

REQUEST FOR INFORMATION **INFORMATION TECHNOLOGY SERVICES FOR THE DEVELOPMENT OF** **AN INTELLIGENT BUSINESS PROCESS AUTOMATION TECHNOLOGICAL** **PLATFORM**

RFI # IDB INVEST 25-003

Department: **ICT/GSI**

Beneficiary Country: **Regional**

The Inter-American Investment Corporation (IDB Invest) aims to be the partner of choice for the private sector in Latin America and the Caribbean. We finance projects to advance clean energy, modernize agriculture, strengthen transportation systems, and expand access to financing. For more information about IDB Invest please refer to IDB Invest's website at www.idbinvest.org

Section 1. Purpose of this RFI

- 1.1 The purpose of this Request of Information (RFI) is to obtain information, data, comments, or reactions from eligible¹ firms pertaining to state-of-the-art technology, designs, or technical literature related to products, systems, technologies, or other Services and estimated cost for budgetary purposes only. IDB Invest will evaluate the information submitted to determine which product, system, or technology should be identified in a future solicitation, typically a Request for Proposal (RFP). This method is commonly used as a research tool to obtain the latest industry information and to assist IDB Invest in determining the most appropriate technology for its intended application. **No contracts are awarded via this process.**
- 1.2 All eligible firms, as defined in the [IDB Invest Procurement Manual](#) may submit a Response. Firms that have the required experience and competence relevant to the assignment shall be assessed and compared, and the best qualified and most experienced firms may be invited to participate in a subsequent RFP.
- 1.3 This RFI is not to be construed as either an RFP or an offer to contract and in no way obligates IDB Invest to do so. IDB Invest reserves the right to reject any or all participating firms for any reason or for no reason without recourse, to request substitution and/or clarification of any information provided, to ask for interviews with the firm's management staff, and/or to visit the participating firm's site. IDB Invest does not bind itself in any way to select any participating firm. No debrief will be provided to firms that have not been shortlisted.

¹ The IDB Invest Procurement Manual establishes general eligibility requirements.

Section 2. Instructions to Respondents

2.1 Questions must be sent by email to danielrod@iadb.org by no later than **August 1, 2025, 3:00 PM EST**, using Annex B – Questions Form.

2.2 IDB Invest will submit the answers to all RFI participants by **August 8, 2025 (EOD)**.

2.3 Respondents must submit all the RFI documentation by email to danielrod@iadb.org by no later than **August 15, 2025, 5:00 PM EST**.

2.3 The act of sending information to IDB Invest in response to this RFI shall imply the Respondent affirms that the individual submitting the Response is duly authorized to release general company information and financial data.

2.4 Eligible firms may associate in the form of a Consortium/Joint Venture to enhance their qualifications. Such Consortium/Joint Venture shall appoint one of the firms as the representative, which will be responsible for the communications, and the submission of the corresponding documents.

2.5 IDB Invest now invites eligible firms to respond to this request, as per the intended Terms of Reference for the Information Technology Services. Interested firms must provide information establishing that they have the experience and are qualified to perform the Services. To ensure that all responses are evaluated in an equivalent fashion, eligible firms must submit a response that includes the information that clearly explains all issues addressed in the following section.

Section 3. Information Technology Services

3.1 The services include designing, building, deploying, and piloting an advanced technology platform that will be called *FactorIASostenible*. This platform will use generative AI and Robotic Process Automation (RPA) to automate complex business processes within ten (10) companies from sectors like Agribusiness, Manufacturing, Retail, Banking, and Telecommunications. The work will be organized into three main areas:

- i) Developing the central platform;
- ii) Customizing and integrating it with each company's systems;
- iii) Providing ongoing support, optimization, and training.

The pilot program will be expected to last about 12 months. It will begin with approximately one month of planning, followed by two to three months of designing processes and building the core technology. Next, over three to four months, the platform will be adapted and integrated into each company's infrastructure. Afterward, the solution will operate in a controlled pilot for four months, concluding with a final evaluation period of about one month.

3.2 Eligible firms must submit their Response following the subsequent order:

1) Basic Information including:

Legal Entity Information:

- a) Legal Entity complete name
- b) Legal entity complete address
- c) Legal entity phone number

Authorized person from the firm to receive notices:

- d) Name
- e) Title
- f) Phone number
- g) E-mail address

2) Background

3) Experience related to the requested services

4) Resources and financial capacity to carry out the requested services

5) Added value that the firm could offer to IDB Invest for this project

6) For budgetary purposes only, provide the estimated cost of your services as per Annex A – Terms of Reference.

Annex A Terms of Reference

1. Executive Summary

FactorIASostenible is a pioneering initiative led by IDB Invest aimed at accelerating Sustainable Digital Transformation within the private sector across Latin America and the Caribbean (LAC). Through this Request for Information (RFI), IDB Invest invites specialized vendors to participate in the design, development, deployment, and pilot operation of an advanced technological platform for intelligent automation of business processes.

The proposed solution will integrate multi-model generative Artificial Intelligence (AI) agents combined with Robotic Process Automation (RPA) technologies, orchestrated through a Programmable Control Model (PCM), enabling the autonomous, secure, explainable, and traceable execution of complex business workflows.

To maximize platform robustness and scalability, an Agent-to-Agent (A2A) collaboration orchestrator will complement the PCM. Consequently, PCM will deliver centralized governance, visibility, traceability, and risk management, while the A2A orchestrator will ensure horizontal scalability, dynamic redistribution of agent tasks, and continuity of operations even amidst the degradation of core components.

An automated testing framework will be integrated to evaluate each interaction in terms of accuracy, latency, and cost, aimed at reducing errors prior to production deployment, avoiding rework, and generating direct savings in both time and resources.

The platform will also include a multi-model AI routing module, dynamically assigning generative AI requests to the most suitable model depending on task complexity, required latency, and associated costs, always ensuring traceability and oversight of these decisions.

Initially, this initiative will be implemented as a 12-month pilot project, involving ten (10) Pilot Companies from strategic sectors (Agribusiness, Manufacturing, Retail, Banking, and Telecommunications) across different regional countries, although additional sectors may be included based on business priorities.

Each Pilot Company will deploy its own instance of the platform within its chosen technological infrastructure (either private or public cloud), adhering to its security and compliance policies.

The pilot structure will be organized into three defined blocks: i) Development and Implementation of the Core Platform; ii) Identification, Adaptation, and Integration with Pilot Clients; and iii) Maintenance, Optimization, and Knowledge Transfer.

Vendors may bid individually or for multiple blocks, based on their technical expertise and capabilities, ensuring full interoperability among components. This approach

encourages specialized provider participation and mitigates risks of technological and operational dependency.

Throughout the planned 12-month pilot execution, the platform's technical and operational capabilities will be validated, assessing concrete impacts in terms of productivity, efficiency, traceability, and regulatory compliance. Practical learnings will be collected, serving as a foundation for future scaling of the platform's usage.

To coordinate this multi-provider effort, IDB Invest will function as the pilot's Integration Office, strategically supervising the pilot, including access to a centralized operational dashboard that consolidates aggregated data from individual dashboards associated with each Pilot Company's technological instance.

Thus, IDB Invest will not host any technical components nor have access to confidential or sensitive data from any of the Pilot Companies, ensuring data sovereignty, local regulatory compliance, and mitigating potential operational, technological, and reputational risks associated with the pilot's execution for IDB Invest.

The primary objective of this pilot initiative is to generate recurrent value for client companies, both current and future, through developing innovative, secure, and scalable business models capable of effectively addressing competitiveness and sustainability challenges within the private sector.

Our value proposition integrates technological innovation in Digital Transformation with financing solutions, positioning IDB Invest as a key multilateral actor fostering sustainable economic growth in the region through the articulation of digital ecosystems, strengthening business capacities, and mobilizing capital toward high-impact initiatives aligned with IDB Invest's strategy.

The learnings obtained from successful pilot implementation will consolidate a technological platform with significant replicability and scalability potential, supported by robust and measurable practical evidence.

