

## TC Document/Appendice

### I. Basic Information for TC

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| ▪ Country/Region:  | PARAGUAY/CSC - Southern Cone   |
| ▪ TC Name:   | Young Talent Development for Digital Transformation: Creating Global Employment Opportunities  |
| ▪ TC Number:   | PR-T1337   |
| ▪ Team Leader/Members:   | OKUMURA, MASATO (LAB/DIS) Team Leader; FERNANDEZ ZANG, LUIS ALEJANDRO (INV/CPR) Alternate Team Leader; VASQUEZ VILLALOBOS, EVELYN (DIS/CCR); TORALES, FATIMA (CSC/CPR) PEDEFLOUS, JUAN ENRIQUE (GCL/FML), GALIA RABCHINSKY (DVF/DSP) |
| ▪ Taxonomy:  | Client Support   |
| ▪ Operation Supported by the TC:                                   | N/A  |
| ▪ Date of TC Abstract authorization:                               | October 20 <sup>th</sup> , 2022  |
| ▪ Beneficiary:   | 400 young students and unemployed youth between 18 to 29 years old   |
| ▪ Executing Agency and contact name:                               | El Centro de Ingeniería para la Investigación, Desarrollo e Innovación Tecnológica (CIDIT)   |
| ▪ Donors providing funding:  | Japan Special Fund (JSF)   |
| ▪ IDB Funding Requested:   | US\$300,000.00   |
| ▪ Local counterpart funding, if any:                               | US\$80,000.00  |
| ▪ Disbursement period (which includes Execution period):           | 42 months  |
| ▪ Required start date:   |  |
| ▪ Types of consultants:  | Not Applicable   |
| ▪ Prepared by Unit:  | IDB Lab  |
| ▪ Unit of Disbursement Responsibility:                             | CSC/CPR  |
| ▪ TC included in Country Strategy (y/n):                           | Y  |
| ▪ TC included in CPD (y/n):  | N  |
| ▪ Alignment to the Update to the Institutional Strategy 2010-2020: | Social inclusion and equality, and Productivity and innovation   |

### II. Objectives and Justification of the TC

- 2.1 The objective of the proposed project is to provide technical training to students and unemployed youth between 18 and 29 years old, in the area of science and technology to increase their employability with a focus on women, people with disabilities, and people in vulnerable conditions. It will aim to democratize knowledge through access to technical training for employment and increasing opportunities for students and unemployed youth from science and technology careers in Paraguay to access better job positions in the national and international markets.
- 2.2 The evolution of companies toward new employment trends was accelerated during the covid-19 pandemic and has made noticeable and indisputable the significant gap in knowledge, skills, and attitudes among students and unemployed youth transitioning to the labor market. In Latin America and the Caribbean, 47% of the people work in the informal sector, poverty is still around 29%, and the average



productivity is reduced to half compared to leading countries. In the region, the gap widens instead of narrowing and is still highly dependent on the export of raw materials. A better future of work depends on countries implementing productive development, innovation, and human talent policies that accelerate productivity growth, and more sustained, inclusive, and sustainable growth patterns with more and better jobs (ILO, 2020).

