PROPOSAL FORM (BOLIVIA)

APPLICATION

- For your application to be considered, please do not modify the format of this form and respect the word limit specified in each case. Use the blank space to enter the answer in each section. **This application should not exceed 5 pages in length** (excluding CVs, work plan/schedule of execution, indicative budget, and bibliographical references that are part of the annex of this form).
- To apply, researchers and research teams must send this form (in PDF format) duly completed through the Web Submission Form. All annexes must be included in this application form and should also be attached individually, following the instructions provided in the online application system.
- This form is subject to the terms and conditions of the call, including the provision on "Arbitration, Applicable Law and IDB Privileges and Immunities."
- Due to technical limitations, we can only provide the proposal form in PDF format. You may export the document into Word format. If you are not able to do this, email Elton Mancilla, <u>eltonma@iadb.org</u>.

INSTITUTION	Name of the institution or associated institutions presenting this proposal.
	Heurística Lab and Busara (Project let by Heurística Lab)
PRINCIPAL INVESTIGATOR (PI)	Name, nationality, gender, email address, and affiliation (if applicable) of the PI. Note: if the proposal is selected, the leadership of the team cannot be deferred to another team member or external person. IDB must authorize changes in team composition and may constitute a reason to terminate the agreement.
	Name: Pedro Del Carpio Nationality: Peruvian Gender: Male Email address: <u>pedrodelcarpio@heuristicalab.com</u> . Affiliation: Heurística Lab
RESEARCH TEAM	 Name, nationality, gender, email address, and affiliation (if applicable) of all members of the research team. Note: if the proposal is selected, changes in team composition must be authorized by IDB and may constitute a reason to terminate the agreement. However, the principal investigator of the proposal should lead the entire project until its full completion.
	 Emiliano Díaz Del Valle, Mexican. Male. <u>emiliano.diaz@busara.global</u>. Busara Javier Rodriguez-Paiva. Peruvian. Male. javierrodriguez@heuristicalab.com. Heurística Lab Anna Yalouris, USA. Female. anna.yalouris@busaracenter.org Busara
ELIGIBILITY	Pursuant to IDB policies, Applicants must meet the following requirements: be a citizen of one of the 48 IDB member countries and not have family members who currently work at the Inter-American Development Bank or IDB Invest (jointly, "IDB Group") (to the fourth degree of consanguinity and second degree of affinity, including husband or wife). Please indicate in the space provided below whether all members of the research team (including the project leader) meet these requirements for participation.
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CO- AUTHORSHIP OF RESEARCH PRODUCT	Indicate the names of the team members who will be co-authors of the final research product (working paper considered for publication in the IDB publication series and/or external academic journals). Note: if the proposal is selected, changes in the co-authorship of the final research product (working paper and/or publication in an external academic journal) must be authorized by IDB and may constitute grounds for termination of the agreement.
	Pedro Del Carpio, Emiliano Díaz Del Valle, Javier Rodriguez-Paiva, Anna Yalouris.

I. APPLICANT DETAILS

II. SCOPE OF THE RESEARCH PROPOSAL

FOCUS COUNTRY	Indicate the name of the country or countries on which the research study will focus.
	Note: Only proposals analyzing the countries of Bolivia, Ecuador, Paraguay, and Suriname will be considered.
	Bolivia

