

TITLE

Al and the SDGs in Latin America and the Caribbean

EDITOR

CAF

EXECUTIVE PRESIDENCY

Sergio Díaz-Granados, president

CORPORATE VICE PRESIDENCY OF STRATEGIC PROGRAMMING

Christian Asinelli, vice president

PHYSICAL INFRASTRUCTURE AND DIGITAL TRANSFORMATION MANAGEMENT

Antonio Silveira, manager

DIGITAL TRANSFORMATION MANAGEMENT

Mauricio Agudelo, director

AUTHORS

Jean García Periche and Cristina Martínez Pinto, Stimson Fellows

CAF TEAM

Enrique Zapata, Camilo Cetina, Eduardo Chomali, María Fernanda Arciniegas, Paola Ferrero

MICROSOFT TEAM

Daniel Korn, Max Scott, Andrés Rengifo

EDITORIAL MANAGEMENT

Strategic Communication Directorate

DESIGN

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Abbreviations

AGESIC

Agency for Electronic Government and the Information and Knowledge Society

ALIA

Latin American Academy of Artificial Intelligence

LAC

Latin America and the Caribbean

IDB

Inter-American Development Bank

ECLAC

Economic Commission for Latin America and the Caribbean

DTI

Smart Tourist Destinations

ΑI

Artificial Intelligence

OECD

Organisation for Economic Co-operation and Development

SDGs

Sustainable Development Goals

UN

United Nations Organization

SEGITTUR

Secretary of State for Tourism of Spain

SICA

Central American Integration System

SNIS

National Integrated Health System

STI

Smart Tourism Systems

UNESCO

United Nations Educational, Scientific and Cultural Organization

Prologue

Al and the SDGs: A Path to the Future



Sergio Díaz-Granados
Executive President of CAF Development Bank of Latin
America and the Caribbean

In the rapid technological developments of our era, Artificial Intelligence has emerged as a transformative force with the potential to impact all spheres of human life. Its influence goes beyond mere process automation, as it is already bringing changes in essential areas such as health, education, policy design, and environmental sustainability.

Latin America and the Caribbean currently face the challenge of successfully addressing a triple transition: green, digital, and energy, with a strong emphasis on human development.

Al and the SDGs in Latin America and the Caribbean is a comprehensive exploration of how this technology can be a crucial ally in overcoming sustainable development challenges.

Through a multidisciplinary approach and relevant case studies, the publication illustrates how AI systems are being strategically applied in key sectors to address some of the most pressing challenges our society faces. From improving healthcare and promoting gender equality to reducing poverty and protecting the environment, AI is presented as a powerful tool that, managed with vision, responsibility, and innovation, can significantly contribute to the advancement of the SDGs and the actions derived from the Pact for the Future.

The authors not only highlight the opportunities AI offers but also address the ethical and social challenges accompanying its implementation. In a global context where technology advances at a rapid pace, it is essential that all people—regardless of their geographic location—have the skills and access necessary to thrive in a digital economy enabled by AI. This is of utmost importance for our region, given the need to integrate technological innovation with actions to face the climate emergency, close social gaps, and accelerate the energy transition.

The partnership between CAF and Microsoft is fundamental to driving the digital transformation agenda in Latin America and the Caribbean. Through this collaboration, we aim to improve the quality of life for the citizens of the region by promoting more agile, transparent, and innovative governments. We are committed to doing more and better to face future challenges and seize the opportunities that digital transformation offers our society.

Now, the invitation is to enjoy this reading and reflect on the shared learnings. This will be the starting point for deploying actions that allow us to make the most out of AI as one of the engines of sustainable and equitable development.

Introduction

Artificial intelligence (AI) is one of the most influential technologies of this era and is expected to directly or indirectly impact public life over the next 5 to 10 years. Because of this potential, governments around the world want to harness it in a positive way, while also seeking to protect people from the potential negative consequences that could occur if the development and implementation of technology is not managed responsibly.

Al can play a key role in advancing the United Nations (UN) Sustainable Development Goals (SDGs) in Latin America and the Caribbean (LAC) and the world. Al can contribute to addressing societal challenges such as improving healthcare, advancing gender equality, reducing poverty and inequality, and contributing to environmental protection. In this regard, the case studies presented in this note highlight how Al systems can contribute to the advancement of the SDGs and thus to the resolution of the current challenges facing society. These cases cover different cross-cutting themes such as gender, inclusion, innovation, accessibility and governance of actors in the digital ecosystem, while focusing on examples from key industries such as health, education and tourism that illustrate how this technology is being strategically leveraged.



AI AND THE SDGS IN LATIN AMERICA AND THE CARIBBEAN

Context

The UN SDGs are a set of 17 global goals adopted by UN Member States in 2015 as part of the 2030 Agenda for Sustainable Development. The SDGs aim to end poverty, protect the planet and ensure peace and prosperity for all people by 2030.

The goals are interconnected, cover a wide range of edges, and involve a series of key partnerships to advance their fulfillment, which includes and intersectionally addresses issues such as poverty, hunger, health, education, gender equality, clean water and sanitation, affordable and clean energy, decent work, and economic growth, industry, innovation and infrastructure, the reduction of inequalities, sustainable cities and communities, responsible consumption and production, climate action, life below water, life on land, peace, justice and institutional strength.

Additionally, in the context of responsibly leveraging AI, it is important to prioritize that people have the skills to thrive in a digital economy enabled by AI, including the private sector, public sector, nonprofits, entrepreneurs, and other organizations key to digital transformation.

In LAC, there are guidelines such as the OECD AI Principles published in 2019, the Recommendation on the Ethics of AI published by UNESCO in

2021, the Santiago Declaration¹ to promote ethical artificial intelligence in LAC, signed by 20 countries in the region, and the recent Montevideo Declaration² for the construction of a regional approach to AI governance with a regional roadmap signed by 15 countries, which establishes working groups focused on several thematic axes, enablers and key instruments to emphasize the importance of deepening dialogue and addressing the use of AI, from the perspective of people and the public interest. In this way, the SDGs provide a framework to address shared challenges and promote sustainable development in the region.

¹ Outcome of the first "Ministerial and High-Level Authorities Summit on the Ethics of Artificial Intelligence in Latin America and the Caribbean", Santiago, Chile, October 24, 2023.

² Outcome of the second "Ministerial and High-Level Authorities Summit on the Ethics of Artificial Intelligence in Latin America and the Caribbean", Montevideo, October 4, 2024.



