The Future of Work podcast is a weekly show where Jacob has in-depth conversations with senior level executives, business leaders, and bestselling authors around the world on the future of work and the future in general. Topics cover everything from AI and automation to the gig economy to big data to the future of learning and everything in between. Each episode explores a new topic and features a special guest.

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00:01 Jacob: Hello everyone, welcome to another episode of The Future of Work with Jacob Morgan. My guest today is Dan Heath and he's the author of a brand new book called Upstream: The Quest To Solve Problems Before They Happen, and he's also the co-author of several other books, which I'm sure you've heard of that he published with his brother Chip including The Power of Moments, Made to Stick and Switch. Dan, thank you for joining me.

00:26 Dan: Thanks for having me on, Jacob.

00:27 Jacob: And before I hit the record button, I was mentioning I had your brother as a guest on the podcast. I think it was mid or late last year, so now I got the whole family.

00:41 Dan: Well, you're missing a sister in between, so you'll need to book her for something.

00:44 Jacob: Oh, we're gonna, oh, yeah, we'll have to...

00:46 Dan: But yeah, you're working your way through the Heath siblings, that's great.

00:49 Jacob: And then we'll get the parents, we'll get whoever we can on here. [chuckle]

00:53 Dan: Exactly.

00:54 Jacob: Well, thank you so much for taking the time to speak with me today and I had the opportunity to read your new book, which was great.

01:01 Dan: Thank you.

01:02 Jacob: The very first thing that I noticed, that I wanted to ask you about is your dedication. [chuckle] Because the dedication said "To my brother Chip, who kept me out of law school" and I suspect that there's a story there, and I really wanna find out what that story is.

01:18 Dan: There is indeed. Yeah, so I went to the University of Texas for undergrad and I'm majored in liberal arts, which is of course the most marketable major that they have and right about the senior year, it started to dawn on me that, "Hey, wait a second. I'm actually gonna have to earn a living at some point in the near future." And so in the tradition of liberal arts graduates I thought, "Well, I'll just go to law school. That'll be the solution to that." And so I applied to law school, got accepted, actually moved up to Chicago, I was gonna go to University of Chicago Law School and partly because my brother lived up there and my brother convinced me, he thought this was a terrible idea, he thought that I would not enjoy being a lawyer, that that wasn't what I should do and

I kinda thought he was right, but I also had enough practicality that it just felt like, "Well, I gotta do something, I might as well do this." And so he convinced me to defer for a year and he said, "I will... I'll pay for your apartment for a year in Chicago and you can do some projects, maybe we'll do some projects together and we'll just figure out, is there some other path for you other than law school and if there's not, then you just start the next fall." Well, that was irresistible to me as a 22-year-old or whatever I was, and so we did...

02:36 Jacob: How old was he?

02:37 Dan: He's 10 years older, so he was as...

02:39 Jacob: 10 years, okay.

02:39 Dan: Yeah, he was 32. And so we did, we did a bunch of projects together, we actually worked on some really interesting stuff, but nothing that like panned out as a profession but part of what came out of that was I ended up getting a job for a guy named Doug Drain who would later provide me with seed funding for an entrepreneurial idea I had and about two months before law school started, this guy Doug Drain made me an offer I couldn't refuse. He said, "If you'll blow off law school and help me with this thing, I'll give you the seed money that you've been wanting for your entrepreneurial idea." So anyway, Chip was the person who set in motion this chain of events that successfully kept me out of law school and I've been grateful ever since for that intervention. And so, that's the gist of the dedication.

03:26 Jacob: Wow, I love that story. So how did... So okay, that's when you were 22, you had that start-up, how did you go from there to where you are now?

03:40 Dan: It was a very meandering and ill strategized path, I think. I worked on the business I referred to that I got seed funding for, it was called Thinkwell, it actually still exists today. It's a publisher of college textbooks that are digital and the format is radically different. If you are familiar with the Khan Academy, it's sort of like the Khan Academy before there was a Khan Academy. We would go around and find the most interesting and the most dynamic professors in the country and instead of learning calculus or biology or something from a 1000 page boring textbook, you could learn from these short video lectures from the most interesting professors in the country, that was the pitch. And so I did that for about four or five years, I decided I wanna go out and broaden my knowledge. I had started this thing with no knowledge of business whatsoever and just picked up what I could on the fly, and so I went to Harvard Business School to get an MBA.

04:43 Dan: After that, I did some work in executive education at Duke and then right around that time, Made To Stick came out, that was our first book, that was in 2007 and to no one's greater surprise than ours, it was a hit. We were, the first week the book came out, we were on the Today Show, and so all of a sudden this door opened in the universe that I never imagined would open, where we could keep writing and in fact, we could do that for a living and speak about what we've written about and that's spending my life ever since.

05:17 Jacob: Alright, I have a very candid question for you.

05:21 Dan: Yeah.

05:22 Jacob: Do you think your Harvard MBA was worth it? [chuckle] 'cause I think...

05:26 Dan: That's probably a longer conversation.

05:28 Jacob: Well, 'cause I get a lot of people on this, that are very mixed on this, and I get some academics and professors, and then I get other people and there's a very different perspectives on what's gonna happen to top tier universities if it's worth to get an MBA or if organizations don't care about it anymore, and there's this really big debate that's going on and these different sides are emerging. And so as somebody who did get an MBA from a top tier university, if you could go back, would you have done it again or did you not think that it was as necessary for where you are now?

06:00 Dan: The career journey of Dan Heath, I hope your listeners are fascinated by this. [chuckle] So, I would do it again if I could go back, but maybe not for the reasons you expect. I think I just needed that transition point in my career, I needed to kinda step out of what I was doing and think about it and be thoughtful about what came next, and so, it was almost like I just needed a timeout that didn't look like a two-year gap on my resume.