III. RESEARCH PROPOSAL

TITLE	Tentative title of the research proposal / research paper.
TITLE	Understanding and reducing informality through a systemic and behavioral lens: Evidence from Bolivian microentrepreneurs
RESEARCH QUESTION AND OBJECTIVE(S) [Max. 200 words]	State the main research question(s) that the proposed study intends to answerBriefly state the general objective of the research study.
	What behavioral, economic, and regulatory factors sustain the persistence of labor and business informality among entrepreneurs in Bolivia? How can targeted interventions address these root causes to promote voluntary formalization?
	The general objective of this study is to develop a systemic diagnostic of informality in Bolivia that integrates behavioral, institutional, and socio-economic perspectives, and to design an evidence-based intervention that promotes formalization among urban informal workers.
	The study will explore how cognitive heuristics, misperceptions of benefits and risks, informal identity models, and low institutional trust interact with regulatory burdens, limited enforcement, and perceived costs to discourage formalization. These overlapping drivers of informality remain understudied in Bolivia, where most existing research has focused on structural variables alone.
	By unpacking the interaction between psychological, institutional, and economic constraints, the project seeks to inform the development of targeted solutions that are both behaviorally grounded and operationally feasible. The findings will offer practical guidance for policymakers and institutions looking to expand inclusion and improve the effectiveness of formalization efforts.
RELEVANCE [Max. 400 words]	 What is the public policy relevance of the proposed study? What is known about the topic in general and, specifically, in the LAC region? What are the knowledge gaps to be closed by the proposed research? Include relevant references
	Public policy relevance: Informality remains one of Bolivia's most persistent public policy challenges. An estimated 86% of Bolivian workers are employed informally—the highest rate in Latin America (Canelas & Niño-Zarazúa, 2023). Informal workers and microentrepreneurs in Bolivia operate outside tax and social protection systems, which can reduce productivity, fiscal revenue, and access to services. Although Bolivia introduced a Simplified Tax Regime in 1997 to encourage formalization among small businesses, Canelas and Niño-Zarazúa (2023) find that these reforms have had only modest effects and have not significantly reduced informality nationwide.
	What is known: Informality in Bolivia is a complex and heterogeneous phenomenon. For many low-skilled or marginalized workers, informal employment is a necessity stemmin from limited access to formal labor markets. Gender dynamics are particularly relevant. Studies show that nearly half of economically active urban women in Bolivia are informally self-employed, compared to about one-third of men

	(Andersen & Muriel, 2007). Female-run informal businesses operate at smaller scales, with reduced profits and weaker access to capital (Andersen & Muriel,
	2007). Institutional trust and perceptions of reciprocity also matter—many informal entrepreneurs view state institutions as distant or extractive. In peri-urban Cochabamba, for instance, some informal workers "reject the government's fiscal offer" and prefer to stay outside the formal system (Sheild Johansson, 2020). Finally, informality in Bolivia often expands during economic downturns, functioning as a safety net in times of labor market distress (Loayza & Rigolini, 2011).
	Knowledge gaps: Despite the scale of informality in Bolivia, empirical research on its behavioral and institutional drivers remains limited. Most existing studies emphasize structural and economic determinants, with little attention to cognitive heuristics, perceptions, or identity-based preferences. To date, no known study has applied a behavioral diagnostic or tested behaviorally-informed interventions to promote formalization in Bolivia through experimental or quasi-experimental methods.
	Strategic relevance: This proposal is one of four coordinated studies submitted by the consortium formed by Heurística Lab and Busara, targeting informality Bolivia, Ecuador, Paraguay, and Suriname. Conducting these studies in parallel would enable cross-country comparisons and the identification of shared patterns and local divergences in the drivers of informality. Insights from one country may inform intervention strategies elsewhere.
CONTRIBUTION	• What contribution do you propose to advance with your research compared with what is known in this area?
[Max. 400 words]	This study makes four distinct contributions to the literature on informality and to evidence-based policymaking in Bolivia and the region.
	First, it will produce a behaviorally informed diagnostic of informality in Bolivia. While Canelas and Niño-Zarazúa (2023) document structural drivers—including labor market segmentation and limited access to formal jobs—there remains little empirical insight into how psychological biases, risk perceptions, or identity-based preferences shape informal entrepreneurs' decisions. This research addresses that gap by integrating behavioral theory with local evidence to examine the cognitive and institutional frictions that sustain informality.
	Second, the study introduces a mixed-methods approach rarely applied in this field. It integrates a comprehensive literature review, in-depth qualitative interviews with at least 15 key stakeholders, and a follow-up quantitative survey to validate and expand the diagnostic findings. This methodological triangulation enables a rich understanding of informality from multiple angles—economic, behavioral, and institutional—and strengthens the design of the proposed intervention.
	Third, the project moves from diagnosis to action. Based on the insights generated, a behavioral intervention will be co-designed with local partners and tested using experimental methods to assess its causal impact on formalization intentions or behavior. This step addresses a major gap in the literature: while informal labor is well-documented in Bolivia, to our knowledge no study has combined a behavioral diagnostic with the design and experimental evaluation of a pilot intervention.
	Finally, this proposal is part of a coordinated research effort led by Heurística Lab and Busara across Bolivia, Ecuador, Paraguay, and Suriname. While each study is independently grounded in its national context, their shared design allows for cross-country learning. This coordinated research effort enables the studies to

