Bill Murphy ([00:01](https://www.rev.com/transcript-editor/Edit?token=sXS4mxW1KhFDQiyo1mW1hr0l2Ds-KL0UiC4Wp5mS63MDtg0LribP8o3ZWe_RM3mmsVxxLrnK15x6dW32Wf0Rgl9I_ds&loadFrom=DocumentDeeplink&ts=1.29)):

Hello. And you are listening to Bill Murphy's RedZone Podcast. I interview leaders who inspire me in the areas of exponential technologies, business innovation, entrepreneurship, thought leadership, enterprise IT security, neuroscience, philosophy, personal development, and more. Welcome to the show.

Welcome back to the show, everyone. This is Bill Murphy, your host of the RedZone Podcast. I'm super excited to be back. I just got back from a two-week adventure on my mountain bike and my gravel bike. I disappeared into the western part of Virginia into the George Washington State Forest and towed a 40-foot trailer behind me that was basically allowed me to both do my work. Actually, I had a little workout room, place to eat. So, I just disappeared from family, friends, and the business, and literally biked into the middle of the forest and did many thousands of vertical feet of climbing, and ascent, and descent.

Then, I went up to Vermont, to the northern part of Vermont where we did the race that we were supposed to do in April that got canceled due to the plague. We charted, did that course and did over 7,500 vertical climbing in one day. I really thought this was going to be a failure, but we went up there and did it. I was just thrilled to have done that amount of climbing in one day, which is unreal for me. But, I'm back.

And my guest today ... This is a lot of fun because I interview a lot of people, and you're going to love Margaret Heffernan. She's from the UK. She's an author, and she's a serial entrepreneur named one of the top 100 media executives by The Hollywood Reporter. She shows us how globalization and pervasive communication technologies have moved our world from one that is complicated to one that is highly complex and much less predictable. So, pay attention to that theme because there's a way I think as IT leaders, as business leaders, as entrepreneurs is that we want to really, really start to think about this concept of complicated versus highly complex. To put it lightly, this change impacts business where even small events can have large impacts, large ripple effects. So from a leadership point of view, how are you prepared to think in this new emerging world using these kind of thinking tools, as I call them.

Margaret and I talk about questions, and share stories, and discuss how leaders share stories about how they can develop a robust, resilient mindset to create community and build a center of excellence for their business. And you look at this concept of redundancy and how IT leaders can survive this unpredictable environment with innovative thinking, accepting the complexity, but helping business look at where there's redundancy, where there's waste and knowing that you can't predict everything, but you can have this resilient mindset and start to build resiliency into your business moving forward.

She's the author of six books. Her third book, Willful Blindness: Why We Ignore the Obvious at Our Peril, was named one of the most important books of the decade by The Financial Times. She was also awarded the Transmission Prize for her work for her next book, A Bigger Prize: Why Competition Isn't Everything and How We Do Better. And listen to this. Her TED Talk has been seen over 11 million times from people around the globe.

And her newest book to be released within the next month or two, I think she's targeting September 2020, is Uncharted: How to Map the Future. The takeaway you're going to get from this is why the world is becoming harder to forecast and what's the difference between complicated versus complex. This will be really good for your thinking tools and building your repertoire around some of these concepts. Why it's harder to lead in a complex world and what will strategic requirements be to restart your workforce moving forward. And what is robust thinking? And how does it relate to resilience? And why it's important for organizations to take care of and cultivate their unique ecosystems that make their businesses differentiated and why it's important for organizations to remember that people are a part of their infrastructure. And is efficiency and running lean always the best choice for organizations?

This is what you're going to get out of the show. I really appreciate all of you for listening. Let us know in the show notes, let us know on iTunes and in Stitcher what your thoughts are. If you listen to this and you're on LinkedIn, let us know in the comments what you think of this show and participate in the conversation. With that, I want to introduce you to my wide-ranging conversation with Margaret Heffernan.

All right. Well, Margaret, I want to welcome you to the show today.

Margaret Heffernan ([05:16](https://www.rev.com/transcript-editor/Edit?token=0KN1s1yrvmGB3wZz4DgPOYDGgYGW4in3aIfIkvX_C1mV79RLGhpN4K1AjR8Slh9XXM5U2KYiGXD3WEHV0MfAovjetcw&loadFrom=DocumentDeeplink&ts=316.38)):

Thank you so much. It's great to be here.

Bill Murphy ([05:18](https://www.rev.com/transcript-editor/Edit?token=mdD7D2-58FRtWqp7TNdGYY5WLeGSG-_M61QaPFz03GVq5WJKGazG_36OQMAEHIEWgWuOdortkrGPWauzkLKr03Jj80o&loadFrom=DocumentDeeplink&ts=318.76)):

Well, the serendipity of us talking is really interesting because I was on LinkedIn last night looking at Safi Bahcall's latest LinkedIn post. He wrote a book last year that I read called Loonshots. It was really interesting. He talked about the concept of experts and how the definition of experts is ... I don't know if the right way to say it is they're ... We're being called into question predictions and from experts that is not ... They're not always playing out. I'd love for you to talk a little bit more about that if you could.

Margaret Heffernan ([05:56](https://www.rev.com/transcript-editor/Edit?token=0Iwi1WQIIgEJtZ0iCbgHGHeD5RJPz6eK7ZrEScS7Jd1XUF_g1LGWcFWBvYgsiX3RJpVbR8kN0BsRhI5nli-gjihPO9A&loadFrom=DocumentDeeplink&ts=356.1)):

Sure. I'd be happy to. I think what's become quite interesting, because experts have got a rather bad press lately, is I think actually what's happening is that the world is becoming harder and harder to forecast, and there are very good reasons for this. Essentially, we've moved from a world that was complicated, which means it's sort of linear, things, patterns repeat themselves predictably. It was a world that was very receptive to efficiency. That world has kind of gradually given way to a world that's complex, which means that you might have patterns but they don't repeat predictably. It means that very small things can make a gigantic impact. And it means that expertise isn't always all it's cracked up to be because things change so fast.

