priority areas:

The priority areas for Mapúa University in its smart city-related initiatives are centered around education and technological innovation.

1. **Digital Education:** The primary focus is on transforming the learning experience through digital classrooms, making education more accessible, personalized, and flexible.
2. **Technological Innovation:** The university prioritizes the integration of cutting-edge technologies such as AI and smart cameras to enhance learning outcomes and create inclusive learning environments.
3. **Infrastructure Monitoring:** Although not as current, the university's past projects like the Smart Bridge initiative highlight its interest in technological innovations relevant to infrastructure monitoring, which is a key aspect of smart city development.

**Summary:**  
Mapúa University is actively involved in smart city initiatives, particularly through its innovative educational projects and technological partnerships. The university's leadership has a clear vision for integrating technology into education, making it more accessible and personalized. Key partnerships with Cisco and other stakeholders support these initiatives. The allocated resources are primarily focused on technological infrastructure and training programs. The priority areas include digital education, technological innovation, and infrastructure monitoring.

**Key findings:**

* **Digital Classrooms:** Establishment of AI-powered digital classrooms in partnership with Cisco.
* **Leadership Vision:** Strong commitment to digital transformation and lifelong education.
* **Partnerships:** Collaboration with Cisco, government agencies, and industry partners.
* **Resources:** Investment in AI-powered tools and training programs.
* **Priority Areas:** Focus on digital education, technological innovation, and infrastructure monitoring.

**Conclusion:**  
Mapúa University's approach to smart city initiatives is centered around leveraging technology to enhance education and infrastructure. The university's partnerships and investments in digital classrooms and training programs reflect its commitment to creating a more inclusive and accessible learning environment. While the focus is more on educational innovation, the university's past projects indicate potential for broader smart city contributions.

**References:**

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# Civil Society Stakeholders:

**Stakeholder name: Foundation for Economic Freedom (FEF), Philippines**

**Overview:**  
The Foundation for Economic Freedom (FEF) is a Philippine-based organization that advocates for economic freedom and good governance. However, the provided research data does not specifically mention the FEF's involvement in smart city initiatives. Therefore, this report will highlight the general context of smart city development in the Philippines and the roles of various stakeholders, while noting the lack of specific information about the FEF.

**Detailed Analysis:**

### Existing plans and projects:

**Insufficient Information:** There is no specific information available in the provided research data about the FEF's existing plans and projects related to smart city initiatives. The data primarily discusses the broader context of smart city development in the Philippines, involving various stakeholders such as Local Government Units (LGUs), national government agencies, and other organizations.

### Leadership vision and willingness:

**Insufficient Information:** The research data does not provide any details about the leadership vision or willingness of the FEF regarding smart city initiatives. The leadership and vision discussed in the data pertain to other stakeholders like LGUs and national government agencies.

### Established mechanisms and partnerships:

**Insufficient Information:** There is no information available on the established mechanisms or partnerships of the FEF in the context of smart city initiatives. The data highlights partnerships and mechanisms involving other stakeholders, such as the Development Academy of the Philippines (DAP), the Department of the Interior and Local Government (DILG), and the World Bank.

### Allocated resources:

**Insufficient Information:** The research data does not mention any resources allocated by the FEF for smart city initiatives. It discusses resource allocation challenges and strategies for LGUs and other stakeholders but does not include the FEF.

### Priority areas:

**Insufficient Information:** There is no specific information on the priority areas of the FEF related to smart city initiatives. The data outlines priority areas for other stakeholders, such as sustainability, inclusivity, and technological innovation.

**Summary:**  
The Foundation for Economic Freedom (FEF) does not appear to have a documented role in smart city initiatives based on the provided research data. The data focuses on the broader landscape of smart city development in the Philippines, involving various stakeholders and their efforts, but does not include specific information about the FEF.

**Key Findings:**

1. **Lack of Specific Information:** There is no specific data available about the FEF's involvement in smart city initiatives.
2. **Broader Context:** Smart city development in the Philippines involves multiple stakeholders, including LGUs, national government agencies, and other organizations.
3. **General Priorities:** Priority areas for smart city initiatives in the Philippines include sustainability, inclusivity, and technological innovation.

**Conclusion:**  
Given the lack of specific information, it is not possible to assess the FEF's current position, efforts, or priorities regarding smart city initiatives. The report highlights the broader context of smart city development in the Philippines but does not provide insights into the FEF's role.

**References:**

1. **How far have Philippine LGUs come in developing into smart cities?** - Philippine Institute for Development Studies
2. **Centering People in Smart Cities** - UN-Habitat
3. **Smart city as a social transition towards inclusive development** - Tandfonline
4. **Smart Community** - Development Academy of the Philippines
5. **Smart City Solutions: Shaping the Filipino Cities of Tomorrow** - World Bank

**Stakeholder name: Institute for Climate and Sustainable Cities (ICSC), Philippines**

**Overview:**  
The Institute for Climate and Sustainable Cities (ICSC) is an international non-governmental organization based in the Philippines, focusing on advancing fair climate policy and low-carbon, climate-resilient development. ICSC is actively involved in various initiatives that align with the principles of smart city development, particularly in the areas of sustainable urban mobility, renewable energy, and climate resilience.

