

Three Dimensional Modelling of Building Tangible Assets Using Terrestrial Laser Scanner

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SUMMARY

Building has two kinds of asset, tangible and intangible asset. Tangible asset in building could be the building itself and its objects in it, while intangible asset could be freehold, rights to build, or rights to use. To organize or know the information about building tangible asset, asset management is needed.

Asset management is activity of treasure organization that consists of planning the need of asset, acquire, inventorying, legal auditing, appraising, operating, maintaining, updating or eliminating to asset transferring effectively and efficiently. In fact, one of the activity of asset management, inventory, is nevertheless executed with manual procedure. As example, usually in each room of building, there is one paper that has information of room assets. With such simple method, the risk of information loss will be bigger and also it is intricate to update the information. One of the solution of manual inventory is three dimensional modelling of asset. With three dimensional modelling, asset data will be stored three dimensionally and digitally also information can be added directly. Three dimensional modelling is carried out by terrestrial laser scanner (TLS). The output from TLS is point clouds that will be modeled into three dimensional shapes according to the scanned object. The use of terrestrial laser scanners for three dimensional modeling of building tangible assets will improve spatial accuracy, thus building user or manager will easily identify the location of the assets