

AI that works for Spanish Speaking Latam

an AI Sprinters Report



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"With effective policies and the right incentives, Hispanic America can harness AI to drive inclusive and resilient growth, enhance competitiveness, and address the region's most pressing social challenges."

Executive Summary

Artificial intelligence (AI) is emerging as a general-purpose technology with the power to reshape productivity, boost innovation, and improve quality of life. For Hispanic America, where diversifying the economy and driving sustainable growth remain core challenges, AI presents a game-changing opportunity.

Countries that move decisively to embrace AI can unlock and benefit from its full development potential. Recent McKinsey estimates project a global economic impact from AI between \$17 trillion and \$25 trillion per year.

For Hispanic America, this report offers tailored estimates based on McKinsey models, adapted with regional macroeconomic data. The findings suggest that timely AI adoption could generate USD 130 – USD 242 billion in annual economic impact across the countries analyzed, equivalent to 3.6%–6.7% of the region's GDP. And that doesn't even account for future AI-native industries.

We anchored the analysis in four priority areas: Enabling Policies, Infrastructure, Technological Innovation, and People, adapted from Google's [Digital Sprinters](#), [AI Sprinters](#), and [AI Pioneers](#) frameworks.

Based on interviews with 55 experts across 10 Hispanic American countries, complemented by data analysis and regional case studies, the report highlights best practices. It sets forward a policy roadmap to turn AI into a force for inclusive growth in Hispanic America.

A unique Opportunity for Hispanic America

AI is quickly becoming a general-purpose technology, comparable to electricity, the internet, and cloud computing. It's reshaping industries and unlocking entirely new forms of value at an exponential pace.

For emerging economies like those in Hispanic America, AI offers a rare chance to fast-track economic growth and address complex social challenges with more innovative and efficient tools. As global digitalization accelerates, the region is at a pivotal moment to embrace AI and lead a path of transformation.

Historically, emerging economies have adopted major technologies later and reaped fewer of their benefits. But AI's unique characteristics offer a chance to flip the script. Today, Hispanic America can leapfrog legacy barriers and take an active role in shaping the AI era.

The following factors point to powerful levers the region can activate to make that happen.

Human Capital Potential

Hispanic America's young, increasingly connected, and tech-curious population is one of its greatest strengths. This demographic advantage, coupled with growing digital fluency, creates fertile ground for building AI skills at scale.

The good news: AI training is highly transferable. The same foundational knowledge can unlock impact across many sectors. This means that upskilling workers in AI doesn't just build specialized talent but also empowers individuals and organizations to innovate in diverse fields with the same foundational knowledge.

Some of the currently available tools can accelerate the development of this transformation, helping learners master complex issues and apply AI to real-world problems. Training and certification

programs, such as [Google Career Certificates](#), AI-powered personalized learning platforms like [LearnLM](#), and using [NotebookLM](#) to digest complex topics and turn knowledge into action.

The leverage potential of foundational AI upskilling, combined with Hispanic America's digital demographic asset, creates a unique opportunity for a multiplier effect on talent development.

Lower Barriers, Greater Opportunities

Today's AI development is taking place in an environment largely free of many barriers that have long held back the creation and adoption of technology in emerging economies, both due to the nature of these technologies and the early stage of their development. This represents an opportunity for the region to take advantage of this more open environment and accelerate AI adoption in a strategic way.

Regulatory Barriers

Early developers of new technologies often benefit from less restrictive regulatory environments. In contrast, those who adopt later tend to face more rigid frameworks, limiting new business entry and innovation.

Hispanic America has the chance to leverage the early stage of AI regulation as a [leapfrogging](#) opportunity, fostering the development and adaptation of AI to local challenges and opportunities.

To make the most of this moment, countries should design policies that reflect their own priorities, rather than importing external regulatory models that may not align with their development priorities or could even limit their innovation potential.

Infrastructure Barriers

Access to robust digital infrastructure remains essential for AI adoption. In the past, this required large investments in hardware, making it difficult for many organizations in emerging economies to

compete. Today, cloud computing and other technological advances are removing some of these barriers, enabling faster and more cost-effective deployment of AI solutions. Examples include cloud-based platforms like [Google Cloud](#), which make advanced AI tools accessible to startups, governments, and civil society without the need for heavy capital investment, and lightweight models like [Gemini Nano](#) that can run directly on mobile devices, bridging connectivity gaps and enabling offline use. Industry-specific tools, such as Mineral's AI-powered solutions for agriculture, show how these technologies can be adapted to local contexts and deliver impact even where infrastructure is limited.

By strategically investing in and expanding access to these tools, Hispanic America can accelerate AI adoption, extend its benefits to underserved areas, and ensure that infrastructure is not a bottleneck for innovation.

Specialized Knowledge Barriers

AI is now more accessible than ever. Large language models (LLMs) allow people to interact using natural language, with no coding skills required.

The technical complexity of interacting with sophisticated systems has drastically decreased. LLMs allow natural language interaction, making AI accessible to a broader population without advanced programming skills.

Generative AI not only improves productivity but also significantly expands workers' capabilities, enabling them to handle tasks they were previously unqualified for. [Recent studies](#) show that people without prior programming or statistical experience successfully executed complex data science tasks with Generative AI support. In other words, AI lowers barriers to specialized knowledge like programming.

Platforms like [Google AI Studio](#) facilitate experimentation. [Gemini](#) and API access simplify AI integration into various applications. Tools like [AppSheet](#), which incorporate AI features, simplify



application development, democratizing access to innovation.

Global Market Access Barriers

In today's hyperconnected world, selling to a global audience is more feasible than ever, especially in the digital economy. AI amplifies this shift by lowering technical and language barriers, allowing entrepreneurs in Hispanic America to create products and services for international users from day one.

From app marketplaces and no-code deployment platforms to AI-driven translation and localization tools, the infrastructure for global reach is already in place.

This creates a historic opportunity for the region to leap into global digital markets without the traditional friction of exports based on physical goods or logistics-heavy industries.

[ConnectAmericas' ADA: Where Business Finds Its Match](#)

ConnectAmericas, the IDB's business platform with over 240,000 companies, fosters trade and partnerships across the region. Fueling this network is ADA, an AI-powered tool that analyzes profiles to quickly match businesses with reliable suppliers, potential clients, and strategic partners. With ADA, ConnectAmericas delivers a smarter, faster way for businesses to build valuable connections, expand into new markets, and accelerate business growth.

Lower Costs for Entrepreneurship

One of AI's most powerful shifts is how much it lowers the cost of launching a new product. Entrepreneurs in Hispanic America can now validate ideas and build minimum viable products far fewer resources, reallocating capital to growth instead of groundwork.

Google's ecosystem of tools helps make this possible, dramatically reducing the need for deep engineering resources at early stages. For example:

- [Google AI Studio](#) and the [Gemini](#) model family, accessible via API and [Vertex AI](#), make it easy to bring sophisticated generative AI into applications and workflows without building complex models from scratch.
- Experimental tools like [Stitch](#) accelerate the idea-to-prototype phase, generating user interface designs from natural language descriptions.
- For agile application development, [AppSheet](#) offers a low-code environment, while [Firebase](#) provides a robust backend for quick MVP creation and iteration.
- [Flutter](#) optimizes the development of appealing user interfaces, and [Google Cloud Run](#) simplifies deployment on scalable infrastructure.

With the right tools, more people can build ambitious products faster and cheaper than ever.

[fAIrLAC/IDB Lab – Responsible and Inclusive AI for Development in Latin America](#)

IDB Lab, through the fAIrLAC initiative, is driving a regional portfolio of responsible and inclusive artificial intelligence solutions, aimed at reducing social, economic, and cultural gaps.

Highlights include the launch of the first regional toolkit for responsible AI adoption among startups and SMEs (IAméricas), which promotes transparency, training, and risk management in the innovation ecosystem.

In Uruguay, the AcelerIA program equips vulnerable workers and microenterprises with AI skills through adaptive learning platforms and personalized mentorship, prioritizing the inclusion of minorities.

In Colombia, Quipu leverages AI to create

alternative credit scoring systems that expand access to finance for women micro-entrepreneurs in the informal sector.

Finally, Prester in Paraguay uses AI to assess the creditworthiness of traditionally excluded populations, such as women, informal workers, and rural communities, advancing financial inclusion and formalization. These initiatives demonstrate how AI can be a powerful tool for equity, diversity, and sustainable development across the region.

Democratization of Advanced Analytics

Generative AI is changing who gets to do data science. What once required advanced skills and big budgets is now within reach for SMEs, NGOs, researchers and local governments, using their own or public data to inform decisions and design solutions that fit local needs.

Google Cloud tools make this shift possible. [BigQuery](#) powers large-scale data analysis, [Looker Studio](#) turns data into interactive visualizations, [Vertex AI](#) helps teams build and deploy predictive models, along with [Model Garden](#), which offers pre-trained models that can be fine-tuned with local data.

Together, these tools unlock new ways to tackle complex challenges, from making food supply chains more efficient to managing natural resources, improving public services like education and healthcare, as discussed in the country cases in this report.

Increased State efficiency

Artificial intelligence (AI) is emerging as a key tool for strengthening state capacity and improving institutional performance. Far from being a futuristic promise, AI is already transforming public management in Latin America, helping governments convert large volumes of data into more accurate, faster, and transparent decisions.

In countries such as Argentina, Paraguay, and the Dominican Republic, AI has been used to compare ministerial and agency mandates, identifying overlaps and institutional gaps that hinder efficiency. In Ecuador, public investment programs have been reviewed to detect redundancies between objectives, beneficiaries, and territories, allowing spending to be aligned with the country's strategic priorities.

Furthermore, by analyzing thousands of project reports, AI models have identified recurring bottlenecks in procurement and permitting processes, allowing for the replication of effective solutions and accelerating policy implementation.

IINA: INE's Intelligent Assistant

IINA is the intelligent assistant for the IDB's Infrastructure and Energy sector. It is a chatbot developed internally that harnesses the potential of generative AI to answer open-ended questions and generate technical content on infrastructure, energy, water, sanitation, and transportation, among other key development topics. This tool allows specialists to leverage the information available from the Bank to accelerate the preparation of loan documents, technical cooperation agreements, and other documents.

Beyond planning and management, AI is also opening up new possibilities for the early detection of fraud and the inefficient use of public resources. By analyzing consumption and behavior patterns, AI systems can detect irregularities in the use of energy, water, or state subsidies, identifying cases of theft, misuse, or misappropriation of funds with greater accuracy than traditional mechanisms.

[Energizados: AI-Powered Electricity Fraud Detection](#)

Energizados is an AI-based tool that helps detect and reduce electricity fraud, improving network efficiency and cost control. In Latin America and the Caribbean, about 15% of total electricity supply is lost, partly due to non-technical losses from theft and fraud. These losses affect not only companies but also the community, causing safety hazards and increased operational costs. Energizados, uses machine learning to detect anomalies in user consumption.

[AquaData: AI-Powered Fraud Detection in Water Networks](#)

Aquadata is an advanced AI-based solution designed to detect potential fraud in water usage by analyzing consumption data. It identifies anomalies and helps plan field visits to reduce unaccounted-for water. Aquadata utilizes a decade's worth of historical data and sophisticated machine learning models to estimate the likelihood of fraud for each consumption unit. These models reveal patterns of loss and fraud that are imperceptible to humans.

These tools not only reduce economic losses but also strengthen citizen confidence in the integrity and effectiveness of the State, demonstrating that technology can be used for the public good. AI enables improved planning and use of state resources by offering more accurate diagnoses, prioritizing investments based on evidence, and anticipating needs before they translate into higher costs. In this way, governments can allocate maintenance, infrastructure, or subsidy budgets based on objective and measurable criteria, strengthening accountability and equity in the distribution of public spending (see box).

[Pavimentados: AI for smarter Road Management \(Regional\)](#)

Pavimentados, an AI tool for road damage assessment, is being integrated into public systems in the region. By monitoring pavement conditions, it optimizes maintenance planning and asset management.

Together, these experiences demonstrate how AI is helping to redesign state action based on evidence, optimizing its internal functioning and enhancing its capacity to respond to the region's social, economic, and environmental demands.

Economic Impact of AI in Hispanic America

Global investment in AI is growing at an unprecedented pace. According to the [Stanford AI Index](#), in 2024, corporate spending reached \$252.3 billion (an increase of 25% from the previous year), led by the United States, China, and the United Kingdom.

This report turns the spotlight on Hispanic America. Using a methodology based on McKinsey's [2018](#) and [2023](#) models, we adapted the analysis to ten countries in the region, integrating local economic data and real-world adoption trends. The result is a grounded estimate of AI's economic potential in this specific context.

With the right enabling environment, scaled AI adoption could generate USD 130 – USD 242 billion in annual economic impact across the countries analyzed, equivalent to 3.6%–6.7% of the region's GDP.

Hispanic America represents [8% of the world's population](#) but accounts for only [2% of global R&D investment](#). AI presents an opportunity to

accelerate the shift toward higher-value activities without needing to develop all technologies locally.

While most advanced AI models are being created abroad, history shows that the greatest economic gains go to those who adopt and apply technology at scale. The ability to deploy innovation widely across sectors may be more decisive than inventing the tools themselves.

For Hispanic America, the key lies in removing barriers, such as limited infrastructure, talent gaps, and outdated regulations, and making innovative use of existing technologies. Encouraging local solutions and adapting global tools to regional needs will strengthen competitiveness, attract investment, and create inclusive growth.

Table 1
 Estimated AI Impact in Hispanic America
 (millions of USD 2023)

Country	Low Potential	High Potential
Argentina	23,721	43,491
Chile	36,432	67,224
Colombia	7,203	13,599
Ecuador	2,405	4,617
El Salvador	684	1,280
Mexico	53,200	99,586
Panama	1,776	3,344
Paraguay	850	1,599
Dominican Republic	2,525	4,750
Uruguay	1,552	2,888
Total Region	130,347	242,376

Source: Own elaboration.

AI Use Cases in the Region

AI is already delivering real impact across Hispanic America. It's helping optimize operations, empower communities, and unlock new pathways for progress. Across the region, concrete examples show how this technology is already contributing to development:

Argentina

Farmers across Argentina are turning to AI to make better use of their land. With satellite imagery and machine learning, they can now track crop health in real time, adjust irrigation and fertilizer use, and spot pests before they spread (see examples [here](#)). These tools are helping build a more productive and sustainable future for one of the country's most strategic sectors.

Chile

Chile is using AI to make mining smarter and safer (see example [here](#)). Algorithms help anticipate maintenance needs, monitor risks, and reduce environmental impacts in one of the country's most critical industries. Beyond mining, AI is also supporting public institutions, like the Electoral Service, which recently used an AI-based system to improve election logistics across the country.

Colombia

Colombia's coffee industry is blending tradition with innovation. From early disease detection in plants to smarter drying and harvesting techniques, AI is being used across the value chain (see example [here](#)). New traceability systems are also helping local producers certify origin and meet global standards, giving Colombian coffee a competitive edge in international markets.

Ecuador

Ecuador is stepping into AI through its farms and greenhouses. With bananas, cocoa, and flowers among its top exports, producers are beginning to use drones, sensors, and data analysis to monitor crops more precisely and use fewer resources. The goal: better yields, healthier plants, and a stronger export sector (see example [here](#)).

El Salvador

El Salvador is advancing in the adoption of artificial intelligence as part of a broader state modernization strategy, supported by a pro-innovation regulatory environment (see examples [here](#)). In this context, AI is already being applied in concrete projects to improve public service delivery, optimize administrative processes, and strengthen institutional responsiveness. Cases such as the simplification of procedures, the digitization of records, and the use of support tools in healthcare and justice reflect a pragmatic, results-oriented approach.

Mexico

In Mexico's industrial corridors, AI is streamlining production and strengthening the country's role in global supply chains. Manufacturers, especially in the automotive sector, are using AI to reduce downtime, fine-

tune logistics, and prepare for growing nearshoring demand (see example [here](#)).

Panama

The Panama Canal is using AI to stay ahead in a world of fast-moving trade. The creation of a Digital Tween and the use of predictive tools help manage ship traffic, optimize scheduling, and conserve water in the Canal basin. These upgrades are making one of the world's busiest routes more efficient, reliable, and sustainable (see example [here](#)).

Paraguay

Paraguayan farmers are beginning to tap into AI to monitor fields, manage pastures, and track livestock more precisely. With soy and beef at the center of its economy, the country is laying the groundwork for smarter, more efficient agricultural systems that can support long-term growth (see example [here](#)).

Dominican Republic

In the Dominican Republic, AI is helping make tourism more personalized and dynamic (see example [here](#)). Hotels and travel platforms are using data to tailor experiences and optimize services. At the same time, early efforts are underway to use AI for natural disaster forecasting, an essential tool for building resilience on the island.

Uruguay

Uruguay is blending AI with tradition through institutions like Latitud and the Technological Laboratory of Uruguay. Their projects include a virtual assistant for dairy farmers, tools to predict rice yield based on drying conditions, and systems that analyze wood strength through images (see example [here](#)). These efforts show how AI can meet local needs and add value to key sectors like agriculture and forestry.

These are just a few signs of the region’s growing AI activity. Across Hispanic America, companies are adopting the technology to improve services, products, and operations. AI-based startups are also expanding, bringing innovation to sectors like fintech, edtech, retail, and creative industries. Innovation is also taking place in the use of AI in the public sector, as the following examples demonstrate:

AI for State Capacity: Turning Data into Decisions

AI is enabling governments to unlock value from existing information:

- **Clarifying Mandates**

In Argentina, Paraguay, and the Dominican Republic, AI was used to compare ministry and agency mandates to detect overlaps and gaps, guiding redesign and reducing friction.

- **Optimizing Portfolios**

In Ecuador, investment programs across objectives, populations, activities, and geography were reviewed with AI systems which allowed to detect and cut redundancies and align spending with priorities.

- **Accelerating Execution**

By mining thousands of project reports, AI system has been used to pinpoint recurring bottlenecks in procurement and permitting, enabling governments to replicate effective solutions and speed up delivery. With similar approach, the Interamerican Development Bank analyzed more than 1,500 operations over the past decade, to identify systemic constraints on policy implementation.



Challenges and Recommendations to Unlock AI's Potential in Hispanic America

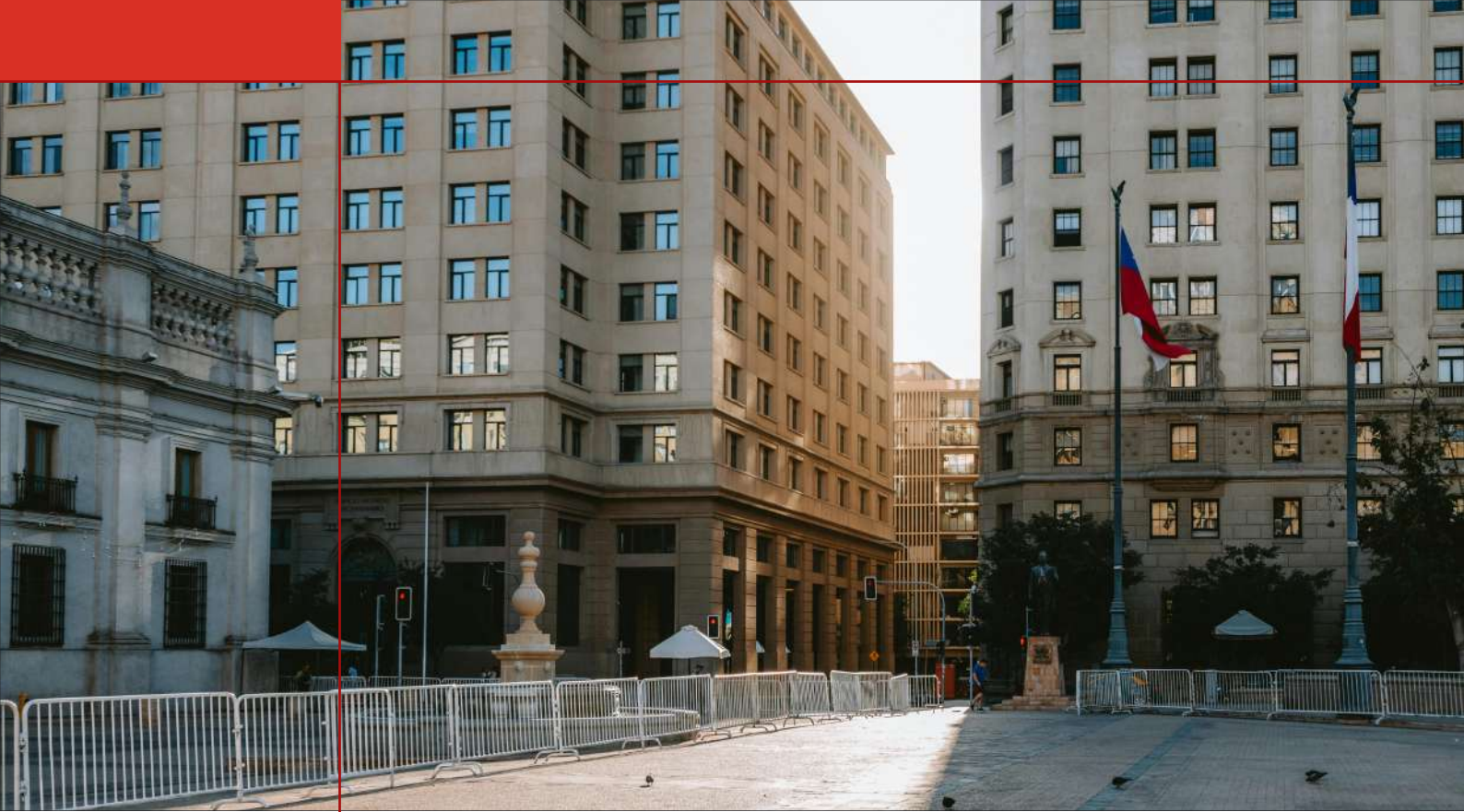
The region holds significant potential to realize the economic and social promise of AI. But turning that potential into real impact will require bold government action, removing barriers, closing gaps, and building on local strengths.

Drawing from the interviews and case studies conducted for this report, we identified key lessons from both successes and setbacks. These insights point to what it takes for progress to be consistent and for AI to become an actual engine of development across the region.

The recommendations that follow are based on Google's [Digital Sprinters](#), [AI Sprinters](#), and [AI Pioneers](#) frameworks. They center on four foundational pillars that enable inclusive digital growth and accelerate responsible AI adoption:

- **Enabling Public Policies:** Drive policies that foster a thriving AI ecosystem, encouraging ideas and data to transform into discoveries and better products and services.
- **Infrastructure:** Invest in robust, secure digital connectivity and sustainable data centers to provide necessary computing capacity and network access.
- **Technological Innovation:** Promote AI R&D to solve local and scalable challenges, opening new opportunities.
- **People:** Prepare citizens for an AI-driven economy through education and skill development.





Enabling Public Policies

To unlock AI's full potential in Hispanic America, countries need a clear policy framework that connects long-term vision with concrete actions across infrastructure, talent, innovation, and regulation.

This starts with strong national AI strategies: plans that define clear priorities, coordinate institutions, and mobilize funds in line with national development goals. These strategies should be grounded in responsible governance and focus on using AI as a tool to improve lives and productivity. Most strategies across the region are still in early stages, and countries are working towards building strong agendas and roadmaps.

A key part of this work is regulation. Well-designed laws can protect people from real AI-related harms. But regulating without a solid foundation can create new problems. Across the region, countries have introduced draft AI bills, some inspired by the EU AI Act, without thoroughly assessing whether those rules match local needs or whether current laws provide effective safeguards against many of the risks that new bills seek to address.

In this context, uncritically adopting external frameworks can create unnecessary constraints and slow innovation. Countries should start by reviewing their existing legal frameworks, incorporating relevant international standards gradually, and introducing new laws only when they clearly address unmet needs. Many AI risks can already be managed under data protection, consumer rights, and cybersecurity laws, especially when regulators are trained and coordinated to respond to emerging use cases.

At the same time, excessive divergence in national rules could raise deployment costs and make it harder for local startups to grow beyond their home markets. Thoughtful regional alignment, focused on shared principles can lower compliance costs while preserving flexibility for innovation.

Some countries are already testing more targeted approaches, passing laws to address specific risks like identity theft through deepfakes or the use of AI in critical decisions. These early efforts show that when regulation is grounded in evidence and focused on real gaps, it can build trust without stifling innovation.

Recommendations

- **Strengthen national AI strategies:** Update or design strategies that set measurable goals, governance tools, funding mechanisms, and connect clearly to digital, economic, and education agendas. Engage academia, civil society, and the private sector from the outset.
- **Review existing laws before drafting new AI legislation:** Assess current legal frameworks to determine whether they already address emerging challenges. This helps prevent regulatory overlap and ensures new rules add real value.
- **Focus legislation on high-impact, sensitive use cases:** Advance new bills only when there is a clear and evidence-based rationale, prioritizing areas such as deepfake identity fraud or automated decisions in essential services.
- **Equip existing regulators for AI oversight:** Strengthen current agencies through training and coordination so they can address AI within their sectors. This approach promotes a practical, scalable governance model rooted in existing institutions and laws, leveraging their expertise to respond effectively to new challenges.
- **Avoid regulatory fragmentation through shared principles and standards:** Promote consistent guidelines on transparency, accountability, and fairness, especially for public sector AI use, through ethical frameworks, technical guides, and good practice manuals.

Building on these principles, adopt global technical standards (e.g., ISO/IEC or IEEE) on topics like concepts & terminology, management systems, impact assessment, privacy protection and assessing security threats in AI systems, to foster interoperability, reduce regulatory friction, and help countries advance even with limited legislative capacity.

Regional coordination around these principles and standards can further reduce compliance costs and give the region a stronger voice in global AI governance discussions.

- **Modernize public procurement rules:** Update procurement frameworks to allow faster and more flexible adoption of AI solutions. This includes supporting pilots, proofs of concept, and subscription-based or cloud-hosted services. Remove regulatory roadblocks that hinder the acquisition of innovative technologies.



Infrastructure

A strong digital infrastructure is essential to building and scaling AI systems. While many countries in Hispanic America have made progress, expanding broadband, launching 5G pilots and attracting data center investments, some gaps still remain. Digital infrastructure varies widely between and within countries, especially between urban centers and rural areas, limiting an equal access to potential benefits from AI.

Governments have a central role to play, by improving connectivity and also through enabling access to cloud computing, strengthening local infrastructure, and opening public data for innovation.

An effective AI infrastructure strategy should not try to replicate the path of wealthier countries. Instead, it should make the most of scalable solutions that already exist, like cloud services, and build smart connections between public and private efforts.

Recommendations

- **Develop national AI infrastructure plans:** Countries need clear, long-term strategies that combine connectivity, access to computing capacity, and data infrastructure. These plans should include diagnostics of current and future needs, funding tools, technical standards, and priorities by sector and territory.
- **Adopt "Cloud First" approaches:** Encourage the use of cloud computing in the public sector, academia, and among small businesses. National cloud strategies can guide this shift by setting out principles for security, interoperability, and responsible use. Promote cloud adoption through training, public-private partnerships, and streamlined procurement rules.
- **Close digital gaps with territorial focus:** Invest in expanding fixed and mobile networks, especially in rural, industrial, and underserved educational zones. Utilize policy and spectrum regulation to expedite and optimize expansion.
- **Attract foreign investment in AI:** Create an enabling environment to draw data center investments. Offer renewable energy access, tax incentives, fast-track permitting, and legal certainty for investors.
- **Build open and secure public data infrastructure:** Treat data as a strategic public good. Create open, well-documented, technically standardized repositories that support AI innovation, while protecting privacy and ensuring data quality. Consider linking national repositories with international ones to broaden access to valuable datasets.
- **Foster public-private partnerships:** Explore joint initiatives to co-develop infrastructure like data centers, computing clusters, or open data platforms. Partnerships can pool resources, share risks, and expand geographic coverage. Make sure contracts are clear, governance is effective, and the goals are aligned with public interest.



Technological Innovation

Unlocking the economic potential of AI in Hispanic America will depend on how well countries can embed innovation into their productive sectors. But the path to impact may look different than in other parts of the world.

In advanced economies, AI innovation often centers around well-funded startups and frontier R&D. In Hispanic America, the most significant gains are more likely to come from helping existing companies, especially those in strategic sectors, adopt and develop AI to solve real-world problems.

This means focusing on where economic activity already happens. Sectors like agriculture, mining, logistics, manufacturing, financial services, and public services make up a large share of regional GDP. Bringing AI into these industries can boost efficiency, improve quality, and increase competitiveness.

