ARTICULATION REPORT 2025

C4IR MEDELLIN

With Local Ecosystem, and the World Economic Forum's Network of Centres for the Fourth Industrial Revolution

Medellín
Centre for the Fourth Industrial Revolution

ruta^n
MEDELLÍN
CENTRO DE INNOVACIÓN Y NEGOCIOS

Alcaldía de Medellín
Distrito de
Ciencia, Tecnología e Innovación

| Medellín |
| Centre for the |
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A city that believes in talent

Federico Gutiérrez Zuluaga, Mayor of Medellin

From Medellin, we are showing the world that our city possesses the ability to lead the Fourth Industrial Revolution. Being the District of Science, Technology and Innovation is not merely a title; it is a testament to this commitment. In our city, we believe in the power of technology to bridge gaps, build trust and, above all, to empower our people with the abilities that will allow them to adapt and prosper within this global transformation.

The alliance between Medellin and the World Economic Forum represents a firm step in this direction. The fact that our city hosts a Centre for the Fourth Industrial Revolution is proof of our potential. Thanks to this, Medellin is now positioned among the countries and cities steering the course of the digital age.

Throughout this year, C4IR Medellin has brought world-class opportunities to the city. It has connected business leaders and entrepreneurs with global initiatives; it has led training programmes, empowering young people and adults to develop the most in demand skills in the labour market; and it has ensured that the city's most innovative initiatives are recognized on global platforms both for their impact as well as their transformative capacity.

Moreover, C4IR Medellin is a reflection of how we understand progress: collaborating, learning and creating solutions that bring innovation to every corner of the Antioquian capital. In this way, Medellin is building a better future for everyone, today.

Medellin leads the Fourth Industrial Revolution with a vision that combines technology, inclusion and a shared future. As the District of Science, Technology and Innovation, the city—through C4IR—drives talent, connects global opportunities and demonstrates that true development is built through cooperation, learning and participation.

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A city converting global vision into local action

Jeremy Jurgens, Managing Director & Head of the Centre for Frontier Technologies and Innovation and Centre for Cybersecurity of the World Economic Forum

As the world navigates the transformations of the Fourth Industrial Revolution, Medellin stands as a powerful example of how technology can drive human development and promote more inclusive and sustainable societies. This city shows how innovation fulfils its purpose as it improves lives and expands opportunities.

As part of the World Economic Forum's global network, the Centre for the Fourth Industrial Revolution in Medellin has converted global perspectives into local actions, proving that progress is not defined by technological sophistication alone, but by the capacity to ensure that innovation strengthens institutions and generates real benefits for people.

Through its work in 2025 across artificial intelligence, education, GovTech and urban transformation, C4IR Medellin has proven that innovation with purpose can generate tangible results. **The World Economic Forum is proud to support this effort and to see how Medellin continues to inspire cities worldwide** in building a more inclusive digital future.

Innovation achieves its true meaning when it improves lives, strengthens institutions and opens opportunities. This is what Medellin represents, and why it continues to inspire cities across the globe in the construction of a more inclusive digital future.

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Innovating to build the Medellin of the future

Catalina Restrepo Carvajal, Director of C4IR Medellin

Innovation finds its true meaning when placed at the service of the city and its residents. This is our identity, and it serves as the starting point for everything we do at C4IR Medellin. This belief has guided our every action throughout 2025.

Being part of the World Economic Forum's Centre for the Fourth Industrial Revolution Network has allowed us to connect the city with a premier global ecosystem for knowledge, exchange and cooperation. And while we are recognised as the only centre in Latin America and the Spanish-speaking world, what truly fills us with pride is fulfilling our mission to work for the benefit of our people.

This year, we solidified our position as a bridge between global vision and local action. We leverage technology to provide solutions that improve public management, strengthen talent, generate opportunities and resolve the territory's real challenges. Along this path, artificial intelligence is the transversal axis that boosts our results and unifies our three workstreams: Education, Urban Transformation and GovTech.
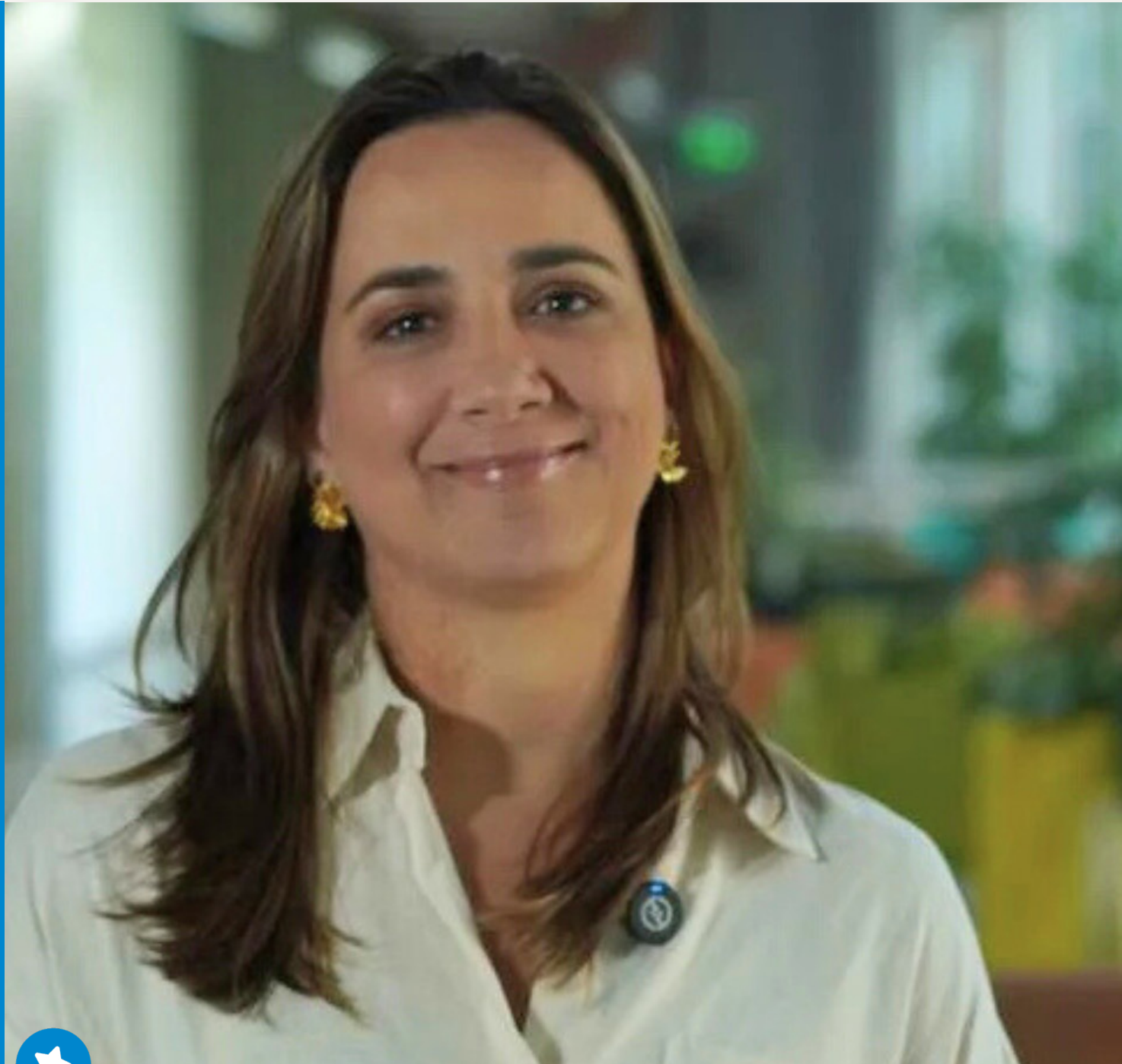
The future of Medellin is being written today, with technology, knowledge, and purpose. From C4IR Medellin, we will continue to champion a city that advances and integrates into the Fourth Industrial Revolution, leading it with a deeply human focus.

> At C4IR Medellin, innovation is a collective purpose. As the sole centre in Latin America, we connect the city with global knowledge to transform public management, strengthen talent and solve the territory's real challenges.

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A living laboratory of innovation for well-being and opportunity

Carolina Londoño, Executive Director, Ruta N

Since its creation, Ruta N has been the engine driving Medellin's vision as a global epicentre of science, technology and innovation. Today, more than ever, we are an active part of an ecosystem that not only promotes technological development but turns it into well-being, employment and new opportunities for the city and its residents.

The presence of the Centre for the Fourth Industrial Revolution (C4IR) at Ruta N reflects our conviction that Medellin has the capacity— and the responsibility—to lead technological transformations with social impact. By working hand-in-hand with public and private organizations, universities, entrepreneurs and citizens, we advance towards a city that is establishing itself as a living laboratory for innovation, where ideas become solutions and technology is designed with a humanistic purpose. Our alignment with the World Economic Forum's Global Network allows us to raise local standards, connecting Medellin with global best practices and accelerating projects that prepare the city for the challenges and opportunities of a sustainable digital economy. This cooperation expands our capabilities in artificial intelligence, data, technological governance, digital economy, health, the environment, and new models of public innovation.

In Medellin, we know that technology isn't an end, but a path to improving lives. That is why, from Ruta N, we champion projects that combine talent, institutional strength, and a shared vision. With C4IR, we are advancing data systems at the service of citizens, trustworthy AI frameworks, regulatory innovation, smart mobility pilots, climate solutions, and tools that strengthen business competitiveness. These are projects born in Medellin that converse with the world and return to our territories converted into real opportunities.

Ruta N is the epicentre of Medellin's innovation ecosystem and the articulator of its science and technology initiatives. From this strategic core, the city turns innovation into well-being, and transforms knowledge into real opportunities for its people. Here, the future is designed, tested, and developed with a humanistic purpose.

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The benefits of being connected to a global network

The city connects with the world through a network of strategic alliances that drive knowledge exchange, collaborative innovation, and a more sustainable, smart, and inclusive urban transformation.

"We believe technology is a tool that expands opportunities and removes barriers. At C4IR Medellin, our focus is on putting talent, collaboration, and innovation at the service of the city, building skills that allow Medellin to actively participate in emerging technologies."

Jorge Vargas Agudelo / Education Workstream

"We are proud to show the world the transformative power of Medellin, a city that inspires, innovates, and leads with purpose. At C4IR Medellin, we work to ensure its experience stands as a global benchmark for human-centric and sustainable innovation."

Pablo Montoya Escobar / Positioning

"Being part of the Global Network of Centres for the Fourth Industrial Revolution allows us to connect with international experts and peers, and secure alliances that will strengthen the District's GovTech capabilities and initiatives. Similarly, we were able to share Medellin's experiences in the GovTech Intelligence Hub, highlighting how our District is moving towards a more agile, digital, and citizen-centred public management. This is how we foster stronger links between our city and the world."