- 2.3 The report "El futuro del empleo y las competencias profesionales del futuro: la perspectiva de las empresas" (The future of employment and the professional skills of the future: the perspective of companies) carried out by IESE Business School in 2019 reveals that companies are incorporating agile methodologies and design thinking for the management and development of projects which require communication skills, teamwork, negotiation, leadership, resolution of complex problems, among others.
- 2.4 On one hand, the unemployment of youth is one of the most serious challenges in the Paraguayan labor market. In the country, the population of youth between 18 and 29 years of age is approximately 1,931,000 people; 942,000 men and 989,000 women, which represents 27% of the total population of Paraguay. Regarding labor market indicators, they show that for the second quarter of 2020 the labor force (economically active population) was composed of 1,151,000 people between the ages of 18 and 29, of whom 692,000 are men and 459,000 women. Among those young people, approximately 376,000 found themselves with difficulties in access to work. Among them, 161,500 were unemployed, 83,700 were underemployed due to insufficient working time and 130,800 were circumstantially inactive (available to work but did not look for work for reasons related to the pandemic).<sup>1</sup>
- 2.5 On the other hand, the country is suffering from a shortage of information technology engineers. According to a report from Paraguay's Ministry of Labor,<sup>2</sup> the software industry is among those with the highest growth in the country. However, this industry is unable to meet its demand for talent through traditional education methods, such as universities that offer computer engineering degrees, and Paraguay occupies position 131/137 in a global ranking about the availability of scientists and engineers.<sup>3</sup>
- 2.6 One of the reasons for this gap is that, in Paraguay, the academy and the local market do not always manage to train students and unemployed youth in these necessary skills (communication skills, teamwork, negotiation, leadership, and resolution of complex problems, among others) to enter global or more competitive markets, including sufficient knowledge of the English language. Therefore, when local young people apply to international projects, they are not often selected. The software development market in Paraguay needs qualified and specific technical

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<sup>1</sup> Continuous Permanent Household Survey, second quarter 2020 - National Institute of Statistics of Paraguay

[https://www.ine.gov.py/Publicaciones/Biblioteca/documento/49a3\\_Boletin%20trimestral\\_EPHC\\_2%C2%BA%20Trimestre%202022.pdf](https://www.ine.gov.py/Publicaciones/Biblioteca/documento/49a3_Boletin%20trimestral_EPHC_2%C2%BA%20Trimestre%202022.pdf)

<sup>2</sup> <https://www.mtess.gov.py/noticias/ministerio-de-trabajo-y-gremio-de-industrias-creativas-se-unen-para-impulsar-capacitacion-con-generacion-de-empleo>

<sup>3</sup> [https://www3.weforum.org/docs/GCR2017-2018/03CountryProfiles/Standalone2-pagerprofiles/WEF\\_GCI\\_2017\\_2018\\_Profile\\_Paraguay.pdf](https://www3.weforum.org/docs/GCR2017-2018/03CountryProfiles/Standalone2-pagerprofiles/WEF_GCI_2017_2018_Profile_Paraguay.pdf)



training to meet their needs in response to the projects they are developing and their potential participation in international projects. It is important to note that there is also a gender gap. According to a survey conducted by UNESCO in 2016, 41.5% of engineering and technology graduates in Paraguay are women.<sup>4</sup> However, a consultation made with the Paraguayan Chamber of the Software Industry (CISOFT) mentions that only 30% of ICT professionals working in its member companies are women. This gender disparity is even larger if we see the leadership positions. Only 5% of CISOFT's member companies are led by women.<sup>5</sup> In addition, the employment of people with disabilities is very limited.

- 2.7 According to Jorge Enciso, President of CISOFT, software development in Paraguay is a niche with great potential for talent and the national economy, driven by the digitization and automation of economic activities in the Software and Information Services sector (SSI). This is one of the most dynamic sectors in the country giving rise to a national production industry that has been growing significantly in recent years. The most requested jobs according to CISOFT are Database Administrator, Front-End Software Developer, Mobile Technology Developer, Interface Designer, User Experience Designer, Back-End Software Developer, and Telecommunications Network Specialist.<sup>6</sup>
- 2.8 The proposed solution addresses the need to democratize knowledge through access to technical training for professional life and shorten the gap of opportunities for students and unemployed youth from science and technology careers in Paraguay to access better job positions in the national and international markets. To achieve this, unemployed youth and recently graduated students must level up in knowledge and skills to be competitive enough amongst professionals from the international market. Leveling up young Paraguayan professionals will positively impact the labor market by offering young local talent the opportunity to develop agile and innovative technological solutions which lead to improving the quality of poor and vulnerable people's lives.
- 2.9 To generate the development of these skills and tools needed, this proposal suggests the implementation of a "Bootcamp" in partnership with the company DIVE INTO CODE Corp., a Japanese company founded in 2015 that offers digital training programs. It was selected through JICA-IDB Lab open innovation challenge TSUBASA (Transformational Start Ups' Business Acceleration for the SDGs) organized in 2021. The programs offered by DIVE INTO CODE focus on digital training in problem-solving. DIVE INTO CODE's program has more than 20 modules on digital skills such as web languages, visualization, and security, among others. Each module may take 30 hours or more to complete. They have incorporated some aspects of gamification, such as using animations to encourage the students, among