These learnings will serve as the foundation for IDB Invest to structure new financial products aimed at accelerating technological adoption through investments in Digital Transformation of business processes, technological infrastructure modernization, and strengthening digital capabilities in the human talent of participating companies.

2. Context

Countries in Latin America and the Caribbean (LAC) face structural challenges related to productivity, competitiveness, and sustainability, exacerbated by a persistent digital gap and an urgent need for technological modernization. Although significant progress has been made in connectivity, only 76% of the population has internet access², disproportionately impacting rural areas and lower-income sectors. This gap limits private sector companies' adoption of emerging technologies, negatively affecting their operational efficiency and innovation capabilities.

Closing the digital divide and modernizing technology within the productive sector is essential for social equity, integrating more individuals and SMEs into the digital economy, and enhancing sustainable economic growth.

The new vision of the IDB Group, captured in the institutional strategy **Transforming for Greater Impact and Scale**³, highlights the strategic opportunity to leverage disruptive technologies to maximize development impact. Among these technologies, Artificial Intelligence (AI) stands out due to its potential to significantly boost productivity, optimize resource use, and enable new business models. The IDB Group has also established its own AI framework, the **Artificial Intelligence Framework for the Inter-American Development Group**⁴, providing ethical and governance foundations to foster a robust ecosystem for responsible innovation.

In this context, IDB Invest, the IDB Group's private sector arm, plays a proactive and strategic role in promoting sustainable development by driving the adoption of digital technological solutions that help close structural gaps, strengthen business competitiveness, and promote a more inclusive and resilient economy in the LAC region.

To further this strategic purpose, IDB Invest is introducing the FactorIASostenible technology platform, an innovative initiative aimed at delivering tangible improvements in competitiveness and sustainability within the private sector.

The scope of this initiative extends beyond the mere automation of isolated tasks. It aims to enable the autonomous execution of entire workflows through a systematic and scalable approach, prioritizing security, traceability, and regulatory compliance within any Pilot Company implementation.

The intelligent automation platform represents an advanced solution integrating innovative generative AI and RPA technologies to transform critical business and operational processes within private sector companies, enhancing efficiency, agility, and adaptability in a highly competitive regional and global economic environment.

Therefore, the FactorIASostenible solution directly addresses the urgent need to

² <https://idbinvest.org/en/publications/smartphones-unlocking-potential-and-overcoming-challenges-latin-america-and-caribbean>

³ <https://www.iadb.org/en/who-we-are/institutional-strategy>

⁴ <https://publications.iadb.org/en/artificial-intelligence-framework-inter-american-development-group>

modernize operations and enhance productivity and efficiency in key strategic sectors in the region, including Agribusiness, Manufacturing, Retail, Telecommunications, and Banking.

Various international experiences confirm tangible benefits derived from adopting these technologies. For instance, global financial institutions⁵ have transformed critical business areas through AI-powered multi-agent systems, achieving significant productivity, efficiency, and profitability gains, along with substantial improvements in customer experience. In the industrial sector, manufacturing companies⁶ successfully scaling Industry 4.0 have reduced machinery downtime by up to 50%, increased productive performance by up to 30%, and significantly improved sustainability by optimizing energy, water, and raw material consumption.

It is important to highlight that the entire solution will be deployed within each Pilot Company's cloud infrastructure, adhering to their specific technological conditions and environments. IDB Invest will neither host nor operate platform components, will not have direct access to confidential or sensitive data, nor will it intervene in the daily operation of client systems.

This architectural decision reflects considerations of digital sovereignty and risk management, ensuring each company maintains complete control over its data and processes. It prevents operational, regulatory, and reputational risks associated with third-party information management that IDB Invest might otherwise face.

Given that client infrastructures will inevitably be heterogeneous, minimum principles of interoperability, security, and traceability will be consistently applied across all implementations. This approach ensures a common standard without imposing a single technology solution, facilitating integration with public, private, or hybrid cloud environments according to each Pilot Company's needs.

To ensure technical, functional, and strategic coherence throughout the pilot program, IDB Invest will establish an internal Integration Office. This office, directly managed by IDB Invest rather than external suppliers, will oversee progress across the three blocks into which the pilot will be divided, coordinate the different technical teams, validate inter-block deliverables, and ensure compliance with objectives set at the pilot's inception.

In practice, the Integration Office will act as the project's integrative and governance entity, resolving operational or technical ambiguities and ensuring the final solution functions as a coordinated, traceable ecosystem rather than isolated components.

This internal governance structure will be essential for the pilot's success, aligning efforts, clearly defining responsibilities, and ensuring effective leadership from IDB Invest in orchestrating Digital Transformation, guaranteeing coherent, integrated, and

⁵ <https://www.mckinsey.com/industries/financial-services/our-insights/extracting-value-from-ai-in-banking-rewiring-the-enterprise>

⁶ <https://www.mckinsey.com/capabilities/operations/our-insights/capturing-the-true-value-of-industry-four-point-zero>

sustainable development.

3. Objectives of the FactorIASostenible Initiative

The general objective of this initiative is to accelerate the adoption of intelligent automation solutions within private sector companies in LAC through the deployment of an advanced technological platform capable of autonomously executing comprehensive business process workflows. The platform will be secure, traceable, and scalable, serving as a demonstrative model for replication in other companies across the region.

The solution will adhere to cybersecurity, modularity, interoperability, responsible governance, and regulatory compliance principles, ensuring its feasibility in real and diverse business environments.

Additionally, the following specific objectives provide the groundwork for future multisectoral and multinational expansion in the region. Such expansion could be articulated through a new financing facility designed by IDB Invest, available to interested companies (current and future clients) as a mechanism to enhance their competitiveness and sustainability through adopting digital solutions.

- Technological Validation: Demonstrate, in a pilot environment, the technical and operational feasibility of the FactorIASostenible platform, verifying that orchestrated generative AI agents can plan, execute, and coordinate complex business tasks end-to-end, interacting with existing corporate systems (ERP, CRM, core banking, SCADA, etc.).
- Impact and Benefit Quantification: Measure the platform's operational and financial impact, including error reduction, time and cost savings, as well as improvements in productivity, traceability, transparency, regulatory compliance, and auditability of automated processes.
- Implementation of Responsible AI Governance Model: Deploy the platform under strict international standards for ethical governance, cybersecurity, and regulatory compliance, aligning with recognized global frameworks such as the NIST AI Risk Management Framework⁷ (RMF) to identify, mitigate, and monitor AI-related risks.
- Strategic Workforce Preparation for Automation: Support Pilot Companies in anticipating changes resulting from advanced automation, evaluating workforce impacts, and offering comprehensive training programs. These programs will include specific technical skills and transversal competencies (both hard and soft skills), targeting employees whose roles will evolve due to automation, enabling their transition to higher value-added roles.
- Generation of Learnings for Regional Scaling: Document and systematize knowledge acquired during the platform's construction, adaptation, and

⁷ <https://www.nist.gov/itl/ai-risk-management-framework>

evolution, and in managing operational and technical challenges with Pilot Companies. These insights will facilitate scaling the pilot to additional companies in the region, positioning IDB Invest as a strategic partner in private-sector digital transformation and regional economic impact generation.

- Creation of Recurring Business Opportunities for IDB Invest: Design new financial instruments dedicated to promoting digital transformation among participating companies, facilitating technology adoption, infrastructure modernization, and human talent investment. This new financing facility will enable the program's expansion to a broader group of companies in the region.

4. Project Scope (Three-Block Structure)

The scope of the solution to be contracted includes designing, building, deploying, operating, and evaluating the FactorIA Sostenible platform, intended to automate entire business processes using RPA and generative AI technologies. The platform must be built and managed with a modular approach that facilitates adaptability, maintenance, and scalability.

Initially, this platform will be implemented in ten (10) private sector companies in LAC, prioritizing Agribusiness, Manufacturing, Retail, Banking, and Telecommunications sectors.

