

Furniture Professionals Guide to Selling Audio-Video Solutions

BIFMA reports annual commercial furniture sales potential of nearly \$14B for 2020. The annual sales potential for Audio-Video (AV) gear and related services at over \$130B for 2020 – with annual growth forecasted at 10+ percent annually for at least the next five-years. This is nearly ten times the size of our entire industry. Our ability to capture even a small share of this market should be very attractive to commercial furniture dealers – in fact, several around the country have launched and maintained very successful AV Divisions – so it can be done!

Attributes working in the typical Commercial Furniture Dealer’s advantage.

- We typically enter the Sales Cycle way ahead of the typical AV Integrator (their industry term for Dealer) by virtue of relationships with A&D firms, Property Management companies and Commercial Real Estate contacts. These are virtually unknown for most AV Integrator. (remember most of these AV folks are techie types or engineers who by nature have few, if any people skills).
- Long established relationships with variety of End-Users built on trust over long periods of time.
- Ability to understand what the End-User wants functionally vs AV Integrators who look at from a reverse perspective, i.e. equipment and configuration view.
- AV Systems are getting simpler to own and install, especially for the most common uses; videoconference, presentation display, audio enhancement, room scheduling.
- Access to equipment. Unlike the commercial furniture world, most major brands can be purchased from distributors with little price disparity. Samsung, LG, Sharp,

Attributes working against the typical Commercial Furniture Dealer.

- Technical skill set. For most DSR’s, anything that comes out of the wall (electrical/data) scares them to death!
- Industry Jargon. Techie-types love to create their own “speak” which is heavy on acronyms as a way to create a “secret society” – you’re not one of us if you don’t understand these terms – therefore can’t be trusted!
- Installation. In the AV world, this is called Day One installation – the ability to install the equipment in a customer’s space. This typically includes running cable, hanging flat screens, installing speakers & cameras, connecting equipment, and commissioning (i.e. making sure it all works)
- Day Two Callouts. Troubleshooting and resolving issues that come up with AV systems. This is without a doubt the most intimidating part of getting into the AV business. AV systems, especially those connected to the internet will from time-to-time receive firmware upgrades and too often will need some handholding to get system back up and running the way “it used to”.

One the key obstacles as a furniture professional to overcome before getting into the AV business is understand what pieces of AV world we do and do not want to participate in. To be sure, there are some overly complex and elaborate pieces of this industry that we do not want to participate in, at least to start. Some of these include video walls, signage, large format integrated projection, and complex room designs. As furniture professionals, our “sweet spot” are the simpler conference rooms and kiosk set-ups. Let’s dive into what these look like.

Conference Room Design

By far, the most frequent opportunity we will be presented with are conference, meeting, and training rooms where we most likely will be providing the furniture. The supporting AV equipment typically found in these spaces is a Flat Screen (why are these called Flat Screens and Not TV's?¹), Webcam or Pan/Tilt/Zoom (PTZ) camera, speakers, and tabletop inputs and controls. The AV world calls these simple set-ups are called "Hang-n-Bang's" because they are easy to configure and install.

Flat Screen – first thing to determine is the size. There is actually a couple of formulas to determine how large an image (screen size) should be for a given space. The easiest of these formulas' looks like this:

- To determine the minimum image size take the distance the furthest person will be away from image and divide that by 3
- To determine the largest image size, take the distance the furthest person will be away from the image and divide that by 1.5
 - Example: furthest away person will be 14 feet (168")
 - $168 \div 3 = 56''$ smallest image size
 - $168 \div 1.5 = 112''$ largest image size

Once the size range is calculated, you can select the appropriate size that fits the space and budget.

A word on budget. There are "Professional Grade" Flat Screens and "Consumer Grade" TV's. There is about a 20% – 50% price premium paid for Pro Grade units. The primary difference now is the Pro Grade will have a beefier Power Supply unit since most of these units will be one 8 – 16 hours per day in commercial settings vs the typical consumer model in homes on for 4-8 hours a day. There used to be other significant differences which are mostly gone now (like input jack types and numbers and control which are mostly gone now). A viable argument can (and often is) made that for the price, buy the consumer model, and if it fails, replace it with another consumer model and you're still likely money ahead.

Wall Installation is fairly straightforward, and most furniture installers can easily accomplish. The electrical and data rough-ins should already be in place.

A word on cabling. Analog VGA cabling is a dinosaur and is no longer supported by most devices in favor of all digital transmission. The most common cable for this utilizes HDMI. There is almost universal dislike for HDMI cable; its very expensive, limited to 30 meters, and the head can not be cut and reattached in the field, making it nearly impossible to route through conduit less than 1 ½" wide. A new, but back-to-the-future move is underway called **HDBaseT**, which is being called the Worldwide One-cable Standard. HDBaseT is becoming the global standard for the transmission of ultra-high-definition video & audio, ethernet, command controls, and up to 100W of power over a single, long-distance cable. This cable is a fraction of the cost of HDMI, easily routed thru smaller conduits, and the standard RJ45 ethernet jack heads are easily replaced in the field.

Remember, whether you are using HDMI or HDBaseT you have to connect the Flat Screen (or TV) to a PC for content. The PC most often is located in close proximity to these units or the table to facilitate quick connection for content. There are no special requirements for a PC to handle and distribute content for most of these applications.

Sound coming from most Flat Screens (or TVs) is pretty weak. The primary reason for this is that these units use rear-firing speakers, and given the thinness of the panel overall, there is no depth to improve the bass coming

from these speakers. The easiest way to improve the sound to most systems is by adding a simple, readily available soundbar directly below or above the Flat Screen.