McKinsey [estimates that](#) 75% of AI's value will come from four functions: optimizing operations, automating knowledge work, upgrading customer service, and enabling personalized products and services. These are precisely the areas where established firms in the region can benefit the most.

However, some barriers remain. Many countries can further increase their investment in R&D. University–industry collaboration can be strengthened. And in many cases, data can be made more accessible and integrated. These steps would make it easier to develop and scale local solutions.

Governments can play a catalytic role to address these challenges. By working with the private sector, academia, and civil society, they can accelerate adoption in key sectors, promote applied research, and create incentives for problem-solving with AI.

Recommendations

- **Accelerate AI in key sectors of the economy:** Design policies that support AI adoption in agriculture, mining, logistics, and other strategic industries. This can include credit lines for tech adoption, targeted funding competitions, and public procurement programs that reward innovation and measurable impact.
- **Promote AI adoption in public enterprises:** Publicly owned companies in sectors such as transport, energy, utilities, and other services can act as catalysts for the broader AI ecosystem. By applying AI across their operations, developing internal governance frameworks, running pilots, acquiring solutions from local startups, and integrating AI into core processes, these enterprises can showcase measurable impact, reduce perceived risk for private adopters, and help build capabilities across the country.
- **Scale AI use across public agencies:** AI can help modernize public services, from health and education to justice and social programs. Start with pilot projects and build internal capacity by training staff, creating institutional AI units, and issuing ethical guidance for AI deployment.
- **Strengthen links between academia, industry, and startups:** Create innovation hubs that connect researchers with companies and public agencies to solve local challenges. Support roles that translate business problems into AI development opportunities, helping scale solutions across sectors.
- **Make existing digital infrastructure work harder:** Cloud platforms, public data repositories, and computing centers already exist in many countries. Launch programs to connect businesses, researchers, and universities with these tools, offering training, technical support, and simple pathways for access.
- **Support AI startups with targeted policies and funding:** Strengthen the AI startup ecosystem through incubators, accelerators, and early-stage financing. Make it easier for startups to sell to governments by updating procurement rules and creating challenge-based funding calls that respond to real national priorities.



People

One of the most defining shifts of this technological era is how much easier it has become to access and apply productive knowledge. People no longer need deep technical backgrounds to start working with AI. With the right tools and foundational skills, they can now contribute across a wide range of fields.

This shift presents a powerful opportunity for Hispanic America. In a region where access to specialized training has often been uneven, helping more people build foundational AI skills can dramatically expand the region's capacity to innovate, address local challenges, and compete globally.

Across the region, there is a major opportunity to scale investment in applied training and better align education systems with industry needs. By expanding access to learning opportunities beyond major cities, reaching rural and underserved areas, and by increasing the number of qualified instructors with clear certification frameworks, countries can equip more people with AI skills and ensure talent development is widely distributed.

Another challenge is brain drain. Many of the region's best-trained professionals in data science, computer engineering, and AI leave to work in global tech hubs, attracted by better salaries and more opportunities. This creates a talent gap in the very systems that trained them. Addressing this requires making local ecosystems more competitive, offering attractive career paths, fostering high-impact projects, and building conditions that encourage talent to stay, return, or engage remotely, so their expertise also strengthens local innovation ecosystems.

To this challenge, it is worth adding that the nearshoring phenomenon has redefined the labor market. The arrival of global companies to the region has drastically intensified the demand for professionals, turning talent retention into a fundamental strategic challenge for the sustainability of organizations embedded in global value chains.

At the same time, SMEs are a key driver for inclusive growth. These companies employ most of the region's workforce. Supporting their digital transformation, especially when paired with targeted training for young people and women, can increase productivity, foster innovation, and close equity gaps.

To guide these efforts, the AI Sprinters and AI Pioneers reports propose a helpful framework that divides talent development into three levels:

- **Apprentices**, who need basic digital and AI literacy.
- **Implementers**, who apply AI tools in their daily work.
- **Innovators**, who design and build AI solutions.

This approach helps ensure that training programs are not one-size-fits-all, but instead tailored to different roles, starting points, and needs across the population.

Recommendations by AI Training Levels

Apprentices

People who need basic AI literacy to participate in everyday work and social environments that are increasingly shaped by digital tools, without requiring deep technical expertise.

- **Launch functional AI literacy campaigns:** Promote the broad adoption of accessible, engaging programs (many of which already exist) by working with trusted providers in the private sector, civil society, and academia. Focus on real-world examples that show where AI appears in daily life, how to use it safely, and how it may affect work and communities.
- **Build human capacity in SMEs for practical AI use:** Offer basic training and hands-on support to help workers in small and mid-sized businesses recognize where AI can make a difference and start using simple tools in their operations.
- **Expand training opportunities beyond big cities:** Make sure that people outside capital cities have access to high-quality learning. This can include regional delivery strategies, partnerships with local governments, and robust online formats that ensure quality doesn't depend on geography.

Implementers

Professionals like analysts, technicians, or supervisors who integrate AI tools into their work to use them strategically in their fields.

- **Bring technical and higher education into the AI era:** Promote partnerships between education bodies, industry, and organizations such as foundations or leading technology companies to support the updating of curricula in universities and technical programs, so students can learn to adopt AI solutions through sector-relevant tools, real-world case studies, and applied projects that connect graduates directly with industry needs.

- **Develop trusted and globally aligned certification systems:** Build national or regional systems that validate people's AI-related skills, inside and outside formal degrees, and align them with international standards. Recognized, portable credentials can help professionals demonstrate their expertise and increase their employability both locally and globally.
- **Train and connect the trainers:** Ensure that educators and instructors are well-prepared by investing in their upskilling in digital and AI teaching methods. Create communities of practice and peer-learning networks so trainers can share resources, update content regularly, and scale high-quality learning to underserved areas.

Innovators

Individuals with advanced skills who can design, build, or adapt AI solutions, from engineers and researchers to entrepreneurs and domain experts.

- **Invest in advanced training with a local mission:** This includes funding scholarships, creating centers of excellence, and supporting applied research programs that directly address the region's most pressing economic and social challenges. Strengthening industry–university collaborations is also critical, as these partnerships not only facilitate the transfer of technology from research labs to market but also help align academic curricula with the evolving needs of local industries, ensuring a workforce equipped with relevant, high-impact skills.
- **Create incentives to embed advanced AI talent in local companies:** Establish a broad package of measures to bring highly skilled AI professionals, such as PhDs or advanced master's graduates, into innovation teams in local firms. This can include competitive fellowship programs, incentives for larger companies to integrate small AI teams or acquire AI startups developing sector-specific solutions, and recognition schemes like national innovation awards or public leadership rankings. Well-designed tax benefits can complement these efforts, encouraging long-term capability building and deeper collaboration between academia and industry to solve real business challenges.
- **Turn brain drain into brain circulation:** Create programs that connect Hispanic American professionals abroad with local innovation efforts. This can include mentorships, remote collaborations, and global knowledge networks, as well as incentives for return or local engagement, ensuring that global expertise translates into tangible benefits for local innovation and competitiveness.
- **Use Nearshoring as a Talent Anchor:** To position nearshoring as a key mechanism for anchoring human capital in the region by promoting corporate policies that offer career development, globally competitive salaries, and challenging projects that neutralize the lure of emigration.

Conclusions

Hispanic America's path to fully capitalizing on the economic potential of AI does not depend on inventing disruptive technologies from scratch, but on strategically enabling the conditions for their massive and effective adoption. To achieve this, it is imperative to act on critical levers that currently limit the speed of change. The decisive adoption of a cloud-first strategy stands out as the fundamental pillar, not only for modernizing technological infrastructure in a scalable and accessible way but also for democratizing access to advanced AI tools for companies, governments, and research centers.

This potential needs action from Governments, through measures such as modernizing of public procurement frameworks, which must evolve to allow for the agile contracting of innovative services and solutions, overcoming the rigidity of obsolete acquisition models. Ultimately, the transformative value of digitalization lies in its ability to intelligently optimize and enhance existing production processes, generating efficiency gains that boost the competitiveness of the region's strategic sectors (See Table 2 for a summary of the main recommendations per country).

Beyond individual challenges, a comparative analysis of the region's countries reveals an invaluable asset: a vast repository of lessons learned and structural similarities. The successes and failures in implementing AI policies, developing talent, or modernizing infrastructure in one country serve as both a mirror and a guide for its neighbors. This convergence of experiences offers a unique opportunity to accelerate progress in a coordinated manner, avoiding the repetition of mistakes and adopting best practices on a regional scale. Fostering collaboration and knowledge sharing is not just a recommendation, but the most efficient path for Hispanic America to advance as a whole toward digital maturity, turning the potential of artificial intelligence into a tangible engine of economic and social development for all.

Table 2
Summary of main recommendations per country

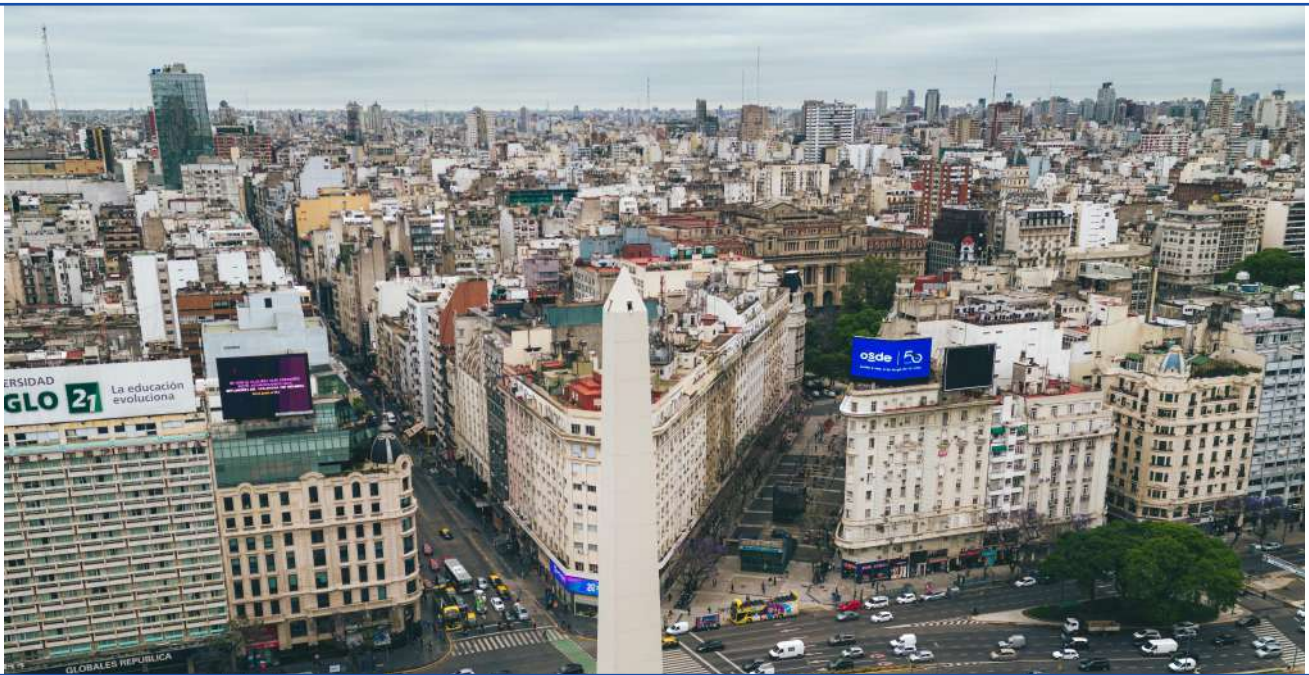
Summary of Recommendations Per Country	Enabling Public Policies	Infrastructure	Technological Innovation	People
Argentina	<p>National Strategy: Consolidate a long-term National AI Strategy with clear goals, a budget, and broad multisectoral consensus to ensure its continuity and coordinate efforts.</p> <p>International Standards: Align AI policies with international standards (e.g., ISO/IEC) to attract investment, facilitate collaboration, and ensure safe and ethical implementation</p> <p>Regulatory Framework: Modernize the personal data protection law and the public procurement system. Comprehensively review the more than 40 draft laws on AI to reduce regulatory uncertainty and move toward a single, coherent regulatory framework.</p>	<p>Cloud First Policies: Promote the priority use of the cloud to scale AI capabilities efficiently and affordably in the public and private sectors.</p> <p>Data Infrastructure: Encourage investment attraction and access to modern, secure, and efficient data centers, anchored in a long-term national strategy.</p> <p>Interoperability: Promote common data standards and open architectures to ensure the secure and fluid exchange of information between systems, especially in healthcare and education.</p>	<p>Promote AI in Key Sectors: Use incentives such as technology credits and challenge-based purchases to integrate AI into strategic industries (agriculture, manufacturing, etc.).</p> <p>Innovation in Public Enterprises: Implement AI pilot programs in state-owned enterprises to generate knowledge and practices that can be replicated throughout the rest of the ecosystem.</p> <p>Sector Innovation Hubs: Develop regional centers of excellence to foster collaboration between academia, industry, and the public sector on AI solutions applied to productive challenges.</p>	<p>Global Talent Connection: Connect the Argentine professional diaspora with the local ecosystem through mentoring networks and returnee programs to strengthen innovation.</p> <p>Training of Trainers: Invest in the development of AI teachers and instructors to ensure scalable, equitable, and high-quality learning throughout the country.</p> <p>Skills Certification: Establish a national competency-based certification system to validate functional skills in AI and facilitate job placement.</p>
Chile	<p>Evidence-Based Regulation: Focus AI regulation on specific risks and leverage the existing legal framework for balanced development.</p> <p>Sector Oversight: Strengthen existing public agencies to oversee AI in their respective domains (health, finance), leveraging their expertise.</p> <p>Legal Certainty for Data Mining: Clarify the legal framework with a broad copyright exception for model training, boosting R&D.</p>	<p>Expansion of "Cloud First" in Key Regions: Prioritize cloud adoption in regional development hubs to deploy scalable AI solutions in sustainability, logistics, and clean energy.</p> <p>Digital Infrastructure for Sustainable Development: Align investment in connectivity, cloud, and open data with the priorities of the sustainable productive development agenda to drive green innovation.</p> <p>Open Data Platforms for Industry: Create public data repositories with territorial granularity to foster AI innovation in priority sectors such as energy, mining, and sustainable agriculture.</p>	<p>CENIA Technology Transfer: Expand programs to accelerate AI adoption in strategic sectors (mining, agriculture) through co-creation with industry and rapid prototyping.</p> <p>AI for Sustainable Transition: Promote public-private partnerships that apply AI to reduce emissions and optimize resources, positioning it as an enabler of sustainable competitiveness.</p> <p>Incentives for Resilient Value Chains: Support AI solutions that improve sustainability and efficiency in strategic value chains such as copper, lithium, and food.</p>	<p>National Certification in Applied AI: Strengthen ChileValora to create industry-recognized micro-credentials in data analysis, prompt engineering, and tool use.</p> <p>Training the Trainers in AI: Fund programs to prepare teachers and facilitators nationwide with practical skills in AI and digital pedagogy.</p> <p>AI in Technical-Vocational Education: Integrate AI training programs for technical roles (manufacturing, logistics) focused on solving practical problems.</p>

Summary of Recommendations Per Country	Enabling Public Policies	Infrastructure	Technological Innovation	People
Colombia	<p>Execute the National AI Strategy: Prioritize the implementation of the National AI Policy with clear governance, a budget, defined indicators, and a centralized coordinating body.</p> <p>Integrate AI into Sectoral Plans: Incorporate AI as a strategic enabler in development plans for priority sectors such as education, health, agriculture, and justice.</p> <p>Review Current Legal Frameworks: Evaluate current regulations (data protection, public procurement, cybersecurity) before creating new AI laws to ensure that the regulation is justified and necessary.</p>	<p>Strengthen Cloud Infrastructure: Promote Cloud-First policies to accelerate access to AI tools, data storage, and advanced computing capabilities across all sectors.</p> <p>Close the Territorial Digital Divide: Prioritize the expansion of broadband connectivity in rural and remote areas through public-private investment, subsidies, and new technologies.</p> <p>Promote Open Data Ecosystems: Expand access to quality data that respond to local priorities and territorial challenges to improve decision-making.</p>	<p>Increase Investment in AI R&D: Increase public and private spending on research and development, creating specific programs to finance AI projects in strategic sectors.</p> <p>Foster Innovation in SMEs: Implement technical and financial support programs for SMEs to develop internal capabilities and adopt artificial intelligence solutions.</p> <p>Promote Strategic Alliances: Create consortia between academia, industry, and government to lead AI initiatives and accelerate technology transfer.</p>	<p>Strengthen English and Digital Skills: Implement national programs to improve technical English proficiency and incorporate AI literacy at all educational levels.</p> <p>Develop Human Capital in SMEs: Launch support programs for SMEs to strengthen talent management, including the training and retention of personnel with AI skills.</p> <p>Expand Continuing Education in AI: Expand and update programs such as those of SENA and SENATIC to align them with industry needs and promote continuous learning.</p>
Ecuador	<p>Finalize and Operationalize the National AI Strategy: Support AI policy with concrete implementation plans, institutional coordination, and financing aligned with the country's development.</p> <p>Sequence AI Regulation: Prioritize institutional development before broad legislation, focusing initial efforts on regulating high-risk cases with local evidence.</p> <p>Create a National AI Governance Committee: Establish a multi-stakeholder advisory group (government, academia, private sector) to guide policies and coordinate public-private collaboration.</p>	<p>Launch a "Cloud First" Strategy: Promote cloud use in the public sector and SMEs with technical guidelines and procurement frameworks that facilitate its adoption.</p> <p>Leverage CEDIA's HPC Infrastructure: Expand access to its computing capacity for universities and startups, funding projects that transform research into AI applications.</p> <p>Expand Digital Connectivity: Prioritize infrastructure investment for rural and productive regions, closing access gaps for inclusive AI adoption.</p>	<p>Launch Sectoral AI Adoption Programs: Support pilots in agriculture, manufacturing, and commerce to demonstrate the value of AI and build trust in the industry.</p> <p>Promote AI in Public Procurement: Incentivize the public sector to acquire AI solutions with clear interoperability, ethics, and performance criteria.</p> <p>Foster Academia-Industry Collaboration: Fund co-development projects between universities and SMEs to solve local production challenges with AI.</p>	<p>Expand AI Training Nationwide: Use online platforms and partnerships to bring AI training to all provinces, focusing on youth, women, and underserved communities.</p> <p>Create Applied AI Certification Pathways: Develop national credentials to validate practical AI competencies, without requiring formal degrees.</p> <p>Support Higher Education in AI: Expand master's and doctoral programs in AI, and connect graduates with local innovation ecosystems.</p>
El Salvador	<p>Develop a National AI Action Plan: Translate new legislation into concrete plans with timelines, roles, and funding to accelerate its adoption in strategic sectors.</p>	<p>Adopt a National "Cloud First" Policy: Accelerate cloud adoption in the public sector, academia, and SMEs with guidelines for safe and responsible use.</p>	<p>Promote Pilot Projects in Strategic Sectors: Fund AI demonstrations in manufacturing, commerce, and finance to demonstrate productivity and cost benefits.</p>	<p>Launch a National AI Retraining Plan: Design a phased strategy to train apprentices, implementers, and innovators with flexible formats.</p>

Summary of Recommendations Per Country	Enabling Public Policies	Infrastructure	Technological Innovation	People
<p>El Salvador</p>	<p>Consolidate El Salvador’s pragmatic and pro-innovation approach to AI regulation: The country’s legal framework stands out for its regulatory pragmatism and its focus on enabling innovation. El Salvador should continue strengthening this approach through multi-stakeholder dialogue, ensuring that benefits reach both emerging and established actors.</p> <p>Ensure continuity and institutional backing for AI-related tax incentives: The tax incentives established under the Law for the Promotion of Innovation and Technology Manufacturing represent an important step toward attracting investment in high-impact AI applications. Sustaining and clearly communicating the continuity of this policy will help build investor confidence and demonstrate the government’s long-term commitment to digital transformation.</p> <p>Leverage the favorable regulatory environment to attract advanced human capital: Continue attracting researchers, entrepreneurs, and developers specialized in AI and its applications across the economy and public sector. Technology visa programs, soft-landing hubs, and strengthened collaboration with international universities could accelerate the consolidation of the country’s technological ecosystem.</p>	<p>Deepen the adoption of cloud infrastructure to enable AI applications: Building on advances in government digital transformation and existing public-private partnerships, El Salvador can expand the use of cloud infrastructure across public institutions. Strengthening technical capabilities, procurement frameworks, and civil servant training would help accelerate the development and deployment of AI-based solutions.</p> <p>Expand public-private partnerships for digital infrastructure: Leverage projects such as Altius Tech Park and Google’s telemedicine initiatives to develop national infrastructure nodes that support real-time AI applications, foster innovation, and improve service delivery across the country.</p> <p>Scale the use of AI across public agencies: The Government of El Salvador can build on recent public and private investments to scale the deployment of AI solutions across public agencies—particularly in healthcare and education—tailoring adoption to the country’s socioeconomic needs.</p>	<p>Promote pilot projects in strategic sectors: Fund demonstration projects in manufacturing, commerce, and financial services to showcase the tangible benefits of AI in productivity, operational cost reduction, and service quality improvement.</p> <p>Strengthen CIED as a hub for AI innovation: Expand the scope of the Center for Innovation in Digital Entrepreneurship to incorporate AI-focused incubation programs, industry challenges, and open innovation platforms that connect government, startups, and academia.</p> <p>Scale support initiatives for AI-driven entrepreneurship: Leverage existing programs that support entrepreneurship and business digitalization—including initiatives led by multilateral organizations—to expand the development of AI-based solutions for SMEs.</p>	<p>Launch a National AI Reskilling Plan with tiered training levels: Design a national strategy to train learners, implementers, and innovators in AI-related competencies. Offer short, flexible learning formats tailored to different sectors and profiles.</p> <p>Promote ICT degree programs in priority regions: Expand scholarship programs and partnerships with regional universities to increase the number of graduates in information and communication technologies, particularly outside the capital and in areas of strategic economic importance.</p> <p>Scale AI training programs for entrepreneurs: Strengthen initiatives such as “Dominando el Futuro” to create AI-focused training pathways for business leaders, helping SMEs and startups integrate AI tools into their operations.</p>

Summary of Recommendations Per Country	Enabling Public Policies	Infrastructure	Technological Innovation	People
Mexico	<p>Consolidate the National AI Strategy: Develop a long-term plan with clear objectives and measurable metrics to ensure its continuity.</p> <p>Design a Balanced Regulatory Framework: Promote the ethical and responsible use of AI, fostering innovation without imposing excessive barriers.</p> <p>Promote Strategic Collaboration: Foster alliances between government, industry, and academia to optimize resources and accelerate AI adoption.</p>	<p>Strengthen Digital Infrastructure Policies: Prioritize closing the connectivity gap between urban and rural areas.</p> <p>Strengthen Public Data Management: Create a national repository of open, standardized, and structured data.</p> <p>Foster a Collaborative Data Ecosystem: Promote data sharing between government, academia, and industry to foster responsible innovation in AI.</p>	<p>Promote Regional AI Research Capabilities: Promote AI research based on the comparative advantages of each state and coordinated with global networks.</p> <p>Create Financing Mechanisms for Startups: Promote the creation of technology startups through tax incentives and simplified regulations.</p> <p>Foster a Culture of Innovation: Promote entrepreneurship in education, business, and government.</p>	<p>Implement AI and Digital Skills Training Programs: Target programs for workers, entrepreneurs, and higher education, tailored to sector demands and nearshoring opportunities.</p> <p>Develop AI Awareness Strategies: Promote public awareness of the benefits, risks, and responsible uses of AI for informed citizen participation.</p> <p>Organize AI Adoption Workshops: Conduct practical workshops for SMEs and the public sector, showcasing real-world applications to facilitate AI adoption.</p>
Panama	<p>Promote Multisectoral Participatory Processes: Involve academia, civil society, and the private sector in defining strategies and regulations.</p> <p>Assess Current Regulations Before Legislating: Identify real gaps in the ecosystem and avoid restrictive regulations without technical justification.</p> <p>Focus Legislative Efforts on Proposals with Consensus: Prioritize initiatives with broad multisector debate to avoid harming technological development.</p>	<p>Promote "Cloud-First" Policies: Prioritize the contracting of cloud services to accelerate the digitalization of the State and the adoption of AI.</p> <p>Expand High-Performance Computing (HPC): Strengthen clusters at public universities and connect them to industry through shared services.</p> <p>Strengthen Last-Mile Connectivity: Invest in quality internet in underserved areas to close the digital divide and enable access to AI.</p>	<p>Expand Financing for Tech Startups: Mobilize public and private capital to facilitate access to early-stage financing and support scalability.</p> <p>Foster a Culture of Innovation and Entrepreneurship: Promote creativity at all educational levels to strengthen the technology ecosystem.</p> <p>Address the Shortage of Specialized Talent: Implement programs to upgrade, attract, and retain talent, and strengthen the link between academia and industry.</p>	<p>Expand Technical, Professional, and Postgraduate Training in AI: Support high-quality master's and doctoral programs and certification pathways.</p> <p>Strengthen STEM Education and AI Pathways: Promote AI training in higher and technical education through incentives and public-private partnerships.</p> <p>Promote International Training Partnerships: Incorporate content, pedagogical models, and global certifications into the Panamanian talent ecosystem.</p>
Paraguay	<p>Initiate a Participatory Process for the National AI Strategy: Launch an inclusive roadmap to align ambitions and establish a shared vision.</p> <p>Integrate AI into the National ICT Plan: Turn the plan into an operational tool with</p>	<p>Promote "Cloud-First" Policies in the Public Sector and SMEs: Incentivize cloud adoption to reduce infrastructure costs and increase digital resilience.</p> <p>Strengthen Rural Digital Infrastructure for AI in Agriculture: Expand</p>	<p>Create a National Fund for AI Startups: Promote entrepreneurship in strategic sectors with subsidies and seed capital.</p> <p>Strengthen R&D with International Collaboration: Co-develop AI solutions for aquaculture, crops, and environmental</p>	<p>Promote AI Training and Job Retraining Plans: Extend training initiatives to the entire community to enhance talent nationwide.</p> <p>Strengthen Higher and Technical Education in AI: Integrate AI content in high schools and</p>

Resumen de recomendaciones por país	Políticas públicas habilitantes	Infraestructura	Innovación tecnológica	Personas
	<p>targets and accountability for emerging technologies.</p> <p>Establish Regulatory Foundations for AI Innovation: Prioritize key frameworks such as a Data Protection Law and ethics guidelines to</p>	<p>connectivity in rural areas to enable AI applications in the agricultural sector.</p> <p>Develop Open Data Platforms for Climate and Agriculture: Promote precision agriculture through public databases accessible to farmers and</p>	<p>monitoring through global alliances.</p> <p>Support AI Research Hubs: Incentivize applied research labs at universities and institutes with public funds for projects aligned with national development.</p>	<p>universities, with a focus on key sectors and rural areas.</p> <p>Train Local Facilitators for AI Literacy: Create a network of community educators to deliver practical workshops, especially in rural areas.</p>
Dominican Republic	<p>Establish Strong Governance for ENIA: Create a high-level coordination mechanism to reduce fragmentation and ensure strategic alignment.</p> <p>Advance the Creation of CENIA: Establish a national AI technical body for regulatory guidance, coordination, and reference on ethics and innovation.</p> <p>Review Existing Legal Frameworks: Evaluate current legislation to address emerging challenges before creating new regulations.</p>	<p>Develop a National "Cloud First" Strategy: Prioritize cloud infrastructure for public services and startups to facilitate access to computing and reduce barriers.</p> <p>Close the Connectivity Gap: Invest in infrastructure for rural and underserved areas to ensure equitable deployment of AI.</p> <p>Expand High-Performance Computing: Support the development of GPU clusters by connecting academic, public, and private resources.</p>	<p>Coordinate Innovation Programs: Strategically align the Innovation Policy, the Digital Agenda, and the ENIA to maximize impact.</p> <p>Create AI Sector Labs: Establish R&D centers in tourism, logistics, and agriculture in partnership with academia and industry.</p> <p>Promote Open Innovation Challenges: Launch calls for startups to solve public challenges with AI in partnership with ministries.</p>	<p>Scale Digital Bootcamps and Mentorships: Expand programs for young people, connecting them with real employment opportunities through internships and apprenticeship programs.</p> <p>Create Incentives for Talent Retention: Establish career paths and support startups to retain the best graduates in the local ecosystem.</p> <p>Promote AI Training for SMEs: Support community-based digital training, especially for small businesses in tourism, commerce, and agriculture.</p>
Uruguay	<p>Implement the National AI Strategy (2024–2030): Translate the vision into concrete actions with budgets and KPIs to monitor progress.</p> <p>Strengthen Public-Private Coordination: Establish structured dialogues to accelerate the ethical adoption of AI across all sectors.</p> <p>Review Existing Legal Frameworks: Evaluate current laws and propose updates focused on high-risk areas without hindering innovation.</p>	<p>Adopt a "Cloud First" Policy: Promote cloud computing in the public sector to accelerate digital transformation and leverage the country's renewable energy.</p> <p>Accelerate Investment in Sustainable Infrastructure: Position Uruguay as a low-carbon AI hub by attracting data centers that use clean energy.</p> <p>Expand Access to Computing for SMEs: Facilitate the use of resources like ClusterUY for small businesses with technical assistance and training.</p>	<p>Strengthen Technology Transfer: Facilitate agile collaboration between universities and companies, reducing bureaucracy and updating incentives for applied R&D.</p> <p>Expand Support for AI Startups: Create acceleration funds and programs to scale AI ventures and connect them to international markets.</p> <p>Scale AI Experimentation: Use LATU and Latitud to create "living labs" that facilitate the prototyping, testing, and certification of AI tools.</p>	<p>Expand AI Education and Training: Expand access to master's degrees, technical training, and flexible certifications for professionals.</p> <p>Deepen the Ceibal AI Model: Consolidate the integration of AI in K-12 education with updated curricula and teacher training.</p> <p>Retain and Attract AI Talent: Strengthen incentives, partnerships, and remote work to ensure the best talent remains in the country.</p>



Argentina

Argentina, as Hispanic America's third-largest economy, is well-positioned to benefit from AI. With a population of 45.5 million and a 2023 GDP of [USD 646.08 billion](#), its [core 2024 economic sectors](#) included wholesale/retail trade (16.2%) and manufacturing (9.4%). Argentina is also the world's [third-largest food exporter](#), with agriculture representing 5.7% of its GDP.

