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Jackson Walker Raises The AVL Bar

New HQ offices feature high-end design and technology.

By Shonan Noronha, EdD

Jackson Walker is a Texas-based law firm with a national presence and global reach. With more than 350 attorneys, the company is one of the largest firms in the state, providing comprehensive services in a broad range of practice areas. It recently moved its Dallas HQ offices to the new KPMG Plaza at Hall Arts in the Arts District of downtown Dallas.

Occupies Four Floors

Jackson Walker occupies four floors in a new building. The entire space is an expression of fine design and technologies for productive collaboration and communication. The AV portion of the project involved 39 different spaces on the four floors.

Among the highlights are two 4K Sharp 84-inch flat-panel displays and Barco's ClickShare wireless presentation system in the Cathedral boardroom. The Learning Center features a Sharp 80-inch interactive display and three Samsung 48-inch LCD displays.

A three-way multipurpose divisible space, called the Conference Center, is equipped with three Panasonic 6500 lumen laser projectors, six Vaddio cameras for videoconferencing, QSC audio conferencing with QSC speakers for speech reinforcement and Shure microphones. In addition, there are more than 25 huddle rooms, each with a Samsung wall-mounted display and Vidyo collaboration capability with Lifesize cameras.

For digital signage, a Glass TV from ad notam Hidden Technologies (www.ad-notam.com) adds elegance to the lobby, which is also a reception area for clients and visitors. Samsung 46-inch LCD TVs in the break rooms on each floor provide viewers with the latest local and world news. Crestron systems are used for monitoring devices in the rooms and for remote monitoring by the company's AV technician.

Teams At Work

As is typical in new construction, several companies were involved in the project, all with distinguished track records. Jackson Walker's Chief Logistics Officer Sharon Kasachkoff provided the vision and leadership, as well as managed the overall project and relocation. With the emphasis on digital, the expertise of Bill Finner, Director of Network and Infrastructure at Jackson Walker, was paramount to success. Finner was the Technical Lead for all of the voice, data and video infrastructure.

Scott McAllister, Senior Associate at Gensler (www.gensler.com), an integrated architecture, design, planning and consulting firm, was the Project Architect. The general contractor for interiors was Pacific Builders. Technology design consultant Acuity (www.acuity-usa.com) provided the needs analysis, designed the AV and

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Huddle rooms offer smartboard and conferencing capability.

The Cathedral Boardroom features two 4K 84-inch LCD flatpanels.

corporate

Each of the three areas in the divisible Conference Center space is fitted with 6500 lumen low-maintenance laser projectors on lifts.

TIPS

>> Blend aesthetics and function when designing the system and selecting products.

>> Ensure efficient and congenial communications between owner, consultant and integrator.

>> Consider single point of contact and invoicing when offering services across multiple disciplines to the same client.

IT systems, and had oversight of the technology installation.

Facility Solutions Group (www.fsgi.com) had been working with Jackson Walker, handling structured cabling needs at the company's offsite data center. At the time, FSG was also under contract to service the legacy AV equipment at all of the Jackson Walker locations in Texas. FSG responded to the RFP for JW's HQ offices and was awarded the installation contract for AV, lighting and electrical systems on the four floors, as well as the exterior and interior building signage. Forrest McKinney, FSG Director of Technical Sales, led the company's team, and Gerald Reeves, FSG Project Manager, was responsible for day-to-day operations and supervision.

Although FSG does offer structured

cabling services, sound masking, security and access control, Jackson Walker chose other vendors for these areas.

Design Considerations

Discussing the needs analysis and design phases of the project, Chris Warrington, RCDD, CTS, an Associate at Acuity, said, "This was the first move for Jackson Walker in 30 years. The client was driving a paperless initiative that would allow them to utilize more space for employees, while minimizing space for their paper files. They also wanted to drive a more collaborative workspace supported by technology via video in the majority of their conference rooms, and interactive whiteboards in select rooms." To support this initiative, Acuity

worked with the client to leverage their existing Vidyo infrastructure to deploy the video to the majority of the conference rooms via the small-form-factor PC and Lifesize Icon Flex camera.