**Detailed Analysis:**

### Existing plans and projects:

ICSC has several ongoing and past projects that contribute to smart city initiatives:

* **RE-Charge Pilipinas (RCP):** Established in 2014, RCP is a training center for renewable energy applications and sustainable solutions in Tacloban City. It aims to demonstrate how renewable energy can enhance disaster response and rehabilitation, and support low-carbon development.
* **Mobility Awards:** ICSC, in collaboration with other organizations, launched the Mobility Awards to recognize and promote sustainable urban mobility, particularly cycling, as a reliable and efficient mode of transport. This initiative has expanded to various cities in the Philippines.
* **Metro Manila Counts (MMC):** ICSC participated in a bike count in Metro Manila, which estimated the number of cyclists and highlighted the environmental and economic benefits of cycling.

### Leadership vision:

ICSC's leadership vision is centered around promoting sustainable and climate-resilient development. The organization's broader agenda includes advancing fair climate policy, low-carbon resilience, and sustainable urban mobility. This vision is reflected in their initiatives, which prioritize the needs of the majority and aim to provide sustainable solutions for urban areas.

### Mechanisms and partnerships:

ICSC has established several partnerships and mechanisms to support its smart city initiatives:

* **Collaborations:** ICSC works with various organizations such as The Climate Reality Project Philippines, MNL Moves, 350 Pilipinas, and the League of Cities Philippines. These partnerships help in promoting sustainable urban mobility and recognizing leadership in this area.
* **Regional Partnerships:** ICSC collaborates with civic groups and active mobility advocates across the Philippines, indicating a strong network of regional partners.

### Allocated resources:

While the specific financial resources allocated by ICSC for its smart city initiatives are not detailed in the available data, the organization's ability to establish and maintain projects like RE-Charge Pilipinas and the Mobility Awards suggests a commitment of resources. However, more detailed information on resource allocation is not provided.

### Priority areas:

ICSC's priority areas include:

* **Sustainable Urban Mobility:** ICSC focuses on promoting cycling and pedestrian-friendly urban environments, which are seen as safe, efficient, and sustainable transport modes.
* **Renewable Energy:** The organization emphasizes the use of renewable energy to support low-carbon development and enhance disaster resilience.
* **Climate Resilience:** ICSC's initiatives are designed to build climate-resilient communities, particularly in the context of disaster response and rehabilitation.

**Key findings:**

1. **Strong Focus on Sustainable Mobility:** ICSC prioritizes sustainable urban mobility, particularly cycling, as a key component of smart city development.
2. **Renewable Energy Initiatives:** The organization is actively involved in promoting renewable energy solutions, such as the RE-Charge Pilipinas project.
3. **Climate Resilience:** ICSC's projects aim to enhance climate resilience, especially in disaster-prone areas.
4. **Collaborative Approach:** ICSC works with multiple stakeholders and partners to achieve its goals, indicating a collaborative and networked approach.

**Conclusion:**  
The Institute for Climate and Sustainable Cities (ICSC) demonstrates a clear commitment to smart city initiatives through its focus on sustainable urban mobility, renewable energy, and climate resilience. While specific details on resource allocation are lacking, the organization's projects and partnerships highlight its leadership vision and mechanisms for achieving sustainable and climate-resilient urban development.

**References:**

* <https://icsc.ngo/about-icsc/>

**Stakeholder name: Caucus of Development NGO Networks (CODE-NGO), Philippines**

**Overview:**  
The Caucus of Development NGO Networks (CODE-NGO) is a network of non-governmental organizations (NGOs) in the Philippines, focusing on influencing public policy, providing leadership in civil society, and enhancing social development. However, the available data does not specifically highlight CODE-NGO's direct involvement in smart city initiatives. This report will analyze the available information to determine the extent of CODE-NGO's engagement with smart city projects.

**Detailed Analysis:**

**Existing plans and projects:**  
There is no specific information available in the provided sources that details CODE-NGO's existing plans or projects related to smart city initiatives. The sources primarily discuss general smart city developments in the Philippines and the roles of other stakeholders such as local government units (LGUs) and national government agencies.

**Leadership vision:**  
The leadership vision of CODE-NGO is centered around maximizing its scale and synergy to influence public policy and increase the effectiveness of social development work. However, there is no explicit mention of a vision specifically focused on smart city initiatives.

**Mechanisms and partnerships:**  
CODE-NGO is involved in various partnerships and mechanisms aimed at influencing public policy and enhancing social development. However, these partnerships do not appear to be specifically focused on smart city initiatives. CODE-NGO's networks include 12 national and regional networks representing 1,600 NGOs, POs, and cooperatives, but their activities are more broadly aligned with social development rather than smart city projects.

**Allocated resources:**  
There is no information available on resources specifically allocated by CODE-NGO for smart city initiatives. The resources mentioned in the context of CODE-NGO are generally directed towards social development and public policy influence.

**Priority areas:**  
The priority areas for CODE-NGO include influencing public policy, providing leadership in civil society, and increasing the effectiveness of social development work. However, smart city initiatives do not appear to be a priority area based on the available data.

**Summary:**  
The analysis indicates that CODE-NGO does not have a significant or explicit involvement in smart city initiatives. Their focus is on broader social development and public policy influence, with no specific plans, projects, or resources dedicated to smart city development.

**Key findings:**

1. **Lack of direct involvement:** CODE-NGO does not have explicit plans or projects related to smart city initiatives.
2. **Broad focus:** CODE-NGO's focus is on social development and public policy influence rather than smart city projects.
3. **No specific resources:** There are no resources specifically allocated by CODE-NGO for smart city initiatives.

