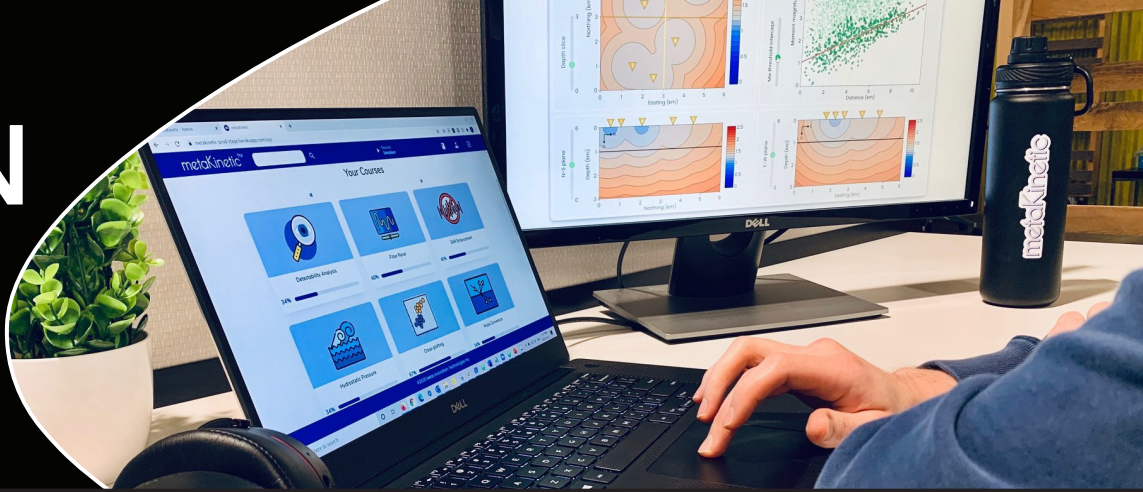# CENGN

META INNOVATION'S INNOVATION HIGHLIGHT

COMPANY OVERVIEW

Meta Innovation Technologies, Inc. is a Canadian tech company headquartered in Ottawa which beside AI augmented analytics products, offers the first simulation-based digital learning and development (L&D) platform of its kind (metaKinetic) built for Energy and Mining technical managers and their teams to power intuitive learning, hands-on practice, and skills maintenance from anywhere at any time. metaKinetic is an enterprise software solution with geoscientists and subsurface engineers as end-users. Meta's mission is to enable the Energy and Mining industry professionals to develop deep understanding of technical concepts and workflows that ties directly to the bottom-line of these trillion-dollars industries and increase return on training investment for organizations.

LOCATION: OTTAWA, ON

TECHNOLOGY

Data Centre and Cloud

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ENERGY AND MINING SECTORS IN NEED OF AN EFFICIENT TRAINING METHOD FOR TECHNICAL WORKFORCE

In the Energy and Mining industry the average cost of an exploration and production project is about $30 million meaning any uneducated decisions related to these projects by technical staff will lead to a loss of millions. The only solution to eliminate uneducated decisions is through staff training. However, in 2019, only $2.8 billion has been spent on training geoscientists and engineers across these two sectors. Backed with training expenditure data over the years, this cost is a repetitive expenditure and the main reason behind it is that it only takes 8 days to forget more than 75% of what staff learn during traditional training (passive training).

METAKINETIC: NEXT GENERATION KNOWLEDGE EMPOWERMENT

Developed by Meta, metaKinetic is the first and largest simulation-based digital training platform for Energy and Mining with 60+ simulations that combat the forgetting curve by putting the trainee in the driver's seat. It resolves the high cost of repetitive training, lack of flexibility, and low return on training investment due to lack of trainee engagement. Through simplification, visualization, and interaction (active learning), metaKinetic revolutionizes the way staff learn and apply complex scientific and engineering concepts and workflows. This platform is a training paradigm changer for Energy and Mining companies on the path of digital transformation, providing them user data analytics to measure their return on training investment and staff performance.

TESTING SCALABILITY IN A CLOUD-AGNOSTIC ENVIRONMENT

Needing to verify the specs required to run numerous concurrent users, Meta used CENGN's cloud infrastructure to scale and stability-test their platform. By testing metaKinetic on the open source testbed, the company was able to prove their solution is cloud-agnostic - flexible to run on any cloud environment. Meta validated and confirmed the scalability of their solution to fulfill the company future growth objectives. The company is leaving this project with additional insights for further developments and confirmation that metaKinetic scales well.

> "The engineering advice and recommendations by the CENGN technical staff offered useful insights into architectural optimizations further elevating user experience and alleviating our future technical debt."
>
> **Dr. Ellie Ardakani, CEO,**
>
> **Meta Innovation**
>
> **Technologies**