And in general, we've moved from complicated to complex because of globalization and pervasive communications, technologies. So one way I always think about this is if you compare the two wars in Iraq, the first one was complicated. It was meticulously planned. It was executed by the bulk. It was superbly efficient. And it was effective. The second Iraq war, by then, of course, we had the internet. We had globalization. And it was wildly complex, by which I mean an extremely well planned, well armed. If you're like traditionally army could be completely blindsided by a kid with a cellphone. So, that's an example of the difference between complicated and complex.

And in the business environment, you can think of it also as you can have a fantastic marketing campaign but you could also find that, as I did with one business I worked with, 50% of their sales vanished over night because of a stinking review on Amazon. This is a very different environment. It doesn't mean that expertise doesn't matter, which is how some people have liked to describe it. Expertise still matters. You still need scientists. You still need engineers. You still need qualified accountants. But, there may be circumstances in which you need more than that. You need more perspectives and a broader range of options.

Now, when it comes to forecasting what this shift from complicates to complex means, is that forecasting has got a great deal harder. And of course, we've seen this recently with the pandemic, which is lots of people could have told you, and indeed did tell me two years ago when I was working on my new book, epidemics are always with us. But, what they could not tell you at that point was when the next epidemic would break out, or where, or what the disease would be. So, these are events that they describe as generally certain, but specifically ambiguous. These are really, until they're pretty much at your front door, virtually impossible to forecast.

There's another thing that's become quite interesting, which is that experts who have been studying forecasting have found that the more famous the forecaster, the more likely they are to be wrong.

Bill Murphy ([09:44](https://www.rev.com/transcript-editor/Edit?token=NW2CLBGNsdyIQnMpSH7S6rvlsmaOVnZ1nYr9fSxZ3Vwn9LA7cYTH0wIe2ZVGMlC_3hgnP55wMRZ03ZLUHxzSTA2b1Jk&loadFrom=DocumentDeeplink&ts=584.31)):

I know.

Margaret Heffernan ([09:45](https://www.rev.com/transcript-editor/Edit?token=bXTChsYlO4WTf2dTmnd-KCmw3R6E2zLwzMlrIoch_M7ktvRiaDUk3kG75qphbSOG_BTNM_N1K3vl6eq52xVz0rjGLuU&loadFrom=DocumentDeeplink&ts=585.89)):

This is really interesting because why? The answer is because the forecaster becomes famous for his or her kind of central big ideas. That becomes kind of part of their brand. Tom Friedman becomes famous for sort of world is flat globalization mindset. Economists become famous for their particular belief in certain theories. Alan Green's been very famous for believing that deregulated markets are the safest markets.

And as they acquire fame, and fortune, and prominence with these big ideas, they don't change them because that's part of who they are. But when the world changes, they miss it because it doesn't fit in with their big idea. So, they become rather fixed while the world remains very volatile. So the fame of the forecaster is probably a counter indicator to accuracy.

Bill Murphy ([10:55](https://www.rev.com/transcript-editor/Edit?token=ax6Ix2PImGn1doDkuuP5rOFIFLnB6oFDpJqPZ6yTzgGTu37ZVT7uj1t9PyRVzebgP4G2RXODuAleD6EY03pM0mehUi0&loadFrom=DocumentDeeplink&ts=655.62)):

Now, you're TED Talks have been watched millions of times, and your books have been very successful. I really was struck by ... So, we have this pause, kind of global pause right now. Then, the leaders are going to go back to work, and I've been really ... Everybody's going to go back to work, actually. But from a leadership perspective, I've been asking myself, "What will the next 100 days look like? And how can people, leadership in particular, within technology, how can they prepare for how to think in this new world?" Because you had talked about robust thinking, and planning, and preparation, but I'd love to get your thoughts on how people should plan for the next 100 days.

Margaret Heffernan ([11:44](https://www.rev.com/transcript-editor/Edit?token=buBNH9v9hvPt3WCT2gdwcp4jcr-hI_nKKtMOty_M2e23jBZn5ulRYfEWiDchWsbkl3jqzfOJW1NaIDIQO8iXjOHzwNA&loadFrom=DocumentDeeplink&ts=704.87)):

Great question. I think, the truth is, first of all, nobody knows what's going to happen in those 100 days. They don't know if we go back to work how many of us will go out to work and at what rate. Nobody's coming out of lockdowns in one fell swoop. People are very, very wary about what happens when we start letting people roam freely again. It's definitely possible that we lift up the lockdown and create a second wave epidemic. So, it could be really bumpy or it could just feel terribly, terribly slow because we're proceeding very cautiously.

I don't think anybody knows that because nobody's really done a comprehensive end of the lockdown anywhere in the world. So, nobody's knows if it's safe or when it's safe or what the data points are that say it's safe. Then you have to think about well, what are the strategic requirements as you start to get the workforce back. I think it's important to remember that a lot of the workforce won't come back. A lot of people have been laid off. A lot of freelancers and suppliers have gone bust. So the whole supply chain and ecosystem in which your business exists may have some gaping holes in it.

If I think of in the IT world, some of the more local and smaller suppliers that you may have called upon, they may be gone or some of their people may be gone. So, it's not going to be, well, we just walk back into the house and switch the lights on.

