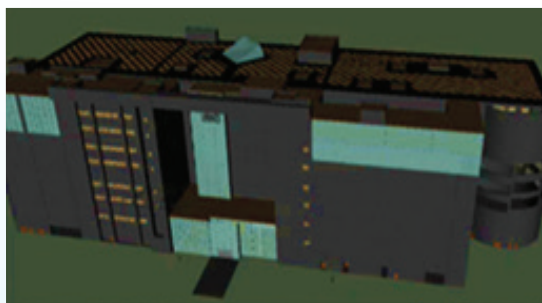


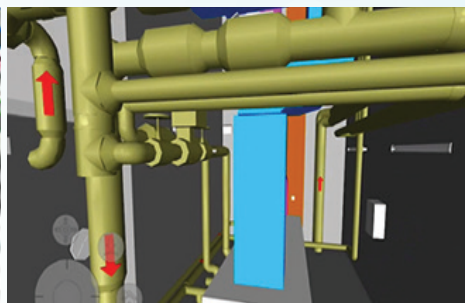
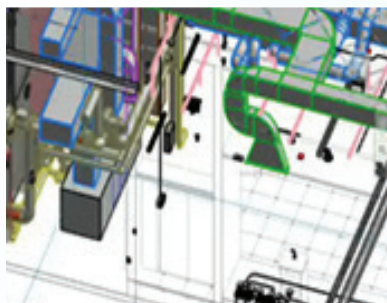
# 機電署總部進行之測試顯示 建築資訊模型技術有助提升資產管理

## Building Information Modelling Trial Enhances Asset Management at EMSD Headquarters



總部大樓的BIM模型。

BIM model of our Headquarters building.



**建** 築資訊模型（BIM）技術透過數碼科技，將建築設計提升至三維立體層面。這是目前建造業界的嶄新主流技術，具有多項優點，如減少施工錯誤及因而導致的工程更改，從而加快工程進度，降低設計和建築成本。

儘管BIM技術在提高操作及維修保養效率方面有眾多潛在優點，但在建築物維修保養上的應用，尤其是與資產管理（AM）的融合，在香港仍未普及。

機電署於2014年在總部大樓開展一個試點項目，測試BIM-AM的資訊產業管理平台可如何改善建築物的操作及維修保養效率。這個試點項目也是發展局給我們的一項任務，以研究BIM-AM技術在建築物操作及維修保養上的應用。

這個試點項目有幾個重要步驟。我們

首先建造一個BIM模型以存儲總部大樓選定區域的保養和設施詳細資料。為了測試BIM-AM的資訊產業管理平台如何簡化操作及維修保養的工作流程，以至庫存管理和事故處理，我們進行模擬，觀察BIM-AM如何配合樓宇管理系統，幫助我們快速確定現有機電系統內的故障位置並予以修復。

BIM-AM平台更易於與日後安裝的電子系統，例如射頻識別、實時定位和閉路電視系統等配合，同時方便透過流動裝置操作，讓所有相關人士，例如物業管理員、操作及維修保養人員和承辦商，能更有效地工作。

作為操作及維修保養行業的先驅，我們深信這個試點項目將令我們的總部大樓，成為香港在操作及維修保養與資產管理方面的BIM技術應用典範。

透過以下QR代碼或連結即可觀看BIM-AM項目詳情的視頻：

Details of the BIM-AM project can be viewed in videos from the QR code below, or on:

<http://www.emsd.gov.hk/emsd/vl/34/s1.html>



高級工程師陳賀賢先生（右）和機電工程師姚卓文先生（左）在2014年10月舉行的技術分享會上，與其他工務部門分享他們在設計BIM-AM測試系統方面的經驗。

Mr. Steve Chan, Senior Engineer (right) and Mr. Steve Yiu, Engineer (left) shared their experiences in the BIM-AM trial system design at a technical sharing session in October 2014 with other works departments.

**B**uilding Information Modelling (BIM) uses digital technology to transform buildings design into a 3D model. Now as a mainstream technology in the construction industry, it has many benefits such as reducing construction errors and subsequent engineering changes, thus speeding up project progress and minimising costs in both design and construction.

However, BIM application to O&M in buildings is not common in Hong Kong, despite its potential benefits in improving O&M efficiencies, especially if integrated with asset management (AM).

EMSD started a pilot project in 2014 at its Headquarters to test how an integrated BIM-AM model may improve O&M efficiencies in buildings. The pilot project is also a response to Development Bureau's task for EMSD to study BIM application in O&M of buildings.

The pilot project has several key steps. A BIM trial model storing detailed maintenance and equipment information of selected areas in our Headquarters was built. To test how an integrated BIM-AM model can streamline O&M workflow, as well as inventory management and incident handling, we ran simulations to see how the model can interface with our Building Management System in order to help us quickly locate and rectify faults in existing E&M systems.

The BIM-AM platform can interface easily with electronic systems to be installed in future, such as Radio Frequency Identification, Real Time Location and CCTV Systems. It is also easily operated via mobile tablets, enabling all parties concerned, such as estate management staff, O&M staff and contractors, to work more effectively.

As a pioneer of the O&M trade, we believe the pilot project will make our Headquarters a showcase for BIM application in O&M and asset management in Hong Kong.