Adriana D'Amato Gutiérrez / GovTech Workstream

"Being part of C4IR Medellin has been an opportunity to connect wills and contribute to the city's digital transformation. Through this coordination, we have managed to open doors, combine capabilities, and build alliances that bring citizens, the public sector, and companies closer to a more inclusive and innovative future."

Ana Carolina Ospina Olaya / Ecosystem Connection

"Our work within C4IR Medellin Urban Transformation workstream represented an opportunity to bolster our city's management through the adoption of emerging technologies, analysis of international best practices, knowledge transfer, and collaborative innovation. This workstream promotes the development of more sustainable, smart, and inclusive urban environments, coordinating efforts with the World Economic Forum and different District secretariats to co-create solutions that respond to modern urban challenges."

Marysol Arcila González / Urban Transformation Workstream

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Thanks to the leadership of C4IR Medellin and its global network, our city has positioned itself as an international benchmark in public innovation, digital skilling, and smart urban development. These are the results of management that puts technology in the service of the people.

In 2025, Medellin cemented its status as a global benchmark for leveraging technology to transform the territory and to improve its citizens' quality of life. Through the Centre for the Fourth Industrial Revolution of Medellin (C4IR Medellin), this vision took shape via strategic partnerships, capacity-building initiatives, and international recognition. Consequently, innovation became the driving force for human-centric development. Below, we present some of the most relevant achievements of our management approach:

- **Thousands of citizens trained to thrive in the digital era**

  Thanks to the alliance between C4IR Medellin and Google, the city took a decisive step in training talent in generative artificial intelligence and cloud computing technologies.

- **Over 1,000 young people prepared to build the Medellin of tomorrow**

  Within the framework of the EstudIA project, students from four public secondary schools in the District, in grades 9, 10, and 11, were trained in digital skills, including chatbot creation, data analysis, artificial intelligence, and web development—key tools for leading the Fourth Industrial Revolution.

- **Medellin is recognised by the World Economic Forum and joins the world leaders of government digital transformation**

  C4IR Medellin was included in the World Economic Forum's Global GovTech Network, a community that integrates public and private sector leaders to drive governmental digital transformation, alongside the centres in Berlin and Kyiv.

- **Three global alliances driving Medellin towards a more agile and efficient public management**

  C4IR Medellin established strategic alliances with the centres in Berlin, Kyiv, and Malaysia, aimed at bolstering the District's capabilities through knowledge transfer processes. This exchange seeks to accelerate project design and implementation timelines while optimizing resource allocation.

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- **Three Medellin projects acknowledged by the World Economic Forum for their GovTech practices**

  Reaffirming our city's dedication to a more open, efficient, and citizen-centric public management, C4IR Medellin championed the international recognition of three District initiatives in the World Economic Forum's GovTech Intelligence Hub.

- **C4IR Medellin and the World Economic Forum led the conversation on public innovation and digital transformation at a city event dubbed MED360**

  Within the framework of MED360, a co-branding segment was developed with the World Economic Forum, consolidating Medellin as an epicentre for international debate on GovTech, data, and artificial intelligence.

- **Medellin designated by the World Economic Forum as one of six pioneering cities in urban transformation at a global level**

  Thanks to C4IR Medellin's work, our city was selected by the World Economic Forum and the Davos Baukultur Alliance to be part of the Pioneering Places Programme. This designation recognises Medellin's leadership in using innovation, sustainability, and urban culture to improve its citizens' quality of life.

This recognition will allow the city to participate in a yearlong global peer-learning exercise, sharing its experiences and lessons in urban transformation. Likewise, it will learn from other pioneer cities about policies and projects that promote smarter, more sustainable people-centred territories.

- **Two District companies spotlighted by the World Economic Forum among the world's best AI solutions**

  Argos and Corona stood out on the global stage for developing artificial intelligence solutions with real impact and sustainability. This distinction was achieved through C4IR Medellin's leadership as the ambassador for Latin America in the World Economic Forum's MINDS programme.

- **Medellin featured in a World Economic Forum article for its use of mobility as a tool for urban transformation**

  The World Economic Forum featured our city in the article "Place-Based Mobility: How Better Transport Can Create Better Places". The report recognizes Parques del Río and Parque Primavera Norte as global benchmarks for their proposal to rethink and optimize public spaces, prioritizing the improvement of citizens' quality of life.

"This is the Medellin we believe in. A city that grows from its neighbourhoods, reconnects with its river, and rediscovers itself in its parks," said Mayor Federico Gutiérrez Zuluaga. This recognition reaffirms the dynamic management of C4IR Medellin.
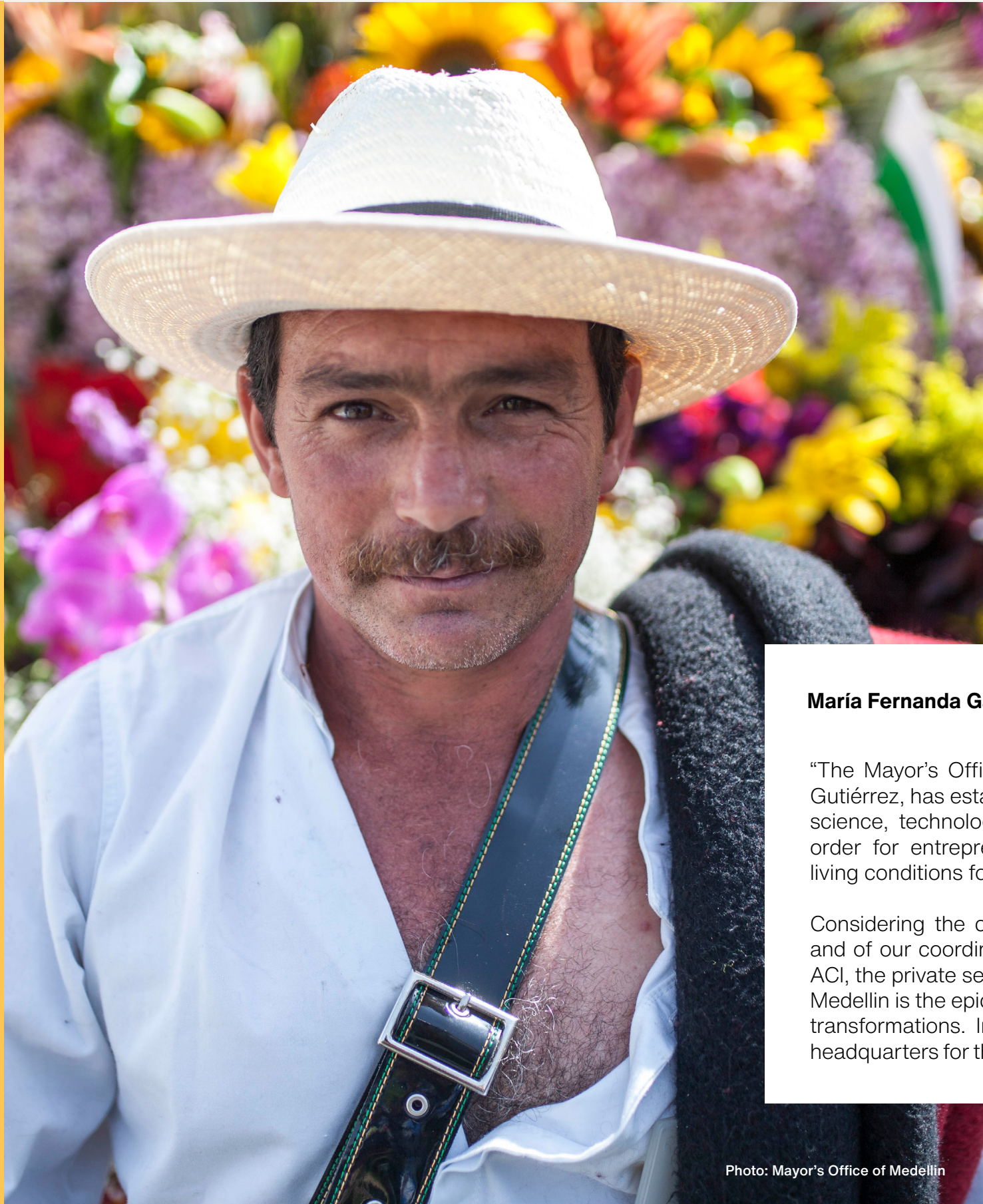

Photos: Mayor's Office of Medellin

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C4IR Medellin, the only centre within Latin America in the World Economic Forum's Global Network of Centres for the Fourth Industrial Revolution, brings together the public sector, private enterprise, and citizens to drive advances in education, GovTech, and sustainable urban transformation.

Medellin's transformation process has turned the city into an international reference and an example of how innovation can drive a territory's development, as well as improve its people's quality of life. This achievement was attained thanks to the strategic use of technology to solve urban and social challenges, applying novel solutions to daily life. This vision was reinforced by the city's designation as a Special District of Science, Technology, and Innovation. As part of the effort to strengthen its innovation ecosystem, the signing of the partnership agreement between the World Economic Forum and Ruta N in September 2024 marked a new milestone for the city with the establishment of the Centre for the Fourth Industrial Revolution of Medellin (C4IR Medellin), officially integrating it into the World Economic Forum's Global Network.

María Fernanda Galeano Rojo, Secretary of Economic Development for the District of Medellin

"The Mayor's Office of Medellin, led by our Mayor Federico Gutiérrez, has established the city as a solid ecosystem where science, technology, and innovation are transversal axes in order for entrepreneurship to flourish and generate better living conditions for our inhabitants.

Considering the changes the current world demands of us, and of our coordinated work with institutions like Ruta N, the ACI, the private sector, and our citizens, today we can say that Medellin is the epicentre of significant social and technological transformations. In 2016, Medellin was honored to become headquarters for the Centre for the Fourth Industrial Revolution (C4IR Colombia) of the World Economic Forum, affirming its leadership in Industry 4.0 policies, a distinction which it recovered in 2024, upon Federico Gutiérrez's return as the city's mayor.

Today we are convinced that joint work and the will to continue betting on spaces for leadership development — like the one currently offered by the Centre for the Fourth Industrial Revolution based in Medellin, being the only Spanish-speaking one — require us to seek more allies, to cross borders, and to create spaces where the city will continue to flourish for its people."

Photo: Mayor's Office of Medellin

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Ruta N:
A world-class host

To ensure that the Centre for the Fourth Industrial Revolution of Medellin (C4IR Medellin) had a solid anchor, Ruta N was chosen as its host entity. Since its creation, it has been the hub of the city's science, technology, and innovation ecosystem.

Fulfilling its mission, Ruta N promotes projects that connect local and international institutions and has positioned Medellin as a Latin American leader in purpose-driven innovation.