Despite facing recent economic challenges, including a [1.6% GDP contraction](#) in 2023 and [117,8% accumulated inflation](#) in 2024, the economy is rebounding, with a [5.5% growth](#) projected for 2025-2026 and a decreasing inflation.

In this context, AI can boost productivity, efficiency, and competitiveness, supporting both economic recovery and future growth.

Economic Potential of AI in Argentina

AI could be a key driver of Argentina's future growth. If all economic sectors were to adopt AI today, its contribution to Argentina's economy is estimated to be about USD 23.7 to USD 43.5 billion annually –equivalent to 3.7%–6.7% of GDP–.

Sectors with the highest projected impact are manufacturing (USD 7.3–12.5 billion annually), trade (USD 3.5–6.4 billion annually), real estate (USD 1.8–3.5 billion annually), and agriculture (USD 1.3–2.5 billion annually). Table 3 details the impact for each economic sector.

Nevertheless, Argentina's current AI adoption rate is still low (about 4.2%). This adoption rate reduces the economic impact of AI to USD 0.987–1.8 billion annually. This number stresses the importance of promoting AI adoption to leverage its potential as an engine of economic growth.

3.7–6.7%

Of Argentina's GDP could represent the economic impact of AI

Table 3

Estimated AI impact by Economic Sector in Argentina (millions of USD 2023)

Economic Sector	Low impact scenario	High impact scenario	Average sectorial impact
Manufacturing	7,337	12,491	30%
Wholesale and retail trade; repair of motor vehicles and motorcycles	3,522	6,434	15%
Real estate activities	1,845	3,518	8%
Agriculture, forestry, and fishing	1,307	2,541	6%
Human health and social work activities	1,304	2,475	6%
Education	1,272	2,430	5%
Transportation and storage	1,098	2,054	5%
Public administration and defence; compulsory social security	973	1,950	4%
Construction	981	1,911	4%
Mining and quarrying	807	1,573	4%
Financial and insurance activities	850	1,510	4%
Information and communication	772	1,439	3%
Accommodation and food service activities	566	1,134	2%
Electricity, gas, steam, and air conditioning supply, and Water supply; sewerage, waste management, and remediation activities	429	797	2%
Other service activities	327	605	1%
Arts, entertainment, and recreation	278	517	1%
Activities of households as employers; undifferentiated goods-and services-Producing activities of households for own use	55	111	0%
Total	23,721	43,491	

Source: Elaborated based on national economic statistics



Enabling Public Policies

In 2019, Argentina released its [National AI Plan](#), a broad strategy to become a regional leader in AI. Despite the original strategy not being implemented, the current government is promoting the [development of AI](#) with the vision of becoming a global hub by capitalizing on competitive advantages like its energy resources, human capital, entrepreneurial ecosystem, and favorable climate for data center investments.

Esteban Lescano, director of the Law and Policy Commission at the Argentinian Internet Chamber (CABASE), explains: *"The government looks favorably upon and has made some public statements in favor of the development of artificial intelligence, of turning Argentina into a regional hub, or fourth in the world in artificial intelligence development."*

Legislatively, there's a burst of AI draft bills in Congress, [reaching more than 40 in 2025](#). The proposed bills are in many cases inspired by the European Union's AI Act. Moreover, some proposals include creating new promotional bodies and authorization processes for using AI systems in specific domains, and specific criminal law provisions.

Most of these legislative initiatives, however, lack broad consensus within or outside Congress. Soledad Guilera, Director of the AI and Public Policy Program at Universidad Torcuato Di Tella, explains: *"There is growing legislative interest in AI governance in Argentina, with over forty initiatives submitted to the National Congress as of June 2025. These proposals reflect a regulatory landscape still in formation, characterized by a predominance of broad, punitive approaches and limited attention to enabling factors or the broader impacts of AI, such as environmental effects or its use in the public sector. The diversity of proposals and the lack of clear definitions of AI reveal both the early stage of the national legislative debate and the absence of global consensus on the most effective regulatory models."*

Recommendations

- **Consolidate a long-term national AI strategy**

Argentina should prioritize fully consolidating and implementing a national AI strategy that can coordinate initiatives under a common goal. This strategy needs broad multi-sector consensus and should include clear goals, progress indicators, and adequate budgeting to ensure consistent execution, regardless of changes in government.

- **Prioritize adopting international principles and standards:**

By aligning policies with international standards and industry best practices, Argentina can foster cross-border collaboration, attract tech investments, and ensure advanced AI solutions are implemented locally, safely, and ethically.

Argentina could strategically adopt international principles and standards, such as those from ISO/IEC and the IEEE. These frameworks provide a strong foundation for responsible AI system development and deployment, while promoting global interoperability and reducing regulatory fragmentation risk.

- **Review existing laws and proposed bills**

Modernize the personal data protection law and public procurement system. Comprehensively review the more than 40 draft laws on AI to reduce regulatory uncertainty and move toward a single, coherent regulatory framework.





Energy Infrastructure and AI

In December 2024, the Government unveiled a [national nuclear plan](#), that includes building small modular reactors (SMR) at the Atucha Nuclear Power Plant, developing uranium reserves, creating an Argentinian Nuclear Council, and establishing a "Nuclear City" in Patagonia for data centers and high-energy demand applications. The goal is to position Argentina as a leader in nuclear energy and AI.

Infrastructure

AI development largely depends on robust, accessible digital infrastructure. In recent years, Argentina has made significant progress in connectivity and technological capacity, creating an increasingly favorable environment for AI expansion. [Internet penetration](#) in households rose from 82.9% in 2019 to 93.4% in 2023. In June 2025, the country surpassed the Hispanic American average in [mobile download speed](#), reaching 61.01 Mbps, while [fixed broadband averaged](#) 92.42 Mbps.

Fernanda Martínez, Director of the Center for Studies in Technology and Society at Universidad de San Andrés, notes: *"Argentina is quite well connected to the internet, compared to the region. The number of households with computers and internet access is an enabler. However, one of the challenges we see is interoperability between systems, for example, in health."*

Argentina has advanced in High-Performance Computing (HPC), with [five high-performance clusters](#) and [14 data centers](#). Building on this foundation, there is an opportunity to attract greater investment, supported by a government plan to position the country as an AI hub by leveraging its nuclear energy capacity.

Recommendations

- Promote investment in digital infrastructure and access to computing capacity

Expand and modernize data infrastructure by attracting investment and providing access to modern, secure, and energy-efficient data centers. This plan should be part of a consensus-based strategy to ensure its long-term continuity.

- Promote “Cloud First” policies

Encourage the use of cloud infrastructure as an efficient and scalable way of taking advantage of AI capabilities in the private and public sectors.

- Improve system interoperability

Address interoperability gaps, especially in critical sectors like health and education. This involves promoting common data standards, open architectures, and platforms that enable secure and efficient information exchange among public, private, and academic institutions.





Technological Innovation

Strengthening innovation capabilities is essential for Argentina to become a key player in the regional AI ecosystem. Sustained investment in research and development (R&D), promoting technology transfer, and supporting the entrepreneurial ecosystem are key to achieving this goal.

Argentina [invests](#) approximately 0.6% of its GDP in R&D, split between 0.33% public and 0.27% private investment. While private investment has grown steadily since 2014 (from [0.14% of GDP](#)), public investment decreased in the same period, from [0.46% in 2014 to 0.33%](#) in 2023. This setback poses challenges for developing scientific and technological capabilities in strategic areas like AI.

Corporate AI adoption is also crucial. A [2024 study](#) by The Conference Board revealed that 100% of surveyed executives consider that AI can boost their organizations' efficiency and productivity, 98% think it is a key factor for improving job performance, and 96% recognize it as an innovation driver. However, 98% of respondents also noted the need to develop new skills and training programs for effective implementation. According to the same study, only 20.4% of Argentina's companies use AI in their operations, and 44.4% plan to adopt it in the short term.

Ariel Graizer, president of the Argentinian Internet Chamber, highlights the dynamism of the local ecosystem: *"Most Argentinian software companies are already using these tools. For example, we apply them in various operational areas of our data centers and networks, improving processes and efficiency."*

Argentina is also attracting significant investment in the AI sector. According to the [Emerging Technologies Observatory \(ETO\)](#), the country hosts 38 AI companies that have completed 87 investment deals, totaling USD 7,135 million. Juan Cruz Díaz, Managing Director of Cefeidas Group, states: *"The Argentinian entrepreneurial and technological ecosystem is very successful, which is a key opportunity for development."*

A remarkable example of AI's transformative impact in Argentina is in the agricultural sector. Various platforms are applying image-based technologies and machine learning to optimize crop yields, efficient water and fertilizer use, and early pest detection, promoting more sustainable agriculture.

In 2022, the country had [165 Agtech](#) companies using technologies like IoT, Big Data, AI, remote sensors, and geolocation. According to Juan Cruz Díaz, managing director of Cefeidas Group, agriculture has historically been a key sector that underwent deep modernization since the 1990s. This technological openness has made the industry particularly receptive to AI adoption today.

Argentinean Agtechs

[DeepAgro](#) uses AI for crop weeding. Their technology combines a camera with a recognition algorithm to identify weeds in fallow, soybean, and corn crops. This reduces spraying costs, improving operational efficiency.

[Calice](#), through its NODES platform, integrates company data to conduct advanced virtual field trials based on AI models. It predicts the behavior of new crop varieties under different conditions.

[ZoomAgri](#) uses AI for quality testing and differentiation of agricultural products like barley, wheat, soybeans, and corn. Its scanning devices, ZoomVarieties and ZoomSpex, analyze the physical quality of the produce, improving efficiency and accuracy in agricultural testing.

Recommendations

- **Support AI adoption in strategic productive sectors**

Create incentives such as sector-specific tech credit lines, AI pilot competitions, or challenge-based procurement to promote AI integration in agribusiness, manufacturing, energy, and healthcare.

- **Accelerate AI use in state-owned enterprises**

Launch innovation programs in public companies such as YPF, Arsat, or INVAP to pilot AI applications and generate transferable lessons for broader ecosystem adoption.

- **Establish sector-focused AI centers of Excellence**

Create regional hubs that connect universities, businesses, and public agencies to co-develop AI solutions addressing sector-specific productivity and sustainability challenges.





People

AI development in Argentina relies on a continuously expanding talent base, vital for harnessing its transformative potential. In recent years, the country has seen rapid [growth in AI talent concentration](#), doubling in just eight years. This progress is accompanied by [significant female participation](#) in AI research, reaching 24.8%.

Argentina also [surpasses the regional average](#) in early science education and specialized postgraduate AI training, reflecting a sustained commitment to human capacity development in strategic areas.

However, a challenge in Argentina is talent retention. Despite recent improvements, the country had a [negative net flow of AI experts](#) in 2023. This trend reflects local market tensions, where domestically trained talent often finds better opportunities abroad.

David Mielnik, AI Leader at the National Tax Court and founder of InteligenciaLegal, recaps: *"Argentina is a great producer of talent in the knowledge economy. We are great talent exporters. Programmers and software designers export their services because they are highly valued abroad, but not quite well recognized in the local market."*

Talent Training Initiatives

Google.org, Google's philanthropic arm, plays a key role in talent development. For example, it has [invested USD 1 million in Argentina](#), distributed to [Chicos.net](#) and [Eidos](#), to train over 100,000 people in AI.

Chicos.net will allocate USD 500,000 to its ['HumanIA'](#) educational project, providing resources and training for teachers and students, along with interactive activities to encourage reflection on AI uses and advancements. The project aims to reach 50,000 new educators and students nationwide, with a strong focus on including women.

Recommendations

- **Connect Argentinian talent to global networks**

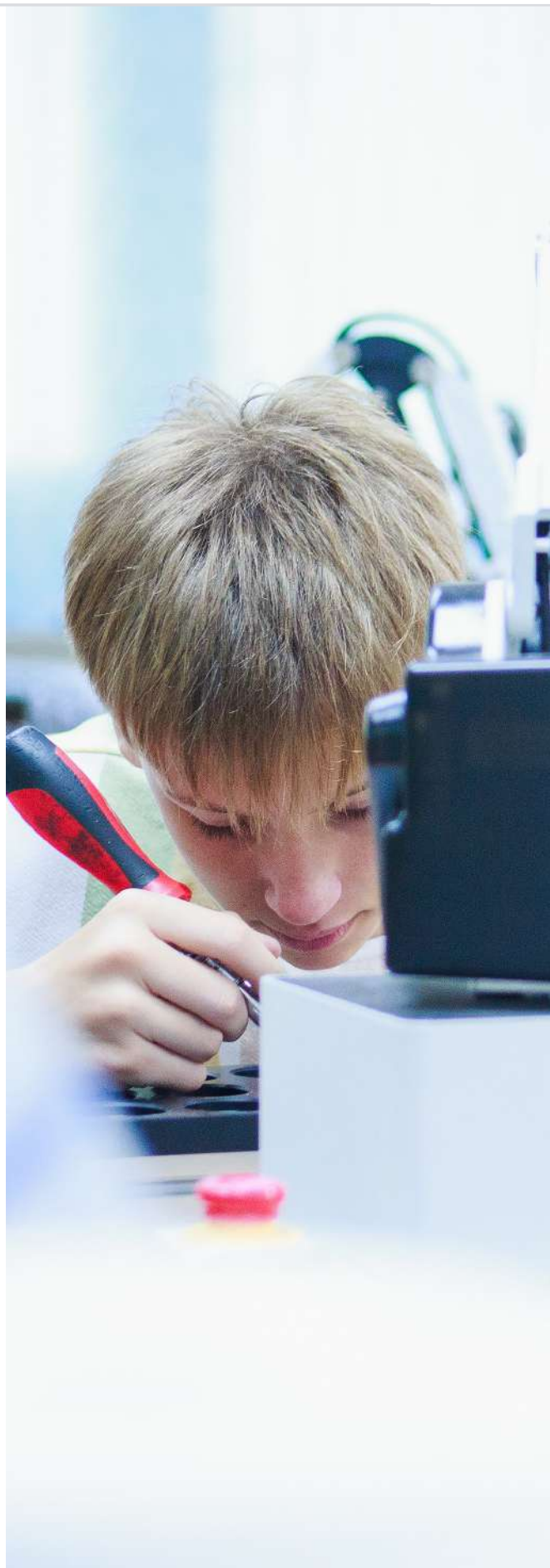
Create mechanisms to engage Argentinian professionals abroad through mentoring, remote collaboration, and return programs that strengthen local innovation ecosystems.

- **Train trainers in applied AI skills**

Invest in upskilling programs for teachers, instructors, and facilitators in AI knowledge and technology-enabled teaching to ensure scalable and equitable learning opportunities.

- **Develop national certification systems for AI skills**

Establish competency-based certification schemes that validate functional AI abilities, independent of traditional academic degrees, to support workforce integration.





Chile

Chile is one of Hispanic America's most stable and open countries, with a [population](#) of 19.7 million and an [estimated GDP](#) of USD 344.37 billion in 2024. Its economy boasts strong institutions and significant trade integration: [exports were](#) 31% of 2023 GDP, with mining accounting for 15.2%.

This dynamism coexists with some structural challenges. The country has seen productivity stagnation and above-target inflation in recent years, starting with the pandemic. [Projections](#) point to moderate economic growth, between 1.5% and 2.5% in the coming years, below the [global 3.1% average](#). In this scenario, AI can be a strategic tool to revitalize the Chilean economy. Its adoption can diversify the productive matrix, increase process efficiency, and open new business opportunities in priority sectors like mining, agriculture, and services.

Economic Potential of AI in Chile

Analyzing Chile's productive matrix, we estimate AI's economic potential between USD 36.4 and USD 67.2 billion annually, equivalent to 10.9% and 20% of GDP. Sectors with the highest projected impact are financial and insurance activities (USD 14-25,1 billion annually), trade (USD 7.2-13.2 billion annually), and manufacturing (USD 3.6-6.8 billion annually), which together would account for over 65% of the total economic effect. Other strategic sectors with high AI adoption potential include mining (USD 2.3-4.5 billion annually), agriculture (USD 1.5-3 billion annually), and electricity and gas supply (USD 1.5-2.8 billion annually). For more details, see Table 4.

Achieving this growth potential requires deepening Chile's AI adoption rate. According to [PwC data](#), only 5% of companies have currently integrated AI into their operations. If this figure holds, AI's economic impact would be reduced to between USD 1.8 and USD 3.4 billion annually.

10.9-20%

Of Chile's GDP could represent the potential economic impact of AI.

Table 4
Estimated AI impact by Economic Sector in Chile (millions of USD 2023)

Economic Sector	Low impact scenario	High impact scenario	Average sectorial impact
Financial and insurance activities	13,976	25,079	38%
Wholesale and retail trade; repair of motor vehicles and motorcycles	7,229	13,209	20%
Manufacturing	3,611	6,796	10%
Mining and quarrying	2,303	4,486	6%
Agriculture, forestry, and fishing	1,529	2,974	4%
Electricity, gas, steam, and air conditioning supply	1,503	2,793	4%
Transportation and storage	1,249	2,337	3%
Construction	888	1,730	3%
Information and communication	825	1,537	2%
Administrative and support service activities	619	1,147	2%
Real estate activities	593	1,131	2%
Professional, scientific, and technical activities	517	958	1%
Education	454	866	1%
Human health and social work activities	442	839	1%
Accommodation and food service activities	247	496	1%
Water supply, sewerage, waste management, and remediation activities	125	232	0%
Public administration and defence; compulsory social security	112	224	0%
Other service activities	120	223	0%
Arts, entertainment, and recreation	83	155	0%
Not information / not classified	6	12	0%
Total	36,432	67,224	

Source: Elaborated based on Chilean National Economic Statistics





Enabling Public Policies

Chile has taken a leading role in formulating policies to boost AI development and adoption. The country established its [National AI Policy](#) in 2021, updated in 2024, which shows the country's commitment to digital transformation and emerging technology adoption.

Chile has worked to create a regulatory environment that facilitates responsible and effective AI adoption and development. The country adopted [OECD AI principles](#) and was the first to use [UNESCO's AI Readiness Assessment Methodology](#) (RAM), which formed the basis for updating its National AI Policy.

Chile has strong institutions and a modern legal framework to address the challenges of the digital economy. As Professor Claudio Magliona explains: “the country already has updated rules in place for key areas like competition, consumer protection, data privacy, and cybersecurity, offering a solid foundation for navigating the impacts of AI without the need for overregulation.”

More than six AI-related bills have been introduced in recent years, reflecting concerns about risks to fundamental rights and digital crime. Two of these bills aim to regulate AI broadly, while others focus on specific issues, like criminalizing the creation or sharing of intimate images created with AI.

So far, the dominant approach has been primarily criminal and risk-focused, with limited coordination. According to Dr. Danielle Zaror, a legal scholar at Universidad de Chile: “existing regulations have generally been sufficient to handle recent technological changes. Broad new legislation should only be considered in cases of clear and concrete new disruptions.”

Recommendations

- Promote a balanced, evidence-based approach for regulation

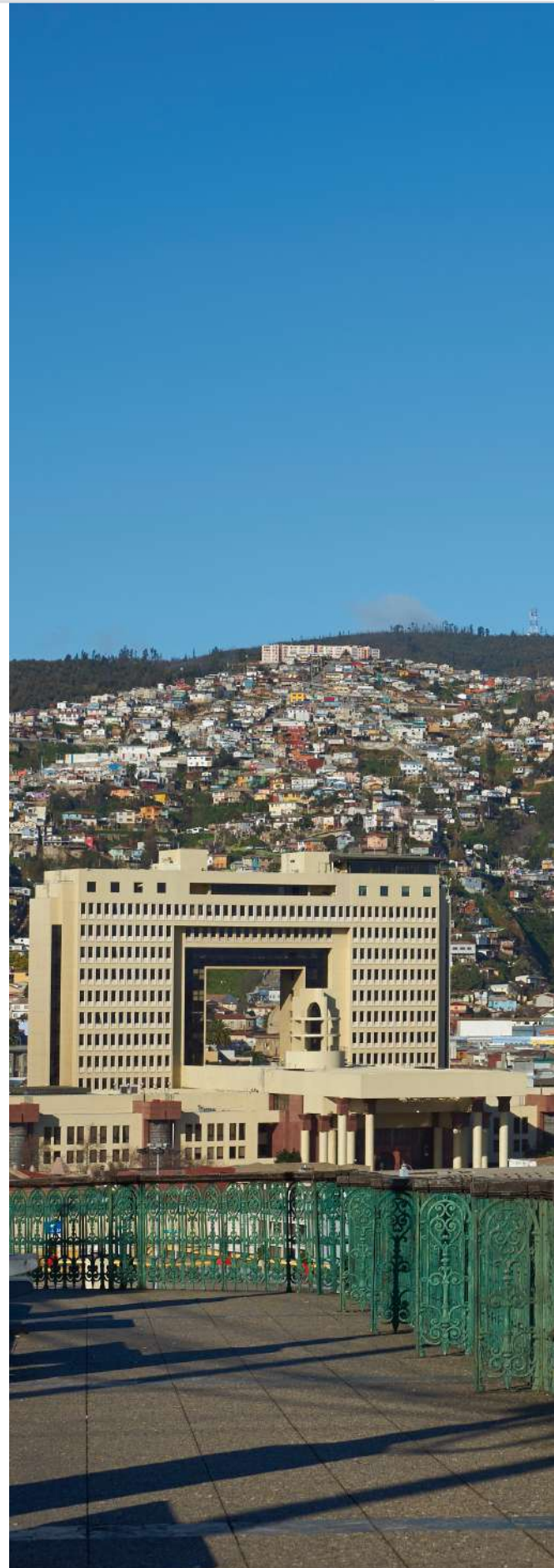
Build on the existing legal framework and focus regulation on specific use cases or concrete risks.

- Prioritize sectoral enforcement and existing expertise

Strengthen the capacity of existing agencies to address AI-related challenges in their respective domains (e.g., health, finance), leveraging their technical knowledge and proximity to key sectors.

- Clarify the legal framework for data mining and model training

Provide legal certainty by adopting a broad copyright exception for data mining, covering both commercial and non-commercial AI R&D, following examples like Japan.





Infrastructure

Chile is emerging as a key digital hub in Hispanic America, driven by investments in international connectivity, data centers, and new technologies. The country currently hosts [45 data centers](#), including Google's facility in Quilicura, a central regional node. New infrastructure continues to grow, [supported by public policies](#) that promote development of digital infrastructure, positioning Santiago as a leading location for cloud services in the region.

In international connectivity, a standout initiative is the [Humboldt submarine cable](#), developed by the Government of Chile in partnership with Google, who brings technology, expertise in the deployment and operation of submarine cables, and co-investment in the project. The cable will connect Chile with Australia and onward to other destinations in the Asia-Pacific region, making it the first route of its kind between South America and Asia-Pacific. Alongside the [Curie cable](#), also developed with Google, already enhances connections with the United States and Panama. These projects will reduce latency and increase data transfer capacity, both critical for AI solutions that require real-time access to large volumes of information.

Domestically, Chile has one of the most advanced digital infrastructures in the region. [Internet access](#) reaches 96.5% of households. The country also has the [fastest mobile networks](#) in Hispanic America and ranks among the top six worldwide for fixed broadband. Furthermore, the successful 5G network deployment has strengthened the digital ecosystem, enabling advanced AI applications in sectors like mining, health, and financial services.

However, [access gaps](#) persist between urban and rural areas with 43.6% versus 26.6% of 5G coverage, respectively. Closing this gap will be key to ensuring equitable access to digital transformation and AI benefits across all territories.

Chile has also launched an ambitious sustainable productive [development program](#) to boost

economic growth while advancing environmental and social sustainability. Led by the Ministry of Economy and coordinated through an interministerial committee, it channels significant public investment, partly funded by lithium mining revenues, into strategic priorities such as just decarbonization, resilience to the climate crisis, and sustainable diversification of the productive matrix. The plan is built on enabling pillars like strengthening public sector capabilities, expanding knowledge and R&D, and fostering private-sector innovation. By aligning digital infrastructure with these priorities, Chile is positioning itself to meet its sustainable development goals while ensuring investments have lasting territorial and sectoral impact.

National Data Centers Plan (2024-2030)

The [National Data Centers Plan](#) is a strategic initiative by the Chilean Government to turn the country into a regional digital infrastructure hub.

It aims to boost technological development and innovation in areas like AI while attracting investment, decentralizing the industry with access to renewable energy, and strengthening R&D capabilities in digital technologies.

Sustainability is a core focus, prioritizing clean energy use, water efficiency, and emissions reduction. As Paloma Herrera, advisor to the Ministry of Science, highlights, "*Chile combines talent, infrastructure, political stability, and unique geographical advantages to attract high-level computing infrastructure.*"

Recommendations

- Align digital infrastructure investments with sustainable development priorities

Design national AI infrastructure strategies that channel resources to areas prioritized in the sustainable productive development agenda. Invest in connectivity, cloud access, and open data platforms that support green innovation and productive transformation at the local level. Foster coordination between development agencies, regional governments, and digital providers to amplify impact.

- Expand cloud-first adoption in regional development hubs

Promote Cloud First policies that prioritize public and hybrid cloud infrastructure in priority development regions. Ensure these areas have access to the computing resources and storage needed to deploy scalable AI solutions for sustainability, logistics, and clean energy.

- Create open data platforms to support AI-driven industrial innovation

Develop public data repositories with territorial granularity that support innovation in priority economic sectors, including clean energy, mining, and sustainable agriculture. Ensure interoperability, privacy protection, and accessibility for researchers, SMEs, and public agencies.





Technological Innovation

Chile has built a strong institutional foundation for AI development, with initiatives linking research, technological innovation, and societal impact. A prime example is the [National Artificial Intelligence Center](#) (CENIA), a private non-profit founded in November 2021 as one of the flagship initiatives of Chile's National AI Policy. Its mission is to promote cutting-edge research, facilitate technology transfer, and foster AI's social application, positioning Chile as a regional leader.

National Artificial Intelligence Center

CENIA connects researchers with industry through applied AI projects, such as early forest fire detection systems using computer vision, and image-based weed recognition technologies that reduce agrochemical use in agriculture. The center recently received a USD 750,000 grant to train small business and public sector workers in AI skills.

In parallel, Chile's AI entrepreneurial ecosystem has grown significantly. The country now ranks third in South America for the number of AI startups according to a [recent study](#), with 152 companies founded since 2015. This momentum has been fueled by incubators, accelerators, and public and private funding that have supported innovative solutions across multiple sectors. Chile's AI market is [projected to reach](#) USD 764.8 million in 2025, with an expected annual growth rate of 28%, reaching USD 2.6 billion by 2030.

AI has the strategic potential to drive productivity and competitiveness. One of the sectors benefiting most from this entrepreneurial boom is mining, where AI is used to optimize logistics, enable predictive maintenance of critical equipment, enhance workplace safety by the early identification of risks, and support exploration of new deposits through advanced geological data

analysis. AI also allows automation of tasks like drilling and loading, lowers operating costs, and improves the use of key resources such as water and energy.

