

Winter report

DIGITAL

ECOSYSTEM DIGEST

2024

AI STARTUP ECOSYSTEM IN GEORGIA



INTRODUCTION

In the realm of technological innovation, artificial intelligence (AI) has emerged as a frontier for competitive advantage and business development. Globally, AI startups are transforming industries by harnessing the power of machine learning, natural language processing, and cognitive computing. They are not just reinventing existing processes or making breakthroughs across various sectors, from healthcare to finance, from education to logistics, etc.

As of recent years, the development of AI startups has been remarkable. AI startups worldwide saw a surge in funding, with total investments exceeding \$65 billion in 2023, a significant increase from previous years (Statista, 2023). This highlights the growing confidence of investors in the potential of AI to disrupt markets. On the other hand, the market for AI technologies grew to 208 billion USD in 2023, representing a 47% annual growth, and is estimated to reach 1.9 trillion USD by 2030 (Statista, 2023). While AI startups are growing across the globe, the United States remains the undisputed leader, accounting for roughly half of the global AI startup funding (Emerj, 2023). Silicon Valley continues to be a hotbed for AI innovation, but other regions like Europe and Asia are also developing AI ecosystems. China is rapidly closing the gap, other countries like Israel and India are also emerging as hubs for AI talent and entrepreneurship.

Despite this rapid growth, AI startups face an array of challenges. The high cost of talent and advanced technology, coupled with significant research and development expenses, presents substantial financial hurdles. Additionally, the complexity of AI systems demands a thorough regulatory environment to address ethical, privacy, and security concerns.





















For a developing country like Georgia, the stakes and opportunities presented by AI startups are particularly significant. Compare to large tech hubs, Georgia's tech market offers a blend of challenges and potential. Limited access to capital, a smaller talent pool, and the need for more robust infrastructure make it difficult for Georgian startups to compete on a global scale. Yet, the importance of fostering a homegrown AI ecosystem cannot be overstated. It represents a vital step towards modernizing the economy, attracting foreign investment, and retaining local talent.

This report delves into the specific context of Georgia, analyzing the AI startup ecosystem through practical research. It has a focus on comprehensive study of around 20 active startups from Georgia, whose business models are fundamentally based on AI, whether they are developing new AI systems or leveraging existing AI technologies. Information was obtained from an observational study enhanced with direct feedback from startup representatives, gathered in January 2024.

The report is organized to give a clear view of the AI startup environment in Georgia. It starts by looking at where these startups are working, how they're set up, their funding, the tech they use, and when they started. The next part focuses on trends in AI innovation, which we see through the lens of ideas represented in startup grant programs.

AI STARTUP ECOSYSTEM IN GEORGIA

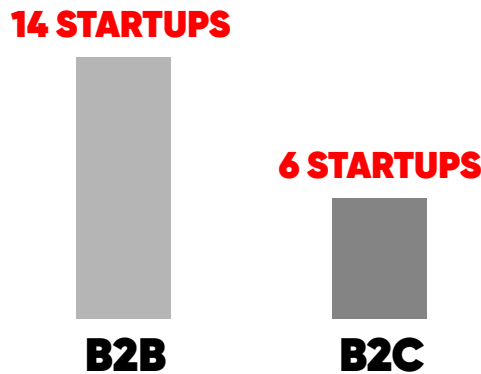
Active AI Startups in Georgia by Sector and Business Model

AgriTech	 Cloudcrop CloudCrop Agricultural AI automation				
EdTech	 Lupi AI Educational data analysis tool				
Travel	 Biliki AI AI travel planning				
Gaming	 Promofy AI gamification platform				
FinTech and Blockchain	 Ambry Solutions Crypto security AI	 MaxinAI Blockchain and software development	 Optio Banking data platform		
Health	 MyDoc MyDoc.ge AI-based telemedicine system	 Wiggly AI AI-powered pet assistant	 Pharmaco Pharmaceutical marketplace	 Ensofy Vocal Biomarkers for Mental Health	
Marketing and Developer Tools	 Theneo API documentation generation	 Brandergate* Brand development AI	 Stori AI Content creation platform		
Business Process Automation	 Logmind Log data analytics platform	 BotFleet Robotic process automation PaaS	 DataMind Business process automation	 Helio.ai Recruiting AI Software	
Customer Service	 CALEN AI Customer service automation		 Pulsar AI Automotive conversational AI		
		B2C		B2B	

Note: Active startups were determined as those having major activity during the year 2023. Startups that ceased operations and those at the idea generation stage are not included.

