

**CASE STUDY**



## Driving Innovation through Collaborative Learning: Evidence from Moldova

October 2023 | Crispin R Mbamba, Jennifer Simpson, and Olga Popovici

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## About This Case Study

The Moldova Future Technologies Activity collaborates with the private sector, academia, and government to build an innovative digital system of economic opportunities for Moldova's small and medium enterprises and entrepreneurs. This "golden triangle" of diverse stakeholders identifies opportunities, co-creates solutions, and advocates for a business-friendly policy environment and integration with global markets. Simultaneously, collaborators address issues such as energy security, legislation gaps, and support during economic crises.

The experiences and lessons in this case study provide guidance to implementing partners on building their own innovation ecosystems for startup businesses and future-ready professionals.

**About the cover photo:** Visit of Mark Simakovsky, USAID Deputy Assistant Administrator at CIRCLE Lab, Technical University of Moldova (*Credit: Future Technologies Activity, funded by USAID, Sweden, and UKaid*).

## Introduction

The Moldova Future Technologies Activity (FTA) is spurring the development of the digital, creative, and green economy amid a global landscape whose evolution is marked by shifting consumer preferences and the influence of digitization on markets and enterprises. This five-year (2021 to 2026), \$52.8 million flagship program is funded by USAID, the Swedish International Development Cooperation Agency, and the UK Foreign, Commonwealth & Development Office. FTA's goal is to enhance the competitiveness of crucial economic sectors in Moldova and facilitate their seamless integration into existing and new markets across the global stage.

FTA's priority sectors include information, communication, and technology (ICT); engineering; light manufacturing; creative industries; and digital media. Operating as a catalyst, FTA primes the workforce for the future by fostering digital acumen and adaptability to emerging changes. FTA collaborates with private sector entities, governmental bodies, and academia to spearhead digitalization initiatives and build resilience through globally acknowledged e-commerce, green energy, and other targeted programs that cultivate future-ready skill sets. This multifaceted approach highlights FTA's proactive role as a transformative partner, ready to propel Moldova toward a digitally empowered and sustainable future.

Considering the facilitative and capacity-strengthening nature of FTA's activities, the application of collaborating, learning, and adapting (CLA)<sup>1</sup> has been an invaluable contributor to FTA's objectives. One initiative is the formation of the "golden triangle" (see sidebar), a body with representatives from the private sector, academia, and government who collaborate on innovation, knowledge exchange, and economic development consistent with Moldova's technological needs. In this case study, we present evidence from key informant interviews on how the application of CLA fosters innovation and collaboration across these sectors. on how the application of CLA fosters innovation and collaboration across these sectors.

## Fostering Cross-Sector Creative Solutions

Capacity and technical knowledge are needed to mobilize skilled workers, drive innovation, and modernize industries and, in turn, improve Moldova's economy. FTA strategically implements many creative solutions and idea-generating events fostered by the collaboration of the private sector, academia, and government entities. The events include hackathons, workshops, fairs,

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<sup>1</sup> [Collaborating, Learning and Adapting \(CLA\) | USAID | Basic Page | U.S. Agency for International Development](#)

and conferences. FTA also facilitates entrepreneurship discussions for holistic solutions, locally led grants for meaningful development, and learning from experts in various fields to gain new perspectives on the developing businesses participating in international events. These collaborative efforts illustrate Moldova's proactive adaptation and ingenuity. By examining how the efforts have generated and implemented solutions, we can learn about new and forward-thinking approaches that foster further cross-sectoral collaboration.

### **The Golden Triangle: Fostering Cross-Sector, Creative Solutions Through Private, Academic, and Government Collaborations**

- Idea-generation events for students and private sector entities spark collaboration and yield inventive solutions that generate fundable startup projects.
- Entrepreneurship discussion programs connect students with appropriate international and national expert mentors to identify critical economic gaps and develop entrepreneur-focused skills courses.
- Locally led grant proposals involve a range of stakeholders from the onset so that proposed solutions truly address pertinent needs/challenges.
- Symbiotic learning through international exchange and educational reforms focuses on the interconnectedness of local and international elements and uses collaboration between the private sector, academia, and government to draw inspiration from global experiences.