The business process automation envisaged goes beyond individual tasks, autonomously covering end-to-end workflows from data ingestion to final result delivery. This pilot will validate tangible improvements in productivity, operational efficiency, traceability, regulatory compliance, security, transparency, and sustainability. The entire solution will be deployed exclusively in each Pilot Company's cloud infrastructure. IDB Invest will neither host nor execute any component of the solution nor access confidential or sensitive data. This approach minimizes operational, reputational, and regulatory risks and ensures that each company retains full control over its assets and processes.

Recognizing the heterogeneous nature of Pilot Companies' infrastructures, minimum principles of interoperability, security, and traceability will be consistently applied across all implementations (these principles will be defined functionally and technically in Block 2).

To ensure technical, functional, and strategic coherence, IDB Invest will establish an Integration Office. This office, directly executed by IDB Invest rather than external vendors, will oversee progress across the three blocks, ensure consistency in deliverables, coordinate various technical teams, and safeguard compliance with objectives established at the pilot's outset. It will also validate inter-block deliverables and resolve any operational, technical, or contractual ambiguities during the program execution.

The solution architecture must be secure, reliable, and ethical by design, complying with the highest standards of cybersecurity, AI governance, interoperability, traceability, and access control, and integrating mechanisms to mitigate bias-related risks.

Regarding specific security measures, the platform must ensure data encryption both in transit (protocols like TLS 1.3⁸ or higher) and at rest, logical segmentation of

⁸ <https://www.rfc-editor.org/info/rfc8446>

components, separation of environments (development, testing, and production with adequate isolation of each client's instances), robust authentication mechanisms (via OAuth2⁹ or OpenID Connect¹⁰ with multi-factor authentication), role-based access controls integrated with Pilot Companies' corporate identity management systems, and continuous auditing of all system access and automated decisions.

In particular, each AI action must be recorded with sufficient detail and context (including explanations or reasoning, where applicable) to guarantee complete traceability and facilitate potential inspections or technical audits.

Additionally, vendors must incorporate explicit safeguards to prevent the generation of inaccurate, biased, or harmful content by generative AI agents. These safeguards include content filters, cross-validation of generated responses, usage limits, and, where necessary, the possibility of escalating to human review. All these elements must be adequately logged for complete and traceable auditing afterward.

To facilitate provider contracting, optimize execution, and ensure pilot scalability, the functional scope has been structured into three complementary blocks:

- Block 1: Development and implementation of the Core Platform.
- Block 2: Identification, adaptation, and integration with Pilot Clients
- Block 3: Maintenance, optimization, and knowledge transfer.

Each block comprises differentiated activities and deliverables, allowing assignment of responsibilities to specialized vendors and mitigating operational, technological, or reputational dependency risks for IDB Invest. Although autonomous, all blocks must fully interoperate to ensure traceability, continuity, and coherence of the overall solution.

- Block 1: Development and implementation of the Core Platform.

This block covers the design, development, and implementation of the technological core of FactorIASostenible. The awarded vendor will be responsible for building the base platform, which will subsequently be replicated across individual client instances during the pilot execution. A modular, scalable, and secure architecture is required, capable of autonomous and continuous operation within diverse cloud environments, according to each client's technical specifications.

The resulting architecture must be cloud-neutral, supporting equivalent deployments on major public cloud providers, specifically Amazon Web Services (AWS), Microsoft Azure OpenAI, and Google Cloud Platform (GCP), the three most widely used cloud services in LAC, as well as private clouds if necessary. To achieve this neutrality, the use of portable and standard technologies, such as containers orchestrated by Kubernetes and cross-platform infrastructure as code, will be prioritized, avoiding vendor-specific dependencies.

Two complementary orchestration layers will be integrated within this architecture: the MCP, responsible for centralized supervision, and an A2A orchestrator that enables direct cooperation between agents to balance workload and maintain operational continuity. Both models will be governed by a shared DevSecMLOps framework and validated through continuous testing environments designed for early detection of performance and security regressions, thus reducing production

⁹ <https://oauth.net/2/>

¹⁰ <https://self-issued.info/?p=2573>

errors and total operational costs.

Portability of data and components is required so the solution can migrate between cloud providers with minimal effort, meeting consistent interoperability, security, and governance standards in any environment.

Each proposal must detail how portability across AWS, Azure, GCP, or other equivalent environments will be guaranteed, including secure configuration and credential management, unified authentication and authorization mechanisms, data encryption both in transit and at rest across platforms, and the ability to monitor and govern multi-cloud deployments through a common control framework.

The Core Platform will include components for process management, complete traceability of each automated task, monitoring and logging, user administration (such as identity and role management), version control for various modules, and comprehensive security mechanisms (authentication/authorization, encryption, vulnerability detection, etc.).

The primary technological component of this block is the development of a generative AI agent system capable of planning, executing, collaborating, reflecting, and adapting to various business flows, under centralized orchestration provided by a Control Model (MCP).

Thus, Block 1 will deliver an "intelligent automation factory," an environment where AI agents coordinate to achieve business process objectives according to defined rules, with automated supervision of their behavior.

It is essential that the architecture of these agents incorporates principles of explainability, resilience, and controlled self-learning, allowing them to improve performance over time without compromising governance (e.g., by logging all decisions and enabling audits).

The MCP orchestration will be centralized, enabling human supervision of key decisions, dynamic management of computational resources (e.g., adjusting agent instances according to workload), and implementing robust error-handling strategies.

Specifically, in the event of failure or unexpected situations, the system must automatically retry tasks, apply contingency or fallback mechanisms when an agent fails to complete an action, and escalate notifications to human operators when necessary. All this must ensure full traceability of each event and decision, allowing technical and functional auditing at any time.

To optimize performance and efficiency, the platform will incorporate a multi-model routing module, intelligently routing requests to the most appropriate generative AI model or combination of models. This routing will consider task complexity, response latency requirements, computational costs of each model, and data policies or company-specific constraints. For example, simpler or lower complexity requests might be resolved by lighter Small Language Models (SLMs), while highly complex or accuracy-critical tasks could be escalated to Large Language Models (LLMs).

The routing module will log each model assignment decision, ensuring complete traceability regarding the selected model (and its version), response times, and

associated costs. It will also integrate supervision mechanisms to adjust routing policies based on actual performance metrics. For instance, if a lightweight model's response quality deteriorates for a specific query type, the system can automatically redirect these queries to a more robust model, notifying administrators accordingly.

A benchmarking framework will be implemented as part of the technical architecture, enabling dynamic testing and transparent utilization of various generative AI models for end-users.

This multi-model approach ensures optimal efficiency and effectiveness by leveraging the strengths of each available AI model type and adapting flexibly to operational conditions.

The platform should integrate both market-leading LLMs provided by major players and optimized SLMs for local deployments or resource-limited environments. The LLMs considered must include top-tier alternatives such as OpenAI (GPT family), Anthropic (Claude 4 family), Meta AI (LLaMA 4), Google (Gemini 2.5 family), xAI (Grok 4), and Microsoft Azure OpenAI. Corresponding SLM versions from these manufacturers, designed for efficiency and performance in local or embedded computing scenarios, must also be considered.

Each model offers different strengths regarding capacity, speed, inference cost, and infrastructure requirements. The platform will establish clear criteria to evaluate which model to use per use case, measuring response quality (accuracy, coherence), observed latency, and transaction cost for each model in representative automated process scenarios.

Based on these evaluations, policies will be defined to automatically select the optimal model for each request in real-time through the multi-model routing module described earlier.

During the pilot, the vendor must demonstrate how they will conduct this benchmarking and maintain an updated model selection as new options or improved versions emerge in the market.

The solution should be adaptable, allowing the agile incorporation of new models and retraining or adjusting selection criteria as best practices and technological advances evolve in the AI field.

Upon completion of Block 1, the Core Platform and an initial set of five (5) end-to-end automated processes adapted to specific use cases will be implemented. Each process will cover one of the five priority sectors (Agribusiness, Manufacturing, Retail, Banking, and Telecommunications), with the possibility that one of these processes could be multi-sector.

- Block 2: Identification, adaptation, and integration with Pilot Clients.