AI STARTUP ECOSYSTEM IN GEORGIA – BUSINESS MODELS AND DIRECTIONS

Primary Business Models of AI Startups in Georgia



In Georgia, AI startups are active in important sectors, with most serving other businesses (B2B) and some also working directly with consumers (B2C). Out of the group, 14 startups mainly use a B2B model and 6 focus on B2C. A few of these companies use both models to some extent, but B2B is more common. Looking at the bigger picture, Georgian AI startups tend to operate like those around the world, which often focus on B2B.

While Georgian AI startups are active in some areas, they have chances to expand into others. The table shows sectors where AI could be used more, following global trends and giving new chances to different industries. Moving into these areas could be an opportunity for new companies.

Sectors with Limited AI Presence in Georgia

E-COMMERCE AND RETAIL AI ■

Minimal presence; potential for growth in personalization.

ENTERTAINMENT AND MEDIA ■

Largely absent, opportunities in content customization.

MANUFACTURING AUTOMATION ■

Not evident; significant room for AI-driven process improvements.

ENERGY AND ENVIRONMENTAL ■

Rarely addressed, scope for AI in sustainability.

EDUCATION ■

Limited; opportunities for interactive AI education.

TRANSPORTATION AND LOGISTICS ■

Unexplored; potential for AI in efficiency.

GEORGIAN LANGUAGE ADAPTABILITY ■

Rarely addressed; significant potential for growth in language processing and understanding.

AI STARTUP ECOSYSTEM IN GEORGIA – CHALLENGES

Specific Challenges for AI Startups in Georgia

LANGUAGE BARRIERS ■

The Georgian language's unique script and complex grammar, combined with less available web material, aren't well supported by current global AI models.

TALENT ACQUISITION ■

Finding AI experts in data scientists is hard in Georgia, limiting the growth of AI startups.

READINESS AND TRAINING DEFICITS ■

There's a gap in how ready users are and their training in AI.

MARKET ADOPTION AND PERCEPTION ■

Some customers are using AI, but others don't see its benefits or are scared of it.

In Georgia, like many small and developing countries, the size of the market and limited financial resources pose challenges for startups. These are common issues not unique to Georgia. However, this page focuses on challenges specific to the Georgian context, starting from the intricacies of the Georgian language to the relatively low readiness of users for AI training.

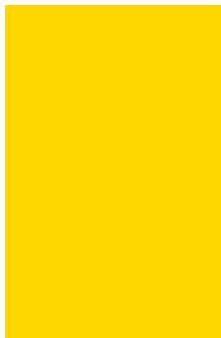
These particular challenges highlight the unique aspects of fostering AI innovation in a Georgian market, where distinct cultural and economic factors play a significant role in shaping the startup ecosystem.

AI STARTUP ECOSYSTEM IN GEORGIA – ANALYSIS BY AGE

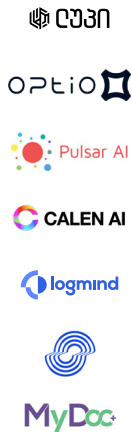
Median age of Georgian Active AI startups **3 YEARS**

