Sometimes, Simple Works Better

BJC HealthCare installs new presentation systems.

Monitor angles were critical to provide perfect viewing for every executive at the table in the Executive Conference Room. Simple touch controls provide audio conference settings and room controls.

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By David Wyne, CTS

When Schiller's AV was invited to bid on designing and installing presentation systems for the new 12-story BJC HealthCare administrative building in St. Louis' Central West End neighborhood, Schiller's first reaction was to design a system that featured all the bells and whistles. After all, BJC HealthCare is one of the largest nonprofit healthcare organizations in the United States, with 13 hospitals and multiple community health locations.

Based on experience in prior medical installations, Schiller's staff understood that medical communication applications generally require all monitors and projection systems to deliver extremely high resolution and complex networking capabilities. Schiller's won the project by doing just the opposite: listening to the customer and designing solutions both functional and budgetary.

The project included five conference rooms and 29 meeting rooms, each with a different communication requirement. BJC Clinical Equipment Planner Cyndy Paul, who was tasked with keeping all elements on target and on budget, said, "We brought what we learned from previous projects to the table. We worked closely with Schiller's team on the design, stating clearly what we did not want and what we did want. We didn't want to look back and question why we did something that wouldn't serve us well in the future. And, Schiller's came back with solutions."

Design Objectives

The first technical proposal was presented to BJC last fall. But after several meetings with BJC, we learned more about their communication and budget needs for this project.

"BJC wanted simple, dependable systems that didn't interfere with their aesthetics," said Todd Callahan, Sales Representative at Schiller's AV, who has

inputs," noted Callahan. "We encouraged them to look ahead and include digital capabilities." Schiller's designed and installed budget-appropriate solutions that are user friendly and future-ready.

AV Solutions

Each of the 29 meeting rooms features an NEC 350W widescreen projector, a Da-Lite Contour Electrol screen measuring 54"x96", an Extron MLC 62-button control panel, two TOA F2322C speakers with an RDL FP-PA20A flat-pack amplifier, wall interface panels with HD15, audio, network and HDMI connections.

BJC required flexibility as to the locations of the lecterns, so Schiller's created custom-length cable harnesses. "Every room has a VGA, 3.5 mini stereo, network and power cable installed into a flexible cable assembly; this was installed from the wall plates and attached to a lectern for easy connectivity to a presenter's laptop," noted Ken Kurtz, Schiller's onsite AV Project Manager, who also served as a BJC liaison with all construction trades, and BJC's go-to contact. All 29 rooms have wireless projectors, so IT personnel can check filter and lamp hours.

"NEC 500u (widescreen) projectors were installed in all five conference rooms but, because the rooms were not all the same size, we had three different size Da-Lite motorized screens installed, all with low-voltage screen controllers," reported Kurtz. The conference room systems include an Extron MLC 104 button control panel with RS232 controls to the projectors and connectivity similar to the other meeting rooms except for one single gang Semtron wall plate with an XLR input for future mic installation.

"For audio, we installed one TOA A706 amp and, based on the size of the room, added four to six TOA FA2322C speakers into the drop-ceiling tiles," explained Kurtz. Additionally, the executive conference room features a Polycom audio conferencing system with AMX touch controls and Shure microphones, and the CEO's personal conference room is fitted with a table-top Polycom phone system.

Although the projectors and some other equipment are linked to BJC's LAN, the AMX systems control both room and AV equipment via direct serial connections. At every decision point, priority was given to maximizing reliability and ease of use. For example, although every projector is equipped with an optional WiFi unit to enable diagnostic access by the IT staff, hardwired LAN connections are provided for every meeting attendee.

Executive Ease Of Use

The most impressive system is in the executive conference room, with its custom-designed conference table. Howard Rabe, BJC Project Engineer, Clinical Asset Management, outlined the design challenges in the 12th floor corner conference room: "We had to respect the aesthetics of the room, as well as the function. How could we install monitors so everyone could see easily without turning around and that did not block the line of sight to the beautiful view of Forest Park, that were bright enough to handle the ambient light, and were not suspended in the middle of the room so [the area] felt like a hockey arena? Plus, the table was designed so everyone faced each other. The technical solution was truly one of a kind."

Our team was delighted to be able to work with the custom furniture maker to design the table around six NEC professional-series LCD monitors, rather than trying to retrofit the equipment into an existing piece of furniture. When activated, the monitors automatically turn on, sync and adjust to the VGA input signal.

To handle conference calls, we integrated the Polycom SoundStructure teleconferencing system with AMX touch controls. A single wireless, handheld unit interfaces with the phone system, controls the Shure AL/C low-profile boundary microphones embedded in the desktop, and activates the monitors. The handheld unit is discreetly installed in a touch-activated custom wall cubby that tilts out to reveal controller storage.