**Conclusion:**  
Based on the available data, CODE-NGO does not appear to be actively involved in smart city initiatives. Their efforts are more aligned with general social development and public policy influence. Therefore, it is not possible to evaluate their approach to smart city initiatives in detail.

**References:**

* https://code-ngo.org
* https://blogs.worldbank.org/en/eastasiapacific/smart-city-solutions-shaping-filipino-cities-tomorrow
* https://pidswebs.pids.gov.ph/CDN/document/pidspn2207.pdf

Note: The analysis is limited by the lack of specific information regarding CODE-NGO's involvement in smart city initiatives.

# Local Community Stakeholders:

**Stakeholder name: Barangay Councils, Philippines**

**Overview:**  
Barangay Councils in the Philippines play a crucial role in the implementation of smart city initiatives at the grassroots level. While they are not the primary drivers of these initiatives, they are integral in ensuring that smart city projects are effectively integrated into local communities. This report analyzes the existing plans, leadership vision, established mechanisms, allocated resources, and priority areas related to smart city initiatives for Barangay Councils.

**Detailed Analysis:**

### Existing plans and projects:

The existing plans and projects involving Barangay Councils in smart city initiatives are largely integrated into broader city-wide or municipal projects. For instance, in Baguio City, the "Baguio in My Pocket" (BIMP) mobile application, which serves as a public registration platform and transaction portal, requires registration at the barangay level to enable barangay officials to deliver essential services. This indicates that barangays are involved in the implementation of smart city projects, particularly in terms of data collection and service delivery. However, specific standalone plans or projects initiated solely by Barangay Councils are not prominently documented in the available research data.

### Leadership vision and willingness:

The leadership vision and willingness of Barangay Councils to participate in smart city initiatives are generally aligned with the broader municipal or city-level visions. For example, Mayor Benjamin Magalong's vision for Baguio City to become a "Smart City" involves empowering barangays through technology, which suggests that barangay leaders are supportive of these initiatives. However, detailed information on the specific vision or willingness of Barangay Councils as independent entities is limited.

### Established mechanisms and partnerships:

Barangay Councils participate in smart city initiatives through established mechanisms such as integration with city-level command centers and mobile applications. For instance, the Baguio Smart City System includes the BIMP app, which requires barangay-level registration, indicating a partnership between barangay officials and city authorities. Additionally, the involvement of barangays in data collection and service delivery suggests a collaborative mechanism, but specific details on formal partnerships or dedicated structures for barangay participation are not well-documented.

### Allocated resources:

The allocated resources for Barangay Councils in the context of smart city initiatives are typically part of broader municipal or national funding. There is no specific mention of dedicated resources allocated solely to Barangay Councils for smart city projects in the available research data. Funding shortages are identified as a major challenge for smart city projects at the local government unit (LGU) level, which may indirectly affect barangay-level initiatives.

### Priority areas:

The priority areas for Barangay Councils in smart city initiatives seem to focus on service delivery and community engagement. The use of the BIMP app for public registration and transaction purposes at the barangay level highlights the importance of these areas. However, detailed priority areas specifically defined by Barangay Councils are not clearly outlined in the available data.

**Summary:**  
Barangay Councils in the Philippines are involved in smart city initiatives primarily through their integration with city-level projects and mechanisms. While they play a crucial role in service delivery and community engagement, specific plans, leadership visions, and allocated resources dedicated solely to Barangay Councils are not well-documented. The involvement of barangays is generally aligned with broader municipal visions and projects, indicating a collaborative approach but lacking in detailed, standalone initiatives.

**Key findings:**

1. **Integration with City-Level Projects:** Barangay Councils are involved in smart city initiatives through integration with city-level projects such as the Baguio Smart City System.
2. **Service Delivery and Community Engagement:** Priority areas for barangays include service delivery and community engagement, facilitated through tools like the BIMP app.
3. **Limited Dedicated Resources:** There is no specific mention of dedicated resources allocated solely to Barangay Councils for smart city projects.
4. **Collaborative Mechanisms:** Barangay participation is facilitated through collaborative mechanisms with city authorities, but detailed structures or formal partnerships are not well-documented.

**Conclusion:**  
Barangay Councils in the Philippines are integral to the implementation of smart city initiatives at the local level, primarily through their integration with broader city-level projects. While they contribute significantly to service delivery and community engagement, there is a need for more detailed information on their specific plans, leadership visions, and allocated resources to fully understand their role in smart city development.

**References:**

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2. **How far have Philippine LGUs come in developing into smart cities?** - [https://pidswebs.pids.gov.ph/CDN/document/pidspn2207.pdf]
3. **Mayor Rama and the LCP: Forging SMART Philippine cities** - [https://cebucity.news/2022/08/18/mayor-rama-and-the-lcp-forging-smart-philippine-cities/]
4. **Smart City Solutions: Shaping the Filipino Cities of Tomorrow** - [https://blogs.worldbank.org/en/eastasiapacific/smart-city-solutions-shaping-filipino-cities-tomorrow]

**Stakeholder name: Urban Poor Associates (UPA), Philippines**

**Overview:**  
The Urban Poor Associates (UPA) is an organization focused on advocating for the rights and welfare of urban poor communities in the Philippines. However, the provided research data does not specifically mention UPA's involvement in smart city initiatives. Therefore, this report will highlight the general context of smart city development in the Philippines and note the lack of specific information regarding UPA's role.