Distribution of Active AI Startups in Georgia by Age

Pioneers, 7 Startups



Established before 2020



Navigators, 5 Startups



Established between 2020-2021



Frontiers, 8 Startups



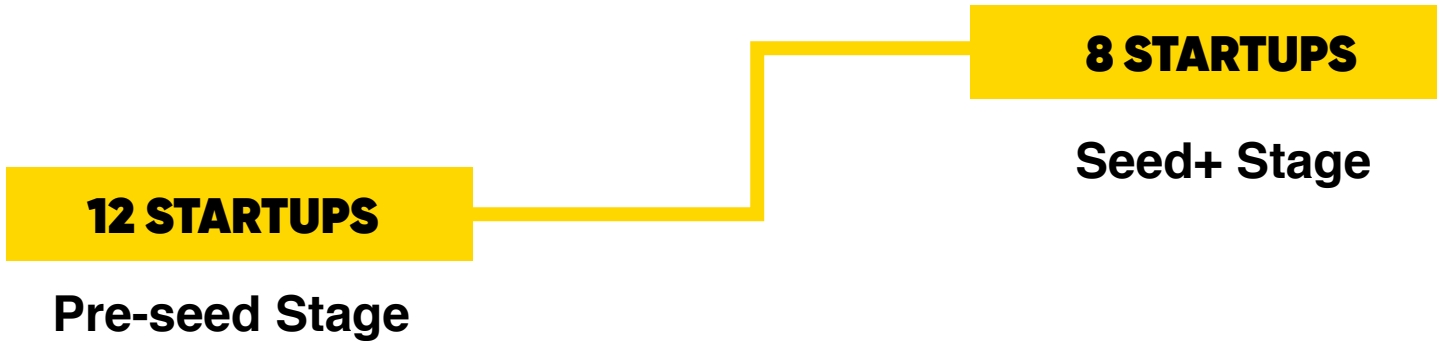
Established between 2022-2023



The active AI startups in Georgia can be categorized into three main groups based on their founding year. The first group, founded before 2020, represents the early entrants (Pioneers) that have sustained through various market conditions. The second group (Navigators) emerged during the global lockdown period, navigating through unique challenges and opportunities presented by the pandemic. The final group (Frontiers) started amidst the latest wave of AI innovation, capitalizing on the surge of technological advancements and market readiness for AI-driven solutions.

AI STARTUP ECOSYSTEM IN GEORGIA – FUNDING STAGES

Funding Stages for Current AI Startups in Georgia



Note: The “Seed+” category includes startups at the seed stage as well as those that have partially advanced to the next funding level, including Series A.

The active AI startups in Georgia are primarily in the pre-seed stage, showing a landscape with many new entrants. There are notable successes, with several startups moving to the seed stage, and also 6 of them have received international funding too. This overview and graph capture only those startups that are still operational, as many have discontinued their activities during the pre-seed stage and are not included in this graph.

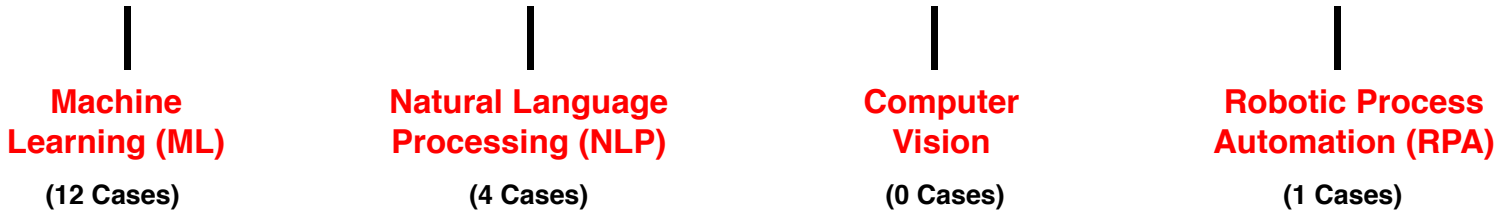
Average Age of Current Active AI Startups from Georgia by Stages



It takes approximately 3-4 years for AI startups in Georgia to reach the seed stage.

AI STARTUP ECOSYSTEM IN GEORGIA – KEY TECHNOLOGIES

KEY AI TECHNOLOGIES UTILIZED BY ACTIVE AI STARTUPS FROM GEORGIA



KEY SUPPORTING TECHNOLOGIES FOR AI SOLUTIONS USED BY ACTIVE AI STARTUPS FROM GEORGIA

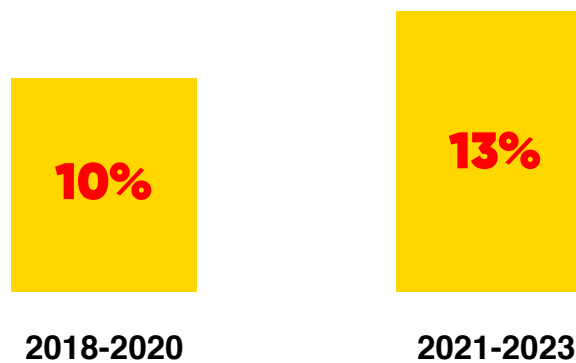


Note: Several startups are utilizing a range of various technologies, which complicates assigning them to sole category. Additionally, many startups are using established AI technologies and supporting technologies to craft tailored solutions for their customers.

TRENDS IN AI INNOVATION IN GEORGIA - AMONG TECH SECTORS

To understand recent AI startup ideas in Georgia, a good approach is to look at the winners of the Georgia Innovation and Technology Agency's Startup Matching Grants. It has been shown the increasing emphasis on AI-based innovations. From 2018 to 2020, 10% of these winners were AI-based projects, showing a clear interest in AI. This trend grew stronger from 2021 to 2023, with AI projects making up 13% of winners.

Percentage of AI Projects among all GITA Startup Matching Grants Winners between Periods



What makes this trend even more striking is the fact that AI projects accounted for only 4% of the total project submissions. Despite their smaller share in submissions, AI projects achieved a winning rate of approximately 11% for the whole period. This success rate is significantly higher than their representation, underscoring the high caliber and compelling nature of AI proposals or a growing acknowledgment of the importance.

