Tom Ehrenfeld:

Welcome to the LEI Podcast. Today I am speaking with Dan Heath, author of *Upstream: The Quest to Solve Problems Before they Happen*. Dan, welcome to the podcast.

Dan Heath:

Thanks, Tom. Great to be here.

Tom Ehrenfeld:

Thanks. So let me start by asking you to tell us about your book, and I think one of the best ways to start is there's a very short passage on the top of page 15, and I ask you to read that short paragraph.

Dan Heath:

Page 15, okay. I'm flipping even as we speak. It says "My goal in this book is to convince you that we should shift more of our energies upstream personally, organizationally, nationally, and globally. We can and we should stop dealing with the symptoms of problems again and again, and start fixing them." And if you'll indulge me I think there's a short parable that opens the book that I think will help clue the listener in as to what this book is all about.

Dan Heath:

And the parable goes like this. By the way, this is attributed to a guy named Irving Zola, a sociologist. You and a friend are having a picnic by the side of a river and just as you're laying out your blanket, and getting ready to eat, you hear a shout from the direction of the river, and you look back. There's a child thrashing in the river, apparently drowning, and so you both instinctively jump in, you grab the child, and you bring him to shore, and no sooner have you done that, that you hear another shout, and you look back. There's a second child in the river, again, seeming to be drowning and so you go back in immediately. You fish that child out.

Dan Heath:

As soon as you get them to shore there's two more children that are floating down the river in trouble, so you begin this revolving door of rescue, and you're starting to get fatigued, and then you notice your friend swimming to shore, and stepping out as though to leave you along. And you say "Hey, where are you going? All these kids are drowning. I need your help. I can't do it by myself." And your friend says "I'm going upstream to tackle the guy who's throwing all these kids in the river."

Dan Heath:

And so, that's the spirit of this book: can we get out of the cycle of constantly reacting to problems and go upstream and fix the systemic issues that we get them?

Tom Ehrenfeld:

In the book, you distinguish why you call it upstream as opposed to proactive, or I forget what else. Why do you use-

Dan Heath:

Preventive.

Tom Ehrenfeld:

-upstream?

Dan Heath:

I think this metaphor of downstream versus upstream is really useful in that process to think about the different circumstances and different timelines. So just to be tangible. I talk in the book about a small problem that happened a few years ago. My parents had their home broken into. The thieves busted in their backdoor when my parents were out for a walk in the neighborhood, and they came in and stole some iPhones, and some jewelry, and some other stuff, and the case was never solved.

Dan Heath:

And so, just as a thought experiment I asked how might we have prevented this burglary all together, and when you start thinking in terms of upstream you start realizing that you can go a couple of inches upstream, or you can go miles upstream, so to switch from distance to a time metaphor seconds before the burglary if they had kicked in that backdoor and a deafening alarm had happened that might've interrupted the burglary. Minutes before they came maybe they noticed one of those obnoxious signs in the front yard of my parents that said we are protected by this state-of-the-art security system. Maybe they would've just deflected to a neighbor's home.

Dan Heath:

Hours before maybe if they noticed a bunch of police out on the street maybe that would deter them from trying anything that day. You can also go further upstream though if you start thinking months or years before. Maybe these are repeating offenders and if they had been enrolled in certain kinds of behavioral therapy as a result of one of their previous offenses maybe they would've been cured of this pattern of behavior, and never done it.

Dan Heath:

And then, you can go very far upstream. There is a researcher named Richard Tremblay who spent his career studying how to reduce chronic aggression that often leads to crime, and his contention is the way to reduce aggression in children, especially males, is to pay attention to their mothers. And his research suggests that there's this whole cluster of risk factors that involve the time in which that future aggressive child is in the womb, things like maternal poverty, and smoking, and malnutrition, and depression.

Dan Heath:

And a lot of these things are preventable, and so Tremblay's argument is, look, if we can create a healthier more supportive environment for these pregnant mothers the downstream payoff of that investment will be that when these kids hit their teenage years they won't be aggressive and they won't commit crimes. And so, just to put a beat on this question I think when we think in terms of upstream solutions it's not an either/or, it's not an upstream or downstream, it's how far upstream should we go to make a wise decision on this particular problem. The way that it's stretching the solution set I guess is a crisper way to say it.

Tom Ehrenfeld:

I like that. Stretching the solution set. It also seems to be... To me, one of the strongest takeaways I got was a call to action for systems thinking, for making connections between cause and effect that may not be immediately apparent, but when you start to pull the boundaries back absolutely correlate.

Dan Heath:

No question, yeah.

Tom Ehrenfeld:

Do you know what I mean? Like finding interventions and building in forms of awareness that have leverage. You talk about leverage points, and it seems to me that with a systems approach it's a systemic way as it were of finding the most effective points of leverage and understanding their impact on a short term, and then longer term, and then even longer term basis.

Dan Heath:

I think that's right, and I think one of the challenges I had in researching and writing this book is I mean there's so much that's been written and considered with respect to systems thinking, like how do you make this clear to people who are not engineers, who are not systems thinkers, who are not lean thinkers, and I think part of it is even in the basics of systems thinking, like distinguishing the part from the whole or anticipating ripple effects from an initial action I think can be really valuable.

Dan Heath:

One of the stories that really landed with me was I read about this situation where in New York City about a decade ago there was a Google engineer walking through Central Park and all of a sudden he's struck by a falling oak tree branch, and really badly hurt, ended up with brain injuries, and was paralyzed. And you hear a story like that and you think, oh God, what a horrible fluke injury, except that later the guy who's the controller of New York City, Scott Stringer, was analyzing a bunch of claims that had been filed against the city, and he comes across lots of examples of people being hit by falling branches, and he's like what the hell is going on here?