Bill Murphy ([13:41](https://www.rev.com/transcript-editor/Edit?token=YHBHoY0hiK3EmqvCWvKgWv9zCcGZsJa8eIMcQ3mdY6DD9Azupx4ln5fCsP3A0nlJhh9GmF7vNFt0eI5MY_JPpuR8_jo&loadFrom=DocumentDeeplink&ts=821.09)):

Sure. Sure.

Margaret Heffernan ([13:42](https://www.rev.com/transcript-editor/Edit?token=G5YZw-IH845hkUhFC1F5Vq9osguP6Tw6s019A0-ns8aBdfG4CirqxVZQyXvB4g6uX1gmuF5glAVypmC1USW_Kig3jbU&loadFrom=DocumentDeeplink&ts=822.67)):

I think what's really important here is I think the companies that have really always looked after their people and looked after their own supply chain and looked after their whole ecosystem, if you like, I think they will have a much smoother reentry. I think those that always really hammered on the people in their ecosystem will find that quite a lot of it either isn't there anymore or won't come back.

How good a citizen you were in the past is going to some degree to shape what reentry looks like. And it is something which companies could be working on now which is thinking of who are the people we're dependent on and how do we reach out to them now to ensure that they're still with us and they're still hale and hearty. I've seen a lot of companies do this, and I've seen a lot of companies not do it because they're so anxious about their core business they've forgotten about everybody else and they've cut off communication and funding brutally, and they'll find it brutally difficult to resume that. So, I think a lot of what resuming business looks like depends a lot on what's happening today and how far the whole ecosystem on which a business depends is being maintained and looked after or just cut off without a dime.

Bill Murphy ([15:14](https://www.rev.com/transcript-editor/Edit?token=8OlsOrtHiyRYdAkeKULoYQ3gHfmpnGnvqb3zbPtODaiT5aSYTdBJumn66LpfmoMIIc96k1AE5o-PySe4Maxl0UQYe3U&loadFrom=DocumentDeeplink&ts=914.07)):

It's interesting. I listen to you talk about robust thinking. And in your next book about how developing ... I run a CIO community, and I often tell the men and women in that community develop those relationships now before you need them, because it's very difficult to dig a well when it's dry or when you need-

Margaret Heffernan ([15:14](https://www.rev.com/transcript-editor/Edit?token=5ocGOHKMcN0pCfRwGktjjvikakR0lv4QB5sw52sHTzDeCRw8lAfaUDsPvjRLR6KzKpgikOKylRq_ZQucrwkOnsW_93I&loadFrom=DocumentDeeplink&ts=914.07)):

Absolutely.

Bill Murphy ([15:36](https://www.rev.com/transcript-editor/Edit?token=Sk8ATJZux0K1pPcYxryjuqxFIDktRKuqrdOjgZqkLkUSurK9Ss7fS5vxnANAfq8wI0w5w77Hgmh7v3s_R5leMX2InBU&loadFrom=DocumentDeeplink&ts=936.4)):

... it within a month.

Margaret Heffernan ([15:38](https://www.rev.com/transcript-editor/Edit?token=zNmn2A3lk9Yj23Hlj5hzRHl2ECt37GNi6WedgRWumF2MDbZtIq1f_1KMe6VaruzathDjLxE632n4B_QtuJRm_FpPyEs&loadFrom=DocumentDeeplink&ts=938.71)):

Yeah. Absolutely.

Bill Murphy ([15:39](https://www.rev.com/transcript-editor/Edit?token=5UNcIv_FbuIyimCdeUEU4X12ha7bNqtmswNwJOtNiGhCF-H1n4ukEszkLqiZzL7ULJXH-eIz1HKSXHRl6M-HnQmDN90&loadFrom=DocumentDeeplink&ts=939.22)):

I'd love for you to talk about having a robust, resilient thinking as it relates to relationships, planning, alliance, and things of that nature.

Margaret Heffernan ([15:47](https://www.rev.com/transcript-editor/Edit?token=3YlkOT-SdarM5vEvV4IVVejBd5hN3kqJUxn7JM0VjXRwqdQiQHPCcXqx3BkR3k-mXRIm-x6EgA2BubZ4OiPzH9kcOBA&loadFrom=DocumentDeeplink&ts=947.4)):

Sure. Sure. I mean, one of the great things about talking to the whole IT sector is they really understand redundancy. Thank God. Whereas in other functions, often there's such a completely myopic view that efficiency is everything that there's no redundancy at all. But in IT, generally, people do understand redundancy. But, I think what's really interesting is that it's a concept that can be so much more widely applied to other aspects of business than just technology.

One of the stories in my book, an organization I started writing about probably three years ago, is an organization called the Center for Epidemic Preparedness. The man who runs that, who's an American executive named Richard Hatchett, I think has a very beautiful mind. He talked to me about kind of it'd be like two different mindsets. And one of them he calls just in case and one of them he calls just in time. Just in case is thinking about the possibility of a disaster, in his case epidemics. And in that case, what are the things you would wish you had in place already? It's a fantastic question. So thinking about epidemics, he thought, "Well, we need to have a lot of vaccines in development ahead of time. And in deed, because of Richard Hatchett, the Center for Epidemic Preparedness had, at the time that the coronavirus epidemic erupted, they already had coronavirus vaccine candidates in development.

So, he thought about what are the diseases that are more likely, therefore what are the vaccines we should work on. And let's start working on them before we need them. So, that's a really interesting thing to think about, your network or your IT infrastructure, which is if things went wrong ... Let's imagine the different ways in which they could go wrong. What are the things we would wish we had sitting on the shelf just waiting to be used?