06:33 Dan: I have to admit, I'm pretty skeptical about the value of an MBA curriculum. Just one of the things that cracked me up was, I think there were something like three Enron cases in the Harvard business school curriculum, two years before we started, and they were very quickly kind of vanished out of the curriculum when Enron blew up. And so I think there's a lot of... I do think there's some science and some knowledge to business with accounting and finance and other things like that. I think there's a lot that's hard to teach, and a lot that's kind of fad chasing. So I'm not sure the reason to go get an MBA is to make you more skillful at business. But I do think there's tremendous win in the credential, especially for certain careers. If you wanna go into venture capital or private equity or hedge funds or whatever, clearly you're gonna need the credential that MBAs offer. So that's my career advice to you out there. [laughter]

07:29 Jacob: Thank you. [chuckle] So, you've written several books with your brother. And where did these ideas for these books come from? Do you have a certain process that you take when trying to come up with a topic and then researching it to create a book?

07:48 Dan: We really don't. The first three books were Made to Stick, Switch and Decisive. And they kind of grew out of each other organically. We always seemed to know what was next for those first three. Our fourth book, The Power of Moments, was the first where we set about consciously trying to figure out, "Hey, what's the next topic?" And our approach was... I think this was a good approach. It's something we advised in our decision-making book and so we kinda took our own medicine. Our approach was to try to get multiple things going at once so that we wouldn't fall in love with a bad idea, and wouldn't suffer from the sunk cost fallacy where you put in six months on something, and you so hate to flush it that you're not willing to walk away.

08:33 Dan: So, I think we avoided that trap and in fact did exactly that. We had a couple of ideas that we probably put in somewhere between four and eight months on researching, thinking, synthesizing and then just decided, "I don't know if this is worth another couple of years of our life, " and just flushed it. Literally got nothing out of it, not even an article. But I think that was good discipline because when we hit up on the Moments topic, we just kind of knew. We knew it was right. I think for us, the topics... We're not artists, we're not chasing our own expression. We're trying to help people and so we need books that are practical. We need books that people can read and know how to do something different, but also that are entertaining. This is not the DOS for

Dummies books either. We want people to be able to read these books and be able to keep flipping the chapters at night and not feel like it's homework and so there's a blend there where you're looking for some science, some great stories, some practicality and the intersection of those things is kind of where we wanna live.

09:42 Jacob: And this new book that you wrote, is this the first book that you've written by yourself without your brother?

09:47 Dan: It is, yeah. So I jettisoned Chip. [laughter] The weak link in the chain. No, I'm kidding, no. So we wrote Power of Moments and basically it was very simple situation. Chip was not that eager to dive right back into the writing and research cycle and I was, this is what I love more than anything and I think Chip has more interests than I do, and got involved in a bunch of different stuff, including a gig at Google X, their Moonshot Factory. So this was an idea that had been in the back of my head for over a decade. I started a file with the name "Upstream", which is the name of the book back in 2009. And there were a couple of things that happened back in that era, that really planted the seed.

10:35 Dan: And the first was, I heard a parable that's well known in public health, and it's actually the very first thing in the book and the parable goes like this: You and a friend are having a picnic on the bank of a river. And you've just laid down your picnic blankets, you're about to have your meal when you hear a shout from the direction of the river. You look back and there's a child thrashing around in the water, apparently drowning. So you both dive in, you fish the child out, you bring them to shore. Just as you're starting to calm down you hear another shout. You look back, there's a second child splashing around again, apparently drowning and so back in you go. You fish them out, then there are two more children come along right behind and so begins this kind of revolving door of rescue, where you're in and out, and fishing kids out and it's exhausting work. And right about that time, you notice your friend is swimming to the shore, steps out, starts to walk away as though to leave you alone, and you cry out, "Hey, where are you going? I need your help. All these kids are drowning" and your friend says, "I'm going upstream to figure out who's throwing all these kids in the river."

11:44 Dan: And that, in a nutshell, is what this book is about. It's about this trap that we fall in. In life and in work, where we're always reacting to things. We're putting out fires, we're responding to emergencies, and it's like we're always dealing with the crisis of the day, but we never make the time to go up to the systems level and figure out how might we have prevented the problems that occupy so much of our time and attention. So that was the origin of this word "Upstream" and the way we'll be using in this conversation, is the idea that we can stop problems before they happen.

12:24 Jacob: I love that story. So, you first heard this in 2009 and you've been collecting and doing research on it ever since then?

12:32 Dan: Exactly right.

12:33 Jacob: Wow.

12:33 Dan: And in fact, I knew really early that there was enough meat here and enough interest. As a writer, you gotta keep yourself interested and, in this case, for 10 plus years. Within a month or so of hearing that parable, I had another conversation with a police chief, he was a deputy police chief of a Canadian city, and he had this wonderful thought experiment. We were talking about

something totally different, this came up, and immediately I connected it to the upstream parable. He said, "Imagine you've got two police officers and one of them decides to go downtown during the morning commute, when things get really crazy. And she goes to this one intersection, that is chaotic and where a lot of accidents happen. And just by making herself visible in that intersection, she makes drivers a little more cautious, a little more careful. They slow down and there're fewer accidents. So that's the first officer. And then the second officer goes to a different part of downtown, where there is a forbidden right turn and she hides around the corner and waits for drivers to try to sneak a right turn, and then she naps them and gives them a ticket." And the deputy chief said, "Which of these officers do you think did more to protect public safety and public health?" And he said, "It's got to be the first officer. She was in a place where she may have prevented accidents and even prevented death."