### **Idea-generation events elevate creative solutions**

Idea-generation events focus on strengthening entrepreneurship and locally led grant development processes, learning from renowned international experts, and getting inspired through international exchange visits. Globally, these programs have emerged as dynamic initiatives that fuel innovation for rapidly developing economies (see sidebar).<sup>2</sup>

FTA has partnered with innovation centers hosted by Moldovan universities to encourage students and private sector partners to participate in strengthening the golden triangle — in line with FTA's objectives. FTA and the innovation centers facilitate idea-generation events targeting the private sector and students. The events incorporate elements of competition to offer

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<sup>2</sup> [Research: How Entrepreneurship Can Revitalize Local Communities \(hbr.org\)](https://hbr.org/2017/05/research-how-entrepreneurship-can-revitalize-local-communities/)

participants unique opportunities to exercise their creativity and propose cutting-edge solutions to pressing challenges.

These events connect individuals from diverse backgrounds to draw on varied ideas and viewpoints and transform them into novel, actionable concepts. One FTA-supported event competition aimed to address the daily challenges farmers experience and bring real-life applications of digital technologies closer to Moldovan students and farmers. As a result of this event, FTA helped launch the Agrotek Arena, representing a center of excellence that revolutionized the agricultural industry. Agrotek Arena features implemented technologies from all of its partners. These partners provide consultancy and educational support to farmers, students, and teachers. Various integrated systems for managing agricultural activities and data have been installed in Agrotek Arena's laboratory, generating analyses and recommendations for farmers, students, and teachers.

“We organized an innovation fair that witnessed enthusiastic participation from both farmers and vendors. This endeavor led to the creation of the Agrotek Arena, a dedicated platform for technology testing.”

— **Svetlana Ghetmancenco,**  
**digitalization specialist**

The primary goal of Agrotek Arena's participants is to promote, practice, and learn new digital technologies to streamline the practice agriculture, reducing its impact on the environment and making it more competitive, sustainable, and regenerative. Agrotek Arena operates from the Technical University of Moldova in the Faculty of Agricultural, Forestry, and Environmental Sciences, where the latest agricultural technologies can be applied on an open field.

These innovation initiatives represent more than just a platform for idea generation; they embody Moldova's transition toward a more innovative and forward-thinking society. They serve as a catalyst for a cultural shift, one that celebrates ingenuity, resilience, critical thinking, and collaboration.

### **Facilitating entrepreneurship discussions to identify holistic solutions**

Entrepreneurship discussion programs are learning platforms that foster collaborative discussion as a powerful dynamic force for creating new initiatives (see sidebar). In Moldova, FTA organizes them as interactive forums or sessions where international and local experts, academics (students and faculty), and industry representatives engage in collaborative dialogue to explore and develop innovative business ideas, strategies, and solutions, often with a focus on entrepreneurship and venture creation. Discussions occur periodically and have proven highly effective at addressing needs as they arise.

Entrepreneurship discussion programs also serve to identify important gap areas. For example, Svetlana Dimitrioglo, smart manufacturing and digitalization manager with FTA, described how these discussions identified a critical workforce gap to support new technology in the fashion industry (see sidebar). ZIPHOUSE is an innovative fashion hub that offers young designers, startups, professionals, and academic staff a unique opportunity to sharpen their technological skills and design abilities.<sup>3</sup> To address the identified challenge, FTA implemented new training programs, setting up the “Fabricademy,” a cross-disciplinary program that pioneers technologies in textiles that have applications across the fashion industry and the emerging wearable market.