Video Cameras have become a necessity for most meeting spaces these days given the proliferation of video-conferencing. There are basically two types; webcam and PTZ. The most common is the webcam, which combines a Highdef camera and microphone. The main challenge with these is depth of field. Most Webcams have a 100° to 150° field of view – which serves small spaces, including desktops very well. However, any space larger than 10' deep will suffer in viewing detail and sound quality. That is when a PTZ, which stands for Pan/Tilt/Zoom camera is recommended. These are common sights in most large meeting spaces – typically on a compact stand that allows the camera to move left/right and up/down. These can also be zoomed in or out to highlight specific speakers or areas. These tend to cost 10X to 30X the cost of a typical webcam. PTZ cameras also have the attribute to be “far-end” controlled – meaning the person(s) on the other end of the call can take control of the camera and focus in on whatever or whomever desired. This feature can be disabled if desired. Which either camera selected, they would need to be connected to the PC to operate – which means additional data cabling required.

Adding a microphone will also be desirable if a PTZ camera is selected or the space is large. Adding a freestanding mic is easy – and typically connects to the PC via USB connection. There are also “daisy-chained” microphone systems available that allows multiple mics on a long conference table, which is a desired function.

Control is one of the areas that has gotten simplified. Formerly, very complicated units and programming was required to select inputs, control volume levels, and turn various units on/off. While you can still select this type of unit, Crestron, Extron, Savant and AMX are the leading providers of these units. While some are very simple, most require programming skills, and I would recommend avoiding these, at least in the beginning of your AV experience if possible. There are models from all these firms that are basic “plug-n-play” units and easy to install and set-up. However, the easiest of all is to simply use the input select from the flat-screen or TV remote that comes with the units and let the connected PC drive the functionality; present PowerPoints, Video-conferences, etc. If there is a phone in the space, use that, perhaps with a couple of satellite speaker/mic connections – simple and virtually failsafe!

Content-sharing is a fancy way of saying showing whatever you want to see on your display; PowerPoint Presentations, Spreadsheets, anything you want seen. This can be done using the connected PC via its connection to the internet, or a Flash-drive, network connection. Another method gaining popularity due to its simplicity and cost is “wireless shar device”. By far the most popular, and the one I like the best, is a unit from Barco called Clickshare®. The base unit connects via hardline to the PC being used, then some puck-shaped dongles connect to a visitors laptop via USB port – a piece of software is quickly downloaded, and with a push of a button, your content is up on the main display. Clickshare® comes in single, double, and four-pack sets, allowing more than one person to simultaneously share their content in either a full-screen or grid-like fashion. Clickshare® also sets up a seamless AirPlay network for your space so IOS users can connect easily. Their wireless connection is encrypted and can be zoned so multiple units can be used in adjacent meeting spaces while keeping the display content secure. This is the easiest way for visitors to connect with your in-room system. There are several providers of these types of systems; Prysm, Mersive, Sony, ScreenBeam to name a few others.

Acoustics. One of the more critical factors of providing effective meeting spaces is controlling the way these spaces sound. Its critical to eliminate echo – or reverb within a space in order for the gear to work properly and

the conversations be understood. Also important is controlling the flow of sound into or out of the meeting space, especially when confidentiality is critical. To control echo or reverb within a space, you need to have adequate soft surfaces to absorb and not reflect sound. The hierarchy of where those soft surfaces are; ① Floor, ② Ceiling, ③ Walls, and ④ Furniture. Is there carpet in the space or bare concrete or hardwood floors? Is there a drop ceiling or open to the deck above? Are the walls drywall, glass, or concrete? Does the furniture have panels with soft sides? All these are considerations to reduce echo. If there is too much echo in a space, the microphones being used for video or audio conferencing will “over-gain” themselves (fancy way of saying pick up the direct and echo sound) and make the overall affect almost intolerable. To reduce sound escaping or entering the space from adjoining spaces, barrier walls and ceiling must be constructed. These can include multiple layers of drywall or thicker glass. Sound blocks on doors and windows. Insulation in the ceilings. All are effective methods used to block sound. Remember, for sound control – soft surfaces to absorb – thick barriers to block.

Summary – in the vast majority of meeting spaces where display is required, it can be accomplished with a Flat Screen (or TV that you pick-up at Costco), a speaker-bar, a speakerphone equipped phone with a middle of the road PC, some cabling and rudimentary installation skills! The market for this is HUGE – ever see a floorplan without a conference room in it? And the margins are way above the single digit animals common to systems projects. It all starts with asking your client three simple questions; what to you want to see, what do you want to do, what’s your budget! All within professional commercial furniture capabilities! What a great way to differentiate your offering and increase your paycheck! Furniture + AV = phenomenal success!

¹ TV’s have a tuner built in and Flat Screens typically do not – jut multiple input jacks.

Author Bio

Darrell Coutts has more than 30-years of experience in the Contract Furniture industry, working for Steelcase Corp, Steelcase, Haworth and Allsteel Dealerships – and several years in the Commercial Audio-Video industry working for a Top Ten US Integrator in the Seattle area. He is currently the Principal of Seattle-based Bravo Partners, a Manufacturers Rep Firm covering the Pacific Northwest and Pacific Rim.

Darrell has undergraduate degrees in Marketing and Economics from Adrian College, Adrian, Michigan, and an MBA in Finance & Accounting from Regis University, Denver, Colorado and Post-Graduate studies at University of Denver (Law), University of Michigan (Economics) and University of Washington (Marketing). Darrell carries both CTS (Certified Technology Specialist) and LEED AP credentials. Darrell is a licensed pilot and certified PADI Dive Master. Darrell is married his high school sweetheart for more than thirty years and is the father of two sons.