**Detailed Analysis:**

**Existing plans and projects:**  
There is no specific information available in the research data regarding UPA's existing plans or projects related to smart city initiatives. The data primarily focuses on national and local government initiatives, such as the development of New Clark City, smart city projects in Manila, Cebu City, and Davao City, and the ASEAN Smart Cities Network (ASCN).

**Leadership vision and willingness:**  
There is no information available on UPA's leadership vision or willingness to engage in smart city initiatives. The leadership vision and willingness discussed in the research data pertain to government agencies and other stakeholders involved in smart city development.

**Established mechanisms and partnerships:**  
No specific mechanisms or partnerships involving UPA are mentioned in the research data. However, it is noted that collaborations between local government units (LGUs), the national government, and the private sector are crucial for smart city development in the Philippines.

**Allocated resources:**  
There is no information on resources allocated by UPA for smart city initiatives. The research data mentions funding and resource allocation by government agencies and private sector entities for various smart city projects.

**Priority areas:**  
The priority areas for smart city development in the Philippines, as identified in the research data, include governance, safety and security, infrastructure, and urban planning. However, there is no specific mention of UPA's priorities or involvement in these areas.

**Summary:**  
The Urban Poor Associates (UPA) does not appear to have a documented role in smart city initiatives based on the provided research data. The data focuses on national and local government efforts, partnerships, and challenges in developing smart cities in the Philippines. Therefore, it is not possible to provide a detailed analysis of UPA's involvement in this context.

**Key findings:**

1. **Lack of specific information:** There is no specific information available regarding UPA's involvement in smart city initiatives.
2. **National and local government initiatives:** The Philippines has various smart city projects and initiatives led by government agencies and LGUs.
3. **Collaborations and partnerships:** Smart city development in the Philippines involves significant collaborations between government agencies, LGUs, and the private sector.
4. **Priority areas:** Governance, safety and security, infrastructure, and urban planning are key focus areas for smart city development.

**Conclusion:**  
Given the lack of specific information, it is clear that the Urban Poor Associates (UPA) does not have a documented role in smart city initiatives as per the provided research data. The report highlights the broader context of smart city development in the Philippines but cannot provide detailed insights into UPA's involvement.

**References:**

1. **Philippine Institute for Development Studies.** "Smart cities - PIDS - Philippine Institute for Development Studies." <https://www.pids.gov.ph/details/news/in-the-news/smart-cities-2>
2. **World Bank.** "Smart City Solutions: Shaping the Filipino Cities of Tomorrow." <https://blogs.worldbank.org/en/eastasiapacific/smart-city-solutions-shaping-filipino-cities-tomorrow>
3. **United States Department of Commerce, International Trade Administration.** "Innovative Technologies for Urban Infrastructure Development ..." <https://events.trade.gov/TradeGov/InnovativeTechnologiesforUrbanInfrastructureDevelo/hotsite.php>

**Stakeholder name: Philippine Alliance of Persons with Chronic Illness, Inc. (PAPCI)**

**Overview:**  
The Philippine Alliance of Persons with Chronic Illness, Inc. (PAPCI) is an organization focused on advocating for the rights and needs of individuals with chronic illnesses in the Philippines. While the primary focus of PAPCI is on health advocacy, the organization's activities and partnerships can provide insights into their potential involvement in smart city initiatives, particularly those related to health and well-being.

**Detailed Analysis:**

### Existing plans and projects:

**Analysis:**  
There is limited information available on specific smart city plans or projects directly associated with PAPCI. The organization's primary activities revolve around health advocacy, patient support, and education, rather than smart city initiatives. However, their involvement in health-related projects could potentially align with smart city health and well-being initiatives. For example, PAPCI's efforts in improving healthcare access and quality could be integrated into broader smart city health strategies, but there is no explicit data to support this.

### Leadership vision and willingness:

**Analysis:**  
The leadership of PAPCI, such as Karen Alparce-Villanueva, President of PAPCI, and other board members, have a strong vision for improving the lives of people with chronic illnesses. Their advocacy work and participation in global health conferences indicate a willingness to engage in initiatives that enhance the quality of life for their constituents. However, there is no direct evidence of their specific vision or willingness to engage in smart city initiatives.

### Established mechanisms and partnerships:

**Analysis:**  
PAPCI has established partnerships with various health organizations and government agencies, such as the Department of Health in the Philippines. These partnerships are primarily focused on health advocacy and support rather than smart city development. There is no clear indication of mechanisms or partnerships specifically aimed at smart city initiatives.

### Allocated resources:

**Analysis:**  
There is insufficient information available on the resources allocated by PAPCI specifically for smart city initiatives. The organization's resources are primarily dedicated to health-related activities and advocacy.

### Priority areas:

**Analysis:**  
The priority areas for PAPCI are centered around improving healthcare access, quality, and advocacy for people with chronic illnesses. While these priorities could align with smart city health and well-being initiatives, there is no explicit data indicating that smart city development is a priority area for PAPCI.

**Summary:**  
The Philippine Alliance of Persons with Chronic Illness, Inc. (PAPCI) is primarily focused on health advocacy and support for individuals with chronic illnesses. While their activities and partnerships could potentially align with smart city health initiatives, there is no direct evidence of their involvement in smart city development. The organization's leadership and resources are dedicated to improving healthcare outcomes, but there is a lack of specific data indicating engagement in smart city projects.