Option

Option, a Chilean company, partnered with Google Cloud to launch a free generative AI pilot program to develop customized mining solutions. This initiative enables personalized AI solutions such as virtual assistants for equipment maintenance, operational results analysis, contract generation and review, and automated maintenance guideline recommendations.

Recommendations

- Scale up CENIA's technology transfer programs to strategic sectors

Expand support for applied AI research with direct pathways to adoption in mining, agriculture, public services, and manufacturing. Prioritize co-creation with industry, enabling rapid prototyping and deployment of AI solutions with measurable impact.

- Promote AI applications that accelerate the sustainability transition of key industries

Encourage public-private partnerships and pilot programs that apply AI to reduce emissions, optimize energy use, and improve circularity in key economic sectors such as mining, manufacturing and agro-industry. These initiatives can directly support the goals of Chile's development agenda, positioning AI as a key enabler of sustainable competitiveness.

- Create incentives for AI-driven innovation that enhances the resilience of strategic value chains

Support the development and scaling of AI solutions that help monitor and improve the sustainability, efficiency, and traceability of Chile's most relevant value chains, such as copper, lithium, forestry, and food. Public funding programs can prioritize technologies that align with the country's broader vision of a more inclusive and environmentally responsible productive model.





People

Chile [stands as a leader](#) in Hispanic America for AI talent training and concentration. With 11 master's and three doctoral programs in AI offered by local universities, the country boasts one of the region's most robust academic offerings. This capability is complemented by a high proportion of STEM graduates and an AI skills penetration four times higher than the regional average.

To further strengthen these capabilities, Chile has implemented various initiatives focused on continuous learning and digital skill development. For the private sector, ChileValora promotes [digital competency certification](#) to improve employability. Additionally, it [provides resources](#) for SMEs, focusing on the strategic use of digital tools and AI. The Gerencia platform (see box) provides AI training for executives and business leaders. Another example is [Relink](#), a joint initiative by SENCE, Sofofa, and the IDB, which uses AI to connect workers with learning pathways and job opportunities based on their skills.

[Gerencia: Empowering Business Leaders with AI](#)

Gerencia is Chile's first executive training program in AI, designed by the National Center for Artificial Intelligence (Cenia) with the IDB and SOFOFA Capital Humano, the training arm of Chile's main business federation. The program equips C-suite leaders with practical tools to apply AI to real business cases, boosting organizational performance. Preliminary results show that three months after the program, firms were 70% more likely to experiment with AI (voice recognition, robotics, MLOps). After a year, they were 60% more likely to adopt. Training helped executives to see real costs/benefits and move from exploration to integration. With IDB support, Gerencia certified 150 executives and is set to expand across other countries in Latin America and the Caribbean.

However, SMEs still face significant barriers to adopting AI, including limited financing, low levels of digitalization, and, above all, a shortage of specialized talent. As Yerka Yukich of the Santiago Chamber of Commerce points out, "*Smaller businesses struggle to access AI, both due to its cost and the lack of people trained to implement it.*"

To close this gap, Google partnered with the National Training and Employment Service ([SENCE](#)) and [Talento Digital para Chile](#), a public-private initiative that provides digital skills training to improve employability and support the country's digital transformation. This alliance awarded 5,000 scholarships in digital training and artificial intelligence, strengthening Chile's technological talent base. This type of collaboration is crucial, considering that, according to [CENIA](#) estimates, 50% of the country's workforce could increase their productivity by at least 30% using generative AI tools.

In this same spirit of capacity building, innovative solutions are also emerging, such as Profe Gabi, a virtual assistant that provides pedagogical and professional guidance to teachers, helping to bring AI knowledge to the education system (see box). In this way, teacher training becomes an essential component of strengthening human capital that will allow Chile to fully take advantage of the opportunities of the artificial intelligence era.

[Profe Gabi: AI for Teacher Mentorship](#)

Profe Gabi, a virtual AI assistant in Chile's National Induction and Mentorship System, supports novice teachers via WhatsApp with guidance on wellbeing, pedagogy, and professional development. Piloted with 550 teachers in 2024, it will expand to 20,000 in 2025 under an RCT comparing different support models. By 2026, the Ministry of Education plans to adopt virtual mentorship as public policy.

Recommendations

- Strengthen and expand ChileValora to create national certification systems for applied AI skills

Develop AI micro-credentials recognized by employers, covering areas like data analysis, prompt engineering, and safe tool usage.

- Support AI trainers and facilitators

Fund programs to prepare teachers, mentors, and technical facilitators across the country. Include digital pedagogy and real-world AI applications.

- Develop specialized AI tracks in vocational and technical education

Embed AI-related skills in non-university education, particularly for roles in manufacturing, logistics, or agriculture. Focus on practical problem-solving using available tools.





Colombia

Colombia has a [population](#) of 52.7 million and a [GDP](#) of approximately USD 370 billion. In 2024, the [economy](#) grew by 1.7%, with an average growth of 2.7% between 2014 and 2024. The economic [sectors](#) contributing most to Colombia's GDP are Trade (17.2%) and manufacturing industries (11.5%). In February 2025, [exports](#) of fuels and extractive industry products accounted for 39.7% of total national exports.

AI can boost Colombia's productivity, efficiency, and economic diversification. According to the National Observatory of Information and Communications Technologies ([ONTIC](#)), in the services sector, 55.4% of companies reported increased sales due to AI use in 2024, while 59.9% reduced operating costs. Additionally, 71.9% reported improved customer relations, 67.3% improved internal organization, and 79.8% improved the quality of goods and services offered.

Economic Potential of AI in Colombia

We estimate that AI can generate an economic impact of USD 7.2-13.6 billion annually, equivalent to 2%-3.7% of GDP. The sectors with the highest potential impact are manufacturing (USD 886 million -1.7 billion annually) and trade (USD 832 million -1.5 billion annually). For more details on projected economic effects in Colombia, see Table 5.

Achieving this positive impact depends on AI adoption rates in businesses. According to Colombia's Ministry of Science, the [AI adoption rate](#) is approximately 21%. Applying this factor, AI's estimated economic impact is reduced to a range of USD 1.5-2.9 billion annually.

AI and the Coffee Industry

AI offers significant opportunities for the Colombian coffee industry, optimizing processes from cultivation to commercialization. Its use facilitates early pest detection, improves bean quality through automated inspection and sensorization, and allows predicting yields or designing market strategies via data analysis and machine learning. A recent [study](#) by *Universidad del Valle* academics found that Colombia, the world's second-largest coffee producer, is well-positioned to lead in this field. It concentrates some of Hispanic America's most prolific researchers in AI applied to coffee and shows exponential growth in scientific publications on the topic, even surpassing countries with higher production volumes like Brazil.

A concrete [example](#) of technology adoption is Juan Valdez, which used generative AI to create and design innovative beverages like "Nevado de mocca y aguacate achocolatado" and "Latte de lavanda y mora". This aimed to appeal to younger generations and reinforced their commitment to innovation and the added value of Colombian premium coffee.

2-3.7%

Of Colombia's GDP could represent the potential economic impact of AI.

Table 5
Estimated AI impact by Economic Sector in Colombia (millions of USD 2023)

Economic Sector	Low impact scenario	High impact scenario	Average sectorial impact
Manufacturing	886	1,658	12%
Wholesale and retail trade; repair of motor vehicles and motorcycles	832	1,520	11%
Education	562	1,074	8%
Agriculture, forestry, and fishing	539	1,050	8%
Real estate activities	547	1,044	8%
Financial and insurance activities	490	872	7%
Human health and social work activities	449	851	6%
Transportation and storage	393	736	5%
Mining and quarrying	366	714	5%
Public administration and defence; compulsory social security	313	629	4%
Electricity, gas, steam, air conditioning supply, water supply, etc.	313	582	4%
Arts, entertainment, and recreation	293	550	4%
Construction	263	513	4%
Administrative and support service activities	260	482	4%
Information and communication	252	469	3%
Accommodation and food service activities	231	463	3%
Professional, scientific, and technical activities	212	393	3%
Total	7,203	13,599	

Source: Elaborated based on Colombian National Economic Statistics





Enabling Public Policies

Colombia has a strong institutional framework for AI development and adoption. It stands out for its strategic vision, modern regulation, and alignment with international standards. The National Digital Transformation and Artificial Intelligence Policy of [2019](#) and the Ethical Framework published in [2021](#) (based on OECD and UNESCO guidelines) have created a positive environment for responsible technology deployment.

Additionally, enabling policies in connectivity, data infrastructure, and education have been implemented. These include the [National Digital Strategy](#) 2023-2026, aimed at reducing access gaps; the National Data Infrastructure Plan, which defines a data governance model; and the [Ten-Year Education Plan](#) 2016-2026, which incorporates ICT tools as a strategic challenge. Furthermore, there are over five bills related to AI, mainly focused on harmonizing AI with labor rights or aggravating penalties for counterfeiting offenses.

In February 2025, the [Council for Economic and Social Policy \(CONPES\)](#) updated the [National AI Policy](#). Its goal is to "build capabilities for the ethical and sustainable research, development, adoption, and utilization of AI systems to drive Colombia's social and economic transformation." The policy outlines six goals for ethical AI governance: strengthen technological infrastructure, boost R&D and innovation in AI systems, develop digital capacities and talent, advance risk identification, prevention, and mitigation measures in AI adoption, and promote AI use and adoption in the public sector.

"The recent artificial intelligence policy represents a significant step forward for Colombia," states Lina María del Vecchio, Executive Director of the Communications Regulation Commission ([CRC](#)). *"In a context of multiple legislative initiatives -some general, others more technical on definitions and responsibilities- it provides a state vision, aligning the Executive and Legislative around common principles for AI adoption as a development tool. It sets a clear framework for action, assigns*

responsibilities to different players within the ecosystem, and avoids regulatory dispersion that could hinder implementation. All this is coordinated by the National Planning Department, ensuring a comprehensive view of the economic sectors involved."

Recommendations

- **Operationalize Colombia's national AI strategy**

Prioritize the implementation of the National AI Policy, establishing a clear governance structure, defined KPIs, dedicated budget lines, and a central coordination body to oversee progress and stakeholder engagement.

- **Integrate AI into sectoral development plans**

Ensure AI becomes a strategic enabler in priority sectors such as education, healthcare, agriculture, and justice by embedding AI use cases and capabilities into existing national development plans and investment programs.

- **Review existing legal frameworks**

Before introducing new AI-specific laws, conduct a comprehensive review of Colombia's existing regulations (e.g., data protection, cybersecurity, procurement) to identify whether they can already address new emerging challenges, and ensuring that any new regulation has a clear rationale.





Infrastructure

AI development in Colombia requires sustained strengthening of digital infrastructure, especially [connectivity](#). In 2024, only 65.6% of households had Internet access, with marked differences between urban (72.5%) and rural (41.9%) areas.

This territorial gap limits the equitable adoption of emerging technologies. As Congresswoman Maren Castillo pointed out, many regions still face fundamental needs, like access to drinking water or overcoming extreme poverty, that shape local priorities over implementing AI solutions. Thus, while in cities like Bogotá AI is seen as a concrete development tool, in regions like La Guajira, Buenaventura, or Chocó, social precariousness and connectivity limitations hinder its effective deployment.

Regarding technological infrastructure, Colombia ranks second in Hispanic America in the number of [high-performance computing](#) systems (11). In [data centers](#), the country ranks fourth in the region with 33 facilities, placing it among the top 25 globally.

Recommendations

- **Prioritize closing the territorial digital divide**

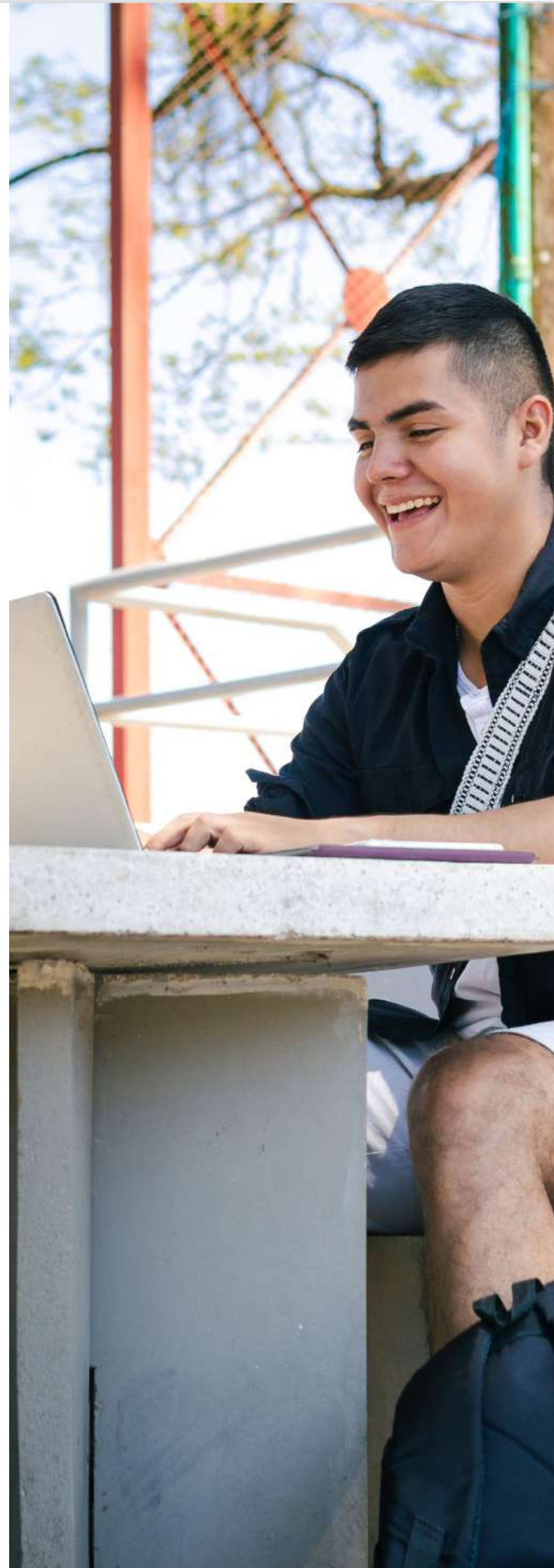
Implement specific public-private investment policies and programs to expand high-quality broadband connectivity to rural and remote areas. This could include subsidies, incentives for operators, and the use of alternative connectivity technologies.

- **Strengthen data center infrastructure and cloud services**

While Colombia has a good number of data centers, promoting Cloud First policies is a powerful way to accelerate AI tools, data storage, and advanced computing capabilities across sectors.

- **Promote open and interoperable data ecosystems to address local priorities**

Expand public access to standardized, high-quality datasets that reflect the country's territorial diversity and serve its most pressing challenges, such as access to basic services, environmental management, and economic inclusion, enabling better decisions and more effective policies and solutions that respond to the specific needs of different regions.





Technological Innovation

Colombia's ability to harness AI's full potential will depend on the strength of its innovation ecosystem. While challenges remain, there are promising signs in the country's tech landscape.

According to the Colombia [Tech Report](#) 2024, AI is considered the most promising sector, with high adoption rates among startups: 81% of AdTech, 80% of EnergyTech, 77% of Industry 4.0, and 74% of HealthTech companies already use AI-based tools. Examples like [Arkangel AI](#) in healthcare, [Habi](#) in real estate, and [Grupo Nutresa](#) in business productivity highlight AI's growing role in strategic sectors.

However, the lack of structured and sustained innovation processes continues to hold back much of the country's productive sector. Nine out of ten [Colombian SMEs](#) lack formal innovation processes to improve products or develop new solutions. In this context, AI offers a strategic opportunity to accelerate their growth. *"In Colombia, as in much of Hispanic America, more than 90% of businesses are micro, small, or medium-sized enterprises. But their contribution to GDP remains limited. Artificial intelligence can change that by improving SME productivity through process optimization, cost reduction, and better decision-making,"* explains Pablo Nieto, public policy manager at the Latin American Internet Association ([ALAI](#)).

Despite its potential, Colombia still faces significant structural challenges, especially in R&D and innovation. According to the [World Bank](#), the country invests less than 0.3% of its GDP in R&D, which is less than half the regional average of 0.62%. This underinvestment limits Colombia's capacity to develop a strong AI research base.

Arkangel AI

Founded in 2020, [Arkangel AI](#) is a no-code platform that allows healthcare institutions to design and deploy predictive AI models for early disease detection. Its [technology](#) has accelerated pediatric leukemia diagnoses by a factor of 28, reduced malaria diagnostic costs fivefold, and lowered hospital mortality rates by anticipating intensive care needs.

Operating in 18 countries, Arkangel AI has reached over 68 million people. One of its standout tools is Search, an AI-based clinical assistant that integrates sources like Google and PubMed, offering streamlined access to more than 37 million biomedical citations to support real-time clinical decision-making.

Recommendations

- **Increase public and private Investment in AI-Focused R&D**

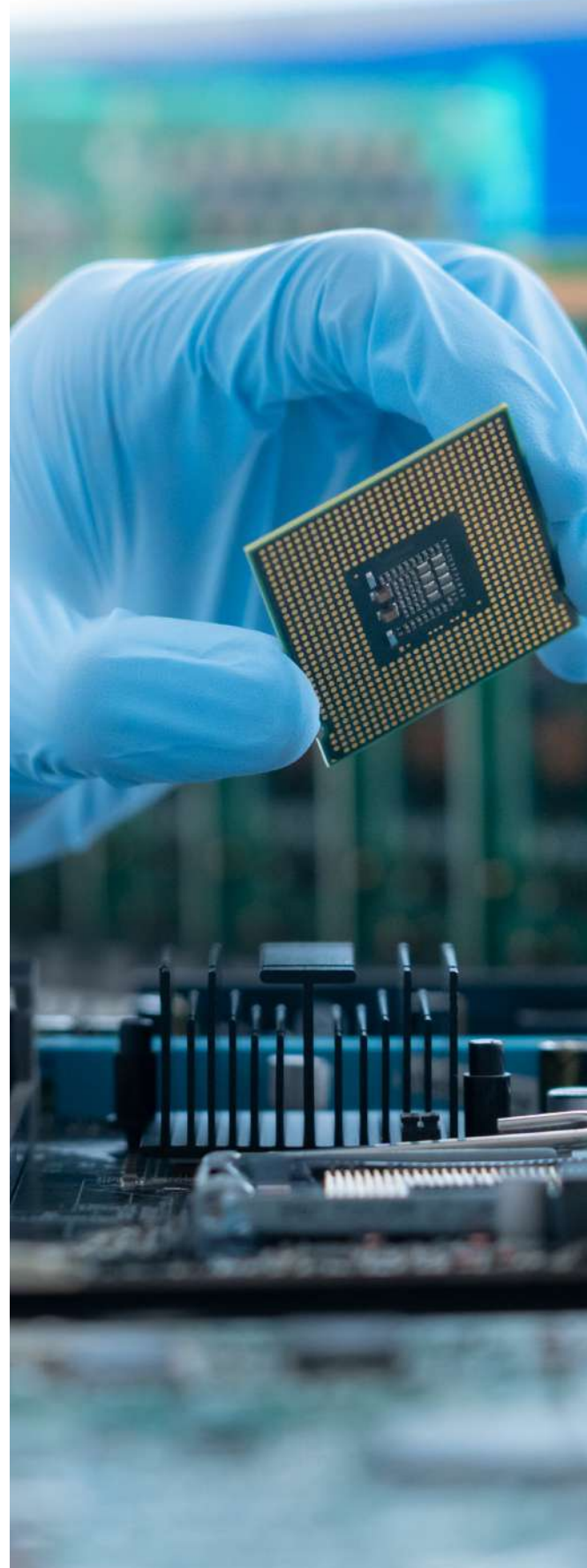
Substantially increase research and development spending from both public and private sources, with a clear focus on AI. Create dedicated mechanisms and programs to fund AI R&D projects in strategic sectors.

- **Foster structured innovation in SMEs**

Design and implement technical and financial support programs to help micro, small, and medium-sized enterprises build internal innovation capabilities and adopt AI solutions. This includes access to tools, methodologies, and specialized guidance.

- **Build strategic academia-industry-government alliances**

Encourage the formation of consortia and collaborative networks among universities, research institutions, companies and government agencies. These partnerships can drive AI initiatives with real economic and social impact, while accelerating technology transfer.





People

Colombia is building a solid pipeline for AI talent. According to [ILIA 2024](#), the country outperforms the regional average in early science education and ranks third in Hispanic America for the share of STEM graduates. It's also among the top five in AI skills regionally, with 11 master's programs at top-ranked universities [and a PhD](#) in AI offered by Universidad de La Sabana. Continuous training is gaining traction as well, with initiatives like [SENA's](#) free AI courses and [SENATIC's](#) 235,000 digital skills slots in partnership with the Ministry of Information and Communications Technologies.

Still, key challenges remain. [English proficiency](#) remains low, which limits the global competitiveness of its talent. Human capital management is another bottleneck, especially for [SMEs](#): 8 out of 10 show weaknesses in recruiting, training, or retaining specialized talent. As Saúl Kattan, former Presidential Advisor for Digital Transformation, puts it: *"Strengthen English Language Teaching and Transversal Digital Skills: Implement intensive, high-quality programs to improve English proficiency nationwide, especially in technical and professional contexts."*

Recommendations

- Improve English and core digital skills

Roll out high-quality, nationwide training programs to boost English proficiency, particularly in technical and professional domains. Embed digital skills, including AI literacy, more deeply into education from primary school through higher ed.

- Support human capital development in SMEs

Launch targeted support and advisory programs to help micro, small, and medium-sized businesses strengthen their workforce strategies. This includes identifying AI training needs and attracting and retaining qualified talent.

- Scale up continuous AI training

Expand and update initiatives like SENA and SENATIC to ensure they remain aligned with fast-evolving industry needs. Promote a culture of continuous learning to help professionals keep pace with AI-driven change.





Ecuador

[Ecuador has](#) a population of approximately 18 million and a [GDP](#) of around USD 119 billion as of 2023. The [most significant contributors](#) to the economy are trade (15.4%), followed by household services (9.5%), professional activities (7.1%), public administration (7%), oil extraction (6.6%), and real estate activities (6.5%).

AI adoption is still in its early stages, but it is steadily gaining traction. Some [estimations](#) indicate that 40% of Ecuadorian companies have begun implementing AI tools. Key drivers include finance and banking (fraud detection, risk analysis, process automation), retail and e-commerce (chatbots, personalized shopping experiences, predictive inventory management), and healthcare, where 20% of companies are investing in AI for diagnostics and clinical analysis.

To facilitate broader adoption, several challenges must be addressed, such as the perception of high initial costs of AI, a limited supply of specialized talent, and underdeveloped technological infrastructure, particularly among SMEs.

Economic Potential of AI in Ecuador

AI's estimated economic potential in Ecuador ranges from USD 2.4 to 4.6 billion annually, equivalent to 2% to 3.8% of the country's 2023 GDP. The sectors with the highest potential gains are trade (USD 421–781 million per year), manufacturing (USD 364–679 million), and entertainment services (USD 260–581 million). For more details, see Table 6.

While Ecuador does not yet have a specific tool to measure AI adoption across its productive sectors, a proxy can be used. Applying a 9.1% adoption rate, based on the average among countries in this report that have that data, AI's current economic impact in Ecuador is estimated at USD 219–420 million per year.

2–3.8%

Of Ecuador's GDP could represent the potential economic impact of AI.

Table 6
Estimated AI impact by Economic Sector in Ecuador (millions of USD 2023)

Economic Sector	Low impact scenario	High impact scenario	Average sectorial impact
Wholesale and retail trade; repair of motor vehicles and motorcycles	421	781	17%
Manufacturing	364	679	15%
Arts, entertainment, and recreation	260	581	12%
Mining and quarrying	179	348	7%
Financial and insurance activities	183	326	7%
Agriculture, forestry, and fishing	162	314	7%
Professional, scientific, and technical activities	169	313	7%
Real estate activities	162	310	7%
Public administration and defence; compulsory social security	133	266	6%
Transportation and storage	128	239	5%
Construction	91	177	4%
Information and communication	74	136	3%
Electricity, gas, steam, and air conditioning supply, water supply and waste management	42	79	2%
Accommodation and food service activities	36	68	1%
Total	2,405	4,617	

Source: Elaborated based on National Economic Statistics from Ecuador



Enabling Public Policies

Ecuador is making meaningful progress in shaping a national AI strategy. In December 2024, a [draft](#) of the “Policy for the Development of Artificial Intelligence in Ecuador” was released for public consultation, reflecting a commitment to a participatory process.

During the second half of 2024, three legislative proposals related to AI were introduced. The “Artificial Intelligence Law in Ecuador” [bill](#) is the broadest, and it follows the European Union’s risk-based approach. [A second bill](#) outlines public policy guidelines focused on strengthening human capital training. [The third](#), the “Organic Law on Digital Use and Artificial Intelligence for Children and Adolescents,” seeks to safeguard the fundamental rights of young people in the digital age.



Recommendations

- **Finalize and operationalize the national AI strategy**

Support the adoption of Ecuador's AI policy by defining concrete implementation plans, institutional coordination mechanisms, and funding models aligned with national development goals.

- **Sequence regulation with institutional readiness**

Encourage the prioritization of policy and institutional development before enacting broad AI legislation. Focus initial efforts on targeted regulation for high-risk use cases backed by local evidence.

- **Create a national AI governance committee**

Establish a multi-stakeholder advisory group that includes Government, academia, and private sector leaders to provide guidance, ensure policy coherence, and coordinate public-private collaboration.





Infrastructure

Ecuador has a solid digital infrastructure foundation to support AI development. As of 2024, [internet usage](#) reached 77% of the population, with average [mobile download speeds](#) of 36.15 Mbps and [fixed broadband speeds](#) of 131.79Mbps. This capacity is set to grow with the [rollout of 5G](#), planned for the first half of 2025. The deployment of 5G will enhance connectivity with lower latency and higher bandwidth, both critical enablers for real-time AI applications and next-generation digital services.

The country also benefits from significantly high-performance computing resources to support research and development. The CEDIA-managed [computing](#) offers an HPC cluster with over 15 PFlops of processing power dedicated to AI, offering 24/7 access for university researchers. This capability is further reinforced by a network of eight registered [data centers](#) that provide essential co-location and cloud services required for training advanced AI models.

Recommendations

- Launch a “Cloud First” strategy for public and SME Adoption

Encourage cloud-based infrastructure for public services, universities, and small businesses. Provide technical guidance and procurement frameworks to ease access and ensure responsible use.

- Leverage CEDIA’s HPC infrastructure for AI research and innovation

Broaden access to CEDIA’s computing capacity by connecting more universities and startups, and funding projects that translate research into practical AI applications.

- Expand digital connectivity in rural and productive regions

Prioritize infrastructure investments in regions with high agricultural and manufacturing potential to bridge access gaps and foster inclusive AI adoption.





Technological Innovation

Ecuador continues to face important challenges in strengthening innovation, particularly in enhancing private sector involvement to accelerate AI adoption across productive industries. This also requires more funding opportunities for the country's technology-based entrepreneurship. As of the latest available data, the country's [R&D investment](#) stands at 0.44% of GDP, compared to the 2020 Hispanic America average of 0.62%.

According to the 2024 [Global Innovation Index](#), there are areas with room for improvement to further boost the entrepreneurial ecosystem. These include increasing ICT service exports, ensuring policy predictability for startups, and improving financing conditions for science and technology-based enterprises.

Ecuador Use of AI and Drones for TR4 Biosecurity

Ecuador is deploying drones and AI to safeguard its banana sector from soil-dwelling fungus that attacks banana plants. Led by [Agrocalidad](#), a phased program prioritizes high-risk border areas, especially with Peru, where 13 drones collect high-resolution imagery, initially covering approximately 8,000 hectares and achieving approximately 30 hectares per hour.

AI software analyzes the imagery for anomalies such as color changes, atypical mortality, leaf wilt and issues alerts for rapid field verification and risk management. Data flows are shifting from batch uploads toward real-time as connectivity improves.

This digital surveillance complements national biosecurity protocols and feeds a sanitary intelligence unit that integrates logistics tracking and outbreak simulations, aimed at protecting more than 350,000 hectares of plantations, 15,000 producers, and an export industry of roughly US\$3 billion.

Recommendations

- **Launch sector-specific AI adoption programs**

Support pilot programs in agriculture, manufacturing, and trade to demonstrate the value of AI, encourage local development, and build confidence across industries.

- **Promote AI use in public procurement**

Incentivize ministries and public agencies to include AI-powered solutions in procurement processes, with clear criteria for interoperability, ethics, and performance.