Case Studies

AI AND THE SDGS

IN LATIN AMERICA AND THE CARIBBEAN

The following case studies highlight the connection between AI and the advancement of the SDGs in LAC and other regions, contextualizing the importance of each topic, examples from the region, and lessons learned.

Health and Wellness

There are different projects globally and in LAC that illustrate the potential uses of AI in the health and wellness sector focusing on the public interest, with challenges that must be considered to ensure the mitigation of risks that may disproportionately impact vulnerable groups. These examples range from the automation of tasks related to hospital operation and care, medical guidance through conversational agents, improvements in the processes of systematization of patient information, opportunities to influence medical training, to the use of AI systems for the timely detection and prevention of diseases.

Why is this topic important?

Healthcare is one of the fields where AI has shown great promise, along with socio-technical challenges related to training data and the involvement of specialized medical personnel to take advantage of this technology. Global investments in AI in this sector are estimated to be close to USD 36,000 million by 2025, representing a growth of 50% compared to 2018 (De Cecco, 2021). SDG 3: good health and well-being aims to ensure healthy lives and promote well-being for all people, regardless of age, so AI is presented as a tool that offers different possibilities to contribute to the advancement of this goal.

Examples of LAC

CAF is financing a telemedicine program in El Salvador that will benefit more than 4 million people. The financing is aimed at both the development of digital and physical infrastructure, as well as the strengthening of the capacities of more than 1,000 professionals in the Salvadoran health system. The project specifically focuses on comprehensive, quality early childhood care and gender mainstreaming, aligning with SDG 1: No Poverty, SDG 3: Good Health and Well-being, and SDG 9: Industry, Innovation, and Infrastructure.

In Mexico, the Association to Avoid Blindness, Microsoft and Business Data developed a technological solution to identify cases of retinopathy in premature babies, with the camera of a cell phone it is possible to take photographs of the baby's retina and through an AI algorithm process the image to detect patterns and determine if there is a case present. The Government of Jalisco also developed a use case in the field of diabetic retinopathy, positioning itself as a pioneer in the use of AI in the public health sector from an ethical and responsible perspective, which earned it recognition from IRCAI and UNESCO as one of the 100 global approaches to sustainable development and the benefit of humanity.

Another example is presented by the Agency for Electronic Government and the Information and Knowledge Society (AGESIC) in Uruguay, which, for more than a decade, has been promoting the development of electronic medical records in its National Integrated Health System (SNIS), interoperable between institutions and throughout



systems to reduce the repetitive workload of clinical staff (De Cecco, 2021). From the point of view of the entrepreneurial sector, the *healthtech ecosystem* in LAC has experienced growth accompanied by financing from different capital funds (Alves, 2023).

In Chile, companies such as Examedi offer services

In Chile, companies such as Examedi offer services that integrate large language models (LLMs) such as GPT-4 from the company OpenAl, to guide patients, democratizing the use of this technology (Bellido, 2023). Similarly, with their *Doctor Al service*, they aim to offer medical interpretations and recommendations, which promises personalized services, according to the different medical histories. However, this use case highlights the importance of addressing the ethical risks associated with information recommended by models based on training data that are often limited and may even present information in a convincing but unsubstantiated way, as well as the importance of protecting personal data and handling it sensitively, since its use could have an impact on the affordability of health insurance.

the territory, advancing in assisted telemedicine in Al



Photograph by Jonathan Durán. Taken from the Financial Journal (2024)

Ethical risks can be addressed and managed through different actions, from legal data protection to initiatives promoted by the public and private sector in terms of algorithmic audits and Al impact assessments, which consider potential risks and specific strategies to mitigate them.

What we learned

The era of digitalization accelerated with the pandemic, so public health policies have taken a central role in the digital agendas of public administrations, with digital applications and tools that seek to enhance and democratize access to quality health services, with a preventive approach, based on data analysis and the interoperability of systems.

In this context, AI viewed through the lens of risk mitigation, offers promising results towards the advancement of SDG 3: Good Health and Well-Being, as long as the development of skills and adequate training are prioritized so that their use enhances human experiences.

As long as the development and use of technology is managed responsibly, respecting data privacy, in accordance with UNESCO's recommendation on the ethics of AI to promote inclusion and recognize gender diversity and ethnic-racial equity (Bagolle, et al., 2022), it will be possible to promote a paradigm shift towards preventive care, anchored in the training of human capital in digital skills, based on data and with a focus on vulnerable populations.

Gender gaps

Recent research presents trends for the future of work and describes the new skills most in demand in the digital age. However, there are analyses that also point to the need to develop actions to close the gaps in access and representation to access such jobs (WEF, 2023), as well as to address the existence of algorithmic biases and the lack of inclusion of perspectives of both women and people belonging to the LGBTQ+ community in the idea, development, implementation and use of Al systems.

Why is this topic important?

Al, as a general-purpose technology, offers transformative potential applicable to any industry, both in the form of new products and services and process improvements. At the same time, it presents challenges associated with the implications that its uses may have on certain population groups or the possibility of exacerbating systemic inequalities. In this sense, SDG 5 points towards gender equality, and specifically target 5.b towards improving the use of enabling technologies, in particular information and communication technologies, to promote women's empowerment.

Examples of LAC

In LAC, the Feminist Artificial Intelligence Network, promoted by the Alliance for Inclusive Algorithms (A+Alliance), has one of its most active communities. These are activists, researchers, social and data scientists who, through their areas of expertise, are developing innovative research projects that comprehensively address the importance of mainstreaming the gender perspective in the life cycle of Al systems, contributing to the advancement of the different SDGs of the 2030 Agenda³. The progress achieved through the different projects that have been promoted by the network is significant, because, in addition to having created a feminist research agenda for the region (Krishnan, et al., 2022), it has contributed with innovative proposals that seek to correct historical inequalities.



Inteligencia Artificial Feminista

Within the framework of the A+ Alliance, projects such as AymurAI, developed by Data Género in Argentina, proposes automation tools aimed at supporting feminist judicial reform⁴, while in Chile, SOF+AI proposes the

³ The A+ Alliance for Inclusive Algorithms and funded by IDRC is an initiative that seeks to contribute to the development of innovation and critical action research capacities at the regional level [website] https://aplusalliance.org/fair-lac/

⁴ AymurAI | Measuring Gender Based Violence in Latin America https://aplusalliance.org/feminist-ai-research-network/feminist-ai-papers/



Proposal La Independiente

development of a complaint and response guidance system based on a prototype of a *feminist* chatbot⁵.

