Appendix: AI Scraping Output

Table 1. Aggregate Capacity Assessment for Argentina - Justice

Level	Analytical capacity	Operational capacity	Political capacity
Individual	**Moderate evidence - primarily for Justicia Inteligente.** Tribunal members and their teams must review and validate the texts generated by the assistant. The system works with style guides derived from rulings and adapts to the criteria of each tribunal member's chamber. This requires legal expertise to assess the correspondence between the source documents and the draft produced. However, the document does not describe specific training programs, certifications, technical profiles for operators, or instruments for assessing their AI-related competencies. In the Search tool, professionals can formulate natural-language queries and use case law results, but no training is documented for assessing the model, its data, or its biases. **Applications:** Justicia Inteligente;	**Moderate evidence - both applications.** In Justicia Inteligente, tribunal members, law clerks, and their teams incorporate automated drafts into preparatory tasks while retaining final review and validation. In the Search tool, legal operators and professionals incorporate semantic searches and automated summaries into precedent research. However, the document does not describe complete individual-level protocols for responding to omissions, hallucinations, or technical failures. **Applications:** both. (Argentina_Justicia.pdf, pp. 6-10, 14-18, and 20-22).	**Partial evidence - Justicia Inteligente.** The document emphasizes that AI does not replace human judgment, that validation remains the professional's responsibility, and that the tribunal member retains responsibility for the signed content. This distribution of authority may preserve legitimacy and trust. However, the document does not describe individual skills for explaining an error to the parties, addressing objections, or restoring trust after a failure. For the Search tool, there is no direct evidence regarding individual political competencies. (Argentina_Justicia.pdf, pp. 6 and 8-9).

	limited evidence for Case Law Search. (Argentina_Justicia.pdf , pp. 8, 16-18, and 20-22).		
Organizational	**Strong evidence - both applications, especially Justicia Inteligente.** The TFN developed natural language processing and machine-learning tools in-house; it maintains a database of more than 12,000 rulings, later described as containing over 19,000 judgments; it updates the search engine automatically; and it incorporates semantic search, filters, and summary generation. For Justicia Inteligente, there are style guides, task boundaries, watermarks, track changes, deliberate restriction of the reasoning scope, human oversight, and a closed environment. These safeguards demonstrate management of quality, bias, traceability, and risk, although no independent evaluations or public accuracy metrics are reported. **Applications:** both. (Argentina_Justicia.pdf	**Strong evidence - both applications.** The TFN has an electronic case-file system, digitized information, institutional infrastructure, in-house development, automatic updating, progressive incorporation of new functions, and projects to automate internal processes. Justicia Inteligente operates in a closed and controlled environment and is adapted to the participating chambers. However, the document does not report a specific budget, a permanent maintenance unit, or a formal continuity and failure-recovery procedure. **Applications:** both. (Argentina_Justicia.pdf, pp. 7-9, 11, 17-18, and 20-22).	**Moderate to strong evidence - both applications.** The TFN links adoption to transparency, access, efficiency, clarity, legal certainty, and human control. Justicia Inteligente incorporates explicit limits: it does not intervene in decision-making, uses watermarks, requires review, and operates within an institutional environment to avoid “shadow AI.” The Search tool democratizes access to case law and generates summaries in understandable language. Nevertheless, the document does not describe external ethical audits, citizen complaint mechanisms, or redress procedures for incorrect results. **Applications:** both. (Argentina_Justicia.pdf, pp. 6-10, 12-18, and 20-22).

	, pp. 7-10, 14-18, and 20-22).		
Systemic	**Limited to moderate evidence.** The Search tool was presented in academic forums and is connected with specialists in AI applied to law; it also draws on ThemisIA of the Inter-American Court of Human Rights. Justicia Inteligente is led by a specialist with academic ties. However, the document does not describe a formal, permanent network of universities, research centers, or external bodies responsible for evaluating the models, their risks, or their impacts. **Applications:** both, with indirect evidence. (Argentina_Justicia.pdf, pp. 1 and 16-21).	**Limited evidence.** The applications were developed with the TFN's internal resources and are primarily oriented toward its own case law and processes. The document shows dissemination to the legal community and the potential to serve as a precedent for other courts, but it does not substantiate operational agreements, sector-wide interoperability, or an interinstitutional implementation network specifically linked to these two systems. **Applications:** both. (Argentina_Justicia.pdf, pp. 15, 18, and 21-22).	**Not fully assessable; insufficient contextual evidence.** The source document mentions ethical and responsible use, human control, confidentiality, transparency, and the protection of rights as TFN principles. However, it does not identify a law, national protocol, sectoral agreement, or external authority that specifically regulates these two applications. References to AI initiatives in other Argentine jurisdictions demonstrate an active ecosystem, but not a uniform national governance framework applicable to the portfolio. (Argentina_Justicia.pdf, pp. 50-53).

Table 2. Traceability Matrix by Application for Argentina - Justice

Application	Capacity and level	Documentary excerpt and assessment
AI-Assisted Case Law Search	Analytical-organizational	“The system can interpret the intent and context of a query, enabling users to ask questions in ordinary language and retrieve relevant rulings without relying on technical terminology or exact keywords.” The TFN has the technical capacity to process legal information semantically. (Argentina_Justicia.pdf, p. 7).

AI-Assisted Case Law Search	Analytical-organizational	The system uses “advanced Natural Language Processing (NLP) and Machine Learning techniques” to understand “the context, intent, and nuances behind each query.” This demonstrates a specialized analytical architecture. (Argentina_Justicia.pdf, p. 17).
AI-Assisted Case Law Search	Analytical-organizational	The enhanced version retains semantic search and incorporates “advanced filters” and “automatic AI-generated summaries of rulings.” The organization progressively expanded the system's analytical functions. (Argentina_Justicia.pdf, pp. 10 and 14).
AI-Assisted Case Law Search	Analytical-organizational	The summaries include “the facts, the main dispute, the decision, and its most relevant reasoning.” The system structures substantive dimensions of decisions to facilitate their analysis. (Argentina_Justicia.pdf, p. 10).
AI-Assisted Case Law Search	Analytical-organizational	The search engine “updates automatically” and includes plans to progressively expand the case law incorporated into it. This demonstrates maintenance and expansion of the information base. (Argentina_Justicia.pdf, pp. 18 and 21-22).
AI-Assisted Case Law Search	Analytical-organizational, limitation	“No official metrics were found on use, efficiency, or the number of queries processed,” nor were indexed academic publications specifically devoted to the system. Independent evaluation capacity cannot be substantiated. (Argentina_Justicia.pdf, p. 2).
AI-Assisted Case Law Search	Analytical-individual, limited evidence	Users can formulate legal statements, questions, or complex descriptions and use the results as reference material for developing new arguments. This requires legal judgment, but it does not demonstrate specific AI training. (Argentina_Justicia.pdf, pp. 17 and 20).
AI-Assisted Case Law Search	Operational-individual	The system enables legal professionals and operators to identify precedents without relying on literal matches and to quickly assess their relevance through summaries. It is therefore integrated into routine legal research. (Argentina_Justicia.pdf, pp. 14-15).

AI-Assisted Case Law Search	Operational-organizational	The system was “developed in record time and with the Tribunal's own resources.” This demonstrates the internal mobilization of technical and organizational resources. (Argentina_Justicia.pdf, p. 18).
AI-Assisted Case Law Search	Operational-organizational	The search engine indexes more than 12,000 judgments issued between 2019 and 2024 and updates automatically. Another source in the same dossier indicates access to more than 19,000 judgments since 2020. The discrepancy prevents establishing a single figure, but both pieces of evidence demonstrate a substantial institutional database. (Argentina_Justicia.pdf, pp. 7, 10, 18, and 21-22).
AI-Assisted Case Law Search	Operational-organizational	The direct precursor was the electronic case-file system implemented in 2019, which digitized processes and generated the information required for subsequent innovations. The application relies on pre-existing organizational infrastructure. (Argentina_Justicia.pdf, pp. 7, 11, and 17).
AI-Assisted Case Law Search	Operational-organizational	The TFN planned to expand the system in successive phases: first to case law dating back to 2000 and subsequently to 1960. This demonstrates incremental planning. (Argentina_Justicia.pdf, p. 18).
AI-Assisted Case Law Search	Political-organizational	The objective is to “democratize access to tax and customs justice” and promote a justice system that is “more open and accessible.” The innovation is legitimized through the values of access and transparency. (Argentina_Justicia.pdf, p. 7).
AI-Assisted Case Law Search	Political-organizational	The generation of plain-language summaries seeks to synthesize complex decisions into “understandable and operational” texts, promoting a new culture of judicial communication. (Argentina_Justicia.pdf, p. 7).
AI-Assisted Case Law Search	Political-organizational	The TFN presents the system as a contribution to the “ethical and responsible implementation of AI in the administration of justice.” The statement provides normative guidance, although it is not equivalent to a mandatory protocol. (Argentina_Justicia.pdf, p. 16).

AI-Assisted Case Law Search	Political-organizational, limitation	No procedures are documented for challenging a summary, reporting an omission, requesting a correction, or obtaining redress for incorrect information.
AI-Assisted Case Law Search	Analytical-systemic, partial evidence	The system was presented in an academic forum at Torcuato Di Tella University and draws on ThemisIA of the Inter-American Court of Human Rights. This demonstrates knowledge circulation, but not a formal evaluation network. (Argentina_Justicia.pdf, pp. 1 and 18-21).
AI-Assisted Case Law Search	Operational-systemic	**Limited evidence. The document indicates that the experience could establish a precedent for other courts in Argentina and the region, but it does not substantiate formal transfer, interoperability, or joint adoption. (Argentina_Justicia.pdf, p. 15).**
Justicia Inteligente: Automated Summarization and Management	Documentary correspondence	The exact name does not appear consistently in Argentina_Justicia.pdf. It is linked to the TFN AI Assistant because the latter summarizes facts and arguments and supports the drafting of proposed judgments. The correspondence is functional, but it is not expressly confirmed by the document.
Justicia Inteligente	Analytical-individual	“Control, review, and final validation always remain with the professional.” Tribunal members and their teams must apply legal expertise to compare the AI output against the case file. (Argentina_Justicia.pdf, p. 6).
Justicia Inteligente	Analytical-individual	“The Tribunal Member, like the Judge, is always ultimately responsible for reviewing and validating the content, which they adopt as their own by signing it.” There is an explicit individual function of oversight and responsibility. (Argentina_Justicia.pdf, p. 8).
Justicia Inteligente	Analytical-individual, limitation	The document does not describe courses, certifications, or training manuals for tribunal members, or criteria for measuring their ability to identify omissions and hallucinations.

Justicia Inteligente	Analytical-organizational	The assistant is supplied with “style guides generated from the processing of published rulings,” which are used to adapt it to the language and conventions of each tribunal member's chamber. This demonstrates the formalization of organizational knowledge. (Argentina_Justicia.pdf, p. 8).
Justicia Inteligente	Analytical-organizational	The system restricts its function to summarization and excludes complex reasoning or evaluative tasks, where it could generate hallucinations. This boundary-setting constitutes a risk-mitigation strategy. (Argentina_Justicia.pdf, p. 8).
Justicia Inteligente	Analytical-organizational	The document acknowledges that systems trained on existing data may reproduce predispositions and that bias management is “a pillar of the design.” This is an explicit recognition of algorithmic risk. (Argentina_Justicia.pdf, p. 8).
Justicia Inteligente	Analytical-organizational	Preliminary drafts are presented in “track changes” mode and carry a visible watermark indicating that they require review. This creates traceability and verifiable human oversight. (Argentina_Justicia.pdf, p. 8).
Justicia Inteligente	Analytical-organizational, limitation	No accuracy metrics, correction rates, error frequencies, or independent evaluations of the generated content are reported.
Justicia Inteligente	Operational-individual	Tribunal members and their teams use the assistant for preparatory drafting tasks, particularly to generate introductory paragraphs on the facts and the parties' arguments. This changes the routine distribution of work. (Argentina_Justicia.pdf, pp. 7-8).
Justicia Inteligente	Operational-individual	Participation by each tribunal member's chamber is voluntary, and the system adapts to its style. This enables gradual incorporation into professional routines. (Argentina_Justicia.pdf, p. 8).
Justicia Inteligente	Operational-organizational	The TFN is developing an in-house tool to summarize administrative acts, appeals, and responses to grounds of appeal. The inputs and functions are clearly delimited. (Argentina_Justicia.pdf, pp. 7-8).

Justicia Inteligente	Operational-organizational	The assistant operates in “a closed and controlled environment, under security protocols.” This demonstrates organizational infrastructure and controls designed to preserve confidentiality. (Argentina_Justicia.pdf, pp. 8-9).
Justicia Inteligente	Operational-organizational	Its purpose is to free teams from mechanical and repetitive tasks so that they can devote more time to substantive legal analysis. The tool is integrated into an organizational redistribution of tasks. (Argentina_Justicia.pdf, pp. 6-8).
Justicia Inteligente	Operational-organizational, limitation	No permanent unit responsible for maintenance, specific budget, recovery plan, or protocol for system unavailability is identified.
Justicia Inteligente	Political-individual	Final responsibility remains with the tribunal member who reviews and signs the text. Human authority is explicitly maintained above the tool. (Argentina_Justicia.pdf, p. 8).
Justicia Inteligente	Political-individual, limitation	The document does not describe competencies for explaining the use of AI to the parties, managing objections, or restoring trust after errors.
Justicia Inteligente	Political-organizational	The system does not intervene “in any decision-making aspect”; it is limited to summarizing facts and arguments. This boundary protects the adjudicative function and seeks to preserve legitimacy. (Argentina_Justicia.pdf, p. 8).
Justicia Inteligente	Political-organizational	The watermark “PREPARED WITH AI - REQUIRES REVIEW” makes the technological intervention transparent and requires deliberate validation. (Argentina_Justicia.pdf, p. 8).
Justicia Inteligente	Political-organizational	Institutional adoption seeks to combat “shadow AI,” or the undocumented use of generative tools, by replacing it with a centralized, consistent, and supervisable environment. (Argentina_Justicia.pdf, p. 9).
Justicia Inteligente	Political-organizational	The TFN links innovation to “efficiency and transparency,” understood as republican values. This constitutes an institutional narrative of legitimation. (Argentina_Justicia.pdf, p. 9).

