

The Human Skills We Need in an Unpredictable World

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Recently, the leadership team of an American supermarket chain decided that their business needed to get a lot more efficient. So, they embraced their digital transformation with zeal. Out went the teams supervising meat, veg, bakery, and in came an algorithmic task allocator. Now, instead of people working together, each employee went, clocked in, got assigned a task, did it, came back for more. This was scientific management on steroids, standardizing and allocating work. It was super-efficient.

Well, not quite, because the task allocator didn't know when a customer was going to drop a box of eggs, couldn't predict when some crazy kid was going to knock over a display, or when the local high school decided that everybody needed to bring in coconuts the next day.

(Laughter)

Efficiency works really well when you can predict exactly what you're going to need. But when the anomalous or unexpected comes along -- kids, customers, coconuts -- well, then efficiency is no longer your friend.

This has become a really crucial issue, this ability to deal with the unexpected, because the unexpected is becoming the norm. It's why experts and forecasters are reluctant to predict anything more than 400 days out. Why? Because over the last 20 or 30 years, much of the world has gone from being complicated to being complex -- which means that yes, there are patterns, but they don't repeat themselves regularly. It means that very small changes can make a disproportionate impact. And it means that expertise won't always suffice, because the system just keeps changing too fast.

So what that means is that there's a huge amount in the world that kind of defies forecasting now. It's why the Bank of England will say yes, there will be another crash, but we don't know why or when. We know that climate change is real, but we can't predict where forest fires will break out, and we don't know which factories are going to flood. It's why companies are blindsided when plastic straws and bags and bottled water go from staples to rejects overnight, and baffled when a change in social mores turns stars into pariahs and colleagues into outcasts: ineradicable uncertainty. In an environment that defies so much forecasting, efficiency won't just not help us, it specifically undermines and erodes our capacity to adapt and respond.

So, if efficiency is no longer our guiding principle, how should we address the future? What kind of thinking is really going to help us? What sort of talents must we be sure to defend? I think that, where in the past we used to think a lot about just in time management, now we have to

start thinking about just in case, preparing for events that are generally certain but specifically remain ambiguous.

One example of this is the Coalition for Epidemic Preparedness, CEPI. We know there will be more epidemics in future, but we don't know where or when or what. So we can't plan. But we can prepare. So CEPI's developing multiple vaccines for multiple diseases, knowing that they can't predict which vaccines are going to work or which diseases will break out. So some of those vaccines will never be used. That's inefficient. But it's robust, because it provides more options, and it means that we don't depend on a single technological solution. Epidemic responsiveness also depends hugely on people who know and trust each other. But those relationships take time to develop, time that is always in short supply when an epidemic breaks out. So CEPI is developing relationships, friendships, alliances now, knowing that some of those may never be used. That's inefficient, a waste of time, perhaps, but it's robust.

You can see robust thinking in financial services, too. In the past, banks used to hold much less capital than they're required to today, because holding so little capital, being too efficient with it, is what made the banks so fragile in the first place. Now, holding more capital looks and is inefficient. But it's robust, because it protects the financial system against surprises.

Countries that are really serious about climate change know that they have to adopt multiple solutions, multiple forms of renewable energy, not just one. The countries that are most advanced have been working for years now, changing their water and food supply and healthcare systems, because they recognize that by the time, they have certain prediction, that information may very well come too late.

You can take the same approach to trade wars, and many countries do. Instead of depending on a single huge trading partner, they try to be everybody's friends, because they know they can't predict which markets might suddenly become unstable. It's time-consuming and expensive, negotiating all these deals, but it's robust because it makes their whole economy better defended against shocks. It's particularly a strategy adopted by small countries that know they'll never have the market muscle to call the shots, so it's just better to have too many friends. But if you're stuck in one of these organizations that's still kind of captured by the efficiency myth, how do you start to change it? Try some experiments.

In the Netherlands, home care nursing used to be run pretty much like the supermarket: standardized and prescribed work to the minute: nine minutes on Monday, seven minutes on Wednesday, eight minutes on Friday. The nurses hated it. So, one of them, Jos de Blok, proposed an experiment. Since every patient is different, and we don't quite know exactly what they'll need, why don't we just leave it to the nurses to decide?