And, even though the building has wireless capabilities, BJC wanted hardwired power and data service available to every person at the executive table, while retaining a sleek, uncluttered appearance. According to Rabe, "We took Schiller's lead on installing cable cubbies. They had to be built into the table, and Schiller's provided actual units to the table fabricator so the fit

worked on the BJC account for more than 10 years. "They wanted every user, from a nurse to the CEO, to be able to plug in a computer or media source and have the AV system in the room working instantly." Callahan brought Schiller's A-team together to focus on key areas: a turnkey system in the 29 meeting rooms, custom solutions for the executive conference room and for the CEO's personal meeting space, and a flexible system for the dual-purpose training room.

"We started over with simplicity in mind, and our engineering department was busy not over-engineering these rooms," reported Callahan. "AV is not the showcase: Functionality is the showcase. For instance, complex programming is hidden behind intuitive or easy to follow AMX control systems."

BJC was also concerned about flexibility for future growth, although "their original specifications called for analog

In the CEO's personal conference room, a sleek and sophisticated 65-inch display drops out of sight when not in use.

When the Skyfold wall in the dual-purpose room is open, the system is programmed to automatically feed both projectors from most analog or digital sources. When closed, the system reverts to single-room control via a wall-mounted touchpanel. Touch controls make it easy for presenters to select different content sources in the flexible Training Room.

Equipment

AMX MVP-5100 touchpanel
AMX NI-2100 controller processor
AMX NI-3100 controller processor
AMX NXD 500I-MW touchpanel
Chief projector monitors
Covid plenum-rated cables
Da-Lite manual, electric screens
Extron Cable Cubby 200, 300 series
Extron MLC-62-button panels
Extron MLC-104-button panels
Hall Research HDMI transmitter/
   receivers
Kramer VM2HXI 1x2 HDMI
   distribution amp
Kramer VS21HR HDMI switcher
Lowell rack system
NEC 350W projector
NEC 500U projector
NEC professional series LCD
   monitors
Peerless-AV LCD monitor mounts
Polycom SoundStructure C-12
   teleconferencing systems
RDL FPPA20A amps
RDL FPPA35A amps
Semtron wall plates
Shure MX 395 AL/C low-profile
   boundary mic
TOA 706 amp
TOA 9000 M2 Series amps
TOA F-2322CU speakers
List is edited from information supplied by Schiller's AV.

Tips

• Listen carefully to the client's *real* needs.
• Take the client's budget concerns seriously.
• Build in flexibility for future expansion.

was perfect. Ken even visited the manufacturer to check the dimensions while the table was being built to make sure everything worked. And it did."

CEO's Credenza

The CEO's personal conference room has an elegant credenza at the far end of the room, with a 65-inch NEC LCD professional monitor and Blu-ray player. The display is fitted into the credenza so it is hidden when not in use, and is raised by two lift motors when necessary.

"There were a few instances when what we had planned on paper just wasn't what you saw in real life on the site," recalled Paul. "Ken called us immediately when he discovered an issue, and then worked with his engineers to solve every problem until the system worked like magic." One issue was the flat-screen monitor designed to disappear into the CEO's credenza. The plan was to use an existing monitor but, when the custom credenza was delivered, the old monitor didn't fit.

"Working with our NEC partners, I found a great 65-inch NEC professional series monitor, but we had only half an inch clearance on all sides," recalled Kurtz. "I called NEC three times to check schematics and be sure there wasn't a stray screw head or molding that would ruin the install. The night before, I couldn't sleep, so I got to the office at 6:00am and started the job myself. After we got the 118-pound monitor onto the

pedestal, it took me about 10 minutes to center the unit, and then we touched the button. The monitor slipped into the credenza and closed perfectly, the very first time. I slept well that night," he exclaimed.

Single Touch Joy

Flexibility is the hallmark of BJC's training room. The dual-purpose room is divisible with a Skyfold wall, and the AV technology offers flexibility for both single- and dual-room use.