The other thing that Hatchett thought about in the just-in-case mindset was if you want to get vaccines into bodies, you need fantastic relationships with all the healthcare personnel on the ground. This is as he said, these are his words, don't exchange business cards in a crisis. He and his whole organization started developing these country by country, both the kind of governmental healthcare people and all the people on the ground so that if they had to go into a brand new country, they already had friends and allies there. Absolutely brilliant thinking. Because this accelerates the application of the planning that they've already done.

There were so many things that are smart about his thinking, but one of them is realizing people are part of my infrastructure. I need to know them. I need to understand what they need from me. I need to understand their culture, and their values, and how they work so that when we really, really, really, really need them I'm not just some new guy whose name they don't know yet phoning out of the blue. I want them to pick up the phone because they know me and they trust me and we can move together fast.

Then, he thought about just in time. What is the stuff we're just going to have to do really, really, really, really fast? He said, "If we have vaccine candidates, we're going to need to manufacture them really fast. So, let's put the contracts in place now. Let's think about capital flows now so that when the time comes we can push that button and get vaccines cranked out at a speed that normal pharma does not work." So, that's about really, really kind of tight manufacturing processes being ready to go at the drop of a hat.

I think what's so fantastic about his thinking is he's not saying it's not about efficiency, because just in time is all about efficiency, but he's accepting that this just-in-case thinking cannot be efficient. I might develop relationships with people I don't need. I will certainly develop vaccine that don't work, and I might even develop vaccines that do work. But actually, we don't have an epidemic of that disease, ever maybe. So, you have to accept that the cost of the redundancy is work that may turn out to have looked like waste. But once you accept that you can't predict this stuff, you are so much better off having it in your back pocket than having nothing in your back pocket when disaster strikes.

Bill Murphy ([20:48](https://www.rev.com/transcript-editor/Edit?token=DqWaWThupd7OIfUHf0mCBj5yAv97TDmzygJ0rlL9GwKt02DP32GFMMATWTsBx9MWzfMv-HWmuYWRdIyR0mZS4SK4w4c&loadFrom=DocumentDeeplink&ts=1248.96)):

I made notes on this, but then I ... Now you're connecting the dots for me in this efficiency. You were quite cogent in the way you explained efficiency. Efficiency, which is what business strives for, many times goes against the grain of potentially the type of agility and adaptability that's needed today. Is that essentially what you're saying?

Margaret Heffernan ([21:09](https://www.rev.com/transcript-editor/Edit?token=jmf6E57g52pZlc7gAX5usvgJaZEI-HXtdwGkuCYIwxqybNVlsFC2iiGKM-gR_FX8kP8-ecmr9hMwUXjW4GE9HwD_Sjs&loadFrom=DocumentDeeplink&ts=1269.98)):

Yeah. I think if you accept it in a complex environment, there's a lot that you can't predict, then efficiency isn't your friend. Because efficiency really delivers benefits with things that are totally predictable and repeatable. So, it's fantastic on assembly lines or manufacturing because it's just ... It's the same old ring binder every day you make it, right?

But in a complex environment, when you can't predict with certainty, efficiency backfires because it will cut out all the margins for error or surprise. And we've seen that in the pandemic, which is many healthcare systems, not all, but many healthcare systems in the western world were stripped back to the bones so severely that they didn't have protective clothing for doctors. They didn't have face masks. They didn't have ventilators because they were running so lean. That is a classic mistake, which is it's fine. It looks super efficient. If your hospital's running at 90 to 100% capacity, it's great. There's no waste. If you're using every single ventilator, it's great. There's no waste. Until suddenly you need three times the capacity, and now you're in deep, deep, deep trouble. So when you have these things, these events which are unpredictable but high impact in those spheres, you cannot afford efficiency. It'll kill you. It is killing people today.

Bill Murphy ([22:59](https://www.rev.com/transcript-editor/Edit?token=ioKnzvVXsoOcq1FR_IgXzAv3101pswIQkpgf9vDSAVafb7JfXvh-Tj4AcnBHlsqgd62TwldVG2ZY_RD0lOriR_mXrwE&loadFrom=DocumentDeeplink&ts=1379.09)):

Yeah, it's interesting. I get involved quite a bit on the IT security side, and it's the irony is pretty high is that you have viruses and malware, and essentially we're using the same digital terms that we use biologically, and we've been preparing for years. It got to the point where every system was hacked. You had to forget the question about preventing the hack. Just assume you are hacked and you wanted to develop an agile system that was always on that never took your business out or your partners out because that would result in millions and tens of millions of dollars. So, it created an agile environment of recovery. So, it became more about how resilient was the business and assuming that a take down could happen. It's almost like we need to take a similar approach biologically and assume that ... And it's more about how quickly can we recover from something like this and how agile can we be.

Margaret Heffernan ([23:56](https://www.rev.com/transcript-editor/Edit?token=dwi6t7uvQTKL_x7HgAMCyzMa4Gk6yf_9cKEw9MpFitFshd2HXtUhIbZAJa-wyPDcLihcauPjgpa0-rdJWfvACB7N4cU&loadFrom=DocumentDeeplink&ts=1436.82)):

That's exactly right. I've had a lot of conversations recently with people talking about this in terms of any measurement of any business, which is we tend to measure businesses by their cashflow, their profitability, that kind of thing. But actually, maybe going forward, we have to start thinking about a measure of resilience, which is how far does this organization have the human capital as well as the financial capital to recover fast if disaster strikes this is becoming a hot topic not only because of the devastating impact of the pandemic but also in the context of climate change.