13:56 Dan: But if you ask which of these officers will be promoted? Which of these officers will be praised? Which of these officers will be rewarded? It's the second one because she's coming back with this stack full of tickets and that's the evidence that she accomplished something and meanwhile that first officer, how would you even demonstrate that you did anything? How do you prove that something did not happen? There's a guy who was driving to work that morning and he saw her at that intersection and slowed down and unbeknownst to him, he would have been in a wreck if it weren't for her there, in an alternate world he would have gone to the hospital with a serious injury, but he doesn't know that, and the officer certainly doesn't either. There's a ambiguity to upstream victories where sometimes when we succeed, we may not even be able to prove that we've succeeded. So, that thought experiment just stuck in my mind and the connection to the upstream side, that parable that I shared is so clear. It's like, if those two people were having a picnic and no kids came by, would they even be aware that anything had been accomplished? That any problem had been solved or would they've just taken it for granted? So those were the initial origins with the idea.

15:23 Jacob: So it sounds like upstream is finding, like you said, the problem with the system, whereas downstream is more like the fighting fire approach?

15:33 Dan: Exactly right, yeah. It's downstream is there's a fire in your house, and somebody needs to come put it out. Upstream is how do we keep houses and buildings from catching of fire. And they require very different skill sets.

15:46 Jacob: Yeah, yeah. And so, I guess the challenge for a lot of people listening is, how do we move from downstream thinking to more of the upstream thinking, which is most of what you cover in the book?

16:02 Dan: Yeah, and that's exactly why I wrote the book is to cover that topic exactly and I could characterize the book at a really high level. It's basically, number one, I'm making the case that it's tremendously important that we shift upstream, not just in businesses but in society, and two, that it's not easy and there's a lot of important reasons why it's not easy, but we've gotta be willing to shoulder that burden and go anyway because the rewards are too profound and when we're recording this, we're right in the middle of the coronavirus episode, which of course is a failure of upstream work. Right now, we're putting out fires that we never needed to put out if things had been handled a little differently and so that's the jist of the book. This is hard work and I want you to know why it's hard work, but it's work that has profound returns.

16:55 Jacob: Can you give an example of something in an organization just to bring it back 'cause

a lot of people listening to this are working for organizations, just something to make this real. An example...

17:08 Dan: Yeah, let's get this tangible, yeah.

17:10 Jacob: Yeah, something [17:10] _____ for upstream.

17:11 Dan: No, I got it. And to be clear, I mean, I think a lot of the thing that brought me to this topic were more social, but there's a lot of business in this book as well. In fact, the first story in the book is about Expedia, the travel site, that back in 2012, with a guy named Ryan O'Neill, who worked in the customer experience group, he was looking through some data from the call center. So, Expedia, of course, is an online site, but they do have a call center where if something goes wrong with your the reservation, you can call a 1-800 number and get a human being on the phone. And so, back in 2012, Ryan O'Neill had discovered that for every 100 people who book a flight on Expedia, 58 of them we're calling the call center for some help, which is just mind-blowing, that the whole point of this thing is to allow for self-service and yet almost six out of 10 people who book online are ending up calling for something.

18:07 Dan: And so Ryan O Neil scratches his head, he starts going through the data, "Why are all these people calling us?" It turns out the number one reason the people are calling is to get a copy of their itinerary. 20 million calls were placed in 2012, 20 million for people who are just asking for a copy of the reservation that they had booked. That's like every man, woman, and child in Florida are calling Expedia in one year and so Ryan O'Neill is like, "This is nuts, we gotta do something about this." And he and his boss, they present this to the CEO at that time and they said, "We've got to convene the task force to get customers to stop calling us. It's an expensive problem. At five bucks a call, the itinerary problem alone is $100 million problem. So, they did, they created a war room to tick these off one at a time, go through the top reasons people are calling and the fixes are not complicated. You give people a self-service option online, and you change the way that you send emails so that not so many of them end up in the spam folder and on and on. So it's not a complicated problem.

19:15 Dan: I think what's interesting for our purposes is, how this problem manifested in the first place? Because you would think that there would be some natural alarm bell once you hit the eighth million call for an itinerary. Red light would have gone up on some executives desk. We gotta do something about this, but it didn't. And the reason is very simple when you think about it, that Expedia, like virtually every company, is divided into functions and silos. So, there's a marketing team and it's their job to get people to the Expedia site and to come there rather than to Kayak or somewhere else, and then there's a product team that designs such a smooth interface that it kind of funnels people to a transaction once they're on the site, and then there's a tech team that pays attention to uptime and making sure everything is humming along smoothly, and then there's the call center team, and how are they measured? They wanna get people off the phone as quick as they can while still keeping them happy and in all those silos, when I talk about their goals, they all kind of make sense. You can nod your head and say, "Well, that does make sense that the marketing team does that, the call center does that", but if you ask the question, "Whose job is it to make sure that customers don't need to call?", the answer is nobody. It's none of those people's job and in fact, none of them would even be rewarded if that were to happen.

20:41 Dan: And so that's an example of the kind of problem that slips between the silos that emerge in organizations where this focus on specialization means it's very easy to solve problems that have

clear ownership. Like whose job is it to respond to Jacob when he calls wanting his itinerary? Well, it's the call center's job. In fact, it's one agent in the call center's job, it's simple. Just like if your house is on fire, whose job is it to put it out? The fire department. But when you ask these more complex questions, like whose job is it to prevent a customer from calling? That's the upstream question, how can we prevent this problem from ever happening? A lot of times, you get distributed ownership and a lot of times distributed ownership can mean no ownership and no action, just as when we ask the question, "How do we keep your house from catching on fire?" That's a complicated answer. Well, the homeowner is slightly involved, the fire department's slightly involved, the people who write the building code are slightly involved and the net-net is probably no one owns it and nothing happens.

