

# Dassault Systemes' DraftSight and Obayashi Corporation

## Promote BIM by switching to DraftSight a free, professional-grade 2D CAD product. DraftSight helps users create, edit and view DWG files and greatly reduce costs and accelerate investments in BIM.

Obayashi Corporation is a company that actively seeks to make extensive use of building information modeling (BIM). They recently began a drastic reform aimed at building a more advanced-level BIM environment on the basis of insights they had acquired in the past. An important piece of this reform is the use of DraftSight, a free professional-grade 2D CAD product from Dassault Systèmes. Why did they switch from their corporate standard 2D CAD software to DraftSight? What advantages did they experience? To learn more, we interviewed members of the BIM Promotion Group at Obayashi Corporation.

### Choosing a dramatic approach to overcome problems as the company moved towards a full-scale implementation of BIM.

Obayashi Corporation is a general construction company known for its enthusiasm for BIM. After having established the BIM Promotion Group in April 2010, the company has been working towards the goal of using BIM in 80% of its building design and construction activities by the end of their 2015 fiscal year. The company already makes use of BIM in 30% of its building design and construction projects. In these projects, BIM is used in both the design and construction stages.

Even though Obayashi Corporation had been effectively expanding the use of BIM, the company intensified its effort in September 2012 by implementing a drastic reform, which included switching from its corporate standard 2D CAD software to DraftSight, Dassault Systemes' free 2D CAD product. The company

used to allocate a large amount of its IT budget to maintain their 2D CAD software. DraftSight, however, has made it possible to reallocate that budget to expand its use of BIM. In addition the company was able to accelerate its use of BIM by convincing its staff members who had familiarized themselves with and were becoming dependent on the previous 2D CAD.

"In order to prepare for the future based on what we learned from our earlier attempts to expand the use of BIM," says Mr. Hiroshi Miyakawa, General Manager of the BIM Promotion Department, "we found it necessary to do something drastic." Compared with 2D CAD, the latest BIM tools demand more skills from users. Therefore, it was difficult to prevent some users from becoming dependent on the 2D CAD software they were familiar with. To change this reality, it was necessary to build an environment in which the BIM software serves as the main tool and lets the users become aware of the change in environment by replacing the legacy 2D CAD software with a new one.

### Introducing a new 2D CAD product that helps change the business environment and cut costs without sacrificing work efficiency.

BIM tools are becoming more popular but still are expensive. To build an environment that permits the use of BIM tools by everyone, a great amount of investment is required. The money needed for this investment can be raised by saving money spent on 2D CAD. The larger the organization, the greater the cost to maintain and manage software upgrades. Without a solution that helped free up budget, a significant investment on BIM would be almost impossible. In order to save money on the cost of 2D CAD, Obayashi Corporation decided to move to DraftSight.

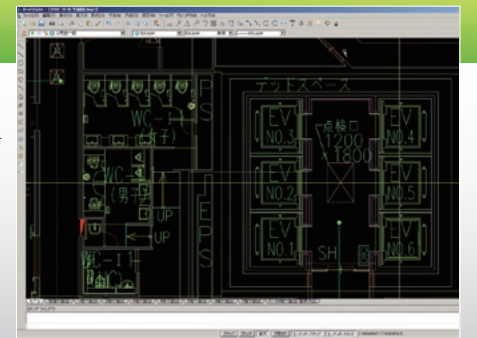
It was Mr. Yasuo Ichii, Section Manager at the BIM Promotion Department, who was responsible for the task of selecting software. He recounts the details that helped him select DraftSight:

"There were three options for software that offered

### Product Information

#### DraftSight

DraftSight is a free, professional-grade 2D CAD product for professionals, students and educators. The product lets users create, edit and view DWG files and is available to download at DraftSight.com. DraftSight runs on Windows, Mac and Linux and includes a Premium version, which is an affordable worldwide technical support and services package designed to help companies manage their CAD requirements by providing support with software deployment, customization, and integration. The Premium version is a subscription-based service and can be renewed on an annual basis.