Another identified challenge was matching mentors to students. In response, FTA ran a scholarship fund to motivate experts and students, which led to a unique partnership with Technical University and ZIPHOUSE. The collaboration identified potential experts and trainers to participate in the Fabricademy through scholarships.

Well-organized partner and community entrepreneurial engagements can lead to university engagements and the development of special entrepreneurship courses that arm students with the skills needed for self-sustaining business ventures.

### **Locally led grant development for resonant development**

Within Moldova, locally led, co-created grants developed under a market systems approach<sup>4</sup> have garnered support because they address discernible needs of citizens (see sidebar, next page). This approach is a collaborative and effective way to respond to the genuine needs of communities.

“Multilateral engagement yields a holistic understanding of the entrepreneurial ecosystem, unraveling untapped opportunities and identifying critical gaps.”

— **Svetlana Dimitrioglo, smart manufacturing and digitalization manager**

“The outcome has been the training of five professionals who have now become instrumental in creating new, innovative courses within Moldova, a direct result of the expertise they gained.”

— **Svetlana Dimitrioglo, smart manufacturing and digitalization manager**

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<sup>3</sup> [About us – Ziphouse \(utm.md\)](#)

<sup>4</sup> [USAID's Market Systems Framework](#)

A locally led grant involves co-creating a solution directly with local partners who participate from the outset. The process uses a holistic perspective that gathers insights from diverse stakeholders (academia, private sector, and centers of excellence) to ensure the elevation of community voices and the unique presentation of potential customer needs in proposals. As a result, proposals comprehensively address multifaceted challenges.

### **Symbiotic learning through international exchange and educational reforms**

Recognizing the symbiotic relationship between local context and international learning is central to FTA's developmental approach. The private sector, academic, and government entities act as a cohesive force that understands the local details, while parallel experiences in other nations can inspire solutions. Notable outcomes include supporting startups for funding student training in creative technologies and advocating for education reforms to facilitate knowledge transfer, address teaching staff shortages, and offer flexible learning opportunities.

Through proactive engagement with the Ministry of Education, FTA aims to modernize education systems to adapt to the careers of the future. FTA learned through its small and medium enterprise and ecosystem support that the education system needs to better prepare Moldovans for future jobs by introducing cutting-edge curricula in topics such as cybersecurity and robotics. As a result of an adaptive, crosscutting approach working with international partners, the Moldovan government, and universities, FTA introduced international best practices and advocated for needed educational reform. FTA partnered with Estonian Development Cooperation to enhance digital education skills within the Future Classrooms Program by introducing participants to the micro-degree program at the University of Tartu. FTA learned that micro-degrees help students and professionals gain future-proof skills and adapt to new and upcoming technologies. They also provide more flexible and modular learning opportunities that encourage lifelong learning. As a result, four participants from the study tour

**“FTA managed a collaborative effort to co-create grant applications for the innovation center’s development.”**

— **Veronica Esanu, STEM education and innovation manager**

**“This multilateral engagement yields a holistic understanding of the entrepreneurial ecosystem, unraveling untapped opportunities and identifying critical gaps... the event garnered substantial interest from companies spanning all corners of the country.”**

— **Daniela Petrusevschi, senior green economy activity lead**

at the University of Tartu returned to Moldova to establish similar university micro-degree programs.

In parallel, FTA supported updates to the Moldovan educational code to legalize micro-degree learning opportunities and to permit experts who do not hold a Ph.D. to teach university-level and micro-courses. These amendments, passed in August 2023, represent a groundbreaking development after a year of persistent lobbying and advocacy, during which FTA led a collaborative effort as part of a joint working group consisting of members from the Ministry of Education and Research, the private sector, and universities. By engaging the golden triangle and integrating international models, FTA has adapted to the evolving educational landscape to facilitate knowledge transfer and skill development..

## Action-Oriented Recommendations

The recommendations below underscore the importance of CLA as a driving force for innovation and development. Each recommendation represents a strategic step to harness the synergies between academia, the private sector, and government entities and create transformative change in the local developmental landscape.