21:44 Dan: And so those are the kinds of things that can happen within organizations and what I love about the Expedia story is it's both the before and after. It's like we can understand what happened before to lead them into this pickle but they also successfully conquered this by going up stream. So, those 20 million calls these days are zero and they completely vanquished this problem.

22:08 Jacob: Why is this so hard for companies to figure out? Because it sounds very commonsensical, if that's a word, that you just are basically looking for what is causing the problem, that's... I mean it doesn't get any simpler than that, right? What is causing the problem as opposed to just like, we keep having these problem... Whack-a-mole for example, instead of just trying to hit them all, trying to figure out why do these stupid moles keep popping back up all the time?

22:35 Dan: I think it, I think it's a problem of levels. So, you're right that's just a matter of solving problems but the key thing is, there's an asterisk there, which is which problem are you solving? So the people in the call center, what have they been told? They've been told, "You're gonna be rewarded if your average call time goes down and your net promoter score or however they're managing customer happiness goes up", and so when they're on a call with you, you're calling them about your itinerary and their goal is they wanna butter you up and make you happy and get you that itinerary lickety-split, and that's what success looks like to them. But there's no natural reason for them to be thinking, "Hey, how could we have kept Jacob from calling?" That's just something that's kind of outside of their experience as it's been defined for them. And so that's a point I'm making in the book is that focus in organizations is both an enemy and an ally. It's an ally in the sense that when we get people focused on particular measures or a particular area of responsibility, it makes them more efficient.

23:44 Dan: They were successful at Expedia at reducing the average call time, they were getting better because of that focus, but focus is also an enemy in the sense that it blinds you to things that are just slightly outside of your box. Like the question "why are people calling at all?" And so, I think that's the trap that we have to urge from is making sure to be careful how we're defining the problems that we're solving.

24:08 Jacob: Is there a place for downstream thinking or are you arguing that we should just completely remove it and only focus on the upstream stuff?

24:16 Dan: No, definitely not. No, I think that we will always want downstream solutions. When your kid is drowning in the public pool, you'll want the lifeguard there to fish them out and when your house is on fire, you'll want the fire department. So I am not at all a skeptic of downstream solutions, but I'm just pointing out what I think is the obvious, which is that we spend about 99% of

our time downstream, even when we stand to gain a ton by just shifting even incremental attention upstream. It's like the Expedia story where they're just burning 100 million bucks a year answering calls that they never needed to field. And so, that's the case that I'm making. Is that we're grossly out of balance and that we stand to gain a lot by correcting that.

25:05 Jacob: In your book, you talk about the three main barriers to upstream thinking which are a problem blindness, lack of ownership and tunneling. So I'd like to spend a couple of minutes maybe talking about what these barriers are, so we can start with problem blindness. So maybe you can explain what it is, if you have any examples of what that might look like and any advice or suggestions for how people might be able to overcome that particular barrier?

25:32 Dan: Yeah, so let me kick this off with just a quick story. There's a guy named Marcus Elliott, who was an MD that got interested in athletic training. So in 1999 Elliott gets hired by the New England Patriots, and he's brought in to help solve a problem that they've had, which is a lot of their players have gotten hamstring injuries, in fact there were 22 injuries that the year before Elliott came in and you have skilled players like wide receivers going down with a hamstring injury, it can just wreck havoc with your team. And so at the time, the lore in professional sports was basically, well, it was just a bad run of luck, right? Football is, it's a dangerous game, people are colliding with each other at high speeds, people are gonna get hurt. That's just the way it is.

26:21 Dan: But Elliott had a very different philosophy, his point of view was that injuries were often the result of poor training. So, when he came in to the Patriots, he made a couple of changes, number one, the idea at that time was you make players better by making them bigger and stronger. Picture the stereotypical weight room scene with people pumping giant quantities of iron and bench pressing and squatting and so forth and Elliott's point of view was, "Look, these players have very different jobs, they need very different training programs", and even beyond that, even within the group of people who are wide receivers, they have very different natural assets and they have different natural imbalances. So, he would do things like measure the strength of one receiver's left hamstring versus right hamstring, and then he would custom design a training program for the receivers that seemed most likely to be in danger of getting an injury because there are predictable aspects to injuries, like muscle imbalances are a predictor of injury. So Elliott comes in and does all this thing and some people are kinda skeptical of this. It seems a little bit like mumbo jumbo.

27:32 Dan: And then the next season, they have three hamstring injuries and people start to become believers in this and these days, this is utterly the norm, I mean this kind of analysis and this kind of injury prevention work. And so, what I wanna point out about that story is number one, this element of problem blindness, which says we can't solve a problem when we don't perceive it as a problem. So, that initial mindset in the NFL and on the Patriots that was sort of like well, injuries are just something that's gonna happen, there's nothing we can do about it, it's just a function of playing this dangerous game, that's problem blindness. And when we don't code things as problems, we're certainly not gonna fix them. So, it took Marcus Elliott to come in and say, "No, this thing that you're coding as natural or inevitable is actually fixable, that we actually have agency here." And he was the one to demonstrate that and kind of pierce the problem blindness and show the solution.

28:31 Dan: I promise you there's something in wherever it is that you work, there's something that your problem blind about. Expedia, it was the calls to the call center. For years, they just thought, "Well, we're doing a lot of transactions, people are doing complicated things with hotels and flights, and of course, people are gonna call the call center", but it wasn't an of course and it took Ryan O'Neill and his boss Tucker Moodey to come along and say, "Hey, wait a second. A lot of the stuff

that they're doing, we can actually prevent", and I think what it takes for organizations to work through problem blindness is someone like a Marcus Elliott or a Ryan O'Neill to shine a light on something and say, "Hey, this thing that we're just reacting to, this thing that we're just managing is something we could prevent with the right solution." So that's the first barrier to upstream thinking.

