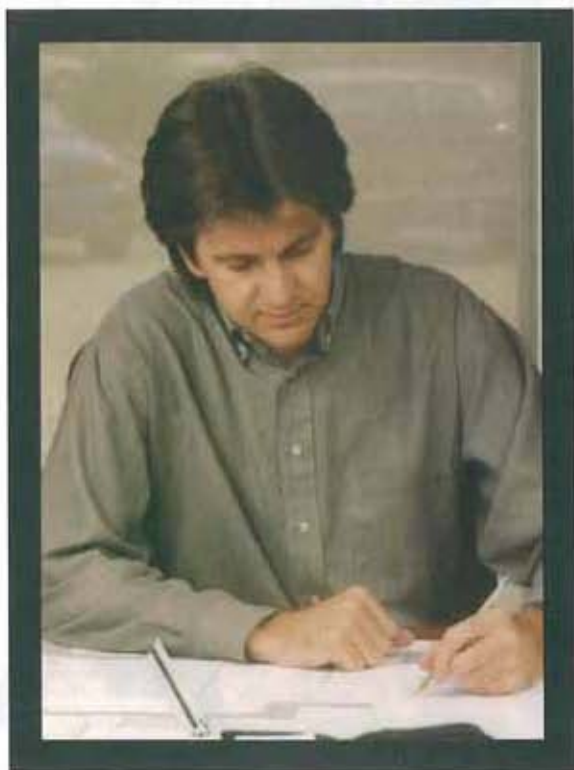

TRENDS

in Worship Technologies

THE INDUSTRY'S TOP CONSULTANTS AND DESIGN-BUILD TEAMS TALK ABOUT WHAT'S NEXT.

by Cathy Hutchison

When consultants and design-build firms are called in to design systems, clients frequently use terms like "cutting edge" or "state-of-the-art" when describing what they want. Beyond the latest and greatest gear, there are macro-trends that are driving significant changes in the technologies churches need and in the ways systems come together. We interviewed some of the top consultants and design-build firms in the industry to find out what is next.



Craig Janssen - principal consultant at Acoustic Dimensions

DOING CHURCH DIFFERENTLY

"One of the biggest trends we've seen is that many of the large contemporary churches are moving away from performance as a main focus of the worship service and more toward participation and experience," comments Vance Breshears of Sound Technology Consultants in El Cajon, California. "To the outside viewer, when looking at the systems and some of the equipment, it might be hard to tell the difference, but it impacts the way we look at architecture, technical systems and acoustics."

"In presentational rooms, the focus is on the communication from the platform out. For community rooms, the emphasis is on connection between people in the congregation," explains Craig Janssen of Acoustic Dimensions in Dallas, Texas. "As the culture is shifting, we are working with clients and architects to design rooms that break down the barriers between the platform and the congregation. This is done with non-traditional seating layouts, video screens that envelop, lighting systems that cue people to focus on things other than the platform and audio systems that allow imaging from multiple points in the room."

INTEGRATION OF TECHNOLOGY AND ARCHITECTURE

"In the past few years, we've seen a much higher level of professionalism in the ability to better interface with architects and consultants," says Gene Pelland of Claire Brothers Systems in Lititz, Pennsylvania. "The church is looking to us to help their architect understand what their needs are because technology tends to drive the space."

"There are always huge discussions between church tech teams about which brand of loudspeaker and which configuration they prefer. It is easy to get caught up in the debate. The reality is that if the room is right, you have a number of quality manufacturers to choose from," adds Janssen. "In the past six months, we've specified line arrays, LCR, central cluster and alternating left right configurations in churches all in rooms where we were able to work with the architect on the room design."

some limited data transmission, and control circuits. Today, in our Church facilities design, we believe that between Category-5e/6 cabling, coaxial cabling, and some optical fiber cabling scattered around a facility, there is almost no limit as to what can be added or facilitated in the future."

