

STORY 8

Building Kenya's future: BIM training and infrastructure skills development

Kenya is at a pivotal moment in its development journey. The government's ambitions for affordable housing, improved transport, expanded energy access and resilient water systems are driving unprecedented levels of infrastructure investment. Yet delivering projects at this scale and complexity demands more than just capital and machinery: it requires new ways of working, collaboration across disciplines, and digital tools that extend the life and value of assets.

BIM is increasingly recognised as a crucial enabler of this transformation. Although the government in Kenya has not yet mandated BIM usage, multilateral banks and international organisations funding projects in the country require its use on projects. This requirement drives demand for skills, knowledge, and leadership to embed BIM into everyday practice.

At the forefront of this shift is ADCC, an Autodesk Learning Partner dedicated to training engineers, consultants, and government agencies in BIM methodologies. By combining technical instruction with an emphasis on collaboration, project management, and long-term asset operation, ADCC is equipping Kenya's infrastructure workforce with the capabilities needed to meet national priorities.

Training for impact

ADCC has developed a suite of infrastructure-focused training programmes, delivered to both government and private sector clients. Using Autodesk technologies such as Civil 3D, InfraWorks, Revit and AutoCAD, participants learn how to move seamlessly from conceptual design to detailed design within a single collaborative environment.

In 2025 alone, ADCC has trained more than 75 engineers, many of whom are part of design teams working on roads, water, and energy projects. These engineers are being prepared to act as BIM champions within their organisations, building momentum and confidence in new ways of working.

Importantly, ADCC's programmes go beyond software proficiency. Sessions address interoperability with other platforms, cloud-based collaboration, and the management of projects within a common data environment. This ensures that learners not only use the tools effectively but also understand how BIM supports efficiency and transparency across the project lifecycle.

To nurture the next generation, ADCC offers discounted training for students and is working with universities to assemble larger cohorts – helping to build capacity and capability for the future. Senior managers and decision-makers, meanwhile, are engaged through targeted webinars that demonstrate the strategic benefits of BIM adoption.



Why BIM matters for Kenya's infrastructure

For Kenya's ambitious infrastructure plans, BIM delivers value at multiple levels:

- Design consultants benefit from powerful collaboration features, clash detection, and AI-driven analysis.
- Project managers gain from automated scheduling and coordinated teamwork in a shared digital environment.
- Owners and operators retain design models and data that inform long-term asset maintenance and management, reducing costly errors.

BIM also plays a key role in managing relationships with key stakeholders. Communities can interact with models in their local environment, helping to secure public approval – often a requirement for funders such as the World Bank or IMF.

As ADCC puts it: "BIM is a crucial tool for projects before, during and after construction. BIM models also help win community approval for projects as they can interact with the proposed models in their environment and see the changes of the environment being proposed."

"After construction, it ensures that the facility management team has full visibility of the design process and decisions made, reducing rework and improving operational efficiency."

Challenges to adoption

Despite the clear benefits, barriers remain. Without government standards or a clear mandate, adoption is left to individual organisations.

ADCC believes that government has a key role to play. By compensating contractors for the cost of BIM tools (just as they are paid for mobilising machinery) and introducing BIM requirements on publicly funded projects, Kenya could accelerate progress. Publishing national BIM standards would provide consistency and confidence across the industry.

Partnering for progress

ADCC works closely with government agencies, contractors, consultants, and universities to build a critical mass of skilled professionals. This collaboration is already paying dividends.

Eng. Joseph Otira, Senior Engineer at the Kenya Rural Roads Authority (KeRRA) says: "Our partnership with ADCC has given us access to approved instructors, allowing us to identify training requirements quickly. Our team has gained essential skills in managing design data, drafting, modelling, and road design presentation."

"The benefits are clear: easier collaboration, faster project delivery within timelines, and cost savings. BIM allows us to accurately quantify requirements for infrastructure works."

Learners also praise the programmes for their interactivity, practicality, and relevance: *"The trainer's wealth of knowledge and the interactive nature of the programme were excellent. I can now carry out more detailed road designs, especially at intersections and junctions, and present outputs more clearly. BIM increases overall productivity and helps save significant project costs."*

Looking ahead

Kenya's infrastructure future depends on building more and building smarter. As early-career engineers trained in BIM enter the workforce and today's BIM-literate designers move into management positions, the implementation of BIM will be the industry default.

To aid this, there's a need to prepare the workforce, champion digital skills, and ensure that BIM is not just a tool but a mindset embedded in how Kenya designs, delivers and manages its vital infrastructure.

As Vikas Tonge, Director at ADCC says: "Just as we invest heavily in machinery, we must also prioritise effective project management. BIM technologies deliver significant cost savings and efficiency throughout the project lifecycle, and therefore they deserve proper attention and strategic investment."



ADCC International East Africa is an Autodesk Learning Partner based in Nairobi, Kenya. It is a specialist in BIM and the infrastructure market, training and preparing architects and engineers to capitalise upon BIM technology. Working in partnership with universities, government departments and commercial organisations, it also offers architectural and engineering design services and solutions, topographic mapping, GIS, photogrammetry and electrical distribution surveys.



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