29:22 Jacob: And I love the... I think you gave an example in the book of the gorillas for the radiologists and radiologists were supposed to look at the skin to try to diagnose it but in the skin, there was an image of a gorilla and most of the radiologists did not even see it? [chuckle]

29:38 Dan: Exactly, right.

29:39 Jacob: Which I thought was insane, because I noticed it right away.

29:43 Dan: Yeah, well, it's kind of a cheat that you figure there's a trick coming if there's some picture like that in a book and...

29:49 Jacob: Oh yeah.

29:50 Dan: Maybe a lot of your listeners have seen, this is a phenomenon called inattentional blindness and probably the best known form of this is there's an experiment called the invisible gorilla that some of you may have seen where you get this task, you're watching a video of some young people like passing basketball around.

30:11 Jacob: Oh, I've seen that, it's a YouTube...

30:13 Dan: Yeah, yeah, you can find this on YouTube.

30:15 Jacob: Yeah, I guess how would you... I guess you could just find like a gorilla attention clip or something?

30:20 Dan: Yeah, "gorilla attention" will probably gets you there. Yeah, and should I get, I guess we've already given away the spoiler, so if you're really spoiler sensitive just skip ahead like 30 seconds, but for the rest of you, the trick is that you're given an assignment to count the number of passes and so, you're really focused on the screen and there's a lot of passes happening, so it takes up a lot of your attention. And meanwhile, there's a guy in a gorilla suit that comes into the middle of this basketball court and beats his chest and walks off and the hilarious thing is at the end of this video, most people didn't even see the gorilla and they kind of don't believe it until you replay the video and you show them, it was right there. And so, metaphorically, what that tells us is we can get so kind of locked in to our day to day routines and we're locked in on that little piece of the pie that's ours, that we can just miss something really obvious that's happening right in our midst.

31:19 Jacob: Would you say this 'cause we hear this all the time, a lot of employees say that I've just been so heads-down, where they're just literally focusing on that one little thing that's in front of them. So maybe being heads down is not a good thing to say and not a good thing to focus on. You gotta have your head up a little bit and kind of looking around instead of just like an ostrich in the sand.

31:40 Dan: Yeah, well, and this gets us to actually the third barrier to upstream thinking which is something called tunnelling. So, let me tell a quick study that relates to exactly what you just said.

There's a woman named Anita Tucker who once ran a frosting factory for General Mills but later got a PhD at Harvard and for her PhD, she followed around nurses in hospitals, for hundreds of hours she shadowed them to see what their life was like and she chronicled that their work was like a succession of unexpected problems. They were always problem-solving. They didn't have the medication that they wanted at the right time or a piece of equipment didn't work, or then, there were really weird things like one day, there was a nurse that was checking out a woman who just had a baby and it was time for them to go home. And part of the check-out process, is you gotta take off the security anklet for the baby, but this baby didn't have one, and so they looked all around to try to figure out where it went, and it turned out it had just fallen into the baby's bassinet, so problem solved, the woman could check out and go home.

32:33 Dan: And then the weird thing was, about three hours later the same problem happened to a different woman, different baby, this time, they couldn't find the anklet at all, and so the nurse told her supervisor about it and they figured out a different way to securely check out the woman from the hospital and so that was the kind of thing that happened in the life of a nurse and Anita Tucker observes that these nurses were resourceful and they were improvisational in solving problems and they took a lot of pride in being independent, they didn't need to run to their boss every time something went wrong. And when I paint that portrait, it's pretty admirable. We like the idea of these resourceful, cheeky improvisational nurses. But from an organizational point of view, the tragedy here is this is the description of an organization that will never improve, that will never learn because when you constantly work around problems, you, by definition, are not solving them, which means that you're dooming yourself to solving the same problem the next week. It didn't dawn on this nurse who'd had two mothers in three hours, where security anklets disappeared, to say, "Hey, there's a systemic problem here."

34:03 Dan: Now, I wanna be clear that I am not throwing stones at nurses at all here. I think that this is actually a core problem that relates to every profession. I think Anita Tucker could have shadowed consultants or flight attendants or chefs and found exactly the same conclusions and this is a phenomenon that I call "tunnelling" in the book. And "tunnelling" is a word that I stole from a book called "Scarcity", which is a wonderful psychology book, if you like that sort of thing. The authors say that when we're dealing with scarcity, scarcity of resources or scarcity of time, which is most of us, either one or the other or both, that we give up trying to systematically solve problems, and we adopt this tunnel vision where we just wanna keep going forward, we just wanna move. And if we hit an obstacle, if we hit a barrier, we just wanna get it behind us so we can keep moving, and that's the nurses. If they ran out of towels, they would just run to the unit down the hall and steal some of their towels, that let them keep going, keep responding to patients. If an anklet falls off a baby, they hunt around for it, they find it, they keep going.

35:16 Dan: But Anita Tucker's shock was that she couldn't find a single instance of systemic problem-solving in all of her shadowing. And I think that's exactly what we're up against when we try to move upstream, is that our schedules are so overloaded that we're so locked in, head down, as you'd said, that we forget that there's even another mode to be in. And yet, if we want our work to improve, it has to be at that level, it has to be at the level of stamping out problems rather than just reacting to them again and again.

35:53 Jacob: When you think of problem blindness, for example, 'cause a lot of employees get very frustrated, for example, when they have a solution to something or when they see a problem, and they think they know the answer to it, and they try to present it, and we've all been turned down and shut down. Then oftentimes, a lot of people either just give up or they get frustrated and they say, "I

don't understand why my leader doesn't understand this. I got this perfect solution." But it occurs to me that maybe in a lot of those situations, what happens is the employee does not understand what the actual problem is. We give up without actually saying, "Why are you turning this down? Why don't you think this is worthy of being funded or something like that?" So, is one possible way of getting over problem blindness is just asking the right questions or even just spending time with a broader network of people outside of your core function?