In Mexico, from PIT Policy Lab and in alliance with the Civic Innovation Laboratory of the UNAM, the Civic Al Laboratory of Northeastern University and Puentech Lab, the proposal La Independiente focused on the prototyping of a knowledge and connection center for Latin American workers in the collective workspace, bringing them tools for their professional development and to create community⁶.

presentation of information to judges.

All this with the priority that the functionalities serve as support to the officials involved and do not lead to automated decisions without human supervision⁷.

Another example was driven by the U.S. Agency for International Development (USAID), through the AI for Equity Global Challenge, which supported a consortium of international organizations, including ITAD, Women in Digital Transformation, PIT Policy Lab, and Athena Infonomics, to work with the government of the state of Guanajuato in Mexico in the identification and mitigation of gender bias in an early warning system for student retention.



Equitable AI: Guanajuato Case (2023)

In addition to the Feminist Al Network, there are regional initiatives that have marked a milestone in collaboration between actors in the ecosystem.

An example of this is the collaboration of CAF, UBATEC, the University of Buenos Aires and the Artificial Intelligence Laboratory of the University of Córdoba (IALAB) in 2 areas:

- facilitating the reporting process of women, improving data management and offering quality attention to victims in all the competent entities for the reception of complaints, avoiding revictimization; and
- 2. increase efficiency and expedite decision-making related to measures in response to complaints filed by women, through the detection and simplified

What we learned

The feminist AI agenda is growing stronger in the region. However, there are numerous challenges to overcome for projects to move from research and prototyping to implementation and scale, including: the scarcity of funding sources – beyond the initial stages – and the mainstreaming of the gender perspective in different sectors, regardless of the execution of projects focused solely on gender issues. For this reason, advancing SDG 5 towards gender equality is a task that requires intentionality, continuous training of human capital, awareness and training on gender and intersectionality and financing.

⁵ Sof.IA is a virtual assistant to provide support and resources against digital gender-based violence https://sofiachat.cl/

⁶ https://www.laindependient.net

Governance

Al also has transformative potential for public administration, both to innovate in the provision of new services, and to improve existing processes, making them more efficient, accessible and effective. In this context, SDG 16 focuses on promoting access to justice for all people and building effective, accountable and inclusive institutions at all levels⁸, a task in which this technology can contribute.

Why is this topic important?

The importance of integrating Al into public administration lies in its ability to streamline processes, reduce costs, and optimize resource allocation, as well as in the possibility of customizing and improving the delivery of public services based on data and predictive and trend analysis, which strengthens the anticipatory capacities of governments. Different Al-powered platforms offer 24/7 access to public services, making them universally accessible, even for those people residing in remote areas. Similarly, by breaking down language barriers and offering services in multiple languages and formats, this technology can enable more inclusive public services, especially benefiting vulnerable groups.

8 Goal 16 aims to promote peaceful and inclusive societies, facilitate access to justice for all people, and build effective, accountable and inclusive institutions at all levels

https://www.un.org/sustainabledevelopment/es/peace-justice/

Examples of LAC

GENIA, a public benefit corporation (PBF) with a mission to include LAC in the global development of AI, is leading a pioneering effort to foster citizen participation through leveraging it⁹.

The CiudadanIA project implements an AI-based citizen interaction system that collects representative data from the population for the training of this tool in public services. CiudadanIA prioritizes the identification of people's needs and objectives, understanding what information is most relevant to them.

In this manner, GENIA uses the data and information collected to assess the main obstacles they face in designing public services focused on their needs. CiudadanIA is directly aligned with SDG 16 target 16.7¹⁰, which seeks to ensure inclusive, participatory, and representative decisions at all levels of government. By combining citizen interaction with AI systems, anticipatory capacities are developed and resource allocation is optimized. Not only does this help improve people's satisfaction, but it also allows governments to use their resources more efficiently, save costs, and make more informed decisions to address different societal challenges more effectively.

9 GENIA - Regional Grand Strategy for Artificial Intelligence. (n.d.). https://www.genia.ai/

10 Peace, transparency, accountability and the rule of law are indispensable elements for achieving sustainable development. https://agenda2030lac.org/es/ods/16-paz-justicia-e-instituciones-solidas





Taína, GENIA initiative (2024)

In addition to the example above, the concept of "smart government" promoted by GENIA comes to life with Taína, an innovative text and voice AI in the Dominican Republic that seeks to improve the relationship between citizens and their governments¹¹. By facilitating the processing of public services through a virtual assistant, from the renewal of documents to the notification of incidents, Taína not only makes these processes more accessible and efficient for all people, but also reflects a commitment to the cultural and linguistic adaptation of technological solutions, thus recognizing the particularities of Latin American Spanish and ensuring that no one is left behind in the era of digital transformation¹².

This interoperable network of AI agents for the public sector, operating through the virtual assistant, represents the principles of SDG 16 target 16.10, which emphasizes the importance of public access to information and the protection of fundamental freedoms¹³.

11 Government launches an Al strategy and presents Taína, a technology that will help citizens to predict state corruption. https://www.diariolibre.com/actualidad/nacional/2023/10/11/gobjerno-presenta-estrategia-de-inteligencia-artificial/2489157

12 The implementation of the National Artificial Intelligence Strategy is contained in decree 498-23 https://lapuertadigital.com/gobierno-buscara-identificar-actos-de-corrupcion-mediante-el-uso-de-la-inteligencia-artificial/

13 SDG 16.10: Ensure public access to information and protect fundamental freedoms. https://ocm.iccrom.org/es/sdgs/ods-16-paz-justicia-e-instituciones-solidas/ods-1610-garantizar-el-acceso-publico-la?page=5

In another example, the Prosecutor's Office of the Autonomous City of Buenos Aires undertook a transformative project by developing PROMETEA, a pioneering system that integrates AI into the judicial process with the aim of automating the drafting of judicial decisions (Estévez, et al., 2020). This tool, which is based on analogous cases with established judicial precedents, has automated repetitive tasks and has allowed the use of AI for the automatic preparation of legal opinions. The impact of this technological solution on the efficiency of judicial processes has been notorious, showing significant reductions in the resolution times of various procedures. For example, the tool has managed to reduce the time required to resolve a contract from 90 minutes to 1 minute and from 167 days to 38 days the time it takes to summon trial proceedings, among other advances (Estévez, et al., 2020).