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<sup>4</sup> "Relevamiento de la Investigación y la innovación en la República del Paraguay" - UNESCO Page 141

<sup>5</sup> <http://www.decidamos.org.py/mujeryeconomia/wp-content/uploads/2018/05/Echauri-Serafini-Igualdad-Conciliaci%C3%B3n-Familia-Trabajo.pdf>

<sup>6</sup> <https://www.clubdeejecutivos.org.py/revista/desarrollo-de-software-en-paraguay-un-nicho-de-gran-potencial-para-el-talento-y-la-economia-nacional>



others. In this project, the business model and the pricing will be defined piloting several options. There are several pricing models and the most accessible one is a subscription model with around \$10/month. Considering the number of beneficiaries planned, it will be most likely possible to offer the courses at lower prices. DIVE INTO CODE issues certifications to the students who complete the courses. It is important to note that DIVE INTO CODE also has a service for finding a job after taking courses.

- 2.10 There are other bootcamp models that are being implemented in Paraguay including one of IDB Lab's projects "Advanced Digital Talent for an Inclusive, Resilient Digital Economy" (PR-T1322). This proposal is innovative for the uniqueness of DIVE INTO CODE's solution that has significant advantages over other bootcamp organizations for the following aspects. Firstly, an international network of mentors with proven experience in low-income environments. The mentors offer support to the students through the application using the integrated automated translation software. This software allows mentors and students who manage different languages to communicate which may help overcome the shortage of experienced mentors. The project aims to adjust the current platform so that mentors and students can communicate in Spanish as well. Secondly, it has an integrated platform called "Diver" for continuous learning. that provides a large catalog of digital courses tailored to the local and international industry's needs. For example, Ruby, one of the most used programming languages in Japan, is not used very much in Paraguay and the focus will be put on others such as PHP, Python, or Java. Within the project, the Executing Agency and DIVE INTO CODE will try to incorporate the local needs for the catalog of the courses in addition to the Japanese and international needs. The Diver platform provides a coherent learning experience that includes digital resources and connects the students and their work directly with the mentors. In this project, the courses will be available in English and in Spanish. These advantages result in a wider pool of international mentors that can effectively create more graduates, ultimately resulting in a growth of long-term mentor availability. This model of DIVE INTO CODE will be localized for Paraguay in terms of the contents of the courses, the delivery channel of the courses, and the pricing structure. In the case of the pilot project conveyed in Benin, Africa, in 2020, approximately 80% of the students could finish the course and 30% obtained IT-related jobs within a month after completion.<sup>7</sup>

### III. Description of activities/components and budget

- 3.1 The project is organized around four components: (i) Design and implementation of the pilot; (ii) Coordination with companies and scale-up planning; (iii) Knowledge and dissemination; and (iv) Project management and coordination.
- 3.2 **Component I: Design and implementation of the pilot (IDB Funding: \$164,350, Counterpart: \$47,000).** The objective of this component is to design and implement the pilot. The Diver platform will be adapted to the local context including the

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<sup>7</sup> The targeted population of this proposal in Paraguay has more focus on the vulnerable population. Also, there may be several differences between two countries, Benin, and Paraguay, such as the basic education level or the situation of the job market. Accordingly, this result of Benin should be considered as a reference. The Executing Agency and DIVE INTO CODE may analyze the difference in the later stage of the project.