36:55 Dan: I think that's a really insightful point that yeah, back to this notion of what level are you solving problems at? Are you the call center rep who's solving for minimizing call time? Or are you a level or two up thinking about, "How could we prevent calls altogether?" I think that you're right to suggest that we be cautious with our own pet ideas, that one way to test ourselves and figure out like, "Hey, do we have the right, holistic conception of this problem", is just to run it by a couple of colleagues in other functions? Make sure you get an IT rep and an HR rep and an operations rep and a marketing rep together to kick the tires on something. And that's something that is not particularly complicated. You could all just go out to lunch one day and talk something over, but it could be a really powerful way of just testing whether you're intervening at the right level in the system.

37:51 Jacob: Well, even if, for example, a lot of the times, leaders might say no to things just because of fear. They're scared of what this might mean for them, maybe they feel that they don't have the knowledge or the experience and they don't wanna be made to look stupid in front of their peers. And so, if you, as an employee, don't understand that that's the true problem, you're gonna beat your head against the wall for ever because you don't understand that the leader is dealing with these issues of fear, and...

38:20 Dan: That's a really good point, actually, is... I remember Marcus Elliot telling me... He comes in with his fancy-pant, customized training. And keep in mind, there's some people who may not, whether it's conscious, or my suspicion is unconscious, kinda don't want him to succeed. If you're the trainer in the weight room who's the bench press guy, you don't really understand this new, tailored, medicalized approach to training. And so, you're gonna have to be a pretty big person to say, "The way that I've always learned to train athletes is wrong, and I gotta get up to speed on this thing that I don't really have the training to understand." That's a pretty big ask. And so, I think that's a good example of some of the barriers we're up against.

39:08 Jacob: Yeah, for sure. And I remember Beth Comstock, the former vice chair of GE. She was telling me this story of how, when she used to work at NBC Universal, she had this idea for something that she wanted to do and I don't remember all the exact details, but she had this idea for something that she wanted to do, and she kept trying to pitch it to her leaders. And her direct manager at the time was like, "No, I'm sorry, it's not gonna work." And she would say, "Okay, why is it not gonna work?" And he would give her feedback, and she would improve, and then she would go pitch it again. And again, the leader would say, "I'm sorry, it's still not gonna work." And she would say, "Okay, tell me why it's not gonna work?" And then, she would keep going back to this leader until finally, the leader said yes, and Beth was... She told me she was shocked. She's like, "Why did you say yes?" And the leader said, "Because you made it impossible for me to say no." [chuckle] And I love that story because she kept trying to understand what the problem was. Like what is the issue? Why are you saying no? What can I do? And she really, it was just kind of a motivating and inspiring story of when you're told "no", try to really understand what that problem is and keep trying to tweak and go back instead of just giving up.

40:19 Dan: Well I like what you're kinda honing in on which is really problem definition. What's

the old cliche? This is attributed to Einstein. It was probably just like, somebody made it up on the internet, but if I had 24 hours to solve a problem, I'd spend 23 hours defining the problem and an hour solving it.

40:39 Jacob: Oh, yeah yeah.

40:40 Dan: And I feel like that's kind of what we're talking about here and I do wanna be clear, you and I have talked a lot about the barriers to upstream thinking, but please don't think this book is just like a big buzz kill of the gauntlet of pain you're gonna run in going upstream. This is a book of solutions. So all of the things we're talking about here, there are ways around them. Here's a business example of where people were able to overcome some of these things we talked about. It comes from LinkedIn, and years ago they were selling as they continue to sell now, a subscription product to employers for recruiting.

41:18 Dan: So, if you wanna go hire a software developer you can obviously subscribe to LinkedIn's recruiting software, and it's an annual subscription and at the time, the way it worked was right around month 11, about a month out from the critical renewal date, 'cause if you run a subscription business, boy renewal is the thing you probably care more about than anything else. About month 11 they would start to look at their accounts and see, "Okay, which ones haven't been very active lately? Let's swoop in in this final month and save the day." That was the instinct, this kind of heroics. And a friend of mine, Dan Shapiro who was the sales boss at that time.

42:00 Jacob: Dan was actually a podcast guest and...

42:01 Dan: Oh, you're kidding, cool.

42:03 Jacob: Yeah, and so, for my new book that came out a few weeks ago, The Future Leader, LinkedIn and Dan Shapiro's team were the folks who are responsible for helping me survey 14,000 LinkedIn members around the world.

42:15 Dan: Oh wow.

42:16 Jacob: Yes, I know. I know Dan...

42:18 Dan: Small world.

42:18 Jacob: Yeah, I know Dan and his team well, so I'm glad you guys know him as well.

42:22 Dan: Well now you know him as a story protagonist as well. So Dan says, "Is there any way we could get earlier warning of who is gonna churn?" And so they crunch the data. They've had the data all along, they've just actually never analyzed it this way. And they're astonished to find out that they can get a pretty good sense of who's gonna churn and who's gonna renew at about week four in the subscription. So, one month into the subscription they can predict who's gonna renew 11 months later and who's gonna churn 11 months later, which is just weird. So, they start thinking about what's going on here and they dig into the data some more and eventually come up with this insight that with LinkedIn, and I suspect this is true of a lot of other subscriptions by the way, but at least we have the data for LinkedIn, people kinda either got value out of the product right away or they just never did. They never locked in, and so it was an easy decision by month 12 not to renew.

