

Company: General Authority for Survey and Geospatial Information

Company Description: The General Authority for Survey and Geospatial Information (GEOSA) is the national body in Saudi Arabia responsible for regulating and developing the geospatial sector. Headquartered in Riyadh, it sets policies and standards, and supports digital transformation and Vision 2030 through accurate, integrated geospatial data and national initiatives.

Nomination Category: Product & Service Categories - Education & Education Technology Solutions

Nomination Sub Category: Professional Development Solution

Nomination Title: Immersive VR Geospatial Training Program: Transforming Technical Capacity Building in Saudi Arabia

1. Which will you submit for your nomination in this category, a video of up to five (5) minutes in length about the the nominated new or new-version product or service, OR written answers to the questions for this category? (Choose one):

Written answers to the questions

2. If you are submitting a video of up to five (5) minutes in length, provide the URL of the nominated video here, OR attach it to your entry via the "Add Attachments, Videos, or Links to This Entry" link above, through which you may also upload a copy of your video.

3. If you are providing written answers for your submission, you must provide an answer to this first question: If this is a brand-new product, state the date on which it was released. If this is a new version of an existing product, state the date on which the update was released:

The VR Geospatial Training Program is a brand-new product officially launched on October 15, 2024.

The initiative was developed from the ground up as part of GEOSA's national digital transformation efforts and underwent a prototype and internal testing phase during Q3 2024. The full release followed a successful pilot with selected government agencies, marking a significant milestone in modernizing technical training in the geospatial sector.

4. If you are providing written answers for your submission, you must provide an answer to this second question: Describe the features, functions, and benefits of the nominated product or service (up to 350 words):

Total 173 words used.

The VR Geospatial Training Program, developed by the **General Authority for Survey and Geospatial Information (GEOSA)**, is an advanced digital platform that enhances the skills of land surveying professionals through immersive, high-fidelity virtual reality. It replaces traditional field training with a scalable, safe, and cost-effective solution.

Key Features:

- **3D Simulation** of real-world tasks like terrain navigation and instrument calibration.
- **Multi-platform compatibility** with VR headsets and desktop access.
- **Interactive tools** including voice commands and motion tracking.
- **AI-driven analytics** for real-time feedback and performance tracking.
- **Content Management System** for continuous updates and customization.
- **Integration with "Ma'arefi" platform** for centralized access across agencies.

Benefits:

- **Saves over SAR 390,000 annually** by reducing field training costs.
- **Cuts physical training by 65%**, enhancing safety and efficiency.
- **Improves learning speed and retention** through repeatable simulations.
- **Accessible anytime**, even during emergencies or travel restrictions.
- **Ensures consistent training quality** across regions and entities.
- **Supports Saudi Vision 2030** by advancing human capital and digital transformation.

This program represents a new standard for immersive government training and a forward-thinking model for workforce development.

5. If you are providing written answers for your submission, you must provide an answer to this third question: Outline the market performance, critical reception, and customer satisfaction with the product or service to date. State monetary or unit sales figures to date, if possible, and how they compare to expectations or past performance. Provide links to laudatory product or service reviews. Include some customer testimonials, if applicable (up to 350 words):

Total 314 words used.

Since its official launch in **October 2024**, the VR Geospatial Training Program has demonstrated strong performance across government entities in Saudi Arabia. Over **325 technicians** from 8 ministries and agencies have completed the training, with more than **600 VR simulation sessions** delivered during the first six months of implementation.

Performance Highlights:

- **Cost Savings:** The program has led to a direct annual cost reduction exceeding **SAR 390,000**, primarily by eliminating the need for field logistics, travel, and equipment usage.
- **Operational Impact:** Reports from participating agencies indicate a **65% reduction in reliance on traditional field-based training**. At the same time, technical readiness before deployment has improved by more than **75%**.
- **Efficiency Gains:** Human error during real-world assignments has decreased by approximately **50%**, thanks to the opportunity for repeated scenario-based practice in a controlled, immersive environment.

Customer Satisfaction:

A post-training survey involving **2,134 participants** reported an **overall satisfaction rate of 80.5%**, with standout metrics including:

- **81.3%** of users confirmed they could complete tasks independently.
- **80.2%** expressed ease of system use.
- **79.2%** acknowledged improved confidence in their field readiness.

Testimonials:

"The VR system helped me visualize and perform surveying tasks before ever stepping into the field. I felt more confident and capable."

— Trainee, Ministry of Municipal and Rural Affairs

"We no longer need to wait for equipment availability or favorable weather. Training can now happen on demand, anywhere."

— Technical Supervisor, Ministry of Environment, Water, and Agriculture

The initiative has also been featured internally in digital transformation roundtables and recognized as a best practice in immersive government training. It is currently under review for expansion to other technical domains such as **remote sensing, drone operations, and GIS analysis**.

Link to the official program overview: <https://www.geosa.gov.sa/marafei>

The program's market adoption and user feedback affirm its value as a transformative tool in the national digital skills agenda.

6. You have the option to answer this final question: Reference any attachments of supporting materials throughout this nomination and how they provide evidence of the claims you have made in this nomination (up to 250 words):

Total 233 words used.

This nomination is supported by a comprehensive set of attachments that demonstrate the development process, measurable outcomes, and user feedback associated with the **VR Geospatial Training Program**. These materials provide clear validation of the program's technical capabilities, cost-effectiveness, and user satisfaction:

Attached Supporting Materials:

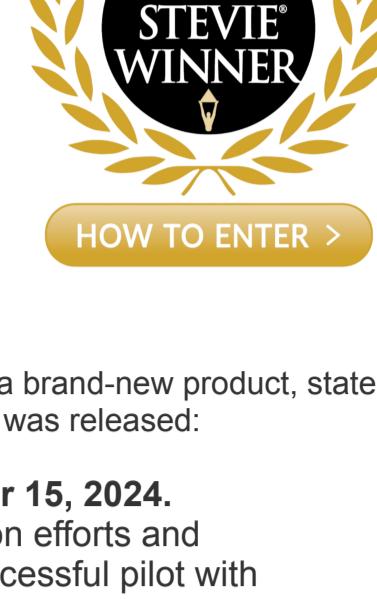
- **Project Design & Implementation Report (PDF):**
A detailed presentation of the full project lifecycle, from ideation and prototyping to national rollout, including technical architecture, training workflows, and stakeholder roles.
- **Performance Evaluation & Satisfaction Survey (Data Summary):**
Statistical analysis of post-training feedback from **2,134 participants**, highlighting an **80.5% satisfaction rate**, reduced human error, and increased field readiness.
- **Screenshots of the VR System:**
Visual documentation showing the interactive 3D environments, training modules, system UI, and scenario walkthroughs that trainees engage with during the simulation.
- **Cost Impact Statement:**
A breakdown of the annual savings (SAR 390,000+) attributed to reduced physical training logistics, repeated sessions, and enhanced remote access.
- **Customer Testimonials & Use Case Insights:**
Quotes and perspectives from actual users in multiple ministries (e.g., Municipal Affairs, Transport, Civil Defense), affirming how the program improved their learning experience and technical confidence.
- **Official Program Link:**
<https://www.geosa.gov.sa/marafei> — publicly available access to the "Ma'arefi" platform, which hosts the VR modules and supports user access across government entities.

These attachments collectively validate the program's innovation, alignment with Saudi Vision 2030, and its role in transforming geospatial workforce training.

Attachments/Videos/Links:

[Immersive VR Geospatial Training Program: Transforming Technical Capacity Building in Saudi Arabia](https://www.geosa.gov.sa/marafei)

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