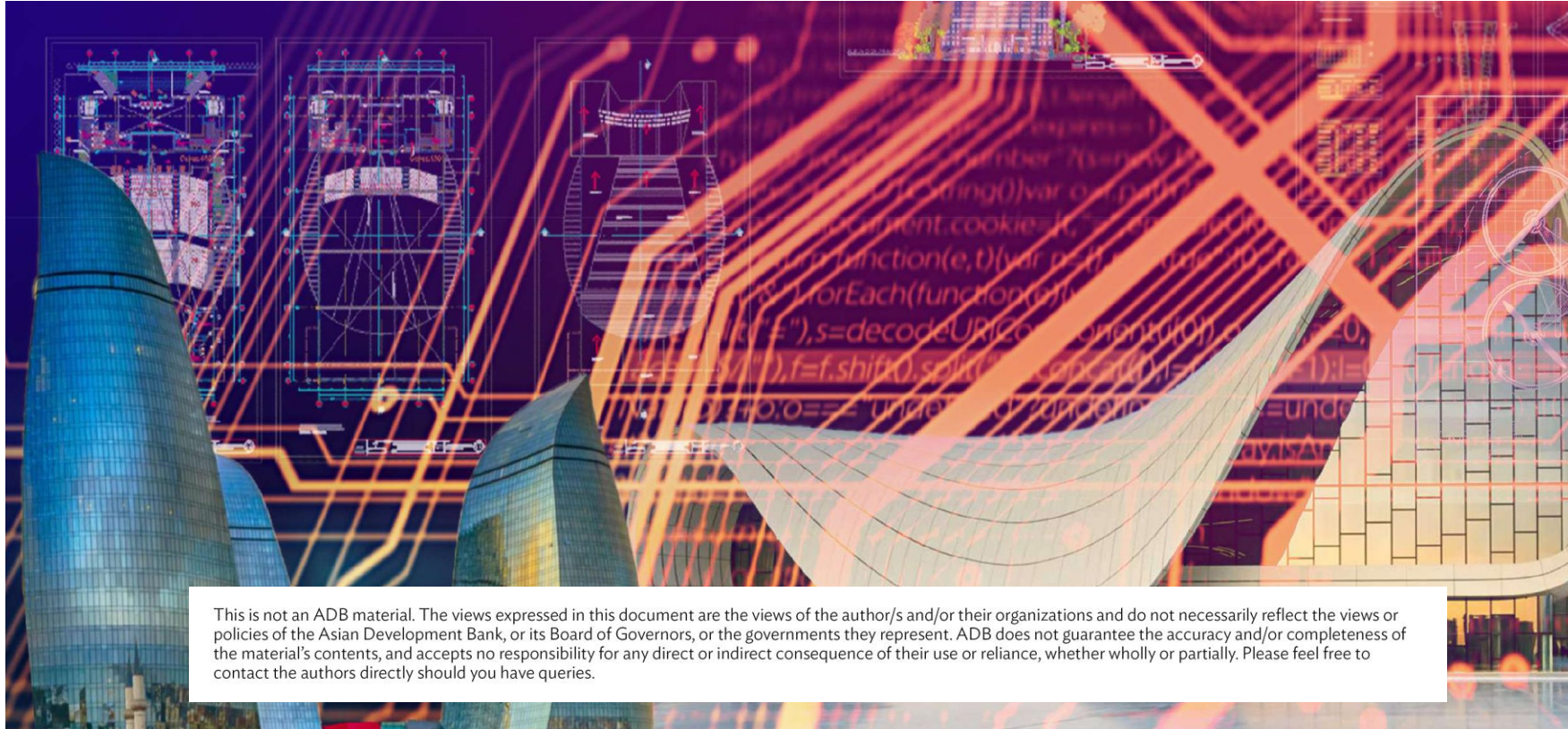




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Universities as enablers of Vibrant Startup Ecosystem in Azerbaijan

Razim Aliyev - Head of Innovation and Technology Transfer Office at Ganja State University



Vasif Hasanov - Director of Department of Innovations at Ganja State University



Tural Rustamov - Specialist on the Development of Startups at Azerbaijan Technological University Innovation Center



Fariz Guliyev - Chief Advisor, International Cooperation Division of the State Agency for Science and Higher Education



Elchin Nasirov - Head of Science Department and Associate Professor of the Department of Agricultural economy

Azerbaijan State Agricultural University, Ganja (Azerbaijan)



Karimov Mehman – Rector Advisor in Strategic Development and Digitalization at Azerbaijan Technological University

Associate Professor in Economics at Azerbaijan State Agricultural University



Elvin Agayev - Director of the Innovation Center at Azerbaijan State Agrarian University





“The future is not dependent on oil and gas. They will deplete one day. The future will be made of innovation, technology, good governance, transparency, and the state support to entrepreneurship.”