Its trajectory, convening power, and deep knowledge of the territory make it the ideal institution to host the Centre, enabling it to translate the World Economic Forum's global vision into concrete results for Medellin and its people.

Ruta N catalyzes a Medellin that grows through science, technology, and innovation.
The presence of C4IR Medellin, in alignment with the World Economic Forum's Global Network, enhances capabilities in artificial intelligence and initiatives that drive digital transformation and public innovation. It scales projects connected with international best practices, delivering solutions that translate into socio-economic opportunities for its citizens.

Photo: Ruta N

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Medellin in the Global Network for the Fourth Industrial Revolution

C4IR Medellin is a proud member of the World Economic Forum's Centre for the Fourth Industrial Revolution Network (C4IR Network), a global ecosystem comprising 22 centres across five continents to accelerate the responsible adoption of frontier technologies.

Its mission is to put technological progress at the service of equitable economic and social transformation, centered on its people. The network amplifies its impact by leveraging the work of communities, initiatives, and the convening power of the World Economic Forum, as well as its infrastructure and international visibility.

Being part of this network positions Medellin on a world-class stage, facilitates the exchange of insights, fosters best practices, and makes it possible to attract strategic alliances.

Michigan, USA
San Francisco, USA
New York, USA
Austin, USA
Berlín, Germany
Geneva, Switzerland
Kyiv, Ukraine
Kazakhstan
Serbia
Azerbaijan
Bejing, China
Tokyo, Japan
Israel
Korea
Qatar
Saudi Arabia
UAE
Space Futures
Oman
Munbai, India
Cyber Economics
Medellín, Colombia
Telangana, India
Vietnam
Malaysia
Rwanda
South Africa

📍 4IR Centres
📍 World Economic Forum Offices

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Photos: Mayor's Office of Medellin

A Centre that transforms technology into opportunities for the City

Besides being the only network Centre in Latin America and the Spanish-speaking world, C4IR Medellin possesses a high-impact added value proposition that goes beyond its location. While other centres concentrate their efforts on specific technologies or sectors, our Centre adopts a human-centric approach.works by its people and for its people.

Its goal isn't to develop technology for technology's sake, but to convert leverage it into a tool for efficient public management, talent trainingdevelopment, opportunity generation, and the creation of solutions that respond to the city's unique challenges and opportunities.

Diego Bustamante, Deputy Head of Latin America at the World Economic Forum

From the World Economic Forum's Latin American agenda, we are excited to continue collaborating with this Centre because it represents a clear vision from Medellin that is urgent for the entire region: integrating innovation and digital transformation with inclusion and opportunities for its people. With this effort, Medellin doesn't just connect with a leading global network in technology management, but builds concrete collaborations and shares its experience, advancing ever further as an international point of reference.

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Alliances that strengthen us

To strengthen its work, C4IR Medellin leads a strategy based on alliances that turn vision into action. The Centre connects the public sector, companies, universities, and startups to co-create projects, exchange knowledge, and scale techno-logical solutions with real impact on the territory. This approach aligns with the city's development plan "Medellin Te Quiere" (Medellin Loves You), which recognises the importance of cooperation and the internationalisation of Medellin as the Science, Technology, and Innovation District. Through these partnerships, C4IR Medellin seeks to con-tribute to the integral development of the region and the enhancement of local capabilities.

This vision emerged from a co-creation process carried out during the first months of 2025, involving public conglomerate entities, universities, companies, citizen organisations, and experts from the World Economic Forum. The process culminated in the development of the Centre's first work plan, which establishes its three strategic workstreams: Education, GovTech, and Urban Transformation, each articulated through artificial intelligence as a transversal axis. Together, these workstreams are designed to drive Medellin's development and enhance the well-being of its inhabitants.

Workstreams

Artificial Intelligence

AI acts as the backbone that connects and empowers every initiative at C4IR Medellin. Whether addressing urban transformation, building digital capacity, or driving innovation in digital government (GovTech), AI remains the core focus of our operations.

Our strategic vision champions the responsible, ethical, and inclusive implementation of Artificial Intelligence as an engine for development and a vital tool for addressing urban, social, and economic challenges. We deliver this through three strategic workstreams: Education, GovTech, and Urban Transformation.

GovTech

We are positioning the city as a regional leader in applying emerging technologies to the public sector. We connect the different agencies of the District and the Public Conglomerate with the methodologies, expertise, and solutions needed to accelerate and scale innovative initiatives that address local challenges.

Education

Our aim is to ensure that children, young entrepreneurs, businesses, public servants, and the broader community are equipped with the necessary tools they need to adapt and thrive in an environment increasingly shaped by artificial intelligence.

We adopt a strategic vision that promotes the responsible, ethical, and inclusive use of AI as both a driver of development and a critical tool for addressing complex urban, social, and economic challenges.

Urban transformation

We are driving urban transformation through the seamless integration of emerging technologies into urban planning and infrastructure development. This strategy is solidifying Medellin as a pioneering smart city on the global stage.

Photo: Mayor's Office of Medellin

Artificial Intelligence with a City Vision

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Photo: Mayor's Office of Medellin

Artificial Intelligence with a City Vision

Medellin is a global example of how to use technology with humanity, with its people at the center of its vision for development.

Artificial intelligence (AI) has changed the way we conceive of technological progress. What once seemed like a distant promise is now a reality reshaping people's lives, transforming how cities operate, and reconfiguring organizational dynamics worldwide. Beyond its technical implications, the advancement of AI poses social, ethical, and cultural challenges that require urgent solutions aimed at guaranteeing its responsible adoption and use.

This rapid expansion of AI is transforming productivity and business models, and revolutionising daily life, spanning healthcare, mobility, logistics, and urban planning. For these reasons, nations, cities, and companies are betting on pragmatic and ethical approaches that prioritise responsible AI implementation over accelerated disruption.

Amidst this revolution, cities are reinventing themselves as living laboratories for innovation and the implementation of AI. Medellin is no stranger to this transformation: as the Special District of Science, Technology, and Innovation, the city has assumed its resolve to lead this change, driving a people-centred vision of technological development.

This strategic vision requires training talent, fortifying local capabilities, and promoting a culture of innovation that responds to the city's pressing needs.

> Globally, artificial intelligence has consolidated itself as a strategic priority. Its adoption now exceeds 75% among companies worldwide, driving historic investments that reached over USD 109 billion in 2024, with sustained growth in areas like generative AI.
>
> **Stanford University (2025)**

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AI at the service of a more ethical and efficient public management

The establishment of C4IR Medellin demonstrates the District's dedication to the responsible use of AI by connecting global methodologies and benchmarks to local capabilities. Likewise, it projects to the world the experiences that have positioned the city as an international reference in innovation and development.

This same transformative impulse is also reaching the public sector. Artificial intelligence is redefining the way governments operate, plan, provide services, and advance their institutional modernization. Public institutions are increasing their use of AI to bolster transparency and efficiency in procurement. Furthermore, AI drives the development of public artificial intelligence infrastructures, allowing governments greater sovereignty over their data and models, thereby ensuring compliance with ethical principles and privacy standars.

This global trend marks the transition towards more agile and inclusive governments, where technology becomes a powerful tool for making efficient and timely decisions that improve citizens' well-being and quality of life.

AI has become an essential component of the State's digital transformation, allowing governments to evolve from reactive models to proactive models capable of predicting needs, optimizing resources, and personalizing citizen services.

Photo: Mayor's Office of Medellin

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Technology with clear rules, real impact, and social responsibility

Given this landscape, Medellin has a unique opportunity, supported by progress in the national regulatory framework and public policy for AI. November 2019 saw the approval of CONPES 3975 and the National Policy for Digital Transformation and Artificial Intelligence—a significant milestone that establishes Colombia as a regional leader in AI governance and implementation.

Beyond policies and strategies concerning usability and control, Medellin is already actively deploying Artificial Intelligence to transform life across the city. From virtual assistants that streamline access to public services and intelligent mobility pilot schemes to enhanced video security, the city demonstrates that AI is an effective tool for solving real-world problems.

These advancements position Medellin as a living laboratory for public innovation, where technology is responsibly integrated to serve citizens, generating insights that can be applied both nationally and internationally.

Regarding urban transformation, AI is emerging as a structural pillar for the design of smart, sustainable cities focused on enhancing their residents' quality of life.

However, international bodies concur that the effective adoption of AI in urban environments depends on three fundamental factors:

▪ A robust digital infrastructure.

▪ Equitable data practices.

▪ Governance frameworks that promote transparency and citizen participation.

Thus, Artificial Intelligence, when responsibly implemented, does more than just make urban operations more efficient: it transforms the way cities listen to, understand, and respond to the needs of their residents.

Cities that integrate AI into their urban management systems through tools such as digital twins, advanced territorial analytics, and machine learning are able to anticipate mobility flows, optimise energy consumption, manage security, and enhance local governance. In this way, they configure urban models that are both more efficient and geared towards citizen well-being.

Digital *twin cities:* Framework and Global Practices Report World Economic Forum (2022)

Colombia demonstrates a superior performance compared to the regional average in terms of AI vision, institutional capability, and adoption, primarily due to the early definitions established within its legal and regulatory framework.

Latin American AI Index (ILIA), 2025

Photo: Mayor's Office of Medellin

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Educating with AI means closing gaps and opening opportunities

In the domain of education and citizen empowerment, global trends concur that the priority is no longer simply transforming educational systems; it is also about ensuring that all individuals can access and benefit from the use of Artificial Intelligence. Closing the digital and social divide is an indispensable condition for building a more equitable society, prepared to seize the opportunities of this new technological era.

These new dynamics necessitate that individuals, from children and young people to entrepreneurs, public servants, and the general citizenry, acquire the essential tools to adapt and thrive in a constantly evolving environment.

However, UNESCO (2024) warns that the pace of acquiring these competencies is uneven. 'While some groups and countries progress rapidly, others are being left behind, deepening existing inequalities,' it highlights.

For this reason, training in digital skills, Artificial Intelligence, computational thinking, and technology ethics is deemed an essential tool for accessing knowledge, employment, and citizen participation.

AI literacy, understood as the capacity to comprehend, use, and critically question this technology, is therefore established as a fundamental component of human development and a precondition for equity in the digital age.

Closing the digital and social divides is an essential condition for building a more equitable society, prepared to take advantage of the opportunities of this new technological era.

Photos: Mayor's Office of Medellin

39%

Of core skills will change in the next five years, and AI related skills—such as analytical thinking, resilience, flexibility, and agility—will be highly valued in the labour market.