translation to the Spanish language where necessary. This process will have a user testing period to verify the correct application of the language. The pilot will start on a limited scale with approximately 40 students. After this initial pilot, the team will evaluate the results and elements for improvement to scale up the pilot. The main results of this component include 400 students and unemployed youth who start the course, 320 of them completing the course of which 128 are from low-income families, 160 are women, and 16 have disabilities. The first action to be implemented in this stage will be the definition of eligibility criteria on the type of population to be covered, which are young people between 18 and 29 years of age with the following characteristics; a) coming from the geographic area covered by the project; Asunción, Central, Itapúa, Caaguazú, and Alto Paraná<sup>8</sup>; b) coming from low-income families<sup>9</sup>; c) at least 50% who enter the program are women who respond to some type of social vulnerability, essentially economic; and d) at least 5% of the beneficiary population are people with some type of disabilities.<sup>10</sup> In addition, the following actions are planned within this component:

- Coordinate with civil society organizations, companies, and public sector institutions that are in the area covered by the project to generate involvement to promote the project and reach the greatest number of young people with the desired characteristic.
- Carry out a communication campaign with the criteria and benefits of the program.
- Diagnostic assessment of the main barriers women and people with disabilities face to access online or hybrid training
- Develop a platform for beneficiary registration.
- Select the beneficiaries of the project, taking into account the eligibility criteria.
- Conduct a baseline survey of all beneficiaries entering the project. Asunción, Central, Itapúa, Caaguazú, and Alto Paraná.
- Start of the training process.

**3.3 Component II: Coordination with companies and scale-up planning (IDB Funding: \$48,800, Counterpart: \$-).** The objective of this component is to develop a strategic plan to replicate the model to a national and international level with a sustainable and scalable business model including the aspects such as pricing/monetizing model, recruiting strategy, etc. At a national level, El Centro de Ingeniería para la Investigación, Desarrollo e Innovación Tecnológica (CIDIT) and the principal partners are expected to maintain the established model and scale it up. At an international level, it will require some efforts to define potential markets, partners, and sustainable/scalable business plans of which some initial versions are to be prepared within this project. To achieve these goals, at least 45 technology management companies located in Paraguay will be identified by the Executing Agency, and the working mechanisms will be established to make sure that they will incorporate young people who have completed the training program within the project. The mechanisms of hiring and the roles for those graduates will be defined

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<sup>8</sup> Among those departments, Itapúa and Caaguazú have higher poverty index than the national average according to the Continuous Permanent Household Survey 2017.

<sup>9</sup> Defined as individuals living above the poverty line but below the national median income. The average monthly income of the employed in Paraguay amounts to approximately 1,867,000 Guaraníes.

<sup>10</sup> Currently, visual, auditive, physical, intellectual and psychosis disabilities are considered to be covered and will be analyzed well during the implementation of the project.



together with those partners. The potential modalities include paid internships, dual training, probationary personnel, or any other company-specific formats. Monetary compensation systems will be established in accordance with their own regulations and labor regulations. The main results to be obtained in this component include 45 companies that join the initiative to hire the graduates, 27 of them actually hiring the graduates, and the strategic plan for sustainability and scalability at a national and international level established.

The principal actions that will be carried out in this component will include:

- The mapping and identification of technology companies that are located within the geographic area of the project.
- Characterization of the identified companies.
- Holding meetings with decision makers from companies and authorities from the labor sector, to identify company needs (related to what the project proposes)
- Workshops conferences, workshops, and others on the importance of the employability of young people (sensitization of these actors).
- Visits and personal interviews with the decision-makers of the companies to promote and achieve employability commitments for these young people who participate in the training process.
- Creation of the network of companies associated with the project within the framework of the employability of the young beneficiaries of the project.
- Contract (signed) commitments with the companies that enter the employability system within the framework of this project.
- Recruitment of young people by the companies that enter the project.

