

Casey Weinstein:

Thank you, Defense One, for having us today. My name is Casey Weinstein. I am the Director of US Airspace and Joint Forces for the ServiceNow team. It's my great pleasure to be here today with Colt Whittall. He is the Chief Experience Officer of the United States Air Force. Thank you very much for being with us today, Colt.

Colt Whittall:

Thank you. Really appreciate-

Casey Weinstein:

Yeah, it's a very cool title, and maybe folks wouldn't necessarily associate it with the US Air Force, but can you tell us a little bit more about your background and how you came into this role of the Chief Experience Officer of the US Air Force?

Colt Whittall:

Sure. My background really is about 20 plus years of designing and developing all kinds of systems, mostly public-facing digital products, [inaudible 00:00:52] everything from the CDC, to a lot of health and wellness [inaudible 00:01:01] sites and applications, often involving integrational devices, and a fair amount of [Inaudible 00:01:08]. That was kind of my Air Force [inaudible 00:01:16]

Casey Weinstein:

So appreciate that. And when we talk about user experience in the air and space force, can you give us some context? What does that mean from a practical perspective?

Colt Whittall:

Sure. It's all about [inaudible 00:01:57] US air force is really about [inaudible 00:01:59]. It's about making airmen more productive, making more lethal, building their morale, contributing to that. It's making them frankly more effective in every single thing that they do with technology. There's a lot that goes into to that but that's really what this is about. I think sometimes people hear the term, user experience, they think well it's about making it pretty, it's about selling something, it's about getting some You Tube videos faster [inaudible 00:02:31]

Casey Weinstein:

I've heard you talk about Lieutenant Colonel Paul Fitz. I was curious if you could tell us his story.

Colt Whittall:

Sure. It's an amazing story and I would encourage anyone to go Google Lieutenant Colonel Paul Fitz [inaudible 00:02:39] magazine and get an article that's I think the title is something like, how an airforce plane runs [inaudible 00:02:56] or something like that But essentially what happened is the more we to [inaudible 00:03:06] lots of pilots lost [inaudible 00:03:07] lost. And so the air force hired a psychologist who had retired from the air force and got his degree in psychology and his prject was to help the air force figure out how to hire better pilots because in the air force, because in our infinite wisdom. The problem we had bad pilots. So Colonel Paul Fitz starts looking at the data, [inaudible 00:03:36] and began realizing there were a whole lot of patterns in these lawsuit [inaudible 00:03:45].

Colt Whittall:

Similar things kept happening again and again. He puled the pilot into the cockpit and they started doing [inaudible 00:03:54] and they figured out that the problem is not the pilots, the problem is the plane. They came up with the idea of [inaudible 00:04:01] which you can see until this day in cockpits and [inaudible 00:04:06] and [inaudible 00:04:08 ]item you can imagine where different controls are shaped differently, are colored differently and then the idea is [inaudible 00:04:19] it's that you don't open the bomb backdoors when you mean to put the landing door up.

Casey Weinstein:

Fascinating. That's a kind of a nice segue into my next question about the implications of not getting this right and tying experience to the mission and mission effectiveness. And you mentioned lethality, which at the end of the day is part of the mission sometimes. Can you talk to us about the implications of that?

Colt Whittall:

Yeah, well, one of the holy grail's in my profession is finding the data that links these things together because it always tells a story. I think we have found them in a lot of different places for example, if you look at a study that was done within [inaudible 00:05:12] they did a fantastic job measuring the impact of certain networks in PC's on productivity of people [inaudible 00:05:17] and the impact is enormous. It was measured within the tens and millions if not hundreds and millions of dollars [inaudible 00:05:28] That's one of them.

Colt Whittall:

And then there's lots of other consequences of bad user experience, there're annoyances like, thankfully former, fitness management system with it's infamous eight layers of navigation. It needn't be that way. It's the opposite of user[inaudible 00:05:43] coming to do 99.9 percent of the time and then you bury it under 8 layers of navigation. It's completely insane. That's the opposite of user [inaudible 00:05:58] What was the quantifiable impact of that? quantifying Exactly. But I can tell you that every time an airmen had to go to that fitness system, they were completely annoyed by it. In fact, ultimately the reason we got redesigned was that airmen [inaudible 00:06:13] social media which doesn't [inaudible 00:06:14] the airforce but [inaudible 00:06:18] and people realize this is a morality issue and we were able to get IT redesigned. In airforce there's other impacts too. There's impacts to readiness that have been documented by reports of [inaudible 00:06:33] reports which I can refer you to.

Colt Whittall:

There's even things like loss of life unfortunately. If you going to work at the NCSB report on the job [inaudible 00:06:42] then straight to [inaudible 00:06:45]. The flawed design of the controls for the navigation was one of the things that they sided as a major factor [inaudible 00:06:56] I would refer you to take a look at the NCSB report and there was a lot of [inaudible 00:06:56] in fact we have included screenshots of the user interface. [inaudible 00:06:56] It's way too easy to unlink with two problems so reports [inaudible 00:07:17] and shipped for support [inaudible 00:07:21]

Casey Weinstein:

Wow. Ttangible reality of life and death impacts. This needs to be talked about. I'm glad you're here and I appreciate you elevating the issue. Compared to similar enterprises. It's kind of hard to compare

enterprises at the scale of the air force, but global enterprises, where do you think the air force is today when it comes to UX and how big of a gap potentially is there from where we need to be?

