

Kaohsiung's Al City Vision: Al, 5G, Smart Healthcare, and Global Collaborations Take Center Stage

20 March 2025 | News

Deputy Mayor Charles Lin shares insights on how Kaohsiung is leveraging Al-driven governance, smart healthcare, and digital transformation at SCSE 2025.



At the Kaohsiung Smart City Summit & Expo (SCSE) 2025, Deputy Mayor Charles Lin discusses the city's ambitious plans to become a global leader in Al-driven urban management, smart healthcare, and sustainable infrastructure.

In this interview, he highlights Kaohsiung's cutting-edge AI initiatives, international partnerships, and the role of Taiwan's semiconductor advancements in shaping the future of smart cities.

Q1: Since digital and green transformation is the theme of SCSE, what are the primary goals Kaohsiung City Government aims to achieve through this event?

Charles Lin:

The primary goal of SCSE is to position Kaohsiung as a leading Al-driven smart city by integrating cutting-edge technologies such as 5G, Al, IoT, and smart industrial ecosystems. This year's event brings together 150+ exhibitors, 500 booths, and over 2,000 professionals from industries, governments, academia, and research institutions. Our focus is to establish international investment opportunities and strategic alliances, fostering industry collaborations and accelerating digital transformation.

Another critical objective is to encourage citizen participation. Many residents are unaware of the full potential of smart city solutions. Through SCSE, we aim to educate and engage the public, demonstrating how smart technology enhances daily life. Last year's event attracted over 40,000 attendees, most of whom were local citizens. With the rapid rise of AI and digital solutions, we expect even greater public engagement this year, improving services like transportation, medical care, and public safety through smart applications.

Q2: What strategies and initiatives is Kaohsiung City implementing to become an Al-driven smart city? How will Al enhance urban development, governance, and daily life?

Charles Lin:

Kaohsiung is actively integrating AI into governance and urban planning. We have launched the Smart AI City Initiative, which focuses on developing city-level generative AI platforms in collaboration with international and domestic tech enterprises. Our key strategies include:

- Al-powered city services Using real-time data analytics to improve traffic management, infrastructure planning, and public services.
- Cybersecurity and data privacy Developing locally trained AI models to ensure data security and privacy compliance.
- Al-assisted emergency response Implementing Al-driven predictive analytics to optimize disaster response and crisis management.
- Al-powered public transport solutions Launching an on-demand, Al-enabled bus system in remote and mountainous areas, ensuring better accessibility for residents.

Kaohsiung aims to become Taiwan's first fully Al-integrated city, optimizing transportation, healthcare, governance, and security to enhance urban living.

Q3: Smart City initiatives have seen major participation from medical centers. How is Kaohsiung innovating healthcare accessibility and quality for its residents?

Charles Lin:

Kaohsiung is a leader in smart healthcare innovation, with 18+ hospitals collaborating on Al-driven solutions. Some key initiatives include:

- Al-powered diagnostics and telemedicine Through federated learning, hospitals share medical insights while maintaining patient privacy. Al enhances medical imaging analysis, speeds up drug development, and personalizes treatment plans.
- Remote healthcare solutions Expanding telemedicine and wearable health technology to improve healthcare access in rural and underserved areas.
- Cross-institutional AI collaboration Partnering with AI research organizations and biotech firms to drive next-generation smart healthcare solutions, which are also being exported to Thailand and Ireland.
- Smart emergency response Utilizing AI to predict and manage healthcare emergencies, optimizing hospital resources and reducing patient wait times.

By integrating Al and digital health technologies, Kaohsiung is enhancing medical accessibility, efficiency, and innovation while establishing itself as a global hub for smart healthcare solutions.

Q4: How is Kaohsiung upgrading its infrastructure with smart technology? Can you share successful examples?

Charles Lin:

Kaohsiung is adopting next-generation smart infrastructure to improve urban management. Key initiatives include:

- Al-driven urban planning Integrating GIS, IoT, and mobile data to analyze urban activity patterns and optimize infrastructure development.
- Smart disaster management Using AI to predict flooding and extreme weather impacts, enabling proactive disaster prevention.

- Drone-based infrastructure monitoring Deploying Al-powered drones to monitor buildings, roads, and trees, enhancing disaster preparedness and city maintenance.
- Smart energy management Optimizing public energy consumption, reducing carbon footprints, and enhancing sustainability.

These Al-powered solutions are improving efficiency, resilience, and environmental sustainability in Kaohsiung.

Q5: What contributions does Kaohsiung aim to offer to other cities through SCSE, particularly in promoting smart city solutions globally?

Charles Lin:

SCSE serves as a global platform for sharing Kaohsiung's smart city innovations. Through 5G, AI, and blockchain, we are fostering international collaborations and exporting smart city solutions. Some highlights include:

- Al-powered crowd management Our system can efficiently manage large crowds, ensuring public safety and event security.
- Al-driven firefighting robots Designed to tackle industrial fires, with potential for global adoption.
- Smart healthcare exports Al-driven healthcare solutions are already being implemented internationally, including in Thailand and Ireland.
- Al city governance platform A scalable urban Al framework balancing data security, privacy, and smart governance.

By showcasing these innovations, Kaohsiung is positioning itself as a model for Al-driven urban transformation worldwide.

Q6: Taiwan Semiconductor Manufacturing Company (TSMC) plays a key role in advancing AI and digital transformation. How does Kaohsiung plan to leverage TSMC's contributions to smart city development?

Charles Lin:

TSMC's advancements in semiconductor manufacturing are positioning Kaohsiung as a hub for Al-driven innovation. These developments will:

- Boost AI capabilities Cutting-edge semiconductor technology will power high-speed computing for AI applications in transportation, energy management, and public services.
- Create a thriving tech ecosystem The expanding semiconductor sector will drive job creation and foster a highly skilled workforce.
- Accelerate Al-driven economic growth Advanced chip technology will fuel Al-powered industries, reinforcing Kaohsiung's leadership in digital transformation.

Kaohsiung is actively building an Al-powered urban framework, integrating smart technologies to enhance city governance and improve residents' quality of life.

Kaohsiung is committed to leveraging AI, 5G, and smart city solutions to enhance urban living, economic development, and international collaborations. The Smart City Summit & Expo (SCSE) serves as a pivotal platform for sharing these innovations with the world. Through technological advancements and strategic partnerships, Kaohsiung is setting a new global benchmark for AI-powered smart cities.