"When it comes to seeing into the future, we try to predict what facilities are going to be used for," elaborates Breshears. "Success in that really requires experience. You have to do



Bill Thrasher at a Billy Graham Crusade in San Diego, CA

EMPHASIS ON INFRASTRUCTURE

"The first and foremost thing that I learned during my years at Walt Disney World," says Bill Thrasher of Thrasher Design Group in Kennesaw, Georgia, "was that you can't have too much infrastructure. The designers of the Magic Kingdom in Florida, back in the 1960's, were so future thinking with their locating of conduit and shielded twisted-pair (STP) "audio" tie-lines all over the park (which opened in October of 1971). You could be standing almost anywhere in the park, and within a 100 foot radius I could find you a six-pair cable that was routed to the nearest Electronic Equipment Room (EER). We wound up using these cables for audio, intercom,

a number of projects then go back and re-evaluate to see if you predicted correctly. At times, we have designed basic infrastructure and capacity for systems and equipment that clients assured us they would never want or need. But ministry needs and requirements can change. Later, we might get a call from them wanting to add certain capability that they've not wanted or needed in the past. We've learned to provide for flexibility and expandability whenever possible and practical, even if it might not make sense for them now."

BLENDING OF TECHNOLOGIES

"We don't believe that audio, video and lighting are separate. They are production systems and have to be

addressed together," explains Pelland

"Fifteen years ago, acoustics, audio, video and lighting were separate disciplines, but advances in technology have caused the lines to blur," says Janssen. "Electronic acoustics, audio across CAT5 and video projection systems that work like moving lights are just a few of the examples of convergence."

"When someone asks me 'What's next?' my brain changes it to 'What should be next?'" quips Pat Brown of Syn-Aud-Con. "While the focus should be on architectural acoustics, loudspeaker selection and placement and mic technique, the danger is that end users will look to advancements in signal processing to solve all of their sound problems. While the electronic parts of the system will likely increase in capability and cost less, these aren't the things that will make systems *sound* better. More and more churches are finding that they need a good room to have good sound."

EMPHASIS ON PEOPLE

"Our technical profession, more than most, is about people," says Ron Simonson of CCI Solutions in Olympia, Washington. "People interact with our systems much more than they interact with almost any other technology in the building. Moreover, that interaction with our systems is generally creative in nature. So the real story here is as much about the interaction of our systems with people as it is about the functionality or features of the product itself."

"We now have a new generation of "tech savvy" volunteers who aren't afraid of anything digital," continues Simonson. "These people will readily accept an assignment in the tech

booth without fear or reservation, but if they experience failure too often, they will quit and pull back from the tech ministries. This is a generation that does not tolerate embarrassment or poor quality for very long. Train and mentor...or quickly lose your tech ministry volunteers. Twenty-something's have the capacity to learn and grow at a lighting pace if the teaching is also fast paced. The best advice I can give is to demonstrate your lesson instead of lecturing. Set your tech ministry staff up for success by predicting and eliminating potential causes for failure and you have the potential to have the best tech staffing that any generation has ever seen."

"Training remains the greatest need in the Church technical realm," adds Thrasher. "I believe that most Church's need to spend less time scraping together money for one more wireless microphone system (or whatever), and spend their time, money, and efforts on developing a technical production resource and training facility within their Church for the purpose of training and growing individuals in the technical and production support areas."

"In the future, it is still going to be about the client. It will still be about bringing value to the people who trust you, to help them correct their problems," explains Kurt Graffy of Arup Acoustics in San Francisco, California. "It always has to start with the client... with understanding them."

COLLABORATIVE RELATIONSHIPS

"I believe the openness and flexibility of using non-traditional methods will become more typical. It comes down to relationships and partnering in a way that you think is going to be of benefit to the client.," Graffy continues. "We did

the new sound system for one of the historic California missions. I felt they would be best served getting a negotiated bid from a contractor with experience working in historically sensitive buildings. That established a dialogue. It was very effective collaboration. At the end of the day, whether it is

negotiated bid or design/bid/build, the designer and integrator need to be working as a team, because that is how it works the best. Just as in sports, each person's contribution to the success of the job/game may be different, requiring different skills and resources than the other players, but to meet the objective it takes

Cool Burner



Pictured: HHB CDR830 BurnIT PLUS CD Recorder
Also available: HHB CDR830 BurnIT standard model

Feature-packed and built to last, HHB makes the CD recorders that professional users depend on. 24-bit AD/DA converters and an advanced laser assembly equip the affordable CDR830 BurnIT to deliver pristine recordings in studios, broadcast facilities and sound system installations the world over. And just a little extra money buys the BurnIT PLUS, adding fully professional analog and digital I/Os and a Wordclock sync input to the already impressive BurnIT spec.