PROMETEA's contribution to the justice system lies not only in the optimization of processes, but also in its possible replicability and influence in the region aligned with goal 16.3, which promotes the rule of law at the national and international levels and guarantees equal access to justice for all people¹⁴. Its implementation aligns directly with efforts to promote more equal access to justice. By automating the preparation of opinions and reducing processing times, this tool allows a more agile and efficient processing of judicial matters,

14 SDG 16.3: Promote the rule of law and ensure equal access to justice. https://ocm.iccrom.org/es/sdgs/ods-16-paz-justicia-e-instituciones-solidas/ods-163-promover-el-estado-de-derecho-y-garantizar

contributing to the reduction of the accumulation of files and waiting times for people.

In Colombia, a similar project was promoted by the Constitutional Court to make the selection process for cases of judicial protection of fundamental rights more efficient¹⁵.

disproportionately affect vulnerable groups. To overcome these challenges, close collaboration between the public sector, the private sector, civil society organizations and academic institutions will be a priority to ensure that the transformative power of this technology is harnessed for the benefit of society.

What we learned

These examples illustrate the diversity of applications of AI in the context of public administrations in LAC, from improving internal processes to facilitating interaction with people and personalizing public services. However, as mentioned in the gender use case, for projects to move from research and prototyping to large-scale implementation, presents significant challenges, such as the need for ongoing funding, contextualization and cultural adaptation of technological solutions, as well as the need to maintain an open and participatory dialogue with citizens for their design.

Likewise, the ethical dimension presents relevant challenges, since it is necessary to consider how the use of AI systems could exacerbate inequalities and impact human rights through automated decisions, recommendations, and predictions that could



¹⁵ The objective of the system is to classify or label tutela judgments on the basis of previously defined and codified categories. As a result, it presents the information in summary cards that indicate the concurrence or not of the categories in a text.

https://ia.derechosdigitales.org/casos/colombia-pretoria/

Industry and innovation

Al has the potential to transform entire industries, making them more efficient, sustainable, and able to meet the needs of a growing population. SDG 9: industry, innovation and infrastructure, and SDG 12: responsible production and consumption, are fundamental to boost sustainable economic growth, facilitate industrial development and promote innovations for the benefit of the public interest.

Why is this topic important?

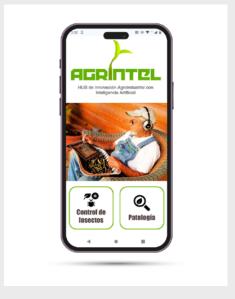
Today, AI is seen as a "new factor of production" that transcends the traditional factors of capital and labor by offering the potential to alter the fundamentals of growth in nations around the world. This technology introduces novel methods for automation, process optimization and decision-making, which facilitates increased productivity and exerts considerable influence on various economic areas¹⁶. For this reason, the UN has identified AI as a crucial tool to achieve the SDGs¹⁷.

Likewise, the strategic alliance between GENIA and the Innovation Club, with the support of the Latin American Network of Innovation Clubs (RELACI as per their acronym in spanish), highlights the importance of the private sector in promoting innovation and technological adoption

in the region¹⁸. By working within the framework of the #YoSoyFuturo Hub, the development of skills relevant to the Fourth Industrial Revolution is promoted, aligning directly with SDG 9 by seeking to improve knowledge infrastructure and foster a culture of innovation and technological development¹⁹.

Examples of LAC

In the agro-industrial sector, the Agrintel project, promoted by GENIA in collaboration with the Ministry of Industry, Trade and MSMEs (MICM per their acronym in spanish) of the Dominican Republic, represents an effort to transform traditional agriculture into a modern and technologically advanced agribusiness²⁰. By focusing on the application of AI to optimize production processes, through the creation of large databases that allow the generation of predictive models based on machine



Agrintel, GENIA initiative (2024)

18 The strategic alliance will empower the private sector in the creation of a Latin American artificial intelligence ecosystem. https://listindiario.com/la-vida/20240226/colaboracion-buscatransformar-industria-4-0 797208.html

19 The agreement includes the development of events, seminars, workshops and training activities

https://www.genia.ai/post/genia-y-el-club-de-innovaci%C3%B3n-rd-anuncian-colaboraci%C3%B3n-para-transformar-la-industria-4-0

20 The objective is to develop an ecosystem of agro-industrial innovation that contributes to the transition from traditional agriculture to agribusiness, through a research and development (R+D) platform, based on the study and implementation of advanced technologies https://listindiario.com/economia/20240220/micm-genia-acuerdan-establecimiento-primer-hub-innovacion-agroindustrial_796409.html

¹⁶ Accenture. "Artificial Intelligence, the future of growth". https://dl.icdst.org/pdfs/files2/2aea5d87070f0116f8aaa9f545530e47.pdf

¹⁷ Al for Good Global Summit https://aiforgood.itu.int/



Seeing AI, app developed by Microsoft (2024)

learning, Agrintel directly addresses several aspects of SDG 9, especially with regard to promoting sustainable industrialization and fostering innovation. In this sense, the adoption of AI in agriculture can not only significantly improve the efficiency and sustainability of this sector, but also has the potential to increase the incomes of agricultural producers and diversify exports, contributing to the economic resilience and sustainable development of the region²¹.

It is also important to note that AI has the potential to empower people with disabilities. SDG 9 seeks to "significantly increase access to information and communication technologies". In this context, a prominent example of industrial innovation is Seeing AI, an application created by Microsoft. This tool uses computer vision technologies to recognize and name people and objects, providing an auditory description of them to visually impaired people, thus facilitating their interaction with the environment.

What we learned

The promise of AI in the industrial sector is enormous, as it has the potential to drive GDP growth, especially in regions such as North America and China, where the adoption of AI technologies is expected to translate into improvements in productivity and product innovation, reaching a total economic impact of \$15.7 trillion by 2030²².

Recently, the massification of generative AI has led to a wide range of new applications and more accessible products, making it easier to interact with these systems through natural language. However, to fully capitalize on the opportunities offered by AI and generative AI, it is crucial that organizations invest in training their staff, embrace a culture of innovation, and collaborate closely with government entities, civil society, and academia. Only through multisectoral collaboration that aims at the creation and documentation of learnings around use cases anchored in the Recommendation on the Ethics of AI, particularly in the field of action of economy and work, will it be possible to maximize its potential and ensure sustainable, sustainable and equitable economic growth.