AI Project Presence in GITA Grant Submissions and Awards

Percentage of AI Projects Among All Submissions: **4%**

Percentage of AI Projects Among Winning Entries: **11%**

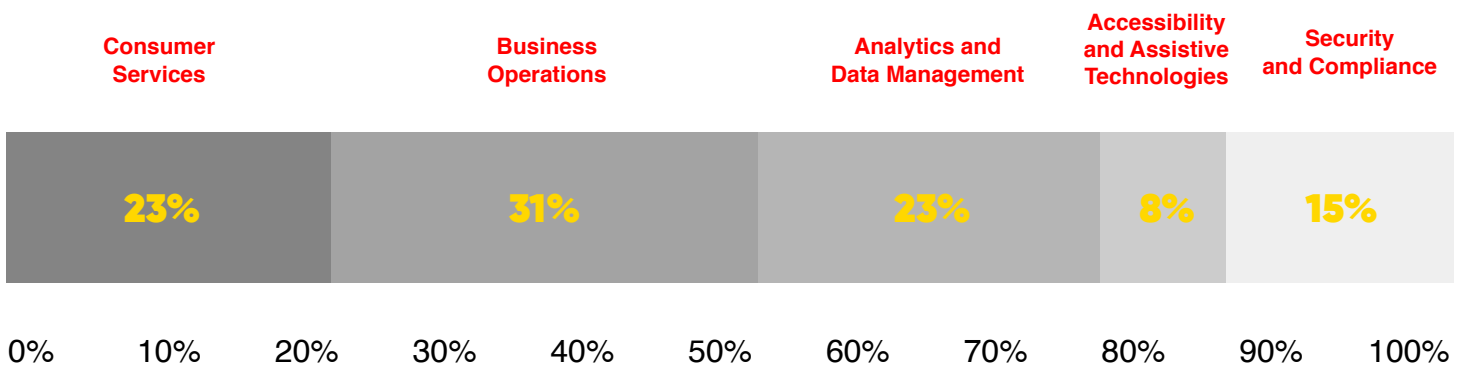
TRENDS IN AI INNOVATION IN GEORGIA - INSIDE THE SECTOR

AI Startup Success Rates in GITA Competitions

Startup Matching Grants & Innovation Matching Grants: **19%**

From 2018 to 2023, the GITA Startup Matching Grants (100-150k GEL) saw 24 AI startups financed and the Innovation Matching Grants had 4 AI-related winner applications for expanding firms (650k GEL). The success rate was 19%, i.e., one in five AI-related startups was financed. Startup Grants foster early-stage global tech, while Innovation Grants advance established local innovations for global markets.

AI Startup Applicants by Sector in GITA Competitions



Represented AI startup ideas for funding Georgia's sector exhibits distinct focal areas. In Business Operations, there's a trend towards automation and efficiency enhancement. For example, solutions here tackle inventory management and business communication, streamlining operations.

- Consumer Services features startups personalizing user interactions, with AI-driven health advice and telemedicine being notable examples.
- In Analytics and Data Management, the focus is on using AI for insightful data interpretation and consumer behavior analysis, crucial in market and brand development.
- Accessibility and Assistive Technologies, though a smaller sector, show impactful AI use, such as in aiding individuals with disabilities.
- Security and Compliance is marked by AI applications in legal research and digital security, highlighting

SUMMARY

There's clear evidence that Georgia's AI innovation ecosystem is developing, but it's not quite stable or solid yet. This evolving landscape presents both opportunities and challenges. Here are some of the main findings from the report, highlighting the current state and trends:

- **Focus on B2B Models:** Many startups are targeting business-to-business models, demonstrating a strategy to serve other businesses' needs. This approach suggests they're positioning themselves as essential players within the commercial sector, providing solutions that other companies rely on for efficiency and innovation.
- **Resilient Older Startups:** Some startups established before 2020, which we can call 'pioneers,' are still active. Their endurance through various market conditions, including the pandemic, suggests they have something valuable that keeps them going. This resilience also highlights what new startups might face in the ecosystem.
- **Sectors and areas with Limited Presence:** The analysis highlights specific technology areas with minimal or no presence. These sectors include E-commerce and Retail, Media, sustainability-related challenges, adaptability of AI to the Georgian language, etc.
- **Influx of New Startups:** There's been a noticeable increase in new startups and ideas since 2020. This trend brings fresh energy and ideas into the ecosystem but also shows how young and changeable the sector is.

