

COLUMBUS BUSINESS FIRST

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Tech planning to get boost care of new MasterFormat

Business First of Columbus - [by Chip Chapman](#)

We're about to cross a major milestone in the history of building construction: We're finally going to see the **trend toward technology issues being considered early in the process.**

As most architects and contractors are probably aware, the Construction Specifications Institute's MasterFormat document is undergoing radical changes - changes that will dramatically improve how technology planning is handled in new and remodeled commercial buildings.

The Construction Specifications Institute's 17,000 members are engaged in non-residential design and construction, and the MasterFormat is the document architects and engineers use to define and specify the various trades work in the construction process.

Unfortunately, technology planning has often been neglected in the design process, even as businesses have come to rely more heavily on technology to drive growth.

Changing needs

Under the current MasterFormat, most technology infrastructure is sparingly defined under the electrical or mechanical contractor divisions. As a result, technology planning is often an afterthought, or left up to the owner, as most of these systems are considered as part of the furniture, fixtures and equipment when the building is nearly completed.

This has caused numerous problems with providing proper structure and layout, pathways, air conditioning and humidity control, cabling and wiring, and electric power and lighting.

More space is needed to support the technology systems that are being installed and implemented by most businesses today. Since 1995, many in the industry have made a pitch to list communications and technology systems as a separate category under Division 17. This has caused a lot of controversy.

In the years since, technology has advanced tremendously. Most people think only of phones and computer systems when speaking of technology. Fire, life safety, security, building-automation, audio, video and lighting controls are all moving toward a common communication platform and Internet protocol.

Internet protocol is going to become the communications standard. It may cost a little more than a serial, analog or other communications format. Most electronic manufacturers, if they haven't already, are developing a solution to move to an Internet protocol platform so that they can be managed in a common manner and make life simpler for the building owner or tenant.

With the technology that's available today, it's possible to design an integrated, converged backbone

infrastructure; design an Integrated Building Systems network; have many different applications riding on a common platform; and keep them private and secure for each of the individual users who want to manage them.

Saving owners money

Ultimately, this saves owners a lot of money. And that's really what it comes down to - saving money - while still having the desired functionality and flexibility.

With proper planning, businesses that need to make changes won't have to rip open the ceilings, drill the walls, or try to add or find space for their new systems.

The coming MasterFormat expansion will reflect these changes and help provide for technology planning in three new divisions: communications, integrated automation and electronic safety and security.

This will be the new model every architect will begin using in 2004.

This is a welcome change. **Integrated Building Systems need separate sections to be properly addressed in the design process. The emergence and convergence of these systems means technology planners are going to need more space - more space in the equipment rooms, more space in the ceilings, pathways, and entrance facilities.**

New consultants and contractors will have to understand how to take these systems into account and how to build the proper infrastructure to support them.

As part of these changes, new strategies, standards and partnerships will have to be developed.

The architects, engineers and technology planners will have to work together to educate the client and plan for technology as early as possible.

A recent United Way study of local organizations it supports listed telecommunications and technology problems as top obstacle preventing them from reaching their vision.

Owners are starting to address this issue by incorporating technology planning as part of an overall strategic plan.

This issue is going to arise more often, particularly when businesses and organizations get ready to do a major renovation or new building construction.

Change is hard, but it is coming. Owners and tenants are going to demand better technology planning and design. Architects and builders are going to have to bring new people onto their teams to help them.

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