

## STORY 1

# Building capability, capacity and confidence in Ethiopia's BIM future

In 2023, The Institute of Ethiopian Standards published its first national BIM standard – a key step in modernising the Ethiopian construction sector.

The transition to BIM across the sector is being led by the Ethiopian government – developing BIM syllabus, coordinating awareness events, and overseeing implementation on national projects. This focus on the new standard gives government agencies, industry bodies, and private companies the confidence to embrace BIM.

But standards alone are not enough; people need the skills to apply them. That's where Autodesk Learning Partner, CMI-BIM Training Center, efforts are focused.

Since the publication of the national standard, demand for BIM training has grown across the sector. Government bodies have begun mandating the use of BIM on public projects, while private firms increasingly recognise the competitive advantage it offers.

*“BIM awareness is no longer an issue. Today, organisations are focused on building BIM teams and seeking certification for their professionals,”* says Feleke Assefa from CMI-BIM Training Center in Addis Ababa.

## Developing trainers, building capacity

A cornerstone of CMI-BIM Training Center's efforts has been its train-the-trainer programme. Over three rounds, 65 industry professionals, university lecturers and members of professional associations have completed the programme.

Training is designed to ensure participants gain a thorough understanding of BIM technology and its practicability – using Autodesk Revit to build capability and understanding.

Trainers are equipped to cascade their knowledge through universities, professional networks, and regulatory bodies, multiplying the impact of the initial programme. A proven way to boost capacity and capability, the train-the-trainer initiative has been delivered in partnership with the likes of the South Africa BIM Institute, GIZ and professional associations.

The Autodesk Learning Partner actively monitors global BIM developments through professional networks and online platforms. Best practices are carefully adapted to Ethiopia's unique context and integrated into both training modules and standard-setting efforts, in collaboration with the Ethiopian

Standards Institute. It aligns its training to the national standards, as well as ISO 19650 and other international BIM standards.

There's a significant focus on how standards are applied in practice – preparing learners for real-world work environments.

*“Our approach is not just about theory. Every learner works on a detailed G+3 residential building project that covers architecture, structure, and MEP, as well as 4D, 5D and clash detection,”* explains Feleke Assefa.

Demand for training is gathering pace – in 2024 alone, CMI-BIM Training Center trained 927 participants. Its instructor team of eight delivered courses with an average satisfaction rating of 91.1%, reinforcing the organisation's focus on maintaining high instructional quality.

# Government and industry collaboration

CMI-BIM Training Center works in collaboration with government ministries and industry associations – all of which have vested interest in increasing capacity and capacity in the system.

- FDRE Ministry of Urban Development and Infrastructure (MoUI) is responsible for formulating and implementing national policies for urban development, planning, and infrastructure. Its powers include developing national urban plans and standards, coordinating infrastructure projects, and regulating the construction industry.
- Regulatory authorities such as the Ethiopian Construction Authority (ECA) and Oromia Construction Authority (OCA), along with professional associations like the Ethiopian Consultant and Contractor Associations.
- International partners add further momentum. GIZ Ethiopia's Sustainable Training and Education Programme has funded trainer development and student training, linking BIM skills directly to employability.
- The Construction Management Institute, created as part of MoUI, is responsible for ensuring effective implementation of the country's short- and long-term construction programmes and projects in terms of time, finance, and quality. Amongst its priorities is building project management capacity within project delivery partners.



# Challenges – and opportunities

Delivering BIM training in Ethiopia is not without hurdles. High software costs, limited access to computers and infrastructure gaps are recurring themes. Some professionals fear that digitalisation could threaten traditional roles.

Yet the opportunities are far greater.

With growing numbers of skilled professionals and strong government backing, Ethiopia is positioning itself as a regional leader in BIM adoption. Job creation, international competitiveness, and more efficient project delivery are all within reach.

CMI-BIM Training Center sees the next few years as critical. With BIM standards in place, the focus will shift to mandating BIM use on major projects. Training will continue to evolve, incorporating new global practices and responding to industry needs.



## Ethiopian Standard: ES 7030:2023<sup>9</sup>

- First published in June 2023.
- Prepared under the direction of the Technical Committee for Construction management systems (TC 134) and published by the Institute of Ethiopian Standards (IES).
- Reference made to CIC BIM standard general, Version 2.1-2021, published by Hong Kong Construction Industry Council.
- Designed to enable an Appointing Party / Client to specify, manage and assess BIM deliverables by architects, engineers, surveyors, and contractors in Ethiopia.
- The use of the standard should ensure that project deliverables produced using the BIM processes achieve an agreed level of quality.



CMI-BIM Training Center is based in Addis Ababa, Ethiopia. The Construction Project Management Institute (CMI), re-established by Proclamation No. 1263/2014, strengthens the country's construction project delivery by building capacity. It develops policies and strategies, establishes international-standard certification and competency systems, provides research, training, and consultancy. CMI identifies and addresses skills gaps, standardises methodologies, facilitates technology transfer, benchmarks project competitiveness, and collaborates with local and international institutions to enhance efficiency, quality, and professionalism in construction project management.



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