Q&A with Sumner Lee, Founder and CEO of Fuse Integration

Sumner Lee is the founder and CEO of **Fuse Integration**, a warfighter-focused engineering and design firm providing innovative tactical edge networking solutions for defense customers. He founded the company with a vision to deliver critically needed capabilities to the warfighter through the application of Design Thinking processes. He aligns the Fuse team around its Noble Cause of "Advancing warfighter capabilities with elegant, user-focused communications, networks, and software systems."

Fuse has successfully grown in a complex defense market. What has made the difference — especially in overcoming obstacles like the "Valley of Death"?

We've pulled together a team that mixes brilliant engineers with operationally seasoned military veterans to deliver game-changing capabilities.

What sets us apart is our relentless drive to connect with the warfighter user. We spend as much time with the Navy and DoD tactical officers, air crew, and weapons school instructors as possible to understand their true pain points.

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This military market is incredibly complex. You've got to connect with the program office that buys technology. You've got to connect with the folks in Washington, D.C., who write down requirements and drive the vision and the path forward for budgets. And you've got to connect with the users. And out of those three things, connecting with the users is where we're differentiating ourselves. Making sure the products we're building meet the need.

Clearly, the warfighter focus is a passion for you. Where does that come from?

I spent time as a naval aviator flying helicopters and saw too many programs that delivered fancy technology but missed the mark. Too often, cutting-edge tech didn't land because no one was paying close enough attention to the actual needs of the warfighter.

That's why, at Fuse, we fly with the users. We listen, we test, we adapt. In addition to running our own organic flight tests, we're participating in numerous defense exercises to test and demonstrate our capabilities across platforms and programs.

Artificial intelligence is changing everything from the battlefield to the board room. What do you see as the future of defense AI? And what is Fuse doing with AI?

AI is a game-changing tool that helps us all research, answer questions, and facilitate decision-making. In defense technology, harnessing AI can improve the way humans can make decisions about mission actions they have to execute.

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Our AI tools are transforming tactical communications. In denied or contested environments — when the adversary is actively trying to block comms — our systems make sure connectivity just works. One example is our AI Radio Environment (AIRE), an API that lets authorized AI developers interact with the network more efficiently, so connectivity becomes seamless, not a second thought.

Autonomous vehicles are another big change in defense technology. Can you talk about how Fuse is monitoring and addressing the drone evolution?

The prevalence and importance of unmanned vehicles is exploding. From the smallest nano to an unmanned helicopter on a scouting mission, to the giant Triton unmanned aircraft that's flying at 35,000 feet, they've become the all-seeing eye — watching every corner of the battlefield. These unmanned platforms span across domains from undersea, unmanned boats to swarms of unmanned surface vessels to unmanned balloons. The unmanned fighter jets that are just about to come online from Kratos, Anduril, General Atomics, and Boeing will make a big difference in tactical air operations.

For swarms of unmanned vehicles in the air or on the ground, we are enabling those unmanned systems to engage with human warfighters who continue to make decisions, so they maintain control and communications. As a small business, we're agile. We sprint forward to advance the technology and we continuously fly agile mesh networks with multiple radios.

We just did it again, in the past few weeks — flying agile mesh networks with multiple radios over Camp Pendleton in support of our Marines, providing resilient connectivity.

What advice would you give to other leaders trying to innovate in high-stakes environments like defense?

If you want to start a business in this challenging world of innovation, where the pace of change is just continually accelerating, you've got to connect with your users — whether you're in defense or in cell phones, or in oil and gas, or in consumer products or services.

> *Whether you're launching a coffee shop or building national defense systems, you've got to stay connected with your users.*

I've got a buddy Ryan Feghali, who just co-founded a coffee shop, CoCo Playa Coffee & Cookies, right here in San Diego. He is crushing it with his first self-branded shop because he's directly connecting with his customers, and he understands in that area of San Diego exactly what the customers want. Month over month, he's growing his business.

Whether you're launching a coffee shop or building national defense systems, you've got to stay connected with your users.

If I were to give a class on leadership, I'd say that not only do you have to lead the charge in staying tied to the user, but you also have to lead your team — to inspire every part of your team to be hungry for talking to the user. Spending time with them and creating empathy with the user's plight. Learn their pain points — and build to fix it.

Let's close by talking about readiness, which is the name of the game for the U.S. Department of Defense.

The DoD has to be ready for the fight at any time. The defense programs need the best, proven, advanced capabilities to deploy right now.

Readiness isn't just a military mandate — it's our mission, too. Fuse delivers proven capabilities that enable the fight. Harnessing AI, autonomous vehicles, and other evolving technologies, we're agile, fast, and ready to go right now.

And we're leaning in. We continuously engage with users in our lab — and in the laboratory of the battlefield — to ensure warfighters have the tactical edge networking tools they need in the most challenging environments. ∎