43:22 Dan: And so Dan's insight was, "Why don't we get out of the business of heroics? Why don't we get out of the business of saving the day and get into the business of stopping the day from needing to be saved?" And so they transferred a bunch of resources early in the process to onboarding. So every customer now has their hand held through, "here's how you set up a job search and here's the way it works and here are the kind of outreach emails that we've seen be really successful. We're gonna help you draft your first one." And it made a huge difference. It cut churn in half in a period of about a year or two, which at the scale LinkedIn operates is just a massive, massive win. I mean, certainly...

44:04 Jacob: Yeah, it's huge.

44:05 Dan: Tens of millions of dollars in profit from that. And so that's an example of upstream thinking. It's like, "How do we get out of the business of just reacting to customer dissatisfaction right around the deadline and how do we get into the business of preventing that dissatisfaction from ever materializing?"

44:22 Jacob: Yeah. I like that story a lot. Well, the one barrier that we didn't touch on was lack of ownership, which I think is also a very, very important one, and probably something a lot of people struggle with. So can you touch on that one briefly?

44:35 Dan: Yeah. In fact, one of my favorite examples, this is an interpersonal example. I met this woman named Jeanie Forest who's an administrator at Yale Law School and she said she had this staff dispute that she had to navigate as a boss at one point. And so, I'll disguise these women's names. But one woman was Dawn who reported to another woman Barbara, the boss, and Dawn had filed a complaint about Barbara saying that Barbara was undermining and belittling her. And so anyway, this eventually reached Forest's desk, and so Forest brought the two women together, Dawn and Barbara, and Forest started the meeting by saying, "I'm the one accountable for this. I'd heard rumors all along that you weren't getting along and I did nothing. I buried my head in the sand. I thought maybe it would go away and so that was my fault, I apologize." And then Forest turned to the two women, she said, "I'd like each of you to tell the story of this situation we're in as though you're the only one in the world responsible for where we are." And so, first the boss Barbara takes a crack and she says, "Well, every time I try to give you instructions, Dawn you shut me down and you ask a bunch of unnecessary questions." And Forest said, "You know Barbara, that sounded an awful lot like you were blaming Dawn. You wanna try that again and you take ownership of this?"

46:03 Dan: And so Barbara said, "Well, you know, I interpreted her questions as though they were mean-spirited. I didn't think they were sincere and I could have just explained what I wanted better and not made assumptions. That was on me." And so then Dawn jumped in and said, "Well, I just accepted her huffing and her eye rolling and I didn't address it. I just got mad and I should have said, 'Look, you're huffing at me and I really don't understand what you want. Just help me understand it better.' That's on me." And so by the end of the meeting they emerged with a kind of detente situation, calmed down and I thought about this about six weeks later, and I pinged Jeanie Forest 'cause I was curious what had happened with the two. This was something that had just happened when I spoke to her and she wrote me back and said, "They're working together productively and cheerfully, it's a little insane."

47:01 Dan: And so that's an example of something that I talk about as a lack of ownership. Like this was a situation where all three of the people involved in this dispute felt like they were kind of

trapped in it, that it was something that happened to them. But with this simple prod, the one that Forest used of figuring out how to explain the situation as though they were the only one responsible for it, all of a sudden they start to identify these levers, these levers of action that were actually there all along to identify, they have influence in the situation, they have agency, they just weren't using it.

47:44 Dan: And I think the same metaphor goes for a lot of different situations where earlier I used the thought experiment of whose job is it to keep your house from catching on fire. Is it the homeowner? Is it the people who write building codes? Is it the people who built your house? Is it the Fire Department? And imagine if every one of those agents were asked that same question? Tell the story of house fires as though you're the only one responsible, what would the homeowner say? What could they do as if there wasn't even a Fire Department, what would you do to make your house safer? And the building codes people, if you couldn't count on anybody else, to be responsible what would you do with building codes to make sure the homes were safe and so on, and so on.

48:28 Dan: I love the way that this takes levers of action that were there all along, but buried and finds a way to kind of surface those strands of causation. And so, I would challenge people listening to this, if there's some kind of problem that you're encountering at work or at home. Maybe it's even in a relationship. Could you tell the story of your relationship problems, as if you were the only one responsible or the story for some customer dissatisfaction as though your customer, as though your business unit perhaps was the only one responsible? That's what we're getting at with this unit on the lack of ownership.

49:06 Jacob: It reminds me a lot of an exercise that therapists use, and some people might be familiar with this. We have a lot of therapists in my family, so I'm quite familiar with this, but during couple's therapy, oftentimes if you go see a therapist and couples usually blame the other person, and the therapists usually say, "You have to say I". You talk about "I feel", "when you do this, I feel like this" instead of "you're doing this, you're doing this". You really bring it back to yourself all the time, and it's a...

49:40 Dan: Oh that's good, yeah.

49:40 Jacob: Yeah, so it reminds me a lot of this, take some ownership, and take a stance in there, and I like your visual of pretend you're the only one in there who can take action to that.

49:51 Dan: Yeah, yeah.

49:53 Jacob: So in lack of ownership I mean, I think the examples there are pretty easy, we've seen lots of them. But I know we only have a couple minutes left, so I wanted to transition maybe to just a couple of the questions that you have in your book. You talk about seven questions for upstream leaders, and of course, we won't be able to get to all seven. But do you have a couple questions in here that are your favorite or ones that you think are, I don't know more impactful than the others?