"In the multipurpose divisible space, Acuity was faced with blending technology with a very high-end buildout and stringent design criteria driven by the client and Gensler," noted Warrington. The client wanted video cameras in the multipurpose rooms to provide attendees at the remote site with just about any angle of the room, thereby maximizing flexibility with camera views.

Acuity and Jackson Walker reviewed several options for each of the products that were deployed. This included reviewing the products at InfoComm and bringing in sample products for Jackson Walker's IT team to test in their environment. Acuity worked with Jackson Walker to define budget and choose products that supported the design intent.

Limited Space

In the Conference Center, the design team also had to take into consideration the limited space. "We designed a centrally located audio system that could service the needs for the entire Conference Center. This removed hardware from the individual rooms. It also allowed for the system to be serviced without the technician occupying the conference room," Warrington explained.

Centralizing the system made it simpler to efficiently control environmental and power needs, and made it easier to futureproof the system, allowing room for growth. "Deploying Crestron Fusion with a central control desk allowed our client to monitor their needs and usage within the rooms," noted Warrington. Acuity also specified additional cable pathways within the ceiling to allow for the client's future needs.

SOW For FSG

FSG's scope of work encompassed multiple aspects of the project. "Among our deliverables was the installation of LED lighting strips on the outside of the building," said McKinney, noting, "This is an attractive element that, in addition to emitting multiple colors, can actually play video clips on the building. Our team also designed, custom

built and installed the glass monument sign outside the building, and the Jackson Walker illuminated sign on the side of the building."

Inside JW's offices, FSG was the electrical contractor for the four floors. "We installed lighting systems with Lutron control and provided, installed and integrated AV systems with Crestron control. This included finishing out the design to find the right products and methodology to accomplish the design intent provided by Jackson Walker and Acuity," explained McKinney.

In addition to installing the digital signage screens and media players

on each floor, FSG's internal content creation group customized content templates and widgets, as well as created the graphics and video for the initial launch.

Every project presents some challenges, and those discussed here, along with their solutions, may inspire ideas for implementation on future projects.

Construction had already started and the electrical team was already installing before the system design was completed and FSG was contracted for the AV installation. This meant that FSG had to be installing cable and infrastructure while still in the design

A flatpanel LCD TV encased in glass adds design sensibility in relation to the adjacent windows.

phase. Consequently, some work had to be redone as things changed, but the team was able to make the aggressive schedule.

In the conference rooms, Jackson Walker wanted to use Vidyo desktop clients on small-form-factor PCs running Windows. They wanted video and audio quality higher than that delivered by typical USB webcam and PC speaker. "The solution was to use the new-to-market (at the time) Lifesize Icon Flex. This system provided a high-quality camera and speakerphone that would work with any soft client that Jackson Walker wanted to use. It works with the current Vidyo desktop client and will also work with other clients that JW occasionally needs, such as Google Hangouts," McKinney explained.

The installation of large-format displays in these rooms was complicated because many of the LCD panels had to be mounted on the thin, modular DIRTT walls. These movable, reconfigurable wall systems enable Jackson Walker to change floor plans as needs evolve, and also use less space. "Further complicating the issue was the mounting of displays with AV hardware behind them, while still conforming with TAS/ADA [Texas Accessibility Standards/Americans With Disabilities Act] requirements for distance from the wall," noted McKinney. FSG worked with Acuity, Gensler and DIRTT to modify these walls, and also offered some unique mounting options. The client needed several power and network ports behind the displays and these were installed before the displays were mounted.