**3.4 Component III: Knowledge and dissemination (IDB Funding: \$32,000, Counterpart: \$15,000).** The project will have a solid communication/dissemination component that will be consistent with pilot design and sustainability and scalability planning. It will cover the value of the piloted solution both for beneficiaries/students and for the companies that can hire them. as well as a strong visibility component of the project in platforms, networks, and also by conventional means. This intervention will be carried out at the beginning of the project and similar actions will be projected throughout the implementation of the project. In addition, the project team will analyze the result of the pilot and prepare knowledge material that can be used for highlighting lessons learned and their dissemination. A communication and dissemination strategy will be developed from the beginning of the implementation of the project to attract good candidates and in later phases more for the involvement of the companies as potential employers, and for scaling up the scheme. This communication strategy will be carried out as follows:

- It will work with the specific needs of what will be communicated, and the eligibility criteria will be adapted in a simple and adaptable language for all sectors.
- Stratified communication contents will be elaborated, for beneficiaries, local authorities, the public, companies, and for decision-makers.
- A diagnosis of the media and communication vehicles will be carried out in order to disseminate the communication contents.
- Throughout the project, communication media will be used to disseminate the progress of the project.
- A project section will be created on the CIDIT website that will contain all the project information.



- 3.5 **Component IV: Project management and coordination (IDB Funding: \$54,850, Counterpart: \$18,000).** The objective of this component is to support overall management and coordination during the implementation of the project.
- 3.6 **Indicative Budget.** The total cost of the TC is US\$380,000 of which US\$300,000 will be financed by the resources of Japan Special Fund (JSF). The remaining US\$80,000 will be provided by the Executing Agency or any other partners.

#### Indicative Budget

| Activity/Component                                    | IDB Funding        | Counterpart Funding | Total Funding      |
|---|--------------------|---------------------|--------------------|
| I. Design and implementation of the pilot             | US\$164,350        | US\$47,000          | US\$211,350        |
| II. Coordination with companies and scale-up planning | US\$48,800         | US\$0               | US\$48,800         |
| III. Knowledge and dissemination                      | US\$32,000         | US\$15,000          | US\$47,000         |
| IV. Project management and coordination               | US\$54,850         | US\$18,000          | US\$72,850         |
| <b>Total</b>  | <b>US\$300,000</b> | <b>US\$80,000</b>   | <b>US\$380,000</b> |

- 3.7 The supervision of this technical cooperation will be under the Paraguay Country Office.

#### IV. Executing Agency and execution structure

- 4.1 The TC will be executed by Centro de Ingeniería para la Investigación, Desarrollo e Innovación Tecnológica (CIDIT) in partnership with Software Natura. The CIDIT is a Technological Development Center, founded as a non-profit Civil Association made up of leaders from the academic and private sectors related to the area of engineering and information technology, created in 2015, within the framework of a co-financed project by CONACYT (National Council of Science and Technology) at the initiative of the academy and the private sector. This center is made up of the Catholic University of Asunción and four private sector companies. The creation of CIDIT responds to the need to have a body that at the country level articulates the supply and demand of talent for science and technology (I+D+i) for the engineering sector that, from its strategic vision, incorporates actors to create synergies between companies, the public sector, and academia to support the processes of technological development, research, and innovation.
- 4.2 The execution of the TC by CIDIT is justified as it has accumulated experience of the Catholic University in the implementation of technological development projects involving the community, as is the case with current projects such as the “Internet of Us” financed by the European Union, in addition to its own projects such as the one recently implemented in the fight against COVID-19, the project called Repositioning of medicines for the treatment of COVID-19 using Artificial Intelligence, whose purpose is to reposition safe commercial medicines in humans to treat COVID-19, with financing from public funds from CONACYT (Paraguay). In this short life of



CIDIT, it has participated in projects and is providing services to the public and private sectors, as well as managing cooperation funds from the public sector. This demonstrates CIDIT's commitment to society and to the different socioeconomic sectors of Paraguay, in addition to having sufficient technical and administrative management capacity to implement projects such as the one being proposed in this document.

