

Tech Meets Function

The modern office configuration requires a new breed of furniture and infrastructure to unleash its tech potential.



Custom-designed by Erik Rueda Design Lab, the Novo conference table has power and data connections accessible in the top of the surface.

By Cindy Davis

It wasn't too long ago that the AV rack took up double, if not quadruple the space they now occupy. "The typical AV closet is moving into the IT center, and a lot of AV is sitting on an IP network connected to a network switch," said Ken Eagle, director of field training/technical sales at Atlona. Networked AV, robust wireless solutions, smaller form factors, and a mobile workforce are driving functional and aesthetic change to what was once a landscape of big black boxes and rabbit warren of cable runs.

Space regained from a larger AV footprint and the flexibility of the network is enabling project and technology planners to think outside the box.

THE NEW IMAGE OF TECHNOLOGY

Manufacturers and bespoke furniture companies are designing lecterns, tables, chairs, and other

furniture and racks with integrated technologies enabling flexible room layouts. "If technology is transforming the way we interact with the world, it stands to reason that the people who build the world around us must reshape it in the new technology's image: sophisticated, flexible, mobile, and discreet," said Jack Daly, director of

IMAGE: CODY O'LAUGHLIN



Middle Atlantic L7 Lectern

Beautifully Accessible

Middle Atlantic Products' L7 Series Lectern is designed to meet the needs of all. Motorized height adjustability complies with ADA guidelines, enabling users to effectively engage with the technology in the space—no matter the stature of the individual or whether they are standing or seated. The L7 is completely tricked out with wireless charging, USB and AC surface power, AV/IP plates, and an innovative small device mounting area below the work surface featuring removable Lever Lock plates. You can customize the L7 to suit your needs with rack-mount storage, document camera drawers, and control panel mounting options.

operations at Erik Rueda Design Lab (ERDL). We are witnessing this change every day, from the home to the office, to school, and everywhere in between. "As designers and fabricators of furniture and millwork, we at Erik Rueda Design Lab stand at the convergence of those physical spaces and their digital counterparts."

WELCOME TO THE NEIGHBORHOOD

The transition to open-plan classrooms and office spaces has been a significant trend for at least the

past five years. You'll find as many studies claiming the benefits of open plans as you will millennials saying they can't concentrate. Huddle spaces and nooks for ad hoc meetings were designed to maintain peace and productivity. A recent trend is to group desks into "neighborhoods," so the open conversation is relevant to all in the group.

Removing walls created challenges and opportunities. Those walls were the conduit for power and infrastructure cabling. AV manufacturers and specialty furniture companies have risen to the occasion with power at the desk and cable raceways designed to run along the floor.

The lack of walls has also seen rise to modular privacy rooms where an employee can make a phone call, two people can laser-focus on a project, or the person who just can't work in an open plan can have an office in an instant.

THE LAST THREE FEET

Every table, desk, credenza, or lectern is an entry point for technology. "Architects, and by extension, contractors, are making truly awe-inspiring buildings and rooms that can accommodate the latest power and data needs," said ERDL's Daly.



IMAGE: CODY O'LAUGHLIN

Erik Rueda Design Lab's mobile huddle table is outfitted with power, data, and a mounted display.

"However, they often only get you as far as the floor or the wall." Wires from outlets or floor boxes still need to make their way up to the user and their devices. "But that last little stretch is often forgotten. People end up cramming cords in small spaces behind credenzas or cabinets, cutting holes in the tops of tables, or leaving wires

splayed out on work surfaces with no discernable organization," he explained. ERDL refers to this as the three-foot problem: it's that last little stretch from our smart buildings to our smart devices. Custom furniture is an opportunity to make smart furniture.

"We work closely with architects and designers to make furniture that will fit a client's digital needs," Daly said. As a baseline, almost all ERDL's furniture must have some form of power, cord management, and device charging capability. And it is standard to integrate Ethernet and HDMI into any shared work surface for meetings and collaboration. "We want to make those connections easy enough to find when ready to plug in, and all but disappear from view when not," Daly said. "Given that the technology for those connections is also changing constantly, we aim to design in such a way that allows future customization of our pieces."