Distributing Audio & Video

The Learning Center, boardroom and divisible space were required to share a common rack room and have interconnects, although the Learning Center is on a completely different floor. FSG collaborated with several vendor partners to design the right solution for video and audio distribution. "We worked with Crestron using its new Certified Design Program to provide end-to-end DigitalMedia and control solutions that could transport video and audio between these large spaces," McKinney said. The system includes a Lifesize Icon series 600/800 hardware-based codec, Lifesize and Vaddio videoconferencing PTZ cameras, and wireless
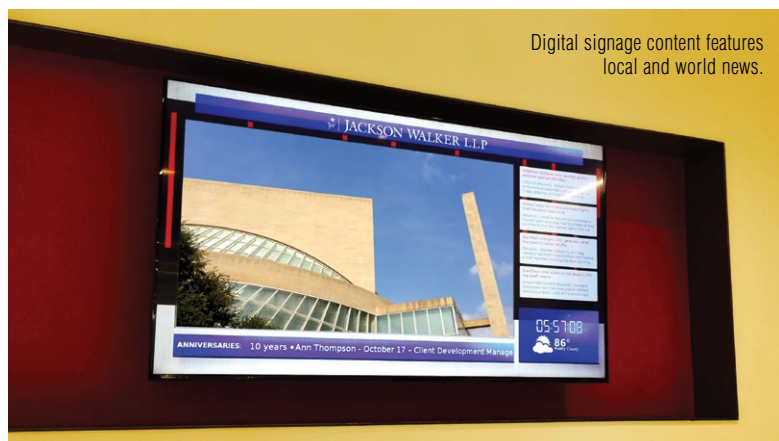
Digital signage content features local and world news.

five different panels. This panel can be operated remotely to control each of the rooms, and provides a direct emulation of the in-room panel so the technician can monitor how the system is operating. The master has an x-panel feature, which is used to remotely monitor and operate any of the systems from any computer on the network.

The centerpiece of Jackson Walker's digital signage is a 46-inch LCD TV encased in a 100-inch-wide glass, which adds a design sensibility in relation to the adjacent windows in the lobby. The entire unit was shipped as one piece by ad notam Hidden Technologies.

In each of the four break rooms, a 46-inch

video via Barco ClickShare.

FSG worked closely with QSC to provide the optimal audio systems in these spaces. This includes a large DSP Q-SYS 500i, with Q-SYS networked amplifiers and QSC speakers. "This design allowed us to route anything anywhere," noted McKinney. "It's a digital video and audio system with few analog I/Os besides the speakers," he said. The Q-SYS also provided five VoIP phones so each space could have audio conferencing.

A Shure Microflex wireless Dante mic system is used, again going digital over the network using Dante into the Q-SYS DSP. "The Shure system lets us meet some special needs of the customer, such as easy reconfiguration of the multipurpose space and the need for technology to disappear in the other spaces, while still providing high-quality audio," explained McKinney.

Custom Programming

FSG's programmer, Ed King, worked with the consultant to understand the functionality of the rooms, and developed the user interface panel pages. "The pages were first submitted for approval," said King. "After approval, we moved forward to write the code. Thereafter, we loaded the code and spent a couple of weeks testing it. One important result of the custom interface was assurance that the systems had a familiar, consistent interface for the users in the three main spaces: boardroom, divisible room and Learning Center. There have, of course, been some minor tweaks and adjustments to the interface based on end user feedback."

A master control panel for use by the company's AV technician incorporates video preview and control of

Samsung commercial-grade LCD flatpanel on a Chief mount is installed in a recessed wall area that's painted to add panache, in keeping with the design sensibility of the new offices. A BrightSign media player is attached to the back of each screen and connected to it via HDMI.

Content on the signage screens is presented in four zones, with the main area showing cable TV and CNN feeds, thereby enabling viewers to keep abreast of local and world news as they stop at or walk through a break room.