**The President of the Republic of Azerbaijan – Ilham Aliyev
Davos World Economic Forum, January 23, 2018**

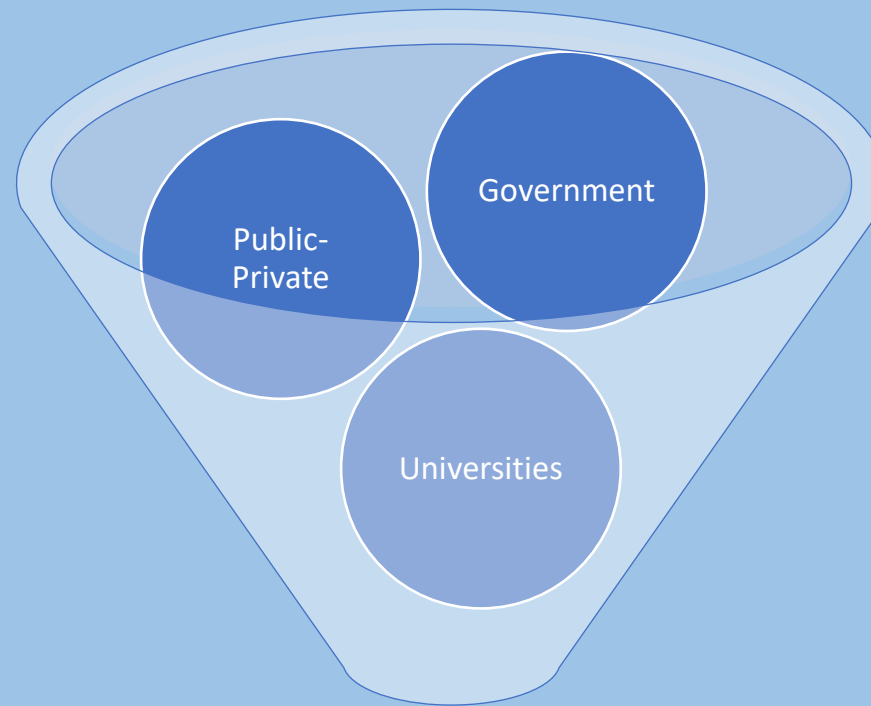
Government, Public-Private, and University Triangle



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TRADE & ECONOMY

Social Innovation
Service Innovation
Innovative consumption
Shared marketplace
Optimization
AI & Automation

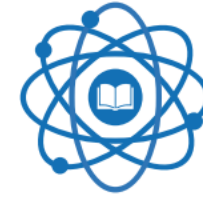


Market Outreach!
SDG ESG

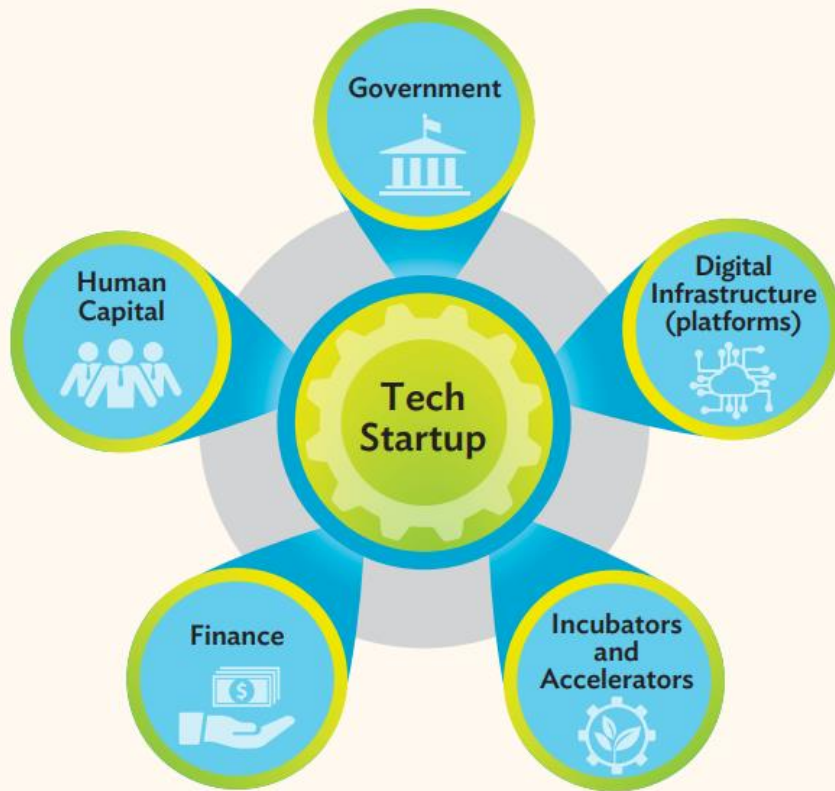
SCIENCE & TECH

Applied-sciences
Applied-physics
Safe energy
Materials science
High-precision engineering
Optimization
Industrial Revolution

Governments' role at initial stage developments



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Source: Vandenberg, Hampel-Milagrosa, and Helble (2020).