This block serves a dual purpose. Firstly, it identifies and prepares specific use cases (processes) within the Pilot Companies where the platform will be implemented. Secondly, it involves adapting and integrating the platform into each client's infrastructure and operations.

The provider will interact with each of the ten (10) companies participating in the pilot. Initially, the provider will collaborate with IDB Invest and the Pilot Companies to select

up to three business processes per company suitable for automation (and document a broader portfolio of potential processes for the future).

Detailed process sheets will be developed, capturing the current flow, actors, input/output data, business rules, critical points, and baseline performance metrics (times, costs, errors, etc.). Based on this, the team will customize the platform's configuration for each case. This involves parameterizing the AI agents for the specific company context, training them with company-specific data or knowledge where applicable (always adhering to privacy guidelines), and adapting workflows to business particularities.

This block must also consider full technical integration with the client's internal systems, including developing APIs, connectors, or data pipelines to connect the platform with databases, ERP, CRM, or other applications involved in the process to be automated.

If necessary, Block 2 will support clients in configuring their cloud infrastructure to host the solution (e.g., provisioning virtual machines, containers, networks, or security certificates), following best practices and ensuring compatibility with Block 1's architecture. Each client deployment will also include enabling a dashboard per platform instance, offering customized visualization of relevant KPIs for the client and IDB Invest.

Finally, a bilateral technical governance protocol will be formalized with each Pilot Company, clearly defining roles and responsibilities (tasks performed by the provider, the client, and IDB Invest), change management procedures, incident escalation, service-level agreements, etc.

The final deliverable of this block will be a fully operational platform in each Pilot Client's environment, integrated into their processes and systems, with joint functional validation by IDB Invest and the Pilot Client, documented by signed acceptance, ensuring all implementations meet the minimum common principles of security, interoperability, and traceability established at the outset.

- **Block 3: Maintenance, optimization, and knowledge transfer.**

The third block focuses on ensuring operational stability, continuous improvement, and institutional sustainability of the platform during the pilot and setting the foundation for the subsequent period.

The provider will commence activities once the platform is deployed with each client (in coordination with other blocks) to establish necessary support and maintenance processes.

This includes proactive 24/7 monitoring of production instances, incident and exception handling (with defined severity levels, target response times, and escalation), preventive maintenance, and evolutionary updates to the platform as improvements or necessary patches emerge.

An essential component of this block is measurement and optimization. Regular evaluations of AI agent performance in production will be conducted, collecting metrics such as autonomy levels, error rates, response times, and adaptability to unforeseen situations.

Based on this data, the Block 3 provider will provide technical feedback to the Block 1 and Block 2 teams, highlighting opportunities for adjustments or improvements in the Core Platform or the configuration of specific processes. For instance, if metrics reveal suboptimal performance in certain tasks using a specific AI model, Block 3 could recommend evaluating alternative models or adjusting multi-model routing policies for those tasks, optimizing result quality or operational costs accordingly.

Another critical activity set of this block is the economic impact analysis for each Pilot Company. An ex-ante analysis (pre-automation) will document the existing process, including times, costs, errors, and baseline service levels. Subsequently, an ex-post analysis will replicate these metrics post-automation.

Comparing both scenarios will rigorously quantify the benefits obtained in each case, such as cost reduction percentages, man-hour savings, or improvements in user response times. Findings will be presented in clear, visually appealing reports for each Pilot Company.

Additionally, this block will capture and systematize pilot learnings by creating a repository of lessons learned by sector and process type, documenting deviations or unforeseen cases encountered and their solutions, and compiling emerging best practices to guide future implementations.

As part of the comprehensive approach supporting Digital Transformation driven by intelligent automation, a systematic digital skills training program will be implemented, targeting employees of each Pilot Company whose roles are directly impacted by technology adoption.

This program aims to facilitate effective skill acquisition, promote adaptability to change, and strengthen employee employability, prioritizing role reconversion and integration into new digital processes.

The instructional and pedagogical design will be comprehensive and robust, covering both technical skills (hard skills) and transversal competencies (soft skills), with special emphasis on new professional profiles emerging from automation. IDB Invest will lead the centralized development, implementation, and administration of these programs, delivered via modern, scalable, and highly available e-learning platforms through massive digital courses (MOOCs) and personalized training.

To maximize accessibility and customization, advanced synthetic avatars generated by generative AI will communicate in multiple regional languages (Spanish, Portuguese, and English), culturally and linguistically adapting to each Pilot Company's local contexts.

The program will include formal evaluation mechanisms, continuous monitoring of learning progress, and certification of competencies acquired by participating employees. This approach seeks to facilitate technological transition and empower human talent to actively contribute to their organizations' digital evolution.

Aligned with a commitment to responsible transition, Pilot Companies must formally and contractually agree to avoid mass layoffs directly resulting from automation. Instead, priority will be given to internal redeployment and continuous development of affected personnel. Furthermore, IDB Invest will mandate reinvestment of a portion of financial savings generated by automation into additional training and internal

talent capacity-building programs.

Although each block can be executed by a different provider, all blocks must interoperate fully with each other as components of a single comprehensive solution. Consequently, each provider will be responsible for implementing secure and standardized integration interfaces, ensuring seamless communication among Block 1, Block 2, and Block 3 in all possible directions (1↔2, 1↔3, 2↔3).

In practical terms, this involves developing well-defined APIs or web services for data exchange, commands, results, exception handling, etc., either in real-time or through scheduled synchronization, as appropriate.

The use of widely accepted protocols is recommended, such as RESTful APIs with JSON, OAuth2/OIDC authentication for securing connections, and asynchronous messaging queues (e.g., AMQP¹¹ or Apache Kafka¹²) to orchestrate events between components.

Integration specifications must ensure modularity—meaning modules can be updated or replaced without "breaking" others; end-to-end traceability, enabling each transaction to be tracked across blocks; and version compatibility, ensuring integrations with Blocks 2 and 3 remain operational with minimal adaptations if the Core Platform is updated in the future.

Each integration flow must be clearly documented, including input/output conditions and integrity verification mechanisms, facilitating initial implementation and issue resolution. IDB Invest, through the Integration Office, will validate that proposed interfaces comply with these criteria, genuinely enabling a coordinated and resilient ecosystem where all three blocks function seamlessly as one integrated platform.

Although each block has its objectives and deliverables, natural dependencies exist among them. For example, the success of Block 2 (client implementations) depends on the quality of the platform delivered in Block 1; similarly, improvements identified by Block 3 will feed back into the Block 1 team for future versions.

Therefore, vendors (if different) must work closely together, coordinating schedules and activities. IDB Invest, through the Integration Office, will organize regular joint meetings under inter-block technical committees to align progress, resolve bottlenecks, and exchange critical information.

All vendors must accept this collaborative dynamic and designate focal points for inter-block communication. Additionally, intermediate deliverables from one block can serve as inputs for another; for instance, architecture documentation (Block 1) will inform client solution designs (Block 2), and the maintenance plan (Block 3) will require detailed configuration information from Block 2. This is reflected in the definition of expected deliverables (section 5) and must be incorporated into each provider's work plans.

It is important to reiterate that the outlined scope covers a pilot involving ten (10) companies. However, IDB Invest envisions that if successful, this model could scale to many more organizations in the future. Therefore, vendors are requested to design solutions with scalability and replicability in mind, such as developing templates or standard configurations for new processes/sectors, automating deployments, and

¹¹ <https://www.iso.org/standard/64955.html>

¹² <https://kafka.apache.org/>

keeping documentation updated for onboarding new clients. A scalability-oriented design from the outset will add significant value to the proposal.

5. Expected Deliverables

This section details the products and outcomes each provider must deliver according to the block awarded, as well as the inter-block deliverables required to ensure the integration and coherence of the complete solution.

All deliverables must strictly align with the defined scope (section 4) and comply with agreed quality standards. Each deliverable will be reviewed and validated by the IDB Invest Integration Office, involving Pilot Companies when applicable, such as in document approval or testing.