Climate change is like epidemics in the sense that we know it's real but we can't predict where hurricanes and tornadoes are going to strike particularly. We can't predict which places are going to flood and which forests are going to catch on fire. We just know there's going to be a lot of this stuff. So, we have to start looking at companies to think about not so much is their factory going to flood, because we can't predict that, but if it were to flood, do they have manufacturing capabilities somewhere else? Do they have a good recovery plan in place? Do they have great people elsewhere? Have they thought about it? Because if they have as many companies proudly do cut their processes to the bone, then when the factory floods, they're in deep trouble.

And of course we've seen this in many parts of the world, not least the UK where I currently live, which is the factory floods and the business is down for two months. That's the opposite of resilience because they have never considered ... And this is companies where ... If the same factories flood sometimes, they just kept thinking, well, it was a fluke. The forest fires were a fluke. The terrible hurricanes were a fluke. But actually, these things aren't flukes. So even though we don't know if it's going to hit us, we have to start working these things into our sense of what a resilient, successful business looks like. And it absolutely, to your point, goes against a century of worshiping, if you like, at the shire of efficiency. And that's just not going to be good enough going forward.

Bill Murphy ([26:32](https://www.rev.com/transcript-editor/Edit?token=-exP5ieum_XblUPfao64S3im6MMSMY8LaS2HxoGYWj8OcRGJGohowRJcuzdcr2ZCYQLP_i5g4jUkBh0syyrP8Rq9CpE&loadFrom=DocumentDeeplink&ts=1592.77)):

Is there a way for leaders to know, Margaret, if they're completely into complexity? And is there a thinking pattern or a thinking approach that helps human beings that don't have the native capability to dig out of that?

Margaret Heffernan ([26:47](https://www.rev.com/transcript-editor/Edit?token=iR9YK431SuD64BJjlYOyv-eH0MfSmngcYtTldXbkja1Z7OfFvFc2E62lJE3BCk3-32qUN8Sja2Vm1_N6hlvXMYF5WBI&loadFrom=DocumentDeeplink&ts=1607.81)):

Well, it's very interesting. My book, Uncharted, looks at the many, many, many diverse reasons, some of which we just talked about, why complexity is here and it's here to stay. It isn't entirely new, but it's having a very, very much greater and wider impact than ever before. There is a great deal that is absolutely unpredictable about human life. And the bigger organizations become, the more uncertainty therefore they contain. I think what I would say is it is a fantastically useful management exercise to try to divide the things that absolutely are the same no matter what and the things that are not the same.

In my TED Talk, I give an example of this, which is about a Dutch home care nursing organization. This is a company that sends out nurses to look at people, generally who are recovering after hospital sessions and coming home to recover. It was run very much like a factory. There's the different qualities of product, which mean different qualities of service. And it required a very, very, very large bureaucracy to do this. It's like a lot of health insurance policies in the United States.

The chap that was involved in it had this very brilliant insight, which is he could see that, actually, although it looks like a single business providing nurses to people recovering from hospital, there were two parts to it. One part of it is the insurance contract, the patient contract, assigning the nurse to the patient. That's the same no matter what. I mean, the nurse may change, but the deal is basically cookie-cuttered.

Then, there's the unknown part of it, the complex part of it, which is the patient. Because even patients coming out of the same hospital, recovering from the same disease or operation, they all recover at different rates for different reasons. So, that's complex because it doesn't repeat itself. You can't predict that everybody coming out of, say, after, I don't know, a stent implant is going to recover in 7.23 days. So, he separated the two, and he used technology in a very smart way to manage all of the bureaucracy involved in this business.

Then to the nurses, he simply said, "You're nurses. You love doing a great job. Go off and do what you think is best for the patients." Now, he originally did this just as a simple experiment with 10 nurses and 40 patients. What he found, which was remarkable and completely surprised him, I should add, is that doing it this way cut the cost of nursing by 30%.

He did that for the simple reason that the patients got much better when nurses were left to use their own professional judgment. They could see when they didn't have to keep coming every week because the patient was fine. And they could see when actually on this day the patient was in distress and needed more love and attention. So both the cost of the admin went down and the quality of the care went up with the result that this whole system was better. I think this ability to distinguish between what are the really repetitive things and how do we essentially automate those, make them super efficient, and the other stuff where there's a big unknown characteristic, the ability to distinguish between those two things I think is really crucial.

I would say to anybody in IT that where you have that combination, you have an opportunity to do some experiments, which may show you some very surprising things. I mean, the Dutch economist who designed this experiment, a guy named Jos de Blok, when I asked him what surprised him about it, he just laughed at me and he said, "I had no idea it'd be so easy. We didn't do this to see if it would cut costs. We just did it to see what would happen. We had no idea it would be this successful."

The other thing I'd say is that in a complex environment where you really can't see everything at once, doing experiments becomes a way of finding out how does this system work. Is there an opportunity here or not? I could sit and thinking about it at my desk forever and never know. Think of an experiment, try it, and find out. And I would distinguish between experiments and pilots because I think pilots are politically really freighted and often kind of over engineered. Think of a simple, quick, cheap experiment and just test the system and see what you find.

Bill Murphy ([32:09](https://www.rev.com/transcript-editor/Edit?token=5SV6z4xF3FSBs-qIV_MFsXsBh52H_dxTB4DcpOMvzwVZ3pMgIALk2b5rJ4vFrBjP1JvQyegNvyGDY2azx0_nmu6EeTk&loadFrom=DocumentDeeplink&ts=1929.75)):

It's very practical, kind of open-ended test. It's more curiosity than anything else, correct?