USA, Silicon Valley, Defense
Republic of Korea, Industry-Trade, Defense
Singapore, Industry-Trade
China – Defense, Trade-Industry
Türkiye – Defense, Trade-Industry

Major public-private startup ecosystem players (*excluding universities*) in Azerbaijan



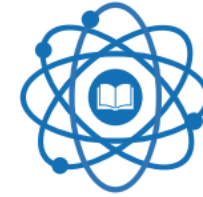
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- ASAN Innovation Center - 500 Startups in Cooperation with ASAN

ASAN – is a time tested social innovation center supported by government. Roughly up to USD 500 million impact effect within the ecosystem

- Innovation and Digital Development Agency – for all spectra of innovation activity – roughly up to USD 500 million impact effect within the ecosystem
- Small and Medium Business Development Agency – for private entrepreneurship and innovative startups – more than USD 1 billion impact effect within the ecosystem
- State Fund for Development of Information Technologies (ICT Fund) – funding mostly technology startups - roughly up to USD 500 million impact effect within the ecosystem

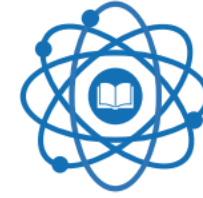
Qualitative characteristics of Azerbaijani startups



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- Almost non-rare instances of highly innovative techno-scientific start-ups in applied sciences, (energy generation, inversion, accumulation...)
- Techno-scientific startups prefer to grow within the country due to security reasons, trust, and gradual growth purposes although there are many takeover initiatives from China, Singapore, Canada, USA, Russia etc.
- There are samples of disruptively innovative technical startups from Azerbaijan who are granted with VIPO and Eurasian patents. (*Real cases are provided in the following slides.*)
- Social and service related startups, in contrast, are prone to grow overseas.
- Startups from both worlds enjoy opportunities in raising capital from overseas and reach international markets.

The most recent, daily University – Startup routine



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Azerbaijan State Oil and Industrial University

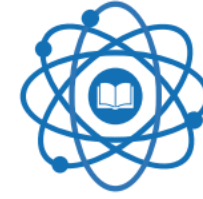
- More than 300 applicant have applied to a 3 month innovation program organized in the university
- 10 ideas have reached the MVP phase.

UNEC

- “Bootstart Incubation” program has finished its work.
- 15 ideas have reached the MVP phase.
- 5 team has received pre-seed capital. 1 team has been granted with an unconditional grant.
- 8 team was accepted to “Inkubator+” program. A more competitive environment.



The most recent, daily University – Startup routine



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French-Azerbaijani University (UFAZ)

- More than 14 startups are reaching to their MVP phase through ActInSpace hackathon for coding.
- 6 startups have graduated, 2 startups received needed investments on their way to the Global ActInSpace.

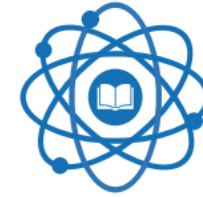


ADA University

- ADA university with Trinity Dublin School (Ireland) has created a “Tangent Startup Bootcamp” 10 startups with MVPs are acting to enter into the Irish startup ecosystem.

We can keep the list going ...

Instances of co-operations from university ecosystems.



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- \$500,000 was financed on a grant basis by the Republic of Korea e-Asia and Knowledge Partnership Fund (EAKPF) and administered by Asian Development Bank (ADB).
- KOICA has supported Innovation and Digital Development Agency with software and hardware equipment to build a new laboratory.
- Azerbaijan Technical University has created a new prototyping laboratory with Nokia.
- Ganja State University has started its own startup competitions since 2021 with 33 teams, 43 university staff involved from the start.
- Azerbaijan State Agricultural University has its own thematic innovative programs for students who are already starting their business.
- Azerbaijan Technological University (Ganja city) hosts “One Barama Center” for startup activities.
- 40 new mentors were grown through TOT programs.
- More than 500 students will be taught entrepreneurship education by Sabah.Academy supported by the Ministry of Science and Higher Education.
- 6 new local universities will promote innovation activity in the next semester.

TA 6650- AZE: Fostering Development of Local Tech Startups

A \$500K grant basis by the Republic of Korea e-Asia and Knowledge Partnership Fund (EAKPF) and administered by Asian Development Bank (ADB).



