Cleanbox Technology: A suite of UVC hygiene products

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CEOCFO:  Ms. Hedrick, what is Cleanbox Technology?
Ms. Hedrick: Cleanbox Technology is a smart tech hygiene company for the disinfecting of HMDs and other communication headsets, electronics, eyewear, masks and devices that are frequently touched or shared. We utilize UVC in an LED, and our engineering is optimized for the maximum efficacy use of UVC in a completely safe and user-friendly way. Because of our engineering, we are able to reach 99.999%+ reduction of a range of contagions, including SARS CoV-2, which we have tested against in a biohazard level III lab.

CEOCFO: Are most scientists agreed that UV light is affective in general and specifically for COVID?
Ms. Hedrick: It really depends on the UV light and how it is used. UV light can be UV A, B or C. UVA and UVB are not used for disinfecting. The sun and tanning beds are both UVA and UVB light. UVC is a short wavelength of light that is beyond the visible spectrum and it does not exist naturally in our atmosphere. That is why it is highly effective at killing contagions, because they do not have a natural built up resistance to it.

UVC has been used in hospitals for a number of decades, consistently. The way we use UVC light is different now, because we use it in an LED as opposed to a bulb. That allows us to control the wavelength, the intensity and dosage and also be able to reach decontaminations level without risking harm to any of the materials. Not all UVC use is equal, but our engineering has been tested specifically against COVID and UVC light in general is known to be effective against other corona viruses, including SARS and MERS.

CEOCFO: What are some of the specific challenges in the areas where you are looking to use UVC?
Ms. Hedrick: Our specialty is with products that are used by multiple people; anything that is used in a public space or for employee training or even just where large groups of people pass through. There is a higher risk of contagion for something like an HMD, (a Head Mounted Display), to anything from VR/AR headsets to glasses, safety glasses and so on. A product that comes in closer proximity to your eyes, nose and mouth is of course in closer proximity to contagion transfer points.

At the same time, with any of these devices including your cellphone, you have a much more expensive product with sensitive electronics, so how you decontaminate them needs to be done in an effective way, but a safe way. We offer a way to disinfect that is safe for the product and for the operator.

CEOCFO: Are people still using things like shared safety glasses for example or a shared headset where you walk into a store and they are in a display? Are they realizing that with COVID it may not be safe to share these types of things?
Ms. Hedrick: I think that is a really great question. It really comes down to a number of factors and why I think products like the ones that we offer are important. There are two ways to answer that question; as a consumer and as a business. There are many businesses that use these electronics in a myriad of ways and they will continue to do so because they're an integral part of the business. There are still multiple people using those electronics.

As a consumer returning to a retail store, I think that because of COVID-19 it will take some time, even once the store has reopened, to have people feel confident to try out different products. When you go to an Apple store or a cellphone store, you want to play around with the tablets and laptops. One of the things that products like ours provide is something that a business can reassure both their employees and consumers that they are actually doing something effective to make that a safe process.

CEOCFO: What is available today from Cleanbox?
Ms. Hedrick: We currently have several products and three product lines on the market that decontaminate a range of devices from HMDs to tablets and phones, and a product for masks. For example, an organization has employees that wear masks in front of their customers, which is pretty much every company in the US, instead of disposing masks you can reuse them and this product has been tested specifically against COVID on N-95 masks.

CEOCFO: What is the product?
Ms. Hedrick: Our CX series is most widely known right now, and is designed around a cone of lights. We have overlapping lights, which is important to reach full decontamination of the surface. The product is adjustable inside so wherever you can hang or place your product in the box, it will be the proper distance from the lights.

It is a simple process; sixty seconds. You open the door, you place the item in, close the door, push the button and it goes through a process of both decontaminating and drying the headset. If there is sweat or other kinds of moisture from something else, it will continue to dry that over
the sixty seconds, or if there is hair or something that has stuck to that product it will blow it off. There is also a visual countdown for the cycle. It is very, very simple.

CEOCFO: Are the different products just different sizes?
Ms. Hedrick: It depends on the product line. In the CX series, our CX1 will fit one HMD at a time. The CX2 will fit two and the CX4 will fit four. A head mounted display, again, can be anything from a VR/AR headset, like a Hololens or an Oculus Rift to a broadcaster headset or earphones or a pilot’s headset. Our CX series works well for any kind of media organization using headsets with a mic.