Justicia Inteligente	Political-organizational, limitation	No litigant participation, external ethical auditing, complaint mechanisms, or redress procedures related to automated drafts are identified.
Justicia Inteligente	Analytical-systemic, limited evidence	The project is led by a specialist in AI applied to law and is disseminated in academic and professional forums. However, no formal scientific evaluation network is substantiated. (Argentina_Justicia.pdf, pp. 7 and 19-21).
Justicia Inteligente	Operational-systemic	**Not fully assessable. Development is concentrated within the TFN, and no implementation agreements with other courts, universities, or regulatory authorities are documented.**
Argentina-justice portfolio	Political-systemic	Pages 50-53 show AI programs, protocols, training activities, and tools in different Argentine jurisdictions. This evidence demonstrates decentralized sectoral activity, but not a uniform national policy applicable to the TFN.
Argentina-justice portfolio	Political-systemic	**Not fully assessable. The document does not identify a comprehensive national law or framework that specifically regulates semantic search, automatic summarization, or AI-assisted judgment drafting.**

Table 5. Aggregate Capacity Assessment for Chile - Justice

Level	Analytical capacity	Operational capacity	Political capacity

Individual	**Moderate evidence. Application:** Judicial Branch Case Law Database. Law students from different universities participated in classifying judgments and identifying relevant legal issues under the direction of academics and Supreme Court justices. Legal researchers, law clerks, and professionals from different chambers also participated. This demonstrates the application of specialized legal knowledge in preparing the information that feeds the system. However, no specific training is documented for understanding the AI model, evaluating its rankings, detecting bias, or critically questioning automated results. (Chile_Justicia.pdf, pp. 5-6 and 8).	**Partial to moderate evidence. Application:** Judicial Branch Case Law Database. The system provides help manuals, tutorials, and a contact section for the Documentation Center. These tools help users and operators incorporate the search engine into their consultation routines. The participation of law clerks, attorneys, and teams from internal directorates also demonstrates professional adaptation during development. Nevertheless, no individual-level protocols are described for responding to incorrect results, anonymization problems, or personalization failures. (Chile_Justicia.pdf, pp. 2, 6, and 8).	**Limited evidence. Application:** Judicial Branch Case Law Database. Justices and judicial authorities publicly explained the application's purpose and linked it to access, speed, accuracy, and service to the legal community. This communication may help build legitimacy and trust. However, the document does not describe individual skills for explaining specific errors, addressing disputes, or restoring the trust of users affected by a failure. (Chile_Justicia.pdf, pp. 8-9 and 25-29).

Organizational	**Moderate to strong evidence.** **Application:** Judicial Branch Case Law Database. The Judiciary integrated more than 1.5 million judgments and developed semantic search, ranking, personalization, more accurate data generation, anonymization, and various filters. The project included a technical committee and an internal interdisciplinary team. However, no public usage metrics, impact evaluations, independent audits, published accuracy tests, or explicit protocols for assessing bias and errors throughout the life cycle were found. (Chile_Justicia.pdf, pp. 8-9 and 32-33).	**Strong evidence.** **Application:** Judicial Branch Case Law Database. The project took approximately two and a half years to implement; it was directed by a technical committee and involved the Directorates of Libraries and the Documentation Center, Studies, law clerks, chamber attorneys, the Judiciary Administrative Corporation, and a specialized external company. The Documentation Center was placed in charge of implementation. The application is publicly available, integrates databases from different courts, and provides continuous access, searches, alerts, annotations, and personalized options through Clave Única. The document does not provide information on the budget, contracts, a permanent maintenance structure, or contingency procedures. (Chile_Justicia.pdf, pp. 1-2, 8-9, and 27-33).	**Moderate evidence.** **Application:** Judicial Branch Case Law Database. The organization legitimizes the system through its contribution to access to justice, transparency, ease of consultation, anonymized information, and availability to the legal community and the public. It also provides support materials and institutional contact channels. However, the evidence does not substantiate citizen participation mechanisms in the design, external ethical auditing, explanations of the ranking, or complaint and redress procedures for incorrect results. (Chile_Justicia.pdf, pp. 2, 6, 8-9, and 27-31).

Systemic	**Strong evidence. Application:** Judicial Branch Case Law Database. The project connected the Judiciary with ten universities and public-law academics to classify judgments and modernize the database. This network contributed specialized legal knowledge and human resources for data preparation. Researchers and research centers also participated in presentation events. Nevertheless, the document does not describe a permanent network devoted to evaluating algorithmic risks or system performance after implementation. (Chile_Justicia.pdf, pp. 5-6, 27, and 30).	**Moderate to strong evidence. Application:** Judicial Branch Case Law Database. Coordination exists among the Supreme Court, Courts of Appeals, trial courts, the Judiciary Administrative Corporation, internal directorates, universities, and an external technology company. The application unifies case law databases in criminal, civil, labor, family, and debt-collection matters. However, the document does not describe external sector-wide mechanisms for responding collectively to failures or shared responsibilities between the Judiciary and the technology provider. (Chile_Justicia.pdf, pp. 6, 8, and 28-33).	**Limited evidence; not fully assessable.** The document substantiates cooperation agreements with universities and an institutional orientation toward access, anonymization, and transparency. Nevertheless, it does not identify a law, national policy, sectoral protocol, or external authority specifically regulating AI applied to case law search. Nor does it present rules on explainability, auditing, provider responsibility, appeal, or redress. (Chile_Justicia.pdf, pp. 5-6 and 32-33).

Table 6. Traceability Matrix by Application for Chile - Justice

Application	Capacity and level	Documentary excerpt and assessment
Judicial Branch Case Law Database	Analytical-individual	“Male and female law students from the Pontifical Catholic University of Chile [...] worked on classifying judgments in constitutional protection actions under the instruction of Justice and Professor Ángela Vivanco.” This evidence demonstrates the application of individual legal

		knowledge to prepare and categorize information. (Chile_Justicia.pdf, p. 6).
Judicial Branch Case Law Database	Analytical-individual	The interns helped “classify and define the most important legal issues in each judgment.” This constitutes an individual task involving substantive analysis of case law content. (Chile_Justicia.pdf, p. 6).
Judicial Branch Case Law Database	Analytical-individual, limitation	Intern certification demonstrates participation and recognition, but it does not establish training in algorithmic operation, result evaluation, bias, or AI traceability. (Chile_Justicia.pdf, pp. 5-6).
Judicial Branch Case Law Database	Operational-individual	The platform provides “help manuals, tutorials, and a contact section for the Supreme Court Documentation Center.” These resources enable users to learn how to use the system and incorporate it into consultation routines. (Chile_Justicia.pdf, p. 2).
Judicial Branch Case Law Database	Operational-individual	Users can save searches, schedule alerts, and make annotations on judgment texts. These functions allow routine legal research to be adapted to the digital environment. (Chile_Justicia.pdf, p. 2).
Judicial Branch Case Law Database	Operational-individual	Users can sort queries by date, case number, and relevance and use a thematic index and support materials. This facilitates integration of the search engine into professional tasks. (Chile_Justicia.pdf, pp. 8 and 27).
Judicial Branch Case Law Database	Operational-individual, limitation	No protocols are described for officials or users to respond when the system retrieves irrelevant case law, omits a precedent, or presents anonymization problems.
Judicial Branch Case Law Database	Political-individual	The justices responsible publicly explained the system's functions, benefits, and evolution. This communication helps build support and understanding, although it does not demonstrate capacity to manage a specific failure. (Chile_Justicia.pdf, pp. 8-9 and 28-29).
Judicial Branch Case Law Database	Political-individual, limitation	No individual competencies are documented for addressing complaints, explaining why a judgment

		was ranked in a particular position, or restoring trust after an omission or error.
Judicial Branch Case Law Database	Analytical-organizational	The system integrates “more than 1,500,000 judgments from the Supreme Court, Courts of Appeals, and trial courts.” This scale demonstrates institutional capacity to collect, organize, and process case law information. (Chile_Justicia.pdf, p. 32).
Judicial Branch Case Law Database	Analytical-organizational	AI makes it possible to “improve accuracy in data generation, controlled access, and anonymized information.” This demonstrates institutional information-analysis and processing procedures. (Chile_Justicia.pdf, pp. 8 and 31-33).
Judicial Branch Case Law Database	Analytical-organizational	The system incorporates “semantic search, ranking, personalization, and optimizations” to improve the retrieval of relevant information. (Chile_Justicia.pdf, pp. 8 and 32-33).
Judicial Branch Case Law Database	Analytical-organizational	Semantic search can identify relevant judgments even when the vocabulary in the query differs from that used in the rulings. This demonstrates the application of NLP and machine learning to case law retrieval. (Chile_Justicia.pdf, p. 33).
Judicial Branch Case Law Database	Analytical-organizational	The system incorporates procedures for anonymizing personal data in published judgments. This function constitutes an analytical and regulatory safeguard for information processing. (Chile_Justicia.pdf, p. 33).
Judicial Branch Case Law Database	Analytical-organizational, limitation	“No published quantitative usage metrics were found,” nor were academic reports specifically devoted to the system. Performance and impact evaluation cannot be substantiated. (Chile_Justicia.pdf, p. 33).
Judicial Branch Case Law Database	Analytical-organizational, limitation	The document does not report ranking-accuracy metrics, results of anonymization audits, bias tests, or permanent model-evaluation protocols.
Judicial Branch Case Law Database	Operational-organizational	“Implementation of this project took approximately two and a half years and was directed by a technical committee.” A specific timeline and

		governance structure existed for its development. (Chile_Justicia.pdf, p. 8).
Judicial Branch Case Law Database	Operational-organizational	The technical committee was supported by “an internal interdisciplinary team from the Directorates of Libraries and the Documentation Center and of Studies, as well as law clerks and attorneys from the various chambers of the Supreme Court.” This demonstrates coordination of specialized human resources. (Chile_Justicia.pdf, p. 8).
Judicial Branch Case Law Database	Operational-organizational	The project received support from the Judiciary Administrative Corporation and “an external company specializing in this type of technology.” This demonstrates the mobilization of internal and external resources. (Chile_Justicia.pdf, pp. 8 and 28).
Judicial Branch Case Law Database	Operational-organizational	The Supreme Court Documentation Center is “responsible for implementing the tool.” The evidence identifies an accountable organizational unit. (Chile_Justicia.pdf, p. 2).
Judicial Branch Case Law Database	Operational-organizational	The database integrates rulings from the Supreme Court, Courts of Appeals, and trial courts in criminal, civil, labor, family, and debt-collection matters. This demonstrates the integration of multiple institutional repositories. (Chile_Justicia.pdf, pp. 8 and 28).
Judicial Branch Case Law Database	Operational-organizational	The search engine is publicly available and provides advanced and saved searches, alerts, annotations, and downloads. Personalized functions are linked to Clave Única. (Chile_Justicia.pdf, pp. 2, 8, and 25-29).
Judicial Branch Case Law Database	Operational-organizational	The renewed version was launched in July 2025 following a project that began in 2022. This demonstrates continuity, updating, and incremental development. (Chile_Justicia.pdf, p. 32).
Judicial Branch Case Law Database	Operational-organizational, limitation	The document does not report a budget, the duration of technology contracts, a permanent maintenance structure, service levels, or a recovery protocol for disruptions.

Judicial Branch Case Law Database	Political-organizational	The platform seeks to provide those consulting case law with “easy, reliable, and rapid” access to Supreme Court judgments. Its purpose is linked to access and service quality. (Chile_Justicia.pdf, p. 6).
Judicial Branch Case Law Database	Political-organizational	The Chief Justice presented the system as technology “at the service of the legal community and everyone who may require it.” This narrative helps legitimize the innovation through its public utility. (Chile_Justicia.pdf, pp. 8 and 28).
Judicial Branch Case Law Database	Political-organizational	The availability of anonymized information incorporates institutional protection of personal data and seeks to reconcile public access to case law with privacy. (Chile_Justicia.pdf, pp. 8 and 31-33).
Judicial Branch Case Law Database	Political-organizational	The platform provides manuals, tutorials, and contact with the Documentation Center. These mechanisms offer guidance and an institutional communication channel for users. (Chile_Justicia.pdf, p. 2).
Judicial Branch Case Law Database	Political-organizational	The authorities stated that the system would continue to grow in response to user needs. This reflects a stated orientation toward adaptation and continuous improvement, although the document does not explain how those needs will be collected. (Chile_Justicia.pdf, p. 9).
Judicial Branch Case Law Database	Political-organizational, limitation	No public consultations, citizen participation in the design, trust assessments, external ethical audits, or specialized complaint and redress mechanisms are identified.
Judicial Branch Case Law Database	Analytical-systemic	The project included student interns from ten universities under the direction of public-law academics. This demonstrates access to a broad network of legal knowledge. (Chile_Justicia.pdf, p. 6).
Judicial Branch Case Law Database	Analytical-systemic	The agreement was signed by the Judiciary and the Universities of Concepción, Los Andes, Alberto Hurtado, Chile, Católica, Católica de Valparaíso, Austral, Valparaíso, Talca, and Diego Portales. The collaboration was formalized and distributed nationally. (Chile_Justicia.pdf, p. 6).

Judicial Branch Case Law Database	Analytical-systemic	Researchers and directors of research centers and libraries attended the launch ceremony. This demonstrates institutional circulation of the project, although it does not prove that they participated in its technical evaluation. (Chile_Justicia.pdf, pp. 8, 27, and 30).
Judicial Branch Case Law Database	Analytical-systemic, limitation	No permanent network of universities or research centers dedicated to measuring accuracy, risks, bias, distributional effects, or anonymization quality is substantiated.
Judicial Branch Case Law Database	Operational-systemic	Implementation coordinated the Supreme Court, Courts of Appeals, trial courts, the Administrative Corporation, internal directorates, universities, and a specialized company. This constitutes a network of public, academic, and private resources. (Chile_Justicia.pdf, pp. 6, 8, and 28).
Judicial Branch Case Law Database	Operational-systemic	The unification of databases from courts handling different subject areas and operating at different levels creates a cross-cutting case law infrastructure for the Chilean Judiciary. (Chile_Justicia.pdf, pp. 8 and 28-33).
Judicial Branch Case Law Database	Operational-systemic, limitation	No agreements are documented regarding maintenance, technical exchange, incident response, or allocation of responsibilities between the Judiciary and the external company.
Judicial Branch Case Law Database	Political-systemic	The cooperation agreement between the Judiciary and ten universities constitutes a formal collaborative arrangement that guided modernization of the case law database. (Chile_Justicia.pdf, p. 6).
Judicial Branch Case Law Database	Political-systemic	**Not fully assessable. The document does not identify a national policy or specific sectoral regulation governing judicial AI, its risks, the relationship with providers, or the rights of those who may be affected by search-engine errors.**

Table 7. Aggregate Capacity Assessment for Colombia - Justice

Level	Analytical capacity	Operational capacity	Political capacity

Individual	**Moderate evidence, concentrated in PretorIA.** Assistant magistrates, legal experts, engineers, and data scientists jointly participated in defining legal criteria, preparing data sets, training, testing, and auditing the system. This demonstrates specialized knowledge and the capacity to evaluate results from both legal and technical perspectives. However, the document does not describe formal training programs, certifications, or supervision manuals for all users. The Search Engine has a public user guide, but it develops search skills rather than the ability to critically evaluate the AI component. No information on profiles or training is available for Relati 3.0 or Sentencias para la Gente IA. **Applications:** PretorIA; limited evidence for the Search Engine. (Colombia_Justicia.pdf , pp. 19-23, 27, and 31).	**Moderate evidence.** In PretorIA, assistant magistrates use the system to support the search, classification, and analysis of tutela claims without transferring the final decision to it. The development of intuitive interfaces and the incorporation of an internal team indicate adaptation of legal work. For the Search Engine, the manual explains searches, filters, consultation of case records, and export of results, facilitating its incorporation into case law research routines. Relati 3.0 is available to citizens, attorneys, and academia, but the document does not describe how JEP staff adapt their tasks. Sentencias para la Gente IA lacks verifiable operational information. **Applications:** PretorIA and the Search Engine; limited evidence for Relati 3.0. (Colombia_Justicia.pdf , pp. 2-4, 19-23, 27, and 31).	**Partial evidence, primarily for PretorIA.** The system was presented as an aid to the judge rather than a substitute for human decision-making. The participation of legal experts and magistrates in parameterization helps preserve professional authority and legitimacy. Nevertheless, no individual capacities are documented for explaining errors to affected persons, managing disputes, or restoring trust after a failure. There is insufficient evidence for the other three applications. **Application:** PretorIA. (Colombia_Justicia.pdf , pp. 2, 27, and 31).