- **Foster collaboration with universities through applied R&D challenges**

Fund co-development projects between academia and SMEs to address local production challenges using AI, building pathways from research to market.





People

Ecuador is gaining momentum in talent and skills development, reflecting a growing interest in computing and AI. According to María Belén Albornoz, a PhD in social science and professor at FLACSO, “Ecuador has a solid training base. We’ve identified 45 specialized programs in AI, machine learning, or data science, and another 415 that include at least one module on these topics.”

This represents a significant increase compared to previous official estimates and underscores the rapid expansion of AI-related education over the past five years. The public sector is actively contributing to this progress through the National Training and Capacity Building Plan, often in collaboration with universities. Currently, five universities in Ecuador offer AI-focused master’s programs.

Escuela Politécnica Nacional offers the [country’s first PhD](#) in Informatics, with research tracks in AI algorithms, machine learning, computer vision, and genetic computing. Similarly, Universidad Politécnica Salesiana offers a [PhD](#) in Computational Sciences, with specializations in AI, neural networks, 5G/6G technologies, and cybersecurity. Escuela Superior Politécnica del Litoral hosts the Industrial [AI Lab](#), an AI research center focused on the retail sector. These developments are expected to gradually increase the proportion of [ICT graduates](#), which currently stands at 2.43%, below the regional average.

In parallel, several initiatives are underway to strengthen STEM education from an early age. Notable examples include the creation of the [STEM Ecuador Coalition](#), the “[STEAM Challenge](#)” by Fundación Telefónica Ecuador, and the [Innova Bootcamp STEAM](#) for teacher training. These efforts, driven by inter-institutional collaboration and public-private partnerships, aim to strengthen AI talent pipelines and accelerate Ecuador’s digital transformation.

Talent Training Initiatives

Ecuador’s Government is investing early in AI talent development through its education system. In March 2025, the Ministry of Education announced a USD 13 million initiative to deploy [Google Workspace for Education Plus](#) across public schools. The goal is to enhance learning experiences, streamline task management, and strengthen teacher collaboration.

Additionally, Google Cloud and the National Telecommunications Corporation (CNT) signed an agreement to provide [cloud infrastructure](#) for public institutions and launch over 30 tech projects over the next two years. Education is a priority sector in this partnership, including a program that uses AI to improve students’ reading skills by personalizing learning based on individual needs.

Recommendations

- Expand AI training to all regions

Use online platforms and regional partnerships to deliver practical AI training across all provinces, with a focus on youth, women, and underserved communities.

- Create certification pathways for applied AI skills

Develop national credentials for practical AI knowledge, enabling individuals to demonstrate competencies without formal degrees.

- Support AI-Focused higher education programs

Scale up master's and PhD offerings in AI and related fields and connect graduates with local innovation ecosystems.





El Salvador

[El Salvador](#) has an estimated population of 6.3 million and a GDP of USD 35 billion as of 2024. The sectors [contributing most to GDP](#) that year were manufacturing (13.8%), trade (11.3%), and public administration (7.8%), followed by financial services (7.2%), real estate (6.3%), and construction (6.1%).

Security measures implemented in recent years have led to a decline in crime, while macroeconomic austerity policies are helping to address fiscal imbalances and [improve investor confidence](#).

However, a stagnant labor market and high poverty rates continue to pose serious [challenges](#) to the country's development. In this context, AI holds significant potential to drive national development, where closing existing gaps and strengthening enablers will be critical to accelerating AI adoption.

Economic Potential of AI in El Salvador

We estimate AI's economic potential in El Salvador to be between USD 657 million and USD 1.2 billion annually, equivalent to 2.1% and 3.9% of 2022 GDP. The sectors with the highest potential are: manufacturing (USD 103-191 million annually), financial and insurance activities (USD 87-155 million annually), and trade (USD 82-152 million annually). For more details, see Table 7.

While there are currently no specific instruments to measure the AI adoption rate in the productive matrix, an approximation is possible. Assuming a 9.1% rate, equivalent to the average of countries in this report that do have such a metric, AI's current impact would be between USD 60 and USD 112 million annually.

2.1-3.9%

Of El Salvador's GDP could represent the economic impact of AI

Table 7

Estimated AI impact by Economic Sector in El Salvador (millions of USD 2022)

Economic Sector	Low impact scenario	High impact scenario	Average sectorial impact
Manufacturing	103	191	16%
Financial and insurance activities	87	155	13%
Wholesale and retail trade; repair of motor vehicles and motorcycles	82	152	12%
Education	46	88	7%
Real estate activities	41	79	6%
Public administration and defence; compulsory social security	39	78	6%
Construction	34	67	5%
Human health and social work activities	36	67	5%
Transportation and storage	31	58	5%
Information and communication	31	56	5%
Administrative and support service activities	28	51	4%
Agriculture, forestry, and fishing	24	47	4%
Electricity, gas, steam, and air conditioning supply; water supply and waste management	24	44	4%
Accommodation and food service activities	22	42	3%
Professional, scientific, and technical activities	14	25	2%
Other service activities	10	18	1%
Arts, entertainment, and recreation	3	5	0%
Mining and quarrying	2	3	0%
Total	657	1,229	

Source: Elaborated based on National Economic Statistics from El Salvador



Enabling Public Policies

In March 2025, El Salvador passed its innovative [Law for the Promotion of AI and Technology](#). The law created the National AI Agency (ANIA), tasked with promoting and fostering AI development, research, and application across sectors. ANIA will manage the National Registry of AI Development, Innovation, and Application, granting benefits to those who register and comply with technical standards.

According to Sigfredo Figueroa, legal advisor to the Presidency of El Salvador, the country's AI law aims to differ from other regional approaches. *"The AI law process began by consulting the productive sector; it's an ecosystem based on regulatory pragmatism."* He emphasizes that the initiative is inspired by an innovation-friendly philosophy, similar to those in Japan and Singapore. With this law, the country seeks to strengthen the national AI ecosystem with a regulatory environment that fosters innovation and attracts AI investment.

In parallel, the 2023 [Law for the Promotion of Innovation and Manufacturing Technologies](#) aims to boost national competitiveness by offering tax incentives for AI-related activities. It covers the development and commercialization of cloud computing, data flows, AI, big data analytics, distributed ledger technologies, cybersecurity solutions, and quantum computing.

The law grants full exemptions from income tax, municipal asset taxes, capital gains tax, and import duties on goods needed for qualifying activities.

These regulatory efforts give El Salvador a strong enabling environment for AI. The key challenge now is aligning other critical areas, like infrastructure and talent, to fully achieve the potential of this robust legal framework.

Another relevant regulation is the [General Law for the Digital Modernization of the State](#) (2023), which establishes the foundations for the digital transformation of public administration through the digitalization of procedures, interoperability across

institutions, and the adoption of advanced technologies to improve the efficiency of public services. According to Mariana Gómez, Executive Director of the Regulatory Improvement Agency, *"this law sets out a new presidential vision for modernization and the development of public administration across all areas, as well as the establishment of strategic partnerships between the Government of El Salvador and Google to attract investment through the use of technological tools and artificial intelligence."*

In this context, the government has begun to leverage AI to modernize public management across key sectors, from healthcare to education. An illustrative example is its application in the simplification and redesign of administrative procedures within the Regulatory Improvement Agency.

Use of AI to Map and Streamline Government Procedures

The modernization of administrative procedures has become a priority for the Government of El Salvador. In this context, the Regulatory Improvement Agency (OMR) has incorporated AI tools to map and streamline processes, reduce response times, and improve the management of the National Registry of Procedures (RNT) through its technological platform, [Simejora](#).

Historically, many procedures in the Salvadoran public administration were characterized by unnecessary requirements, redundant steps, and unclear legal bases, all of which extended response times. In some cases, a procedure would move from one desk to another, with multiple officials reviewing the same document without adding value to the process, unnecessarily delaying responses to users. As explained by Mariana Gómez, Executive Director of the OMR: "when processing a permit or request, it may go through, for example, 20 steps. Within those steps, the document is passed to desk one, where it is reviewed and, without further analysis, sent to desk two. Desk two reviews what desk one did, but does not add value. Then it goes

to step three: the person at desk three reviews both previous steps—which may have taken five days—and still adds no value to the process.” In addition, process analysis and mapping were carried out manually, which could take “five hours, eight hours, or even two days depending on the complexity of the procedure.”

To address this challenge, in February 2026 the OMR launched an AI-powered Process Mapping Tool, developed in collaboration with Google. According to Gómez, the tool enables process flows to be mapped and visually represented “in no more than five minutes,” even for highly complex procedures.

The tool has accelerated technical work and supported the reengineering of administrative processes, facilitating the identification and elimination of unnecessary requirements. As a result, “4,968 procedures have been evaluated,

1,706 simplified, and 1,805 registered. This means they have already been streamlined, simplified, and incorporated into the National Registry of Procedures,” according to Gómez.

One concrete outcome of this review has been the elimination of the requirement to submit notarized enlarged copies of the national ID (DUI) at specific sizes. As Gómez explains, for years citizens were required to enlarge their ID document and have it notarized, even though this requirement had no legal basis. Such practices imposed unnecessary costs and delays on users.

The project is now moving into a second phase, in which AI will not only map existing processes (“As-Is”) but also support the design of optimized versions (“To-Be”).

It is worth noting that this pro-innovation regulatory framework is also linked to a broader strategic vision regarding the potential of AI for emerging economies. As noted by Stacy Herbert, Director of the National Bitcoin Office, AI can

become “an extraordinary tool for developing economies to leap toward the technological frontier.” In her view, there is “a small window of infinite opportunity” that must be seized now—particularly by agile countries capable of moving quickly, such as El Salvador. In this context, Herbert emphasizes the importance of regulatory certainty to attract technological talent: “having a clear regulatory framework and legal certainty is essential to attract builders and engineers—the people who are building the future. That is the goal: to bring them into your country, and that is precisely what El Salvador has done.”

The [Reciprocal Trade Agreement](#) established with the United States in January 2026—aimed at deepening the bilateral economic relationship beyond [CAFTA-DR](#)—reinforces a process that began in 2023. This agreement establishes a framework to strengthen trade and investment between both countries by reducing trade barriers, preventing barriers to digital trade, among other measures.

These regulatory advances provide El Salvador with a favorable environment for the development of AI. The main challenge now is to align other key areas—such as infrastructure and talent—to fully leverage the potential of this robust legal framework.

Recommendations

- **Develop a national AI action plan to operationalize recent laws**

Consolidate El Salvador's pragmatic and pro-innovation approach to AI regulation: The country's legal framework stands out for its regulatory pragmatism and its focus on enabling innovation. El Salvador should continue strengthening this approach through multi-stakeholder dialogue, ensuring that benefits reach both emerging and established actors.

- **Ensure continuity and institutional backing for AI-related tax incentives:**

The tax incentives established under the Law for the Promotion of Innovation and Technology Manufacturing represent an important step toward attracting investment in high-impact AI applications. Sustaining and clearly communicating the continuity of this policy will help build investor confidence and demonstrate the government's long-term commitment to digital transformation.

- **Leverage the favorable regulatory environment to attract advanced human capital**

Continue attracting researchers, entrepreneurs, and developers specialized in AI and its applications across the economy and public sector. Technology visa programs, soft-landing hubs, and strengthened collaboration with international universities could accelerate the consolidation of the country's technological ecosystem





Infrastructure

El Salvador's digital infrastructure has made significant progress in recent years, although key gaps remain—particularly in strengthening the processing capacity required for advanced AI development.

[Internet usage](#) has grown rapidly, from approximately 34% in 2017 to 66.5% in 2024 according to the International Telecommunication Union, with [alternative estimates](#) placing the figure at 76.9% in early 2025. [Median fixed download speeds](#) reached 84.76 Mbps in August 2025, representing a 52% year-on-year increase. However, [fixed broadband](#) penetration remains limited, with 11.6 subscriptions per 100 inhabitants compared to a global average of 20.

The [gender digital divide in internet access](#) has narrowed significantly. International Telecommunication Union data for 2020 showed a gap of 4.8 percentage points (52.4% for women versus 57.2% for men), but [more recent estimates](#) suggest that the Americas region has reached gender parity in both internet use and mobile telephony, with El Salvador converging toward that threshold.

In contrast, the [urban-rural divide](#) remains the main structural challenge: only 37% of households have internet access (51.2% in urban areas versus 13% in rural areas, EHPM 2023), a four-to-one disparity that has improved since 2019 but remains pronounced. These inequalities have prompted public initiatives such as [Conectando El Salvador](#), aimed at expanding connectivity in rural areas. In parallel, the University of El Salvador is advancing the [Campus Cloud 2025](#) project to strengthen national high-performance computing capabilities.

At the same time, strategic partnerships with the private sector are accelerating the adoption of cloud and AI technologies across public management and economic development. For example, in August 2023, El Salvador announced a collaboration agreement with [Google](#) to support the country's digital transformation, modernize

public services, and position it as a regional economic hub. This strategic partnership focuses on cloud and AI, including the joint development of simple and interoperable digital ecosystems for commerce, healthcare, and health records; training for government agencies; and the creation of a telemedicine platform (DoctorSV) that uses AI to automate processes and expand access to healthcare, among other initiatives.

DoctorSV

Since [DoctorSV](#) is a telemedicine application developed by the Government of El Salvador in collaboration with Google Cloud to expand access to healthcare services through digital tools and AI. The platform leverages the Gemini model to support triage and clinical guidance, enabling 24/7 remote medical consultations. Its objective is to facilitate primary care and reduce congestion in the public healthcare system.

Through the application, users can conduct video consultations with doctors, receive preliminary diagnoses, and obtain electronic prescriptions. The system is complemented by a network of more than 348 pharmacies, 76 laboratories, and 42 radiology centers, allowing patients to undergo tests and collect medications when needed. The service is free for users, as consultations, tests, and medications are funded by the State.

The platform includes more than 1,200 general practitioners and 250 specialists, and requires users to register with a national ID or passport to schedule consultations. It initially focused on treating low-complexity conditions and users aged 18 to 30, before gradually expanding to a broader population.

The attraction of private investment has been key to the expansion of El Salvador's digital infrastructure. Among these investments, the [Altius Tech Park](#) stands out as the country's first Tier III data center, backed by a USD 70 million investment and with the potential to generate up to 5,000 direct jobs.

The public sector is also investing through a USD [60 million](#) data infrastructure program and an USD [85 million](#) government digital transformation initiative, both supported by the Inter-American Development Bank.

At the same time, AI can also catalyze private investment by demonstrating its value through concrete applications. One example is the use of virtual libraries at the Ministry of Housing to support regulatory analysis and case resolution.

Cloud-Based Virtual Libraries for Analyzing Public Regulations

The Ministry of Housing faced a bottleneck in service delivery due to the complexity of technical and legal regulations. According to Jorge Martínez, Head of the Information Technology Unit, one of the main challenges was the analysis and review of regulatory frameworks: *“reviewing a 90-page law, finding a specific article, and trying to understand how it relates to the user’s situation was complex and time-consuming.”* In practice, the challenge involved *“identifying the relevant regulation for the user’s case, analyzing it, and cross-referencing it with other regulations to provide better support and improve response times,”* as Martínez explains.

To address this inefficiency, the Ministry—led by its technology team and supported by Google Cloud—implemented a pilot project based on virtual libraries powered by generative AI agents. The system enables natural language queries over the institution’s document base, facilitating information retrieval as well as the generation of summaries, technical extracts, and comparisons across regulations. According to Martínez, these libraries allow users to *“analyze regulations, generate extracts, provide summaries, or compare across regulatory frameworks to deliver better results.”*

The pilot delivered immediate results, significantly reducing the time required for analysis and case resolution. As Martínez notes, *“what used to take four hours to complete an analysis and issue a resolution or report is now done in 30 to 35 minutes.”* This improvement has been particularly

relevant for assisting citizens who approach the Ministry seeking guidance or institutional support.

Following this success, the tool began to expand into other areas, including financial management and procurement. In the area of acquisitions, for example, AI is used to analyze processes, verify compliance, validate adherence to technical specifications, and generate draft reports.

Recommendations

- Deepen the adoption of cloud infrastructure to enable AI applications:

Building on advances in government digital transformation and existing public–private partnerships, El Salvador can expand the use of cloud infrastructure across public institutions. Strengthening technical capabilities, procurement frameworks, and civil servant training would help accelerate the development and deployment of AI-based solutions.

- Expand public–private partnerships for digital infrastructure

Leverage projects such as Altius Tech Park and Google’s telemedicine initiatives to develop national infrastructure nodes that support real-time AI applications, foster innovation, and improve service delivery across the country.

- Scale the use of AI across public agencies

The Government of El Salvador can build on recent public and private investments to scale the deployment of AI solutions across public agencies—particularly in healthcare and education—tailoring adoption to the country’s socioeconomic needs.





Technological Innovation

El Salvador's AI innovation ecosystem remains nascent compared to the average in Latin America and the Caribbean. Currently, [R&D expenditure](#) accounts for 0.14% of GDP—approximately one quarter of the regional average.

As of September 2024, the Economic Commission for Latin America and the Caribbean ([ECLAC](#)) identified seven companies in the country engaged in AI-related activities. Meanwhile, [ETO](#) reported that three Salvadoran companies received venture capital funding by the end of the year, with a total of four transactions amounting to approximately USD 1 million.

Nevertheless, important foundations are being laid. In December 2024, the Center for Innovation in Digital Entrepreneurship ([CIED](#)) was inaugurated as a joint initiative between the Government, the United Nations Development Programme, and the Korea International Cooperation Agency. The center provides entrepreneurial training, specialized technical assistance, and access to enabling infrastructure such as 3D printers, scanners, and drones.

A distinctive feature of El Salvador's emerging AI innovation ecosystem is the role of partnerships between the public sector, technology companies, and international organizations. These collaborations have enabled the combination of technological capabilities, financing, and public policy to drive the adoption of digital technologies. Programs promoted by the Inter-American Development Bank in collaboration with Google—such as initiatives supporting business digitalization like [ConnectAmericas](#)—illustrate how these partnerships can contribute to strengthening the entrepreneurial ecosystem.

In this context, various public institutions have begun implementing AI-based solutions to modernize services and improve public information management. One example is its application in the National Registry of Natural Persons.

AI to Modernize Civil Registry Systems and Improve Citizen Services

The National Registry of Natural Persons (RNPN) faced the challenge of centralizing and digitizing civil registry records, which had historically been decentralized across municipalities. Although real-time data capture began in 2023 through digital systems, around 18 million images of civil records—containing the historical information of the Salvadoran population—were not available in any centralized system.

The challenge was not only to digitize these documents, but also to extract and index the information they contained, which proved complex due to the high heterogeneity of the records. As noted by Velasco, Executive Director of the RNPN: *“there were handwritten records, others were typewritten, and the information was not uniform; for example, the father’s name could appear at the beginning or at the end of the record.”*

To address this issue, the RNPN implemented an AI system, in collaboration with Google, trained to recognize patterns in documents and automatically extract key data to integrate it into the central registry system.

To digitize the historical archive, the RNPN established digitization centers across the country and developed logistics to transport registry books from municipalities. Once the images were captured, the AI system was trained to recognize different formats of civil records—from handwritten documents to typewritten forms—and extract relevant data for the central system.

According to Velasco, carrying out this process manually *“would not only have represented a cost of around USD 30 million, but also an estimated timeline of 10 years.”* In contrast, with the AI-based approach, he notes that *“we not only saved a significant amount of resources, but also time, reducing execution time by up to 90%.”*

This digitization effort enabled the launch of the [simple.sv](#) portal, through which citizens can

request and obtain electronic certificates quickly and remotely. It has also strengthened interoperability across public institutions. According to Velasco, “around 75% to 80% of government institutions are already connected to the registry,” enabling real-time data validation and improving administrative processes across the public sector.

As an additional outcome, the process also led to the creation of the [Así Somos](#) portal, an open data platform based on demographic information from the national ID (DUI). This tool allows for the generation of population metrics and supports both public policy design and private-sector decision-making.

AI is also being used to improve the efficiency of the justice system and strengthen the responsiveness of public institutions.

Procurador IA: AI to Streamline Public Defense

The Office of the Attorney General (PGR) of El Salvador faced significant delays associated with the volume of case documentation. In the words of Jairon Pineda, strategic advisor to the PGR, “a public defender may take two to three days just to read through a case file before preparing a defense strategy.”

To address these challenges, Attorney General René Escobar promoted a modernization initiative as part of the agreement between the Salvadoran government and Google, which led to the development of [Procurador IA](#), an AI agent designed to support case analysis.

The system operates in a closed environment that exclusively consults the PGR’s institutional databases—including national legislation, jurisprudence, and internal templates—avoiding external references and ensuring that analysis remains within the Salvadoran legal framework. As Pineda explains, the system was deliberately designed to rely only on institutional information: “we

restricted it to search only within our own data... so it does not pull jurisprudence from other countries, but only ours.”

The tool allows defenders to upload case documents to generate summaries, preliminary analyses, and draft defense strategies, which are then reviewed and validated by legal professionals. The system is not intended to replace lawyers, but to strengthen their work.

Pilot tests in the Juvenile and Criminal units show substantial efficiency gains. According to Pineda, “what might take a defender five hours can now be done in 15 to 20 minutes.” This reduction in time enables defenders to increase their responsiveness and accelerate case processing. As Pineda notes, the expected impact is that “if I previously produced a defense document in three days... now I can increase my output and generate at least one per day,” expanding the institution’s capacity to serve citizens.

Recommendations

- **Promote pilot projects in strategic sectors:**

Fund demonstration projects in manufacturing, commerce, and financial services to showcase the tangible benefits of AI in productivity, operational cost reduction, and service quality improvement.

- **Strengthen CIED as a hub for AI innovation:**

Expand the scope of the Center for Innovation in Digital Entrepreneurship to incorporate AI-focused incubation programs, industry challenges, and open innovation platforms that connect government, startups, and academia.

- **Scale support initiatives for AI-driven entrepreneurship**

Leverage existing programs that support entrepreneurship and business digitalization—including initiatives led by multilateral organizations—to expand the development of AI-based solutions for SMEs.





People

El Salvador is taking initial steps to strengthen its AI talent base. Currently, two universities—[Don Bosco University](#) and [ISEADE-FEPADE](#)—offer master’s programs in AI. In addition, Francisco Gavidia University includes [AI modules](#) in its master’s program in strategic IT management. However, the country still needs to expand its [AI research](#) capabilities. As noted by Sigfredo Figueroa, “the lack of skilled labor could become an obstacle to the deployment of AI in El Salvador.”

To address this challenge, several initiatives have emerged. The [CUBO Program](#) offers university-level AI courses and seeks to complement formal education through intensive learning experiences such as workshops, bootcamps, and mentorship with international experts. These initiatives allow students to develop practical skills in programming, technological infrastructure, and AI-based solution development, helping to accelerate the formation of specialized talent in the country. As explained by Stacy Herbert, Director of the National Bitcoin Office, these programs are based on open calls for university students combined with intensive complementary training: “we invite university students to participate through open calls... and provide them with additional training in programming and weekend bootcamps.”

These efforts are complemented by other training initiatives led by the public sector and the business ecosystem. The Ministry of Economy has launched an “[Introduction to AI](#)” course, while COEXPORT, in partnership with the OEI, offers the “[Dominando el Futuro](#)” program aimed at entrepreneurs and business leaders. In addition, the Inter-American Development Bank, in collaboration with Google Cloud, announced in December 2025 a program providing [10,000 scholarships in digital skills training](#).

AI-Driven Transformation of Education in El Salvador

El Salvador’s public education system has begun implementing a nationwide personalized tutoring model in collaboration with [xAI](#). This intelligent tutor, based on Grok technology, uses the Socratic method to guide students—from kindergarten through high school—in solving problems in mathematics, science, and history, encouraging them to arrive at answers on their own rather than simply receiving them. The objective is to scale educational excellence at a much faster pace than traditional teacher training models allow. According to Stacy Herbert, Director of the National Bitcoin Office, the system aims to provide a personalized tutor for every student. In her words, it is “an infinitely patient Aristotle,” guiding students through the process of understanding rather than simply delivering answers.

The project envisions nationwide deployment—preceded by pilot phases—and is being developed jointly with engineers from xAI working directly with the Salvadoran government. The initiative seeks to leverage AI’s capacity to incorporate the national curriculum while integrating content and methodologies from the world’s leading education systems, with the goal of accelerating learning in contexts where improving teaching quality could take decades through traditional mechanisms. As Herbert notes, this approach would enable countries to “scale excellence and ambition much faster,” as the tutor can integrate vast amounts of knowledge and guide students step by step through the learning process.

In parallel, the ARK Educate program works with children aged 7 to 17 to foster an invention-oriented mindset. Students develop their own projects and rotate annually between AI and robotics tracks. The pedagogical approach draws inspiration from Montessori education and aims to strengthen creativity and experimentation, encouraging students to invent their own solutions and learn through hands-on problem solving. As Herbert explains, the goal is for students to learn from an early age to “think like builders,” developing an innovation mindset.

Complementing these efforts, [Google for Education](#) has implemented Workspace for Education across the public primary education system, trained teachers, and advanced toward personalized learning through Education Plus. Next steps include training pedagogical leaders and distributing Chromebooks to fourth-grade students. In addition, Google.org has committed a USD 200,000 donation to strengthen digital skills training through civil society organizations.

Recommendations

- Launch a National AI Reskilling Plan with tiered training levels:

Design a national strategy to train learners, implementers, and innovators in AI-related competencies. Offer short, flexible learning formats tailored to different sectors and profiles.

- Promote ICT degree programs in priority regions:

Expand scholarship programs and partnerships with regional universities to increase the number of graduates in information and communication technologies, particularly outside the capital and in areas of strategic economic importance.

- Scale AI training programs for entrepreneurs

Strengthen initiatives such as “Dominando el Futuro” to create AI-focused training pathways for business leaders, helping SMEs and startups integrate AI tools into their operations.





Mexico

[Mexico](#) is one of the world's 15 largest economies, with a population of nearly 130 million, a [GDP](#) of USD 1.85 trillion in 2023, and a diversified productive base. These conditions position the country to fully capitalize on the benefits of AI.

Mexico [grew](#) only 1.5% in 2024. However, future economic outlooks look promising, as Mexico is poised to become Hispanic America's primary beneficiary of [nearshoring](#), a shift that amplifies the value of AI adoption across key industries. [Sectors](#) such as trade, healthcare, logistics, financial services, agriculture, and tourism are already integrating AI to improve data analysis, automate processes, optimize operations, and personalize services.

[Manufacturing](#), which accounts for 20% of national GDP, stands out as a high-impact use case. AI can significantly boost efficiency and productivity, especially in the [automotive industry](#), Mexico's top export sector, representing 35% of total exports, and a strategic anchor for nearshoring efforts.

Economic Potential of AI in Mexico

AI could generate between USD 54.8 billion and USD 102.5 billion in annual economic value for Mexico, equivalent to 3% to 5.6% of 2024 GDP. Most of this impact is expected in three key sectors: manufacturing (USD 18.4–34.6 billion), retail trade (USD 10.4–19.0 billion), and financial and insurance services (USD 7.8–13.9 billion).

However, the low adoption of emerging technologies across the productive sector is a significant constraint. As of today, only 7.3% of Mexican firms use innovative digital tools, including AI.

If this trend continues, AI's economic contribution could be reduced to an estimated USD 4.0 - 7.5 billion annually, and over a 30-year horizon, cumulative gains from increased sales would range from just USD 6.7 to 12.5 billion per year.

Accelerating AI adoption is therefore critical, not just to unlock its full economic potential, but to enable more inclusive, sustainable growth and boost Mexico's long-term competitiveness.

3-5.6%

Of Mexico's GDP could represent the potential economic impact of AI.

Table 8
Estimated AI impact by Economic Sector in Mexico (millions of USD 2024)

Economic Sector	Low impact scenario	High impact scenario	Average sectorial impact
Manufacturing	18,436	34,598	34%
Retail trade	10,420	19,039	19%
Financial and insurance activities	7,823	13,925	14%
Wholesale trade	6,805	13,644	13%
Administrative and support service activities	1,837	3,400	3%
Transportation and storage	1,532	2,867	3%
Electricity, gas, steam, and air conditioning supply; water supply and waste management	1427	2,652	3%
Information and communication	1,357	2,427	2%
Mining and quarrying	1,176	2,291	2%
Accommodation and food service activities	819	1,643	2%
Construction	819	1,596	2%
Human health and social work activities	495	940	1%
Education	488	932	1%
Professional, scientific, and technical activities	473	875	1%
Other service activities	347	695	1%
Real estate activities	319	608	1%
Arts, entertainment, and recreation	133	267	0%
Agriculture, forestry, and fishing	65	127	0%
Total	54,770	102,525	

Source: Elaborated based on Mexican National Economic Statistics





Enabling Public Policies

Mexico has been a regional pioneer in AI policy. In 2018, it became the first country in Hispanic America, and one of the first globally, to launch a [national AI strategy](#), positioning itself as an early reference point.

