

3D Digitizing Services Take Off

The development of digital cameras and progress made with optical phase calculation algorithms has generated 3D imagery techniques. The 3D digitizing of an object or other thing then only takes a few seconds and can be integrated into an inverse engineering or quality inspection process. 3D digitizing is the process of collecting data on the shape of real-world objects and using it to build digital three-dimensional objects that are useful for a variety of applications. A wide range of industries –from entertainment (to produce movies and video games) to industrial design – make extensive use of 3D digitizing services.

The number of companies offering 3D digitizing services has grown exponentially in the past few years. 3D digitizing can be done from photographs for a variety of uses – to visualize architectural constructions, renovate existing buildings, virtual animation and for electronic marketing media. The process involves taking perspective views, making calculations on the projections, identifying the vertexes of buildings and joining them to create a 3D model. Taking different perspectives of a building help minimize errors in 3D digitizing.

One field that makes extensive use of 3D digitizing services is architecture. In the architectural industry, the process involves creating 2D floor plans using standard CAD tools such as AutoCAD. Using the structural details, each floor and building is then given an additional property for the appropriate visualization in a virtual space.

In engineering, the process of 3D digitizing involves conversion of point data into point cloud with standard formats such as AutoCAD DXF, Wavefront OBJ, and STL, which consist of a polygonal surface mesh, such as triangular facets, created from the points. In AutoCAD, the DXF data imports as a polyface mesh, which retains most of the object properties during 3D digitizing.

India has become a popular outsourcing destination for 3D digitizing services, enabling companies to save money and time. Indian companies offer services to convert engineering drawings, architectural designs, terrain maps and so on.

One company that has made a reputation for itself in this field is AABSyS Information Technology, based in Bhubaneswar, in the state of Orissa in India. It offers 3D digitizing services to create architectural 3D models of buildings that enable users to view the structure's interiors and exteriors. AABSyS helps engineering firms generate digital 3D machine, structural and civil drawings. The company's 3D digitizing services also helps environmental, mining and GIS consultants to generate 3D terrain models to help them in their research and

analysis.

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