



TECH DRIVEN ACOUSTICS



OVERVIEW

Considering an upcoming lease renewal, one technology firm was grappling with the rapid changes brought on by COVID-19 including remote team management, lack of at-home offices, and health and acoustical challenges. They knew that they needed to rethink their office layout to build for a more flexible future, introduce new tech, minimize noise disruptions, and ensure their team members' wellbeing.

They reached out to JSDA Inc. to craft a spatial solution that would take into account the changes wrought by the pandemic, their unique corporate culture, and make it a safer and more functional office for the long-term. Gathering people with tech solutions to return to the office was the design brief.

By adding new tech, acoustical solutions, planting living walls, and creating a more flexible workspace, we were able to solve their challenges and ensure this business will thrive in their refreshed space for years to come.

THE CHALLENGE: MAKING ROOM FOR HEALTH, NOISE, AND WORKFORCE FLEXIBILITY

In March 2020, the heartbeat of business fell flat. Employees around the world logged into their laptops and dove headfirst into working remotely.



But for our client, like many others, many of their team members didn't have the option to effectively work from home. They needed to come back to the office and have a space that was not only safe, but one that was built for the future of work, beyond 2020.

This client contacted J S D A Inc. to redefine what their workspace could be and using our proprietary "7 Steps to Returning to a Resilient Office," we rolled up our sleeves and went to work.

The current office space posed a few challenges. The primary one being its "DIY default layout," meaning that it was the typical open office plan with a few semi-private offices (with no ceilings) scattered around.

This floorplan was not ideal for many reasons but mainly because of the new, significant acoustical challenges brought on by online video and phone conferencing.

The new space would also need to embrace health precautions and be flexible enough to meet the demands of an increasingly remote workforce.

Our goal?

Create a functional office that would allow employees to bring their full selves to work each day, while maximizing productivity, enhancing wellbeing, and making space for the firm's future.

THE SOLUTION: VERTICAL PLANTS, NEW TECH, AND A PLAN FOR THE OFFICE DOG

Knowing that acoustics, health, and the ability to accommodate a hybrid workforce were key to success, we started our process by surveying each team member and examining the impact of the current space on productivity and wellness.

First, an increased focus on health and wellbeing.

To make the rest of 2020 bearable, we created a second "COVID-19" entrance to minimize traffic near the main entrance. We also reassigned parking space to add outdoor furniture complete with tables, chairs, and umbrellas to the outdoor space to allow additional private space for calls and conferencing.

Based on the feedback from the employee survey, we turned our attention indoors and rethought what long-term wellness looks like for this business.

The end result?

A flexible meditation and relaxation room where people could bring their yoga mats and breathe deeply. As part of this new space, we also upgraded the restrooms and changing spaces to increase privacy and comfort.

Throughout the office, we wanted to bring a feeling of tranquility, so we added vertical planted



walls to create a vibrant and unique space that also promoted mental clarity and cleaner air. (Bratman, Hamilton, & Daily, 2012)

And of course, our client added CDC-guided new cleaning and paper protection protocols to keep people free from germs.

Second, **acoustics**.

Open-plan offices look gorgeous. But like any other layout, they are not a one-size-fits-all solution. Especially not for our client, whose tightly packed and semi-private offices, combined with days full of Zoom calls, made for one noisy, dysfunctional office.

The importance of sound acoustical practices cannot be overstated on an organization's effectiveness. When noise is diminished, individuals report positive impacts on cognitive stress and health. (Seddigh, Berntson, Jonsson, Danielson & Westerlund, 2015)

To ensure that all team members would be able to do their tasks effectively in the new space, we utilized the data compiled from our survey to understand each individual's work style preferences and created a plan that added acoustical and visual barriers between stations.

By adding private offices with flexible wall systems and alternative acoustical ceilings, we planned a space that would keep the noise from phone calls and video conferences to a minimum, allowing quieter departments, like accounting, the focused environment they need.