This effort was followed in 2020 by the release of the [National AI Agenda](#), aimed at expanding Mexico's strategic vision for AI development and adoption. The creation of the [National AI Alliance](#), a collaboration between the Senate and civil society organizations, also helped define standards and best practices to guide a more coherent, cross-sector AI policy framework.

However, significant challenges remain. The 2018 and 2020 strategies did not lead to concrete actions or a sustained roadmap. As Senator Luis Colosio puts it: *"Mexico was a regional leader in new technology implementation, both public and private, but that leadership was lost due to a lack of continuity in the national public agenda."* The recent creation of the Agency for Digital Transformation for Mexico presents an opportunity to reclaim that leadership and relaunch a coordinated agenda around AI, connectivity, and digital skills.

A key risk today is regulatory fragmentation. According to [ANIA](#), 15 AI-related bills are currently under discussion in the Senate and 25 in the Chamber of Deputies. This proliferation of uncoordinated proposals risks producing a fragmented and contradictory framework. As Sissi de la Peña, Senior Advisor at the Datasphere Initiative, warns, weak institutional coordination in tech governance and cybersecurity undermines the effectiveness of reforms. Still, there are signs of optimism with the creation of new specialized legislative commissions to address these topics.

Despite this complex landscape, momentum is building. As Alberto Farca of Centro México Digital notes, *"despite a digital policy vacuum nationally, AI and digitalization are gaining relevance, with a new ministry dedicated to digital transformation*

focused on simplifying government procedures and services."

These efforts could lay the foundation for more coherent, effective, and citizen-centered digital governance. To move forward, Mexico must develop a comprehensive and pragmatic regulatory framework, one that updates outdated rules, balances innovation with rights protections, and positions AI as a driver of inclusive, sustainable, and sovereign development.

Recommendations

- **Consolidate a national AI strategy** with a long-term vision, clear objectives, and measurable metrics that transcend administrative cycles.
- **Design a balanced regulatory framework** that promotes ethical and responsible AI use, without excessive restrictions that limit innovation.
- **Promote strategic collaboration** among government, industry, and academia to optimize resources and accelerate AI adoption.





Infrastructure

Mexico has a solid foundation for advancing AI capabilities, especially regarding digital infrastructure and data availability. According to the 2024 Hispanic American Artificial Intelligence Index (ILIA), the country ranks fourth in the region for [enabling factors](#). It stands out for high 5G network penetration, robust computing capacity, and extensive use of internet-connected devices in households.

Mexico is also the third country in Hispanic America with the [most clear and actionable public data](#), supported by the strong governance of the National Institute of Statistics and Geography ([INEGI](#)).

INEGI

Opening public sector data is crucial for unlocking AI's potential as an innovation driver, economic development tool, and means to formulate contextualized solutions to national challenges. High-quality public data, especially in sectors like health, agriculture, finance, and education, enables the training of AI models that reflect local realities and support evidence-based policymaking.

In this area, INEGI stands out as one of Mexico's most valuable institutional assets. Known for its strong governance and technical rigor, INEGI has built a well-curated, accessible data infrastructure. Thanks to its work, Mexico holds the 30th position globally in the [Open Data Inventory](#). INEGI's data has been instrumental in analyses such as estimating AI's economic potential using microdata from the 2019 Economic Census.

Mexico's infrastructure conditions reflect a favorable environment for AI development and digitalization. As Roberto Durán, professor at Tecnológico de Monterrey, states, "we have interesting infrastructures within the country to be

able to advance in digitalization," providing a base for building more advanced capabilities. However, this potential faces significant barriers. Digital infrastructure has an unequal territorial and socioeconomic distribution, limiting its impact. In 2022, [only 78.6%](#) of the population had internet access, with notable gender gaps and disparities between urban and rural areas. Sergio Alcocer, president of Mexico Exponencial, warns: "There's still a huge lag in Mexico regarding connectivity, and you can hardly use AI if you don't have adequate connectivity." This gap also affects strategic sectors like education, where a lack of connectivity and institutional understanding of AI's potential hinders its effective integration.

Regarding open data, despite INEGI's leadership, critical challenges persist. Many available datasets are not structured or formatted for use in AI systems, limiting their value for algorithm training, digital service development, and academic research. As Prof. Durán emphasizes, "we have a lot of data, but very poorly structured." Furthermore, data openness efforts have shown little dynamism outside INEGI's scope, with limited data management at the business level, especially in small and medium-sized enterprises, and low public trust in government data privacy protection.

Recommendations

- Strengthen policies focused on expanding access to digital infrastructure, with consideration for closing urban/rural connectivity divides.
- Design Reinforce the State's role in public data curation and openness.

This includes standardizing, structuring, and documenting datasets, and creating an open national repository, inspired by initiatives like [INDIAai](#) or [Data.gov](#).

- Promote inter-institutional data sharing processes and foster collaboration among government, academia, and industry.

This way, Mexico can build a data ecosystem that boosts responsible innovation, promotes local AI capability development, and ensures privacy and security standards aligned with international best practices.





Technological Innovation

Mexico holds a leading position in Hispanic America for [AI-driven technological innovation](#). According to ILIA 2024, the country ranks fourth in the region in AI research, adoption, and development. It stands out in AI-related patents, with 4.22 per million inhabitants, the highest rate in the region.

Mexico also has a growing entrepreneurial ecosystem, with more than 360 [companies developing AI-based solutions](#). This dynamism is supported by substantial technical and human capital in top-tier universities and research centers, along with increasing institutional openness to ethical and trustworthy AI. As Alberto Farca of Centro México Digital notes, “the perception of AI in Mexico is more open than in other countries, although concerns around bias and discrimination persist.” This openness is reflected in initiatives focused on responsible development, sustainable investment, and international cooperation.

These innovation-driven conditions are further amplified by global trends such as nearshoring, which present Mexico with a strategic opportunity to position itself as a regional hub for AI-powered manufacturing and logistics. The country’s geographic proximity to the United States and its integration under the USMCA framework (which includes a digital trade chapter) create favorable conditions for scaling AI-driven ventures. Applications in process automation, supply chain optimization, demand forecasting, and quality control can significantly enhance the competitiveness of Mexican firms. As Senator Luis Colosio of Nuevo León puts it, “AI can improve efficiency and access to services in key sectors like finance, manufacturing, agriculture, and healthcare.”

Pulsar: Transforming the manufacturing industry with AI in Mexico

[Pulsar](#), founded in 2020, specializes in AI solutions for optimizing industrial plant operations. Its technology combines sensors and algorithms,

allowing companies to monitor machine performance in real time.

Deployed in sectors like food, automotive, plastics, and metalworking, Pulsar’s solutions have improved efficiency, reduced waste, lowered energy costs, and strengthened communication across teams through a centralized platform. The company’s nearshoring strategy aligns with national policies aimed at attracting foreign investment and positioning México as a high-tech manufacturing hub in Hispanic America.

Despite this progress, structural challenges remain. One significant gap is the disconnect between academic research and the needs of the productive sector and society. As Miguel González of Tecnológico de Monterrey notes, “we have excellent research centers, but unfortunately, they’ve become disconnected from the needs not only of industry, but of society.” This weakens technology transfer and knowledge commercialization, key drivers of digital transformation.

The geographic concentration of the AI ecosystem in Mexico City and the State of Mexico further limits participation from other regions and [exacerbates territorial inequalities](#). Roberto Durán, also of Tecnológico de Monterrey, points out that “AI’s greatest potential lies in improving SME productivity, but fundamental gaps persist there, such as a lack of data storage”, which prevents analytics and automation.

To consolidate its leadership, Mexico must advance sustained public policies that decentralize technological development, strengthen knowledge transfer, and promote AI adoption across the economy. Leveraging nearshoring alongside a strategy for inclusive digitalization and innovation could position Mexico as a regional leader in tech-driven economic growth and social development.

Recommendations

- Promote regional AI research capacities, building on each State's comparative advantages and linking them to global research networks.
- Create funding mechanisms for tech-based startups, supported by tax incentives and streamlined regulations.
- Foster a culture of innovation and entrepreneurship across education, business, and government.





People

Mexico has notable strengths in AI-related human capital. The country demonstrates high levels of [digital literacy](#), includes AI content in formal education, and benefits from a mature research ecosystem. These conditions have supported the development of specialized talent across various regions of the country. In particular, there is a notable concentration of AI students in Mexico City, which accounts for approximately 51% of all students enrolled in [AI specialization programs](#). This concentration suggests a favorable environment for the emergence of academic initiatives and capabilities with regional impact.

Mexico's education system holds strong potential to scale this base by integrating AI across all levels of learning. Key steps include training teachers in the pedagogical use of emerging technologies and adopting active methodologies for AI instruction. Strengthening links between academia and the private sector would help align training programs with labor market needs. A more balanced approach, combining research with practical training, would better equip graduates with the skills needed to drive digital transformation.

However, these capabilities remain unevenly distributed. The geographic concentration of AI talent limits adoption in other regions, reinforcing territorial inequalities and constraining the ability to develop localized digital policy. As Sissi de la Peña notes: *“The lack of institutionalization and human capital are significant barriers to the development of digital governance and regulation in the country. There are professionals, but they are few, and educational plans have been slow to incorporate the necessary components for digital skills training.”*

This is compounded by the urgent need to adapt education systems to prepare the workforce for automation. Senator Luis Colosio has highlighted the proposed Agency for Digital Transformation as a vehicle to advance a national digital skills agenda aligned with the demands of AI and other disruptive technologies. Sergio Alcocer has also pointed to

the lack of worker training and unresolved ideological barriers in the public sector as major constraints, emphasizing that deeper collaboration with educational institutions could help bridge these gaps.

To address these challenges, Mexico must strengthen public policy efforts aimed at developing specialized human capital with an inclusive, territory-sensitive approach. Investing in digital skills will not only expand AI's economic impact but also support more legitimate, sustainable, and people-centered digital governance.

Digital Factory: Driving Digital Transformation for SMEs

Launched in February 2024 by Google, [Fábrica Digital](#) supported the digital transformation of SMEs in México, focusing on the manufacturing, automotive, and metalworking sectors. The program targeted key nearshoring regions, aiming to boost business competitiveness through specialized training and mentorship.

The initiative was delivered in two phases. First, companies completed a digital maturity assessment to evaluate their current capabilities. Then, they implemented pilot projects using personalized roadmaps, guided by expert mentors. With an investment of over USD 400,000, 40 SMEs participated in an intensive program that reached 2,000 employees with training on digital transformation and data-driven innovation. Additionally, 350 companies assessed their digital maturity and accessed open platforms to build their capabilities further, all supported by a network of 80 specialized mentors.

Recommendations.

- Implement targeted AI and digital skills training programs for workers, entrepreneurs, and higher education institutions, tailored to sector-specific demands and nearshoring opportunities.
- Develop public outreach and education strategies to raise awareness among citizens about the benefits, risks, and responsible uses of AI, supporting informed participation in the digital transition.
- Organize practical workshops and establish effective adoption strategies for SMEs and the public sector, showcasing real-world AI applications in daily operations and governance.





Panama

With a [population](#) of 4.45 million and an estimated [GDP](#) of over USD 80 billion, Panama has become a strategic logistics hub for international trade. Its privileged geographic location and the Panama Canal connecting two oceans give it a set of comparative advantages that AI technologies could significantly enhance.

In the most recent reporting period, Panama recorded 7.4% [economic growth](#), driven by post-pandemic recovery and a dynamic services sector. However, [growth slowed](#) to 2.9% in 2024 due to the closure of the Cobre Panamá mine and a severe drought affecting Canal operations. [This infrastructure](#) contributes 3.2% of GDP and more than 13% of fiscal revenues.

In this context, AI is emerging as a key tool for improving logistics and critical infrastructure efficiency. Its application in the Panama Canal, through technologies like Digital Twins, illustrates the transformative potential of AI in strategic sectors.

As a gateway between Central and South America and a consolidated global logistics hub, Panama is well-positioned to become a regional node for AI. Canal modernization initiatives, the deployment of digital twin technologies, and multisectoral efforts to design a national AI strategy all signal its growing role in the region's digital transformation.

Panama can leverage its world-class infrastructure, expertise in smart logistics, and intercontinental connectivity to lead. As Carlos Kan, critical technologies specialist at SENACYT, noted: *“Panama has a unique position. The key is knowing who to partner with, what capabilities to develop, and how to capture the opportunities that open with AI and digital transformation.”*

Digital Twin of the Panama Canal

As part of the Panama Canal's modernization, [Stantec](#) developed an advanced digital twin for the new locks. This system integrates BIM modeling, real-time sensors, and AI algorithms to simulate and optimize mechanical, electrical, and hydraulic operations, enhancing both efficiency and decision-making.

The impact has been substantial: it has supported operator training, enabled the efficient transit of over 12,000 ships annually, and promoted more rational water use amid increasing climate-related pressures. Panama's experience is now recognized internationally as a benchmark for AI applications in critical infrastructure.

Economic Potential of AI in Panama

AI's economic potential in Panama is estimated between USD 1.8 and USD 3.3 billion annually, equivalent to 2.1% to 4% of 2023 GDP. The sectors with the highest potential include trade (USD 375–695 million), construction (USD 251–489 million), and transportation and storage (USD 225–421 million). For further details, see Table 9.

While there is no dedicated metric to measure AI adoption across Panama's economy, a proxy estimate is possible. Assuming a 9.1% adoption rate, based on the average among countries in this report, AI's current economic impact would range between USD 162 and USD 304 million per year.

2.1 - 4%

Of Panama's GDP could represent the potential economic impact of AI

Table 9

Estimated AI impact by Economic Sector in Panama (millions of USD 2023)

Economic Sector	Low impact scenario	High impact scenario	Average sectorial impact
Wholesale and retail trade; repair of motor vehicles and motorcycles	375	695	21%
Construction	251	489	14%
Transportation and storage	225	421	13%
Financial and insurance activities	159	283	9%
Real estate activities	140	266	8%
Manufacturing	92	173	5%
Human health and social work activities	80	152	5%
Public administration and defence; compulsory social security	69	139	4%
Education	68	131	4%
Mining and quarrying	52	101	3%
Professional, scientific, and technical activities	53	98	3%
Information and communication	51	93	3%
Electricity; gas, steam, and air conditioning supply; water supply and waste mgmt	40	74	2%
Agriculture, forestry, and fishing	34	66	2%
Administrative and support service activities	35	65	2%
Accommodation and food service activities	31	58	2%
Other service activities	11	21	1%
Arts, entertainment, and recreation	10	19	1%
Total	1,776	3,344	

Source: Elaborated based on National Economic Statistics from Panama



Enabling Public Policies

Panama is developing a [national AI strategy](#) through a participatory process led by its Secretaría Nacional de Ciencia, Tecnología e Innovación (SENACYT), which brings together government institutions, the private sector, academia, and civil society. It is structured around [five pillars](#): (1) governance and regulatory framework, (2) human talent and institutional capacity, (3) data and infrastructure, (4) ethics, inclusion, and sustainability, and (5) international cooperation and global standards.

This approach aims to align the country with strategic frameworks adopted by other nations in the region. Various AI-related legislative initiatives exist, but none have reached a broad consensus to date. This fragmentation limits the establishment of a national vision that can position Panama as a key player in the regional digital economy.

Recommendations

- **Build on and continue promoting multisectoral participatory processes**

Actively involve academia, civil society, and the private sector in defining regulatory guidelines and national strategies.

- **Evaluate current regulations**

As a prerequisite to proposing specific AI legislation, consider emerging risks and institutional capabilities. Prioritize an approach that identifies fundamental ecosystem gaps (such as needs to update public procurement law) and avoids restrictive regulations without technical justification.

- **Focus legislative efforts on proposals with broader multisectoral consensus**

If pending initiatives are prioritized, advance those debated with multiple relevant stakeholders, and avoid regulations that could harm technological development due to a lack of solid foundations.





Infrastructure

Panama has one of the most advanced connectivity infrastructures in Hispanic America. Currently, six [international submarine cables](#) connect the country to the United States, South America, Europe, and Asia, positioning it as a potential regional digital hub. By 2028, this number is expected to increase to nine.

Currently, around 78% of the population has [internet access](#). As of October 2024, 366 [5G sites](#) had been activated in Panama City, covering nearly 80% of the capital. The country also hosts eight [data centers](#). Panama has developed high-performance computing capabilities, most notably through the Iberogun cluster at the *Universidad Tecnológica de Panamá*, which is integrated into regional networks such as [Consortio Centroamericano de Computación de Alto Rendimiento](#). Some structural challenges include having only one Internet Exchange Point.

To consolidate its position as a regional digital hub, Panama needs to expand its data infrastructure and enhance water and energy resilience.

Recommendations

- Promote “Cloud-First” policies to accelerate digital government and AI adoption

Prioritize public procurement of cloud services to improve infrastructure scalability, efficiency, and resilience across sectors.

- Expand high-performance computing and AI-ready infrastructure in public universities

Scale up the reach and capability of existing university clusters (like [Iberogun](#)) and connect them to innovation hubs and private users through shared service models.

- Strengthen last-mile connectivity to close regional gaps in AI access

Invest in improving broadband and mobile internet quality in underserved urban and rural areas to ensure that the benefits of AI tools and services can reach the entire population. Prioritize digital inclusion as a foundational layer for AI adoption, especially in education, SMEs, and public service delivery.





Technological Innovation

Panama invests approximately 0.16% of its GDP in [R&D](#), about a quarter of the regional average of 0.62%. Nevertheless, the ILIA 2024 [highlights](#) Panama's regional leadership in open-source software production, a form of collaborative innovation that can be particularly valuable in resource-constrained contexts.

Similarly, the [Global Innovation Index](#) 2024 places Panama 82nd out of 133 economies, recognizing relatively strong performance in areas like institutional quality, infrastructure, and creative outputs, but underscoring persistent weaknesses in market sophistication, business capabilities, and research intensity.

Together, these indicators portray an innovation ecosystem still in early stages of consolidation, where institutional fragmentation, limited investment, and a nascent entrepreneurial environment continue to constrain the full realization of AI's transformative potential.

In the AI sector specifically, 14 [panamanian companies](#) are innovating with the use of AI, 2024, but only one had reported [investment rounds](#), totaling USD 1 million. These findings underscore the need for specialized incubators, dedicated funds, and AI research centers to stimulate the sector's growth.

Although Panama is considered the most developed [startup ecosystem](#) in Central America, where opportunity-driven ventures outnumber necessity-driven ones, a [shortage of specialized talent](#) within technology innovation companies remains as a challenge for scaling the ecosystem.

Recommendations

- **Expand funding mechanisms for tech-based startups:** by mobilizing public and private capital, easing access to early-stage financing, and supporting their growth and scalability.
- **Promote innovation and creativity education** in higher education, technical training, and adult learning programs to strengthen a culture of technological entrepreneurship.
- **Address the shortage of specialized talent through continuous upskilling,** talent attraction and retention policies, and stronger connections between academia and the innovation ecosystem.





People

Panama offers two master's degrees related to AI: one at Universidad de Panamá focused on [e-learning and AI](#), and another at UMECIT on [data science and business analytics](#). Talent development, however, faces structural challenges. According to [UNESCO data](#), only 3.51% of university graduates in 2022 pursued ICT careers. Various initiatives aim to reverse this situation. The [Skilling Panama](#) program, in partnership with AWS, Meduca, and AIG, seeks to train 31,000 Panamanians in AI and cloud technologies. The [C-TASC-AIP](#), alongside UTP and SENACYT, promotes training in critical areas for AI development. Other notable initiatives to promote AI training include [Technovation Girls Panamá](#), the [Atenea](#) educational chatbot, and the work in [municipal AI training](#) with *Centro Latinoamericano de Innovación Pública*.

Recommendations

- Expand postgraduate, technical, and professional training in AI by supporting master's programs, doctoral research, and high-quality certification pathways.
- Strengthen STEM education and AI-related career pathways in higher education and vocational training through incentive schemes, hackathons, and public-private partnerships.
- Continue promoting partnerships with global training networks to bring international content, pedagogical models, and certifications to Panama's workforce development ecosystem.

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Paraguay

Paraguay has a [population](#) of approximately 6.9 million. With 4.2% [GDP](#) growth, it was [one of the fastest-growing economies](#) in Hispanic America. The [top GDP contributing sectors](#) included trade (11.6%), government services (9.1%), agriculture (8.3%), construction (6.8%), electricity and water (6.4%), real estate services (5.9%), and financial intermediation (5.6%).

Given agriculture's central role in Paraguay's production, the country is vulnerable to extreme weather events worsened by climate change. Between 2019 and 2022, severe droughts [slowed](#) economic growth and undermined poverty reduction efforts. In this context, Paraguay's Investment and Export Network sees an opportunity to leverage the country's clean energy potential to support AI development. [Paraguay](#) has significant photovoltaic, wind, and hydroelectric capacity, with the potential to add nearly 4 gigawatts of renewable energy, 30% more than the current supply.

Economic Potential of AI in Paraguay

AI's economic potential in Paraguay is estimated at between USD 850 million and USD 1.6 billion per year, equivalent to 2% to 3.7% of 2023 GDP. The sectors with the highest potential impact include manufacturing (USD 187–348 million), trade (USD 113–210 million), and agriculture (USD 83–162 million). For further details, see Table 10.

While no official metric currently exists to measure AI adoption in Paraguay's economy, we estimated a proxy based on a 9.1% adoption rate, the average among countries covered in this report. Using that benchmark, AI's current economic impact in Paraguay would range between USD 77 million and USD 145 million annually.

AI for Precision Agriculture

In [April 2025](#), officials from the Ministry of Agriculture met with a Taiwanese delegation led by the Secretary General of the International Cooperation and Development Fund (ICDF) to explore AI adoption in agriculture. The Taiwanese team presented an AI-powered system that uses climate variables to optimize crop monitoring and reduce production risks, particularly in aquaculture and orchid cultivation, both strengthened by Taiwan's technical mission in Paraguay.

2-3.7%

Of Paraguay's GDP could represent the potential economic impact of AI.

Table 10

Estimated AI impact by Economic Sector in Paraguay (millions of USD 2023)

Economic Sector	Low impact scenario	High impact scenario	Average sectorial impact
Manufacturing	187	348	22%
Wholesale and retail trade; repair of motor vehicles and motorcycles	113	210	13%
Agriculture, forestry, and fishing	83	162	10%
Financial and insurance activities	81	145	9%
Public administration and defence; compulsory social security	62	124	8%
Electricity, gas, steam, and air conditioning supply; water supply and waste management	57	106	7%
Construction	52	102	6%
Real estate activities	53	101	6%
Arts, entertainment, and recreation	49	93	6%
Transportation and storage	41	77	5%
Information and communication	29	53	3%
Accommodation and food service activities	21	39	2%
Administrative and support service activities	19	36	2%
Mining and quarrying	2	4	0%
Total	850	1,599	

Source: Elaborated based on National Economic Statistics from Paraguay





Enabling Public Policies

Paraguay does not yet have a national AI strategy or any formally introduced AI-related bills in Congress. In 2024, the Paraguayan Artificial Intelligence Society ([SoPalA](#)) and the Development Bank of Latin America (CAF) hosted the first Meeting of the Paraguayan AI Society, creating a space for dialogue aimed at shaping effective policies and practices around AI adoption.

Among broader digital initiatives, the Ministry of Information and Communication Technologies launched the [National ICT Plan](#) 2022–2030, which includes goals to foster and develop emerging technologies such as AI. Nevertheless, this plan could be strengthened by legislative actions. As explained by Maricarmen Sequera, Executive Director of TEDIC, the absence of a Personal Data Law and other key digital regulations as a significant barrier to AI development in Paraguay: "The lack of clear rules creates uncertainty for investors and other actors in the ecosystem," she warns.

Recommendations

- **Kickstart a participatory process for a national AI strategy**

Create a roadmap for AI development by launching an inclusive consultation process with universities, tech communities, civil society, and private sector actors. This would help align ambitions with concrete actions and establish a shared national vision.

- **Integrate AI into Paraguay's existing ICT Plan**

Transform the National ICT Plan (2022–2030) into a more operational tool for AI adoption by setting specific goals, timelines, and accountability mechanisms focused on emerging technologies.

- **Lay regulatory foundations for AI innovation:**

Prioritize the development of foundational digital regulations, such as a Personal Data Protection Law and guidelines for AI ethics and transparency, to reduce uncertainty for businesses and attract responsible investment.





Infrastructure

In terms of internet access and connectivity, Paraguay has a foundation for AI development. As of 2023, [internet penetration](#) reached 78% of the population, with average [fixed broadband download speed](#) of 98.95 Mbps. While the country is advancing in [5G](#) rollout, full-scale deployment has yet to begin.

However, Paraguay still lacks the advanced infrastructure needed to support AI at scale. Currently, the country has one operational [data center](#) and no large-scale high-performance computing (HPC) facilities or regionally recognized supercomputers. Rather than wait for large investments in data centers, Paraguay would benefit from using immediate solutions such as cloud technologies that enhance its current capacity.

Recommendations

- Promote “Cloud First” policies across government and SMEs

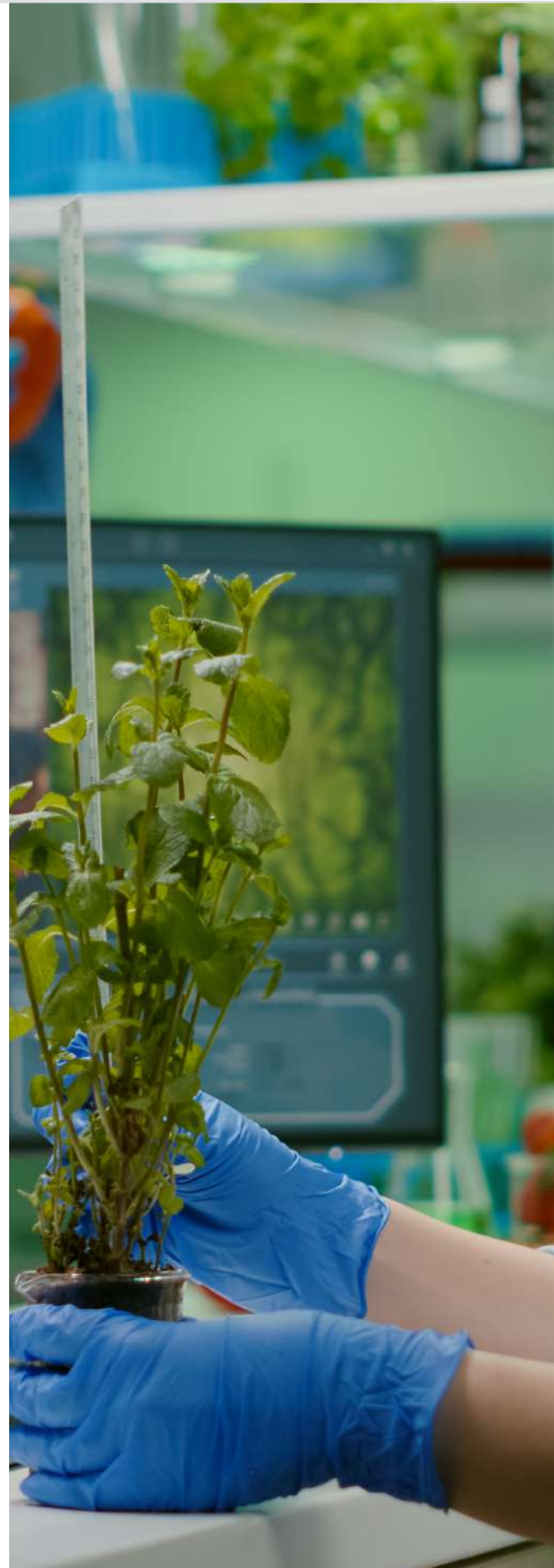
Facilitate access to scalable computing power by encouraging public institutions and small businesses to adopt cloud-based solutions, reducing infrastructure costs and increasing digital resilience.

- Strengthen rural digital infrastructure for agricultural AI use

Ensure that AI applications in agriculture, Paraguay’s key sector, are not hindered by connectivity gaps. Expand broadband and mobile networks in rural areas through public-private partnerships.

- Develop public open data platforms for climate and agriculture

Enable precision agriculture and environmental monitoring by creating open-access datasets on weather, soil, water, and crop performance, integrated with user-friendly tools for farmers and innovators.