Organizational	**Strong evidence for PretorIA; limited evidence for the other applications.** The Constitutional Court established its own team of four AI and data-science experts; trained the system on institutional information; developed legal criteria with the participation of magistrates; conducted training, testing, and auditing; and adopted a “white-box” model oriented toward traceability, explainability, and human control. The Search Engine has an institutional guide and structured search functions, but its training data, metrics, and models are unknown. Relati 3.0 has no independent evaluation or metrics. For Sentencias para la Gente IA, even the technical architecture is not documented. **Applications:** PretorIA; partial evidence for the Search Engine and Relati 3.0; not assessable for Sentencias para la Gente IA. (Colombia_Justicia.pdf , pp. 1-8, 19-23, 27, and 31-32).	**Strong evidence for PretorIA and moderate evidence for the others.** PretorIA has its own technical team, integration with the Court's systems and databases, institutional training, and internal maintenance. The Search Engine is incorporated into the official portal, provides access to judicial decisions dating back to 1992, and allows users to filter, sort, and export results. Relati 3.0 is developed by the JEP's Office of the General Rapporteur and operates publicly on its portal. Sentencias para la Gente IA is associated with the CNDJ's institutional bulletin, but no verifiable details are available on resources, processes, or the support structure. **Applications:** PretorIA, the Search Engine, and Relati 3.0; insufficient evidence for Sentencias para la Gente IA. (Colombia_Justicia.pdf , pp. 1-8, 19-23, and 35-36).	**Moderate and uneven evidence.** PretorIA was legitimized through a narrative of transparency, independence, innovation, legal certainty, and protection of fundamental rights; it was also designed to preserve human decision-making and apply vulnerability criteria. Relati 3.0 and the Search Engine seek to democratize access to case law. Sentencias para la Gente seeks to present disciplinary decisions in citizen-friendly language and fulfill a preventive purpose. However, no consolidated mechanisms are identified for citizen participation, appeal, external ethical auditing, or redress for errors in these systems. **Applications:** all four, although the evidence is strongest for PretorIA. (Colombia_Justicia.pdf , pp. 3-8, 24-32, and 35).

Systemic	**Strong evidence, primarily through PretorIA.** Its development connected the Constitutional Court, Universidad del Rosario, IALAB at the University of Buenos Aires, Universidad de los Andes, and institutional and private support actors. The collaboration produced academic knowledge, testing, legal criteria, and technological adaptation. Universidad de los Andes also documented Relati 3.0 and the Search Engine in its public algorithms repository, although this demonstrates academic observation more than joint development. **Applications:** PretorIA; limited evidence for the Search Engine and Relati 3.0; not assessable for Sentencias para la Gente IA. (Colombia_Justicia.pdf , pp. 1, 3-4, and 24-34).	**Strong evidence for PretorIA and moderate evidence for the portfolio as a whole.** PretorIA emerged from memoranda and collaboration among the Court, domestic and foreign universities, technical specialists, and private funders. Its PretorIA Plus+ version received support from LabJusticia. The Search Engine and Relati 3.0 expand public access to case law from different jurisdictions, but no common architecture for interoperability or sector-wide coordination among the four responsible entities is substantiated. **Applications:** PretorIA; partial evidence for the Search Engine and Relati 3.0. (Colombia_Justicia.pdf , pp. 1-4 and 24-34).	**Moderate but incomplete evidence.** The document mentions CONPES 3975, the Ethical Framework for AI, guidelines on inclusion, cybersecurity, regulatory sandboxes, data trusts, and the adoption of international recommendations. However, it expressly states that no regulatory reforms specifically linked to PretorIA were developed. The ethical framework is described as soft law and is not fully binding. Nor is there evidence of a justice-sector framework uniformly applicable to all four applications or of an external authority specializing in their oversight. **Applications:** contextual evidence applicable to the portfolio, with a more developed connection to PretorIA. (Colombia_Justicia.pdf , pp. 32 and 40 and sections on PretorIA governance).

Table 8. Evidence Traceability by Application for Colombia - Justice

Application	Capacity and level	Documentary excerpt and assessment
PretorIA	Analytical-individual	“The data sets were produced through joint work between the Constitutional Court's assistant magistrates and IALAB's system-development engineers.” The evidence shows that legal operators contributed specialized knowledge to convert case law criteria into technically usable parameters. (Colombia_Justicia.pdf, p. 27).
PretorIA	Analytical-individual	Defining and refining the criteria involved “more than 40 days of joint work” among IALAB, attorneys from Universidad del Rosario, and delegates of the Court's male and female magistrates. This demonstrates interdisciplinary learning and evaluation. (Colombia_Justicia.pdf, p. 27).
PretorIA	Analytical-individual and organizational	The results had to be “validated by the person who would be the system's end user.” Professional validation preserves the ability to compare technical results with legal expertise. (Colombia_Justicia.pdf, p. 31).
PretorIA	Analytical-organizational	The Court “formed its own technical team of four AI and data-science experts to adapt the system and take ownership of the technology.” This is direct evidence of specialized personnel within the organization. (Colombia_Justicia.pdf, p. 1).
PretorIA	Analytical-organizational	The system was trained for five months using Court information. The organization had its own data, specialists, and technology-preparation process. (Colombia_Justicia.pdf, p. 1).
PretorIA	Analytical-organizational	A total of 2,500 judgments were used, and seven data sets were constructed for training, testing, and control. This demonstrates structured procedures for preparing and analyzing information. (Colombia_Justicia.pdf, p. 27).
PretorIA	Analytical-organizational	The data sets underwent “three rounds of training, testing, and auditing by a group of legal experts.” The existence of testing and auditing constitutes direct evidence of technical and legal oversight. (Colombia_Justicia.pdf, p. 27).

PretorIA	Analytical-organizational	The system was configured as “controlled AI” using “white boxes” that were “auditable and explainable,” under human control. This orientation directly addresses traceability and risk assessment. (Colombia_Justicia.pdf, p. 27).
PretorIA	Analytical-organizational	The data sets, keywords, and segmentations were made available to the Court to ensure “traceability, auditability, applicability, and interpretability.” This demonstrates internal control mechanisms over inputs and results. (Colombia_Justicia.pdf, p. 31).
PretorIA	Analytical-organizational, limitation	The executive summary states that no verified and published quantitative metrics exist on cases processed, time reductions, or accuracy rates. This absence prevents assessment of the system's current monitoring. (Colombia_Justicia.pdf, p. 2).
PretorIA	Analytical-organizational, limitation	The document identifies contradictions between IALAB's and the Court's descriptions of whether the system uses machine learning, predicts cases, or recommends cases. This inconsistency limits technical transparency.
PretorIA	Operational-individual	The tool “assists the team of assistant magistrates in selecting cases for review without replacing the final human decision.” The system is incorporated into professional routines while preserving legal discretion. (Colombia_Justicia.pdf, p. 2).
PretorIA	Operational-individual	The interface was designed so that “the legal operator could interact naturally with the system.” This demonstrates adaptation of the technology to everyday work. (Colombia_Justicia.pdf, p. 27).
PretorIA	Operational-organizational	“The Court's internal technical team is responsible for maintaining and updating the system.” The explicit assignment of responsibilities supports continuity of operations. (Colombia_Justicia.pdf, p. 2).
PretorIA	Operational-organizational	Implementation included “establishing and professionalizing a team of computer engineers and data scientists” to operate and continuously develop the system. (Colombia_Justicia.pdf, p. 27).

PretorIA	Operational-organizational	The tool was in the process of “being installed and integrated with other systems and databases of the high court.” This demonstrates incorporation into the Court's infrastructure.
PretorIA	Political-individual	The system does not make the final selection; it assists the constitutional judge in searching for and analyzing information. Professional authority remains above the tool.
PretorIA	Political-organizational	The platform was presented as the result of leadership centered on “transparency, independence, and innovation,” directed toward legal certainty and the protection of fundamental rights. This narrative seeks to build institutional legitimacy.
PretorIA	Political-organizational	The system was trained to identify extreme poverty, minority status, risk, and vulnerability. Incorporation of these criteria demonstrates organizational attention to equity and differentiated protection. (Colombia_Justicia.pdf, p. 27).
PretorIA	Political-organizational	The 33 normative and case law criteria can be modified by the constitutional judge. This preserves institutional control over the values and parameters guiding the tool. (Colombia_Justicia.pdf, pp. 27-28).
PretorIA	Analytical and operational-systemic	The system was developed through cooperation among the Constitutional Court, Universidad del Rosario, and IALAB at the University of Buenos Aires. PretorIA Plus+ subsequently received support from LabJusticia at Universidad de los Andes. (Colombia_Justicia.pdf, p. 1).
PretorIA	Operational-systemic	The project was formalized through a memorandum of understanding among the Court, Universidad del Rosario, and the Argentine laboratory. This demonstrates formal interinstitutional coordination. (Colombia_Justicia.pdf, pp. 26 and 33-34).
PretorIA	Operational-systemic	Implementation financing was arranged through private funds administered by the Bogotá Chamber of Commerce. This demonstrates the mobilization of external resources, although the document does not specify amounts or conditions. (Colombia_Justicia.pdf, p. 26).

PretorIA	Political-systemic, contextual evidence	CONPES 3975 established lines of action on an ethical framework, inclusion, cybersecurity, testing environments, and data governance. However, the document clarifies that “no regulatory reforms linked to the system have been developed.”
PretorIA	Failure-response capacity	**Partial evidence. Human control, testing, auditing, and a white-box design are present, but no public complaint or redress procedure is identified for people whose cases may be affected by an incorrect classification.**
Rapporteur's Office Case Law Search Engine	Analytical-individual, limited evidence	The Court publishes a “Case Law Search Engine Manual” explaining how to search, filter, and examine results. The manual develops usage skills, but not competencies for understanding or critically evaluating the algorithm. (Colombia_Justicia.pdf, pp. 19-23).
Rapporteur's Office Case Law Search Engine	Operational-individual	The manual explains how to search full text, keywords, date ranges, and restrictions, as well as how to combine terms to refine results. This enables the tool to be incorporated into routine legal research. (Colombia_Justicia.pdf, pp. 20 and 23).
Rapporteur's Office Case Law Search Engine	Operational-individual	Users can review case records containing additional data, topics of interest, and highlighted terms within the judicial decision. The interface supports reading and information retrieval. (Colombia_Justicia.pdf, p. 22).
Rapporteur's Office Case Law Search Engine	Analytical-organizational	The system uses pattern recognition and ranks results by relevance. However, no verified information is available on models, training data, or providers. (Colombia_Justicia.pdf, pp. 7-8).
Rapporteur's Office Case Law Search Engine	Analytical-organizational, limitation	No verified figures are available on queries, users, response times, or the accuracy of the AI component. No public technical manual was found either. (Colombia_Justicia.pdf, p. 8).
Rapporteur's Office Case Law Search Engine	Operational-organizational	The tool is integrated into the Court's official portal and provides access to judicial decisions dating back to 1992, text consultation, and export of between 25 and 1,000 results per page. (Colombia_Justicia.pdf, pp. 7-8 and 19-23).

Rapporteur's Office Case Law Search Engine	Political-organizational	Its institutional purpose is to facilitate rapid and accurate access to constitutional case law. Public availability contributes to transparency and access to justice. (Colombia_Justicia.pdf, pp. 7-9 and 35).
Rapporteur's Office Case Law Search Engine	Political-organizational, limitation	The system uses personal data, but the dossier does not document specific privacy protocols, an explanation of relevance ranking, auditing, or complaint procedures for omissions. (Colombia_Justicia.pdf, pp. 7-9).
Rapporteur's Office Case Law Search Engine	Analytical-systemic, limited evidence	Universidad de los Andes documented the application in its public algorithms repository. This provides external academic observation, but does not prove collaboration in its development or evaluation. (Colombia_Justicia.pdf, pp. 7-10).
Relati 3.0	Analytical-organizational	The system uses language models and generative AI for semantic search across orders, judgments, dissenting opinions, resolutions, and macro-cases. This implies institutional capacity to organize and process the JEP's case law collection. (Colombia_Justicia.pdf, pp. 3-4).
Relati 3.0	Analytical-organizational, limitation	“No independent academic evaluations specifically devoted to RELATI 3.0 were found,” nor were verified metrics on queries or impact. Oversight and evaluation cannot be substantiated. (Colombia_Justicia.pdf, p. 4).
Relati 3.0	Operational-organizational	The JEP's Office of the General Rapporteur developed successive versions of the system - 1.0, 2.0, and 3.0 - demonstrating incremental learning and organizational updating. (Colombia_Justicia.pdf, p. 3).
Relati 3.0	Operational-organizational	Version 3.0 operates publicly on the JEP portal and processes different types of case law documents. It is integrated with institutional consultation infrastructure. (Colombia_Justicia.pdf, pp. 3-4).
Relati 3.0	Political-organizational	Its purpose is to facilitate public access to transitional-justice case law for citizens, attorneys, academia, and international organizations. This contributes to transparency and accessibility. (Colombia_Justicia.pdf, pp. 3-4).