²¹ The agreement will also promote employment opportunities. https://eldia.com.do/pais-tendra-el-primer-hub-de-innovacion-agroindustrial/

²² Regions such as Latin America and developing countries will face more modest growth due to a lower adoption rate of AI technologies and challenges in infrastructure and digital skills. https://www.pwc.ch/en/publications/2017/pwc_global_ai_study_2017_en.pdf

Partnerships to achieve the goals

SDG 17 target 17.6, which focuses on "partnerships to achieve the goals",23 highlights the importance of enhancing regional and international cooperation in science, technology and innovation. This focus on knowledge sharing and the creation of technology coordination and facilitation mechanisms is critical to global progress and the achievement of the SDGs.

Why is this topic important?

CAF and the Organization for Economic Cooperation and Development (OECD) explicitly recommend that Latin American governments "explore the development and implementation of a strategy and roadmap for Al in the public sector in Latin America and the Caribbean through a collaborative regional approach, as well as "explore the possibilities of cooperation and collaboration at the regional level to develop Al projects and initiatives".²⁴

23 Goal 17 aims to revitalize the global partnership for sustainable development. The 2030 Agenda is universal and requires the involvement of all countries and requires collaboration between governments, the private sector and civil society.

24 Strategic and Responsible Use of Artificial Intelligence in the Public Sector in Latin America and the Caribbean | OECD Library. https://www.oecd.org/es/publications/uso-estrategico-y-responsablede-la-inteligencia-artificial-en-el-sector-publico-de-america-latina-y-elcaribe 5b189cb4-es.html

In this sense, different LAC countries have begun to meet in international forums such as the G20, the Ministerial Summits and Summits of High Authorities on the Ethics of AI in LAC, jointly organized by CAF and Unesco in collaboration with the countries of the region, within the framework of the Central American Integration System (SICA), with the aim of establishing a common vision and collaboration agreements to address ethical and regulatory issues related to Al.

At the first Ministerial Summit, the Santiago Declaration emerged²⁵ that highlights the promotion of the ethical and responsible use of Al. At the second Ministerial Summit, the Montevideo Declaration was approved²⁶, which consolidates the creation of a working group on the ethics of AI in LAC, whose technical secretariat will be exercised by CAF and UNESCO, plus a regional roadmap with concrete actions. In addition to this, organizations such as the EU-Latin America and the Caribbean Digital Alliance and the Economic Commission for Latin America and the Caribbean (ECLAC) also facilitate initiatives towards technology governance in the region.

25 To promote ethical artificial intelligence in Latin America and the Caribbean https://minciencia.gob.cl/uploads/filer de santiago.pdf

26 To establish a regional approach to Al governance, focusing on the promotion and protection of human rights, fundamental freedoms and dignity of individuals, ensuring inclusive and sustainable technological development https://www.gub.uy/agencia-gobierno-electronicodeclaracion-montevideo#:~:text=La%20Declaraci%C3%B3n%20de%20 Montevideo%20busca, development%20technol%C3%B3gico%20





Examples of LAC

The LATAM 4.0 project, in correspondence with the objective of strengthening alliances to advance the set of SDGs, emerges as a prominent case study in LAC that illustrates how multisectoral cooperation and innovation in AI can be catalysts for sustainable development in the region. This project represents a collaborative effort by companies, universities, governments, and civil society organizations to forge the regional AI ecosystem in LAC, through the articulation of a Regional AI Consortium²⁷. It is a coalition led by GENIA that seeks to promote the development of a regional AI ecosystem, supporting the implementation of strategies and projects that promote innovation and training in the subject.

This regional project emanates from an agreement signed between the governments of the Dominican Republic and Honduras, both Full Member countries of SICA, in collaboration with GENIA, with the aim of implementing a regional AI strategy, making LATAM 4.0 the first regional artificial intelligence project in the Western Hemisphere.²⁸ The strategic collaboration between the SICA countries constitutes the first step towards regional integration that will allow LAC to adopt emerging technologies, positioning itself as active actors in their development and application.

Likewise, the historical collaboration between SICA countries to expand #YoSoyFuturo HUB underscores the relevance of South-South and triangular cooperation in promoting technological development and innovation. The first projects of the #YoSoyFuturo HUB will consist of the training of 1,000 young people (500 in the Dominican Republic and 500 in Honduras) in AI, under the coordination of GENIA and its Latin American Academy of Artificial Intelligence (ALIA).²⁹

On the world stage, GENIA recently presented and defended a draft Regional AI Strategy at the U.S. Capitol and supported the drafting of House Resolution 649, which was referred to the Foreign Relations Committee and the Committee on Science, Space, and Technology:

28 Honduras and the Dominican Republic announce historic regional artificial intelligence project "LATAM 4.0". (2024, March 13). SENACIT; National Secretariat of Science, Technology and Innovation of Honduras. The LATAM 4.0 Project focuses on the development of a regional ecosystem through the training of human talent and the implementation of research and development (R+D) projects

https://senacit.gob.hn/honduras-y-republica-dominicana-anuncian-historico-proyecto-regional-de-inteligencia-artificial-latam-4-0/

29 Latin America is recognizing the importance of working together to move forward into the future https://rdedigital.com/rd-y-honduras-anuncian-proyecto-latam-4-0-que-fomenta-inteligencia-artificial/



GENIA #Yosoyfuturo Initiative (2024)

27 Colombia's Minister of Information and Communications
Technologies (ICT), Sandra Urrutia, mentioned the government's
interest in "seeking the potential of the knowledge society to generate
equality and productivity" https://www.prnewswire.com/news-releases/nace-latam-4-0-la-primera-coalicion-de-inteligencia-artificial-en-latinoamerica-891420172.html

"urging the United States to champion a regional Al strategy in the Americas to foster inclusive Al systems that combat prejudices affecting marginalized groups and seek to promote justice, economic well-being and democratic values." 30

What we learned

Aligning the efforts of international, governmental, private and academic organizations around AI, hand in hand with initiatives such as LATAM 4.0, reflects the spirit of SDG 17, demonstrating the potential of regional and international cooperation to overcome global challenges. By promoting access to science, technology and innovation and strengthening knowledge-sharing mechanisms, projects such as LATAM 4.0 contribute significantly to the achievement of the SDGs and progress towards a more sustainable and equitable future for the region.

In addition, the region is going through a key moment in the strengthening of a common voice around the ethical governance of Artificial Intelligence, where international organizations such as UNESCO and CAF have been key actors in accompanying countries in the definition of priorities, objectives and strategic actions around the use of this technology and risk mitigation.