	support each other—filling information gaps, sharing methodological lessons, and generating a cross-country evidence base that can inform region-wide strategies beyond isolated national findings.
CONCEPTUAL FRAMEWORK AND FRENDS [Max. 400 words]	 Provide initial ideas regarding conceptual or theoretical issues to consider in this paper. What relevant trends will this paper document?
	This study adopts a multidisciplinary conceptual framework that integrates behavioral economics with structural and institutional analysis to better understan the persistence of informality in Bolivia. Traditional economic models assume that informal entrepreneurs make rational decisions based on cost-benefit analyses—responding to formalization costs, expected returns, or the perceived probability of enforcement (Loayza & Rigolini, 2011). However, behavioral economics shows that decision-making is often shaped by bounded rationality, heuristics, and identity-related factors that can lead individuals to make suboptima or inconsistent choices.
	Several behavioral mechanisms are especially relevant in the context of informality. Present bias may lead entrepreneurs to overweigh immediate costs—such as time, paperwork, or anticipated tax payments—while undervaluing longer-term benefits like access to credit or legal protections. Status quo bias and procrastination may reinforce inertia, especially when the transition to formality requires navigating unfamiliar or uncomfortable bureaucratic processes. Loss aversion may deter informal workers who fear losing perceived autonomy or who associate formalization with increased financial or regulatory risk. These mechanisms are well-documented in the behavioral economics literature and have been explored in informality contexts outside Bolivia (e.g., de Andrade et al., 201 Bruhn & McKenzie, 2014).
	The concept of identity may also play a role. According to Akerlof and Kranton's (2000) theory of identity economics, individuals are influenced by internalized social categories that shape their behavior. For some informal entrepreneurs, formalization may not align with how they see their role or business type, especially when formal economic participation is perceived as bureaucratic, elitis or inaccessible.
	Women, in particular, face structural constraints that make formal employment difficult. Andersen and Muriel (2007) document how Bolivian women in informa microenterprises often face household responsibilities and time constraints that limit their ability to expand their businesses or transition to formal employment.
	In Bolivia, these psychological and practical barriers may be intensified by particularly low levels of trust in governmental institutions. For instance, informate entrepreneurs in peri-urban areas of Cochabamba have explicitly expressed skepticism toward state involvement, perceiving formalization less as a benefit and more as a loss of independence (Sheild Johansson, 2020).
	The combination of administrative complexity, weak enforcement, and low perceived benefit from formalization exacerbates the psychological and practical barriers faced by many informal entrepreneurs. These insights justify a conceptua framework that recognizes informality as the result of both institutional constraint and behavioral dynamics, each reinforcing the other in ways that traditional mode alone cannot fully explain.

• Provide some papers that the paper will review.

REVIEW OF EMPIRICAL STUDIES

[max. 400 words]

• Discuss potential criteria that will be used to select papers to be included in the review.

This study will conduct a focused review of empirical research examining the structural, institutional, and behavioral drivers of informality, with particular emphasis on evidence from Bolivia and comparable Latin American countries. The review will inform the diagnostic phase, support hypothesis development for the pilot intervention, and help align the study with effective, tested approaches.

Bolivia-specific studies include:

- Canelas and Niño-Zarazúa (2023) examine informality in Bolivia through the lens of pension reforms (Renta Dignidad), noting the country's high informality rate (86%) and structural segmentation between involuntary informal workers and voluntary informal entrepreneurs. They argue that persistent informality reflects structural and institutional barriers that go beyond economic incentives alone.
- Andersen and Muriel (2007) analyze informality and productivity in Bolivia, highlighting significant gender disparities. They find informal self-employment particularly prevalent among women, shaped by household responsibilities, limited access to capital, and smaller business scale—reflecting structural gender-based constraints.
- Sheild Johansson (2020) explores informal workers' attitudes toward taxation in peri-urban Cochabamba, revealing widespread mistrust of state institutions. Informal entrepreneurs view formalization as a threat to their autonomy rather than a beneficial exchange, illustrating critical behavioral barriers to formalization.

Regionally, the review will include:

- Bosch et al. (2021) conducted a randomized controlled trial in Peru to test whether messaging strategies could improve compliance with labor laws among large formal firms. They found that deterrence messages emphasizing enforcement led to a measurable increase in worker registration with social security—particularly in very large firms—while softer behavioral nudges had no significant impact. The study highlights the importance of credible enforcement in promoting labor formalization within the formal private sector.
- Kettle et al. (2016), who tested behaviorally informed tax reminders in Guatemala. Social norm messages (e.g., "most people like you have paid") significantly increased tax declaration rates compared to control messages, offering a low-cost model for influencing compliance through psychological framing.

Selection criteria for the review include:

• Empirical studies focused on informal labor or micro and small enterprise behavior.