Schiller's and BJC teams tested actual presentation scenarios, and the room was reprogrammed twice to streamline functionality so virtually any end user can walk in and connect to the sophisticated system with simple one-touch controls. The AMX processor does all the work. When the Skyfold wall in the dual-purpose room is open, the system is programmed to automatically feed both projectors from most analog or digital sources.
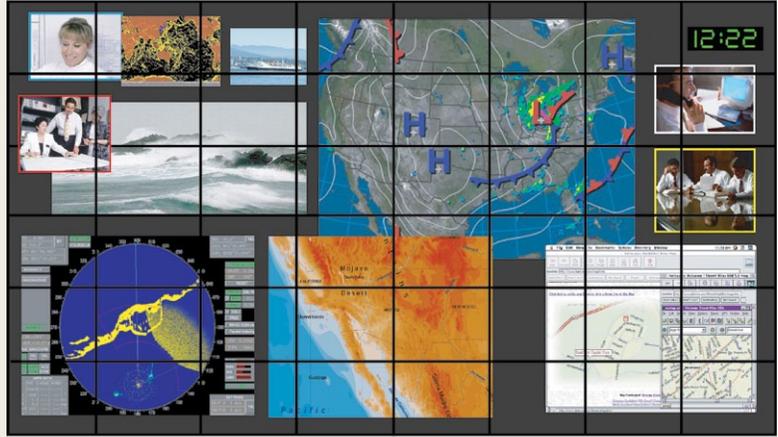
When the Skyfold wall is closed, the system reverts to single-room control with a simple touch via a wall-mounted touchpanel. "The presenters don't have to reconfigure the room; the controller does it for them. It's awesome," observed Rabe. For more complex media presentations, any combination of three sources can be routed and displayed onscreen with the touch of a button. And the pro-

Compiled By Amanda O'Mahony

All specifications supplied by manufacturers and/or distributors.

connections

RGB Spectrum's Large Wall

RGB Spectrum's SuperWall display processor combines up to 4 MediaWall 4500 or MediaWall 4200 processors to display up to 120 windows arranged over up to 48 screens. Its parallel processing architecture can scale up as necessary, with no dropped pixels, no lost frames. It offers a Java-based web control interface that supports all MediaWall processor functions, including SinglePointKvM, the company's software for controlling computers displayed on the wall with a single mouse and keyboard.

RGB Spectrum
510.814.7000
www.rgb.com

Thinklogical's Video, KVM Routing

Thinklogical's MX48 router allows for flexible deployment configurations in small to medium-sized environments such as smaller command and control centers, corporate conference rooms and hospital or higher education presentation rooms. It is a compact, high bandwidth (6.22Gbps) solution for end-to-end routing of video and peripheral signals over multimode or single-mode fiberoptic cable. The protocol-agnostic router supports DVI, Dual-link DVI, 3G, HD, SD SDI, Dual-link SDI, USB HID, USB 2.0 (high speed, full 480 Mbps), FireWire 800, serial and bidirectional audio. It is scalable from 16 ports up to 48, and is compatible with all Thinklogical KVM and video extension systems.

Thinklogical
203.647.8700
www.thinklogical.com

Leviton NS' Shielded Connector

Leviton Network Solutions' QuickPort eXtreme Cat6A Shielded Connector is an updated version with a narrower design for higher density applications, and increased margin for alien crosstalk (AXT) suppression. The shielded connector protects data from potential EMI/RFI (electromagnetic interference/radio frequency interference), and is part of a Cat6a shielded system, including patch cords and patch panels. It meets TIA-568-C.2 and ISO/IEC 11801 (Class Ea) performance for all internal and alien crosstalk parameters up to 500MHz.

Leviton Network Solutions
800.323.8920
www.leviton.com/ns

INDUSTRY WATCH

every hardware codec manufacturer to develop a software-only strategy.

• As BYOD becomes the norm, look for firms that did a great deal of their business selling personal-use technology (smartphones, notebooks) to the enterprise to struggle, and look for the successful ones to start marketing directly to the consumer.

• Look for a new form of "App Store" to open up, with apps customized for specific enterprises to collaborate in the cloud.

With video continuing to explode and settle into the three forms (Immersive, Meeting, and Personal), and BYOD devices and the cloud gaining traction, look for end users to continue to expect "any content, anywhere, at any time" to be the norm. The excitement will only continue from here. *IT/AV*

Carol Zelkin is Executive Director of IMCCA (www.imcca.org), the not-for-profit association that represents unified collaborative conferencing and communications. David Danto is Principal Consultant at Dimension Data and IMCCA's Director of Emerging Technology.

CORPORATE: SIMPLE WORKS BETTER

jectors are connected to the BJC Media Services Department over their wireless network, enabling remote monitoring of lamp life, troubleshooting and power control. Although the projectors are wireless, they are hardwired for dependability now, but ready for future flexibility.

Occupants moved into the new space in mid-March, and BJC is pleased with the result. "This project is not about the bottom dollar. It's about quality and service. Schiller's may not be the biggest player in the AV market, but you see the quality, passion and dedication they put into the job. They answered every question we had and were very responsive," noted Cyndy Paul.

Sometimes, simple is better. Complex networking of content and control within a facility is appropriate when it serves the user's needs, but optimal AV design involves creating a solution that is as user friendly, reliable, expandable and cost-effective as possible. Schiller's work at the BJC HealthCare facility shows how well "right-sized" technology can provide a superior, sustainable and affordable user environment. *IT/AV*