- 4.3 CIDT will contract Software Natura (Swnat) as the local implementation partner that principally supports the implementation of bootcamps and the coordination with IT companies for internships or employment of the students. Swnat is a reliable provider of quality engineering services for companies located in Paraguay with a branch in the United States. It is recognized in the local and international fields for its excellence in the provision of software development services. Swnat provides full-cycle agile software development services for ed-tech, e-commerce, and healthcare-related industries. It is expected that Swnat also contributes to the scale-up at both domestic and international levels.
- 4.4 In addition to that, DIVE INTO CODE, a Japanese startup of e-learning will be a strategic partner of the project as the principal provider of the solution to be piloted. It was selected as one of the most innovative and potential solutions from Japanese startups for the LAC region. through JICA-IDB Lab open innovation challenge TSUBASA (Transformational Start Ups' Business Acceleration for the SDGs) organized in 2021. The programs offered by DIVE INTO CODE focus on digital training in problem-solving through technology and are problem-based learning.
- 4.5 The executing agency agrees to adhere to the standard IDB Lab arrangement for results-based disbursements, the procurement and financial management policies applicable to the private sector, in accordance with the Financial Management Guidelines for IDB-financed Projects (document OP-273-12) of 17 June 2019 and specified in the Guide for Milestones-based Management and Financial Supervision for IDB Lab and SEP Technical Cooperation Projects.
- 4.6 The Executing Agency shall prepare a procurement plan acceptable to the Bank, that describes the contracts for goods and services required to carry out the Project, including the estimated cost of each contract, and the proposed methods for acquisition of its goods and services, including consultants' services. The Bank may request annual reports on the execution of the Procurement Plan by the Executing Agency. Implementation of the procurement policies, terms of reference, and contracts for the acquisition of goods and services, as well as the Procurement Plan and fulfillment thereof, may be subject to ex-ante review or ex-post supervision by the Bank, at its discretion. Software Natura and DIVE INTO CODE will be contracted as principal solution providers through direct contracting. In the case of Software Natura, the reasons for the direct contracting are: (i) it is the only provider identified in Paraguay that has the capacity to provide the necessary support for the implementation of proposed bootcamps in this project and for the coordination with companies as potential employers, (ii) it is well recognized in Paraguay and has experience with both the public and the private sector such as the collaboration with Ministry of Public Health and Social Welfare, and (iii) the Executing Agency has been working with Swnat for several years that includes internship opportunities for the students that participated in CIDIT's programs among others and has had a successful experience. Regarding DIVE INTO CODE, the justification for the direct



contracting is that it is the only provider of the unique bootcamp model connecting the training capacity and students internationally and its value was recognized in the open innovation challenge in Japan co-organized by JICA and the IDB Group.

- 4.7 The level of risk, as determined by the Diagnostic Assessment of Integrity and Institutional Capacity (DICI), was low, confirming that the Executing Agency has an acceptable financial management system for IDB Lab and has a monitoring and accountability structure for the presentation of its institutional financial statements to the Bank.