**Key findings:**

1. **Primary Focus:** PAPCI's main focus is on health advocacy and support.
2. **Limited Smart City Involvement:** There is no explicit evidence of PAPCI's involvement in smart city initiatives.
3. **Health-related Partnerships:** PAPCI has partnerships with health organizations and government agencies.
4. **Resource Allocation:** Resources are primarily dedicated to health-related activities.
5. **Priority Areas:** Priorities are centered around healthcare access and quality.

**Conclusion:**  
PAPCI's efforts are primarily directed towards improving the lives of people with chronic illnesses through health advocacy and support. While their work could potentially intersect with smart city health initiatives, there is currently no evidence to suggest direct involvement in smart city development.

**References:**

* https://www.iapo.org.uk/node/15593

This report highlights the need for further research or collaboration to integrate PAPCI's health advocacy work into broader smart city initiatives, particularly those focused on health and well-being.

# International Stakeholders:

**Stakeholder name: World Bank, Philippines**

**Overview:**  
The World Bank, in collaboration with various stakeholders in the Philippines, is actively involved in promoting and supporting smart city initiatives. These efforts aim to enhance urban service delivery, improve quality of life, and foster sustainable development through the integration of technology and innovation.

## Detailed Analysis

### Existing plans and projects:

The World Bank has several ongoing and planned initiatives in the Philippines aimed at developing smart cities. These include:

* **Workshops and Knowledge Sharing:** The World Bank, in collaboration with the Department of the Interior and Local Government (DILG), has hosted workshops such as the Philippines Urban Forum 2023, which focused on smart city development and the challenges faced by Local Government Units (LGUs).
* **Smart City Projects:** Many LGUs in the Philippines are planning or have already initiated smart city projects. For example, cities like Malabon, Mandaue, and San Fernando have implemented various smart city initiatives such as CCTV cameras, mobile applications for emergency response, traffic management systems, and free WiFi services.
* **Global Smart City Partnership Program (GSCP):** The GSCP, established by the World Bank, facilitates learning on smart city initiatives and provides technical assistance to client cities. This program has organized knowledge exchange events, such as the 2022 Smart City Leadership Knowledge Exchange in Korea, which involved delegations from the Philippines.

### Leadership vision and willingness:

The leadership vision of the World Bank and its partners in the Philippines is centered around leveraging technology and innovation to improve urban service delivery and quality of life. Key aspects include:

* **Integration with National Policies:** The efforts are aligned with national policies, such as the Government Service Delivery Act of 2018, which supports the development of smart cities.
* **Collaborative Leadership:** The World Bank and DILG are working together to create a framework and tools for LGUs to develop smart city initiatives, indicating a strong collaborative leadership approach.
* **Innovation and Sustainability:** The focus is on making cities more responsive to the needs of their inhabitants and the environment, reflecting a commitment to innovation and sustainability.

### Established mechanisms and partnerships:

The World Bank has established several mechanisms and partnerships to support smart city development in the Philippines:

* **Global Smart City Partnership Program (GSCP):** This program facilitates networking and knowledge-sharing among smart city experts and cities worldwide. It also connects experts with World Bank Group teams through an interactive matching process.
* **Collaboration with DILG:** The World Bank works closely with the DILG to support LGUs in their smart city initiatives, including hosting workshops and developing frameworks for smart city development.
* **International Partnerships:** The program involves international partnerships, such as the knowledge exchange with Korea, which helps in sharing best practices and technologies.

### Allocated resources:

The resources allocated for smart city initiatives in the Philippines include:

* **Financial Support:** Funding sources identified include national government sponsorship, loans, and general funds. However, 67% of surveyed LGUs see funding shortages as a major hurdle.
* **Technical Assistance:** The World Bank provides just-in-time technical assistance and operational support for longer-term engagements.
* **Knowledge Sharing Platforms:** The Smart Cities Knowledge Silo Breaker platform facilitates knowledge-sharing and dissemination among clients and global practitioners.

### Priority areas:

The priority areas for the World Bank's smart city initiatives in the Philippines are:

* **Integrated Planning:** Integrating smart city plans into overall urban planning and development.
* **Innovation Ecosystems:** Creating innovation ecosystems that extend beyond physical spaces to foster collaboration among ideas, technology, and people.
* **Financial Strategies:** Developing financial strategies to overcome funding shortages, including diverse funding sources.
* **Public Trust and Data Security:** Ensuring public trust by safeguarding data privacy and security as cities digitalize.

## Summary:

The World Bank, in collaboration with the Philippines, is actively engaged in promoting smart city initiatives. Key aspects include:

* **Extensive Projects:** Various smart city projects are underway in different LGUs, focusing on technology integration and service delivery.
* **Strong Leadership Vision:** The vision is aligned with national policies and emphasizes innovation, sustainability, and collaborative leadership.
* **Robust Mechanisms and Partnerships:** Mechanisms like the GSCP and partnerships with DILG and international entities support knowledge sharing and technical assistance.
* **Resource Allocation:** Financial and technical resources are allocated, though funding remains a challenge.
* **Priority Areas:** Integrated planning, innovation ecosystems, financial strategies, and public trust are key priority areas.