Example of screen displayed by DraftSight

DWG file compatibility and allowed us to use DWG files like we did before. Among them, only DraftSight offered a free version. I was impressed that Dassault Systèmes, the 3DEXperience company, was making available a free 2D CAD product for their customers and prospects."

To address this further, by freeing up budget with DraftSight, Dassault Systemes helps its customers invest in 3D and experience all the advantages 3D has to offer. According to the results of a survey conducted by Dassault Systèmes, almost 35-40% of IT investments in the manufacturing industry and about 60% of IT investments in the construction industry are investments in 2D CAD. By offering a free, professional-grade 2D CAD product, Obayashi Corporation expects to reduce their investments in 2D CAD; which will surely lead to accelerated investments in more advanced products such as 3D CAD. By offering DraftSight, Dassault Systèmes can help construction companies implement their BIM strategy. With a small footprint of only about 70MB, DraftSight runs on Windows, Mac and Linux and can be downloaded and installed in just minutes at DraftSight.com. As a result, it can be easily recommended for anyone that does not have a CAD package with DWG-file compatibility. Although DWG files are the standard at Obayashi Corporation, they often need to use the DXF format when exchanging data with partner companies, for example. This data exchange process can be improved by having partner organizations install DraftSight.

Mr. Ichii also mentioned the compactness of the program as one of the advantages of DraftSight. DraftSight is sufficiently functional as a 2D CAD product. By eliminating rarely used functions that users might find in some excessively elaborate CAD systems the product is compact and starts

up and works quickly. Users of traditional CAD software find DraftSight easy to use and transition to. At Obayashi Corporation, there was no need to conduct user training after switching to DraftSight.

### Seeking a quick expansion in the use of BIM by learning from successful implementations in other industries.

Switching to DraftSight is an ongoing process at Obayashi Corporation. So far, they have installed about 100 DraftSight licenses. The process of switching to DraftSight is expected to be complete by the end of fiscal year 2012 within the Design Division and end of fiscal year 2015 within the rest of the company. The company is expediting the DraftSight installation process because of their target to use BIM in 80% of building design and construction projects by the end of fiscal 2015. Mr. Masuichiro Muraoka, General Manager at the BIM Promotion Department, comments: "From the days when drawings were hand-written, 10 years passed before we achieved the company-wide use of 2D CAD. With BIM, we plan to take only half that time."

At Obayashi Corporation, the introduction of DraftSight is supporting the desire to accelerate the establishment of a new BIM environment. What, then, are the company's ideas about the future of BIM? Mr. Ichii recounts as follows: "In my own opinion, imitating others in the construction industry will not help much in our efforts to improve the productivity of this industry. I would rather learn from successful implementations in other industries such as the automobile and aircraft industry. Dassault Systèmes' products are used in the successful

implementation of 3D CAD in companies throughout the world in various industries like Boeing for example. I hope to learn from them." Obayashi Corporation has already installed several Digital Project systems, which are BIM solutions based on CATIA, Dassault Systèmes' 3D CAD application. The company is now discovering the great things they can do with this application.

Let's continue to watch what they do in the future with BIM. "With BIM," says Mr. Miyakawa, "it may be possible to implement a new construction technique that no other company has imagined before without much difficulty."

### CORPORATE PROFILE

#### Obayashi Corporation

**Founded**  
January 1892

**Incorporated**  
December 1936

**Main activities**  
Construction in Japan and abroad, regional /urban/ocean development, environmental improvement, other construction-related activities, engineering/consulting services related to the above, real estate business, etc.

**President**  
Toru Shiraishi,  
President and Representative Director

**Home office**  
2-15-2 Konan, Minato-ku, Tokyo

**Capital**  
57.752 billion yen

**Number of employees**  
8,305 (as of March 2012)



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