Margaret Heffernan ([32:16](https://www.rev.com/transcript-editor/Edit?token=LQxcs9tomoWzSvL_Q0DwOjMRowzSGPlpiZV6lSzl2HivN2890UukaDToBmpbRfjbMWsC3ED_4QoL8GFy1fwjusCyrcw&loadFrom=DocumentDeeplink&ts=1936.17)):

Well, yes. And it's also looking at pain points. So in this case, the pain point was the system was really expensive and the nurses hated it because it treated them like machines, and they didn't go into nursing to be treated like machines. So the question was, if you actually speak to their professional pride, do you get a better result, to which the answer was yes, staggering better result. And I mean, after doing this experiment, they basically ... They own the home care nursing market in the Netherlands, where it started, but it's now spread all over the world. But, this is not something you could ever, ever, ever, ever, ever figure out sitting at your desk with a spreadsheet.

Bill Murphy ([33:01](https://www.rev.com/transcript-editor/Edit?token=_urKu24nG_C632pjyaa_-E8V_R0rXL6kaWouecyMrNF6D9WQef1W22HQqSuqRRnKXDaW1Ym8auiiJZhC0BPa5G1iLQs&loadFrom=DocumentDeeplink&ts=1981.3)):

No. What I love, though, and I think it's going to force, there's a pro and con to what's happening right now. There's certainly more cons than pros. But, I do think that the IT ... I think businesses for the past 12 to 15 years have been running fairly fat, and you don't have to be efficient when things are really going well. You can just essentially buy systems, and you can hope people are doing things. I feel like it was sloppy process, sloppy communication, or Barbara's sitting there, so she must be doing her work. So, I'm not really sure if it's efficient or not efficient. But essentially, now everybody's at home. I think that that's a interesting intersection between using human beings for the highest value possible but also cleaning up all of the technical inefficiency.

Margaret Heffernan ([33:49](https://www.rev.com/transcript-editor/Edit?token=B-PpaSS0G9sVdiQb_tQCoPhqE6KzoXQDXW63Jx0A7zprQW_Hlx9nGWCgN5EFA0MdtYKqElHrmVPnOBM5MfNAz3s8jgE&loadFrom=DocumentDeeplink&ts=2029.16)):

Well, I think that's right, but I also think that certainly in a lot of the technology companies that I've run and also that I work with, I think people have become very infatuated with A/B testing. Let's tweak this. Let's tweak that. And I'm not against it by any stretch of the imagination, but there's a limit to what it will give you because you're really just incrementalizing improvement. Now, incrementalizing improvement's great. It's not going to ever, ever, ever give you a quantum leap improvement of the kind that the Dutch nursing system found. So, I would be really encouraging of CIOs and their senior leadership teams encouraging their young technologists to think about where the opportunity for good experiments resides.

And here there's an interesting case. One of the people I worked with recently was chief data officer at the Bank of England. He knew that because there's more, and more, and more requirement for reporting and financial services, so he knew his whole department was really going to be under more, and more, and more pressure to analyze more, and more, and more data. And he was also enough of a realist to know nobody was going to give him extra resources for this. So he thought, "Well, what are we going to do? I can't just sit here and think, 'Well, everybody's just going to run harder.' That's unsustainable."

And I think typically, in many organizations, the senior leadership team would've taken themselves off to a swanky hotel somewhere for a weekend and come up with a plan and then shoved it down the throats of everybody who works for them. And instead, he did something completely brilliant, which is he called the entire department together and said, "Look, here's the situation. I don't think there's one thing that's going to make this manageable. I think we need to try to improve pretty much everything we do. So I want all of you to go away and think about what's the stuff that in this department you think doesn't work very well. Will you have an idea about how we might be able to do it better?"

He said he was absolutely stunned by the response because people were really excited to be invited to help. It's very well understood in management that if you get people to volunteer to work on things, you don't have to engage them. They're engaged because they volunteered, right?

Bill Murphy ([36:25](https://www.rev.com/transcript-editor/Edit?token=gHVHmvS4-3Wj_HR3iQJy4K-a0J91syPPIfjYw8Eybb6xZfOmhm0HYC-kI0Od9YRCx0gf6upza69cpIZU2hTHt7F67bU&loadFrom=DocumentDeeplink&ts=2185.51)):

Sure.

Margaret Heffernan ([36:26](https://www.rev.com/transcript-editor/Edit?token=0mUJ7Zx8UbQ6n95Mc-IQkugOwgb2e6j0N-egTgKb-pzsjXYiNGmHzM7OGfuV-6iTBcCCIf9NksZGGkMf23keERhZrh4&loadFrom=DocumentDeeplink&ts=2186)):

So [inaudible 00:36:26] you have a much higher level of interest and excitement. And he said the range of proposals he got was enormous. It was everything from open up the senior leadership team meetings so we know what the heck's going on and don't sit around worrying about it to, well, let's change the way we tag the data. I mean, they improved everything in that organization so radically. But, this wasn't a multi-million dollar change program bought at huge expense from external consultants who had to spend a year finding out what the heck was going on anyway. I mean, this was self-generated by people who really understood the whole system and they knew where all the kind of leakages and waste was. They also knew the things that drove them all crazy that they all hated and spent a lot of time complaining about.

So, everybody was involved in absolutely lifting the quality of work, and attitude, and thinking across the whole department. It's something that has come to be thought of as open strategy. Because instead of a couple of chiefs going away and figuring it out and trying to sell it to the Indians, as it were, it was just completely self-generated. And as a consequence, people understood where it was coming from and why it might be interesting. And of course, some of the experiments didn't work, but none of them cost a fortune. None of them took six months to implement.

So, I think there was a huge opportunity as we go back to work, as he's asked about at the beginning, to have a real heart-to-heart. Everybody's been through a trauma together. We're glad to be going back to work. Most people are grateful to be going back to work when they do. But, we all know the system. No system is perfect. So, let' us thinking collectively about how we can improve it. Because if we improve it, we improve it for everybody. So, let's say this is a collective task and see where is there room for experimentation that might show us in these very complex systems where there's real room for improvement that's far better than just incremental inching along A/B testing.