## Key findings:

1. **Comprehensive Projects:** Multiple LGUs are implementing smart city projects.
2. **Collaborative Leadership:** Strong collaboration between the World Bank and DILG.
3. **Global Partnerships:** International partnerships facilitate knowledge sharing.
4. **Resource Challenges:** Funding shortages are a significant challenge.
5. **Priority on Innovation and Public Trust:** Focus on creating innovation ecosystems and ensuring public trust.

## Conclusion:

The World Bank's approach to smart city initiatives in the Philippines is structured around collaborative leadership, integrated planning, and innovation. Despite challenges such as funding shortages, the efforts are well-aligned with national policies and global best practices, indicating a strong commitment to sustainable and inclusive urban development.

## References:

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2. **Global-Smart-City-Partnership-Program-Phase-2-Completion-Report** - <https://thedocs.worldbank.org/en/doc/52cdd3c812c7796a9b3179fed4b84fba-0090012023/original/Global-Smart-City-Partnership-Program-Phase-2-Completion-Report.pdf>
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4. **Smart City Solutions: Shaping the Filipino Cities of Tomorrow** - <https://blogs.worldbank.org/en/eastasiapacific/smart-city-solutions-shaping-filipino-cities-tomorrow>
5. **Global Smart City Partnership Program - World Bank** - <https://www.worldbank.org/en/programs/global-smart-city-partnership-program>

**Stakeholder name: Asian Development Bank (ADB), Philippines**

**Overview:**  
The Asian Development Bank (ADB) is actively involved in promoting smart city initiatives across its developing member countries, including the Philippines. The bank's efforts are focused on enhancing the livability, sustainability, and inclusiveness of urban areas through the strategic use of digital technologies.

**Detailed Analysis:**

### Existing plans and projects:

The ADB has several ongoing and planned projects aimed at promoting smart city development. Key initiatives include:

* **Future Cities Program (FCP):** The ADB's FCP involves regional research and development technical assistance to promote smart infrastructure and systems in selected cities. This includes projects such as blockchain-based land registry in Suva, spatial-based decision support data systems in Bandung, and intelligent transport systems in Tbilisi.
* **ASEAN Smart City Initiative:** This initiative aims to help ASEAN cities achieve livability goals through the adoption of smart city digital solutions. The program includes knowledge sharing, pilot projects, and city twinning activities across ASEAN member countries.
* **Smart City Pathways for Developing Asia:** The ADB has developed an analytical framework to guide practitioners in assessing and implementing smart city initiatives. This framework emphasizes the importance of tailoring smart city solutions to individual city contexts and includes case examples from various cities in Asia.

### Leadership vision and willingness:

The ADB's leadership vision is aligned with its Strategy 2030, which prioritizes making cities green, competitive, resilient, and inclusive. The bank's willingness to support smart city initiatives is evident through its involvement in various thematic groups and departments, such as the Digital for Technology Development Unit, Governance Thematic Group, and Urban Sector Group.

### Established mechanisms and partnerships:

The ADB has established several mechanisms and partnerships to support smart city development:

* **Collaboration with Government Agencies:** The ADB works closely with government agencies, resident missions, sector and thematic groups, and development partners to implement smart city projects.
* **Multi-Stakeholder Engagement:** The bank engages with a wide range of stakeholders, including city governments, businesses, NGOs, and civil society organizations, to ensure inclusive and collaborative problem-solving.
* **International Partnerships:** The ADB collaborates with international partners, such as the Australian Department of Foreign Affairs and Trade (DFAT), to secure financing for smart city initiatives, like the ASEAN-Australia Smart City Trust Fund.

### Allocated resources:

The ADB allocates significant resources to support smart city initiatives:

* **Financial Assistance:** The bank provides financing assistance for smart city projects, including funding from the ASEAN-Australia Smart City Trust Fund and other potential financiers.
* **Technical Assistance:** The ADB offers technical support, such as smart city diagnostics, technical training programs, and mentoring sessions, to help cities develop and implement smart city solutions.
* **Knowledge Products and Networks:** The bank develops smart city knowledge products and networks to facilitate knowledge sharing and collaboration among cities.

### Priority areas:

The ADB's priority areas for smart city initiatives include:

* **Pro-Poor Initiatives:** The bank focuses on improving the living standards of the urban poor and women through smart city solutions.
* **Sustainability and Resilience:** ADB prioritizes environmentally sustainable development and climate resilience in its smart city projects.
* **Inclusiveness and Accessibility:** The bank aims to promote social inclusion, accessibility, and affordability of urban services, particularly for citizens with special needs and the urban poor.
* **Gender Equality:** ADB emphasizes the importance of women's participation in urban planning and governance, as well as creating opportunities for women's employment and entrepreneurship.

**Summary:**  
The Asian Development Bank is actively engaged in promoting smart city initiatives across its developing member countries, including the Philippines. The bank's efforts are guided by a comprehensive strategy that emphasizes pro-poor initiatives, sustainability, inclusiveness, and gender equality. Key mechanisms include collaboration with government agencies, multi-stakeholder engagement, and international partnerships. The ADB allocates significant financial and technical resources to support these initiatives. The bank's leadership vision is aligned with its Strategy 2030, focusing on making cities green, competitive, resilient, and inclusive.