Relati 3.0	Analytical-systemic, limited evidence	Universidad de los Andes documented Relati 3.0 as a public-sector AI use case. Nevertheless, the document does not establish that the university participated in developing or evaluating the application. (Colombia_Justicia.pdf, pp. 3-4).
Relati 3.0	Individual capacities	**Not assessable. The document does not describe profiles, training, manuals, or competencies of JEP officials for overseeing generative AI.**
Relati 3.0	Failure-response capacity	**Not assessable. No protocols are identified for correcting incorrect generative responses, informing users, or processing complaints.**
Sentencias para la Gente IA	Analytical-organizational	**Not assessable. The dossier states that no verified technical information is available on the type of AI, the data processed, or the operational workflow. (Colombia_Justicia.pdf, pp. 5-6).**
Sentencias para la Gente IA	Operational-organizational, limited evidence	The system is linked to the National Judicial Discipline Commission's “Sentencias para la Gente” bulletin and is recorded as operational since 2025. However, the document does not describe resources, personnel, infrastructure, or the production procedure. (Colombia_Justicia.pdf, pp. 5-6).
Sentencias para la Gente IA	Political-organizational	The bulletin seeks to disseminate the most important disciplinary judgments and is presented as a preventive mechanism for reducing the number of people subject to disciplinary proceedings. Its purpose contributes to citizen access and the legitimacy of the disciplinary jurisdiction. (Colombia_Justicia.pdf, p. 5).
Sentencias para la Gente IA	Political-organizational, limitation	The use of AI for summarization or simplification is only a possibility inferred from the dossier, not a technically verified function. It therefore cannot be concluded that effective mechanisms of algorithm-enabled accessibility exist. (Colombia_Justicia.pdf, pp. 5-6).
Sentencias para la Gente IA	Individual and systemic capacities	**Not assessable. No training activities, agreements, collaboration networks, specific regulation, external evaluation, or oversight mechanisms related to the AI component are documented.**

Table 9. Aggregate Capacity Assessment for Mexico - Justice

Level	Analytical capacity	Operational capacity	Political capacity
Individual	**Limited evidence not directly attributable to the applications.** The document reports that the Federal Judicial Training School and the Federal Judiciary Council held a seminar on AI in the judicial function, and that the SCJN, the CJF, and the Judiciary of the State of Mexico have conducted training activities on AI functionalities. However, there is no evidence that those who develop or operate Sor Juana, AVT, Archi, or Justicia Inteligente received specific training to understand their data, models, results, errors, or biases. Applications with direct individual-level evidence: none. Contextual sectoral evidence: general training at the SCJN and CJF. (Mexico_Justicia.pdf, pp. 26 and 41).	**Limited evidence.** Sor Juana and AVT are designed for direct use by citizens, and the document does not describe a specific work routine to which judges or staff must adapt. Nor does it document internal manuals, correction protocols, or capacities to respond to incorrect answers. There is insufficient verifiable information for Archi and Justicia Inteligente. **Applications:** none are fully substantiated. (Mexico_Justicia.pdf, pp. 1-2 and 75-80).	**Partial evidence, concentrated in the public communication surrounding Sor Juana and AVT.** Officials associated with Sor Juana publicly explained the system's operation and purpose, while AVT directs users to institutional sources through which information can be verified. Nevertheless, no individual competencies are described for managing failures, explaining specific errors, or restoring the trust of an affected person. There is no evidence for Archi or Justicia Inteligente. **Applications:** Sor Juana and AVT, partially. (Mexico_Justicia.pdf, pp. 75 and 79 and subsequent informational sections on both applications).

Organizational	**Moderate evidence for Sor Juana and AVT; not assessable for Archi and Justicia Inteligente.** Sor Juana uses natural language processing, semantic search, a vector database, and proprietary code. It also stores questions, answers, error detections, and judgment selections to improve model quality and accuracy. AVT was trained on SCJN knowledge bases and allows its answers to be verified through institutional links. However, there are no independent evaluations, accuracy metrics, bias audits, or published life-cycle evaluation protocols. **Applications:** Sor Juana and AVT. (Mexico_Justicia.pdf, pp. 75-80 and subsequent sections on Sor Juana).	**Moderate evidence, concentrated in Sor Juana and AVT.** Both applications were developed within the SCJN, have public platforms, and use digital infrastructure and institutional databases. Sor Juana was developed by a Justice's office using Streamlit, Google, and Pinecone; AVT was developed by the team of the General Unit for Transparency and Systematization of Judicial Information. No specific budgets, maintenance plans, contingency structures, or responsibilities for failures are identified. No verifiable information is available for Archi or Justicia Inteligente. **Applications:** Sor Juana and AVT. (Mexico_Justicia.pdf, pp. 75-80 and 45).	**Moderate evidence for Sor Juana and AVT.** Both seek to bring judicial information closer to citizens through understandable language, transparency, and direct access to sources. Sor Juana states that it is in an experimental phase, acknowledges that it may produce inaccurate results, and explains its data processing. AVT explicitly adopts “privacy by design,” does not collect personal data, and directs users to the institutional portal. However, no documented mechanisms exist for citizen participation in design, external ethical auditing, complaints, appeals, or redress. **Applications:** Sor Juana and AVT. Not assessable: Archi and Justicia Inteligente. (Mexico_Justicia.pdf, pp. 75-80).

Systemic	**Moderate evidence in the surrounding environment, but only weakly linked to the four applications.** Mexico has universities, research centers, civil society organizations, and international networks that produce knowledge on AI and justice. The document highlights SCJN research, application of UNESCO's RAM methodology, academic publications, and training activities. Nevertheless, there is no evidence that this environment systematically participates in the technical evaluation of Sor Juana, AVT, Archi, or Justicia Inteligente. Directly linked applications: none to a robust degree. (Mexico_Justicia.pdf, pp. 7-13, 31-35, and 40-45).	**Partial evidence.** Cooperation and coordination structures exist in digital justice: the SCJN, the CJF, and the Electoral Tribunal maintain a strategy built around e-justice, digital transformation, digital governance, and data governance; the CJF has also mentioned interconnection partnerships with state judiciaries. However, the document does not demonstrate a common architecture for operating, sharing resources, or resolving failures across the four portfolio applications. **Applications:** contextual evidence for the portfolio, with a more direct relationship to SCJN and CJF initiatives. (Mexico_Justicia.pdf, pp. 8 and 40-45).	**Partial and incomplete evidence.** Mexico has data-protection, transparency, human-rights, and digital-justice rules that may apply to AI systems. The National Code of Civil and Family Procedures establishes principles of equitable and secure digital justice, operational guarantees, and information-protection obligations. Nevertheless, the document states that Mexico has neither a specific national AI strategy nor a binding sectoral plan for the judiciary. The SCJN and the CJF stated that they do not have an institutional AI strategy. **Applications:** a contextual framework applicable to all four, but not specifically designed to govern them. (Mexico_Justicia.pdf, pp. 7-9 and 28-41).

Table 10. Traceability Matrix by Application for Mexico - Justice

Application	Capacity and level	Document excerpt and assessment

Sor Juana	Analytical-organizational	“Sor Juana uses a generative AI model with natural language processing capabilities to answer questions about the content of specific draft judgments.” This demonstrates organizational technical capacity to process legal information through natural language. (Mexico_Justicia.pdf, pp. 75-76).
Sor Juana	Analytical-organizational	“The system was built with Streamlit - interface - Google - AI infrastructure - and Pinecone - a vector database for semantic search.” An identifiable technological architecture exists, although it depends on external providers. (Mexico_Justicia.pdf, pp. 75-76).
Sor Juana	Analytical-organizational	“We store only what is essential: questions, answers, error detection, and judgment selection, in order to continuously improve the quality and accuracy of our model.” This demonstrates information collection for learning and improvement. (Mexico_Justicia.pdf, subsequent section on Sor Juana's data processing).
Sor Juana	Analytical-organizational, limitation	“Because this is a system in the experimental/pilot phase, no published impact metrics were found.” Nor are there academic evaluations of the system or metrics on use or adoption. (Mexico_Justicia.pdf, p. 76).
Sor Juana	Analytical-individual	**Not assessable. No training activities, professional profiles, internal manuals, or competencies are identified for the people who develop, supervise, or validate its responses.**
Sor Juana	Operational-organizational	“Sor Juana was developed by the office of Justice Ana Margarita Ríos Farjat with the support of tools such as Streamlit, Google, and Pinecone.” The office mobilized technological resources to produce a functional prototype. (Mexico_Justicia.pdf, p. 75).
Sor Juana	Operational-organizational	“It operates as a chatbot that can be consulted through the SCJN's public platform.” A public interface exists for its operation and citizen access. (Mexico_Justicia.pdf, p. 76).
Sor Juana	Operational-organizational, limitation	The system “can access only one draft judgment at a time” and considers only Justice Ríos Farjat's cases. This demonstrates a restricted operational scope. (Mexico_Justicia.pdf, p. 75).

Sor Juana	Operational-organizational, limitation	The system is linked “to the tenure of a specific Justice, which may affect its institutional continuity.” The source expressly identifies a sustainability risk. (Mexico_Justicia.pdf, p. 76).
Sor Juana	Operational-individual	**Not assessable. The document does not describe officials who use the system as part of their work routines or procedures for intervening when an answer is incorrect.**
Sor Juana	Political-organizational	It is “designed to facilitate access to and understanding of the public versions of draft judgments.” Its purpose is to expand citizen access and comprehension. (Mexico_Justicia.pdf, p. 75).
Sor Juana	Political-organizational	The system allows users to ask questions and receive “plain-language answers.” This translates specialized legal information into an accessible format. (Mexico_Justicia.pdf, p. 75).
Sor Juana	Political-organizational	The platform states that it is “an experimental model” and that it “may generate unexpected or inaccurate results.” The warning provides transparency about its limitations. (Mexico_Justicia.pdf, subsequent informational section on Sor Juana).
Sor Juana	Political-organizational	“It does not collect or process personally identifiable information from users.” This criterion incorporates explicit privacy protection. (Mexico_Justicia.pdf, p. 75).
Sor Juana	Political-individual, partial evidence	The coordinating magistrate of the Justice's chamber publicly explained that the platform allows users to engage with draft judgments and obtain practical, citizen-oriented explanations. This helps build understanding and trust, but does not demonstrate capacity to manage a failure.
Sor Juana	Failure-response capacity	**Partial evidence. The tool warns that it may generate inaccurate results and records errors to improve the model, but no complaint procedure, user-requested human review, or redress mechanism is documented.**

Virtual Transparency Assistant	Analytical-organizational	“The system uses natural language models and generative AI algorithms trained on SCJN knowledge bases.” This demonstrates access to organized institutional information used to feed the system. (Mexico_Justicia.pdf, p. 79).
AVT	Analytical-organizational	The system uses “knowledge bases on search trends to provide links of interest and allow the user to verify the information.” This corroboration provides a verification mechanism. (Mexico_Justicia.pdf, p. 79).
AVT	Analytical-organizational, limitation	“No verified quantitative metrics were found on AVT use or impact.” Nor were academic evaluations or international reports located. (Mexico_Justicia.pdf, p. 80).
AVT	Analytical-individual	**Not assessable. The document does not describe staff profiles, training, or competencies for analyzing and correcting its results.**
AVT	Operational-organizational	“AVT was developed internally by the SCJN.” This evidence demonstrates institutional capacity to build the application. (Mexico_Justicia.pdf, p. 79).
AVT	Operational-organizational	The application “is available through the SCJN transparency portal and directs users to specific content on the judicial portal.” It is integrated into an existing institutional channel. (Mexico_Justicia.pdf, p. 79).
AVT	Operational-organizational	The team from the General Unit for Transparency, Systematization of Judicial Information, and Judicial Archives participated in its development. The evidence identifies a responsible unit, although it does not detail its technical composition or budget. (Mexico_Justicia.pdf, AVT institutional section).
AVT	Operational-individual	**Not assessable. No staff routines or individual protocols are described for addressing chatbot errors or interruptions.**
AVT	Political-organizational	The application is “designed to facilitate citizen access to information on transparency and access to judicial information.” Its purpose is directly related to institutional openness. (Mexico_Justicia.pdf, p. 79).

AVT	Political-organizational	“AVT was designed under the principle of privacy by design: it does not require the collection of personal data to operate and does not use cookies or track browsing.” An explicit normative decision is embedded in the design. (Mexico_Justicia.pdf, p. 79).
AVT	Political-organizational	Responses refer users to institutional links so that they can verify the information. This promotes transparency and reduces exclusive dependence on the automated response. (Mexico_Justicia.pdf, p. 79).
AVT	Failure-response capacity	**Not assessable. The document does not describe how erroneous responses are reported, corrected, or remedied, or whether a special complaint procedure exists.**
Archi	Analytical-organizational	**Not assessable. “No verifiable information was found on the technology or operational workflow of the Archi system.” (Mexico_Justicia.pdf, p. 77).**
Archi	Operational-organizational	**Not assessable. Although it is recorded as a TEPJF system operating since 2024, its existence, structure, personnel, infrastructure, and resources could not be verified. (Mexico_Justicia.pdf, pp. 77-78).**
Archi	Political-organizational	**Not assessable. No verifiable information is available on its purpose, users, design principles, protection of rights, or accountability mechanisms.**
Archi	Individual capacities	**Not assessable. No data are available on training, profiles, or staff interaction with the system.**
Archi	Systemic capacities	**Not assessable. No agreements, external collaboration, specific regulation, or independent evaluation are documented.**
Justicia Inteligente: Automated Summarization and Management	Analytical-organizational	**Not assessable. The document states that it found no verifiable technical information on the system or documented metrics or results. (Mexico_Justicia.pdf, pp. 1-2).**

Justicia Inteligente	Operational-organizational	**Not assessable. No origin, development process, infrastructure, team, budget, or implementation procedures were identified. (Mexico_Justicia.pdf, pp. 1-2).**
Justicia Inteligente	Political-organizational	**Not assessable. No verifiable data are available on transparency, legitimacy, participation, privacy, or responses to errors.**
Justicia Inteligente	Individual capacities	**Not assessable. No operators, training, manuals, or changes in judicial routines are documented.**
Justicia Inteligente	Systemic capacities	**Not assessable. The case sheet itself identifies a possible inconsistency between the country recorded - Chile - and the responsible entity - Mexico's CJF - and recommends verifying the database entry. (Mexico_Justicia.pdf, pp. 1-2).**
Mexico-justice portfolio	Analytical-systemic	The document reports academic research, application of UNESCO's RAM methodology, university programs, and scientific output on AI. This demonstrates an available knowledge environment, although it is not necessarily integrated into the evaluation of the four applications. (Mexico_Justicia.pdf, pp. 31-35 and 40-45).
Mexico-justice portfolio	Operational-systemic	The SCJN, the CJF, and the Electoral Tribunal maintain a technology strategy based on “e-justice, digital transformation, digital governance, and data governance.” This is evidence of general digital coordination, but not of a common structure for the four applications. (Mexico_Justicia.pdf, p. 45).
Mexico-justice portfolio	Political-systemic	Mexico has data-protection, transparency, and human-rights laws applicable to AI, but “there is still no specific national AI plan.” The regulation provides a useful foundation, although it does not constitute a comprehensive sectoral framework. (Mexico_Justicia.pdf, pp. 7 and 28-39).
Mexico-justice portfolio	Political-systemic	The SCJN stated that it does not have an institutional AI strategy, and the CJF likewise stated that it has no AI strategy, although it plans virtual assistants and has an e-justice policy. This demonstrates a gap between digital transformation and AI-specific governance. (Mexico_Justicia.pdf, pp. 39-41).

Table 11. Aggregate Capacity Assessment for Argentina - Health

Level	Analytical capacity	Operational capacity	Political capacity
Individual	**Moderate evidence, primarily for ARPHAI.** The project requires people who handle data to hold Good Clinical Research Practice certification and sign an individual confidentiality commitment. It also worked with medical experts to define annotation criteria, train algorithms, and evaluate results. In Chat Crecer, specialized teams in health, epidemiology, user experience, and digital government are identified, but no formal profiles or specific training in critical AI evaluation are described. **Applications:** ARPHAI; partial evidence for Chat Crecer. (Argentina_Salud.pdf, pp. 36, 43-44, 61, and 73-74).	**Moderate evidence.** Chat Crecer used midwives, digital literacy facilitators, and field teams to incorporate the chatbot into prenatal care and help users overcome access difficulties. ARPHAI prepared manuals, formed support teams, and carried out awareness-raising and training for health personnel to record and analyze data in the Integrated Health Record. **Applications:** both, with more explicit evidence for ARPHAI. (Argentina_Salud.pdf, pp. 6, 29, 35-39, 52, 71, and 74).	**Limited evidence.** Chat Crecer includes officials and professionals who explain the tool, promote its use, and address objections through digital literacy. This helps build trust and acceptance. However, no individual competencies are documented for managing an AI failure or restoring trust after errors. In ARPHAI, no individual actions involving direct engagement with affected publics are observed. Application with partial evidence: Chat Crecer. (Argentina_Salud.pdf, pp. 29, 35-38, and 52).