Below are the expected deliverables listed by block:

- **Block 1: Development and Implementation of the Core Platform**
 - B1-01. Technical architecture document. Comprehensive specification of the Core Platform architecture, detailing modular component design, interactions, cloud-neutral infrastructure diagrams, multi-model routing strategy, data model, security controls (access and encryption), and technical governance model for versions and parameters, following enterprise architecture standards and distributed system best practices.
 - B1-02. Developed and implemented Core Platform. Source code and executables of the FactorIASostenible core: automation engine, reusable knowledge repository, traceability system, multi-model routing module, dashboards, version control, and user/role management. Must adhere to DevSecMLOps principles with Docker/Kubernetes containers, integrated unit testing, and infrastructure as code for reproducible deployment across multiple clouds.
 - B1-03. Orchestrated generative AI agent system (MCP). Set of several specialized agents (language, data analysis, business rules, etc.) coordinated by the MCP. Deliverables include functional documentation, decision diagrams, dynamic planning capabilities, reflection, and adjustment mechanisms, alongside resilience features (retries, timeouts, uncertainty management). Must demonstrate autonomous end-to-end task resolution in a controlled environment.
 - B1-04. Agent-to-Agent orchestrator (A2A). Horizontal component redistributing tasks among agents, balancing load, and maintaining operation if MCP degrades. Includes logical architecture, internal APIs, automatic reassignment policies, failure controls, and audit logs. Functional tests must demonstrate at least a 15% reduction in average latency and confirm that at least 95% of tasks complete successfully even when agent failure is induced during resilience tests.

- B1-05. Automated test harness. Comprehensive framework with scripts and synthetic data to measure MCP + A2A interaction accuracy, latency, and cost. Integrated into the CI/CD pipeline. Minimum requirements: coverage of at least 80% critical paths, three successful complete executions before production deployment, automatic critical defect reports, and inference cost baseline
- B1-06. Training and testing logs. Evidence of datasets, parameters, accuracy metrics, functional results, and decision traceability, including regulatory and cybersecurity compliance validation.
- B1-07. Operational monitoring dashboards. Configuration and deployment of dashboards per instance (Pilot Company) and a central dashboard accessible only to IDB Invest, featuring configurable alerts and real-time updates aggregating information from all client instances to enable a comprehensive pilot overview (without exposing sensitive individual data).
- B1-08. Continuous technical monitoring system. Infrastructure and application monitoring tools (Prometheus, ELK, CloudWatch/Azure Monitor, etc.) with automatic alerts, centralized log and metric collection, and secure remote management capabilities.
- B1-09. Technical documentation and manuals. Installation, configuration, operation, and maintenance guides covering security, version control, and disaster recovery, designed for ease of future deployments and scalability.
- B1-10. Regulatory compliance plan (Responsible AI). Document demonstrating alignment with the NIST AI RMF and detailing implemented risk mitigation measures (bias, privacy, misuse, etc.) in the solution.
- B1-11. Catalog of five (5) automated end-to-end processes. Source code, BPMN diagrams, prompt/template sets, test data, and validation metrics for each process. Processes must cover four priority sectors (Agribusiness, Manufacturing, Banking, and Telecommunications) plus one cross-sector process. Each process must pass the Automated Test Harness (B1-05) and document expected impact on operational KPIs, unit cost, and latency.

- **Block 2: Identification, Adaptation, and Integration with Pilot Companies**

- B2-01. Methodological document and process portfolio. Methodological manual detailing the procedure for identifying, analyzing, and prioritizing processes suitable for automation using FactorIASostenible. It must include eligibility criteria (characteristics making a process a good candidate for AI/RPA), information-gathering templates, and feasibility assessment guides.

Alongside this, deliver a documented portfolio containing at least 30 standard processes gathered during the initial phase across various sectors. Each standard process should include: functional description, current workflow, performance

metrics, identified automation potential, expected benefits, and relevant technical considerations.

- B2-02. Adapted and integrated solution per Pilot Company. Complete configuration of the FactorIASostenible platform for each Pilot Company, including the adaptation of two specific processes (selected from the inventory of 30) and integration with the client's internal systems. This involves platform parameterization, such as loading company-specific prompts or business rules, training or fine-tuning models using client data when applicable (respecting privacy policies), and implementing necessary technical integrations (APIs, connectors, ETL scripts, etc.).

Each delivery must include operational evidence: test cases executed in the client's environment demonstrating the successful completion of an automated workflow from start to finish. Additionally, specific documentation per Pilot Company must be provided, detailing integration architecture (systems connected and integration methods), configurations made, and any custom developments implemented.

- B2-03. Operational protocols and service agreements. For each Pilot Company, a formal document (agreed upon with the company) establishing the platform's operational protocols once integrated, and applicable service level agreements (SLAs) during the pilot.

This must include operational schedules, monitoring and local support responsibilities (Pilot Company vs. provider vs. IDB Invest), procedures for reporting and addressing incidents, target response and resolution times according to severity (aligned with Section 9 specifications), and contingency measures for prolonged incidents.

A change management section outlining how configuration adjustments will be requested and approved during the pilot, and an issue escalation framework defining first-, second-, and third-level support contacts from the provider, Pilot Companies, and IDB Invest must be included.

- B2-04. Technical-Functional consistency report. Upon completion of implementations, generate an analysis comparing the delivered solution for each client against the original Core Platform specification to identify adaptations or deviations made to accommodate specific cases, evaluating if these variations affect the vision of a single replicable solution.

The report must identify components or configurations differing among Pilot Companies, justify why variations were necessary (e.g., technical limitations in legacy system xyz at Pilot Company abc), and propose possible actions for standardization or reincorporation into the standard product.

This deliverable ensures the pilot concludes with clear insights into maintaining a common approach versus necessary customizations, providing valuable lessons for future scaling.

- **Block 3: Maintenance, optimization, and knowledge transfer.**

- B3-01. Maintenance plan (preventive, corrective, evolutive). Document per instance (per Pilot Company) describing planned maintenance tasks. It must detail periodic monitoring procedures, preventive maintenance routines such as scheduled restarts, log clean-ups, or integrity checks; handling of corrective incidents including reporting channels, technician assignments, target response times; and evolutive maintenance activities during the pilot, such as platform updates, deployment of new AI model versions if relevant improvements are released, or performance optimizations.

The plan should align with defined SLAs and include task prioritization to ensure preventive activities do not interfere with critical operations.

- B3-02. Performance and optimization report. Generate a consolidated monthly report summarizing key platform performance metrics per client and executed optimization actions.

This report must include platform usage statistics (processed volumes, average task completion time, automation rate vs. human interventions); incidents (type, frequency, resolution time), bottleneck analysis (e.g., modules consuming excessive time or resources); and improvements applied (parameter tuning, refactoring, changes in AI model assignment via multi-model routing, etc.).

Clearly highlight each improvement's impact (e.g., "response time reduced by 20% after optimizing xyz"), providing an objective basis for performance evolution evaluation. The report should also include operational lessons learned, identifying effective configurations, beneficial adjustments, or those that did not yield expected results, feeding back into Block 1 for future platform versions.

- B3-03. Economic impact analysis. For each Pilot Company, generate a comparative before-and-after report quantifying benefits from intelligent automation. This report must include cost and time metrics before implementation (based on historical data or validated estimates by the Pilot Company) and the same metrics after weeks/months of automated operation.

Calculate indicators such as percentage cycle time reduction, man-hour savings (with economic valuation), error or rework reductions, improvements in quality or satisfaction indicators linked to the process, etc. The analysis should also account for operational costs of the solution (e.g., cloud consumption, licenses if applicable, dedicated support hours) to present a net balance.

An executive summary format with clear comparative graphs and an approximate ROI summary of the pilot in each case is expected. This information will be crucial for justifying further expansions or scaling of the program.

- B3-04. Lessons learned repository. Prepare an executive document structured to capture lessons learned during pilot execution. It can be organized by categories (technology, change management, training, integration, etc.) or by use cases/sectors, including: expectations vs. actual outcomes, key challenges faced,

implemented solutions, and concrete recommendations for future similar projects.

