Capital planning by definition is more strategic in nature than facilities management. That’s because capital planning looks at the long-term use of a building, whereas facilities management is focused on the maintenance of those buildings. However, if both of these teams and systems are not connected and integrated, costly mistakes can be made.

Let me tell you a story: A large public sector organization in Canada had a building that needed its roof repaired. The facilities team did their job—they submitted the work orders, received bids from vendors, and ultimately repaired the roof. What the facilities team didn’t know, however, was that the capital planning department had different plans. Just six months after the roof had been repaired, the building was torn down. The cost of the roof repair was in the hundreds of thousands of dollars and all of that money was thrown away. Why did this happen?

The Benefits of Capital Planning and Facility Management Data Integration

Robust capital planning helps ensure that organizations can optimize their building assets—getting the most out of the buildings they have and determining when to remodel or replace. By that same token, a facilities management team using a quality computerized maintenance management system (CMMS) is crucial for educational facility managers to not only efficiently and effectively handle reactive maintenance requests, but to provide preventive maintenance on facility assets. However, if these two groups are not integrated and don’t have visibility into each other’s dataset, organizations can face significant operational inefficiency and risk spending in areas that don’t return the greatest value.

Expense and Inefficiency

No matter what industry you’re in, what country you’re in, or what size your organization is, real estate and facilities are going to be your second-largest expense and your largest long-term obligation. And for some they are also the largest capital expense and the largest source of revenue growth. Real estate and facilities are a huge financial lever for every organization on the planet—and the cost to organizations caused by delays and mistakes in this area is in the hundreds of billions of dollars. Added to this, organizations spend $100 billion in capital renovations and renewals every year. Yet based on customer research, we’re seeing organizations wasting 5 percent of their capital budgets on average. So if you do the math, organizations are throwing away $5 billion annually.
OPERATIONAL CHALLENGES

If we look inside organizations, we can get a sense of the complexity of the problem. Organizations often have four or five different groups managing different functions in real estate and facilities. There’s a capital planning group that creates the plans and defines and funds the project to pursue. There is a separate group to execute the approved capital projects. The facilities group has to maintain those capital assets, and there are other groups that manage space and occupancy, energy management, and so on.

Between all of these groups, there could be a litany of systems that contain information for all the various facets of the organization. Keeping the data up-to-date is crucial to making better decisions on capital expenditures. How does an organization know what to do if the information is inaccurate? How does an organization know they are fixing what is most important?

In order for these groups to attain a true alignment of purpose and resources, each group needs visibility into the data being gathered by other departments. Once groups are aligned in this manner, delays and mistakes can be avoided, especially the huge costs incurred when assets are managed inefficiently.

On the one hand there is the capital planning department that looks at strategic decisions and capital reinvestments for the short, medium, and long term. On the other hand there is the facilities department that ensures the facilities remain operational and are safe for occupants. Both groups have their own data in their own disparate systems, and they are in separate departments that run independently of one another. Communication can get locked, and then the left hand doesn’t know what the right hand is doing. These conditions are ripe for costly mistakes. Without integration, time and money is wasted on projects that are not providing maximum value to the organization.

BUILDING A TWO-WAY STREET

Typically, capital budgeting is done at a strategic level. Capital planners are not immediately concerned with how much one length of pipe costs, for example. But on the maintenance side, budgetary dollars need to be translated more explicitly, particularly for mechanical systems.

Although a quality facility assessment is invaluable to forming a capital plan, an assessment is just a snapshot. Five years from now that snapshot is naturally no longer a perfectly accurate representation of the state of an organization’s facilities. Buildings have degraded, repairs have been made, and after a given period of time, facility managers are left to reference data that is out of date and can therefore lead to mallocation of time and resources.

Capital planning already allows for unbiased insight into how funds are allocated. But while a capital planner is thinking five years ahead, the facility manager is dealing with any number of reactive maintenance issues today. An integration of capital planning data with facility maintenance data allows for real-time visibility into the immediate needs of an asset or building.

Instead of information only flowing in one direction at a time, we need to have a two-way street. Capital planning data says, “Go do this,” while facilities data says, “I did this.” If an exchange of knowledge can be achieved between the two entities, much of the inefficiency we mentioned can be eliminated, and we can fuse the diligence of long-term planning with the here-and-now realities of maintenance management.