Bill Murphy ([38:56](https://www.rev.com/transcript-editor/Edit?token=Bq5qeGTAu-wO8jwLmagADeQ9SL7Db6gBw5PwV9NAS_eN_7Ej7yaodk5uAqx63mi_QGeNYKnMXqtDZFnCGl-0hS4-6_o&loadFrom=DocumentDeeplink&ts=2336.08)):

Yeah, I love your ... When you say incremental improvement will not give a quantum leap. That was a great, great quote there. What a great way to engage everybody on the team towards solving a problem and keeping costs down. That could be a really practical approach for businesses for the next period of time.

Margaret Heffernan ([39:14](https://www.rev.com/transcript-editor/Edit?token=_khZorn2ck1QfHWFOwmDgPE61NHcBYmztxwdZW2pfdAWWGWDVB7V-ZWLdVEjrYznMYaR_BUtHJynvyaCL5vMlA6x3fc&loadFrom=DocumentDeeplink&ts=2354.14)):

Well, I think so. Also, I'm very, very stuck by all the agonizing people go through, leaders go through thinking about how to engage people. I often think, "Let's back up a second and think why are they not engaged." To a significant degree, they're not engaged because they don't feel listened to and they don't feel they're ever consulted about, well, where are the problems and what could we do about them.

It's quite interesting because I've done a lot of work with Microsoft. Microsoft under Satya Nadella has started a little bit of this. They have their thing called One Week where everybody can work on any problem they want to. I think One Week's great, but I think an annual process is a rather slow process. I think much more productive, and it gets close, of course, to something resembling open source, is just ... When you see something that doesn't work, think about, well, how would I fix it. And talk to your pals and say, "Well, how would you fix it?" Then, maybe there's a germ of idea that becomes an interesting experiment that in some cases really reveals some opportunity for improvement.

Bill Murphy ([40:30](https://www.rev.com/transcript-editor/Edit?token=SrjTt_67Z3xaMx9XbtT4GQDVypv6hrjmBSxSkFmpFdSjwZMd1SMq6oWLksN9PSYwSY0uragsVm9B-7vU5J8WEsrJyvs&loadFrom=DocumentDeeplink&ts=2430.2)):

I love that. I love that. Well Margaret, as we wrap up, I just had one other question for you, and that is, what do you find through the years that your predominant superpower is when you sit down with companies, and people, and leaders? What do you find is sort of your go-to real strength that you bring to bear that helps bring light and clarity to the people and companies you work with?

Margaret Heffernan ([40:54](https://www.rev.com/transcript-editor/Edit?token=j79ZVAlYYeUux9yKlA066YvclW69yQ4gwWsQIxT-IgYTLR75iVmQ2YVMvHt-Amzq6P_3ohLKt44IdxnnoX1eTdP6zUg&loadFrom=DocumentDeeplink&ts=2454.42)):

I think it's mostly being wiling to say what everybody's thinking and nobody's comfortable talking about. I think it's what really should be, and often is, but isn't always, the advantage of an outsider, which is that I am willing to say what I think. And if people don't like it, that's fine with me. I chose many years ago not to run a consulting company so that I don't need to sell to people, which means that I call it as I find it, and some people like it and some people don't. But what they absolutely know is I'm not selling them anything. I think that objectivity and honesty is a superpower, which even the people who don't like it trust, right?

Bill Murphy ([41:49](https://www.rev.com/transcript-editor/Edit?token=VXhNp6KCMf6Ph7g7NVrOd1hR7NHWQnQ6lskKLZbyF37KjffR8SNhMbuoyYFojVyhyrkWpMzexUdHluSzO5QTEqqIZFY&loadFrom=DocumentDeeplink&ts=2509.01)):

Yes.

Margaret Heffernan ([41:49](https://www.rev.com/transcript-editor/Edit?token=7WIaRIfTM-fpjHO0py5pcRVbGCYGGwR5-RXcImkYiCYyauj6E-10g-quwvXkU1yb3_zoYl_Zw_azVfOxdpV-9xrLQGY&loadFrom=DocumentDeeplink&ts=2509.78)):

I think the work that I did when I wrote the book for which I'm best known, Willful Blindness, showed me I'm now pretty good at identifying the things that companies are willfully blind to and why. I have a pretty good sense of where it is likely to lie. And I think that in this new book, Uncharted, I talk about the things that people ... If you like, the things that companies are blind to because they keep thinking they know the future. They keep thinking it's either going to be what they want it to be or it's going to be a perpetuation of the past. People think history repeats itself, which it doesn't. Or that they think that their fundamentals beliefs, like efficiency, that will keep them safe.

There is, I think, a fundamental, ineradicable level of uncertainty in business that if you ignore it you're being willfully blind. But if you start looking for it, you have an opportunity to see what's going on in your universe before other people do. Telling people that there is uncertainty they can't get rid of annoys them because they want to think, no, I can make the world certain. I'm powerful, or smart, or rich enough to make the world certain. But, you can't. But what you can do, the super smart thing to do, is say, "Okay, there's lots that's uncertain, so let's try to understand where it might reside so whatever happens in those areas we're prepared.