CEOCFO: What are people doing today with some of the items that need to be disinfected? How is it being handled?
Ms. Hedrick: Generally speaking, the most common practice is to use alcohol or disinfectant wipes on a product. That is certainly something better than not doing anything at all, but it does have its limitations. Number one, for the solutions to be effective they need to be left wet on a surface for four minutes and nobody really does that.

It is also not a good solution for soft surfaces, such as foam, rubber, anything that is not a hard plastic or polymer or glass. That is generally what people have done.

What we want to provide is a way to disinfect that is safer, more effective, takes less time and has consistency. It’s easy to accidentally forget to clean part of a surface, or not take adequate care if you’re in a hurry. We try to help eliminate that risk factor.

CEOCFO: What is the CleanDefence? Is that an upcoming product or series?
Ms. Hedrick: CleanDefence is a product specifically for face masks. It looks different than our CX series, because it is a different form factor, but it is also a unit that you open up and are able to hang four masks in it at once. We tested it on a range of masks, all the way to the N95 and we did test the N95 against COVID in a BSL-3 lab by inoculating the various layers of that mask with COVID and determining a reduction.

CEOCFO: There is so much opportunity. How are you reaching out to potential customers?
Ms. Hedrick: Currently, most of our growth is organic and it is the result of some of our larger clients already knowing our product line and trusting it and then continuing to reach out to us during COVID times. We are still a small company and we are growing, so we have not really done much marketing to date. We are thought leaders in the XR space and we do present and speak at a number of events.

We recently published a collaborative white paper along with Hoag Memorial Hospital in Newport Beach California, and ResInnova Laboratories and a few other experts in the UV decontamination space.

CEOCFO: Is cost a factor? Where does that come into play?
Ms. Hedrick: Yes, I think that people always look for the best value add to whatever kind of investment they are going to make. However, our value that we offer our clients, in addition to both the risk mitigation
point of view and the consistent hygiene component, is that we are completely safe for the products that we are protecting.

A cellphone or let us say, in a hospital, a stethoscope or a tablet or an HMD or a pilot’s headset, are very expensive products that you generally do not dispose of after a couple of uses. Because our product is certified for 10,000 hours of continual use, in most cases it will not only last longer than the headset or product that you are decontaminating. By avoiding corrosive hygiene methods, we are helping maximize that product’s lifespan.

CEOCFO: *Do you need to maintain a large inventory? Are you able to manufacture to order? What are some of the logistical circumstances?*

Ms. Hedrick: That is a great question that I do not actually get asked a lot. All of our products are made in the US. We work with a manufacturing company out of California, and source from across the country which allows us quality control as well as less complicated sourcing channels.

CEOCFO: *Where were the challenges in coming up with the right amount of light, the right amount of time, the right size of the box and so on? What was the hard part?*

Ms. Hedrick: That is a really smart question, because you are really identifying that it does take a combination of surface distance, time and intensity to actually produce a product that does what it says. My co-founder and I spent a number of years doing R&D.

When we first starting filing patents, the use of UVC in an LED was relatively brand new. We learned and grew with the experts, would test and make adjustments, and then go back and test again. We invested in our engineering and we invested in our design, so that we could take those basic principles and use it across our product line as we grew.

CEOCFO: *Are you seeking partnerships, funding or investments as you move forward?*

Ms. Hedrick: Yes, absolutely! We have a number of growing partnerships now and we are always looking to grow with strategic partnerships.

CEOCFO: *Organizations may need to prove they have taken correct steps in COVID safety, either for regulatory issues or perhaps for lawsuits? Do you see that as a factor in gaining more interest, not just for protecting people from disease, but that ultimately as a business you need to take certain precautions?*

Ms. Hedrick: I think that is really endemic for most businesses, certainly in the US. You have to show that you have taken adequate steps to protect your client. COVID-19 is unique because it basically shut down the entire world. I do think that there will be regulatory developments of having to show that a business has taken the proper precautions in order to both re-attract their customer base as well as protect themselves as a business.
CEOCFO: There are so many new products and new ideas surrounding the pandemic today. Why does Cleanbox Technology stand out?

Ms. Hedrick: We began our engineering a few years ago before COVID and we understand the nuances of how to make a technology such as UVC light work effectively. Our products are trusted by Fortune 100 companies and we are currently in twenty-five countries.

We are experts using UVC light for surface decontamination. We have made it a point of company culture to put our clients first and take their feedback and integrate it into our next version of a new product, for example. I think that really sets us apart, because we were here before COVID and we will be here after COVID. We are constantly innovating and integrating new technology and functionality. As a small company something that we are able to be is agile and I am proud of my company for that!