Consider another example: When a boiler breaks, the facilities team is likely only replacing individual components as they fail. But being able to cross-reference capital planning data might tell them that the more cost-effective decision would be to replace the boiler entirely. Conversely, capital planners may have intended to replace a boiler after five years of use based on assumptions about its useful life from the initial facility condition assessment. But with access to maintenance data, they can see how well an asset has been maintained and add additional years to the life of that asset. The capital plan can be adjusted every day instead of every five years, which immediately translates to the ability to make better repair-versus-replace decisions.

PRIORITIES AND PREDICTION

A large corporate bank was wasting about 5 percent of their capital expense per year. They spent hundreds of thousands of dollars renovating bathrooms in their buildings rather than addressing serious issues with power transformers. As the bathrooms had more visibility with the employees and executive team, this repair project was prioritized over the more serious power transformer problems. Why did this happen? The bank did not have integrated capital planning and facilities and work order systems, and therefore did not have the proper visibility to make the right decisions.

Although work order systems do projections for maintenance (i.e., via maintenance schedules), there’s no prioritization of the work. Facility managers want the ability to prioritize these items along with other requirements. The cross-departmental knowledge gained from an integration of data makes this possible.

Data integration leads to other benefits as well. Facility managers already have details on things like components in their CMMS and don’t want to have to double-enter it in a capital planning system, or worry about the two systems synching. Which data is correct? They’d rather pull key
Insights from the maintenance data to inform capital planning, and vice versa.

Integration provides the opportunity to flag costs that are out of line based on history. For example, if an asset with a 10-year life had 75 percent of its replacement cost spent in the first five years, the application would flag the asset as potentially needing earlier replacement. This kind of information also presents the opportunity to predict failure or a need for renewal based on historic data for similar systems and components.

The Costs of Doing Business

To get a better sense of just how much complexity and time can be saved by integration, we can take a closer look at some of the cost centers for facility managers and planners. The two cost categories at hand (capital and maintenance) form part of a complete cost picture of which facility managers need clear visibility. That includes:

- **Birth and burial expenses**—One-time costs from concept to bidding, financing, construction, and installation, and projection of expenses for eventual decommissioning, demolition, and disposal.

- **Annual recurring expenses**—Associated with day-to-day maintenance and operations, including utilities and expenses involved in equipment maintenance, custodial services, grounds upkeep, and security.

- **Recapitalization costs**—Include periodic recurring expenses such as retrofits or improvements, and projects such as remodeling or equipment replacements.

Obtaining visibility into the events that lead to these costs escalating is a primary driving force behind the need for unity between strategic and operational systems.

Unique Challenges for Institutions

All organizations have baseline standards that must be met. State and local building code compliance is one example. Integrating those kinds of specific requirements into your facility capital planning, while simultaneously allowing visibility to facility managers, can ensure that any investments you make to your facility portfolio adhere to these parameters and are properly maintained over the years.

But the education and public sector industries also face another, more specific issue: an aging infrastructure. Many buildings, which were built decades ago, are now in need of major renovations in order to ensure optimal operation of key functions. But the decreased availability of capital for local governments and universities across North America has created a large maintenance backlog for facility managers—increasing risk and creating challenges when it comes to prioritizing departmental needs. By integrating capital plan and maintenance databases, organizations can optimize their budgets to ensure that their buildings meet the needs of occupants, either in the long or short term.

Make Better Spending Decisions

The benefits of an integrated system are clear: You can have an operational and strategic view across your portfolio, and you can align those investments with organizational needs. From there, department leaders can match operational investments with strategic priorities, maximize their budgetary spending, and enhance communication between departments. All of this is a result of streamlining the exchange of information. Facility managers can both contribute to and benefit from the free flow of information—sharing the data they have with others as well as taking advantage of the data from other departments. This allows for a standardization of data across systems.

So instead of having stand-alone systems with disparate data, university and government organizations can unlock the power of bringing these systems together. Capital planning and facility managers gain the ability to have data flow where it is needed, from requirements and work requests to maintenance data and condition information, leveraging the right information at the right time for the right decisions.

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