

BIM NEWSLETTER

AEC NEWS & STORIES



JANUARY, 2024



Highlights

- Traditional Survey & BIM
- Autodesk Solutions and Value Proposition
- Digital twin, the why?
- In what ways BIM can be used on Construction sites?

Traditional Survey & BIM

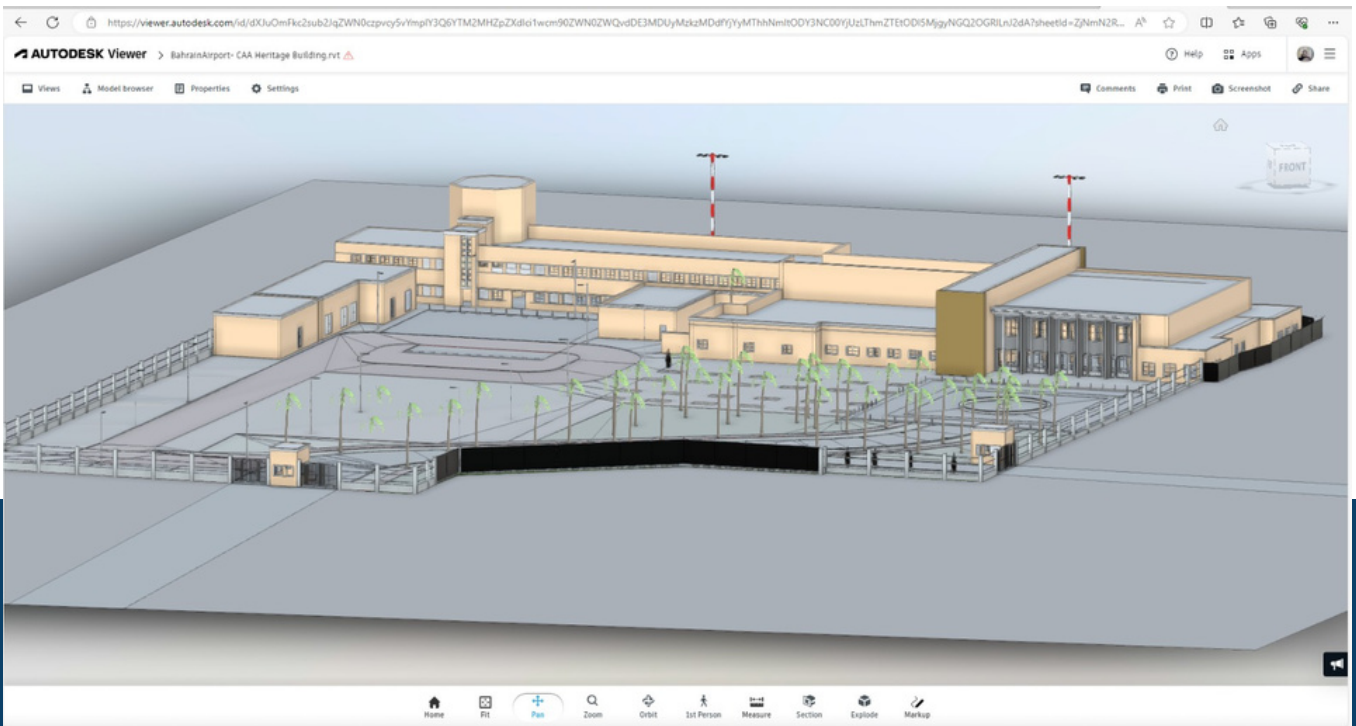
The Surveying process was traditionally done through manual surveying using tools such as a theodolite, transit, and GPS. Surveying has evolved over time with technological advances in GPS technology, remote sensing imagery, aerial photography, satellite imagery, and laser scanning technology (e.g., LIDAR).

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 **AUTODESK**
Reseller

Building information modeling (BIM) is a process involving the generation and management of digital representations of the physical and functional characteristics of places.

With the advancement of technology, surveying is now done with a combination of GIS and BIM technologies. BIM is also being used as it helps in creating a 3D model that has accurate information about the land and its topography.



MicroCenter had an opportunity to deliver the BIM survey and ArcGIS GeoBIM solution in a Proof - of - concept project for the Bahrain Airport Company (BAC).