## **V. Alignment with IDB Group strategies**

- 5.1 The Project is aligned with the Bank's Strategy with Paraguay 2019-2023 (document GN-2958), specifically with the strategic priority area of diversifying the country's economic production and promoting human capital and living conditions. The Project is also directly aligned with cross-cutting themes related to gender and diversity and innovation and technology. The Project will provide job training to vulnerable populations helping increase the supply of qualified employees in high-demand sectors.
- 5.2 Also, the project is aligned with the National Development Plan Paraguay 2030, in which a regulatory and institutional framework has been implemented to support science, technology, and innovation. Likewise, it contributes to the mission of the National Council for Science and Technology (CONACYT), which seeks to stimulate and promote scientific research, technological development, human resource training, innovation processes, and competitiveness, through generation, dissemination, and knowledge transfer. The project will eventually complement the efforts of the Paraguayan government, supporting the programs that CONACYT has been developing to improve and increase the formation of human capital, (with special emphasis on young people), science and innovation, and other actions to promote the link between actors of the scientific and technological industries of the country. It will also support the efforts of the Ministry of Information and Communication Technologies (MITIC), particularly in the agenda for Digital Transformation, which recognizes that the new digital economy requires new skills and knowledge, and for this, the state seeks to strengthen the training of young people and entrepreneurs so that they can develop in ICT professions and the overall digital ecosystem. These national policies and institutions seek to make Paraguay a more competitive country at a global level through Digital Transformation and the generation of highly competitive human capital, which this project will directly support.
- 5.3 The Skills Development Sector Framework Document (document GN-3012-3) establishes the importance of investing to develop the cognitive, technical, and socio-emotional skills needed to access high-quality jobs and thrive in the labor market. This project is also aligned with the Labor Sector Framework Document (document GN-2741-9), which establishes the objective of workers becoming more productive, earning higher wages, and having stable jobs. In addition, this operation is aligned with the IDB Group's Employment Action Framework with a Gender Perspective, by supporting entrepreneurs and human talent development with a gender perspective, fostering reallocation to emerging sectors.



- 5.4 The Project complements an IDB Group operation from CTI, loan PR-L1153, “Digital Agenda Support Program” specifically aligned and supporting KPI (ii) of Component 2 related to “increasing the supply of human capital digital talent through the promotion of training of ICT professionals and the improvement of digital training programs”.
- 5.5 The Project is also aligned with the vertical of education, talent, and employment of IDB Lab, specifically regarding skills and the future of work since it emphasizes the need to accelerate the adoption of cross-cutting digital skills. It leverages IDB Lab’s experience and lessons learned, by testing models that accelerate skill building among women and vulnerable populations, as well as by developing innovative, sustainable, and inclusive entrepreneurial ventures that increase digital talent among vulnerable populations (including a project in Paraguay (PR-T1322), Laboratoria (RG-T3510), DEV.F (RG-T3590), and Youth Programmers (ATN/ME-16123-UR). This project may contribute to the dialogue for the formation of future IDB loans in Paraguay and other countries. In addition, the project team and the Executing Agency will take into account any other relevant projects and activities of the IDB Group. For example, the lessons learned from the project “Program to Support Job Placement” (PR-L1066) will be incorporated into the implementation of the project.
- 5.6 It will contribute to the Sustainable Development Goals (SDGs) 4 (Quality education, specifically 4.3, by ensuring equal access for all women and men to affordable and quality technical, vocational and tertiary education, including university, 5 (Gender equality, specifically 5.B by improving the use of information and communications technologies to promote women’s empowerment and gender equality) and 8 (Decent Work and Economic Growth, specifically 8.2 by achieving higher levels of economic productivity through diversification, technological upgrading, and innovation). The project’s implementation will be based on [the Principles for Digital Development](#), endorsed by the IDB and other multilateral organizations.

## **VI. Major risks**

- 6.1 Connectivity. Paraguay’s households still have very limited access to connectivity and broadband. To mitigate this situation, there are plans to establish strategic partnerships with key actors in the telecommunication industry such as telecom companies. This will provide beneficiaries access to computers and connectivity close to their homes. It will also be essential to establish partnerships with universities so that beneficiaries who need it are able to use their infrastructure. For socioeconomically vulnerable participants, the project includes stipends or direct incentives for access to computers, data plans, and internet connections.
- 6.2 High dropout rates from bootcamps. While attending the bootcamp, students will receive socioemotional support and ongoing advice from coaches and peers throughout the training process. The possibility of dropping out due to economic factors should not be left outside, considering that not having a compensation plan for the participants, they will still need to have a source of income for themselves or their families while participating in the bootcamps. This said, in this project, students are expected to contribute to financing their training, which should discourage them from dropping out.



