#### 00:04

I'm here, because I've spent far too many nights lying awake, worrying and wondering who wins in the end. Is it humans or is it robots?

#### 00:14

You see, as a technology strategist, my job involves behavior change: understanding why and how people adopt new technologies. And that means I'm really frustrated that I know I won't live to see how this all ends up. And in fact, if the youngest person watching this is 14 and the oldest, a robust 99, then together, our collective consciousnesses span just 185 years. That is a myopic pinprick of time when you think of the evolution and the story of life on this planet. Turns out we're all in the cheap seats and none of us will live to see how it all pans out.

#### 00:52

So at my company, we wanted a way around this. We wanted to see if there was a way to cantilever out, beyond our fixed temporal vantage point, to get a sense of how it all shakes up. And to do this, we conducted a study amongst 1,200 Americans representative of the US census, in which we asked a battery of attitudinal questions around robotics and AI and also captured behavioral ones around technology adoption.

#### 01:17

We had a big study so that we could analyze differences in gender and generations, between religious and political beliefs, even job function and personality trait. It is a fascinating, time-bound time capsule of our human frailty in this predawn of the robotic era. And I have five minutes to tell you about it.

#### 01:37

The first thing you should know is that we brainstormed a list of scenarios of current and potential AI robotics. They ran the spectrum from the mundane, so, a robot house cleaner, anyone? Through to the mischievous, the idea of a robot pet sitter, or maybe a robot lawyer, or maybe a sex partner. Through to the downright macabre, the idea of being a cyborg, blending human and robot, or uploading your brain so it could live on after your death. And we plotted people's comfort levels with these various scenarios. There were actually 31 in the study, but for ease, I'm going to show you just a few of them here.

### 02:15

The first thing you'll notice, of course, is the sea of red. America is very uncomfortable with this stuff. That's why we call it the discomfort index, not the comfort index. There were only two things the majority of America is OK with. And that's the idea of a robot AI house cleaner and a robot AI package deliverer, so Dyson and Amazon, you guys should talk. There's an opportunity there.

## 02:39

It seems we're ready to off-load our chores to our robot friends. We're kind of definitely on the fence when it comes to services, so robot AI lawyer or a financial adviser, maybe. But we're firmly closed to the idea of robot care, whether it be a nurse, a doctor, child care. So from this, you'd go, "It's OK, Lucy, you know what? Go back to sleep, stop worrying, the humans win in the end." But actually not so fast.

## 03:03

If you look at my data very closely, you can see we're more vulnerable than we think. AI has a branding problem. So of those folks who said that they would absolutely reject the idea of a personal assistant, 45 percent of them had, in fact, one in their pockets, in terms of a device with Alexa, Google or Siri. One in five of those who were against the idea of AI matchmaking had of course, you guessed it, done online dating. And 80 percent of those of us who refuse the idea of boarding an autonomous plane with a pilot backup had in fact, just like me to get here to Vancouver, flown commercial.

### 03:34

Lest you think everybody was scared, though, here are the marvelous folk in the middle. These are the neutrals. These are people for whom you say, "OK, robot friend," and they're like, "Hm, robot friend. Maybe." Or, "AI pet," and they go, "Never say never." And as any decent political operative knows, flipping the ambivalent middle can change the game.

### 03:56

Another reason I know we're vulnerable is men -- I'm sorry, but men, you are twice as likely than women to believe that getting into an autonomous car is a good idea, that uploading your brain for posterity is fun, and two and a half times more likely to believe that becoming a cyborg is cool, and for this, I blame Hollywood.

## 04:12

(Laughter)

# 04:14

And this is where I want you to look around the theater and know that one in four men are OK with the idea of sex with a robot. That goes up to 44 percent of millennial men compared to just one in 10 women, which I think puts a whole new twist on the complaint of mechanical sex.

## 04:28

(Laughter)

# 04:30

Even more astounding than that though, to be honest, is this behavioral difference. So here we have people who have a device with a voice assistant in it, so a smart speaker, a home hub or a smart phone, versus those who don't. And you can see from this graph that the Trojan horse is already in our living room. And as these devices proliferate and our collective defenses soften, we all see how it can end. In fact, this may be as good a time as any to admit I did take my Alexa Dot on vacation with me.

# 05:01

Final finding I have time for is generational. So look at the difference just three generations make. This is the leap from silent to boomer to millennial. And what's more fascinating than this is if you extrapolate this out, the same rate of change, just the same pace, not the accelerated one I actually believe will be the case, the same pace, then it is eight generations away when we hear every single American thinking the majority of these things here are normal. So the year 2222 is an astounding place where everything here is mainstream.

# 05:32

And lest you needed any more convincing, here is the generation's "excitement level with AI." So not surprisingly, the youngest of us are more excited. But, and possibly the most paradoxical finding of my career, when I asked these people my 3am question, "Who wins in the end?" Guess what. The more excited you are about AI and robotics, the more likely you are to say it's the robots. And I don't think we need a neural net running pattern-recognition software to see where this is all headed. We are the proverbial frogs in boiling water. So if the robots at TED2222 are watching this for posterity, could you send a cyborg, dig me up and tell me if I was right?

06:13

(Laughter)

06:14

Thank you.

06:15

(Applause)