Key Benefits

- BIM can help in construction and management of smart cities
- Save time and cost by minimizing data conversions
- Communicate up-to-date project information easily and securely
- Better decision-making and data management during the AEC lifecycle

Autodesk Solutions & Value Proposition

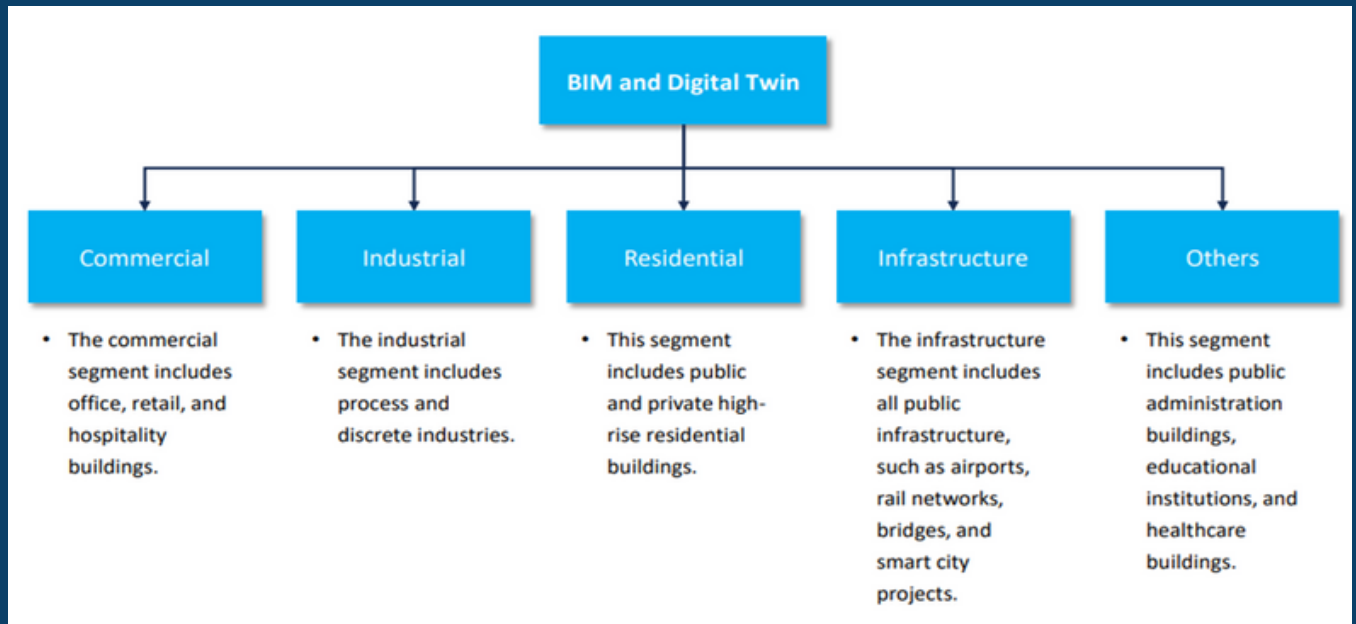
Autodesk's AEC products have been constantly improving the way building, infrastructure, and industrial projects are designed, built, and operated.

- Autodesk Construction Cloud is a collaborative environment designed for project stakeholders to connect workflows across a construction project's life cycle, digitalize project data, integrate workflows, and increase efficiency and profits while minimizing risk.
- Autodesk leads the way in the AEC technology evolution with the launch of Autodesk Forma, an industry cloud that unifies workflows across teams that design, build, and operate built environments. Forma's initial capabilities integrate automation and predictive analytics through AI in the planning and design stages to deliver better and more sustainable outcomes.
- Autodesk expands its operations and maintenance leadership through Autodesk Tandem, a digital twin solution that facilitates collaboration between stakeholders with streamlined communication and a centralized data repository as well as the ability to integrate with existing facility management platforms and offer a digitalized handover process.

Digital Twin, the Why?

A digital twin is a dynamic, up-to-date representation of a physical object or system with a complete collection of all data in one place.

Digital twins have emerged as a transformative technology with applications in various sectors such as Smart cities, Permit systems, Manufacturing, Engineering design, AEC etc.



Furthermore, digital twins find valuable applications in permit systems by allowing authorities to visualize proposed construction projects in a virtual environment.

In what ways BIM can be used on Construction sites?

BIM can be used in numerous ways for construction sites. From better planning of resources and materials to improving collaboration between various disciplines, BIM is used widely to help keep the project within the scheduled time and budget.

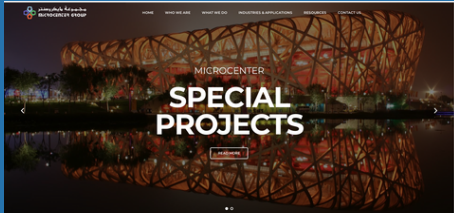
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Incorporated in 1984, MicroCenter is an award winning group of technology companies in the Kingdom of Bahrain, which provides IT Business Solutions, Geographic Information Systems (GIS), Utility Network GIS Surveys, LIDAR Technology, BIM modeling, Smart card & Digital Solutions and highly specialized GIS & Autodesk Training. With over 100 qualified staff & branch in Saudi Arabia, it aims to refine its capabilities in developing & integrating innovative IT, GIS & Engineering solutions and expand the expertise in different corners of the GCC.



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