Colt Whittall:

I think the gap is pretty large. Now it varies depending on the application. We have some software [inaudible 00:07:57] But the range is huge. At the opposite of the spectrum you have things like the fitness management system. We also have a huge range in performance as far as IT. If you're sitting in some locations using certain equipment say you're most updated PCs, your user experience is actually pretty good.. But if you're sitting in other locations, maybe on the other side of the world and you're using a [inaudible 00:07:57] computer and maybe it's three, four years old [inaudible 00:07:57]. You're user experience is very, very different, in fact, pretty bad.

Colt Whittall:

And we have the data which shares all of this and we monitoring it and we are attempting to take actions trying to prove it across the board but particularly I want to bring those locations up there to the level of the bets. And then I also, by the way, we backup user experience. We're also doing some of it in a way that you can best market vs commercial standards. What they see on the enterprise non-government sector. And overall doesn't look good, but that's the averages, right? So like I said, when it comes to ours best, it's good. But the reign is immense and we have a long way to go to bring it all up.

Casey Weinstein:

So what are some specific that we're taking today? Obviously the creation of your position and bringing someone in with your skillset and experience is a big part of that, right? It's clearly a priority for the air force, but where do we go from here? What does the journey look like you over the next few years?

Colt Whittall:

Well, it's a lot of big things and some small things, but there's a few examples. So when it comes to enterprise IT the [inaudible 00:00:09:59] program of course is extremely important to me, extremely consequential. You can see my background. Those are the eight user archetypes, they way we categorized types of users for enterprise. So [inaudible 00:10:16] program extremely significant [inaudible 00:10:18] what that is. I think most of you probably know. But the first wave of that, and one frankly that I am most passionate about, is the one that is going to move the needle the most initially.

Colt Whittall:

One of the things that we discovered in our analysis is that [inaudible 00:10:35] is that, are we the single biggest impacts user experience [inaudible 00:10:45] IT? Frankly, [inaudible 00:10:43] in computers we use every day. They don't run our security staff. [inaudible 00:10:49] In the Marvel movies with Thanos and he snapped his fingers, if I could snap my fingers and do one thing, it would be to zap every spin disk in the air force and priced with a solid [inaudible 00:11:03] You do that, that would move the needle on previous experience, better, faster, more than any other that we could do.

Casey Weinstein:

So Thanos initially would only do half the spinning drives, but you're going full Thanos.

Colt Whittall:

I'd do all. 100 percent Thanos. Right now in the air force I think they are looking at maybe a little bitty complete. But best case scenario, we are about we still have about 60 percent [inaudible 00:11:37] And so I'd say there's a lot of work to be done. So [inaudible 00:11:43] will help that and also frankly just our regular PC purchases [inaudible 00:11:49] in compliance with the upgraded minimum standards that we put about a year ago. And we move that in the right way [inaudible 00:11:52].

Casey Weinstein:

It's fascinating. I'm sorry.

Colt Whittall:

There's a bunch of others I could get into, but we'll stop there.

Casey Weinstein:

It's just interesting legacy IT being such a huge challenge. I think there's maybe a misconception about the cloud and is the cloud's everywhere now. And from everything I've read, really, we're just getting started with cloud infrastructure and modernized infrastructure and a seamless unified experience across an enterprise. The last I read, I think from the economist, was ten percent of the data in the world is in the cloud today. So we're really getting started. It's going to be a journey clearly. And it's interesting to hear you validate that. Well, we covered world war II, an awesome story, war story. We covered Marvel and the Avengers, which I always appreciate. We're coming up at the end of our time. Are there any closing thoughts you'd like to talk about today or share?

Colt Whittall:

No, I think that's it. The only other thing I would say and we'll go back to the B-17 story. UX is in our DNA [inaudible 00:13:00]. I sometimes run into questions about it and people just assume this is a commercial thing. This is not us. And I would just say no, you're wrong. [inaudible 00:13:04] engineering, the term that was used then, still is, and the great grain child of that user experience [inaudible 00:13:37]. These techniques are very much in the DNA of the air force. They're very much part of our history. We've been doing them all along. In fact, we were some of the original innovators in this space and frankly, we're also doing some great work in it today. You see a lot of it in the software factories, and you're seeing a lot of it [inaudible 00:13:57] in some of our large more legacy IT programs. So we have a long way to go, but we can do it.

Casey Weinstein:

Well. That's fantastic. Appreciate your time. Appreciate what you do for our airmen and all our service members. That's all the time we've got today. Thank you so much for joining me, Colt. Yep. Thank you for our audience tuning in today and look to learn more. Please visit our ServiceNow resources in the resource center, and I will turn it back over to the defense one team for more great sessions.