The Future of Jobs Report,
World Economic Forum (2025)

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Joint work to provide accessibility, equity and connectivity

The 'EstudIA' project demonstrates the District's progress in expanding access to emerging technologies. Led by the Mayor's Office of Medellin, the initiative seeks to upskill 50,000 young people in digital skills to enhance their performance in tech-driven industries, facilitate their labor market integration, and connect them with the opportunities of the global digital economy

This initiative is aligned with the vision of an economy transforming around 4.0 technologies, positioning Artificial Intelligence as a key driver for the city's economic and social development. In this same direction, Medellin's academic ecosystem is actively responding to this transformation.

These global trends confirm that AI is redefining how governments, cities, and individuals address the challenges of the 21st century. Crucially, they also highlight that the speed and depth of this transformation depend on strengthening local capabilities. This requires a skilled talent pool, adequate technological infrastructure, and agile governance frameworks capable of responding to the most pressing and critical needs of their communities.

Universities and training centres have enhanced their educational offering with specialized programmes in Artificial Intelligence, data science, and advanced analytics, complemented by practical application projects and partnerships with the private sector. This joint effort positions Medellin as a city that does not only incorporates technology but establishes it as a strategic pillar of its educational model.

AI Capabilities and Opportunities Diagnosis, C4IR Medellin, 2025


Photo: Mayor's Office of Medellin

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Challenges and opportunities of the District's innovation ecosystem

To better understand these capabilities and opportunities, in 2025, C4IR Medellin conducted the 'AI Capabilities and Opportunities Diagnosis' to identify the current status of the District's innovation ecosystem against global trends. Its main findings reflect current challenges while revealing vast potential for transformation.

Likewise, the diagnosis also highlighted the strategic opportunities for the city:
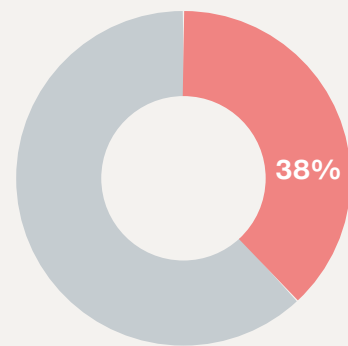
38% — Only 38% of organisations within Medellin's innovation ecosystem are currently applying AI or advanced analytics tools.
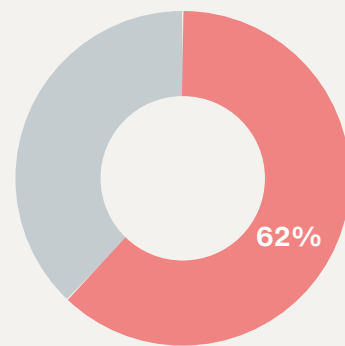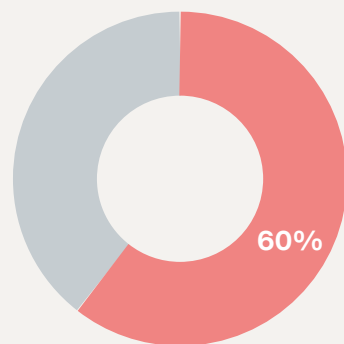
62% — 62% remain in exploratory or planning stages.
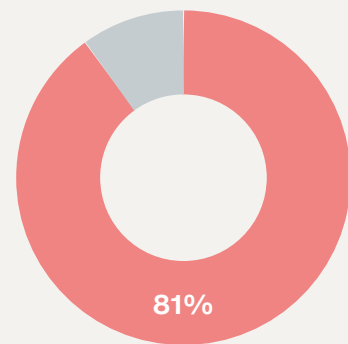
81% — 81% of surveyed companies expressed interest in incorporating AI within the next three years, particularly in areas like automation, customer service, education, and mobility.
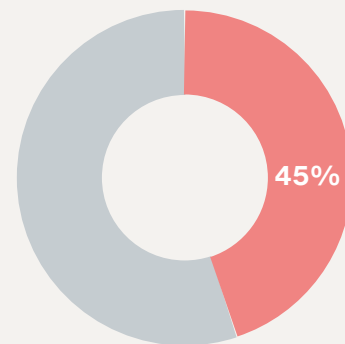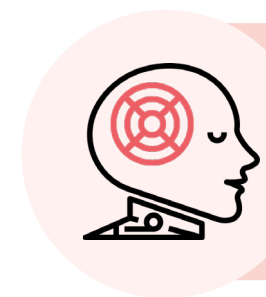
45% — 45% of companies identify the lack of specialised personnel as the primary barrier to AI adoption.
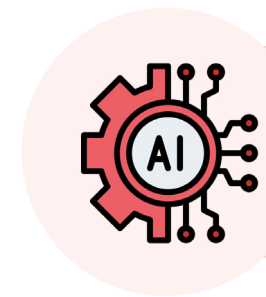
60% — 60% of existing training programmes focus on basic or technical levels, highlighting the need to strengthen advanced training and talent retention.
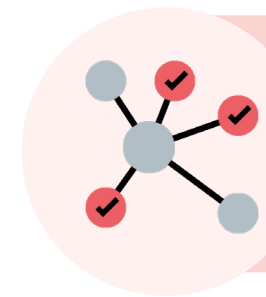
Medellin boasts over 120 actors linked to the innovation and data science ecosystem, and 14 higher education institutions already include Artificial Intelligence components in their academic programmes.

71% of public actors consulted consider AI a key instrument for urban planning, risk management, and citizen services.

Medellin possesses a robust and articulated ecosystem but requires progress in digital infrastructure, connectivity, R&D investment, and social appropriation programmes to cement its status as a regional model for the ethical, responsible, and purposeful adoption of Artificial Intelligence.

Our Workstreams

Education
- EstudIA
- Alliance with Google

Urban Transformation
- Pioneering Places Programme

GovTech
- Open Data Policy Diagnosis
- World Economic Forum's GovTech Intelligence Hub

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Photo: Mayor's Office of Medellin

Education

The key to building a more competitive, inclusive, and future-ready Medellin.

The technological transformation driven by Artificial Intelligence has placed human talent development at the center of debate, making it a fundamental challenge. The capacity for individuals to adapt to shifts in the labour market and social dynamics increasingly depends on their mastery of digital skills. In this context, education becomes the crucial starting point for building a future-ready city.

Facing this scenario, Medellin has chosen to respond with a future-oriented vision. The District Development Plan 2024-2027, 'Medellin Te Quiere' (Medellin Loves You), recognizes that the rapid transition towards the digital economy demands a robust response. While the city benefits from a solid innovation ecosystem, gaps still persist in upskilling the talent capable of taking on the challenges of the Fourth Industrial Revolution. Therefore, the District is implementing a comprehensive strategy to ensure that training addresses the real demands of the economy and expands opportunities for participation. This is, in essence, a mandate to transform Medellin into a territory where knowledge is the catalyst for its development.

C4IR Medellin has embraced talent development as a top priority. The Centre recognises that training in digital skills, beyond responding to market needs, is fundamentally a way to ensure that all citizens understand and navigate an ever-changing world.

For this reason, the Centre incorporates leading global insights and best practices into the city's policy frameworks to foster the responsible adoption and deployment of technology, aiming to drive a more inclusive and competitive Medellin.

> Thanks to technology, learning to use Artificial Intelligence and digital tools is more than a skill; it is a way to participate, adapt, and ensure a better quality of life.
>
> With the 'Medellin te quiere' Development Plan, the city is implementing an inclusive educational scheme that opens doors, empowers individuals, and prepares its people to build the future with confidence and well-being.

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Educational projects

EstudIA

As part of the District Administration's pledge to training 50,000 young people in digital skills, Ruta N, via C4IR Medellin, supported the Secretariat of Education in training 1,011 students from grades 9, 10, and 11 enrolled in four public secondary schools from the District: Institución Educativa Octavio Calderón Mejía, Instituto Técnico Industrial Pascual Bravo, Institución Educativa San José Obrero, and Institución Educativa Alfonso Mora Naranjo.

Using a project-based, collaborative methodology, these students applied their knowledge to solve challenges within their educational and social environments.

Grade 11 students received strategic mentorship in employability competencies and career counselling, preparing them to make informed decisions about their academic and professional future, thereby becoming agents of change for the Medellin of tomorrow. This project represents much more than a training programme: it is an investment in making our vision for the future a reality.

The project will be continued in 2026, solidifying its role as a pillar of the city's strategy for young talent development.

Key achievements:

The project has enabled young people to develop crucial 21st-century skills:

- Computational thinking.
- Data analysis and visualisation.
- Fundamentals of Generative Artificial Intelligence.
- Strengthening their ability to learn, create, and lead in the Fourth Industrial Revolution.

On November 13, 2025, the best projects presented by each grade were awarded. Some of the highlights included a tourism app (9th grade), an online soap store (10th grade), and a digital marketing campaign focused on green fashion (11th grade).
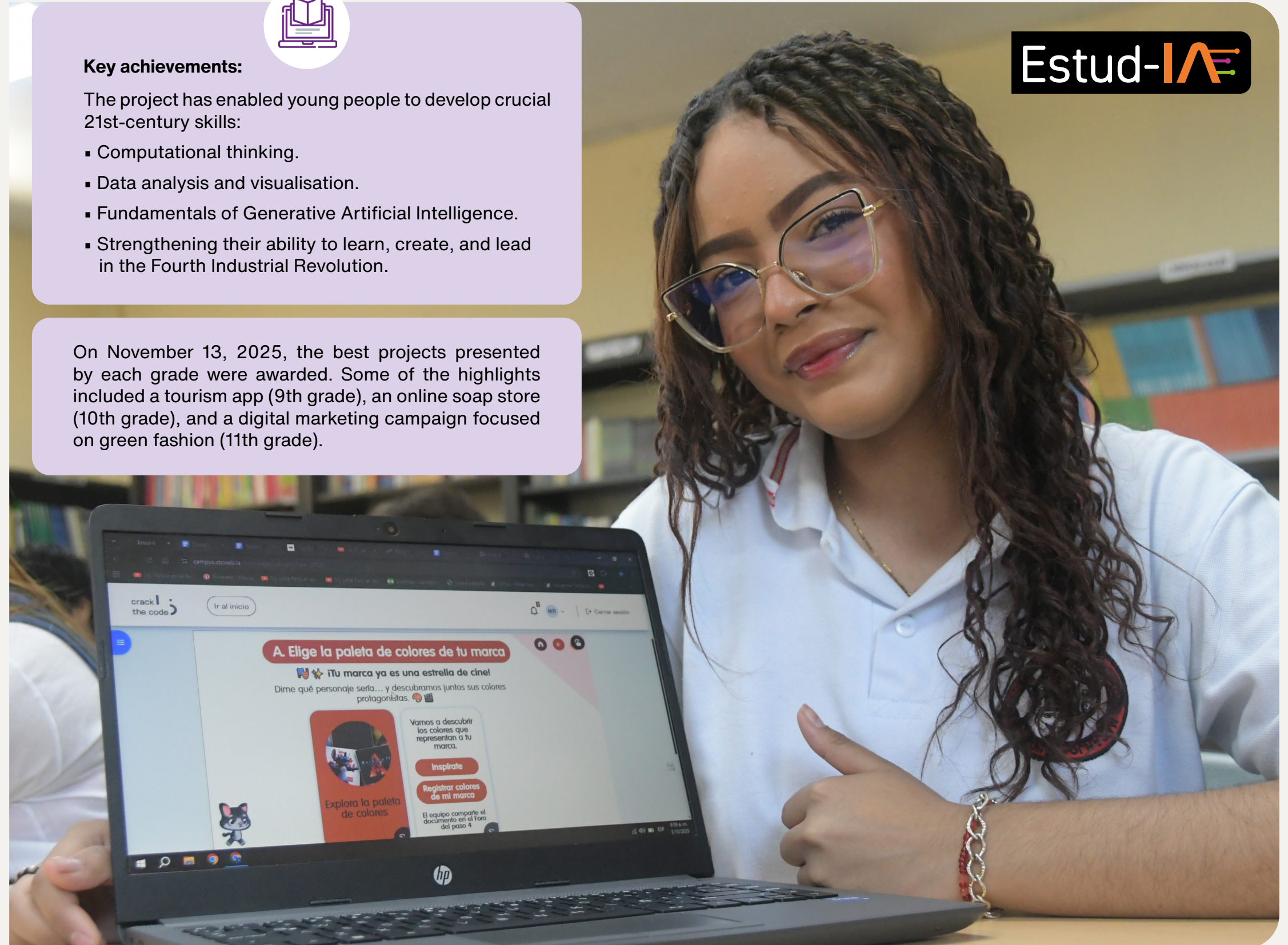
Photo: Secretariat of Education, Medellin