	• Research that includes behavioral, perceptual, or cognitive mechanisms influencing decisions.
	• Evaluations of policy tools such as simplified regimes, communication campaigns, or enforcement measures;
	• Priority given to Bolivian or Latin American countries with transferable lessons.
	This review will ensure the diagnostic and intervention phases are grounded in robust empirical evidence, incorporate the most relevant regional barriers to formalization, and avoid duplicating past approaches. It will also help position the study within ongoing policy debates across Latin America and contribute to the growing behavioral economics literature on informality.
POLICY EXAMPLES FROM THE REGION AND POLICY RECOMMENDATIONS [Max. 400 words]	 Provide potential policy examples that you could discuss in the paper and relevant features and characteristics. Present some initial policy recommendations that may emerge from the analysis presented in the paper.
	A central case in Bolivia is the Simplified Tax Regime (Régimen Tributario Simplificado), introduced to encourage small-scale enterprises to formalize by offering simplified compliance procedures and lower tax obligations. Despite its intent, this regime has had limited success in substantially reducing informality due to persistent structural and institutional barriers (Canelas & Niño-Zarazúa, 2023).
	Andersen and Muriel (2007) show that Bolivian women are more likely to engage in informal self-employment, in part due to household responsibilities and limited participation in the formal labor market. Female-operated informal enterprises tend to be smaller and less profitable than male-operated ones, reflecting structural barriers such as sectoral segregation and limited capital access. These findings underscore the importance of incorporating gender-specific constraints into the design of effective formalization policies.
	Bosch et al. (2021), in a randomized field experiment in Peru, found that enforcement-oriented messaging (e.g., reminders of inspection risk) increased formal worker registration in very large firms, while softer behavioral nudges had no measurable impact. Similarly, Kettle et al. (2016) tested behaviorally informed tax reminder letters in Guatemala. Messages based on social norms and salience significantly increased tax declaration rates compared to control messages, offering a model for low-cost interventions that influence compliance through framing rather than enforcement alone.
	These cases suggest that while simplification and regulatory reform are necessary, they are often insufficient on their own. Effective strategies must also address cognitive frictions, perceived relevance, and motivational barriers to formalization. Based on these insights and the forthcoming diagnostic and pilot phases, several policy strategies may emerge:
	• Reframed outreach campaigns that present formalization not as a bureaucratic obligation, but as a pathway to legitimacy, business growth, and protection—particularly when aligned with entrepreneurs' values and goals.
	• Digitally streamlined registration and renewal systems, designed with user input to reduce cognitive overload, present bias, and hassle costs in

	transitioning to formality.
	 Tailored communication strategies based on behavioral segmentation, allowing messages to adapt to entrepreneurs' differing motivations, identity, constraints, and perceptions of risk. Behavioral reminders and visual progress cues (e.g., mobile nudges or simplified step trackers) that help overcome procrastination and clarify next steps in the registration process.
PERIOD OF EXECUTION	 Indicate the estimated period for the development of the study. The maximum period to carry out the study is <u>18 months</u>. Include as an annex to this proposal the work plan and planned schedule of activities.
EXECUTION	We propose an 18-month timeline, from April 2025 to October 2026, including two major phases (diagnostic + pilot).
BUDGET (\$USD) [Max. 100 words] maximum funding of US\$45,000.	 Provide the total amount of funding requested in U.S. dollars. This estimate should include the monetized value of all inputs and activities necessary to carry out the study/intervention. Specify whether the proposed project has other sources of funding. If so, provide the amounts secured or in the process of negotiation. If not, describe the measures envisaged to obtain funding if necessary.
	• Include as an annex to this proposal an indicative budget considering all the components or activities foreseen for the development of the study.
	Note: Funds from this call cannot be used to cover the costs of study dissemination materials (dissemination of the products of this call will be the responsibility of the IDB), travel or the purchase of goods and services (except when it is demonstrated that these are indispensable to achieve the objectives of the research). Likewise, the maximum percentage of administrative costs (overhead) is 15% of the direct costs.
	We request a total of USD 43,500, which covers all inputs and activities required for the completion of the study, including the behavioral diagnostic, fieldwork, pilot design, implementation, and evaluation. This amount includes research personnel, local coordination, data collection, and indirect costs (not exceeding the 15% administrative overhead limit). The project has no other sources of funding, and full execution depends on the support provided by this call. An indicative budget detailing all components and phases of the project is included as an annex to this proposal.