FSG's internal content creation team, known as FSGmedia, worked with the client to produce the initial content loops and customize the widgets. Brannon Bourland, FSG's Director of Marketing Communications responsible for Content Creation, said that it was a challenge to balance ease of operation with aesthetic and security priorities. "Jackson Walker wanted to be able to create their own content for the

system, as well as have the ability to use content created by outside parties. Technically, we were challenged by the need to install signage that operates on the client's local area network and can comply with the necessary security protocols and the network's architecture. We found a great solution to these challenges in the BrightSign player and BrightAuthor software."

Customer-facing content features news of area events, local announcements, information about Jackson Walker, and feeds from newswire services and national weather sources. Employee-facing content includes HR announcements, recognition of employee awards, birthdays and anniversaries, as well as newswire and national weather feeds. "We simplified the process of content creation. Jackson Walker can create digital signage content quickly by simply converting their PowerPoint presentations into .jpg files," reported Bourland.

Discussing customization, Bourland said, "Brent Young, our in-house coder and graphic designer, created the custom time and weather widget used in Jackson Walker's digital signage. Likewise, we custom-coded the widget for the Reuters newswire feed. If it becomes necessary for us to recode some aspect of these widgets, we are able to host the test code on a website the client can access, and then house the completed code on their players and network."

When asked how this project was different from others, Warrington said, "As consultants, we don't always have the opportunity to work with a client that wants to implement technology that will drive productivity and collaboration as part of their main focus. This client was very open to new technology. A key factor for us at Acuity was to make sure the client did not over deploy technology that could not be properly leveraged by their workforce."

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connect the components. All equipment is housed in two Middle Atlantic racks in a rack room that is shared with the newsroom broadcast control equipment located more than 170 feet away from the main student commons area. The rack room is temperature controlled and all equipment is remote monitored as well, connected to an APC UPS battery backup unit.

There really isn't any template for this type of design and installation project. The Sensory Technologies team had to think creatively, ask the right questions, rely on manufacturer and integrator expertise, and set clear expectations with its client. This included hundreds of hours of design and project management, including coordination of several teams and components to ensure that the plan was well thought out and there were no gaps leading up to the physical installation.

Another challenge was determining how to suspend a display that could weigh roughly 4000 pounds under the glass ceiling. "We met with the architects and structural engineers early on in the project to come up with a safe and aesthetically pleasing way to suspend the 24-foot-wide LED wall to the

building steel structure," said Daniel Martin, Design Engineer at Sensory Technologies. "When we are faced with challenges such as this, we bring in skilled partners to consult with to make sure we have thought of every possible way to make the project successful. You have one shot to make this right, so we overcompensate on the engineering to allow full confidence with the solution," he noted.

NanoLumens provided a lead onsite engineer during the installation. Aerial Arts of Westfield IN rigged and installed the support beam. Together with the Sensory Technologies team, they worked tirelessly with structural engineers to ensure that the beams and support overcompensated for the weight, confirming that it was a secure installation.

Scheduling the installation posed yet another challenge. Franklin Hall is one of the oldest classroom buildings on IU's campus and was in use even when construction jobs were underway. Classes end in the spring and pick up in the fall, so the window of time to complete the installation was small. Everything had to be timed accordingly, and all parties had to meet

deadlines for expectations and deliveries. Timelines were refined and equipment ship dates were double and triple checked. The 23.5-foot steel beam had to enter the building at a specific time, through a specific door, and had to be hung quickly to allow the other trades to continue to work. The partnerships between the client, contractors, electricians, manufacturers and Sensory had zero room for error.

"WOW" typically is the summative expression many use when entering the space. Most say it's not something you expect to see in a higher-education lobby. The digital display is crystal clear, bright and easily viewable even in its high-ambient-light space. Students say that the display's "floating look," suspended by aircraft cable from above, feels very "futuristic."

The control user interface is graphically impressive, intuitive and accessible, which enables students to engage with the technology spontaneously. The IU Media School team can display customized messaging with its internal digital signage platform. At the same time, the all-important IU Hoosiers sporting games are a mere click away, when needed.