Sound reckless? (Laughter) (Applause) In his experiment, Jos found the patients got better in half the time, and costs fell by 30 percent. When I asked Jos what had surprised him about his experiment, he just kind of laughed and he said, "Well, I had no idea it could be so easy to find such a huge improvement, because this isn't the kind of thing you can know or predict sitting at

a desk or staring at a computer screen." So now this form of nursing has proliferated across the Netherlands and around the world. But in every new country it still starts with experiments, because each place is slightly and unpredictably different.

Of course, not all experiments work. Jos tried a similar approach to the fire service and found it didn't work because the service is just too centralized. Failed experiments look inefficient, but they're often the only way you can figure out how the real-world works. So now he's trying teachers. Experiments like that require creativity and not a little bravery.

In England -- I was about to say in the UK, but in England -- (Laughter) (Applause)

In England, the leading rugby team, or one of the leading rugby teams, is Saracens. The manager and the coach there realized that all the physical training they do and the data-driven conditioning that they do has become generic; really, all the teams do exactly the same thing. So, they risked an experiment. They took the whole team away, even in match season, on ski trips and to look at social projects in Chicago. This was expensive, it was time-consuming, and it could be a little risky putting a whole bunch of rugby players on a ski slope, right? (Laughter)

But what they found was that the players came back with renewed bonds of loyalty and solidarity. And now when they're on the pitch under incredible pressure, they manifest what the manager calls "poise" -- an unflinching, unwavering dedication to each other. Their opponents are in awe of this, but still too in thrall to efficiency to try it.

At a London tech company, Verve, the CEO measures just about everything that moves, but she couldn't find anything that made any difference to the company's productivity. So, she devised an experiment that she calls "Love Week": a whole week where each employee has to look for really clever, helpful, imaginative things that a counterpart does, call it out and celebrate it. It takes a huge amount of time and effort; lots of people would call it distracting. But it really energizes the business and makes the whole company more productive.

Preparedness, coalition-building, imagination, experiments, bravery -- in an unpredictable age, these are tremendous sources of resilience and strength. They aren't efficient, but they give us limitless capacity for adaptation, variation and invention. And the less we know about the future, the more we're going to need these tremendous sources of human, messy, unpredictable skills.

But in our growing dependence on technology, we're asset-stripping those skills. Every time we use technology to nudge us through a decision or a choice or to interpret how somebody's feeling or to guide us through a conversation, we outsource to a machine what we could, can do ourselves, and it's an expensive trade-off. The more we let machines think for us, the less we can think for ourselves. The more -- (Applause) The more time doctors spend staring at digital medical records, the less time they spend looking at their patients. The more we use parenting apps, the less we know our kids. The more time we spend with people that we're predicted and

programmed to like, the less we can connect with people who are different from ourselves. And the less compassion we need, the less compassion we have.

What all of these technologies attempt to do is to force-fit a standardized model of a predictable reality onto a world that is infinitely surprising. What gets left out? Anything that can't be measured -- which is just about everything that counts. (Applause)

Our growing dependence on technology risks us becoming less skilled, more vulnerable to the deep and growing complexity of the real world.

Now, as I was thinking about the extremes of stress and turbulence that we know we will have to confront, I went and I talked to a number of chief executives whose own businesses had gone through existential crises, when they teetered on the brink of collapse. These were frank, gut-wrenching conversations. Many men wept just remembering. So, I asked them: "What kept you going through this?"

And they all had exactly the same answer. "It wasn't data or technology," they said. "It was my friends and my colleagues who kept me going."

One added, "It was pretty much the opposite of the gig economy."

But then I went, and I talked to a group of young, rising executives, and I asked them, "Who are your friends at work?" And they just looked blank.

"There's no time." "They're too busy." "It's not efficient."

Who, I wondered, is going to give them imagination and stamina and bravery when the storms come?

Anyone who tries to tell you that they know the future is just trying to own it, a spurious kind of manifest destiny. The harder, deeper truth is that the future is uncharted, that we can't map it till we get there.

But that's OK, because we have so much imagination -- if we use it. We have deep talents of inventiveness and exploration -- if we apply them. We are brave enough to invent things we've never seen before. Lose those skills, and we are adrift. But hone and develop them, we can make any future we choose.

Thank you.

(Applause)