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By John Pfeleiderer, CTS-D

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AV Consultant Be All End All Doctor?

The question of using an Audio-Visual Consultant will invariably come up during the planning sessions for any significant Audio Visual project. Questions of why we need to hire this specialised skill usually hinge on the need to save money for the project and the arguments that all of these skills can be had simply by managing these tasks in-house or to let the system integrator do these necessary jobs. While in some cases these assumptions may be possible, there is a critical need of overall responsibility for the project and especially for the long term projects the AV Consultant is better prepared to take on such a role in the construction of larger projects such as a new building, auditoria space, sports facility or other specialized AV intensive projects.

In many cases, the need for the AV Consultant may be linked to the sheer size of the project. The problems that could come up with designing and managing such a project could overburden the already full schedules of the in-house AV staff. The complexity of these larger and more specialised projects may exceed the abilities of even a well trained in-house staff to take on these specific areas of acoustical, structural and electrical designs or evaluations that may be needed for successful completion of the project.

Today's integrated AV systems are complex and to assume that an architect, general contractor or project manager will have the depth of specialised knowledge and experience to be fully aware of the many dynamics in the integrated design is not reasonable. Therefore, the presence of the consultant's segment of the AV Industry is well warranted and should be considered in your planning when some of the following issues are present or possible.

To begin this discussion, we should review what an AV Consultant is and what are some of the major attributes and skill sets that they bring to the project.

As a concise definition- the AV consultant works with project team in the development of the Audio Visual technical solutions at the beginning of the project. They will provide some or all of the building program requirements for AV, create budgets, system designs, bid documents, drawings, equipment

specifications and when contracted will provide management for your project.

To more specifically define the role of the AV Consultant we shall look at the following:

- AV Consultants are independent. In this case, it means that they will be working (directly or indirectly) for the owner of the project. To clarify this a bit, in many cases they are hired by the architect that is chosen by the owner. So for communication with the consultant there may be a step in between using the architect as the link to the consultant in this arrangement. This process will vary with the contractual agreements so each situation and job will be different.
- AV Consultants bring a level of experience and expertise to the project that is difficult to match. Choosing a well-qualified consultant is very important and we shall later explore some of the basic qualifiers you should know before contracting for services.
- Independence brings to the table the ability to be free of profit margin driven selection of equipment for your project. The Consultant is free to choose the best equipment for your needs rather than be driven by the sales of the most profitable product that might be less appropriate for the project.



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- Independence also allows the consultant to watch over the project with a clear eye to inspect workmanship and quality as the project is being constructed and or commissioned and the progress reporting is to the owner or architect not the Integrator. In other words, it is not the Fox watching the hen house, thus avoiding the conflicts of interest that may occur using the Integrator only for the entire process.
 - Consultants also bring to the table the abilities for creating the conceptual and construction drawings, preparing the budgets and bid documents for the systems, system design, infrastructure design, and putting together the documents necessary for construction specification submittals. They can also be contracted to fully manage the project and to work with the integrator in completing and verifying the commissioning process if required by the project.
 - With a wide variety of technical staffing, consultants also have resources or industry contacts to complete acoustical analysis, identify electrical needs, mechanical and structural issues as needed to support the installation of AV equipment.
 - Lastly, there is a responsibility for the project that consultants take on when they contract for the management of the job that relieves the owner from the ongoing construction meetings and time needed to see through a construction project. However, it should be noted here that the owner or owner's representative should still maintain an open line of communication with architect and the AV consultant so that any issues or miscommunications may be quickly remedied to keep the job moving forward.
- OK, now that I have made the consultant able to "walk on water", I would like review and illustrate the criteria that are used to select a consultant that will (with diligent application) closely meet the above attributes and expectations.
- Qualifications of the AV Consultant:
- First and foremost get and check the references of the prospective consultant.
 - Check out the reputation of the firm and stability of the organization.
 - Check their web-site information.
 - How long have they been in business?
 - Have there been any judgments or controversies surrounding this firm?
 - Do they carry the proper amount of insurance?
 - Medical Coverage
 - Errors and Omissions Insurance
 - Disaster Recovery
 - Bid Bonding
 - What do the references say about the consultant's work?
 - Keep in mind the references the firm gives you will probably be favorable. Do a little poking around on your own...
 - If possible, visit recently completed jobs- ask questions of the owners about how the consultant performed their duties and responsibilities.
 - How well did they interface with the project team - the architect, project manager, integrator, system programmer, and other trades?
 - Judge the quality of design and check the overall workmanship of the job.
 - Ask how the prospective consultant will manage your project.
 - Ask if they are in-tune with your bidding and procurement process? Be prepared to explain the process if this is unfamiliar territory for the prospective firm.
 - Ask to see some samples of their drawings and submittals.
 - Does the consultant use CSI (Construction Specifications Institute) standards or if International, use the accepted local construction standards for your location.
 - Ask about their working relationship with the architect that has been chosen for your project.



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- Does the consultant have an industry-recognised certification?
 - ICIA has an industry certification of CTS-D (Certified Technology Specialist - Design). Does your prospective consultant have a CTS-D assigned to your project?
 - Are there others on staff with CTS or CTS-I (Certified Technology Specialist - Installation) certifications assigned to your project?
 - Is the firm a Certified Audio Visual Solutions Provider (CAVSP)?
 - NSCA also has various certification paths in the integration of low voltage and AV systems.
- Is the consultant firm a member in good standing of professional organisations?
 - ICIA - International Communications Industry Association <http://www.infocomm.org/>
 - AES - Audio Engineering Society <http://www.aes.org/>
 - NSCA - National System Contractors Association <http://www.nasca.org>
 - IEEE - Institute of Electrical Electronics Engineers <http://www.ieee.org>
 - IMTC - International Multimedia Telecommunications Consortium <http://www.imtc.org>

By now you should be aware of the decision making points that are necessary to contract with an AV Consultant. However, I would be remiss if I did not mention the possibilities of doing some of the pre-planning using in-house resources and making sure that the integrator is also a quality organisation.

If you are fortunate to have an in-house designer that has done some of the preliminary conceptual work on the project, get these ideas out on the table so that the concepts are considered by the consultant's system designer. There is no sense in having the consultant re-invent the wheel if there is one available to roll forward.

As far as choosing an integrator for smaller projects that do not necessarily need the services of a consultant, some of the above "qualification points" can be modified to choose a commendable integrator. But in any case, keep your eyes wide open and ask questions about the company's business practices and the level of workmanship you should be expecting. Lastly, get it in writing - make sure the contract is in language that is understood by all parties involved and clear lines of communication need to be established and maintained throughout the duration of the construction.

The above recommendations are only the beginning of the project. After time, you will know how the process in going and each time you begin another project, the rules will again be slightly different. That is in part why this industry is so interesting. It is never the same. Each time you begin a project it is always a new challenge. 



About the writer...

John Pfleiderer, CTS-D is the Videoconferencing Engineer and Video Infrastructure Designer for Cornell University. He is the Current Chair of the ICIA Technology Managers/End Users Council and has been a member of that council since 1997. He is also a member of the ICIA Professional Education and Training Committee (PETC) and Membership Committee. He can be reached at jap85@cornell.edu.