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Photo: Mayor's Office of Medellin

Alliance with Google

In order to further digital inclusion and large-scale training in emerging technologies, C4IR Medellin formalized an alliance with Google to provide citizens of the Metropolitan Area with the opportunity to train in Generative Artificial Intelligence and Cloud Engineering.
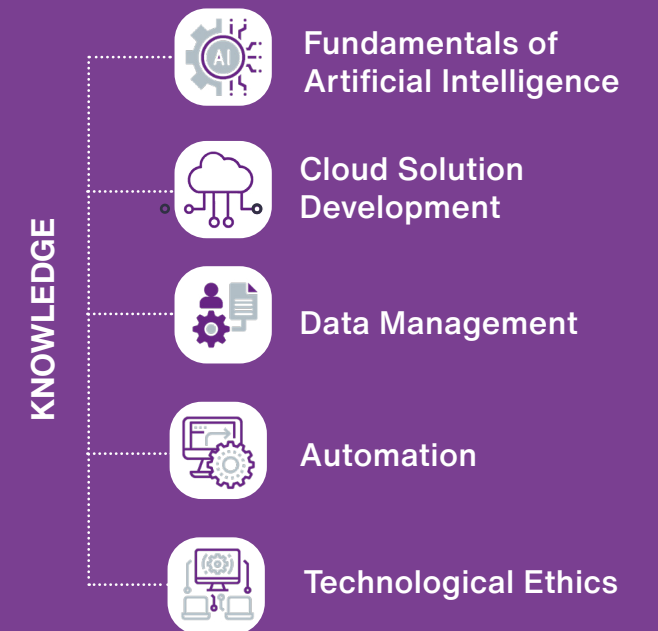
This ongoing project aims to train up to 10,000 participants, ranging from individuals with no prior experience seeking to enter the technology field to professionals seeking to upskill or pivot their careers. As of the writing of this report, 2,357 participants have completed their training process.

With this initiative, C4IR Medellin reaffirms its mission to democratize democratizing technological knowledge, promote equitable access to specialisedspecialized, high-quality training, and empowering digital talent while fostering a local ecosystem prepared to meet the challenges and opportunities of the future.

Key Programme Features

The programme is delivered through progressive learning paths that integrate theoretical frameworks, practical application, and specialized technical support. Using the Google Cloud Career Launchpad, participants cultivate high-demand expertise in:

KNOWLEDGE

- **Fundamentals of Artificial Intelligence**
- **Cloud Solution Development**
- **Data Management**
- **Automation**
- **Technological Ethics**

Fabio La Selva, Head of Learning, Google Cloud Latam

At Google Cloud, we are committed to talent development for the technology market across Latin America by partnering with higher education institutions, as well as governmental and non-profit organisations throughout the continent. In Medellin, C4IR, hosted by Ruta N, is one of our allies with great potential to scale up training efforts, providing the people of Medellin and the Metropolitan Area with Google Cloud content and expertise—specifically in Artificial Intelligence—which will help them stand out in the technology market and exponentially increase their employability.

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Photo: Mayor's Office of Medellin

Urban Transformation

Medellin has turned territorial challenges into opportunities for urban transformation improving the quality of life of its residents. Today, as the District of Science, Technology, and Innovation, the city integrates sustainability, coexistence, and collective knowledge.

Medellin has undergone constant transformation. Every reclaimed space, every mobility project, and every piece of infrastructure built has been an opportunity to connect people, revitalize neighborhoods, and improve the daily lives of its citizens.

What distinguishes Medellin is that innovation is not just technological—it is also cultural, social, and profoundly collective. The city has built its progress on a foundation of trust, understanding that true transformation happens when people participate, collaborate, and truly see them-selves as part of a common purpose.

Urban transformation has been one of Medellin's most powerful hallmarks for decades. Today, the city reaffirms this vocation with its designation as the District of Science, Technology, and Innovation, advancing towards an urban development model that combines sustainability, connectivity, and quality of life.

In Medellin, transforming the territory means building with purpose, integrating innovation, knowledge, and citizen participation into every step of its planning.

These city-led priorities also shape the work of the Centre for the Fourth Industrial Revolution Medellin (C4IR Medellin), which supports this agenda through its Urban Transformation workstream. The Centre works to ensure that Medellin's experiences —its learning models, management practices, and urban impact projects— can be shared internationally, demonstrating how a city can innovate within its territory to build well-being.

Likewise, C4IR Medellin seeks to connect these experiences with the knowledge and best practices that other countries and cities worldwide have been developing, forging strategic partnerships that accelerate local transformation processes.

Thus, Medellin evolves and shares its approach-es with the world. This urban transformation be-comes a strong connection between the city and its citizens, linking knowledge and action, com-bining local experience and global cooperation. A bridge where C4IR Medellin reaffirms itself as the space from which the District engages in dialogue, learns, and leads the future of urban reinvention.

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Photo: Mayor's Office of Medellín

Jeff Merrit, Head of the Centre for Urban Transformation, Executive Committee Member, World Economic Forum

"Our collaboration with C4IR Medellin over the past year has been a powerful example of how local innovation can inspire global transformation. Medellin's remarkable story continues to serve as a beacon for cities worldwide, showing what's possible when technology, inclusion, and vision come together. Through our partnership, we're helping share these lessons with the global community while opening pathways for partners to join Medellin's ongoing journey of reinvention".

Sibylle Barden, corporate board advisor, and global strategist. Creator and host of the *Der Große Neustart podcast*

"Medellin is proof that collaboration can rewrite a city's destiny. In my conversation with Catalina Restrepo, I witnessed how C4IR Medellin turns technology into trust, innovation into inclusion, and purpose into progress. It reminds the world that the Fourth Industrial Revolution is not about machines, it's about humanity working together to build a future that belongs to everyone."

Foto: Alcaldía de Medellín

The vision of a city that advances hand-in-hand with technology and innovation materialises through the integration and alignment of several pillars:

▪ **Modern infrastructure.**

▪ **Cleaner, more efficient mobility.**

▪ **Public spaces that promote peaceful coexistence.**

▪ **Projects that deepen the bond between communities and their environment.**

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Urban Transformation

Pioneering Places Programme

Medellin was honoured to be selected as one of six cities participating in the Pioneering Places Programme, an initiative by the World Economic Forum and the Davos Baukultur Alliance. The program brings together leading global cities to advance projects aimed at improving quality of life through innovation, sustainability, and urban culture.

Alongside Kuala Lumpur, Montreal, Nairobi, San Francisco, and Utrecht, Medellin stands out as the only city representing Latin America, reaffirming itself as an international benchmark in urban transformation and sustainable development.

This recognition reflects C4IR Medellin's work to showcase local capabilities, amplify the city's international standing, and bridge it with major global innovation networks.

In this international gathering, Medellin presented a Smart Water System developed in the village of San José of the San Antonio de Prado township, and managed by the Undersecretariat of Public Utilities, part of the Secretariat of Management and Territorial Control. This smart water treatment system improves efficiency, service quality, and sustainability. The project demonstrates how the combination of technology and community participation can generate tangible improvements in the quality of life for rural families, establishing Medellin as a model for innovation-driven territorial development.

Manuela García, Undersecretary of Public Utilities for the District of Medellin

"Representing Medellin in the Forum's Pioneering Places Programme has been a challenging and deeply inspiring experience for the Undersecretariat of Public Utilities. It makes us proud to take the name of the Special District of Science, Technology, and Innovation to a global network that recognises the value of our transformation. Connecting with the Forum's Network through C4IR Medellin, and sharing our living laboratory for smart water systems with the world, has been an enriching experience that raises our quality standards and pushes us to keep innovating for Medellin."

Photos: Mayor's Office of Medellin

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Photo: Mayor's Office of Medellin

GovTech

The digital transformation redefining how governments think, decide, and act.

In a global context where technology is solidifying its role as the engine of institutional innovation, governments are adopting digital tools, data analytics, and Artificial Intelligence to deliver services that are more efficient, transparent, and people-centric.

This evolution transforms public administration, the relationship between citizens and government, generating new dynamics of trust, participation, and shared responsibility. In this way, digital transformation opens the opportunity to build smarter, more accessible governments capable of anticipating and responding to the needs of their citizens with speed and precision.

In Medellin, this vision is being realized through a set of strategic actions that aim to establish the territory as a leading example of public innovation and the harnessing of technology.

★ As the District of Science, Technology, and Innovation, our city is moving forward with the development of a modern digital infrastructure, the integration of information systems, and the adoption of emerging technologies serving the collective well-being, where the role of C4IR Medellin holds particular relevance.

Kelly Ommundsen, Head of Digital Inclusion and Executive Committee member, World Economic Forum

"The collaboration between the World Economic Forum and C4IR Medellin has been pivotal in advancing the global GovTech agenda over the past year. C4IR Medellin's substantive contributions to the GovTech Intel Hub have strengthened collective efforts to generate actionable insights and best practices in digital governance, informed by Medellin's focus on human-centered innovation that prioritizes citizen wellbeing alongside technological advancement. Their leadership and commitment to innovation continue to position Medellin as a reference point for technology-enabled public sector transformation. Looking ahead, the MED360 event represents a key opportunity for our organizations to further deepen collaboration and advance global discussions on the future of GovTech."