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COST ESTIMATES AND FINANCING PLAN (\$'000)

Item	Amount
Republic of Korea e-Asia and Knowledge Partnership Fund^a	
1. Consultants	
a. Remuneration and per diem	
i. International consultants	168.00
ii. National consultants	168.00
b. Out-of-pocket expenditures	
i. International and local travel	74.00
ii. Miscellaneous administration and support costs ^b	14.50
iii. Training, seminars, workshops, forums, and conferences ^c	25.50
iv. Contingencies	50.00
Total	500.00

Note: The technical assistance (TA) is estimated to cost \$550,000, of which contributions from Republic of Korea e-Asia and Knowledge Partnership Fund are presented in the table. The government will provide counterpart support in the form of the office accommodation, venues for activities, communication facilities for consultants, remuneration for TA focal persons assigned, and other in-kind contributions. The value of government contribution is estimated to be \$50,000 and will account for 9% of the total TA cost.

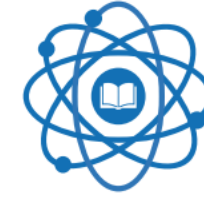
^a Administered by the Asian Development Bank.

^b Includes translation and other miscellaneous costs.

^c Includes startup competitions and study tours.

Source: Asian Development Bank estimates.

TA 6650- AZE: Fostering Development of Local Tech Startups



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COMPLETED ACTIVITIES !!!



December 2021: Fostering Development of Local Tech Startups Diagnostic Report

October 2022: Modular Capacity Building Workshop

December 2022: Tech startups development Strategies and Action Plans 2022-2025 for three beneficiary universities in Ganja

May 2023: StartupFest Ganja tech startups competition

- Winner team visited Istanbul Technology Valley.

August-October 2023: MOUs on twinning partnership between BUs and Boston University.

- Director of Entrepreneurship Faculty visited Ganja for 2 weeks to share experience on building entrepreneurial facility at university.

StartupDay Tech Startups Competition organized by beneficiary universities.



A screenshot from a regional state university's startup environment
(Azerbaijan Technological University, Ganja city)



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EAKPF
Republic of Korea

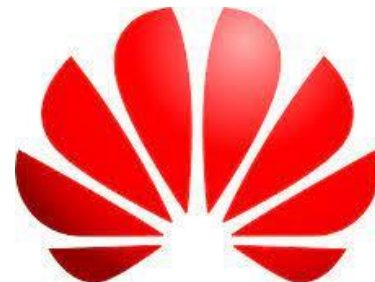


ASIAN DEVELOPMENT BANK

aselsan



AZTELEKOM



HUAWEI



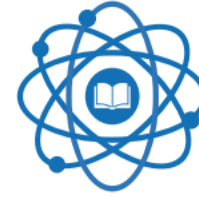
Innovation and Digital
Development Agency



**Çünki daha çoxuna
Layiqsən**

Azerbaijan Technological University, Ganja city

MOTTO says it all.



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OUR MOTTO

İDEYA SİZDƏN, DƏSTƏK BİZDƏN |
IDEA FROM YOU, SUPPORT FROM US
| Ideam a te, auxilium a nobis |
당신의 아이디어, 우리의 지원





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The role of the state in personnel training

“Centre of Cybersecurity of Azerbaijan” – was founded mutually with Technion - Israel Institute of Technology

- Specialist preparing trainings;
- Knowledge and skills widening trainings;
- Trainings to improve the knowledge of cybersecurity specialists;



Technion
Israel Institute of Technology

Project “Skills for Future” which is coordinated mutually with State Agency for Public Services and Social Innovation



KOICA leaders in a curious visit by invitation to Azerbaijan Technical University, Baku city



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KOICA leaders in a curious visit to Azerbaijan Technical University



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- What are being showcased?
- A VIPO patented prototype of new generation inverter voltage stabilizer
<https://patentscope.wipo.int/search/ko/detail.jsf?docId=WO2023212787& cid=P11-LQNSMZ-18837-1>
- What is next to it?
- An impulse generator and energy accumulator
- What else is on the stand?
- Ether energy through static-dynamic prototype? Is it ever possible? 😊

WIPO Patent being presented to our university sheltered local startup



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VIPO Patent being presented to our university sheltered local startup



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Bayraktar CTO is checking the stand



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Minister of Transport and Digital Development is
checking the stand
(select startups around thousands in Teknofest)



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A 100%
autonomic trimaran
water rescue drone

A 100%
local university startup
designed, coded and
built product





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THANK YOU FOR YOUR ATTENTION!

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International Cooperation Department of the State Agency for Science and Higher Education