HHB's commitment to high-quality CD recording doesn't stop with the best hardware in the business. Our CD-R discs are specifically developed for audio recording, with a custom-formulated Phthalocyanine dye providing widespread player/recorder compatibility and superior archival security.



Distributed in the USA and Latin America by:
Sennheiser Electronic Corp.,
1 Enterprise Drive, Old Lyme, CT 06371 USA
Tel: 860-434-9190 • Fax: 860-434-1759 • www.hhbusa.com
Latin America: Telephone: 52-55-5639-0956 • Fax: 52-55-5639-9482
Distributed in Canada by HHB Canada: Tel: 416-867-9000 Fax: 416-867-1080

HHB
FIRST WE LISTEN

Circle Reader Response #74

everyone's contribution, it's a team effort with a shared objective, success for the client."

"Collaboration is the key to success," adds Janssen. "It is impossible for one person to be an expert in every single aspect of a project. On our own team we rely heavily on cross-pollination between people with performing arts, worship and entertainment backgrounds, with different people having their own area of expertise in a discipline. This collaboration principal isn't limited to Acoustic Dimensions. It is important industry-wide. Our successful projects are a direct result of the relationships we share with hundreds of gifted design-build contractors, talented architects, knowledgeable clients and quality general contractors. When each person brings their differing experience to the table, the results are often much higher than any one group."

"We're seeing more opportunities to maintain an ongoing relationship with the facility through a service contract even after the warranty period is over as a service both to the church and to our company," says Chad Gillenwater of SPL Integrated Solutions in Baltimore, Maryland. "Continued input can increase the value of the system to the congregation over the life of the system."

HOW DO YOU PREPARE?

"One of the best things tech teams can do to prepare for what's next is to create a culture of collaboration and continuous learning within their organization," says Janssen. "One of the dangers in working within the church is becoming insulated. The more you are exposed to other ministries—especially those different from your own—and other types of work environments such as performing arts or sports, the less likely you are to stagnate. The ability to incorporate new technologies and ideas is what truly keeps you cutting edge."

"Future technologies still need to meet the needs of the people—whatever the worship experience. Though it is easy to get enamored of the technology, the point is to understand the people, then let the technology flow out of that," adds Graffy.

"The point is that you've got to know the ministry. Engineering is the easy part. Meeting the ministry goal. That's the challenge," concludes Breshears. ♦

Cathy Hutchison works with the team at Acoustic Dimensions, designers of performance technologies such as audio, video and lighting. In her spare time, she works as a freelance writer.

Advice from Syn-Aud-Con

by Pat Brown

Today there is greater awareness regarding sound than ever before. People usually know good sound and bad sound when they hear it. What people do not understand is *why* systems sound bad. They usually blame the gear, thinking that a new console or more signal processing will solve the problem.

There are many reasons why sound systems can sound bad, but in my experience the main ones are:

1. Poor or inappropriate room acoustics
2. Poor or inappropriate loudspeaker selection and placement
3. Poor microphone technique

Every church sound technician wants the latest mixing console or digital signal processor, but these things do not address the major reasons for poor sound. As amazing as signal processors are, the only thing they can do is process signals! They are not a cure for the major maladies that rob us of outstanding sonic performance in auditoriums. A signal processor cannot correct the room's acoustics, make a bad loudspeaker into a good one, or compensate for poor microphone techniques. Attempts to use them to do so amount to wasted funds that could have been directed toward proper solutions.

The sonic performance auditoriums will only improve if:

1. A professional acoustician is involved in the room design, including geometry and surface treatment selection.
2. A professional is retained to design the sound system, and the venue owner takes their advice regarding loudspeaker selection and placement.
3. The technical personnel of the venue receive appropriate training for operating the system, and are motivated to keep learning and honing their skills over time.

A good room, with an appropriate sound system in the hands of a skilled operator is a thing to behold!



Pat Brown in his element