Through the GovTech Workstream, C4IR Medellin develops two complementary approaches:
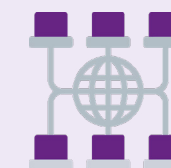
1. Consolidating Medellin's global standing as a benchmark for public innovation, aligned with World Economic Forum initiatives.

2. Identifying and adapting international best practices that, through strategic partnerships and technical cooperation, enhance the city's current and future projects.

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Three partnerships driving Medellin towards more agile and efficient public management

Thanks to its work and achievements, C4IR Medellin, through its GovTech workstream, has been included by the World Economic Forum in its Global GovTech Network, alongside the centres in Berlin and Kyiv. This international network connects the world's leading public innovation hubs, articulating efforts to accelerate the digital transformation of governments and promote the responsible and strategic use of emerging technologies.

In this way, C4IR Medellin reinforces its standing as a key player within the global community, positioning the city on the international stage for its leadership in public sector modernization and its capacity to generate technological solutions with a high social impact.

Medellin engages in dialogue with the world because it understands the power of technology and innovation to make the public sector more efficient and improve the quality of services delivered to citizens.

By joining the GovTech Network, the city demonstrates its ability to create real solutions that respond to the challenges of its territory and community needs. Today, Medellin's experience is recognized globally as an example of how the future can be built through strategic alliances.

Photo: Mayor's Office of Medellin

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GovTech

Open Data Policy Assessment

In coordination with the Undersecretariat of Digital Innovation, we evaluated the status of Medellin's open data policy using the World Economic Forum's benchmarking tool. The city achieved an outstanding score of 95 out of 100, reflecting a high level of maturity and placing it in alignment with internationally recognized reference cities such as Amsterdam, Vienna, and London. This result reflects the policy's robustness, complying with established quality principles such as integrity, accuracy, timeliness, and permanence.
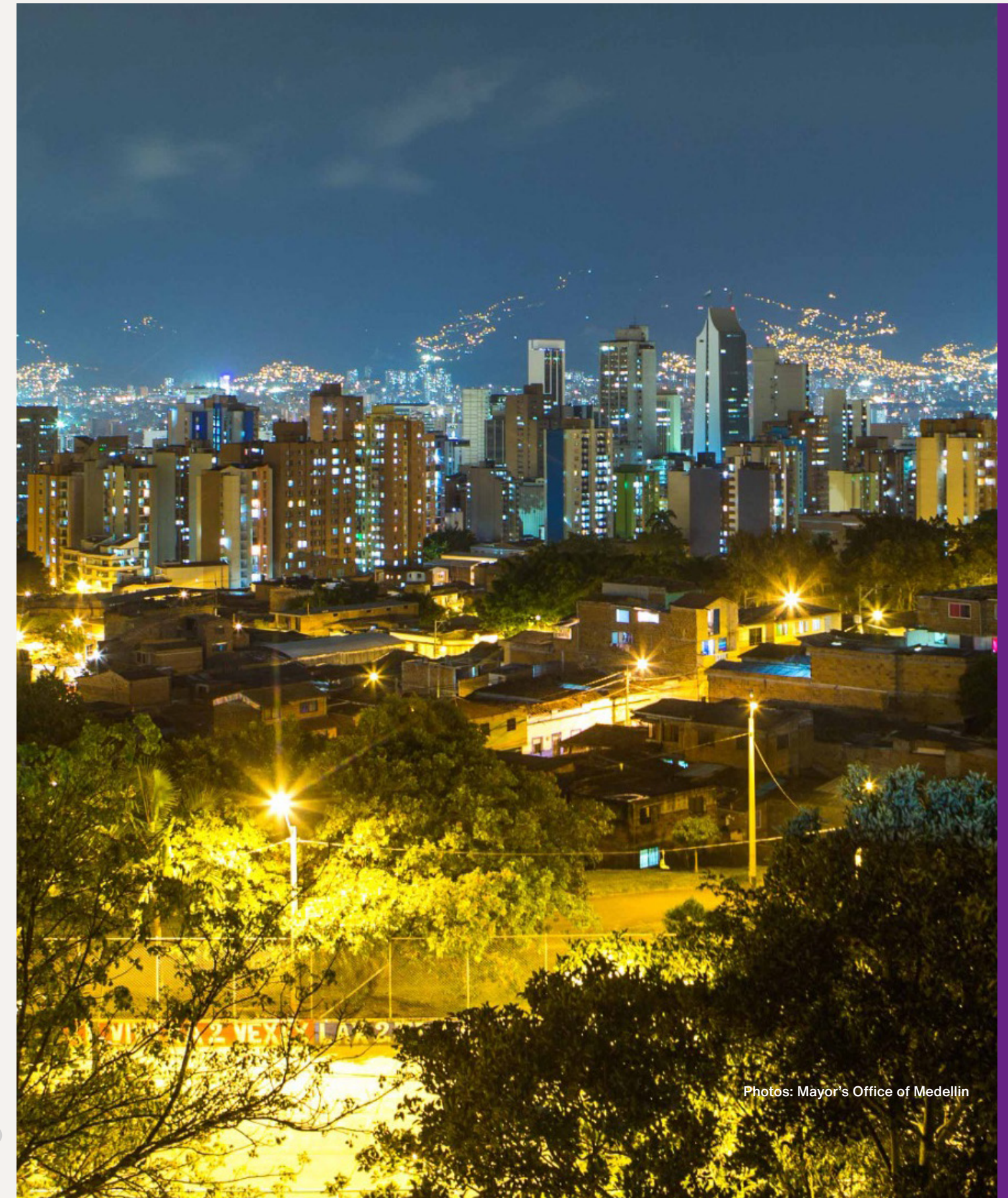
Having MEDATA as the platform for the city's open data strategy has been fundamental to anchoring an accessible, interoperable, and public-value-oriented information ecosystem. This tool allows citizens to access, reuse, and generate knowledge from data, driving innovation and the responsible use of information across various domains.

This assessment also contributes to identifying opportunities for improvement, as it provides a comprehensive view of the current policy status, serving as a roadmap for directing actions that will enhance institutional infrastructure, optimize data quality, and establish sustainable practices

Santiago Restrepo, Secretary of Digital Innovation for the District

"The partnership with C4IR Medellin has been essential for enhancing the District's institutional capabilities in open data and digital governance. The diagnosis, carried out with the World Economic Forum's evaluation framework, confirmed 95% alignment with international standards. This demonstrates our city's resolve to solidify its position as a global reference in public innovation, ethical information management, and inter-institutional cooperation".

Photos: Mayor's Office of Medellin

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World Economic Forum GovTech Intelligence Hub

The GovTech Intelligence Hub is an initiative led by the World Economic Forum, and developed with the centres in Kyiv and Berlin, both members of the C4IR Network. Its purpose is to identify and showcase global best practices in GovTech.

To showcase the city as a model for innovation applied to the public sector, C4IR Medellin contributed to the publication of local solutions recognized for their impact:

In its application, SIES-M demonstrated a notable impact across essential fronts:
- Reducing response times.
- Bolstering citizen trust in institutions.
- Improving the local government's operational capacity in critical situations.

SIES-M
Integrated System for Emergencies and Security of Medellin

SIES-M is a system that consolidates ten agencies (including Police, Mobility, Health, and Firefighters) into a single center to coordinate emergency response efficiently and swiftly. This is achieved through video surveillance, geo-referencing and automation.

Photo: Mayor's Office of Medellin

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MEDATA
Medellin District Data Strategy

MEDATA is the city's data strategy, which organizes and publishes information generated by the departments of the District of Medellin. It enables citizens, researchers, businesses, and public entities to access reliable and reusable data through its platform. Its implementation has improved transparency across various processes, driven evidence-based decision-making, and promoted innovation through the use of public information.

PROJECT DATA VISUALIZATION
Reporting on educational, planning, and environmental management actions in the communes and townships of Medellin.

Through digital tools like KoboToolbox and Power BI, this project from the Secretariat of the Environment—which was presented as a successful case study in the GovTech Intelligence Hub—allows for the monitoring and visualization of data concerning environmental education and sustainability projects. In this manner, it cultivates transparency, citizen trust, and accountability across Participatory Budgeting initiatives throughout the city.
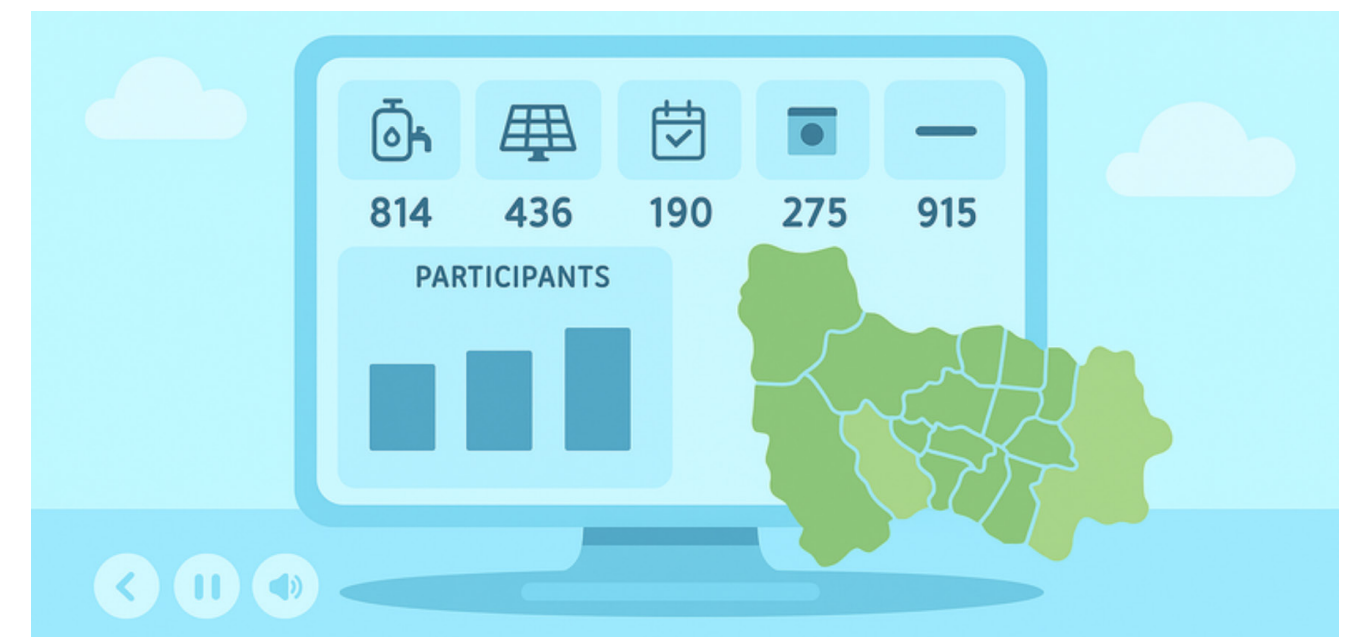

Illustration: World Economic Forum

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We are currently documenting these cases in detail for future publication in the GovTech Intelligence Hub:

▪ SIAE / Environment Information and Analysis System (Empresas Públicas de Medellin, EPM)

An internal platform developed by EPM that integrates security, social, political, environmental, and economic data from multiple public and institutional sources.