We revisited the whole concept of what "working together" means in the future. Business goals and company culture must mesh together seamlessly. By embracing the latest technology, we are able to shape the way employees interact. Or, in the case of adding BOSE noise-cancelling headphones, the way employees put their heads down to get work done.

Third, **flexibility**.

We emphasized branded, flexible spaces that could be easily adapted as the business' staffing needs change. The number of remote workers is expected to remain high and we knew we needed to accommodate ways of interacting when they visit the office, while providing for flexible workspace for those full-time, in-office workers.

To ensure the office would be useful for years to come, we added mobile, castered workstations that enable the blended work teams to collaborate and adapt their space as their business evolves. This unusual application will enable team members to play with the direction they face, making it easier to avoid worker breathing zones, to minimize disruptions and maximize collaboration all in one workspace.

We also reduced the size of hot-desking spaces and added adjustable height work surfaces to every private office to further add flexibility.



Fourth, **more tech.**

We couldn't design a new office plan for a tech-focused company without bringing in more technology to the space.

Knowing that Zoom calls are here to stay, we made sure that we were creating space for human connection by aligning monitors to simulate direct eye contact. (Hietanen, Peltola, & Hietanen, 2020)

We added large, 8K/5G flatscreen monitors to each private office and a mobile, floating monitor in the open, team area. Each whiteboard was upgraded to smartboards that are able to convert images and handwriting to digital files. Furthermore, we strategically placed monitors to enhance both face-to-face and remote conferencing.

Next up, the 14' ceiling in the reception zone was connected to the open plan space, adding a series of acoustical panels. Another series were dropped within the workspace for visual and acoustical separation zones. This design allowed us to drastically change the welcoming space and create a cohesive flow to the rest of the office. Now the high ceilings boast new monitors and the latest technologies to showcase marketing efforts and their team wins.

Then, we focused on hybrid (in-person and remote) gatherings. First, we added an Epson BrightLink projection system to make large group meetings and gatherings enjoyable for all. The 5G-enabled Barco Clickshare we implemented will allow on-demand live streaming across phones and monitors and the Eduflex hybrid classroom technology grants a real-time, any-location learning environment to elevate collaboration.

Last but certainly not least, we added an electronic barrier to gently prevent the company dog from trying to chase cars.

Finally, the **"behind-the-scenes" work.**

In this case, this meant paying extra attention to the air quality in the office. We reviewed their HVAC system with our engineering team and determined specific, biometric changes such that would keep employees healthier by keeping the air flowing and fresh. These included new electronically operated skylights to increase fresh air and maximize daylight.

THE RESULTS

Our client's landlord was grateful to have a tenant renewal during a year filled with cancelled leases. He quickly negotiated the tenant improvements, including the HVAC modifications to address ultraviolet light filters, rezoning and adding extensions to the existing supply system. Our client, thrilled with the prospect of a new office that would keep people happy and healthy, renewed their lease for three years, providing long-term stability for the business and making space for their blended work life.

What makes this project special isn't just an unusual year. It's the people. From a marketing



executive who needed bike storage so she could maintain her workout regimen to ensuring the office dog stayed safe, we were thrilled to design a solution that will propel our client's success every day.

WORKS CITED

Jonne Hietanen, Mikko Peltola, and Jari Hietanen. 2020. "Psychophysiological Responses to Eye Contact in a Live Interaction and in Video Call." *Psychophysiology*, vol. 57, no. 6, e13587, <https://doi.org/10.1111/psyp.13587>

Bratman, G. N., Hamilton, J. P., & Daily, G. C. (2012). The impacts of nature experience on human cognitive function and mental health. Retrieved October 29, 2020, from <http://willsull.net/resources/BratmanHamiltonDaily2012.pdf>

\Aram Seddigh, Erik Berntson, Fredrik Jonsson, Christina Bodin Danielson, and Hugo Westerlund. 2015. "Effect of Variation in Noise Absorption in Open-Plan Office: A Field Study with a Cross-Over Design." *Journal of Environmental Psychology*, vol. 44, pp. 34-44.