Include both positive learnings (best practices to replicate) and identified improvement areas. This matrix will serve as input for IDB Invest in planning subsequent phases or new pilots and support Pilot Companies in their ongoing Digital Transformation journeys beyond this pilot.

- B3-05. Knowledge transfer program. Deliver a comprehensive instructional training program designed to upskill key personnel within each Pilot Company impacted by automation. The program will include digital courses (MOOCs) hosted on a modern educational platform equipped with multilingual synthetic avatars ensuring personalized and culturally appropriate learning experiences. IDB Invest's prior experiences through the BID Academy team can be referenced for design and implementation.

The proposed solution must include formal evaluation and certification systems and dashboards enabling detailed participant progress monitoring. Ad-hoc content will be developed and existing training materials integrated when appropriate to optimize resources and avoid duplication.

A consolidated report presenting quantitative and qualitative training outcomes, including participation, completion, and certification rates, scalability recommendations, and detailed budget usage, will be provided at the end.

- B3-06. Post-pilot sustainability plan. Document recommendations and next steps ensuring initiative sustainability post-pilot, covering technical aspects (e.g., migrating components to permanent client infrastructure, scaling the platform), financial aspects (cost models for operating at scale, potential funding sources or monetization strategies), organizational aspects (establishing an internal automation team, defining permanent roles), and governance aspects (policy updates, periodic AI risk reviews).

Propose a technology evolution roadmap, identifying valuable future functionalities not implemented in the pilot, including new advanced AI models or additional integrations. This plan will strategically guide IDB Invest in sustaining and scaling the FactorIASostenible initiative.

6. Tentative Program Timeline

The following tentative timeline is proposed for executing the pilot project, divided into phases. The phases and their durations may be adjusted according to the awarded provider's proposal and final coordination with pilot companies, but the aim is to maintain a logical sequence covering planning, technical implementation, deployments, pilot operations, and closure/evaluation:

- Phase 0 – Preparation (4-6 weeks). Formalization of contracts with vendors, formation of work teams, kick-off sessions with IDB Invest, and establishment of the Integration Office. Detailed adjustment of the work plan and final schedule per block. Initial coordination with Pilot Companies (designation of focal points, preliminary collection of environmental information).
- Phase 1 – Solution and process design (10-12 weeks). Completion of the Technical Architecture Document for the Core Platform (Block 1) will occur in parallel with the identification and analysis of processes within pilot companies (Block 2). Activities include information-gathering interviews with each Pilot Company, process mapping workshops, and prioritization sessions. At the end of this phase, the detailed architecture of the platform, specific use cases (processes) per company with requirements documentation, and the adaptation plan per client should be fully defined.
- Phase 2 – Core Platform construction (12-16 weeks). The provider responsible for Block 1 must ensure the implementation of the Core Platform according to the agreed design, including developing the orchestrator (MCP), AI agents, base integrations, security modules, dashboards, and other components. This phase will include internal testing cycles and continuous feedback from IDB Invest via the Integration Office to ensure alignment. Simultaneously, sandbox environments for testing in an isolated reference environment must be prepared.

During this phase, an automated testing environment will be built and integrated, and initial continuous validation cycles will be conducted to establish the baseline quality and optimize MCP+ A2A cooperation before deployment into client environments.

- Phase 3 – Adaptation and integration into Pilot Companies (12-16 weeks, partially overlapping with Phase 2). The provider for Block 2 will handle deploying the Core Platform into each pilot client's infrastructure and adapting it to their processes. This task will be staggered (not all clients simultaneously) to allow the Block 2 team to focus on a few clients at a time. For each Pilot Company, infrastructure provisioning, platform installation, internal systems integration, adjustment of AI agents with company-specific data, and comprehensive end-to-end testing are required. At the completion of each integration, acceptance sign-off will be obtained from the Pilot Company.

- Phase 4 – Pilot operation (maximum 16 weeks, ~4 months). Controlled operational period of the platform in all ten (10) companies, with active support from vendors. Block 3's provider will lead this phase, involving vendors from Blocks 1 and 2 as necessary.

During this phase, real performance will be monitored, configurations fine-tuned, usage and impact metrics collected, and incremental corrections or improvements made. Training sessions for personnel at each company will also take place. Significant adjustments (resolution of unforeseen exceptions, threshold calibrations, etc.) are expected within the first two months, with operations stabilizing afterward.

- Phase 5 – Closure and final evaluation (4 weeks). IDB Invest's Integration Office will receive consolidated analyses from final reports (performance, lessons learned, sustainability plan) and post-automation data from each Pilot Company. IDB Invest will lead the economic impact analysis presentation, distribute satisfaction surveys to key users, and conduct feedback workshops with each Pilot Company. Finally, orderly dismantling of infrastructure and components from Pilot Company instances will be executed.

Internally, overall pilot results will be presented to IDB Invest, and recommendations for the subsequent phase (scaling or adjustments) will be discussed.

This tentative timeline seeks a balance between speed and rigor. Achieving demonstrable quick wins in the short term without compromising solution quality and security is critical. Vendors may propose adjustments or alternative strategies (for example, phased pilot implementation, beginning with a subset of companies), provided they clearly justify how these changes enhance the likelihood of success.

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7. Emerging Risks and Mitigation

The innovative nature of FactorIA Sostenible entails certain emerging risks, especially associated with the use of generative AI and the integration of multiple technologies in critical business environments. The main anticipated risks are identified below, along with proposed mitigation measures that must be considered in proposals:

- **Risk of inappropriate or incorrect AI responses.** Generative models could produce incorrect, biased, or inappropriate content.

Mitigation measure: Implement content filters and cross-validation of model outputs (for example, having a second agent or module verify the first agent's response). Clearly define the extent to which AI can make decisions before requiring human approval (human-in-the-loop for sensitive cases). Train agents using relevant domain-specific examples and counterexamples to reduce errors. Maintain detailed logs of each generated output for auditing purposes.

- **Cybersecurity risk.** The platform will integrate multiple components and interact with corporate systems, increasing the attack surface.

Mitigation measure: Apply Zero Trust principles in design, including robust authentication for each interaction and segmentation of networks and data. Conduct penetration testing and vulnerability assessments before deployment. Ensure AI models, particularly external services, are accessed via encrypted and authenticated channels, and do not expose sensitive information in prompts or responses. Regularly update security patches for all components.

- **Data Privacy and Compliance Risk.** Processing business data (potentially sensitive) through AI models, particularly external APIs, could violate privacy policies or industry regulations.

Mitigation measure: Implement anonymization schemes for personal data before sending it to external AI services; preferably use models executed within client infrastructure for highly sensitive data. Sign data processing agreements with external AI providers if utilized, ensuring confidentiality, non-reuse of data, and guaranteed deletion. Include a consent management module, where Pilot Companies explicitly approve data usage conditions on the platform.

- **Technology integration risk (compatibility).** Challenges integrating the platform with heterogeneous legacy systems of each pilot company, causing delays or limited functionality.

Mitigation measure: In the initial phase of Block 2, conduct a thorough diagnosis of each client's infrastructure and systems. Design the platform with adapters or modular integration elements (e.g., microservices or middleware adaptable to source/destination systems). Proposals should include personnel experienced in integrating common ERP/CRM systems in the region. Plan connectivity and interoperability tests early (lab tests with client sample data, system stubs, etc.). Maintain realistic scope; if a system proves extremely difficult to integrate within the pilot timeframe, negotiate temporary solutions (e.g., manual data uploads) with the client to avoid blocking progress.

- **Supplier dependence/lock-in risk.** Using proprietary AI technologies or specific cloud services could create future dependence, increasing costs or complicating expansion.

Mitigation measure: Opt for a modular and cloud-neutral design (as noted in Section 4). When third-party AI models are used, structure the platform to allow provider changes with minimal effort (e.g., through multi-model routing and a model abstraction layer). Include contract clauses ensuring access to developed source code and trained models/instances, enabling IDB Invest or Pilot Companies to continue the project with another provider if necessary.

- **Adoption and organizational change risk.** Pilot company users may resist adopting the new platform due to fears (job loss, trusting AI) or lack of understanding.