50:22 Dan: Let me share just a couple just to give you a flavor for what's in the book. So one of the questions is, and these are questions by the way, that upstream leader should be asking themselves. And so one is, "How can you get early warning of the problem?" If we wanna prevent problems it sure helps to have more runway. And so that's really the LinkedIn story, right? If we can predict four weeks into a subscription whether people are in danger of churning, it gives us a lot of ability

to change that course. Another one is "how do we unite the right people". Back to this notion of focus can be an enemy and an ally. Often to solve upstream problems, we need to unite people across groups, across silos, across organizations. So, that's the Expedia story when you realize that it may only take one call center rep to respond to a complaint about a missing itinerary, but it may take three or four groups working together to prevent that customer from needing to call.

51:21 Dan: And then another one, maybe the third and final I'll highlight is "Where can you find a point of leverage?" So upstream work is systems work, and systems are complicated. Systems that have lots of variables involved. So it's like where do you poke in the system, and how do you know you're picking a spot that's not gonna cause enough unintended negative consequences to outweigh the good you're doing. So in the book, there's a long story, I won't tell it now. But I tell the story of how Chicago Public Schools managed to dramatically increase the graduation rate from 52% to 78%, just an astonishing win in a system that is enormous, and one of the most important parts of their victory was they figured out that the ninth grade year was the critical leverage point and that if you could take a student who was kind of at risk. And in fact, they had some early warning technology that they used to where they could predict who was off-track in the ninth grade. If you could nudge them back on track in the ninth grade, chances are they would graduate successfully. And so even in big complicated systems, we can often find points of leverage to have out-sized outcomes.

52:38 Jacob: Maybe last question for you before I ask you where people can grab your book and learn more about you is what happens if you're not in a leadership role, so you don't have the usual authority or the power or the resources or the budget that a typical leader might have? Any advice or suggestions for those people?

53:00 Dan: Yeah, well I think the thing out what we're talking about is there are multiple levels of upstream, and so you're certainly right that there are some kinds of upstream work in organizations where you're gonna have to have sign off by C-level folks. But there are others that are much smaller, and in fact there are a lot that are even personal. Some of my favorite examples were people that discovered recurring problems in their own lives and just did something about it. Like there was this guy Rich Marisa, who had this ongoing argument with his wife. I guess all couples have these little things that they bicker about but Rich and his wife, they bickered about the hallway light.

53:44 Dan: So Rich was always going in and out of the house and taking the dog out and he would flick the hallway light on to get some light and he'd come back in, but forget to turn it off, and that bugged his wife. And so one day Rich just realized, he had this epiphany that he could solve this. All he had to do is go to Home Depot, by a $15 piece of hardware called a light timer switch and it has buttons on it where you can select five minutes of light or 10 minutes of light or 15 minutes of light. And now when he goes outside he just presses a button, light comes on, he doesn't even have to remember, the light turns itself off and that argument is gone forever from their relationship. And it's a little thing. It's not like they were on the cusp of divorce about this dumb hallway light argument, but it was an irritant. An irritant that they had adapted to that they never had to adapt to.

54:37 Dan: And I think work is full of those things: In your life individually, in your team's life. There are meetings and annoying meeting practices that you have adapted to that you needn't have adapted to. The most absurd one and hilarious one I came across was this woman told me she had just been moved physically within her office so she had just taken over a new desk, and her desk was right by a stairwell door. And they're often reinforced so they're heavy doors, and this thing just

creaked like crazy and it drove her nuts, and of course a lot of the people around had kind of adapted to it. And a couple of days of this thing just distracting her, she finally just brought in a can of WD-40 from home and generously lubed up the hinges on the door. All the sudden it was quiet, just perfectly quiet and she said her officemates treated her like she had come down from on high. They were just in awe that she had solved this problem. And I think that's a great example of where our capacity to adapt as human beings is actually maybe a little bit over powerful. That we adapt to things in our lives and in our work, and even in our country that we needn't have adapted to that we could have solved with just a little bit of forethought.

56:06 Jacob: I love that story. It reminds me of, I keep getting these weird visuals from movies. Did you ever see the original Men in Black movie with Will Smith and Tommy Lee Jones?

56:14 Dan: Yeah. Yeah, yeah.

56:15 Jacob: You remember there was that one scene where they have to take a test and they're sitting in these circular chairs, and there's a table in the middle of the room and everyone's trying to write their answers on this piece of paper, and they're like trying to hold the paper and write on it and they keep puncturing holes through it, and Will Smith finally gets up and he drags this table from the middle of the room to his chair and just uses that, puts the paper on it to write the responses so he doesn't puncture the paper and meanwhile everyone's trying to figure out how do we get this paper? How can I write on it without damaging it? And there's just this table sitting in the middle of the room that nobody thought of to just drag to themselves to use. And so...

56:55 Dan: I love it.

56:56 Jacob: It reminds me very much of that story of this lady who's just like, "I'm gonna just gonna get WD-40 and take care of this."

57:02 Dan: The WD-40 hero. I know. It's kinda gotten in my head, these kinds of stories. Now I feel like there's always this little process active in my brain where I'm like, "What else is a recurring irritant that I can try to conquer with this stuff?" So anyway, I hope the same little process opens up in your brain, whoever's listening to this.

57:24 Jacob: Yeah, I'm sure it will. So where can people go to learn more about you and the book? Anything that you wanna mention for people to check out, please feel free to do so.

57:35 Dan: Yeah, so you can find the book anywhere they sell books or if you wanna learn more about the book you can go to UpstreamBook.com conveniently enough, and it will tell you everything you could ever wanna know.

57:48 Jacob: Very cool. Well again Dan, thank you so much for joining me. I really appreciate it.

57:52 Dan: Thank you. It was fun.

57:53 Jacob: Thank you and thanks everyone for tuning in. Again my guest has been Dan Heath and his brand new book is called Upstream The Quest to Solve Problems Before They Happen. I had a chance to read it. It was fantastic. I highly recommend you grab a copy as well and I will see all of you next week.