Organizational	**Strong evidence.** Chat Crecer underwent pilot testing, impact measurement, usability analysis, and continuous improvement based on user questions and feedback. ARPHAI developed predictive models, automated-detection prototypes, epidemiological dashboards, anonymization and security procedures, bias auditing, and academic output. **Applications:** both; evidence is more robust and formalized for ARPHAI. (Argentina_Salud.pdf, pp. 2, 6, 16, 34-39, 44, 52-53, 61, 65, 70, 73-74, and 77-78).	**Strong evidence.** Chat Crecer connected the Ministry of Health and the Secretariat of Modernization, incorporated teams in user experience, epidemiology, health content, and digital literacy, and moved from a municipal pilot to national deployment. ARPHAI had interdisciplinary teams, high-performance infrastructure, open repositories, territorial implementation teams, manuals, technical support, and the transfer of a dashboard to the Province of Buenos Aires. **Applications:** both. (Argentina_Salud.pdf, pp. 1-7, 35-39, 47-53, 54-62, 67-74, and 78).	**Moderate to strong evidence.** Chat Crecer was designed participatively and incorporated user feedback, testimonials, in-person support, and reliable content to build legitimacy. ARPHAI institutionalized principles of equity, a gender perspective, responsible data use, anonymization, an ethics committee, and bias mitigation. Nevertheless, neither case identifies complete appeal or redress procedures for an incorrect algorithmic decision. **Applications:** both, with greater ethical formalization in ARPHAI. (Argentina_Salud.pdf, pp. 2, 7, 29, 35-39, 45-46, 61, 73-74, and 82-85).

Systemic	**Strong evidence, concentrated in ARPHAI.** The project established a network of more than 20 institutions and nearly one hundred researchers, involving national and provincial ministries, universities, research centers, and international cooperation. It also produced publications, open-source code, and studies on low-cost models, bias, and responsible data use. Chat Crecer included teams from different public agencies and was recognized by the OECD, but its scientific network was more limited. **Applications:** ARPHAI; moderate evidence for Chat Crecer. (Argentina_Salud.pdf, pp. 2, 31-40, 54-65, 72-74, and 77-85).	**Strong evidence.** Chat Crecer coordinated national agencies, health authorities, the municipality, primary care centers, midwives, and field teams, and was subsequently scaled nationally. ARPHAI connected national and provincial ministries, CIECTI, universities, computing centers, international cooperation, municipalities, and health facilities; it also transferred technology to the Province of Buenos Aires through an agreement. **Applications:** both, with greater interinstitutional density in ARPHAI. (Argentina_Salud.pdf, pp. 1-7, 21, 24, 30, 35-38, 47-53, 54-62, and 67-74).	**Moderate evidence.** Chat Crecer was linked to Universal Health Coverage objectives and Digital Agenda initiatives, but the document does not identify a specific regulatory framework for health chatbots. ARPHAI is embedded in the Integrated Health Record, the National Health Surveillance System, the Salud Digital Bonaerense program, and debates on data protection, equity, and responsible use. However, the evidence likewise does not demonstrate a comprehensive, binding national framework specifically regulating AI in health. **Applications:** both, with more developed evidence for ARPHAI. (Argentina_Salud.pdf, pp. 30, 42, 61, 68-74, and 82-85).

Table 12. Traceability Matrix by Application for Argentina - Health

Application	Capacity and level	Document excerpt and assessment
Chat Crecer	Analytical-organizational	“The system was built through a participatory process that incorporated user feedback to define content and conversational flows, following a user-centered design methodology.” The excerpt demonstrates the collection and analysis of information to adapt the application. (Argentina_Salud.pdf, p. 2).

Chat Crecer	Analytical-organizational	“Women who used Chat Crecer attended an average of 1.2 more medical checkups than those who did not use it.” The organization produced evidence on results before scaling. (Argentina_Salud.pdf, pp. 2, 6, 16, 30, and 53).
Chat Crecer	Analytical-organizational	“The team worked hand in hand with midwives” and carried out “usability tests and platform analyses [...] that make it possible to improve content and performance.” Usage monitoring and iterative learning are present. (Argentina_Salud.pdf, pp. 6 and 36).
Chat Crecer	Analytical-systemic, partial evidence	The application was registered by the OECD Observatory of Public Sector Innovation and evaluated through an intervention design supported by the Ministry of Health's epidemiological team. This links the project to knowledge networks, although no permanent research network on algorithmic risks is documented. (Argentina_Salud.pdf, pp. 2 and 31-40).
Chat Crecer	Operational-organizational	“The system emerged as a joint initiative of the Undersecretariat of Digital Government and the Ministry of Health's National Directorate for Maternity and Childhood.” This demonstrates organizational coordination between technology and health areas. (Argentina_Salud.pdf, p. 1).
Chat Crecer	Operational-organizational and systemic	“It was launched in 2018 as a pilot project in the Province of Buenos Aires and was expanded nationwide in May 2019.” The transition from pilot to the federal level demonstrates scaling capacity. (Argentina_Salud.pdf, pp. 1-2).
Chat Crecer	Operational-individual	“During that stage, the team worked hand in hand with midwives, who recommended the virtual assistant to their patients.” Professionals incorporated the application into their everyday relationships with patients. (Argentina_Salud.pdf, p. 6).
Chat Crecer	Operational-individual	“Approximately ten digital literacy facilitators” provided assistance to resolve initial questions and address objections or difficulties of use. This demonstrates human resources specifically assigned to facilitate adoption. (Argentina_Salud.pdf, pp. 29 and 52).
Chat Crecer	Operational-organizational	Connectivity problems, safety concerns, and the digital divide were addressed through “a digital literacy teachers program” and mobile internet access points. The case demonstrates organizational adaptation to implementation problems. (Argentina_Salud.pdf, pp. 37-38).

Chat Crecer	Political-individual, partial evidence	Digital literacy facilitators conducted interviews and provided support to “resolve initial questions” and address objections. This promotes trust and acceptance, although it is not equivalent to formal capacity to respond to algorithmic failures. (Argentina_Salud.pdf, pp. 29, 35, 37-38, and 52).
Chat Crecer	Political-organizational	“The system was built through a participatory process that incorporated user feedback.” Recipient participation contributed to the legitimacy of the content and design. (Argentina_Salud.pdf, p. 2).
Chat Crecer	Political-organizational	The document records user testimonials emphasizing the reassurance produced by receiving “reliable information.” This constitutes evidence of trust, although it is based on testimonials rather than comprehensive institutional measurement. (Argentina_Salud.pdf, p. 7).
Chat Crecer	Political-organizational	“All the information we receive is encrypted. Operators can see only the user's name.” The design incorporates an organizational response to privacy concerns, although no external audits are described. (Argentina_Salud.pdf, pp. 45-46).
Chat Crecer	Political-systemic, contextual evidence	“The initiative responds to the objectives of Universal Health Coverage,” and the project “forms part of Digital Agenda initiatives.” These frameworks guide the application, but they do not constitute AI-specific regulation. (Argentina_Salud.pdf, pp. 30, 42, and 53).
Chat Crecer	Political capacity to respond to failures	**Not assessable. The document does not identify complaint, appeal, formal human-review, or redress mechanisms when the chatbot provides incorrect or insufficient information.**
ARPHAI	Analytical-individual	“Everyone who handled data was required to submit Good Clinical Research Practice certification [...] as well as an individual confidentiality commitment.” This constitutes an explicit requirement concerning individual knowledge and responsibilities. (Argentina_Salud.pdf, p. 61).
ARPHAI	Analytical-individual and organizational	“The team worked collaboratively with medical experts to identify [...] entities of interest [...] and define criteria for manual annotation, automated rule-based annotation, and automated machine-learning annotation.” This demonstrates technical and clinical specialization applied to system construction. (Argentina_Salud.pdf, p. 73).

ARPHAI	Analytical-organizational	The project developed “predictive models, automated disease-detection prototypes, and the development and transfer of a health-management dashboard.” This demonstrates stable capacity to produce evidence and analytical tools. (Argentina_Salud.pdf, p. 65).
ARPHAI	Analytical-organizational	“The team audits its predictive models and developments with the aim of discovering potential biases related to gender, age, or geographic location.” This is direct evidence of critical evaluation of results and risks. (Argentina_Salud.pdf, p. 82).
ARPHAI	Analytical-organizational	The data are anonymized, only necessary information is transferred, and processing is conducted at the High-Performance Computing Center “under strict security and access standards.” This demonstrates data-management and data-quality protocols. (Argentina_Salud.pdf, p. 61).
ARPHAI	Analytical-organizational	The project identified limitations in calibration, validation, data quality, and data availability and developed lower-complexity models for resource-constrained settings. This demonstrates technical learning and adaptive capacity. (Argentina_Salud.pdf, pp. 73 and 77-78).
ARPHAI	Analytical-systemic	“ARPHAI has built a network of more than 20 institutions and nearly one hundred researchers.” The network includes contributions in research, management, technological development, monitoring, and evaluation. (Argentina_Salud.pdf, p. 72).
ARPHAI	Analytical-systemic	Technical specialists and decision-makers from “more than 20 institutions in 7 provinces across the country” participated. This constitutes a national environment for knowledge production and transfer. (Argentina_Salud.pdf, pp. 64-65).
ARPHAI	Analytical-systemic	The initiative received funding from Canada's IDRC and Sweden's Sida, with support from universities, scientific centers, and the national high-performance computing system. It therefore had access to national and international scientific resources. (Argentina_Salud.pdf, pp. 54, 60, 63, 78, 80, and 84).
ARPHAI	Operational-individual	“Health personnel received awareness-raising and training” during implementation of the Integrated Health Record. This demonstrates staff preparation to incorporate new digital processes. (Argentina_Salud.pdf, p. 71).

ARPHAI	Operational-individual and organizational	“The support provided consisted of preparing user manuals, establishing central support teams, and [...] field implementation teams tasked with awareness-raising and training.” This is direct evidence of training, support, and implementation structures. (Argentina_Salud.pdf, p. 74).
ARPHAI	Operational-organizational	The project has public open-source repositories and models designed to operate on low-cost infrastructure. This facilitates maintenance, replication, and adoption. (Argentina_Salud.pdf, p. 4).
ARPHAI	Operational-organizational	“ARPHAI transferred an epidemiological management dashboard to the Province of Buenos Aires.” The transfer demonstrates that the developments reached the application stage within the public system. (Argentina_Salud.pdf, pp. 4 and 67-70).
ARPHAI	Operational-systemic	“The connection between the project and the province was established through an agreement” that included testing with real data, connecting teams, and creating future spaces for joint research. Formalized interinstitutional coordination exists. (Argentina_Salud.pdf, p. 68).
ARPHAI	Operational-systemic	The consortium connected CIECTI, the Ministry of Science, the Ministry of Health, provincial ministries, universities, a technology cooperative, and international cooperation. This demonstrates a distributed resource network. (Argentina_Salud.pdf, pp. 54-62, 67-74, and 84).
ARPHAI	Operational-systemic	The dashboard uses information from the Integrated Health Record and the National Health Surveillance System and is designed for provincial and municipal settings. It is integrated with the infrastructure and responsibilities of different levels of government. (Argentina_Salud.pdf, pp. 68-70 and 73-74).
ARPHAI	Political-organizational	The project prioritizes “an equity perspective, particularly regarding gender,” expressed through bias mitigation, careful management of databases, and diverse team composition. This incorporates explicit normative criteria into implementation. (Argentina_Salud.pdf, p. 61).
ARPHAI	Political-organizational	Clinical records were used “with the approval of an independent ethics committee.” An external ethical-oversight mechanism exists for data processing. (Argentina_Salud.pdf, p. 73).

ARPHAI	Political-organizational	The project developed cross-cutting lines of work on “Bias and Responsible Data Use,” formulated gender-related recommendations, and participated in debate on updating the Personal Data Protection Law. (Argentina_Salud.pdf, p. 74).
ARPHAI	Political-systemic	The agreement with the Province of Buenos Aires “opens a field of research” on digitization, epidemiological surveillance, and evidence-based decision-making. This strengthens coordination and legitimacy between the public health sector and the scientific system. (Argentina_Salud.pdf, p. 69).
ARPHAI	Political-systemic	This coordination occurs within the framework of the Salud Digital Bonaerense program and the Integrated Health Record, a federal strategy seeking collaboration among levels of government and health organizations. This is evidence of sectoral direction, although not of comprehensive AI regulation. (Argentina_Salud.pdf, pp. 69-70).
ARPHAI	Political-systemic, limitation	The project participated in debates on data protection, governance, human rights, and regulatory adaptation, but the document does not identify a comprehensive national law or regulation specifically governing AI applied to health. (Argentina_Salud.pdf, pp. 65 and 74).
ARPHAI	Political capacity to respond to failures	**Partial evidence. Bias auditing, an ethics committee, anonymization, and responsible-data-use protocols are present; however, no complaint or redress mechanism is documented for people affected by an automated result.**

Table 13. Aggregate Capacity Assessment: Brazil–Health

Level	Analytical capacity	Operational capacity	Political capacity

Individual	**Limited but observable evidence.** In **Laura–Virtual Triage**, physicians train the algorithms in accordance with hospital guidelines, which requires clinical knowledge to inform and contextualize the system. In **Optimization of Diagnoses in the SUS**, professionals must interpret automated results and prioritize cases for specialist review. For the **AI System to Automate Teleconsultation Transcription**, the SUS Digital framework provides for professional training, although the documents do not establish that this training has already been delivered specifically for the application. **There is insufficient evidence** of application-specific individual training for Helô, medication procurement, or voice-response robots.	**Partial evidence.** In **Laura–Virtual Triage**, physicians and care teams incorporate alerts, risk scores, and patient prioritization into their routines. In **Optimization of Diagnoses in the SUS**, the platform is intended to be integrated into professionals' workflows and support clinical decision-making. In **Helô**, approximately 300 staff members handle cases transferred to the human-assisted component. However, manuals, occupational profiles, and systematic workforce-adaptation processes are not described for most applications.	**Cannot be adequately assessed.** Measures aimed at preserving trust are observed—professional review, human-assisted service, fraud warnings, and consent—but the documents do not describe individual skills for building legitimacy, managing resistance, or restoring trust after AI failures.