Technological Innovation

Paraguay's AI innovation ecosystem is still in its early stages. In 2022, the country allocated 0.12% of its GDP to [R&D](#), one-fifth of the regional average of 0.62%. According to the Global Innovation Index ([GII 2024](#)), Paraguay's key strengths include its use of low-carbon energy and high-tech imports as a share of total trade. However, other weaknesses remain such as low imports of ICT services, limited collaboration between industry and academia in R&D, and scarce funding for startups.

As of September 2024, [ECLAC](#) identified five companies engaged in AI-related activities in Paraguay. According to [ETO](#), just one of them had received capital investment, totaling less than USD 1 million.

To address these gaps, the Paraguayan government has launched several initiatives to strengthen the startup ecosystem. One example is [InnovandoPY](#), a program supporting digital ventures with seed capital, specialized mentoring, and business training. Across seven editions, it has invested over USD 380,000 and supported more than 300 entrepreneurs. The Facultad Politécnica of Universidad Nacional de Asunción also hosts [Startup Lab](#), the country's first university-based incubator for tech-driven, innovation-focused ventures.

Recommendations

- **Create a national fund for AI-driven startups:**

Support entrepreneurship in Paraguay's highest-impact sector by offering grants or seed funding for startups that apply AI to solve challenges of relevant economic sectors.

- **Build R&D capacity through global collaboration**

Establish partnerships with international research institutions to co-develop AI solutions in aquaculture, crops, and environmental monitoring. Prioritize knowledge transfer and local capacity-building.

- **Support the emergence of AI research nodes**

Create incentives for universities and technical institutes to set up applied AI research labs, starting with small-scale prototypes and targeted government funding for projects aligned with national development goals.





People

Paraguay has been expanding its academic offerings for talent development necessary for greater AI adoption. Currently, there are two specialized master's programs in artificial intelligence: the Master's in Artificial Intelligence Sciences from the *Facultad de Ingeniería* of UNA ([FIUNA](#)) and the Master's in Artificial Intelligence and Data Analysis from the *Facultad Politécnica* of UNA ([P-UNA](#)).

This is complemented by various institutions offering doctoral programs in related areas, such as the Doctorate in Engineering Sciences (FIUNA), the Doctorate in Computer Science (FP-UNA), and the Doctorate in Data Science (UCOM).

Additionally, the Paraguayan government has established strategic international alliances to strengthen technological skills and competencies among state personnel. In collaboration with the Korea International Cooperation Agency (KOICA), MITIC conducted an [AI training program](#) applied to e-government in 2023, with participation from officials from various public institutions. Likewise, in [2024](#), a training program on "Strengthening e-government capacities for digital transformation in Paraguay" was carried out in collaboration with KOICA.

Recommendations

- Drive training and reskilling plans across society

Just as the government has promoted AI training and capacity-building plans for public officials, we recommend extending these initiatives to the rest of society, which will be a fundamental step to improve AI talent transversally in the country, not just for state modernization.

- Strengthen higher and technical education pathways for AI careers

Support the integration of AI-related content into technical institutes, vocational training centers, and university programs. Prioritize fields such as agronomy, logistics, and public management, ensuring that young adults and working professionals, especially in rural areas, can access up-to-date, job-relevant training.

- Train local facilitators to scale AI awareness

Create a network of community-based digital educators equipped to deliver introductory AI literacy workshops, especially in rural regions, using culturally relevant and practical content.





Dominican Republic

With a [population](#) of 11.3 million and an estimated [GDP](#) of USD 124.3 billion in 2024, the Dominican Republic has established itself as one of the region's most dynamic economies. Over the past decade, it has posted average annual [growth](#) of nearly 5%, twice the regional average. This performance has been driven largely by a robust tourism sector and steady inflows of remittances. These factors have supported macroeconomic stability and helped bring inflation down to 3.6% year-over-year as of March 2025.

[Services](#) represent 59,8% of GDP, with [tourism](#) accounting for 16.6% of formal employment. In recent years, the country has welcomed over 10 million [visitors](#) annually, making it the most visited destination in the Caribbean. The [manufacturing sector](#), which contributes 14% of GDP, has benefited from the nearshoring trend to the United States, supported by [diversified exports](#) including medical instruments, gold, and tobacco.

While the economy has demonstrated strong performance, it remains exposed to climate-related risks, such as hurricanes. Between 1851 and 2021, the country was hit by 139 [tropical cyclones](#). Notable events include Hurricane [Fiona](#) (2022), which affected 1.4 million people and caused USD 375 million in damages, and Hurricane [Georges](#) (1998), which led to losses equivalent to 14% of GDP.

Against this backdrop, AI has emerged as a cross-cutting tool to build resilience, drive economic diversification, and attract investment. The country's National AI Strategy ([ENIA](#)) aims to train 10,000 developers annually and position the Dominican Republic as a regional tech hub. Reflecting this momentum, the country ranked second in the Caribbean, only behind Costa Rica, in the 2024 [AI Readiness Index](#).

Economic Potential of AI in Dominican Republic

AI's estimated economic potential in the Dominican Republic ranges from USD 2.5 to USD 4.7 billion annually, equivalent to 2.1% to 3.9% of 2023 GDP. The sectors with the highest potential include manufacturing (USD 375–691 million), trade (USD 333–617 million), and construction (USD 293–571 million). For more details, see Table 11.

While no official statistic currently tracks AI adoption across the country's productive sectors, a proxy estimate based on a 9.1% adoption rate, the average for countries in this report, suggests AI's current economic impact may be between USD 230 and USD 432 million annually.

2.1 - 3.9%

Of Dominican Republic's GDP could represent the potential economic impact of AI.

Table 11

Estimated AI impact by Economic Sector in Dominican Republic (millions of USD 2023)

Economic Sector	Low impact scenario	High impact scenario	Average sectorial impact
Manufacturing	375	691	15%
Wholesale and retail trade; repair of motor vehicles and motorcycles	333	617	13%
Construction	293	571	12%
Accommodation and food service activities	220	412	9%
Transportation and storage	201	376	8%
Real estate activities	192	365	8%
Education	165	316	7%
Financial and insurance activities	157	280	6%
Human health and social work activities	122	231	5%
Public administration and defence; compulsory social security	97	194	4%
Professional, scientific, and technical activities	100	185	4%
Agriculture, forestry, and fishing	87	169	4%
Other service activities	73	135	3%
Electricity, gas, steam, and air conditioning supply; water supply and waste management	44	83	2%
Information and communication	37	67	1%
Mining and quarrying	29	56	1%
Total	2,525	4,750	

Source: Elaborated based on National Economic Statistics from the Dominican Republic



Enabling Public Policies

In 2023, the Dominican Republic launched its [National Artificial Intelligence Strategy](#) marking a key milestone in the country's efforts to institutionalize AI and integrate it into national development. The strategy is built around four core pillars: advancing smart governance, fostering local talent and innovation, strengthening data infrastructure, and promoting regional integration. The plan outlines 50 specific initiatives and includes a monitoring system led by the Government Office of Information and Communication Technologies ([OGTIC](#)), ensuring coordinated implementation and long-term impact.

ENIA's implementation faces important challenges, particularly around coordination and funding. As Abel López, former ENIA coordinator, explains: *"The ecosystem is working in a fragmented way. Every institution wants its own innovation department, with its own policies and visibility. Many focus on hitting annual training targets by offering standalone workshops, often with no follow-up or impact evaluation. Launching labs isn't enough; we need coordination and structured support for each unit."*

On the regulatory front, several proposals are currently under discussion. One significant [initiative](#), led by Senator Omar Fernández, calls for the creation of a national AI Center, an entity designed to promote the ethical and responsible use of AI. The proposal outlines regulatory and certification powers, as well as human oversight in sensitive areas such as health, justice, and labor.

This emerging framework builds on existing laws, including the Personal Data Protection Law and legislation on high-tech crime, as noted in UNESCO's the Readiness Assessment Methodology report ([RAM](#)).

Recommendations

- **Establish strong governance for ENIA's implementation**

Create a high-level coordination mechanism with clearly defined institutional mandates, dedicated resources, and reporting obligations to reduce fragmentation and ensure strategic alignment across ministries and sectors.

- **Move forward with the creation of CENIA as a technical anchor**

Establish a specialized national AI body that can provide regulatory guidance, coordinate implementation, and serve as the country's reference institution for ethics, oversight, and innovation.

- **Review existing legal frameworks**

Assess whether current laws already address emerging challenges, and ensure that any new regulation is grounded in a clear rationale.





Infrastructure

By 2025, the Dominican Republic had made notable in [digital connectivity](#), with 78% of the population online and the country ranking among the top three in Hispanic America for [5G rollout](#). However, continued efforts are needed to address structural barriers that limit the development of a robust AI ecosystem. Average [fixed broadband speed](#) remains low at 46.78 Mbps, placing the country 109th globally.

Meanwhile, critical infrastructure remains limited: there are no high-performance computing centers, and [only one](#) datacenter is currently registered in Santo Domingo. In terms of secure digital infrastructure, the country has 2,453 secure [internet servers](#). Despite current progress, gaps remain between urban and rural areas, where access to networks and digital services remains uneven.

To address these challenges and unlock new opportunities, the country has launched several strategic initiatives aimed at becoming a regional AI infrastructure hub. These include installing [GPU clusters](#) and strengthening the Santo Domingo [Cybernetic Park](#), an AI and data science innovation hub supported by the Technological Institute of the Americas (ITLA) in collaboration with the private sector. [ENIA also](#) sets the objective of positioning the country as a regional provider of data storage and analytics services.

Despite recent progress, expanding modern and inclusive digital infrastructure remains one of the country's most pressing challenges for enabling a national AI ecosystem.

Recommendations

- Close the last-mile connectivity gap:

Invest in infrastructure for rural and underserved areas to ensure AI-driven services can be deployed equitably, particularly in health, education, and emergency response.

- Expand high-performance computing capacity

Support the development of GPU clusters and AI-ready infrastructure by connecting academic, public, and private sector resources, building on existing efforts like the Santo Domingo Cybernetic Park.

- Develop a national “Cloud First” strategy

Prioritize scalable cloud infrastructure for public services and startups. This would improve access to computing, streamline data management, and lower barriers for AI adoption.





Technological Innovation

Public data on [R&D spending](#) in the Dominican Republic remains limited; however, estimates from UNESCO's RAM place it at approximately 0.086% of GDP, below the [regional average](#) of 0.62%.

According to the 2024 [Global Innovation Index](#), the country ranked 97th out of 133 economies, a slight decline of the three positions from the previous year. Key innovation strengths include energy efficiency, gross capital formation, labor productivity growth, and creative goods exports. However, major weaknesses remain in business and market sophistication, particularly low startup and scaleup funding, limited venture capital and joint ventures, and low imports of ICT services.

As of March 2025, Tracxn identified eight [AI-related companies](#) in the country, two of which had received venture capital. ETO data shows that three AI companies in the Dominican Republic have completed [eight funding transactions](#), totaling around USD 1 million over the past decade.

To strengthen its innovation ecosystem, the government has launched several initiatives, including the [National Innovation Policy 2030](#), which aims to establish centers of excellence in R&D and innovation; the [2030 Digital Agenda](#), which includes cross-cutting technological innovation policies; and the [National Network](#) of Prototyping and Technology Transfer Centers, focused on SMEs. Complementing these efforts, [ENIA](#) also prioritizes boosting AI adoption and development.

While these initiatives represent important progress, further work is needed to address persistent challenges in funding, coordination, and implementation. Strengthening these dimensions will be critical to achieving long-term impact and scaling innovation across the country.

AI-Powered Co-Creation of Tourism Products in the Dominican Republic

Since the Dominican Republic joined the Central America & Dominican Republic Tourism Promotion Agency ([CATA](#)) in 2019, the agency has used AI and other advanced tools to integrate the country into complementary, multi-destination offerings and to optimize processes, efficiency, and decision-making across the sector.

Working closely with tourism authorities and FEDECATUR, CATA has trained more than 4,000 professionals and launched the first online catalog of regional experiences, while initiatives like the 2021 hackathon (with over 40 tour operators) and a 2023 AI workshop (with more than operators) have fostered collaborative, AI-assisted product design.

By analyzing large traveler datasets to spot behavior patterns, AI enables more precise personalization and stronger commercialization of Dominican experiences. CATA's program signals AI's growing role in the country's tourism recovery and digital transformation, with plans to extend AI across management processes and deepen industry partnerships.

Recommendations

- **Boost coordination between innovation programs**

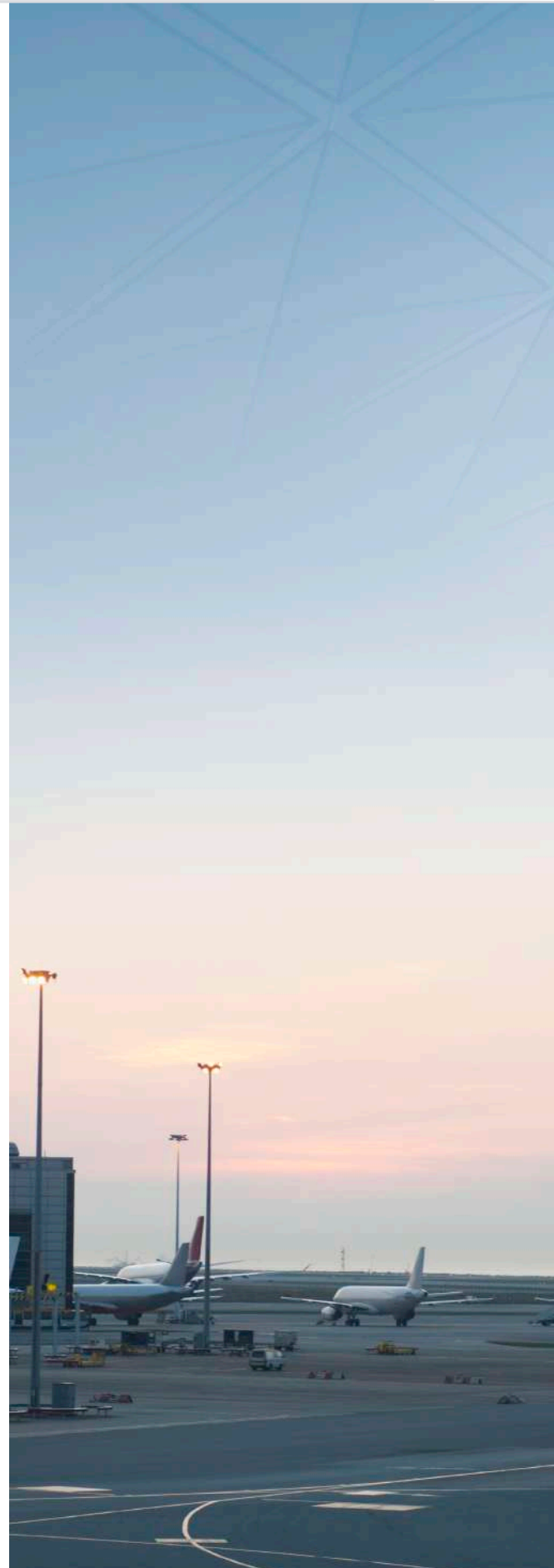
Ensure that the National Innovation Policy 2030, Digital Agenda 2030, and ENIA are strategically aligned to avoid duplication and maximize impact.

- **Build sector-specific AI labs with academia and industry**

Create applied R&D centers focused on AI use cases in tourism, logistics, and agriculture, linking them with universities and private companies.

- **Encourage public innovation challenges and open calls**

Launch sector-focused challenge programs where government ministries partner with startups to solve concrete problems using AI, incentivizing practical innovation.





People

The Dominican Republic is expanding its academic offerings in AI at both the master's and doctoral levels. *Universidad Autónoma de Santo Domingo* offers programs at both levels; *Universidad Dominicana* offers a productivity-focused doctorate; and both UNPHU and UNICARIBE universities offer master's programs in AI-related fields.

Nonetheless, the development of specialized AI talent remains at an early stage. According to ILIA 2024, the share of [AI professionals](#) in the workforce grew from 0.03% in 2016 to 0.06% in 2024, an increase that points to the need for scaling advanced training and strengthening talent retention strategies.

In related fields, 2022 data from the UNESCO Institute for Statistics shows that 11.55% of higher education graduates earned [STEM degrees](#), with just 3.72% specialized in ICT, highlighting a gap to close. As Jean García Periche, AI policy researcher at the Institute for Ethics in AI, puts it: *"The lack of resources and human talent is very pronounced. The best technicians graduate from ITLA, but most end up working abroad, earning five times what they would in the local market."*

Despite these challenges, there are signs of promising progress. The 2024 Coursera Global Skills Report ranks the Dominican Republic 37th globally in [data science](#), placing it in the "competitive" group with a 45% proficiency score. Despite gaps, this reflects a talent base that can be scaled.

Various institutions are starting to address these challenges. Public actors like OGTIC and the Cabinet of Innovation and Digital Development have launched initiatives such as ["Semilleros Digitales INTRO"](#) a six-month intensive program in programming and AI for young people. Civil society organizations, including [Fundación Enlata](#), are also contributing by offering training in innovation and entrepreneurship with a focus on AI for small businesses and underserved communities.

Fundación Enlata

Based in Santo Domingo, [Fundación Enlata](#) has emerged as a regional leader in using AI for inclusion and development. Through its "IAvanza" program, it has trained over 7,000 people, mostly vulnerable youth, in tech tools, process automation, data analysis, and innovative product design. The program combines technical training with soft skills, critical thinking, and teamwork, aiming to solve local challenges through emerging technologies. Graduates have created AI-driven solutions such as neighborhood safety platforms, small business tools, and community chatbots.

Recommendations

- Support youth digital bootcamps and mentorship programs

Scale successful initiatives like “Semilleros Digitales INTRO” and connect them to real job opportunities through internships and apprenticeships.

- Build talent retention incentives

Create career pathways and recognition programs to retain top graduates in the local ecosystem, offering competitive salaries, research grants, or startup support.

- Promote training for SMEs and underserved communities

Support community-based digital training programs, especially for small businesses in tourism, commerce, and agriculture, key drivers of the Dominican economy.





Uruguay

Uruguay stands out in Hispanic America for its macroeconomic stability, high human development, and elevated GDP per capita. In 2024, its [GDP](#) reached USD 81 billion, with a [population](#) of 3.4 million.

The most significant [contributors to GDP](#) were trade, accommodation, and food services (15%), followed by manufacturing (9.5%). Agriculture also plays a central role, with 90% of the national territory suitable for farming. The agro-industrial sector accounts for approximately 16% of GDP and employs about 13% of the workforce.

In 2024, Uruguay's [economy grew by 3.1%](#), well above its 1.17% average over the previous decade. This performance followed years of stagnation due to the pandemic and a severe drought that disrupted key sectors. Given Uruguay's productive profile, AI represents a strategic opportunity to drive sustainable growth and strengthen economic resilience.

Economic Potential of AI in Uruguay

We estimate AI's economic potential in Uruguay at USD 1.6 to 2.9 billion annually, equivalent to 2% to 3.7% of GDP. The sectors with the greatest potential include manufacturing (USD 470–879 million), trade (USD 273–499 million), information and communications (USD 179–333 million), and healthcare (USD 151–287 million). For more details, see Table 12.

However, Uruguay's relatively low AI adoption rate, estimated at 8%, currently limits this potential to USD 124–231 million per year. This highlights the urgent need to accelerate AI adoption to unlock its full economic benefits.

2-3.7%

Of Uruguay's GDP could represent the potential economic impact of AI.

Table 12
Estimated AI impact by Economic Sector in Uruguay (millions of USD 2023)

Economic Sector	Low impact scenario	High impact scenario	Average sectorial impact
Manufacturing	470	879	30%
Wholesale and retail trade; repair of motor vehicles and motorcycles	273	499	17%
Information and communication	179	333	12%
Human health and social work activities	151	287	10%
Transportation and storage	117	220	8%
Financial and insurance activities	77	138	5%
Administrative and support service activities	65	120	4%
Electricity, gas, steam, air conditioning supply, water supply, and waste mgmt	57	105	4%
Professional, scientific, and technical activities	45	83	3%
Education	34	65	2%
Arts, entertainment, and recreation	30	56	2%
Accommodation and food service activities	24	49	2%
Real estate activities	15	28	1%
Other service activities	9	16	1%
Agriculture, and forestry, and fishing	2	5	0%
Mining and quarrying	3	5	0%
Construction	1	1	0%
Total	1,552	2,888	

Source: Elaborated based on National Economic Statistics from Uruguay



Enabling Public Policies

Uruguay launched its first AI strategy in 2019 as part of its broader digital government agenda. In 2023, [Law No. 20.212](#) tasked the Agency for Electronic Government and Information and Knowledge Society ([AGESIC](#)) to align Uruguay's national data and AI strategy with UNESCO's AI ethics recommendations. The resulting [National AI Strategy 2024–2030](#) builds on the 2019 strategy and aims to promote inclusive and sustainable economic growth through AI innovation.

On the regulatory front, in June 2024, AGESIC submitted a [report](#) to the Legislative Branch focusing on ethical development, human rights protections, and support for technological innovation. Overall, Uruguay has a strong institutional and legal base to advance in the ethical deployment of AI systems.

Recommendations

- **Ensure effective implementation of the National AI Strategy (2024–2030)**

Translate Uruguay’s strong vision into action by aligning institutional mandates, dedicating long-term budgets, and monitoring cross-sectoral progress through measurable KPIs.

- **Strengthen public-private coordination mechanisms**

Build structured dialogue between AGESIC, academia, industry, and civil society to accelerate AI adoption and ethical development across sectors.

- **Review existing legal frameworks**

Rather than proposing broad new laws, focus on assessing how current frameworks apply to AI use cases. If gaps exist, consider proportionate updates tailored to high-risk sectors, ensuring alignment with international good practices while preserving Uruguay’s innovation-friendly environment.





Infrastructure

Uruguay is well-positioned to strengthen its digital infrastructure and AI capabilities. The country [ranks second](#) in this area, reflecting a solid foundation for deploying emerging technologies. In 2024, household internet penetration [reached 91%](#), and by June 2025, fixed broadband speeds averaged [176.8 Mbps](#). Early adoption of the [IPv6 standard](#) has been a key enabler, with a 53.5% adoption rate as of August 2025, further solidifying Uruguay's status as a regional connectivity leader.

Uruguay has also invested in high-performance computing. Launched in 2018, the National Supercomputing Center, [ClusterUY](#), supports AI and significant data research, with over 2,240 CPU cores and more than 100,000 GPU cores. This infrastructure benefits universities, research centers, and the private sector.

Clean energy adds another strategic advantage: Uruguay operates one of the world's most renewable electricity grids, making it an ideal destination for sustainable data center investment. In 2024, Google announced a USD 850 million investment to establish a [data center in Canelones](#). This new facility reflects a national priority for attracting infrastructure investments. As Andrés Kalansky, director of Quatromanos, notes, *"There's a national commitment to technological development, it's seen as central to the country's future."*

Still, key challenges remain. Limited 5G coverage restricts real-time AI applications in sectors like agriculture and logistics. Existing infrastructure like ClusterUY also faces hurdles: institutional fragmentation, bureaucratic bottlenecks in universities, and a lack of private sector engagement, especially among SMEs. As Juan Pablo Pignataro, head of cloud and AI at ANTEL, puts it: *"Infrastructure alone isn't enough. Without a strategy, the right incentives, and a vibrant innovation ecosystem, it risks becoming obsolete."*

This underscores the need for stronger coordination between public and private actors, along with policies that ensure sustainable and impactful use of Uruguay's digital assets.

Recommendations

- Accelerate sustainable data infrastructure investment

Position Uruguay as a low-carbon AI hub by attracting international data centers that align with its clean energy advantage.

- Expand SME access to high-performance computing

Develop user-friendly programs for small firms to leverage resources like ClusterUY, paired with technical assistance and training.

- Adopt a “Cloud First” policy for public services and open data

Promote cloud adoption across public institutions to accelerate digital transformation, improve interoperability, and reduce operational costs. This approach would also leverage Uruguay’s clean energy infrastructure to enable scalable, low-carbon AI solutions hosted on cloud platforms.





Technological Innovation

Uruguay has made substantial progress in building AI-related innovation capabilities. The Information Technology (IT) sector is now a key pillar of the national economy, ranking fifth in GDP contribution after traditional sectors like soy, cellulose, meat, and tourism. Amílcar Perea, President of the Uruguayan Chamber of Information Technologies, notes that "the sector aims to reach 5% of GDP, and 10% by 2030," reflecting a long-term growth vision.

The country has also increased R&D investments, rising from [0.3% of GDP in 2012 to 0.62% in 2022](#). Public investment has played a leading role, growing from 29.6% to 47.1% of total R&D funding over the same period.

However, this momentum has yet to translate into broad AI adoption or a strong entrepreneurial ecosystem. Uruguay is home to just [eight AI companies](#), which have raised around USD 112 million over the past decade. According to the 2019–2021 [Innovation Activities Survey](#), only 15% of firms report carrying out innovation activities. Market dynamics (53%) and cost barriers (50%), rather than lack of knowledge or policy, are the top reasons holding firms back.

Carolina Aguerre, a professor at Universidad Católica de Uruguay, highlights limited tech transfer between universities and businesses. Key issues include poor communication channels, weak institutional coordination, and bureaucratic hurdles, especially for SMEs. As Gustavo Domínguez, Technical Manager at [Latitud](#), points out, many traditional small businesses "are simply unaware of AI's potential to improve their operations and competitiveness."

Technological Laboratory of Uruguay (LATU)

Founded in 1964, [LATU](#) plays a key role in certification, productive development, and tech transfer. Its affiliated foundation, [Latitud](#), leads R&D and innovation projects aligned with industry needs, bridging academic expertise and real-world applications.

Recent AI-driven initiatives include:

- A virtual assistant for the dairy sector to help navigate export standards.
- Predictive models for rice quality and yield based on drying conditions and grain variety.
- Image recognition tools to assess structural resistance in wood.

Recommendations

- **Strengthen university-industry technology transfer**

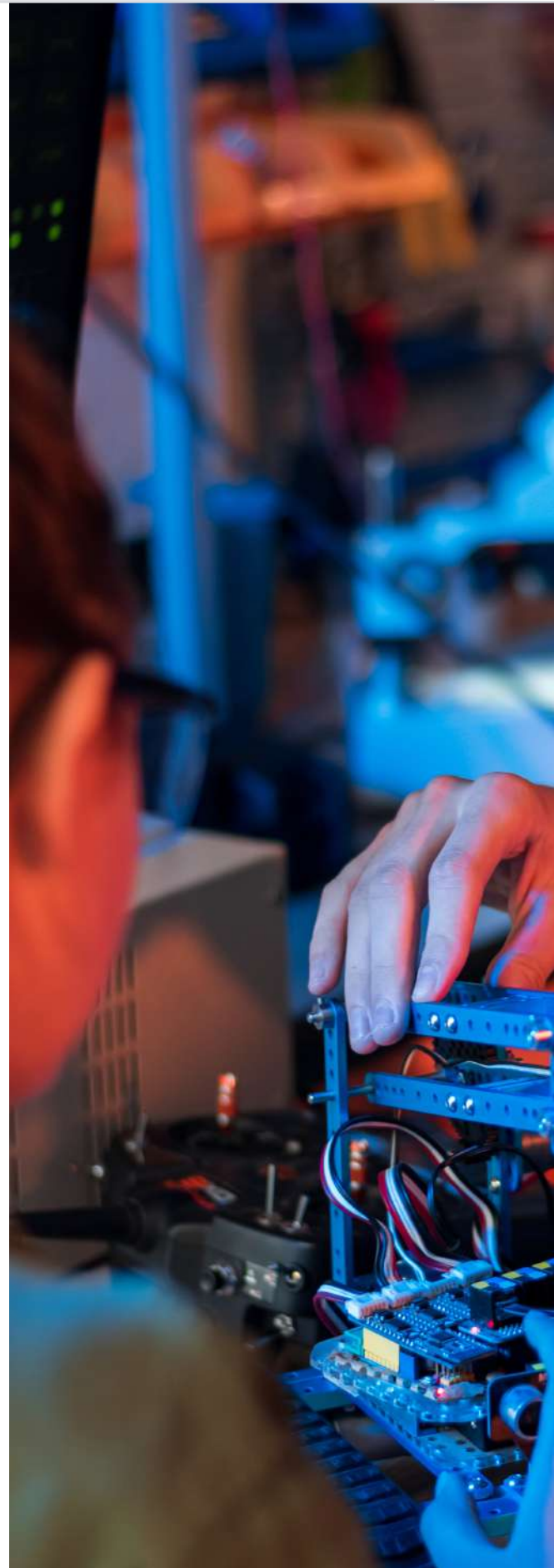
Develop streamlined policies and tools to enable faster, more effective collaboration between universities and the private sector, especially SMEs. This includes reducing red tape, clarifying IP frameworks, and updating academic incentives to value applied R&D, patenting, and prototype development alongside traditional publications.