SMALLER TECHNOLOGIES DRIVE BIG CHANGE

Rooms that were once dedicated to an occasional videoconference are giving way to interactive and multiuse spaces. "Instead of rooms with TVs on

Atlona's OmniStream Platform Pushes the Boundaries

Located in Tel Aviv, Israel, Bank Hapoalim's Innovation Center is driving forward the latest technology for the banking world, creating and developing new ideas for the industry and consumers. "Our goal was to create a dynamic working space where innovation will occur," said Tsachi Lutaty, head of the innovation lab at Bank Hapoalim. "We looked for an AV system that would be an enabler for the innovation process in terms of helping us capture ideas, promote discussions, and communicate products to visitors and employees, while being available everywhere within the space and flexible enough to handle any type of AV we will need. Choosing an AV-over-IP solution would help us achieve that goal." Atlona's OmniStream Platform provides the flexibility that Bank Hapoalim's Innovation Center needed.



IMAGE: ATLONA

Bank Hapoalim's Innovation Center, Tel Aviv

carts with a hard video codec attached to it that you wheel into a room or hang on the wall, now we do business off of our laptops with Skype or GoToMeeting,” Eagle said. Employees and students are using technologies that are more accessible and easier to use to facilitate their mobile lifestyle.

Consumer-driven choices such as desktop videoconferencing are driving manufactures to develop new solutions to enhance the experience. “That has changed the way that we design some of our hardware and how we make things work,” Eagle said. “It’s forced us to try to simplify solutions so that it works for a large group of people.” While dedicated videoconferencing rooms were sitting idle, ad hoc meetings were being held around a laptop with the group huddled closely to get into camera view and hear the audio. “That’s not a very good experience,” Eagle said. “We’re designing equipment to take advantage of USB peripherals in the room. Fixed cameras, tabletop microphones, and speakers enable the other folks in the room via these USB connections to participate in a Skype session as if they were sitting right in front of a laptop, even though they’re sitting across the table.”

Ultra-thin display manufacturers are relying on supporting manufacturers to help ensure a sleek low profile. “The industry is keeping technology seamless from an aesthetics perspective in that



SnapCab Pods (distributed by Steelcase)

I Want to Be Alone!

Demand for noise and distraction prevention in the open-plan environment is increasing. One answer is the SnapCab Pod (distributed by Steelcase), standalone office pods that are simple to install and easy to relocate. Available in various sizes, the pods provide an experience that supports productivity with quiet ventilation for constant air flow and LED lighting for consistent illumination. The pods are built on casters, making them mobile for creating a new layout or adjusting a space.

all technology continues to get thinner and thinner, enabling most infrastructure to remain out of sight,” said Todd Mares, director of emerging technologies at Peerless-AV. Low-profile mounting solutions, optical HDMI cables to accommodate screens that are millimeters off the wall, and thin-

ner soundbars supporting higher-end audio come together to complete the picture. “AV technology has gotten to the point where a thin form factor of both audio and video reproduction can be not only an engaging experience, but also a point of pride in the end result aesthetic,” Mares added.

The Beauty of Multiplicity

Atlanta-based Holder Construction, a leading contractor of large commercial projects, has deployed the Mezzanine platform to connect team members in multiple locations for seamless collaboration with content coming from multiple sources.

“We had a client who was very early in the conceptual phases of putting a project together,” said Chad Douglas, director of pre-construction at Holder. “Our virtual design and construction department sat in the Mezzanine room with the Revit file up on the screen and started making adjustments on the fly—what if we stretched this building a little bit taller, what if we made it a little bit wider.” Distributed teams are able to seamlessly share multiple pieces of content at the same

time—including drawings, timelines, budgets, and bids—easily from familiar applications. “The ability to use Mezzanine and bring everyone into one place, in real time, meant that it was a five-hour effort as opposed to a five-week effort, because we had the technology to solve the problem quickly.”



Oblong’s Mezzanine platform in use at Atlanta-based Holder Construction

IMAGE: OBLONG