How professionals use the various functions of the building information management system - by Thomas Massaro

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Thomas Massaro, Building Files

Over the past 35 years I have been fortunate to have seen construction from all aspects of the industry. I started as a mechanical HVAC contractor, went on to facility management for a large national hotel chain, received a mechanical engineering degree and currently I am a principal of a professional engineering firm. Throughout my career, I found that to be successful I needed to learn to multi-task and manage information efficiently and effectively. This became more apparent once I opened IES, our consulting engineering company in 2000. If you are involved on the design side of construction you know that buildings are designed at lightning speed with minimal budgets for professional services, yet our liability and overhead is enormous. Most A&E professionals juggle between 40 to 60 projects in various stages at all times which is challenging. If you sit back and think about all the components that go into the design of one building and then multiply that by 60 you can image how difficult it is to keep track of this information. I found early on that to be profitable in this business we needed to find collaboration tools which were low cost, lightweight and easy to use. We needed tools that would save us time managing building information not only in the design process but throughout the entire life cycle of the project starting in the design phase, through construction and into facility management. It was a struggle to find a single application that could do multiple tasks efficiently. Also, valuable information seemed to get lost when projects moved from design to construction and into the facilities because there are very few collaboration tools used by all three industries. We took a hard look at all the platforms we were using and discovered that we only utilized about 10% of the capabilities of these products, training was difficult and the yearly licensing demands were expensive, eating away at a large portion of our profits. We just could not find a single collaboration tools which was low cost, light weight and easy to use. Out of frustrated necessity, we decided to do what engineers do best: develop our own platform that could meet our needs, so Building Files was born!

Building Files is an interactive, cloud-based, building information management system that is used throughout the lifecycle of a project by consultants, contactors, and facility engineers. The following is a brief overview of the platform we developed and how different professionals use the various functions.

A & E Industry

Uses for this sector include secured project management FTP as an organized collaboration service for the entire team throughout the design process. It works well in conjunction with web conferencing and is beneficial for presentations so clients can get a better understanding of the spaces and FF&E. Email notifications are available to assist in tracking and managing users.

Construction

This interactive platform is used from bid through close-out documentation. It assists in the tracking and management of RFI's, submittals, change-orders, punch lists, schedules, and correspondences. Email notification can be turned on or off if desired. Building Files allows users to embed files such as 360° photos, O&M'S, RFI's, inspections, punch lists, specifications etc. into floor plans. Features also allow for a higher level of paperless closeout documentation. O&M's can now be digitalized and embedded into the floor plans. Users can view construction progress remotely via photos or live video which is used by PM's, owners, investors or even banks for application of payment.

Facility Management/
Municipalities

Facility files such as drawings, O&M's, specifications, etc. can be scanned and uploaded to this platform. Most facilities see a 2-year or less ROI on this implementation. Facilities can reclaim valuable floor space by reducing the need for paper file management such as building drawings, 3 ring binders, and CD's. This service will increase accuracy and integrity the file room contents by eliminating tracking files in and out. Facilities IT can reduce on-site Digital Data Storage through the use of the cloud.

Future Integrations

• Preventive maintenance software

• Asset & Move management, inventory control

• Augmented Reality for MEP coordination and installation.

As a LEED AP, I am also proud to be a part of the green building movement assisting the A&E, construction, and facility management industries with our product and services. The next time you are involved with a green building project think about utilizing a cloud-based paperless Building Information Management system. We are excited to say, in less than 4 years we have saved over a million trees and growing.

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