Organizational	**Relatively high capacity.** **Laura–Virtual Triage** processes clinical variables, generates risk scores, and has been subject to effectiveness studies; **Optimization of Diagnoses in the SUS** is developing a national image repository, algorithms, and validation phases; **Helô** uses knowledge bases, phased implementation, and interaction data; the **medication procurement system** analyzes historical data, prices, demand, and anomalies; and the **voice-response robots** cross-reference epidemiological information using big data. Gaps remain: for Laura at HFA, no institution-specific metrics, formal human review, or bias assessment are reported.	**High capacity, although uneven across applications.** Responsible departments and teams, digital infrastructure, budget allocations, timelines, interoperable systems, and scaling mechanisms are in place. Notable examples include the Ministry of Health's IT department for the voice robots; Dataprev for Helô; the Inova HFA project for Laura; PROADI-SUS and Hospital Israelita Albert Einstein for diagnostics; and the Ministry of Health for transcription and procurement. Capacities are more consolidated in Laura and Helô, whereas procurement and transcription remain primarily in the planning or pilot stage.	**Medium-high capacity.** Organizations build alliances and legitimacy narratives through collaboration among ministries, hospitals, universities, companies, and social organizations. Helô emphasizes transparency, continuity, and official channels; Laura incorporates formal partnerships and data protection; and PROADI-SUS seeks to expand access to specialists. Nevertheless, there is little evidence of external auditing, citizen deliberation, or explicit protocols for responding to harm or algorithmic failures.

Systemic	**High capacity.** A scientific and technological ecosystem is in place, comprising ministries, hospitals of excellence, universities, research institutes, RNP, Finep, PROADI-SUS, and domestic developers. Laura was evaluated through collaborations with PUCPR, FGV, and Instituto Laura; the national image repository seeks to create data infrastructure for research; and the PBIA provides for repositories, predictive models, and investment in research and training.	**High capacity.** The portfolio demonstrates coordination among federal actors, hospitals, universities, technology companies, social organizations, and municipal governments. Particularly relevant are the MCTIC–HFA–RNP–Instituto Laura agreement, the INSS–Dataprev collaboration, PROADI-SUS–Hospital Israelita Albert Einstein, and the planned integration of federal systems for procurement and teleconsultations. Territorial expansion is still projected in several cases and has not always been completed.	**High capacity in policy formulation, but still incomplete in institutionalization and implementation.** The **Brazilian Artificial Intelligence Plan 2024–2028**, **Ministerial Ordinance GM/MS No. 3,691/2024**, the LGPD, telehealth regulations, and rules governing collaboration with social organizations provide sectoral direction. The PBIA establishes resources, targets, and indicators for multiple applications. However, the document itself indicates that the PBIA's general legal format remained under discussion, and no systematic oversight or compliance results are presented for all systems.

Table 14. Traceability Matrix by Application: Brazil–Health

Application	Capacity and level	Documentary excerpt or evidence
AI and Voice Response Robots	Analytical–organizational	"The system will cross-reference the information and, using big data and analytical tools, track who is at risk, who had contact with whom, where that person is located, and what their data are" (Brasil_Salud, p. 2).
AI and Voice Response Robots	Operational–organizational	"The system has been under development in the Ministry of Health's IT department for the past 20 days" (p. 3). The existence of a responsible department constitutes evidence of resources and internal implementation capacity.

AI and Voice Response Robots	Operational–organizational	“The IVR systems will also ask the person for authorization to make follow-up calls every eight, 10, or 12 hours” (p. 3). This indicates an operational procedure for follow-up and consent.
Helô	Analytical–organizational	“A second phase involving the creation of a knowledge base that makes it possible to tailor the service to the citizen’s profile” (p. 11).
Helô	Operational–organizational	“This initiative was implemented in phases. The first phase involved implementing a rule-based virtual assistant using keywords, and the second phase involved creating a knowledge base” (pp. 10–11). The phased implementation demonstrates organizational management and learning capacity.
Helô	Political–organizational	“With Helô, the INSS aims to promote greater transparency and expand opportunities for interaction by offering continuous service 24 hours a day, seven days a week” (p. 10).
Helô	Operational–individual	“Approximately 300 INSS staff members provide more than 3,000 service interactions per day” through the human-assisted chat (p. 17). The evidence shows the direct participation of public officials in hybrid human–AI operations, but does not establish specific training.
Helô	Political–organizational	“Helô operates exclusively within Meu INSS,” and the INSS warns that contacts through WhatsApp are scams (p. 17). Restricting service to official channels constitutes a measure to protect user trust and security.
Helô	Operational–systemic	“Dataprev mobilized its team of experts,” and the assistant’s development was “another technological collaboration with the National Social Security Institute” (p. 15).
Helô	Analytical–systemic	The planned modernization is built “with 13 AI models from the Amazônia IA ecosystem,” developed by a Brazilian company that acts as an “AI factory for Dataprev” (pp. 14–15). This demonstrates the availability of specialized external knowledge and technological development.

Laura–Virtual Triage	Analytical–individual	“Physicians train the algorithms to address various diseases” (p. 26). This is the most direct evidence of the participation of professionals with specialized knowledge in training and contextualizing the system.
Laura–Virtual Triage	Operational–individual	The system “issues alerts to the care team” and allows “the most critically ill patients to be seen as a priority” (p. 22). Professionals incorporate the algorithmic recommendation into clinical care.
Laura–Virtual Triage	Analytical–organizational	“The technology operates by analyzing more than 90 variables from clinical information” and generates “a risk score for clinical deterioration for each patient” (p. 26).
Laura–Virtual Triage	Analytical–organizational, limitation	The HFA fact sheet states: “Are there metrics to measure the tool’s effectiveness? No”; neither human review nor potential biases were formally considered during implementation at that institution (pp. 23–24).
Laura–Virtual Triage	Operational–organizational	The implementation “is part of the Inova HFA project, aimed at supporting and immediately adopting innovation in health care” (p. 22).
Laura–Virtual Triage	Political–organizational	Instituto Laura, HFA, MCTIC, and RNP “signed an agreement […] to promote the application of new artificial intelligence technologies in health care” (p. 22).
Laura–Virtual Triage	Analytical–systemic	“A study conducted in partnership by researchers from the PUCPR School of Medicine, Fundação Getulio Vargas, and Instituto Laura Fressatto” analyzed 24,100 patient encounters (p. 28).
Laura–Virtual Triage	Operational–systemic	The agreement brings together Instituto Laura, MCTIC, RNP, and Armed Forces hospitals, with the expectation of “scaling the solution to other health care facilities in Brazil” (pp. 24 and 26).
Laura–Virtual Triage	Political–systemic	The technology “complies with personal data security requirements […] such as the General Data Protection Law (LGPD),” and the data are processed in coded form and returned anonymously (p. 27).

Laura–Virtual Triage	Political–systemic	Municipal partnerships may be established “under Law No. 13,019/2014,” and the initiative is also supported by SUS telemedicine and telehealth regulations (p. 31).
Laura–Virtual Triage	Political–systemic	P.A. Digital procedures “follow parameters established by the World Health Organization and the Ministry of Health” (p. 33).
AI to Support Medication Procurement Decisions in the SUS	Analytical–organizational	The system “uses artificial intelligence to analyze historical data on purchases, prices, demand, and medication availability, generating optimized recommendations” (p. 34).
AI to Support Medication Procurement Decisions in the SUS	Operational–organizational	The architecture “is designed to integrate with SUS information systems,” including SNGPC and SADIHS (p. 35).
AI to Support Medication Procurement Decisions in the SUS	Analytical–organizational, limitation	“Because it is in the pilot phase […] no published results are available,” and “there are no independent evaluations of the system” (p. 35).
AI to Support Medication Procurement Decisions in the SUS	Operational–organizational	The PBIA allocates “R$ 2,496,000.00” and sets a target of implementing the system in ten units in the first year and fifty in the second (pp. 48–49).
AI to Support Medication Procurement Decisions in the SUS	Political–systemic	“The initiative is included in the Brazilian Artificial Intelligence Plan 2024–2028 as one of the priority actions in the health sector” (p. 34).
Optimization of Diagnoses in the SUS	Analytical–organizational	Hospital Israelita Albert Einstein is developing “a National Medical Image Repository, as well as artificial intelligence algorithms for the SUS” (p. 43).
Optimization of Diagnoses in the SUS	Operational–individual	The platform “will be incorporated into the work routines of public health network professionals” and will support case prioritization for specialist physicians (p. 43).

Optimization of Diagnoses in the SUS	Operational–organizational	“The cloud prototype and the algorithms are structured […] as a result, the platform will move into the validation and expansion phase” (p. 44).
Optimization of Diagnoses in the SUS	Analytical–systemic	The repository will make it possible to store examination histories “regardless of where in the country they were performed” and to use the data as a population-management tool (p. 43).
Optimization of Diagnoses in the SUS	Political–organizational	The project is being developed through PROADI-SUS and Hospital Israelita Albert Einstein, aligning the public system’s clinical, access, and efficiency objectives (pp. 42–44).
Optimization of Diagnoses in the SUS	Operational–systemic	The PBIA establishes model validation within six months, implementation in five pilot hospitals, and expansion to twenty hospitals, with R$ 60 million already invested through PROADI/MS (p. 49).
AI System to Automate Teleconsultation Transcription	Analytical–organizational	The system must create “a secure, robust, and responsible repository of structured clinical data, useful for monitoring, research, and development in health care” (p. 48).
AI System to Automate Teleconsultation Transcription	Operational–organizational	The PBIA sets a six-month development and validation period, implementation within one year, usage indicators, and a budget of “R$ 2,534,000.00” (p. 48).
AI System to Automate Teleconsultation Transcription	Analytical/operational–individual, indirect evidence	The Ordinance establishes “training for health professionals” as a structuring action (p. 53). However, the document does not demonstrate that this training has already been delivered specifically for the transcription system.
AI System to Automate Teleconsultation Transcription	Operational–systemic	The Ordinance requires connectivity infrastructure and platform interoperability with the RNDS, electronic health records, and Meu SUS Digital (p. 53).
AI System to Automate Teleconsultation Transcription	Political–systemic	Ministerial Ordinance GM/MS No. 3,691/2024 establishes SUS Digital–Telessaúde and sets requirements for informed consent, privacy, security, professional rules, and the recording of care in the medical record (pp. 51–53).

AI System to Automate Teleconsultation Transcription	Political–systemic, limitation	Although the system is a PBIA action, the document states that “the legal and institutional format is still under discussion” with respect to the Plan’s general formalization (p. 58).

Table 15. Aggregate Capacity Assessment for Chile - Health

Level	Analytical capacity	Operational capacity	Political capacity

Individual	**Limited evidence.** In DART, RAPID, Telesalud, MIRAI, and the Virtual Analyst, health professionals remain involved in interpreting or reviewing results: ophthalmologists review DART-positive cases; physicians decide treatments using RAPID reports; Teletriage teams assess requests; clinical teams incorporate the MIRAI score; and medical reviewers examine medical leave certificates referred by the Virtual Analyst. This presupposes professional knowledge for contextualizing results, but no specific training, AI-oversight manuals, technical profiles, or competencies for detecting bias or algorithmic errors are documented. Applications with partial evidence: DART, RAPID, Telesalud, MIRAI, and Virtual Analyst. (Chile_Salud.pdf, pp. 3-12).	**Partial evidence.** Professionals incorporate the tools into their routines: ophthalmologists review cases selected by DART; emergency staff use RAPID for stroke-related decisions; Teletriage teams process and prioritize requests; clinical teams integrate MIRAI into follow-up; medical reviewers intervene in cases flagged by the Virtual Analyst; and Superintendency analysts focus on complex complaints after automation. However, no information is available on training to address failures, individual contingency protocols, or mechanisms for systematic critical review. **Applications:** all six, with unequal intensity. (Chile_Salud.pdf, pp. 1-12).	**Not assessable due to insufficient information.** No direct evidence is identified concerning individual skills to explain the systems to patients or users, build trust, address resistance, communicate failures, or restore legitimacy after algorithmic errors.

Organizational	**Moderate evidence, with substantial asymmetries.** DART has clinical validations and sensitivity metrics; MIRAI was adapted and calibrated for the Chilean population; the Virtual Analyst uses clinical guidelines and technical documentation; and the Superintendency redesigned and automated stages of the complaint process. RAPID and Telesalud include analysis and prioritization processes, but not complete clinical evaluations. In nearly all cases, permanent algorithmic audits, bias evaluation, retraining policies, and life-cycle traceability mechanisms are lacking. Strongest evidence: DART and MIRAI. Intermediate evidence: Virtual Analyst and Isapre complaints. More limited evidence: RAPID and Telesalud. (Chile_Salud.pdf, pp. 1-13).	**Strong evidence.** All six cases demonstrate structures and processes for incorporating technology: DART operates in more than 170 facilities; Telesalud was deployed in 82 facilities under the Department of Digital Health; the Virtual Analyst transformed the processing of medical leave certificates; the Superintendency automated 34 stages of the complaint process; RAPID was incorporated into a high-complexity hospital; and MIRAI has ministerial funding and an interinstitutional pilot. Limitations remain regarding provider dependence, connectivity, equipment, the absence of detailed public budget information, and the lack of explicit structures for managing failures. **Applications:** all six. (Chile_Salud.pdf, pp. 1-12).	**Partial to moderate evidence.** Organizations justify the systems by their capacity to reduce time, expand coverage, prioritize risks, free specialists, and improve access. DART is also associated with debates on responsible AI; Telesalud includes a satisfaction survey; and the Virtual Analyst is reported in public accountability reports and in an academic repository of public algorithms. However, no specific citizen-participation mechanisms linked to algorithm design, permanent ethics bodies, mandatory external audits, or clear procedures for remedying failures are documented. Strongest evidence: DART, Telesalud, and Virtual Analyst. More limited evidence: RAPID, MIRAI, and Isapre complaints. (Chile_Salud.pdf, pp. 2, 4, 6, 8, and 11-13).

Systemic	**Strong evidence, although concentrated.** DART connects Minsal, TeleDX, public facilities, clinical research, and international networks. MIRAI links the Ministry of Health, the University of Chile, and MIT through a cooperation agreement, local adaptation, and calibration publications. Telesalud received support from PAHO and the governments of Germany and Japan. These cases demonstrate access to universities, companies, international organizations, and knowledge networks. RAPID provides international technology transfer, but without a published Chilean evaluation. Strongest evidence: DART and MIRAI; moderate evidence: Telesalud; limited evidence: RAPID, Virtual Analyst, and Isapre complaints. (Chile_Salud.pdf, pp. 3-12).	**Strong evidence.** Coordination networks are observed among ministries, health services, hospitals, CESFAM centers, universities, technology companies, and international organizations. DART and Telesalud were scaled across the public network; MIRAI is based on cooperation among Minsal, the University of Chile, and MIT; the Virtual Analyst was developed by FONASA, COMPIN, SONDA, and DataOn; and RAPID supports assessment of transfers from regional areas. Complaint automation coordinates Superintendency processes and relations with Isapre members. **Applications:** all six, although RAPID remains concentrated in one hospital. (Chile_Salud.pdf, pp. 1-12).	**Moderate but incomplete evidence regarding AI-specific governance.** The cases operate within health regulations, rules governing medical leave, Isapre regulation, and data-protection laws. The Virtual Analyst dossier mentions Laws 19.628 and 21.719 and the 2021 National AI Policy, while noting that the system predates the latter. RAPID is framed within digital-health and technological-modernization policies. Nevertheless, the document does not demonstrate a comprehensive, binding sectoral framework specifically governing transparency, explainability, auditing, bias, responsibility, and redress across the six applications. Most visible evidence: Virtual Analyst, RAPID, and Isapre complaints; less explicit linkage: DART, Telesalud, and MIRAI. (Chile_Salud.pdf, pp. 2, 6, and 12-13).