30 H. Res.649 – We urge the United States to advocate for a regional Al strategy in the Americas to foster inclusive Al systems that combat bias within marginalized groups and promote social justice, economic well-being, and democratic values. Congress.gov. Retrieved March 18, 2024, from https://www.congress.gov/bill/118th-congress/house-resolution/649/text





Sustainable Tourism

Tourism was one of the most affected sectors by the COVID-19 pandemic, with economic losses of up to 70% of revenues in 2020 (Fernández, 2023). In response to the need to modernize the sector, CAF designed a new model of tourism agenda that aims to

- improve the well-being of rural, indigenous and Afrodescendant communities;
- 2. protect and restore biodiversity and enhance ecosystem services;
- reducing vulnerability to natural disasters resulting from climate change with more resilient infrastructures and monitoring and forecasting systems;
- 4. improve government planning processes;
- 5. improving the circular economy; and
- creating new spaces to boost creative and cultural economies, such as museums, galleries, theatres or creative districts (Fernández, 2023).

In parallel, the Inter-American Development Bank (IDB) developed a Tourism of the Future program³¹ that explores the role of digital technologies for the recovery of the sector, emphasizing the strategic use of technology in the phases of the tourist travel cycle, technological solutions

and smart tourism (ITS) systems, hand in hand with the application and the challenges associated with the data sources that feed them.

based on AI systems to promote sustainable destinations

Why is this topic important?

Tourism is one of the most important economic activities for many LAC countries. In addition, from a cultural and social point of view, it plays a crucial role in the preservation and promotion of the cultural and natural heritage of one of the most biodiverse regions in the world. Although tourism is included as part of at least 3 SDGs: Goal 8, on economic growth and employment; Goal 12, on sustainable production and consumption, and Goal 14, on life below water, the sector can and should play a key and cross-cutting role in the 17 SDGs.

At its intersection with technology, trends point towards the transformation and digitalization of the services offered and of the travel cycles (search, booking/planning, enjoying the experience and sharing it) that increasingly depend on digital tools in each of their phases. This is how AI, whether for the automation and optimization of certain processes or based on the analysis of large amounts of data to identify patterns and trends of travelers, offers on the one hand intelligence for decision-making for both governments and companies, as well as valuable and personalized information for tourists about the desired destination.



IDB Future Tourism Program (2022)

31 The objective of the program is to generate methodological and operational instruments that contribute to the digitalization of the tourism sector in LAC to reactivate tourism activity under the new context posed by the COVID-19 pandemic, as well as to respond to the sectoral structural challenges

https://www.iadb.org/en/who-we-are/topics/sustainable-tourism/sustainable-tourism-initiatives/technology-service-tourism

Examples of LAC

The Smart Tourist Destinations (DTI per their acronym in spanish) model is an international practice of the Spanish Secretary of State for Tourism (SEGITTUR). The model is internationally recognised by international organisations and institutions such as the World Tourism Organisation (UNWTO), the OECD, the IDB and the WTTC32 and is promoted through a network of 619 members, of which 440 are destinations, 86 institutions, 86 companies and 8 observers³³. DTI consists of 4 axes: innovation, technology, sustainability and accessibility, seeking greater control of tourism, more efficient and sustainable management and an increase in its profitability and competitiveness in the economy as a whole³⁴. Under this model, in LAC the cities of Teguila in Mexico, Medellín in Colombia and Montevideo in Uruguay have been distinguished as Smart Tourist Destinations³⁵.

In tourism services, conversational agents or chatbots have also gained ground. The Spanish case leads the sector with use cases applied, both in the aeronautical industry by Iberia and in the province of Malaga³⁶, while companies such as Seguritec Latam have taken on the task of socializing its potential benefits: 24/7 availability to resolve doubts and guide potential customers, agile booking of services, data collection and identification of user needs, among others³⁷.

In addition, efforts such as REDi Turismo Innova³⁸ and REDi Datatur³⁹ of the government of Jalisco, in Mexico, aim to mainstream innovation in small and medium-sized companies in the sector, in the development of digital skills and the use of data intelligence to execute strategies designed based on patterns and trends.



SEGITTUR Smart Tourist Destinations Model



REDi Datatur Initiative of the Government of Jalisco. Mexico (2023)

32 The aim is to promote and promote the digital transformation of Spain's tourist destinations and areas. At the same time, it aims to promote sustainable tourism development and ensure the satisfaction of tourists and improve the living conditions of the population https://www.segittur.es/destinos-turisticos-inteligentes/

33 DTI Network – Smart Tourist Destinations Network https://www.segittur.es/destinos-turisticos-inteligentes/proyectos-destinos/red-dti/

34 White Paper Smart Tourist Destinations https://www.segittur.es/destinos-turisticos-inteligentes/proyectos-destinos/libro-blanco-destinos-turisticos-inteligentes/

35 Conscientious travel: smart tourist destinations gain prominence in Latin America https://www.americaeconomia.com/negocios-e-industrias/viajar-conciencia-los-destinos-turisticos-inteligentes-ganan-protagonismo-en

36 Interview with Ángel Hernández – Managing Partner of Chatbot Chocolate https://www.segittur.es/blog/entrevistas/entrevista-con-angel-hernandez-socio-director-de-chatbot-chocolate/

37 How a *chatbot* for the tourism sector helps win more customers https://securitec.pe/blog/chatbot-turismo/

38 Program Results https://www.policylab.tech/redi-turismo-innova?lang=es

39 Program for companies and individuals with business activity in the medical or tourism sector in the Western Coast-Sierra of Jalisco, interested in innovation, technology, sustainability and competitiveness in the https://www.policylab.tech/redi-datatur?lang=es sector

What we learned

While tourism is one of LAC's economic drivers, there are not many documented use cases or best practices in the region focused on leveraging emerging technologies, either by the private or public sector. The digital transformation of the sector needs to be accelerated with the support of tools such as AI to improve the competitiveness of companies, the creation of capacities in the use of technology and the development of strategic plans and public policies of Smart Tourist Destinations based on the pillars of governance, technology, innovation, sustainability and accessibility, as shown by the Spanish experience, highlighted as an international good practice.





Conclusions and recommendations

Al has the potential to play a critical role in advancing the UN SDGs both in LAC and globally. The case studies presented in this paper highlight the opportunities that Al offers in key areas such as health and well-being, gender, governance, industry and innovation, and sustainable tourism. However, for this technology to promote inclusive, sustainable, and equitable social and economic development in the region, it is essential that its integration into development strategies is supported by public policies designed intentionally and under a public-private collaboration scheme.

When the Al lifecycle is aligned with ethical considerations, it has the ability to maximize scarce resources and build resilience, allowing its benefits to translate into tangible improvements in the lives of all people. This approach also contributes to aligning technological development initiatives with the SDGs, promoting a public interest approach.