Bill Murphy ([43:43](https://www.rev.com/transcript-editor/Edit?token=MXJAJA3Kq3fthdPOY0-KPgAtmr4gOgksjMpnGFH9Dl7Og_kwXIvzl1a_d80RLYECsTcQxzq5WqUwBYmTK-9trqCGtDE&loadFrom=DocumentDeeplink&ts=2623)):

It's a historic principle. It's a very ancient principle of just we strive for certainty, and I don't think we've ever had it. But certainly in business, like you said, for the past 100 years, efficiency has been our friend. But in a world that's uncertain, and unpredictable, and increasingly more unforecastable, can you as a human being be comfortable with discomfort? And that's very highly level skill.

Margaret Heffernan ([44:07](https://www.rev.com/transcript-editor/Edit?token=-Pmd5zYuGXwtNNThTGRJIej-iy3VZ8FSpj3U7fNfHVzjaz5wJAn2PVIIE44qIY97Xk6fLhZmwYFqeJ4P7LMiJsSLvw8&loadFrom=DocumentDeeplink&ts=2647.06)):

But I think also, I do think that Silicon Valley's a little bit to blame here because I think it has sold us a fantasy of ultimate controllability, that we can ... With enough data, everything can be predicted, and I think ... I mean, I know from private conversations I've had with people everybody coming up against the wall of this. Everybody knows. No matter how much data you have on me, you don't know every book I'm going to like, every movie I'm going to like, every restaurant I'm going to like because human beings are too complex. And scale that up into businesses, it gets even more complex.

So, I think this myth of control that the tech sector has sold to the world is a real fantasy. I think when you find yourself in a position being sold it by a tech salesman, back off because it ain't so. It can't be so. This is snake oil. It isn't the real world.

Bill Murphy ([45:22](https://www.rev.com/transcript-editor/Edit?token=RhKtUcwdSsjwYggyqGaU86UUL6lzhfyT_xfGnDolTxJubqCk14u8u8ZCn5qtiJeW_f4IYmipGv3BYGvrBVlF6Qo2-hE&loadFrom=DocumentDeeplink&ts=2722.03)):

Well, Margaret, I've had a blast. I'm looking forward to releasing this episode with the links to your new book, Uncharted. I'm going to put links to your previous TED Talks as well. I think this is a lot of fun for leaders as they reemerge, reengage back in the marketplace. It's really a level set I look at for how they can approach the future.

Margaret Heffernan ([45:45](https://www.rev.com/transcript-editor/Edit?token=Ev0VlvdaX-GmJ4iewjnJ8Q3GMz0j3bFl1A5JnLdVsNaLsBIAmxMJRjx-H_vsp0sGPBY9cNrAR5Bx5RqSljWyEwGMdog&loadFrom=DocumentDeeplink&ts=2745.03)):

Yeah. It's going to be different. That is the only forecast I can make with total confidence. It's going to be different.

Bill Murphy ([45:53](https://www.rev.com/transcript-editor/Edit?token=muF2A8Nk7dnAVpLUF9U4USzaWqFeJKX3xTxXjtwtWbSUQBHzommyvLQZnArxwTGG72zemb2H6BqVNeDtjBTfs0sqn50&loadFrom=DocumentDeeplink&ts=2753.27)):

It's going to be different. Well, thank you, Margaret. I hope you have a great day, and I look forward to reading more about your work and the impact you're having in the world.

Margaret Heffernan ([46:03](https://www.rev.com/transcript-editor/Edit?token=8wI8RBL4KNgBannI-VgGeMobnBZ0lRP-dWAqTA90x02mkV3B2OVYxaR1XznOc-2vU7yAzH2IQ_n5k03C7cOcHUibNAw&loadFrom=DocumentDeeplink&ts=2763.96)):

Well, thank you for your fantastic questions because they always gear up my thinking. So, I appreciate the opportunity to think a bit harder and a bit more clearly. I think that's the game we're all in.

Bill Murphy ([46:16](https://www.rev.com/transcript-editor/Edit?token=2PfItwPX4XE6sABL0Uv_WVlN0opmRUQnqyJZ20NHlTU-AUABnPSKBuI0vY0GSYRgrMW6_HJvsMcZbSBZBr9Saf0Eno0&loadFrom=DocumentDeeplink&ts=2776.16)):

Well, this is great. It's great. Well, have a great day, Margaret, and be safe, and be healthy out there.

Margaret Heffernan ([46:22](https://www.rev.com/transcript-editor/Edit?token=ISJVu34CaGP1AyX1x1OvKzO8heKGXliGHJB5ozdlcD242eTDcfnpcPHb_IAc-SG773b-I0PzNbP_go1qen9fj5bZag8&loadFrom=DocumentDeeplink&ts=2782.92)):

You, too. Thanks a lot.

Bill Murphy ([46:24](https://www.rev.com/transcript-editor/Edit?token=fCVO6iRpqaCQlC6RogxvSHp_tFNeFIinwNqxWFqGhBWFXTdmQcmvjaJACFuig16TiOw6OuEEwn9HX9ZGbF8mwso0lKo&loadFrom=DocumentDeeplink&ts=2784.46)):

Bye-bye.

Margaret Heffernan ([46:25](https://www.rev.com/transcript-editor/Edit?token=MLsxqRo9bF_xCu9seiPRCY103HX3-uqgOXIGxgQ1FUwaIAQ2mDgoIGOC4Z8xkfVaImIDCndJRnqjrVZl2zuTtRF-JlM&loadFrom=DocumentDeeplink&ts=2785)):

[inaudible 00:46:25]. Bye.

Bill Murphy ([46:28](https://www.rev.com/transcript-editor/Edit?token=A7jHr0KuZ_zBlhjw3EV2vpAdKXzpo9wnHDtFl3vrByyL9n2VfY-kpxfmMchy0yCySYu-FDx0boct4YNf_KwZwpfOI00&loadFrom=DocumentDeeplink&ts=2788.75)):

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