Table 16. Traceability Matrix by Application for Chile - Health

Application	Capacity and level	Document excerpt and assessment
Automatic Processing of Complaints Regarding Increases in Isapre Base Prices	Analytical-organizational	“The system automates the classification, document validation, and processing of complaints.” The organization has automated processes to analyze documents, recognize patterns, and classify complaints. (Chile_Salud.pdf, p. 1).
Automatic Processing of Complaints Regarding Increases in Isapre Base Prices	Operational-organizational	“The process redesign included reducing the total number of stages from 107 to 93, of which 34 were automated.” This constitutes a verifiable transformation of institutional processes and routines. (Chile_Salud.pdf, p. 1).
Automatic Processing of Complaints Regarding Increases in Isapre Base Prices	Operational-individual	“Freeing analysts from repetitive tasks made it possible to reassign human resources to cases of greater complexity and added value.” Officials adapted their tasks to a new division of labor between humans and automation. (Chile_Salud.pdf, p. 2).
Automatic Processing of Complaints Regarding Increases in Isapre Base Prices	Political-organizational, limited	“No user-satisfaction evaluations or service-quality metrics from complainants' perspective were found.” The absence of this evidence limits the ability to substantiate mechanisms of legitimacy, trust, and response to citizen concerns. (Chile_Salud.pdf, p. 2).
DART	Analytical-organizational	“It has undergone successive clinical validations, including a study published in Revista Médica de Chile [...] in 2021.” Clinical validation constitutes evidence of system-performance evaluation. (Chile_Salud.pdf, p. 4).
DART	Analytical-individual and operational-individual	The platform refers “only cases requiring specialized care to the ophthalmologist.” The specialist retains an interpretive and decision-making role, although the document does not demonstrate specific training in algorithmic oversight. (Chile_Salud.pdf, p. 4).

DART	Operational-organizational	The platform “is integrated with Minsal's teleophthalmology system” and operates in more than 170 facilities, processing more than 220,000 patients annually. This demonstrates resources, infrastructure, and internal coordination for large-scale operation. (Chile_Salud.pdf, pp. 3-4).
DART	Analytical and operational-systemic	It was developed by TeleDX, adopted by Minsal, validated through clinical research, and documented by the IDB as a responsible-AI case. This arrangement connects a company, government, health facilities, and knowledge networks. (Chile_Salud.pdf, pp. 3-4).
DART	Political-organizational and systemic	The IDB documented the system “as a reference case of responsible AI in health.” The dossier also records forums for discussing algorithmic responsibility and bias prevention. This contributes legitimacy and deliberation, although it is not equivalent to regulation or mandatory auditing. (Chile_Salud.pdf, p. 4 and subsequent section devoted to DART).
DART	Analytical-organizational, limitation	“Screening quality depends on the quality of the fundus photographs taken at the facilities.” Performance depends on variable technical conditions, requiring quality controls that the summary does not fully describe. (Chile_Salud.pdf, p. 4).
RAPID Platform	Analytical-organizational	The system “analyzes brain images [...] to calculate required response times, assess possible transfers from regional areas, and reduce the risk of death or disability.” The organization has automated analysis to support clinical decisions. (Chile_Salud.pdf, p. 5).
RAPID Platform	Operational-individual	RAPID generates reports that guide “the clinical decision regarding the treatment to be followed.” The final decision remains with the medical team, although no training programs or protocols for disagreement with the recommendation are identified. (Chile_Salud.pdf, p. 6).

RAPID Platform	Operational-organizational	The Public Emergency Care Hospital was “the first Chilean public hospital to implement this technology for stroke management.” Adoption demonstrates infrastructure and transformation of high-complexity emergency processes. (Chile_Salud.pdf, p. 5).
RAPID Platform	Operational-systemic	“The system makes it possible to assess potential transfers of patients from regional areas, extending the reach of specialized diagnosis beyond Santiago.” It performs a territorial-coordination function, although the platform remains installed in only one hospital. (Chile_Salud.pdf, p. 6).
RAPID Platform	Political-systemic, contextual evidence	“The initiative forms part of the technological-modernization agenda of the public hospital system [...] within digital-health and AI-adoption policies.” This links the application to a sectoral orientation, but does not substantiate specific oversight or responsibility rules. (Chile_Salud.pdf, p. 6).
RAPID Platform	Analytical-organizational, limitation	“No Chilean academic publications evaluating the system's clinical impact in the context of the public system were found.” This absence prevents substantiation of consolidated local evaluation capacity. (Chile_Salud.pdf, p. 6).
Telesalud	Operational-organizational	“Teletriage teams at each CESFAM evaluate requests and select the most appropriate response for each case, prioritizing according to risk.” The system is incorporated into primary-care routines and retains professional intervention. (Chile_Salud.pdf, p. 8).
Telesalud	Operational-systemic	It was scaled “nationwide under the direction of Minsal's Department of Digital Health, with support from the Pan American Health Organization and the governments of Germany and Japan.” A national and international coordination network exists. (Chile_Salud.pdf, p. 7).

Telesalud	Political-organizational	“A satisfaction survey administered to 2,500 users during the pilot phase reported improvements” in communication, shorter queues, and greater visibility of demand. User consultation provides evidence of feedback and legitimacy, although not of participation in algorithm design. (Chile_Salud.pdf, p. 8).
Telesalud	Analytical-organizational, limited evidence	The platform makes it possible to “visualize unmet demand and manage waiting lists,” but no indexed publications on clinical results were found. Management information is produced, but clinical evaluation is insufficient. (Chile_Salud.pdf, p. 8).
Telesalud	Political-organizational, limitation	The document warns that internet access and digital literacy may exclude older adults and other groups. A risk of inequality is recognized, but no specific algorithmic or institutional measures to mitigate it are described. (Chile_Salud.pdf, p. 8).
MIRAI	Analytical-systemic	“In 2022, the University of Chile signed a cooperation agreement with MIT to adapt and validate the model for the Chilean population, with funding from the Ministry of Health.” This is direct evidence of an international scientific network, public funding, and joint knowledge production. (Chile_Salud.pdf, p. 9).
MIRAI	Analytical-organizational	“The model was adapted to the characteristics of mammograms obtained in Chile's public network and calibrated to the epidemiological distribution of the local population.” Adaptation and calibration demonstrate organizational technical capacity. (Chile_Salud.pdf, p. 10).
MIRAI	Analytical and operational-individual	The risk score “is integrated into the health team's clinical assessment to define a personalized follow-up plan.” The team retains clinical interpretation, but no manuals or specific training for questioning the model are substantiated. (Chile_Salud.pdf, p. 10).

MIRAI	Operational-organizational	The pilot involves Minsal and the Faculties of Physical and Mathematical Sciences and Medicine at the University of Chile, in addition to ministerial funding. An interorganizational structure exists for piloting, adaptation, and evaluation. (Chile_Salud.pdf, p. 9).
MIRAI	Analytical-organizational, limitation	The results are “preliminary and require validation in a larger cohort.” The capacity is therefore still developing and cannot be considered fully consolidated. (Chile_Salud.pdf, p. 10).
FONASA Virtual Analyst	Analytical-organizational	“Its database is fed by clinical guidelines, information on authorized specialists, and the average number of leave days for each health condition.” A structured process exists for integrating clinical information to feed the model. (Chile_Salud.pdf, p. 12).
FONASA Virtual Analyst	Operational-individual	The system classifies medical leave certificates into those eligible for direct approval and those that “require review by a medical reviewer.” Professional intervention is concentrated on cases flagged by the model. (Chile_Salud.pdf, pp. 11-12).
FONASA Virtual Analyst	Operational-organizational	In 2019, “95% were processed by the Virtual Analyst system, and 68% of those medical leave certificates were approved and signed in bulk.” This demonstrates broad incorporation into FONASA and COMPIN's ordinary processes. (Chile_Salud.pdf, p. 12).
FONASA Virtual Analyst	Operational-systemic	“Development was carried out jointly by FONASA, the company SONDA, and the consulting firm DataOn, with the COMPIN Medical Review Office as the implementing unit.” Coordination exists among a public agency, a medical unit, and technology providers. (Chile_Salud.pdf, p. 12).
FONASA Virtual Analyst	Political-organizational	The system is documented in institutional public-accountability reports and in the Algoritmos Públicos repository. This provides publicity and visibility, although the document itself clarifies that transparency comes from an academic initiative rather than a regulatory obligation. (Chile_Salud.pdf, pp. 11-13).

FONASA Virtual Analyst	Political-systemic	The dossier identifies medical-leave regulations, Law 19.628, and Law 21.719 on sensitive personal data as the applicable framework. Nevertheless, it states that the system predates the 2021 National AI Policy. The regulation is general rather than application-specific. (Chile_Salud.pdf, p. 12).
FONASA Virtual Analyst	Analytical and political-organizational, limitation	“No evidence was identified [...] regarding model-performance metrics, a retraining policy, external algorithmic auditing, or appeal mechanisms.” This is a central gap in technical oversight, accountability, and redress. (Chile_Salud.pdf, pp. 12-13).

Table 17. Aggregate Capacity Assessment for Colombia - Health

Level	Analytical capacity	Operational capacity	Political capacity

Individual	**Partial evidence - NAO.** The use of simulated scenarios is documented so that students and health-trained personnel can interact with cases similar to those they will encounter in clinical consultations. This indicates the development of knowledge for interpreting and applying technologies in a clinical context. However, the evidence does not demonstrate specific training for critically evaluating algorithms, identifying bias, or challenging their results, as required by individual analytical capacity. Conoce Tus Riesgos provides no evidence regarding training or the characterization of technical profiles. (Colombia_Salud.pdf, pp. 30, 32, and 38).	**Partial evidence - NAO.** The simulation of clinical cases demonstrates preparation to incorporate digital technologies into professional practice. NAO is also used to communicate treatments, care instructions, medications, and diets. Nevertheless, the document does not describe manuals, staff action protocols, training programs, or competencies for responding to AI failures. (Colombia_Salud.pdf, pp. 30, 32, and 38).	**Not assessable due to lack of information.** No evidence is identified for either application regarding individual skills to build trust, explain AI, negotiate resistance, form alliances, or restore legitimacy after a technological failure.

Organizational	**Moderate evidence - both applications.** Conoce Tus Riesgos was developed internally by the Ministry and processes a 17-question questionnaire using an epidemiological risk model to generate individualized profiles. NAO is embedded in activities of the Military Hospital's Subdirectorate of Teaching and Scientific Research, which works with social robotics, mixed reality, AI, and clinical-prediction algorithms. However, the document does not describe independent evaluations, permanent auditing protocols, bias controls, or algorithmic life-cycle monitoring. (Colombia_Salud.pdf, pp. 1-2, 30, and 32).	**Moderate evidence - both applications.** The Ministry developed and maintains a nationwide application available on Android and iOS and connects its results to preventive interventions by EAPBs, IPSs, and health personnel. The Military Hospital incorporated NAO as part of an institutional strategy to humanize care and adapted it through content and interaction protocols for oncology. Nevertheless, the dossier does not report a specific budget, a maintenance structure, a unit responsible for resolving failures, or formalized contingency procedures. (Colombia_Salud.pdf, pp. 1, 4, 15-16, 18, 24, and 30).	**Partial evidence - both applications.** The Ministry presents Conoce Tus Riesgos as an instrument for prevention and connection between citizens and the health system. The Military Hospital frames NAO within a strategy to humanize care, helping build a narrative of usefulness and acceptance. However, no mechanisms are identified for deliberation, citizen participation, external ethical auditing, or institutional resolution of disputes and failures. (Colombia_Salud.pdf, pp. 1-2, 4, 18, and 28-30).

Table 18. Traceability Matrix by Application for Colombia - Health

Application	Illustrated capacity and level	Document excerpt and rationale
Conoce Tus Riesgos V1.0	Analytical-organizational	“The application incorporates a risk calculator based on epidemiological models validated for assessing cardiovascular and metabolic risk. The system processes responses to the 17-question questionnaire through an algorithm.” The organization has an analytical process for producing risk profiles, although the document warns that the use of machine learning was not confirmed. (Colombia_Salud.pdf, p. 2).

Conoce Tus Riesgos V1.0	Analytical-organizational, with limitation	“No independent academic evaluations were found regarding the validity of the algorithm used or the system's impact.” The excerpt shows capacity to generate results, but insufficient evidence of external evaluation, continuous validation, or risk oversight. (Colombia_Salud.pdf, p. 2).
Conoce Tus Riesgos V1.0	Operational-organizational	“The app was developed internally by the Ministry and is available on Google Play and the Apple App Store.” This demonstrates sufficient resources and organizational arrangements to develop and operate a nationwide application. (Colombia_Salud.pdf, p. 1).
Conoce Tus Riesgos V1.0	Operational-organizational and systemic	“The app is designed so that health-benefit-plan administering entities - EAPBs - health-service-provider institutions - IPSs - and health personnel can determine the risk faced by their users and patients.” This demonstrates a use architecture integrating different sectoral organizations and professionals. (Colombia_Salud.pdf, pp. 15-16).
Conoce Tus Riesgos V1.0	Operational-systemic	“As soon as the person's risk profile is identified, interventions are directed [...] along with who in the health system must respond to address these needs.” The application not only provides information but also seeks to distribute intervention responsibilities within the system. (Colombia_Salud.pdf, pp. 11, 18, and 24).
Conoce Tus Riesgos V1.0	Analytical-systemic, limited evidence	“Universidad del Valle disseminated the tool as a resource for identifying possible future diseases within its community.” There is a link with a public university, but the document substantiates only dissemination, not participation in algorithm design, validation, or scientific evaluation. (Colombia_Salud.pdf, p. 1).
Conoce Tus Riesgos V1.0	Political-organizational	The application was promoted “as a primary-prevention tool” and provides “personalized information” without requiring a medical visit. This institutional narrative associates the technology with prevention, access, and public utility, contributing to its legitimation. (Colombia_Salud.pdf, p. 2).
Conoce Tus Riesgos V1.0	Political-organizational, with limitation	The dossier includes a reference to the “2021 Privacy and Personal Data Protection Policy of the Ministry of Health and Social Protection.” This indicates the existence of a general policy applicable to data processing, but does not confirm specific rules on algorithmic transparency, explainability, or accountability. (Colombia_Salud.pdf, p. 6).