Through georeferenced dashboards, SIAE allows the understanding of events in the territories where the company operates, as well as anticipating risks and making more strategic and informed decisions.
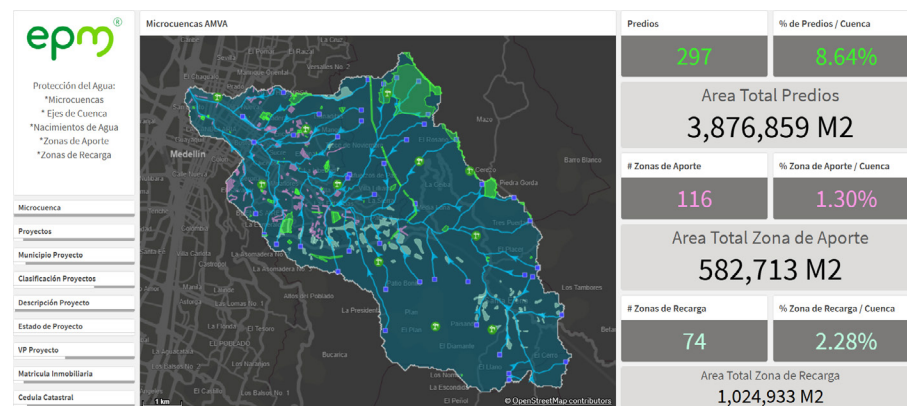
Courtesy of Empresas Públicas de Medellin.

▪ Sandbox (EPM)

A controlled testing environment designed by EPM that replicates water, gas, and energy networks on a small scale.

This tool allows for the safe experimentation and validation of new technologies without affecting real operations or interrupting services.
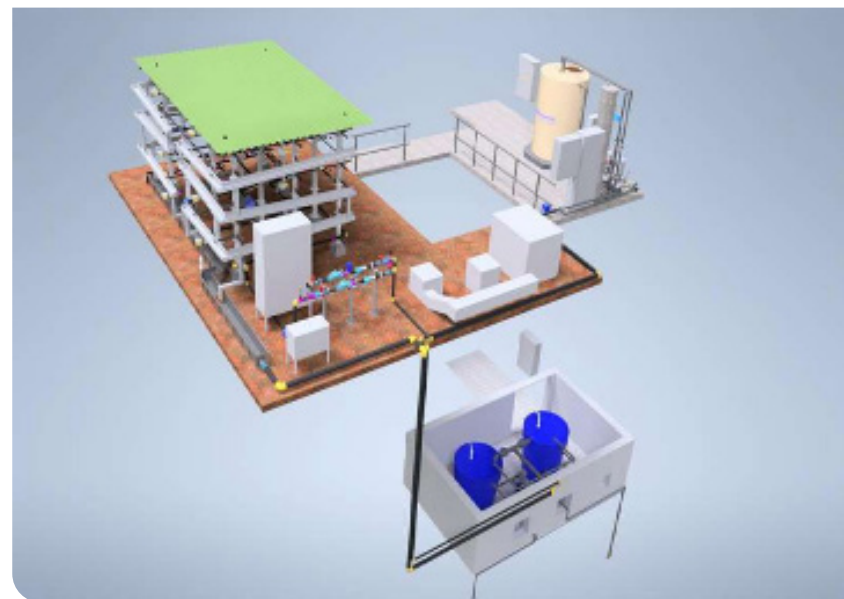

Illustration courtesy of: Empresas Públicas de Medellin.

▪ GeoMedellin (Medellin Geospatial Data Strategy)

A strategy that centralizes territorial information from different departments into a unified platform. It provides a holistic view of the territory to support planning and transparent, evidence-based decision-making.

Its geoportal allows officials and citizens to visualize, analize, and download over 160 layers of the city's geographic information.

Articulation with
the World Economic
Forum C4IR Network

- Global Government Technology Centre Kyiv (GGTC Kyiv)
- Global Government Technology Centre Berlin (GGTC Berlin)
- Centre for the Fourth Industrial Revolution Malaysia (C4IR Malaysia)

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Articulation with the World Economic Forum C4IR Network

Medellin expands its footprint within the World Economic Forum's C4IR Network through strategic partnerships with the centres in Kyiv, Berlin, and Malaysia. These cross-network alliances drive the exchange of knowledge through meetings on digital governance, data ethics, technological solutions, and strategies to improve public services.

As part of its strategic focus on leveraging international experiences, C4IR Medellin solidified its ties with other centres in the World Economic Forum's C4IR Network. In coordination with Ruta N' Smart Cities team, the District's primary needs for knowledge transfer and technical cooperation were identified. Strategic alliances were established with network centres where synergies were found, designed to accelerate Medellin's local innovation while positioning homegrown best practices on a global stage.

★ Strategic alliances with the centres in Kyiv, Berlin, and Malaysia amplify the District's capacity to incorporate GovTech solutions, drive public innovation, and advance human-centric digital government strategies.

★ International cooperation facilitates technical exchange, the transfer of methodologies, and the development of collaborative projects aimed at improving public services and promoting the responsible use of data.

★ C4IR Medellin projects the city as a global reference by articulating knowledge, experience, and institutional will to transform public administration through technology, ethics, and collective action.

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Photo: Mayor's Office of Medellin

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Global Government Technology Centre Kyiv (GGTC Kyiv)

Kyiv
Global Government
Technology Centre

C4IR Medellin formalized a knowledge transfer alliance with the Global Government Technology Centre Kyiv (GGTC Kyiv) in order to elevate Medellin's GovTech capabilities through the exchange of experiences and insights in public innovation and digital governance. This partnership seeks to align the digitalization strategies developed by Ukraine with the digital transformation processes that Medellin is implementing. Through this alliance, which involves Ruta N and the Secretariat of Digital Innovation, the District's capacity for governmental innovation is enhanced, and Medellin's integration with international leaders in digital transformation is solidified.

Between late 2025 and early 2026, two main knowledge transfer activities will take place:

1 The first aims to share mutual learnings in developing pilot projects for technological solutions to urban challenges through multistakeholder cooperation between the public, private, and academic sectors.

2 The second focuses on the technical exchange of digital governance frameworks and strategies, alongside the dissemination of methodologies, insights, and tools to enhance citizen-centric digital engagement with public institutions.

Zoya Lytvin, Director of GGTC Kiev

"At the Global Government Technology Centre in Kiev — the second GovTech Centre in the world and the 21st Centre for the Fourth Industrial Revolution (C4IR) within the World Economic Forum's Network — we highly value our collaboration with C4IR Medellin as an enriching exchange of knowledge between two C4IR Centres and rapidly rising innovation ecosystems. Our alliance has been an inspiring opportunity to share best practices on GovTech solutions and initiatives, including GovTech Lab UA — Ukraine's first open innovation programme — and to learn from each other's experiences in fostering open innovation for more responsive and human-centred governance. We look forward to deepening this collaboration and building lasting bridges between Ukraine's and Latin America's digital transformation journeys."

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Global Government Technology Centre Berlin (GGTC Berlin)

Berlin
Global
Government
Technology Centre

With the Global Government Technology Centre Berlin (GGTC Berlin), C4IR Medellin formalized a knowledge transfer alliance with the purpose of enhancing local capabilities in data governance and the responsible use of information within the public sector.

This strategic cooperation fosters the exchange of policy frameworks, institutional experiences, and practical solutions that enable public entities to advance towards the ethical, secure, and effective management of data. The alliance is centered on a technical knowledge transfer session, led by GGTC Berlin, addressing institutional structures, open data policies, interoperability standards, and governance models applied by leading governments.

Manuel Kilian, Director of GGTC Berlín

"GovTech is a global phenomenon. It's our privilege to advance the GovTech agenda together with C4IR Medellin, which brings considerable expertise and experience on implementing GovTech at the regional level. It's through these alliances that we can make real progress."

★ The meeting, scheduled to take place during the first quarter of 2026, will be aimed at officials from the Secretariat of Digital Innovation, representatives from universities specialising in data governance, members of the Medellin Public Conglomerate, and representatives from the private sector, articulated through the Medellin Chamber of Commerce.

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Centre for the Fourth Industrial Revolution Malaysia (C4IR Malaysia)

Malaysia
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To further develop the District's capabilities in digital innovation and data governance, C4IR Medellin formalized a knowledge transfer alliance with the Centre for the Fourth Industrial Revolution Malaysia (C4IR Malaysia).

This cooperation fosters the exchange of experiences regarding the design of public sector digitalization policies and strategies, referencing Malaysia's MyGov strategy and Medellin's initiatives aimed at using data to improve public services, such as "Ciudadano 360". The alliance also aims to promote peer learning, solidify institutional capabilities, and open new opportunities for international cooperation in digital governance and public innovation.

Adrian Marcellus, CEO of MyDIGITAL Corporation and Director of C4IR Malaysia

"The Malaysia Centre for the Fourth Industrial Revolution (Malaysia Centre4IR) is delighted to partner with C4IR Medellin, a collaboration that truly embodies the spirit of the World Economic Forum's global C4IR Network. Together, we're showing that distance is no barrier when purpose and vision align — and that meaningful collaboration can flourish across continents when driven by a shared commitment to digital transformation".

Starting in 2026, we will hold technical sessions and virtual exchange workshops focused on two axes:

1 Malaysia's experience in digital innovation.

2 Medellin's learnings derived from the evaluation of its open data policy and the improvement roadmap developed by C4IR Medellin and the Secretariat of Digital Innovation.

Strengthening the
Entrepreneurship and Innovation
Ecosystem with the World Economic Forum

- Strategic Intelligence Platform Licences
- MINDS Programme
- *Co-branding* for the MED360 Event
- Visits from World Economic Forum Representatives
- C4IR Talks: Connecting with Strategic Stakeholders

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Map of articulation with the ecosystem of entrepreneurship and innovation.

Strengthening the Entrepreneurship and innovation
Ecosystem with the World Economic Forum

Medellin elevates its innovation ecosystem with an important global partner. In doing so, the District of Science, Technology, and Innovation projects its capabilities and reaffirms its leadership as a Latin American benchmark in digital transformation and the strategic use of Artificial Intelligence.