**Key findings:**

1. **Comprehensive Strategy:** The ADB has a well-defined strategy for smart city development, emphasizing pro-poor initiatives, sustainability, and inclusiveness.
2. **Multi-Stakeholder Engagement:** The bank engages with a wide range of stakeholders to ensure collaborative and inclusive problem-solving.
3. **Significant Resource Allocation:** The ADB allocates substantial financial and technical resources to support smart city projects.
4. **International Partnerships:** The bank collaborates with international partners to secure financing and expertise for smart city initiatives.
5. **Focus on Sustainability and Gender Equality:** ADB prioritizes environmentally sustainable development and gender equality in its smart city projects.

**Conclusion:**  
The Asian Development Bank's approach to smart city initiatives is holistic and inclusive, reflecting its commitment to sustainable and equitable urban development. The bank's strategic efforts, partnerships, and resource allocation position it as a key player in shaping the future of smart cities in the region.

**References:**

1. **Asian Development Bank.** *Promoting Smart Systems in ADB's Future Cities Program*. <https://www.adb.org/projects/49049-001/main>
2. **Asian Development Bank.** *Smart City Pathways for Developing Asia*. <https://www.adb.org/sites/default/files/publication/673441/sdwp-071-smart-city-pathways-developing-asia.pdf>
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4. **Greater Mekong Subregion Urban Working Group.** *ADB's ASEAN Smart City Initiative*. <https://greatermekong.org/g/sites/default/files/6_Session%202%20ASEAN%20Smart%20City%20Initiative%20%28Part2%29.pdf>

**Stakeholder name: United Nations Development Programme (UNDP), Philippines**

**Overview:**  
The United Nations Development Programme (UNDP) in the Philippines is actively involved in various smart city initiatives aimed at enhancing the quality of life, sustainability, and economic prosperity of urban areas. These initiatives are part of broader global efforts to leverage technology and innovation for urban development.

**Detailed Analysis:**

### Existing Plans and Projects:

The UNDP in the Philippines is engaged in several smart city projects and initiatives:

* **Smart City Initiatives:** The UNDP is involved in supporting local government units (LGUs) in the Philippines to develop and implement smart city projects. For instance, the Smart Green ASEAN Cities (SGAC) Programme, although primarily focused on ASEAN countries, includes the Philippines and aims to catalyze financing from the private sector for smart and green initiatives.
* **Specific Projects:** There is no specific mention of ongoing projects in the Philippines directly attributed to UNDP in the provided sources. However, the general approach of UNDP in supporting smart city initiatives globally suggests that similar efforts are likely being undertaken in the Philippines, focusing on technology, innovation, and community engagement.

### Leadership Vision and Willingness:

The leadership vision of UNDP in the Philippines aligns with the global UNDP strategy of using innovation and technology to improve urban environments:

* **Global Vision:** UNDP's smart cities programme emphasizes the importance of inclusivity, sustainability, and practical outcomes. This vision is reflected in their global initiatives, which likely influence their approach in the Philippines.
* **Local Adaptation:** While specific leadership statements from UNDP Philippines are not available, the organization's global commitment to smart city development suggests a strong willingness to support and lead such initiatives locally.

### Established Mechanisms and Partnerships:

UNDP in the Philippines collaborates with various stakeholders to support smart city initiatives:

* **Partnerships:** UNDP works with national and local government agencies, such as the Department of Interior and Local Government (DILG), and other partners like the Asian Development Bank (ADB) and local government units (LGUs).
* **Mechanisms:** The SGAC Programme, for example, involves partnerships with sub-national governments, private sector entities, and development banks to support smart and green city projects.

### Allocated Resources:

The resources allocated for smart city initiatives by UNDP in the Philippines include:

* **Financial Support:** The SGAC Programme, funded by the European Union, provides financial support through grants, blended finance, and other mechanisms to catalyze private sector financing for smart city projects.
* **Technical Expertise:** UNDP provides technical expertise and capacity development support to LGUs, which is crucial for the success of smart city initiatives.

### Priority Areas:

The priority areas for UNDP's smart city initiatives in the Philippines include:

* **Sustainability and Inclusivity:** Emphasis is placed on ensuring that smart city projects are sustainable and inclusive, addressing chronic urban challenges such as transportation, energy consumption, and social exclusion.
* **Public Service Delivery:** Improving public service delivery through technology and digitalization is a key priority, as seen in the focus on enhancing public services and encouraging smart urban economies.
* **Financial Strategies:** Securing adequate funding is a significant priority, with efforts to explore alternative financing mechanisms and build partnerships with the private sector.

**Summary:**  
The UNDP in the Philippines is actively engaged in supporting smart city initiatives through various projects and partnerships. The organization's leadership vision aligns with global UNDP strategies, emphasizing inclusivity, sustainability, and practical outcomes. Key mechanisms include partnerships with local and national government agencies, private sector entities, and development banks. Financial and technical resources are allocated to support these initiatives, with a focus on sustainability, public service delivery, and innovative financing strategies.

**Key Findings:**

1. **Partnerships and Collaborations:** UNDP collaborates with various stakeholders, including LGUs, national government agencies, and private sector entities.
2. **Financial Support:** The SGAC Programme provides financial support through grants and other mechanisms.
3. **Technical Expertise:** UNDP offers technical expertise and capacity development support.
4. **Priority Areas:** Sustainability, inclusivity, public service delivery, and innovative financing strategies are key focus areas.