Mitigation measure: Involve end users early in the design of use cases (through participatory methodologies described in Block 2). Implement a change management strategy with clear communications about AI objectives and scope, emphasizing that it augments rather than indiscriminately replaces work. Provide practical training demonstrating how the tool facilitates their tasks. Identify internal champions within each Pilot Company to serve as positive internal references. Ensure the user interface and experience are friendly and in the local language to reduce usage barriers.

- **Performance and Scalability Risk.** The platform might perform well with limited use cases but encounter performance issues when scaled to more processes or concurrent users.

Mitigation measure: Design for horizontal scalability using containers and microservices that can replicate to balance loads. Conduct stress and load tests with simulated high-volume data. Continuously monitor resource usage and latency for each component during the pilot; optimize code or redistribute workloads if bottlenecks are detected. Include architectural review milestones mid-pilot to incorporate necessary optimizations before scaling to more users/processes within each company.

- **Legal/Regulatory Risk due to AI.** Regulatory frameworks surrounding AI are evolving (e.g., the EU AI regulation serving as a reference for local data protection laws in LAC countries). New legal requirements may emerge during the pilot affecting its operation, such as explaining automated decisions to authorities or prohibiting certain data transfers outside the country.

Mitigation measure: Stay updated on regulatory developments in pilot countries. Design the platform with "explainable AI" capabilities to generate reports justifying decisions, aiding compliance with potential future explainability requirements. Adopt principles from frameworks like NIST AI RMF proactively for advanced compliance. Obtain periodic legal advisory (IDB Invest can provide guidelines) to anticipate changes. Ultimately, have contingency plans if a component must be disabled or modified due to new regulations—for example, if a country bans a certain cloud service, be prepared to migrate to a local

alternative.

These risks are not exhaustive, and vendors are expected to identify additional relevant risks based on their experience, including corresponding mitigation plans. A proactive and systematic risk management approach will be valued, including designating responsible parties, risk dashboards during the project, and escalation mechanisms for critical risks.

8. Data governance and digital sovereignty

A fundamental pillar of FactorIA Sostenible is to ensure robust data governance and fully respect the principles of digital sovereignty of participating countries and pilot companies. Given the distributed nature of the pilot (with components deployed in each company's infrastructure) and the use of generative AI, the following guidelines are established for secure, ethical, and regulation-compliant data management:

- **Data ownership and usage policies.** Each pilot company retains full ownership of its data, both the information provided to the platform and data generated by it (logs, AI outcomes, metrics, etc.). Suppliers' data use will be strictly limited to pilot purposes and aligned with permissions granted by each company. It is prohibited to use data from one pilot company to train models that benefit other pilot companies or for any other unauthorized purpose. Upon pilot completion, suppliers must return or delete (as agreed with each company) all provided data, without retaining copies, except those legally required as previously agreed.
- **Sensitive data access.** IDB Invest will never access confidential or sensitive data of the pilot companies. Its role is limited to aggregated oversight (individual and centralized dashboards) and strategic guidance. If technical support requires suppliers to access a client's actual data, it must occur under strict controls with prior client authorization (preferably anonymizing information whenever feasible). All data accesses will be logged in audit trails.
- **Local storage and data minimization.** Each company's operational data (documents, process records, databases) will remain, by default, within the client's infrastructure. The platform may process and produce outputs, but it must not replicate full business data into central repositories beyond client control. Only data essential for general orchestration or system enhancement, with prior approval, will be stored externally (e.g., in the supplier's cloud). In such cases, aggregated or anonymized data storage will be prioritized. A principle of data minimization will be applied: the platform and suppliers will handle only the data strictly necessary to fulfill defined use cases.
- **Sovereignty and cloud service localization.** Although the platform will be implemented in each client's cloud, some supplementary cloud services may be utilized (e.g., external AI APIs or notification services). Use of such services must respect sovereignty restrictions; for instance, if a country or company policy prohibits data leaving the territory, an external service located abroad will not be

used (or will be restricted to non-sensitive data with approval). When using international public clouds (AWS, Azure, Google), resources will ideally be deployed in geographic regions aligned with the client (preferably in data centers within their country or region). Each proposal must clearly state component localization, allowing companies to evaluate compliance with sovereignty policies. In uncertain cases, preference will always be given to on-premise or private architectures within the client's country for critical data components.

- **Data retention and deletion.** Retention policies will be defined for various types of data handled during the pilot. For instance, detailed audit logs might be retained for x months for forensic analysis, then encrypted and archived; transactional data may not require retention post-output generation. These policies must balance data value (continuous improvement, audits, compliance) against data footprint minimization for security. Upon pilot completion, each company will agree with the supplier which data remains (e.g., anonymized log repositories retained by IDB Invest for impact assessment) and which data to delete. All data deletions must be securely performed (verifiable erasure) and documented.
- **Data quality and integrity.** Given that automated processes rely on input data from various sources, integrity validation at ingestion points must be implemented. For instance, validating format and consistency before processing a CSV file uploaded by a user. When integrating multiple systems, data reconciliation mechanisms should be considered to detect source discrepancies. Data errors (missing fields, invalid formats) must either be corrected automatically where feasible or require human intervention otherwise. Additionally, when training AI models with historical client data (if applicable), data lineage must be documented, ensuring sufficient quality (cleanliness, representativeness) to avoid introducing model biases.
- **Privacy by design.** All platform functionalities must centrally consider privacy. For example, dashboards displaying metrics should avoid exposing sensitive, identifiable data. If recording chat sessions between an employee and an AI agent, evaluate if anonymizing names or identifiers is necessary. Compliance with applicable data protection laws or local regulations (e.g., Brazil's Lei Geral de Proteção de Dados, Argentina's Ley de Protección de Datos Personales, etc.) is mandatory for each pilot. Suppliers are encouraged to include data protection experts in their teams or hold certifications such as ISO 27701, demonstrating experience in handling sensitive data projects.

To operationalize these guidelines, a Data Governance Committee for the pilot will be established (including representatives from IDB Invest, suppliers, and designated representatives from each pilot company) to ensure data policy compliance. This committee will oversee formal agreements for data exchanges between parties, evaluating legal implications prior to approval. Additionally, to enhance transparency,

each pilot company will periodically receive a governance report detailing newly captured platform data, storage methods, access logs, and any security incidents. This will continuously foster trust in data management practices.

The success of FactorIA Sostenible will be measured not only in efficiency or savings terms but also by the effectiveness of data handling and protection throughout the process, setting a precedent of trust for future program expansions.

9. Service Level Agreements (SLA)

To ensure support and solution quality during the pilot phase, specific service levels regarding system availability, incident response times, and support channels are defined.

Below are the minimum expected Service Level Agreements (SLAs). Although economic penalties for non-compliance will not apply during this pilot, these levels will help monitor provider performance and ensure appropriate attention. Incident severity classifications and associated objectives are as follows:

- **Severity 1 – Critical.** Severe problem causing total platform downtime or complete interruption of essential functionality, affecting all users or critical processes without alternatives. Requires immediate attention.
 - Target response time: < 1 hour (24x7 support).
 - Target resolution time: < 4 hours (or implementation of an emergency temporary solution within this timeframe).
 - Support channel: 24x7 emergency phone line (in addition to notification via email/ticket).
- **Severity 2 – High.** Serious incident significantly degrading platform functionality or performance but not completely halting operations. May affect multiple users or an important process, although a temporary solution exists.
 - Target response time: < 4 hours (during standard or extended business hours, e.g., 8x5).
 - Target resolution time: < 1 business day (or mitigation within 1 day).
 - Support channel: Helpdesk/ticketing system and telephone contact during business hours.
- **Severity 3 – Medium.** Minor fault or important query partially affecting a non-critical functionality, with limited impact.
 - Target response time: < 1 business day.
 - Target resolution time: < 5 business days (or scheduled for the next version/update if not urgent).