Strategic Intelligence Platform Licenses

By belonging to the Network of Centres for the Fourth Industrial Revolution, the World Economic Forum grants C4IR Medellin a package of access codes to the Strategic Intelligence platform. This tool drives research and strategic decision-making in the international arena.

This license was granted to representatives of the following entities and companies in the local ecosystem: the Mayor's Office of Medellin (through the Secretariat of Economic Development, the Secretariat of Digital Innovation, and the Administrative Planning Department), Ruta N, the Urban Security and Solutions Company (ESU), the Medellin Chamber of Commerce for Antioquia, the University of Antioquia, ITM, Plaza Mayor, Tecnnova, Galletas Noel, Corona Industrial, Sofasa, and Comfama.

Through **Strategic Intelligence**, users gain access to the World Economic Forum's global agenda to consult specialized documents, research, and reports; additionally, it allows for the development of transformation maps with the support of Artificial Intelligence. In this way, the city enhances its ability to anticipate trends and design efficient solutions with high social impact.

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MINDS Programme

The MINDS Initiative of the World Economic Forum is a global call that identifies business transformations driven by Artificial Intelligence with real-world impact. As the ambassador for Latin America, C4IR Medellin actively promoted the participation of the local ecosystem, achieving significant recognition

- Medellin achieved the second-highest representation in the world, behind only China. In doing so, it solidified the city's status as a global leader in the strategic and responsible adoption of AI in the productive sector.

- Two local companies advanced to the second round, demonstrating the region's high potential for leading corporate innovation.

- In the second cohort of the programme's call for applications, again as the ambassador for Latin America, C4IR Medellin ranked the city in third place by the number of applicants, trailing only China and the United States.

Andrés Areiza, Director of Innovation Management at Corona

Our participation in this important event was a great way to learn about the international standards by which these types of solutions are measured and evaluated. It helps us identify where we need to elevate our capabilities to generate greater impact in our developments, resolve specific market friction points, and apply the technologies of the Fourth Industrial Revolution more accurately and efficiently.

Estefan Wolff, Digital Manufacturing Lead at Cementos Argos

This was a great opportunity to test ourselves, receive feedback from global experts, identify how we could improve our processes, and determine where we stood on architectural and ethical guidelines.

Photo: Mayor's Office of Medellin

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Co-branding for the MED360 Event

In 2025, we ensured that the segment led by Ruta N, within **MED360** event, featured World Economic Forum co-branding. This strategic affiliation validated its role as a reference space for the global dialogue on public innovation and digital transformation.

In coordination with the World Economic Forum, we designed an academic programme that brought together international experts from the public, private, and academic sectors, recognized for their leadership in topics of data, Artificial Intelligence, and emerging technologies applied to government.

This segment, conceived within a major city event, established a dialogue for exchange that aligned local priorities with global GovTech trends. In doing so, we fostered reflection on how technology can enhance public administration and the relationship between government and citizens.

MED360 was a space for conversations that set the pace for digital transformation. Discussions centred on trust as the foundation of any technological system, understood not only through the values that guide it but also through the real capacity to deliver on its promises. The power of data and its potential to unlock opportunities when combined with talent and vision was also explored. Medellin is precisely this combination of people with extraordinary capabilities, real opportunities, and a vision aligned with values that inspire the future.

Speakers and panellists who participated in the session led by Ruta N at MED360

- **Claude Dyer,** Acting Head of Digital Inclusion, World Economic Forum
- **Stephen Burt,** Chief Data Officer, Government of Canada
- **Teresa Verthein,** Head of Government Affairs for Mexico, Colombia and Central America, Salesforce
- **Kelly Ommundsen,** Head of Digital Inclusion, Executive Committee Member, World Economic Forum
- **Combiz Abdolrahimi,** Vice President and Global Head of Government Affairs & Public Policy, ServiceNow
- **Raquel Cardamone,** Chief Executive Officer, Bright Cities
- **Cristina Müller,** Head of Government & Regulatory Affairs for the Andean Region, Visa
- **Carlos Zavala,** Regional Country Manager for the Andean Region, Visa
- **Markus Schwertel,** Director, Global Policy & Strategy, HP
- **Nicolás Salazar**, Ecosystem Lead, GovTech Latam

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Visits from World Economic Forum Representatives

In March 2025, we hosted a visit from representatives of the World Economic Forum in Medellin. During the visit, we developed collaborative sessions with Ruta N, the Secretariat of Digital Innovation, and representatives of the Medellin Public Conglomerate. These sessions focused on defining C4IR Medellin work plan and aligning it with the city's priorities as the District of Science, Technology, and Innovation.

This workshop was decisive in cementing the partnership between Medellin and the World Economic Forum, validating C4IR Medellin's approaches, and advancing a shared work agenda for 2025 and beyond.

The meeting with World Economic Forum representatives allowed for a discussion of the challenges and opportunities for the city regarding Artificial Intelligence, data governance, and governmental digital transformation. It also served to define the first projects and areas of international cooperation within C4IR Medellin's three strategic workstreams: Education, GovTech, and Urban Transformation.

Photo: Ruta N

Photo: Mayor's Office of Medellin

Kelly Ommundsen, Director of Digital Inclusion and member of the Executive Committee of the World Economic Forum

In May 2025, we were honored to receive the second visit from the World Economic Forum represented by Kelly Ommundsen, Head of Digital Inclusion. Her presence was instrumental in solidifying cooperation with the District Administration and advancing the joint agenda with C4IR Medellin.

During her time in Medellin, Ms. Ommundsen participated in various events organized by C4IR Medellin and Ruta N. These sessions were specifically focused on knowledge exchange and the recognition of local initiatives that drive digital transformation and public innovation within the city. Ms. Ommundsen began her visit with an appearance at the Innovation Land event, organized by ANDI. She took part in a discussion with C4IR Medellin, addressing trends in digital transformation. Following this, she led a workshop with local entrepreneurs, focusing on innovation, technology, and the strategic role of the World Economic Forum.

Ms. Ommundsen also held a meeting with the Empresa para la Seguridad y Soluciones Urbanas (ESU). The primary objective of this session was to explore co-branding opportunities for the World Economic Forum at the MED360 event and to broaden the strategic engagement between the Forum, the District Administration, and the city's innovation ecosystem.

Photo: Mayor's Office of Medellin

As a key part of her agenda, Kelly Ommundsen visited the Integrated System for Emergency and Security (SIES) Medellin. This initiative had been previously documented by C4IR Medellin as a best practice in the fields of security and emergency management, slated for publication in the GovTech Intelligence Hub. This firsthand exposure allowed her to observe how innovation directly augments the city's institutional capacity.

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C4IR Talks: Connections with Strategic Stakeholders

To fulfill its local ecosystem engagement strategy, C4IR Medellin launched a series of talks and panel discussions branded as C4IR Talks. These sessions were designed to spotlight the Centre's role within the city's innovation ecosystem and were instrumental in fostering ties with strategic actors across the public, private, and academic sectors. These engagement opportunities consolidate C4IR Medellin's role as a key actor in articulating the city's innovation ecosystem, reinforcing the vital connections among academia, business, government, and international organizations.

Through dialogue, cooperation, strategic alliances, and knowledge dissemination, the Centre reaffirms its dedication to promoting a Medellin that is more competitive, sustainable, and prepared to lead the challenges of the Fourth Industrial Revolution.

Photo: Ruta N

- During the first official visit of the World Economic Forum delegates to the city, C4IR Medellin participated in the plenary session of the University-Business-State Committee (CUEE) on March 7th. This event featured a dialogue between Catalina Restrepo Carvajal, the Centre's Director, and Manju George, Strategy Director for the World Economic Forum's Digital Economy platform. Their conversation focused on the significance of Medellin's incorporation into the Global Network of Centres for the Fourth Industrial Revolution, the transformative impact this represents for the city, and the resulting opportunities for multistakeholder cooperation and alignment with various innovation ecosystem stakeholders.

Photo: Ruta N

- At the Tech Summit 2025, organized by REF Medellin, the Director of C4IR Medellin presented the Centre's strategy and progress to over 100 CEOs from the country's leading companies. This was accompanied by a presentation on global trends in artificial intelligence and its application in the corporate landscape and the local context of Medellin. Her intervention reinforced the understanding that the District is solidifying its leadership in the responsible adoption of emerging technologies and the critical link between innovation, competitiveness, and sustainable development.

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Photo: Mayor's Office of Medellín

- We hosted two C4IR Talks at the Chamber of Commerce of Medellin. The first session was directed at the Digital Business Cluster Advisory Board, and the second was with the Cluster Strategy Committee, which convened the directors of each cluster along with the Vice President of the Chamber of Commerce. These focused meetings provided an opportunity to comprehensively present the mission and progress of C4IR Medellin across its three strategic workstreams.

- We successfully facilitated the participation of Francisco Betti, Executive Committee Member and Head of Global Industries at the World Economic Forum, in the Medellin Chamber of Commerce's Experiencia Tech event. His address was instrumental in elevating the conversation around technology adoption and innovation as key drivers of competitiveness across the region's productive sectors.

- At the Antioquia Regional Council BPrO—a key gathering for leaders in the regional BPO industry—we hosted a dedicated C4IR Talk. The session focused on explaining the Centre's mission, core areas, key projects, and strategic partnerships. Crucially, this session served as a catalyst for industry leaders to identify potential synergies and opportunities for joint initiatives.

Andrés Arias, Manager of the Digital Business Cluster

Our partnership with the Centre for the Fourth Industrial Revolution in 2025 has enabled us to advance in three fundamental areas. First, achieving a deeper insight into the purpose and activities being structured by the Centre for the Fourth Revolution in Medellin. Second, understanding how to mobilize an entire ecosystem around science, technology, and innovation to foster a shared vision, not only among the Chamber of Commerce, Ruta N, and the Centre for the Fourth Revolution, but with every institution representing the ecosystem and its supporting entities.

And the third point is recognizing the common purpose that unites us through digital humanism—understanding how this must impact people and, consequently, the city's economic development. This allows us to bolster and solidify both local and international relationships through the World Economic Forum, providing us with benchmarking opportunities and, most importantly, enabling us to adapt the Forum's frameworks and opportunities to the local ecosystem of the District of Medellin and the Department of Antioquia.

Menna Helal, Head of Communications for the C4IR Network, World Economic Forum

"Working with C4IR Medellin team over the past year has been truly inspiring. Their commitment to their community and to using technology for the good of the city showcases the true meaning of inclusive innovation. The team brings that spirit to life every day, helping the city turn this ambition into action and ensuring that technology serves everyone".

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Foto: Alcaldía de Medellín