- **Foster cross-sector collaborations for innovation:** Encourage dynamic partnerships between academia, government, and private sector entities to leverage diverse perspectives and expertise. Collaborative efforts can lead to innovative solutions that address complex challenges and drive sustainable development.
- **Elevate creative solutions through idea-generation events:** Organize creative thinking events that challenge participants to exercise their creativity and propose innovative ideas for pressing problems. These initiatives should be inclusive, welcoming participants from various backgrounds to promote the fusion of diverse viewpoints and the birth of novel concepts.

“The project team collaborates with partners in Chisinau and beyond to design and develop entrepreneurship courses tailored to the relevant user group. This collaborative effort allows the team to tap into external insights and expertise, enabling them to respond effectively to the region’s specific needs and challenges.”

— **Veronica Esanu, STEM education and innovation manager**

- **Facilitate entrepreneurship discussions for holistic solutions:** Create platforms for discussions that involve experts, academia, and industry representatives to identify gaps and opportunities within the entrepreneurial ecosystem. These discussions should lead to the development of tailored programs and initiatives that nurture local startups and innovation.
- **Empower locally led grant proposals for resonant development:** Engage local partners from the outset in developing grant proposals that directly address communities' needs. This approach not only ensures contextual relevance but also strengthens the collaboration between stakeholders for comprehensive and impactful solutions.
- **Embrace international exchange for local innovation:** Leverage international study visits and collaborations to observe successful models and best practices from other countries. Adapt these insights to the local context, allowing for the emergence of innovative strategies that drive progress and development

## Conclusions

This case study highlights how the dedicated application of CLA, in conjunction with the “golden triangle” alliance between the private sector, academia, and government, has been instrumental in driving innovation and progress in Moldova. By embracing cross-sector partnerships, elevating creative solutions, facilitating holistic discussions, empowering local voices, and leveraging international exchange, FTA has fostered a vibrant ecosystem where novel ideas may flourish and outcomes improve. The synergistic collaboration between diverse stakeholders has catalyzed the emergence of tailored initiatives and strategic reforms that propel Moldova toward a digitally empowered and sustainable future. FTA’s commitment to CLA underscores that adaptability, ingenuity, and multi-sectoral cooperation are indispensable to advancement in a rapidly evolving world.

## Notes on Data Collection

This case study engaged five project specialists from FTA in written narrative and oral interviews to gain insight into the role of CLA in driving innovation. The participants encompassed FTA’s monitoring, evaluation, and reporting manager, senior green economy activity lead, STEM education and innovation manager, smart manufacturing and digitalization manager, and digitalization specialist. External partners contributed four specialists representing the Future Classroom initiative. These specialists are dedicated to fostering digital education and creating an innovative learning environment aimed at transforming Moldova’s K-12

education system for the digital age. Their expertise in empowering youth with science, technology, engineering, the arts, and mathematics skills proved invaluable in enhancing collaboration and advancing the mission.

Before conducting the interviews, the authors met with the monitoring, evaluation, and reporting manager to introduce the case study, gauge interest, and identify suitable participants.

The monitoring, evaluation, and reporting manager received a comprehensive interview guide and subsequently organized various interview sessions, using the golden triangle approach, with the project team and local partners representing the innovation center formed through collaboration between the private sector, academia, and government. Interviews with participants were held online and in person. After these sessions, the monitoring, evaluation, and reporting manager, who continued to provide input during the data analysis phase, held a follow-up interview via Microsoft Teams.

Using USAID's CLA framework as a guide, the monitoring, evaluation, and reporting manager manually analyzed transcripts from all four interviews for patterns in practices and to identify emerging themes. Their focus was identifying responses that highlighted how the application of CLA has contributed to innovative activities in FTA.

We are grateful for the time and thoughtfulness of all the participants, whose insights are valuable. This case study could not have been completed without them.

## **CONTACT**

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