- Support channel: Standard helpdesk (electronic ticket or email), tracked during business hours.
- **Severity 4 – Low.** Query or request for cosmetic improvement, typographical error, or issue with no appreciable operational impact.
 - Target response time: < 2 business days.
 - Target resolution time: In the next planned update (not urgent).
 - Support channel: Low-priority ticket.

The provider is expected to deliver monthly support reports including incident listings, severity levels, actual vs. targeted response and resolution times, identified root causes, and preventive actions implemented to avoid recurrence. This enables IDB Invest to monitor trends and demand improvements if patterns of problems are detected.

Regarding platform availability, a general uptime of at least 99% is targeted during each Pilot Company's operating business hours (to be defined with each company, typically Monday-Friday office hours). This equates to a maximum allowable downtime of approximately 1.6 hours per month. The provider must continuously monitor platform status, proactively notifying any downtime or significant service degradation, and initiating recovery actions according to incident severity.

Outside regular business hours, including nights, weekends, and holidays, the platform must continue operating autonomously, executing previously configured automated processes without manual intervention. Although active real-time support is not required during these periods, the provider must ensure automated monitoring mechanisms and alerts to detect and log critical incidents. It must also guarantee that critical processes include automatic recovery mechanisms or scheduled retries, with relevant incidents addressed promptly at the beginning of the next business period.

Given that this is a pilot phase, flexibility and cooperation among parties in response to unexpected events are anticipated. However, the defined service levels reflect a commitment to operational continuity even during this pilot. Vendors must size their support teams and architectures with the necessary resilience to meet these standards.

Support agreements must designate a service manager or liaison responsible for overall pilot service management, who will periodically meet with IDB Invest to review support KPIs, incidents, and Pilot Company satisfaction, making adjustments as needed.

10. Post-Pilot Considerations and Technological Evolution

In the case IDB Invest decides to execute an RFP, the resulting contract will exclusively cover activities required for developing and executing the pilot with the ten (10) companies. However, all parties should keep in view the horizon beyond the pilot to establish solid foundations for potential expansion or continuity of the FactorIA Sostenible program.

Some key considerations in this regard are:

- **Scaling to full production.** If the pilot is successful, IDB Invest may consider scaling the platform to a larger number of companies, and even potentially offering it as a commercial service (though currently this option is not being considered). Vendors must design and document the solution so such scaling is feasible, for example, modularizing components to facilitate licensing or replicating instances easily, avoiding dependencies on specific configurations from the ten pilot cases that could later be difficult to generalize, and planning operational models for larger scales (e.g., how would support be provided to 25 companies or even 100?).
- **Future business models.** Based on this pilot, IDB Invest is evaluating the structuring of financial instruments or business models to facilitate the adoption of intelligent automation by more companies. This could involve financing for scaling this or similar platforms integrating Digital Transformation strategies, technology leasing schemes, or even creating an AI solutions marketplace for businesses. Selected vendors participating in the pilot will have the opportunity to position themselves as preferred partners for these potential future expansions, provided they demonstrate commitment, quality, and alignment with IDB Invest's values.
- **Rapid technological evolution.** The world of generative AI and automation is evolving rapidly. During and after the pilot, new, more powerful language models and advanced techniques (such as efficient fine-tuning, federated learning, etc.) will emerge, along with updates to RPA systems and other involved tools.

The architecture defined should be flexible enough to incorporate technological improvements without requiring complete redesigns. For example, if a notably superior AI model appears (publicly known or developed by a new actor), the platform should be able to evaluate and integrate it via the mentioned multi-model module, maintaining or improving capabilities. Likewise, regarding RPA, the solution must adapt to new versions of operating systems, business applications, browsers, etc., ensuring future functionality.

- **Post-Pilot evolutionary maintenance.** IDB Invest may separately contract an evolutionary maintenance service after completing the pilot to continue enhancing the platform before broader scaling. Vendors must include in their proposals an orderly transfer of knowledge and deliverables so that another provider, or the same one if rehired, can resume code and operations without depending on undocumented information. Therefore, maintaining good version management, documentation, and clean coding standards will be necessary to facilitate this continuity.

- Intellectual property and licensing. As detailed in the following section, IDB Invest will seek to retain intellectual property rights for key developments of the pilot, ensuring the possibility of scaling or sharing them within the regional ecosystem.

Vendors must plan the ownership transition upon completion of the pilot project, including delivering code, trained models, configurations, and other artifacts. If certain components fall under specific licenses (e.g., open-source libraries with particular licenses), this must be explicit and approved. Any third-party tools employed (commercial APIs, etc.) must be clearly listed to foresee associated costs or contracts in a post-pilot phase.

11. Intellectual Property

The intellectual property of all developments, components, and outcomes generated within FactorIA Sostenible will belong exclusively to IDB Invest and/or the Pilot Companies, according to the nature of each element, ensuring knowledge and assets remain in the region for long-term utilization.

The expected approach is detailed below:

- Source code and developed components: All software (source code, scripts, configurations, tuned AI models, etc.) specifically developed or configured by vendors for the pilot will be the property of IDB Invest. Upon project completion, the provider is expected to deliver all source code with sufficient documentation, enabling IDB Invest (or its designee) to maintain or evolve it. Vendors waive any ownership claims on this code, except for moral rights of authorship that may be recognized. IDB Invest may license or transfer such code to participating pilot companies or other IDB Group entities if desired.
- Pre-existing and standard components. If the provider includes previously owned components in the solution (such as proprietary frameworks, generic modules previously developed, pre-trained AI models, accelerators, etc.), they must explicitly declare it in their technical proposal. If usage is accepted, the provider will grant IDB Invest and pilot companies a perpetual, royalty-free, non-exclusive, irrevocable license to use those components within the project context (including future scaling).

If the solution includes third-party components (such as libraries, commercial APIs, or other services), the provider will be responsible for managing corresponding licenses on behalf of IDB Invest or the pilot companies, as agreed upon.

Vendors should avoid incorporating components whose licensing model could compromise the future scalability of the system, particularly those entailing disproportionately increasing costs with user or transaction growth. Likewise, contractual commitments that limit flexibility for expansion, replication, or transfer of the solution to other entities or operational contexts must not be

established.

- AI models and trained data: Any generative AI model trained or fine-tuned during the project using Pilot Companies' data must be delivered upon project completion. The resulting model will be considered joint property of IDB Invest and the corresponding Pilot Company, especially when the model incorporates knowledge derived from such data.

In practical terms, the trained model instance must be deployed in the Pilot Company's infrastructure, and IDB Invest may request a copy for backup, auditing, or replicability purposes. For third-party models used without fine-tuning (e.g., commercial APIs like OpenAI in black-box mode), neither property transfer nor model delivery applies.

However, if specific models are developed during the project, such as a classifier trained with pilot data, the provider must deliver source code, configuration parameters, and trained weights, ensuring future reuse and maintainability.

- Documentation, manuals, and methodologies. All documentation produced (technical manuals, process identification methodologies, templates, reports) will be freely available to IDB Invest. IDB Invest should be able to share parts of this documentation with other companies, consultants, or include them in future publications without restrictions. Vendors transfer rights of reproduction, adaptation, and dissemination of these materials. Whenever possible, documentation will adopt open licensing approaches to maximize reuse.
- Copyright and Recognition. IDB Invest may, at its discretion, publicly recognize vendors' contributions (e.g., listing the development company in a final report). However, vendors may not publish or publicly disclose project results or details without written authorization from IDB Invest during the execution and a reasonable period afterward, except for general information that does not compromise confidentiality.
- Innovations and Patents. If during the project, the provider conceives innovations eligible for patent or industrial property registration, they must notify IDB Invest. Such cases will be analyzed individually, ensuring IDB Invest retains at least a free license if the innovation directly derives from funds and data provided by IDB Invest and Pilot Companies.

Inter-American Investment Corporation
1350 New York Ave, NW, Washington DC 20577, USA
Web site: www.idbinvest.org

Annex B Questions Form
Submit questions by August 1, 2025



RFI IDB Invest 25-003 Questions Form

Company Name:	
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Question Number	Priority Indicator (H/M/L)	Date Submitted	Source Document, Section and Page number	Vendor's question	IDB Response