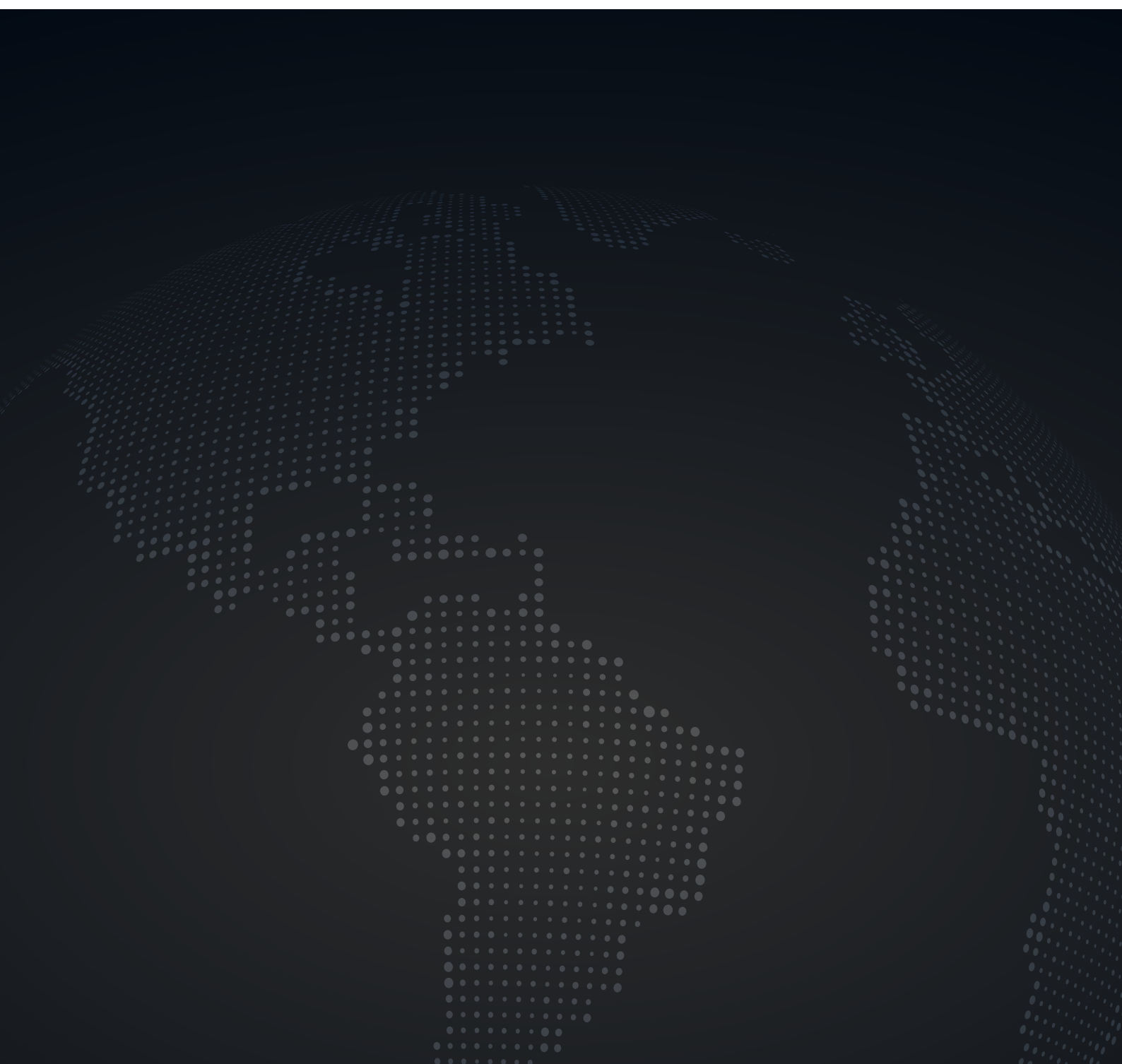
In summary, Georgia's AI sector is growing and has a lot of potentials, but it's still finding its footing. Its future depends on how these startups meet market demands and handle global competition.

WHAT IS DIGITAL ECOSYSTEM DIGEST?

Digital Ecosystem Digest is a quarterly electronic research report issued by the BTU Center for Entrepreneurship.

The report reviews current technological and innovative trends in various sectors of the digital economy of Georgia and covers topics such as: startups in digital business, e-commerce markets, digital platforms (B2B, B2C or C2C), fintech technologies, etc.

The purpose of the report is both to consolidate existing information and to generate new practical knowledge about the digital economy. Each research report will be co-authored by different researchers. Authors of the current edition are BTU affiliated academic staff- Tsothe Zhghenti and Vakhtang Chkareuli, BTU researcher student - Mariam Khatiashvili-Gurgenidze.



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