In line with these objectives, the second Ministerial and High-Authorities Summit on the Ethics of Al was held in Montevideo, Uruguay, in October 2024, where the Montevideo Declaration was approved, reaffirming the region's commitment to the development of AI that promotes human rights and democracy. This event was key to approving a regional roadmap structured around 5 axes: governance and regulation, talent and the future of work, gender, diversity and inclusion, environment and ecosystems, and infrastructure.

For its part, the G20, as a forum under Brazil's presidency in 2024, can play a crucial role in:

- promote global dialogue and cooperation on the use of Al.
- contribute to the development of governance frameworks aligned with core values and social inclusion.
- 3. facilitate interoperable governance across borders, promoting the responsible use of this technology.

In line with the SDGs, and taking into account Brazil's leadership in the fight against hunger and inequality, sustainable development and global governance reform as central issues on the G20 agenda in 2024, this forum will have the opportunity to take the conversations on



Al to new and different areas of discussion, exploring the benefits of the social impact of new technologies to the fullest.

In this context, the G20 can contribute to the development and adoption of AI governance frameworks that are aligned with the needs and aspirations of a diverse and multicultural society. It can also promote international debates around interoperable governance across borders. Meanwhile, the push for a voluntary model code of conduct initiative on AI could offer an opportunity for G20 countries to move forward together on a shared set of values and principles. In this regard, there is a need to collaborate towards a globally coherent approach to the responsible design and deployment of AI, recognizing that AI and other technologies will be used across borders, and that interoperable governance helps all countries to access the best existing tools and solutions.

As Amandeep Singh Gill, the UN Secretary-General's Special Envoy for Technology, put it: "Al has the potential to help humanity achieve the SDGs, but it must be guided by adequate safeguards to ensure it is useful, safe and inclusive." This statement underscores the importance of regional and multisectoral cooperation, as exemplified through the continuity in the organization of the Ministerial and High-Level Authority Summits on the Ethics of Al in LAC, jointly organized by CAF and UNESCO in collaboration with the countries of the region, as well as through initiatives such as LATAM 4.0, which engages private sectors, government agencies, academic

institutions, and civil society organizations in a regional AI strategy. Such examples of collaboration ensure that AI development in the global south is coordinated, leveraging collective strengths and representing common interests on the international stage.

According to the cases analyzed, in order to maximize the potential of AI it is crucial to address certain challenges such as:

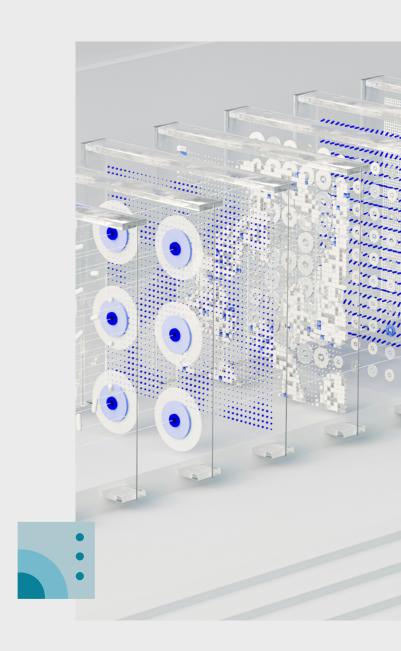
- closing gaps in access to and development of digital skills,
- design and enable sustainable financing schemes
- combat algorithmic bias and ensure the inclusion of diverse perspectives,
- foster cooperation between governments, civil society, academia and the technical community to create representative databases
- promote technology governance frameworks that protect human rights.
- Document and share use cases as best practices

Based on the above, the region has before it the opportunity to consolidate collaborative ecosystems in which the ethical development of AI is promoted focused on the needs of people and the public interest.



Therefore, as additional recommendations of this note, it is suggested:

- scaling prototypes and pilots: it is essential that technological innovations that have gone through incubation and piloting stages go from being merely documented projects to widely implemented solutions, with the corresponding funding for this purpose,
- foster multi-sectoral collaboration: greater coordination between the public and private sectors, civil society and academia is needed to enhance the impact of AI in the region,
- investing in training and a culture of innovation:
 it is essential to promote a culture of change and
 systems thinking within organizations, both public
 and private, with the aim of taking advantage of Al
 for innovation, as well as working on the continuous
 training of human resources in the different sectors,
- establish a repository of initiatives: An effort should be made to identify and document initiatives based on AI systems at their intersection with the different SDGs, in order to exchange learnings and shorten knowledge gaps around implementations in strategic and emerging topics such as the tourism sector.





References

Alianza A+ (n.d). *Incubating Feminist Al > From paper to prototype* https://aplusalliance.org/feminist-ai-papers/

Alves, T. (July 21, 2023). Latin America Reports Presents 2023's Top 15 Healthtech Startups Operating in Latam [website] https://latinamericareports.com/top-15-healthtech-startups-operating-in-latam/8310/#:~:text=Data%20from%20the%20LatAM%20Tech,walue%20of%20USD%20%245.6%20billion

Bagolle, A.; Casco, M.; Nelson, J.; Orefice, P.; Raygada, G., & Tejerina, L. (2022). The great opportunity of digital health in Latin America and the Caribbean. Washington: IDB https://publications.iadb.org/en/publications/spanish/viewer/La-gran-oportunidad-de-la-salud-digital-en-America-Latina-y-el-Caribe.pdf

Bellido, A. (November 16, 2023). Examedi, chilean healthtech, revolutionizes health with AI and expands its services [website] https://contxto.com/en/chile/examedi-chilean-healthtech-revolutionizes-healthcare-with-ai-and-expands-services/

CAF will support the implementation of a telemedicine system in El Salvador with a credit of USD 77 million (September 14, 2023). [website] https://www.caf.com/en/currently/news/2023/09/caf-will-support-the-implementation-of-a-telemedicine-system-in-el-salvador-with-a-credit-of-usd-77-million/

CII.IA. (July 19, 2022). Challenges of artificial intelligence applied to health [website] https://www.ciiia.mx/noticiasciiia/retos-de-la-inteligencia-artificial-aplicada-a-la-salud

De Cecco, C. (September 02, 2021). How can artificial intelligence improve the health of Latin Americans? [website] https://www.caf.com/es/conocimiento/visiones/2021/09/como-puede-la-inteligencia-artificial-mejorar-la-salud-de-los-latinoamericanos/