- 6.3 Low participation of women. To prevent low interest or limited participation from women, there will be a diagnostic assessment of the main barriers they face to accessing online or hybrid training. The recommendations to overcome these barriers will be implemented during the execution of the bootcamp models. The project team will work with relevant local partners to make sure that the project has enough outreach to female students. The lessons learned from IDB Lab projects will be incorporated to attract women to coding courses.
- 6.4 Sustainability of bootcamp models. From the startup of project execution, different business models for boot camp programs will be analyzed, implemented, and iterated. IDB Lab's experiences and lessons learned from various bootcamp models in the region will be incorporated into the project's training programs. Business models will be iterated through each cohort, using a continuous improvement mechanism.
- 6.5 Rapid changes in demand. If the demand for information technology changes and the offer of training fails to catch up with the speed of adjusting the content, the content may become obsolete, and the graduates may not find relevant jobs. To mitigate this risk, the executing agency will carry out every 3 months an assessment of the training content that is in accordance with the current needs of the market, in order to later propose improvements or new additions to it.
- 6.6 Coordination of multisector actors. The project includes a collaboration between actors from different sectors such as technology-based companies, chambers of commerce, educational institution, NGOs, etc. in addition to the Executing Agency and the principal providers. If the coordination fails, the project may not achieve its goals. To mitigate this risk, the Executing Agency will design a collaboration scheme where partners are categorized by role and the level of commitment/contribution, and several types of information sharing are included such as regular meetings with core partners and newsletters with a larger group.
- 6.7 **Access to information.** The information contained in this document is classified as public upon approval under the Bank's Access to Information Policy.<sup>11</sup>
- 6.5 **Intellectual property.** The Executing Agency and the solution providers will retain ownership of all intellectual property rights to the products developed and studies conducted under the project and will grant IDB Group a nonexclusive, free license to use them for non-commercial purposes in Paraguay and throughout the region. This will ensure that the lessons learned from the project such as the applicability of the latest IT training models for poor and vulnerable populations are disseminated as widely as possible throughout the region.

## **VII. Exceptions to Bank policy**

- 7.1 None.

## **VIII. Environmental and Social Strategy**

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<sup>11</sup> <https://www.iadb.org/en/access-information/home>



- 8.1 Based on IDB's Environmental and Social Policy Framework (GN-2965-21), the classification for this operation is "C".



**YOUNG TALENT DEVELOPMENT FOR DIGITAL TRANSFORMATION: CREATING GLOBAL  
EMPLOYMENT OPPORTUNITIES**

**PR-T1337**

**CERTIFICATION**

The Grants and Co-Financing Management Unit (ORP/GCM) certifies that the referenced operation will be financed through:

| <b>Funding Source</b> | <b>Fund Code</b> | <b>Currency</b> | <b>Amount Up to</b> |
|-----------------------|------------------|-----------------|---------------------|
| Japan Special Fund    | JSF              | USD             | 300,000             |

For operations financed by funds where the Inter-American Development Bank (IDB) does not control liquidity, the availability of resources is contingent upon the request and the receipt of the resources from the donors. Additionally, in case of operations financed by funds that require a post-approval agreement with the donor, the availability of resources is contingent upon the signature of the agreement between the Donor and the IDB. (i.e.: Project Specific Grants (PSG), Financial Intermediary Funds (FIF), and single donor trust funds).

Certified by:

DocuSigned by:  
*Itaru*  
9CD58142A44C449...

DocuSigned by:  
*Kai Hertz*  
A254C95CC1DB4A2...

Kai Hertz on behalf of Maria Fernanda Garcia Rincon  
Chief  
Grants and Co-Financing Management Unit  
ORP/GCM

Date