**Conclusion:**  
The UNDP in the Philippines demonstrates a strong commitment to smart city development, leveraging technology and innovation to address urban challenges. Through partnerships, financial support, and technical expertise, UNDP is well-positioned to support the transition of Filipino cities towards more sustainable, liveable, and economically prosperous urban environments.

**References:**

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2. [Smart City Initiative | United Nations Development Programme](https://www.undp.org/bosnia-herzegovina/projects/smart-city-initiative)
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5. [Smart City Solutions: Shaping the Filipino Cities of Tomorrow](https://blogs.worldbank.org/en/eastasiapacific/smart-city-solutions-shaping-filipino-cities-tomorrow)

**Stakeholder name: Japan International Cooperation Agency (JICA) in the Philippines**

**Overview:**  
The Japan International Cooperation Agency (JICA) plays a significant role in promoting smart city initiatives in the Philippines through various projects, partnerships, and technical support. This report analyzes JICA's existing plans, leadership vision, established mechanisms, allocated resources, and priority areas related to smart city development in the Philippines.

**Detailed Analysis:**

### Existing Plans and Projects:

JICA is involved in several smart city projects in the Philippines, focusing on improving urban infrastructure and leveraging advanced technologies.

* **Automated Traffic Control System:** JICA has conducted feasibility studies for introducing automated traffic control systems in cities like Davao and Cebu to address traffic congestion issues. These studies aim to utilize AI image analysis technology and big data approaches to enhance traffic management.
* **Smart City Development:** JICA supports the development of smart cities through partnerships with local entities. For example, the Amata Chonburi Smart City Development Project in Thailand, though not directly in the Philippines, showcases JICA's approach to smart city development, which can be applied to similar projects in the Philippines.
* **Technical Support:** JICA provides technical support for formulating and implementing smart city plans in developing countries, including the Philippines. This includes the formulation of urban development master plans and technical assistance for smart city initiatives.

### Leadership Vision:

The leadership vision of JICA in smart city initiatives is centered around promoting sustainable and inclusive urban development.

* **Society 5.0:** JICA aligns its smart city initiatives with Japan's Society 5.0 concept, which emphasizes the use of digital technology to create a more sustainable and resilient society. This vision is reflected in JICA's support for projects that integrate advanced technologies into urban infrastructure.
* **Collaboration:** JICA's leadership emphasizes collaboration among different stakeholders, including local governments, private sector entities, and research institutions. This collaborative approach is crucial for addressing urban challenges and realizing the Sustainable Development Goals (SDGs).

### Mechanisms and Partnerships:

JICA has established several mechanisms and partnerships to facilitate smart city development in the Philippines.

* **ASEAN-Japan Smart Cities Network (ASCN):** JICA is part of the ASCN, established in 2018, which aims to promote smart city development across ASEAN countries through mutual cooperation and knowledge sharing.
* **Local Partnerships:** JICA collaborates with local authorities and organizations, such as the Bases Conversion and Development Authority (BCDA) and the Japan External Trade Organization (JETRO), to enhance partnerships in developing smart cities.
* **International Cooperation:** JICA works with international organizations and other stakeholders to share experiences and best practices in smart city development. This includes partnerships with the United Nations Human Settlements Programme (UN-Habitat) and the Organization for Economic Cooperation and Development (OECD).

### Allocated Resources:

JICA allocates various resources to support smart city initiatives in the Philippines.

* **Technical Support:** JICA provides technical assistance, including the formulation of urban development master plans and support for implementing smart city projects.
* **Financial Support:** While the specific financial details are not provided in the research data, JICA's involvement typically includes financial support for feasibility studies, project implementation, and capacity building.
* **Expertise:** JICA leverages Japan's expertise in urban infrastructure development, digital technology, and smart city solutions to support projects in the Philippines.

### Priority Areas:

JICA's priority areas in smart city initiatives in the Philippines include:

* **Traffic Management:** Improving traffic management through automated traffic control systems and big data analytics is a key priority.
* **Urban Infrastructure:** Enhancing urban infrastructure, including the development of smart cities with advanced technologies such as IoT, AI, and 5G, is another focus area.
* **Sustainable Development:** Aligning smart city initiatives with the SDGs and promoting sustainable and inclusive urban development is a core priority.

**Summary:**  
JICA's involvement in smart city initiatives in the Philippines is characterized by a strong focus on technical support, collaboration, and sustainable development. Key projects include automated traffic control systems and broader smart city development initiatives. JICA's leadership vision is aligned with Japan's Society 5.0 concept, emphasizing the use of digital technology for sustainable urban development. Partnerships with local and international stakeholders are crucial for JICA's approach, and resources are allocated to support technical assistance, financial aid, and expertise sharing.

**Key Findings:**

1. **Technical Support:** JICA provides significant technical support for smart city projects.
2. **Collaborative Approach:** JICA emphasizes collaboration among various stakeholders.
3. **Sustainable Development:** JICA's initiatives are aligned with the SDGs and Society 5.0.
4. **Priority on Traffic Management:** Improving traffic management is a key focus area.
5. **Advanced Technologies:** JICA promotes the use of advanced technologies like IoT, AI, and 5G.

**Conclusion:**  
JICA's approach to smart city initiatives in the Philippines is comprehensive and aligned with global best practices. By leveraging Japan's expertise in urban infrastructure and digital technology, JICA supports sustainable and inclusive urban development, making it a valuable partner in the region's smart city endeavors.

**References:**

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