Summit of Ministers and High Authorities of Latin America and the Caribbean (2023). *Declaration of Santiago. Retrieved March 18, 2024,* https://minciencia. gob.cl/uploads/filer_public/40/2a/402a35a0-1222-4dabb090-5c81bbf34237/declaracion de santiago.pdf

El Día. (February 20, 2024). The country will have the first agro-industrial innovation hub.

https://eldia.com.do/pais-tendra-el-primer-hub-de-innovacion-agroindustrial/

Estévez, E., Fillotrani, P., & Linares Lejarraga, S. (2020). PROMETEA: Transforming the administration of justice with artificial intelligence tools. Washington: IDB artificial https://publications.iadb.org/es/prometea-transformando-la-administracion-de-justicia-con-herramientas-de-inteligencia artificial#:~:text=En%20 2017,%20la%20Fiscal%C3%ADa%20de%20la

Fernández, E. (January 23, 2023). Latin America's New Voice in Global Tourism https://www.caf.com/en/knowledge/views/2023/01/latin-americas-new-voice-in-global-tourism/#:~:text=In%20addition%20 to%20the%20natural,development%2C%20 innovation%20and%20environmental%20sustainability

GENIA [website] https://www.genia.ai/

GENIA. (February 19, 2024). GENIA and the RD Innovation Club announce their collaboration to transform Industry 4.0. [website]

https://www.genia.ai/post/genia-y-el-club-de-innovaci%C3%B3n-rd-anuncian-colaboraci%C3%B3n-para-transformar-la-industria-4-0

H. Res.649 - We urge the United States to advocate for a regional AI strategy in the Americas to foster inclusive

Al systems that combat bias within marginalized groups and promote social justice, economic well-being, and democratic values. Congress.gov. Retrieved March 18, 2024 https://www.congress.gov/bill/118th-congress/house-resolution/649/text

ICCROM [website] https://ocm.iccrom.org

IDB (n.d). Future Tourism Program [website]

https://www.iadb.org/en/who-we-are/topics/ sustainable-tourism/sustainable-tourism-initiatives/ technology-service-tourism

IRCAI (May 2023). 100 Artificial Intelligence Approaches for Sustainable Development and the Benefit of Humanity https://ircai.org/wp-content/uploads/2023/05/IRCAI-Global-Top-100-2022-Call-Report.pdf

Krishnan, A.; Nevers, A.; Moon, A.; ...; Aguilar, Y., & Quiroga, Y. (2022). Feminist artificial intelligence.

Towards a research agenda in Latin America and the Caribbean. https://www.vialibre.org.ar/inteligencia-artificial-feminista-hacia-una-agenda-de-investigacion-en-america-latina-y-el-caribe/

Listin Diario. (February 20, 2024). Minister Bisonó and the GENIA corporation agree to establish the first Agro-industrial Innovation Hub. https://listindiario.com/economia/20240220/micm-genia-acuerdan-establecimiento-primer-hub-innovacion-agroindustrial_796409.html

Listin Diario. (February 26, 2024). The collaboration

seeks to transform Industry 4.0. https://listindiario.com/la-vida/20240226/colaboracion-busca-transformar-industria-4-0 797208.html

Mercedes, Y. (March 13, 2024). The Dominican Republic and Honduras announce the LATAM 4.0 project that promotes artificial intelligence. [website] https://rdedigital.com/rd-y-honduras-anuncian-proyecto-latam-4-0-que-fomenta-inteligencia-artificial/

PR Newswire (November 22, 2022). "LATAM 4.0" is born: the first artificial intelligence coalition in Latin America. https://www.prnewswire.com/news-releases/nace-latam-4-0-la-primera-coalicion-de-

PTI POLICY LAB (n.d.). *REDi Turismo Innova. Program results*. https://www.policylab.tech/rediturismo-innova?lang=es

inteligencia-artificial-en-latinoamerica-891420172.html

PTI POLICY LAB (n.d.). *REDi DataTur*. https://www.policylab.tech/redi-datatur?lang=es

United Nations Organization (2015). Goal 17: Revitalize the Global Partnership for Sustainable Development https://www.un.org/sustainabledevelopment/es/globalpartnerships/

América Economía Journal (August 31, 2023). *Travel* conscientiously: smart tourist destinations are gaining prominence in Latin America.

https://www.americaeconomia.com/negocios-e-industrias/viajar-conciencia-los-destinos-turisticos-

inteligentes-ganan-protagonismo-en

Saavedra, V. & Upegui, J. (2021). Colombia PretorlA and the automation of the processing of human rights cases. https://ia.derechosdigitales.org/wp-content/uploads/2021/03/CPC_informe_Colombia.pdf

Sánchez, P. (October 11, 2023). The Government launches an Al strategy and presents Taina, a technology that will help citizens. [website] https://www.diariolibre.com/actualidad/nacional/2023/10/11/gobierno-presenta-estrategia-de-inteligencia-artificial/2489157

National Secretariat of Science, Technology and Innovation of Honduras - SENACIT (March 13, 2024). Honduras and the Dominican Republic announce historic regional artificial intelligence project "LATAM 4.0. [website] https://senacit.gob.hn/honduras-y-republica-dominicana-anuncian-historico-proyecto-regional-de-inteligencia-artificial-latam-4-0/

Secretary of State for Tourism - SEGITTUR (n.d.). Interview with Ángel Hernández - Managing Partner of Chatbot Chocolate [blog] https://www.segittur.es/blog/entrevistas/entrevista-con-angel-hernandez-socio-director-de-chatbot-chocolate/

Secretary of State for Tourism - SEGITTUR (n.d.). Smart Tourist Destinations [website] https://www.segittur.es/destinos-turisticos-inteligentes/

Secretary of State for Tourism - SEGITTUR (n.d.). Smart Tourist Destinations White Paper [website]

Secretary of State for Tourism - SEGITTUR (n.d.).

DTI Network - Network of Smart Tourist Destinations
[website] https://www.segittur.es/destinos-turisticosinteligentes/proyectos-destinos/red-dti/

+Sof.IA [website] https://sofiachat.cl/

Vásquez, M. (2022, April 14). How a chatbot for the tourism sector helps win more customers https://securitec.pe/blog/chatbot-turismo/

WEF (2023). Future of Jobs Report 2023. INSIGHT REPORT. https://www3.weforum.org/docs/WEF Future of Jobs 2023.pdf

WEF (2023). Global Gender Gap Report 2023.
INSIGHT REPORT https://www3.weforum.org/docs/wef-gggr-2023.pdf