Conoce Tus Riesgos V1.0	Political-systemic, contextual evidence	“The digital-health agenda includes: interoperability of health records, a health-data analytics unit, the MinSalud Digital app [...] and the Digital Health CONPES.” The excerpt substantiates a sectoral digital-transformation framework, but does not establish specific regulation for this application or for AI. (Colombia_Salud.pdf, pp. 22 and 26-27).
Conoce Tus Riesgos V1.0	Political and operational-systemic, contextual evidence	An “enabled technology piloting platform, a regulatory basis for data exchange, and technical operating guidelines” were announced. These are relevant sectoral instruments for coordinating infrastructure and information exchange, although their direct link to Conoce Tus Riesgos is not demonstrated. (Colombia_Salud.pdf, p. 22).
NAO	Analytical-organizational	The Subdirectorate of Teaching and Scientific Research states that the hospital works “with mixed reality, social robotics, and artificial intelligence [...] and also to develop algorithms for predicting clinical condition and the best outcomes for patients.” This demonstrates an institutional foundation for technological research and analysis. (Colombia_Salud.pdf, pp. 30, 32, and 38).
NAO	Analytical-individual	For the health workforce, “material is prepared through applications that can be projected in simulated scenarios,” and students are exposed to cases similar to those they will encounter in consultations. This evidence supports an inference of technical-clinical learning, although not specific training in critical algorithm evaluation. (Colombia_Salud.pdf, pp. 30 and 32).
NAO	Operational-individual	“With augmented and virtual reality, we have students simulate real-life cases that will arise in their consultations.” Simulation develops capacity to incorporate technologies and adapt professional practice. (Colombia_Salud.pdf, pp. 30, 32, and 38).
NAO	Operational-organizational	“The Military Hospital adapted it to the Colombian clinical oncology context,” and the robot “can be programmed with specific content for each type of treatment.” This demonstrates adaptation of the tool to clinical processes and institutional needs. (Colombia_Salud.pdf, p. 4).
NAO	Operational-organizational	NAO communicates “details about what their treatment will involve, specific recommendations on the care they should follow, medications, and diets.” The tool is integrated into concrete oncology-support activities. (Colombia_Salud.pdf, pp. 30-32 and 38).

NAO	Operational-organizational, with limitation	“Its implementation requires personnel trained to program and maintain the robot. Acquisition and maintenance costs limit its scalability.” The document identifies critical resources, but does not confirm an existing budget, technical staffing structure, or formal training program. (Colombia_Salud.pdf, p. 4).
NAO	Political-organizational	The Military Hospital incorporated the robot “as part of its strategy to humanize health care and apply innovative technologies to clinical care.” The strategy provides an institutional narrative that legitimizes the technology through its contribution to well-being and the patient experience. (Colombia_Salud.pdf, p. 4).
NAO	Political-organizational, partial evidence	The robot is presented as “a pedagogical tool for emotional support” that promotes the self-esteem, self-sufficiency, and independence of pediatric patients. The justification centers on human values, but no participation, complaint, or failure-management mechanisms are identified. (Colombia_Salud.pdf, pp. 30, 32, and 39).
NAO	Analytical-organizational, with limitation	“No indexed academic publications were found evaluating NAO's clinical impact [...] using rigorous research methodology.” A consolidated capacity to evaluate results or risks therefore cannot be substantiated. (Colombia_Salud.pdf, p. 4).
NAO	Operational and political-systemic	**Not assessable. The dossier mainly describes an internal Military Hospital experience. It does not present interinstitutional agreements, coordination with other health entities, sectoral rules of use, or external oversight mechanisms specifically related to NAO.**

Table 19. Aggregate Capacity Assessment for Mexico - Health

Level	Analytical capacity	Operational capacity	Political capacity

Individual	**Limited evidence. Application:** “Mírame a los ojos.” The document states that 22 physicians in Zacatecas were being trained to incorporate the technology into their consultations. This substantiates an individual-preparation activity. However, the content of the training, manuals, criteria for evaluating transcription accuracy, and competencies for identifying system errors, bias, or limitations are not described. The physicians' capacity to act as critical evaluators of AI-generated results therefore cannot be fully confirmed. (Mexico_Salud.pdf, p. 10).	**Moderate evidence. Application:** “Mírame a los ojos.” Physicians incorporate speech recognition into their everyday consultations, partially replacing manual note entry with dictation and automatic transcription. The technology changes the work routine and enables more time to be devoted to observing and assessing the patient. The training of 22 physicians provides additional evidence of professional adaptation. Nevertheless, no individual protocols are identified for correcting transcripts, responding to failures, or resolving discrepancies between the recording and the note entered into the record. (Mexico_Salud.pdf, pp. 4, 7, and 9-10).	**Partial evidence. Application:** “Mírame a los ojos.” The program narrative emphasizes eye contact, humanism, closeness, and a respectful and empathetic relationship with patients. Physicians are presented as responsible for maintaining human interaction while technology assumes part of the documentation work. However, no information is available on competencies for explaining AI to patients, responding to concerns about recording and data processing, or restoring trust when an incorrect transcription occurs. (Mexico_Salud.pdf, pp. 4-5 and 9).

Organizational	**Partial to moderate evidence. Application:** “Mírame a los ojos.” The system was developed internally by IMSS's Directorate of Innovation and Technological Development, uses medical natural language processing and specialized clinical vocabulary, and is integrated with the electronic health record. IMSS also reports a 40% reduction in time spent writing notes. However, no independent academic publications, accuracy evaluations, bias audits, traceability protocols, data-quality controls, or system life-cycle evaluation mechanisms are identified. (Mexico_Salud.pdf, pp. 1-2, 4, and 7).	**Strong evidence. Application:** “Mírame a los ojos.” IMSS has a specialized directorate - DIDT - internally developed software, audio-capture hardware, physician licenses, computers in consulting rooms, and integration with the electronic health record. The program began as a pilot and expanded to different regions. It is also embedded in a broader institutional strategy covering infrastructure, information security, scalable applications, data centers, and technology governance. Nevertheless, no specific procedures are described for resolving speech-recognition failures or assigning institutional responsibility for errors in clinical notes. (Mexico_Salud.pdf, pp. 1-2, 4-5, 7, and 11-12).	**Moderate evidence. Application:** “Mírame a los ojos.” IMSS has constructed an institutional narrative legitimizing the application as a means of humanizing the consultation, improving quality, reducing administrative burdens, and strengthening the physician-patient relationship. The strategy was presented at a national meeting attended by the heads of the 35 state offices and directors of High-Specialty Medical Units. However, no patient consultations, participation by external organizations, ethical auditing, public accountability mechanisms, or procedures for addressing harm or disputes arising from failures are documented. (Mexico_Salud.pdf, pp. 4-5, 7, 9, and 11-12).

Systemic	**Not assessable with sufficient evidence.** The dossier does not identify participation by universities, public research centers, professional associations, international organizations, or external scientific networks in developing, evaluating, or overseeing “Mírame a los ojos.” The observed technical capacity is concentrated within IMSS, particularly DIDT. References to international companies such as Google, Amazon, and Microsoft are comparative and do not demonstrate collaboration with them. (Mexico_Salud.pdf, p. 11).	**Limited and primarily intra-institutional evidence. Application:** “Mírame a los ojos.” Program expansion is coordinated from IMSS central offices to its state offices and medical units. The national meeting with 35 state heads and 25 directors of High-Specialty Medical Units demonstrates coordination capacity within a large national organization. Nevertheless, no coordination is documented with other institutions in Mexico's health system, state governments, regulatory bodies, external development companies, or civil-society actors. The evidence therefore corresponds more to a national IMSS institutional network than to a consolidated systemic capacity in the Mexican health sector. (Mexico_Salud.pdf, pp. 11-12).	**Not assessable due to lack of information.** The document mentions an IMSS technology strategy with components related to infrastructure, security, data centers, and technology governance. It also refers to an agreement with the Cyber Police to receive security alerts. However, it does not identify laws, regulations, sectoral standards, external oversight authorities, or national agreements specifically directed at regulating AI in health, speech recognition in consultations, or the use of clinical information obtained through these systems. (Mexico_Salud.pdf, p. 12).

Table 20. Traceability Matrix by Application for Mexico - Health

Application	Capacity and level	Documentary excerpt and assessment

“Mírame a los ojos”	Analytical-individual	“In Zacatecas, 22 physicians are already being trained to incorporate this technology into their daily consultations.” The training demonstrates individual preparation, but the content related to critical evaluation, oversight, or result correction is not specified. (Mexico_Salud.pdf, p. 10).
“Mírame a los ojos”	Analytical-individual, limitation	The document does not present manuals, technical profiles of physician users, knowledge-assessment instruments, or criteria for verifying transcription accuracy. Individual capacity to understand the system's inputs, operation, and limitations therefore cannot be fully assessed.
“Mírame a los ojos”	Operational-individual	Physicians use the tool to “accelerate data entry and optimize consultation time.” This demonstrates incorporation of the application into routine Family Medicine practice. (Mexico_Salud.pdf, p. 7).
“Mírame a los ojos”	Operational-individual	“The time physicians devote to writing the medical note is reduced by 40 percent, allowing them to focus more on observing and assessing the patient.” The application redefines the distribution of professional time and tasks. (Mexico_Salud.pdf, p. 7).
“Mírame a los ojos”	Operational-individual	“Physicians no longer have to spend long periods writing their medical notes [...] they can dictate the information.” Staff adapt their clinical-documentation work to automated speech recognition. (Mexico_Salud.pdf, p. 9).
“Mírame a los ojos”	Political-individual, partial evidence	The tool enables the physician to “maintain eye contact and direct attention to the patient during the consultation.” This form of use may help preserve interpersonal trust and professional authority in relation to the technology. (Mexico_Salud.pdf, p. 1).
“Mírame a los ojos”	Political-individual, partial evidence	The source states that the technology promotes “a more respectful and empathetic physician-patient relationship.” However, it does not document how physicians explain the system, request consent, or respond to transcription errors. (Mexico_Salud.pdf, p. 9).
“Mírame a los ojos”	Analytical-organizational	“The system uses speech-recognition software with medical natural language processing to transcribe the dialogue between physician and patient in real time.” This demonstrates specialized knowledge for analyzing clinical language. (Mexico_Salud.pdf, p. 2).

“Mírame a los ojos”	Analytical-organizational	The software uses “specialized medical vocabulary developed internally by IMSS's DIDT.” The existence of in-house development demonstrates an internal technical foundation, although the composition and permanence of the specialized team cannot be evaluated. (Mexico_Salud.pdf, p. 2).
“Mírame a los ojos”	Analytical-organizational	IMSS reports that implementation “reduces by 40% the time physicians spend drafting medical notes.” An organizational measurement of operational efficiency exists. (Mexico_Salud.pdf, p. 2).
“Mírame a los ojos”	Analytical-organizational, limitation	“No academic publications were found evaluating the system's impact on the quality of medical care, patient satisfaction, or the reduction of errors in clinical documentation.” The lack of independent evaluation limits the capacity to understand effects, risks, and results. (Mexico_Salud.pdf, p. 2).
“Mírame a los ojos”	Analytical-organizational, limitation	Transcription quality depends “on the accent, the physician's diction, and the vocabulary used.” The dossier recognizes sources of error, but does not describe protocols to measure, mitigate, or correct them. (Mexico_Salud.pdf, p. 2).
“Mírame a los ojos”	Operational-organizational	“The system was developed by IMSS's Directorate of Innovation and Technological Development.” DIDT constitutes a specialized organizational unit responsible for technological development. (Mexico_Salud.pdf, p. 1).
“Mírame a los ojos”	Operational-organizational	The installed equipment includes “audio-capture hardware and automatic speech-recognition software.” Specific physical infrastructure exists to operate the application. (Mexico_Salud.pdf, p. 2).
“Mírame a los ojos”	Operational-organizational	“At IMSS Nuevo León, 27 Family Medicine Units have licenses enabling their physicians to use the tool.” This demonstrates the provision of licenses and deployment across multiple units. (Mexico_Salud.pdf, p. 4).
“Mírame a los ojos”	Operational-organizational	The system “captures the dialogue, converts it into text using medical terminology, and integrates it into the patient's Electronic Health Record.” Integration with the record demonstrates incorporation into pre-existing institutional infrastructure. (Mexico_Salud.pdf, p. 4).

“Mírame a los ojos”	Operational-organizational	The program “began at IMSS Nuevo León as a pilot plan in 2022, as part of the technological modernization being promoted nationwide.” A sequence of piloting and institutional expansion exists. (Mexico_Salud.pdf, p. 5).
“Mírame a los ojos”	Operational-organizational	IMSS's technology strategy includes “strengthening infrastructure, information security, an architecture with scalable applications [...] data centers, and technology governance.” This provides a broad organizational environment for sustaining the application. (Mexico_Salud.pdf, p. 12).
“Mírame a los ojos”	Operational-organizational	Between 2021 and 2024, “95,000 computer units” were acquired, and an investment of “3.097 billion pesos” was announced for equipment replacement. This evidence concerns IMSS's general technology infrastructure rather than a budget exclusively allocated to “Mírame a los ojos.” (Mexico_Salud.pdf, p. 12).
“Mírame a los ojos”	Operational-organizational, limitation	No specific procedures are documented for addressing speech-recognition failures, interrupting the system, recovering information, automatically correcting errors, or determining responsibility for an incorrect clinical note.
“Mírame a los ojos”	Political-organizational	The program seeks to “improve medical care and prioritize closeness with beneficiaries.” The organization legitimizes the technology through a patient-centered-care narrative. (Mexico_Salud.pdf, p. 4).
“Mírame a los ojos”	Political-organizational	IMSS states that the system “affects the quality of care for beneficiaries by prioritizing eye contact, humanism, and warmth.” The narrative links automation to values inherent in health care. (Mexico_Salud.pdf, pp. 4-5).
“Mírame a los ojos”	Political-organizational	The IMSS Director stated that the institution seeks to become “the major technology agency of the health sector” through its own models and programs. This constitutes a strategic statement intended to generate internal support and legitimacy for technological transformation. (Mexico_Salud.pdf, p. 11).
“Mírame a los ojos”	Political-organizational	The National Information Technology Meeting included “the participation of the heads of all 35 state offices.” This forum demonstrates coordination and support-building within IMSS. (Mexico_Salud.pdf, p. 11).

“Mírame a los ojos”	Political-organizational, limitation	No patient-consultation mechanisms, public information on the recording of conversations, ethical audits, complaint systems, or procedures for remedying harm associated with an erroneous transcription are identified.
“Mírame a los ojos”	Analytical-systemic	**Not assessable. The document does not substantiate an external network of universities, research centers, or specialized bodies that evaluates the application's effectiveness, risks, or biases.**
“Mírame a los ojos”	Operational-systemic, limited evidence	The heads of 35 state offices and 25 directors of High-Specialty Medical Units were urged to join the technological transformation. This demonstrates territorial coordination within IMSS, but not coordination across the health sector as a whole. (Mexico_Salud.pdf, pp. 11-12).
“Mírame a los ojos”	Operational-systemic, contextual evidence	IMSS has an agreement with the Cyber Police to receive security alerts. The agreement demonstrates external cybersecurity coordination, but the document does not establish a specific relationship with the application. (Mexico_Salud.pdf, p. 12).
“Mírame a los ojos”	Political-systemic	**Not assessable. No laws, regulations, standards, interinstitutional agreements, or external authorities are identified that specifically guide the implementation and oversight of AI in health or automated speech recognition in medical consultations.**