## Q&A Report: Technology Integration - Beyond the Basics:

## **Question Asked**

MasterFormat includes numbers and titles for many of the new solutions mentioned -- it is updated every two years to help meet new technology and products. not a question, just a comment

preliminary project description is the SD documentation you're describing. It is unfortunate that you're not encountering them. SD is too early for specifications, descriptive or performance. Of course, the outcomes described in a preliminary project description will need to be reduced to a set of specifications so they can be contracted for, typically CD stage. again, mainly a comment.

specifications can be more system based than you describe, functional intent is part of systems coordination sections already in place in MasterFormat and also can be captured as systems and facility level performance specifications instead of descriptive specifications - what you describe as

yes - need for more coordination requirements - thank you for your answer; much focus currently on more system based specifications now at CSI, based on rise of systems based resources and products in all areas of construction

coordination between facility system and services designers is a challenge

security vs "hack" - please also comment on how systems can be "hacked" positively as needed

Great presentation on hospital D&D and technology integration. But couldn't you replace 'hospital' w/ almost any project type? Your recommendations for changing the process is equally applicable and appropriate for any building that needs technology, and that is every building these days.

Is there some sort of 'coverall' system that can be installed to prepare for future technologies/renovations?

How a wide 16 feet hallway help you in decenteralize the service. I'm sorry I'm not getting this.

Does the expanded interoperability open up the opportunity for system "hacks"

what about conerns about security hacking and system redundancy

## The "NOT-SO-SMART" Building

## ANSWERS

Yes, we agree and thank you. Technology should be added to the Master Format in order to close the gaps and force us to plan for it early in the Conceptual Phases of Design.

Technology is now being discussed as part of the owner's early concepts because it is considered part of the owner's Brand and competitive differienator.

It is important for the Archtiect to partner with a Technology Design Firm to co-develop an early Technology Narrative.

The coordination requirements can and should be well-defined by the Design Team.

Yes, agree. This is a HUGE challenge and an opportunity for us to provide additional services to help facilitiate.

Additional verifcation points will be necessary in this new world of emerging technology

Yes - Absolutely. You can replace "Hospital" with any type of project - Technology complexities will vary and hospitals are the most complex due to the clinical systems and patient life aspect.

We would love to say "yes" - today there many of us trying to solve for this and we are getting closer as technology evloves from a systems manufactuering perspective. Firms like JCI, Siemens, Schneider, Honeywell are building/buying the expertise to provide the most "connected, seamless solutions and the Technology Design Firms are providing a non-proprietary, third party solution that is not based on equipment manufacturer but based on the total enterprise solution.

This is just one example and we would be happy to discuss if you would like for one of us to call you.

Potentially, we have not seen an increased risk yet....time will tell. Additional verification points will be necessary.

We have not seen an increased hacking risk yet....time will tell. Additional verification points and system redundancy will be necessary and we negotiate this with each system manufactuer based on the requirements of the project.