- **Expand support for AI startups and applied innovation**

Launch dedicated funds, accelerator programs, and technical mentorships to help AI ventures scale and connect with global markets.

- **Leverage LATU and Latitud to scale AI experimentation**

Build on successful pilots to create living labs that support prototyping, testing, and certification of AI tools for strategic sectors.





People

Uruguay is steadily building a strong AI talent pipeline. The country stands out for both the quality and quantity of its academic programs, the early integration of digital skills in basic education, and rising participation in tech literacy initiatives. According to [ILIA 2024](#), Uruguay leads Hispanic America in the number of AI-related master's degrees, with five programs ranked in the QS Rankings.

The country also outperforms the regional average in the percentage of STEM graduates, with ICT degrees representing 4.07% of all graduates in 2022. AGESIC complements formal education with [open-access AI training courses](#) that introduce fundamental concepts, use cases, and potential risks.

Rafael Sotelo, Dean of the School of Engineering at Universidad de Montevideo, highlights the role of universities in developing AI and data talent, many of whom go on to work for Uruguayan or Uruguay-based firms that export tech services. While AI adoption within the domestic market remains limited beyond data analysis, several pilot projects and use cases are being explored across government, industry, and civil society.

Bruna De Vargas, coordinator of the [trinational postgraduate program in robotics and AI](#) at UTEC Rivera, underscores AI's growing relevance across strategic sectors like IT, livestock, and forestry. She also emphasizes the importance of coupling technical training with ethical and regulatory awareness to ensure AI adoption is inclusive and responsible.

At the early education level, [Ceibal](#) plays a pivotal role in building foundational AI skills. Its approach is based on three pillars: Computational Thinking, the use of programmable Microbit devices, and fostering responsible digital citizenship. Ceibal also runs "AI Week," an annual event designed to deepen teacher and student engagement with AI. Tools like Google's [Teachable Machine](#) are used in upper elementary grades to introduce algorithmic

thinking, data bias, and human decision-making in AI systems.

One final milestone: In 2023, Uruguay recorded the highest percentage of women with AI engineering skills in Hispanic America, with women representing 25% of the talent pool, a significant step forward for gender equity in tech.

Computational Thinking and AI in Education

Uruguay is taking bold steps to integrate artificial intelligence into primary education, building on its long-standing commitment to digital literacy. A flagship initiative is Ceibal's [Computational Thinking](#) program, which began incorporating AI modules into the national curriculum for 4th to 6th grade students in 2022.

In 2023, Ceibal launched Uruguay's first AI Education Framework, offering pedagogical guidance to help schools and teachers integrate AI in ways that are critical, contextualized, and inclusive. By 2024, the program was renamed Computational Thinking and Artificial Intelligence and achieved record reach: 5,194 student groups from 1,382 schools, more than 90,300 students engaged, and over 4,000 teachers trained, figures that underscore its deep integration into the national education system.

According to Isabel Amigo, Head of Research, Development, and Innovation at Ceibal, some of the most innovative pilot projects include automating oral English assessments and using generative AI to support tutors in correcting assignments. These tools, she notes, offer *"huge potential to scale education and personalize learning pathways,"* while also prompting critical debates on how to assess core competencies like writing and how to safeguard student data.

Ceibal is also shaping the regional and global conversation on AI in education. In 2025, it will host the second edition of [EduIA](#), a regional event dedicated to AI and education, and has launched the [EduIA Lab](#), a hub promoting the ethical, inclusive, and effective use of AI in education systems. It participates in the International AI Literacy Framework—an OECD and European Commission initiative that will underpin PISA 2029—and recently published the book [Building Artificial Intelligence for Education](#), documenting its experiences and lessons learned.

Looking ahead, Ceibal is developing a Teacher Competency Framework on AI, to be unveiled in October 2025, aimed at strengthening professional development and fostering an interdisciplinary approach so that AI can be addressed across all areas of knowledge.

Recommendations

- **Scale advanced AI education and workforce development**

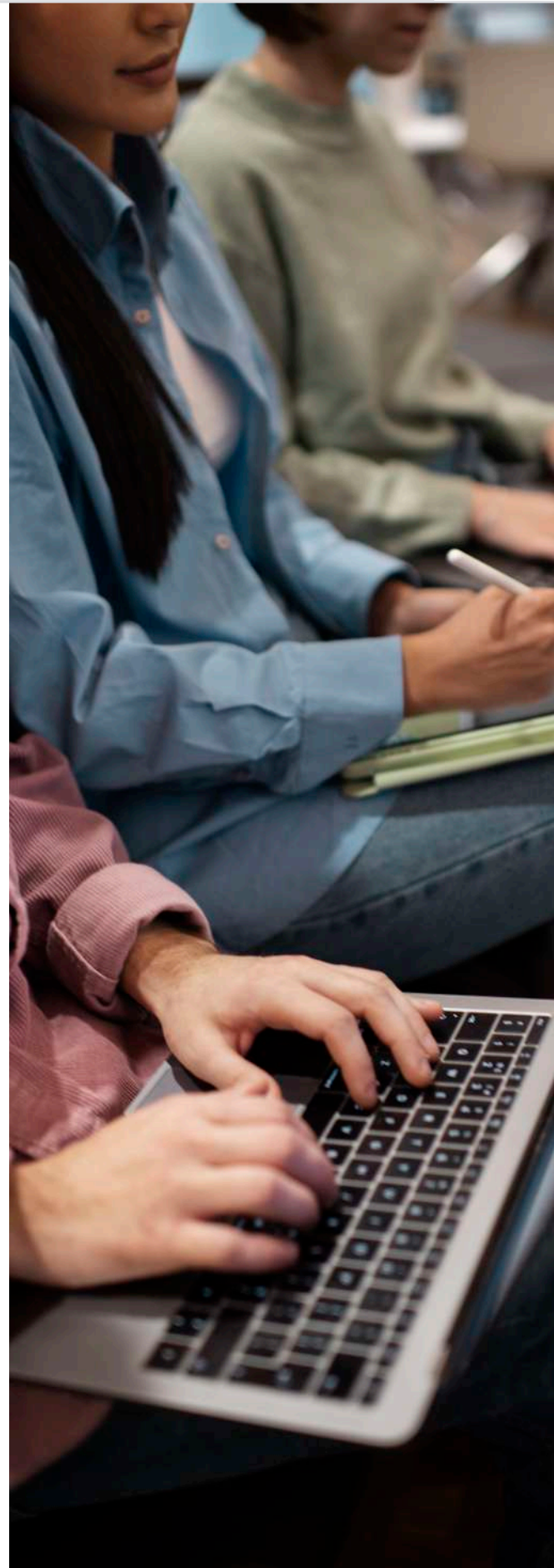
Expand access to master's and technical programs, and offer flexible certification pathways for professionals seeking upskilling.

- **Build on Ceibal's pioneering AI literacy model**

Deepen the integration of AI in K–12 through updated curricula, teacher training, and interdisciplinary learning aligned with ethical principles.

- **Retain and attract AI talent through competitive pathways**

Strengthen national incentives, international partnerships, and remote-work opportunities to keep top talent in Uruguay.



Methodological Annex

This study estimates the economic impact of AI for a group of countries in Hispanic America, drawing from the methodological frameworks developed by McKinsey ([2018](#), [2023](#)). Unlike previous studies, typically global in scope, this analysis is tailored to the region, incorporating local economic data and technology adoption dynamics.

Calculation Structure

The methodology estimates AI's percentage impact on business sales by sector, adapting global benchmarks to local economic matrices. It relies on McKinsey's published projections for the potential of generative AI and deep learning across industries. The model provides a range: the lower bound represents a conservative or pessimistic scenario, while the upper bound reflects an optimistic one. To assess both the current impact and the untapped potential, we also factor in each country's AI adoption rate.

Information Sources Used for Sales by Economic Sector

Sector-level sales data are critical inputs, as they anchor estimates of AI's economic impact. However, data availability varies widely across countries. As shown in Table 13, some countries, such as México and Chile, offer direct sales data. Others only provide proxies, such as the gross value of production or GDP by sector. It's important to note that GDP by sector often underestimates economic activity, as it captures only value added and avoids double-counting. Gross production value is more informative but still imperfect, since it does not reflect total sales unless all output is sold within the same period. As a result, inconsistencies in data availability across countries introduce comparability limitations.

Table 13
Variability of industry data across countries

Country	Variability of data by industry across countries
Argentina	Gross value of production by industry
Chile	Sales by industry
Colombia	Value added of production by industry
Ecuador	Value added of production by industry
El Salvador	Value added of production by industry
Mexico	Sales by industry
Panama	Value added of production by industry
Paraguay	Value added of production by industry
Dominican Republic	Value added of production by industry
Uruguay	Value added of production by industry

Table 14
Variability of AI adoption data across countries

Country	AI adoption measurement
Argentina	AI adoption extrapolated from large-company survey using Chile–Argentina adoption ratio.
Chile	Survey of AI adoption among companies of different sizes
Colombia	Official ministerial document on AI adoption (based on a survey)
Ecuador	-
El Salvador	-
Mexico	Survey on the adoption of advanced technologies
Panama	1,776
Paraguay	850
Dominican Republic	2,250
Uruguay	Survey of AI adoption among logistics companies

Information Sources Used for AI Adoption

Similarly, to estimate how much of the potential impact is currently being realized, we applied country-specific AI adoption rates to the model. As with sales data, AI adoption statistics are uneven and unavailable in several countries. Table 14 lists the sources used. It's worth noting that the wide variation in how countries measure AI adoption limits direct comparability. For example, Chile uses a business survey covering firms of various sizes, offering a more comprehensive snapshot. In contrast, Argentina's figure is drawn from a survey of only large companies, so the data was extrapolated using Chile's distribution as a proxy, with the obvious limitations that entails. Colombia relies on figures from an official Ministry of Science, Technology, and Innovation document. In Uruguay, the measurement is limited to the logistics sector. México, meanwhile, reports on the adoption of advanced technologies more broadly, with AI as a subset.

List of Interviewees

As part of the qualitative component of this research, semi-structured interviews were conducted with key actors across Latin America's AI ecosystem. These virtual conversations lasted around 60 minutes and focused on each expert's view of AI adoption in their country and its potential economic impact. Discussions also explored key enablers and barriers for AI development and implementation. This qualitative input helped enrich the analysis with grounded, contextual insights from stakeholders directly involved in the space.

Argentina

Ariel Graizer: Electronic engineer (National Technological University, UTN), president of the Argentine Internet Chamber (CABASE) since 2009. Leads LAC-IX, the Latin American and Caribbean Internet Exchange Point Operators Association, since 2011. Previous roles include CEO of Servicios y Telecomunicaciones S.A. (since 1999) and founding member/vice president of NAP CABASE (1997).

David Mielnik: Lawyer and Master in Criminal Law (Torcuato Di Tella University). Founded InteligenciaLegal.com.ar, the first international academy for AI in Law, and Legaltech Software Factory, where he trains/advises lawyers on AI for legal practice. Also, an AI leader for the National Tax Court and a professor at UTDT Law School since 2013.

Inés Reineke: Economist (Pontifical Catholic University of Argentina) with a master's in public management (Universitat Pompeu Fabra). Global Innovation Director at the Local Innovation Network, leading initiatives to strengthen public management in Argentine municipalities.

Juan Cruz Díaz: Director at Cefeidas Group and co-director of the Corporate Governance Program at Universidad de San Andrés. Special Advisor at the Americas Society/Council of the Americas (AS/COA) and has advised organizations like OAS, IFC, and the World Bank. Lawyer with a master's from The Fletcher School of Law and Diplomacy at Tufts University.

Esteban Lescano: Argentine lawyer (Universidad Austral), with master's degrees in Business Law (UFV, Madrid) and Business Management (IAE). Professor at UBA and researcher on internet freedom of expression. Founded Lescano & Etcheverry Abogados, specializing in communications law. Directs the CABASE Legal Commission and actively participates in Internet Governance forums (ICANN, LACNIC, IGF, NETMUNDIAL). Has published on digital regulation and attended international programs in Europe and the US on digital diplomacy and governance.

Julia Pomares: Expert in strategy and public policy, with over 25 years of experience in institutional reforms, digital transformation, and, more recently, AI governance. Former Executive Director of CIPPEC, presided over the G20 T20, and was Chief of Staff for the Government of Buenos Aires City. Currently an Independent Director at La Anónima and Pampa Energía, Co-Founder of GIDE, and Lead Author for UNESCO's AI report in Argentina. Holds a doctorate in Political Science from LSE and is a professor at Torcuato Di Tella University.

Luciano Crisafulli: Economist (National University of Córdoba) and Director of the Coalition of Cities for Artificial Intelligence (CIIAR). Founder and director of the CorLab Innovation Laboratory, creator of the Córdoba Smart City Fund, Latin America's first govtech startup investment fund.

María Fernanda Martínez: Holds a Master's in education (Universidad de San Andrés). Serves as Executive Director of the Center for Studies in Technology and Society (CETyS) at Universidad de San Andrés, Argentina.

Pablo Poza: Part-time professor in Business Policy at IAE Business School since 2013, specializing in decision-making and technology. Also directs the Digital Business degree at Universidad Austral. Professionally, serves as Business Developer Executive at Edrans, leading Latin American growth through Amazon Web Services solutions. Previously held leadership roles at IBM Global Business Services and PwC Consulting, with over 23 years of

experience in consulting and the telecom/media industry.

Soledad Guilera: Director of the Artificial Intelligence and Public Policy Program at the Government School of Torcuato Di Tella University (Argentina). Advisor to Urban AI, member of the GovAI US Coalition, and expert in Government, AI, and Smart Cities. Formerly taught at UC Berkeley, led Bloomberg's What Works Cities certification in Latin America, advised the Argentine Presidency on its 2030 Strategy, and worked in Deloitte Consulting's Strategy and Operations practice in New York. Currently part of the team implementing UNESCO's RAM in Argentina.

Chile

Rodrigo Durán: General Manager of the National Artificial Intelligence Center (CENIA), Latin America's leading AI research institution, recognized internationally for scientific and technological leadership: commercial Engineer and Master in Economics and Public Policy (Universidad Adolfo Ibáñez). Distinguished career in designing and implementing science and technology public policies, served as chief of staff to Chile's first Undersecretary of Science.

Luz María García: General Manager of the Chilean Association of Information Technology Companies (ACTI). Over a decade of experience in designing, implementing, and managing public policies for science, technology, and innovation. Led emblematic projects like Smart Cities with Meaning (Undersecretariat of Telecommunications, 2014) and Smart Island Territories (Undersecretariat of Economy, 2016-2017). Was the manager of the Sé Santiago Smart City program.

Paloma Herrera: Lawyer, legal advisor to the Ministry of Science, Technology, Knowledge, and Innovation (MCTCI).

Claudio Magliona: Lawyer and professor at the University of Chile with a distinguished career in corporate, financial, technology, and intellectual property law. Expert in mergers and acquisitions,

startup financing, software licensing, data protection, cybersecurity, telecommunications, and entertainment industry contracts.

Antonia Morandé: Legislative advisor to Deputy Diego Schalper.

Gonzalo Rivas: Chief of the Division of Competitiveness, Technology and Innovation at the Interamerican Development Bank. He is an economist from Universidad de Chile

Rodrigo Román: Economic analyst at the Society for Manufacturing Promotion (SOFOFA). Commercial Engineer with an Economics major (Pontificia Universidad Católica de Chile) and a Master's in Applied Economics with a Public Policy major from the same university.

Nayat Sanchez-Pi: Director of the Inria Chile Research Center and CEO of the Inria Chile Foundation, leading the CIRIC Center of Excellence. Doctor in Artificial Intelligence (Carlos III University of Madrid), with a distinguished international career in applied research in artificial intelligence, Internet of Things, and human-computer interaction. Has been a professor in Spain and Brazil, a researcher in Portugal, Ireland, and France, and has led interdisciplinary R&D teams in collaboration with industry and academia. Currently directs the Chile-France Binational AI Center.

Yerka Yukich: Executive Secretary of the Digital Economy Center of the Santiago Chamber of Commerce (CCS), promoting strategic initiatives for e-commerce development and digital transformation in Chile. Publicist (University of Santiago), with over a decade of experience leading the digital marketing ecosystem, notably as General Manager of the Interactive Advertising Bureau (IAB) Chile. Recognized for her ability to connect public and private actors, she has led collaborative projects nationally and internationally, actively contributing to the country's digital environment modernization.

Danielle Zaror: Lawyer (University of Concepcion). Master's in Economic Law and Doctorate in Law

(University of Chile). Specialist in rational legislation (University of Girona). Currently a researcher at the Center for Law and Technology (CEDI) of the Faculty of Law, University of Chile.

Colombia

Ingrid Hernández: Presidential Advisor in the Administrative Department of the Presidency of the Republic of Colombia, specifically in the Presidential Advisory for Digital Transformation. Lawyer with specializations in New Technologies and Telecommunications Law, and Economic and Market Law. Also holds an MBA (Master's in Strategic Business Administration).

Germán López: Director of Regulatory Affairs for the Colombian Chamber of Information Technology and Telecommunications (CCIT). Lawyer (Universidad Externado de Colombia) with specializations in Telecommunications Law and Economic Law. Previously worked at entities like the Communications Regulatory Commission (CRC) and the Ministry of Information and Communications Technologies (MinTIC).

Lina María Duque del Vecchio: Executive Director of the Communications Regulatory Commission (CRC) of Colombia since February 2024. Lawyer with a Master's in Law and extensive professional experience with the CRC and its predecessor (the CRT).

Marelen Castillo: Representative to the Chamber for the 2022-2026 legislative period. Doctor in Education (Nova University) and holds an MBA from Tecnológico y de Estudios Superiores de Monterrey.

María Fernanda Quiñones: Executive President of the Colombian Chamber of Electronic Commerce (CCCE). Lawyer (Universidad de los Andes) with various specializations. Notable career includes 11 years at CredibanCo, where she structured the general secretariat, before leading the CCCE.

Mario Castaño: Technical director of Cintel. Telecommunications engineer with a Master's and a Doctorate in Telematic Engineering. Senior Member

of the IEEE and actively volunteered in the organization, serving as President of the IEEE Colombia Section and Director for Latin America for the IEEE Communications Society (ComSoc).

Natalia Orozco: Deputy Director of the Chamber of Digital Industry and Services at ANDI. Studied finance and international studies at Universidad del Externado de Colombia and holds an MBA from Cardiff Metropolitan University.

Pablo Nieto: Regional Public Policy Manager for the Andean Region at the Latin American Internet Association (ALAI). Professional in politics and international relations (Universidad Sergio Arboleda), specialist in government, management, and public affairs, and holds a master's in Public Policy from Universidad Externado de Colombia.

Santiago Pinzón: Vice President of Digital Transformation for the Chamber of Digital Industry and Services at ANDI. Lawyer (Pontificia Universidad Javeriana) and holds a Master's in Public Administration from American University in Washington, D.C.

Saúl Kattan: Economist (Universidad de Los Andes) with executive studies at INALDE and Wharton. Recently served as Presidential Advisor for Digital Transformation. Over 25 years of experience, expert in corporate transformation. Former chairman of Ecopetrol and ETB boards, led Juan Valdez Café's US expansion, and was recently named interim manager of Internexa.

Viviana Vanegas: Colombian economist serving as Director of Digital Development and Technical Director at the National Planning Department (DNP) of Colombia. Her professional experience includes technical and leadership roles in the public sector, including DNP, the Communications Regulatory Commission (CRC), and the National Superintendence of Health, among others.

Ecuador

María Belén Albornoz: Research Professor at FLACSO Ecuador. Holds a Doctorate in Social

Sciences (Universidad Nacional de Cuyo, Argentina) and a Post-doc (Centre for Design, Innovation and Sustainable Transition, Aalborg University, Denmark). Coordinates FLACSO Ecuador's Science, Technology and Society Laboratory (CTS Lab). Her research focuses on technology transfer models, big data, and science, technology, and innovation policy.

El Salvador

Sigfredo Figueroa: Legal advisor to the Presidency of El Salvador on regulation and infrastructure projects. Director of the Regional Operator of the Central American Electricity Market. Lawyer specializing in corporate, energy, fintech, aeronautical Law, and arbitration. Graduated from Universidad Dr. José Matías Delgado, holds an LL.M in Commercial Law (King's College London), and an MBA (Universidad de Valencia).

Mariana Gómez: Executive Director of El Salvador's Regulatory Improvement Agency (Organismo de Mejora Regulatoria, OMR), an entity under the Presidency established in 2019 through the Regulatory Improvement Law.

Stacy Herbert: Director of El Salvador's National Bitcoin Office, where she leads President Bukele's sovereign Bitcoin strategy. In parallel, she has emerged as a leading force in El Salvador's AI transformation, drafting the nation's pioneering pro-innovation AI legislation and regulations that prioritize open-source development and minimal bureaucracy. As AI advisor to the President, Herbert spearheaded high-level partnerships with global technology leaders including NVIDIA and xAI, securing the world's first sovereign B300 cluster and establishing the country's inaugural national AI lab. She also founded Cubo AI, El Salvador's first-of-its-kind elite education program, in which top AI engineers from around the world teach the country's brightest students advanced artificial intelligence and machine-learning skills, creating a pipeline of homegrown talent poised to power the next chapter of El Salvador's technological renaissance.

Jorge Martínez: Systems Engineer with postgraduate studies in IT Administration and 20 years of experience leading digital transformation in the public sector. He is an expert in cloud architectures (AWS, Azure, GCP) and modernization project management. He currently leads the strategic integration of Artificial Intelligence and Intelligent Agents to optimize government efficiency, automate internal processes, and transform the citizen experience through agile, high-impact digital services.

Jairon Pineda: Engineer and Strategic Advisor at the Attorney General's Office (PGR). He serves as the Coordinator of the Institutional Modernization and Innovation Committee (CMII), the body responsible for leading the institution's digital transformation. His work focuses on advancing strategic initiatives to modernize public services, including the standardization of service processes, the improvement of institutional data quality, and the adoption of technologies such as Artificial Intelligence and electronic signatures, ensuring an ethical and efficient approach.

Fernando Velazco: Lawyer and Notary Public, Master's in Governance and Senior Public Management from the Complutense University of Madrid, Spain, Master's in Business Law from the Central American University José Simeón Cañas of El Salvador, Specialist in Intellectual Property Management from the Bolivarian University of Venezuela. He currently serves as National Registrar of the National Registry of Natural Persons, where he has led projects to improve institutional operations and citizen services, including the implementation of Digital Identity for public and private institutions, the digitization and centralization of El Salvador's Civil Registry, the updating and modernization of the institution's regulatory framework, the incorporation of new technologies in the issuance and delivery of the national identity document (Documento Único de Identidad), and the development and modernization of identity document services abroad. Under his administration, the institution received the award for Best New ID Card 2023, granted by High Security Printing, among other

projects and recognitions. He previously served as Director of the Registry of Movable Property Guarantees, Legal Advisor to the National Registry Center and the Intellectual Property Registry, among other positions.

México

Sergio Alcocer: President and founder of México Exponencial. Served as president of the Mexican Council on Foreign Affairs (COMEXI) for the past 4 years. Professor at the National Autonomous University of México. Civil engineer (National Autonomous University of México) and holds a Ph.D. in structures (University of Texas at Austin).

Luis Donald Colosio Riojas: Senator for Nuevo León since September 2024. Serves as president of the Digital Rights Commission. Lawyer (Tecnológico y de Estudios Superiores de Monterrey) and holds a master's in Business Law (Universidad de Monterrey).

Sissi De La Peña: Senior Advisor at Datasphere Initiative, director at the Mexican Cybersecurity Academy, and on the advisory board of the Science Innovation Network UK-Mexico. Civil Engineer (Universidad La Salle) and holds a master's in science (University of Leeds).

Roberto Durán: Professor at the School of Government and Public Transformation of Tecnológico de Monterrey and an expert in nearshoring. Economist (Instituto Tecnológico Autónomo de México), with a master's from the London School of Economics and a Ph.D. from Oxford University.

Alberto Farca: Chief Project Officer of Centro México Digital. Specialist in economic competition, regulation, and public policy design. Experience includes developing digital agendas and implementing public programs in México.

Miguel González: Professor at Tecnológico y de Estudios Superiores de Monterrey. Holds a master's and a Ph.D. in artificial intelligence (Institut National des Sciences Appliquées (INSA), France).

Rolando Zapata: Senator for Yucatán since September 2024. Serves as president of the Commission for Analysis, Monitoring, and Evaluation of AI applications and development in México. Lawyer (Universidad Autónoma de Yucatán) and holds a master's in procedural Law.

Panama

Carlos Kan: Specialist in Critical and Emerging Technologies at the National Secretariat of Science and Technology (SENACYT) of Panama. Electronic Engineer (Universidad Católica Santa María La Antigua (USMA)). Holds an International MBA in Technology Management (National Tsing Hua University, Taiwan), with research in intellectual capital and technology management. Trained in innovation ecosystems (Pontificia Universidad Católica de Chile) and research security (James Martin Center for Nonproliferation Studies, USA). Senior member of the IEEE. Part of the team was awarded the United Nations Public Service Award 2022 for Panama's digital COVID-19 vaccination system and served as CONACYT commissioner (2019–2024).

Paraguay

Maricarmen Sequera: Executive director of TEDIC, a non-profit promoting civic technologies and digital human rights to foster a free culture in Paraguay. Lawyer (National University of Asunción), specializing in intellectual property. Developed an international career at the intersection of Law, technology, and digital rights.

Dominican Republic

José Abel López: He is currently the founder of Enision Innovation Labs and works in project management at the Enlata Foundation, focusing on digital entrepreneurship and technology startups with innovative business models. He has collaborated with major brands including Reebok, Johnnie Walker, Gatorade, Banco Popular, and government organizations like the Ministry of Industry, Commerce and MSMEs, the Presidency of the republic, and UNDP.

Piero Manuel Gómez Tolari: Vice President and Operations Director of Fundación Enlata. Leads innovation, entrepreneurship, and inclusion programs impacting over 7,000 people in the Dominican Republic. Managed partnerships with UNHCR, IDDI, and MICM, mobilizing over US\$170,000 in seed capital. Co-founded the IAvanza community and the EDIKE platform. Previously directed ¼ Creativo, specializing in strategic design and social innovation, and founded Protección Integral Empresarial, focused on organizational security. His career combines creativity, management, and commitment to territorial and community development.

Jean García Periche: President of GENIA Latinoamérica, a regional R&D platform aiming to include Latin America in global AI development. Associate Researcher at the Latin American Centre (LAC), University of Oxford, and the Oxford Institute for Ethics in AI.

Carlixto Diego Juliao Vásquez: Engineer specializing in quality assurance in the food industry. Experienced in international standards like FSSC 22000, HACCP, and GMP, as well as auditing, documenting safety systems, and cleaning programs. Trained teams in key food safety topics and has strong knowledge of equipment and processes in production, storage, and distribution plants.

Uruguay

Carolina Aguerre Regusci: Associate Professor in the Department of Humanities and Communication at the Catholic University of Uruguay. Senior associate fellow at the Centre for Global Cooperation Research at Universität Duisburg-Essen in Germany and affiliated researcher at the Center for Studies in Technology and Society at Universidad de San Andrés (Argentina).

Isabel Amigo: Head of Research, Development, and Innovation at Ceibal, the Uruguayan State's center for educational innovation with digital technologies. Also serves as an Adjunct Professor at the

University of the Republic. Previously an Assistant Professor at IMT Atlantique.

Bruna de Vargas: Professor in charge of Robotics and Artificial Intelligence at the Technological University (UTEC) and participates in the ASTRAL Project (H2020).

Gustavo Domínguez: Technical Manager at Latitud. Also serves as Associate Professor at the University of Montevideo and at the University of the Republic.

Andrés Kalansky: Director at Quatromanos, a leading corporate communication company in Uruguay, founded in 1997.

Amílcar Perea: President of the Uruguayan Chamber of Information Technologies.

Emiliano Pereiro: Head of the Computational Thinking and Artificial Intelligence Unit at Ceibal, where he works on introducing these disciplines into education. Also teaches in postgraduate education programs.

Juan Pablo Pignataro: Head of Business Development for Cloud and Artificial Intelligence at the National Telecommunications Administration (ANTEL).

Rafael Sotelo: Dean of the Faculty of Engineering at the University of Montevideo and co-founder of the startup Quantum-South. Doctor of Engineering, with extensive experience in quantum computing and AI. Has consulted for public bodies and is an active member of the National System of Researchers.