Dan Heath:

And he digs around and come to find out that the park's budget had been trimmed a very years prior and they had but back on their pruning initiatives and you come to find out, oh gosh, so for the Parks Department they were able to pair back probably as a result of some city initiative to save money, and they save money which was good for them locally, but the net effect of that was a lot of those branches that would've been pruned to keep things healthy ended up falling on human beings and causing lawsuits. And so, Scott Stringer's associate told me "Whatever money we thought we were saving on the pruning side were ending up paying, and then some, on the lawsuit side."

Dan Heath:

And I think those systemic linkages are really difficult to see in big organizations. We're continually pushed to specialize. We're pushed into silos, pushed into functions, and all of a sudden you start to do these things that optimize locally. Like for the Parks Department treated independently from everybody else maybe this is a great idea but when you think about the system as a whole the impact of saving money in one spot was to take it out of a different pocket and then some.

Tom Ehrenfeld:

And you end up with point optimization instead of systems optimization.

Dan Heath:

Exactly right.

Tom Ehrenfeld:

I'm not going to make this a big call to lean, but I will point out that one of the reasons I invited you, and I'm again, just really delighted, and honored that you're here now, is that there's an enormous amount of overlap between what you're discussing and what I would consider some basic tenets of lean. In fact, one of our folks once consulted with a major hardware seller, and on their budget they had a separate line item for falling inventory.

Tom Ehrenfeld:

They stocked their stores so high, and maintained them so poorly, that they had a number that was built into the budget for injuries and worse that were the result of inventory tumbling off the top shelves.

Dan Heath:

I love that. It reminds me. I was talking to ... Have you interviewed Steve Spear? I imagine he's a-

Tom Ehrenfeld:

Yes, absolutely. Yes. He's a member of the LEI crowd.

Dan Heath:

Yeah. And for listeners who may not be familiar he wrote a great book called *The High-Velocity Edge* about learning organizations, lots of lean content in there. I interviewed him as part of this research and I remember he told me this story of going to Harvard Medical School and he asked the students what the normal rate of central line infections are. For non-healthcare listeners this is like when you need to put large volumes of fluids or medicine in a patient you basically put a catheter in their chest. It's called a central line.

Dan Heath:

And one consequence of that is if you don't do it with perfect hygiene, perfect procedure, you can introduce an infection. It's a really common problem, albeit a preventable one. And so, Steve Spear was asking them "What's the normal rate of central line infections?," and some of the students were up on the literature and so they were able to say, well, it's X for every thousand cases. And Spear's said "No, that's the rate today that's an average of people's experience but what is the normal rate? There's no such thing as a normal rate. There should be zero central line infections."

Dan Heath:

It's like the fact that something happens doesn't mean we should continue to allow it to happen, which is your story about the falling inventory line item. It's like the fact that we've done something stupid and allowed our inventory to hurt people it doesn't make it wise for us to budget for that in the future. What's wise is to say, hey, the appropriate rate of customer falling inventory injuries is zero just as the appropriate desirable rate of central line infection errors are zero.

Dan Heath:

I didn't write about this in the book but I wish I had because he had this beautiful quote. He said that "The instinct to change is often driven by an insufferable frustration with the status quo." And I think that's true of so many different areas including healthcare. A lot of the people who started the quality work that led to a dramatic reduction in central line infections and other kinds of errors were people who just were absolutely fed up with the idea that we're accepting that, oh well, maybe one in 100 patients gets a central line infection, and that's just the way it is. Healthcare's a tough business. And they said, no, even one is too many, by the way.

Dan Heath:

I went on a little tangent there but I can't remember what the original question was. I just started thinking about Spear.

Tom Ehrenfeld:

It's great. There's a lot of stuff to cover but I'm just going to jump ahead to one where you talk about something you call upstream witchcraft, basically stories of ways that folks found points of leverage, the right place to intervene in order to improve future outcomes. And in fact, I'm going to quote your research and use an example from another Heath Brothers book called *Decisive*.

Dan Heath:

Oh, nice.

Tom Ehrenfeld:

And I'd say the story of Van Halen and the M&Ms is just a perfect example of what you're calling upstream witchcraft, what lean and Toyota might call poka-yoke, which is idiot-proofing. It has to do with building in mechanisms before accidents or mistakes happen. And the Toyota example I'd share is a string on their automated looms because before being a car manufacturer Toyota was a textiles manufacturer.

Dan Heath:

No kidding. I didn't know that.

Tom Ehrenfeld:

Yeah. And they adopted some of the ideas and principles from that when they became a car maker. And it was a string that would break when the loom was ... Oh my God, now that I'm under pressure. It basically was automating the awareness of a critical failure, and alerting people in advance, so it's a long way up.

Dan Heath:

We've got to tell the Van Halen story.

Tom Ehrenfeld:

Please, go ahead.

Dan Heath:

You just teased that but you can't leave people hanging.

Tom Ehrenfeld:

Tell me.

Dan Heath:

If you tell me there's a Van Halen story on a podcast it's got to be told. That's just a rule.

Tom Ehrenfeld:

Give us some context too, sorry.

Dan Heath:

Yeah, I will.

Tom Ehrenfeld:

Okay, please.

Dan Heath:

So David Lee Roth, of course the lead singer of Van Halen in the only era that mattered, the late '70s, early '80s. This is during the Running with the Devil, Dance the Night Away, Jump, Panama, Hot for Teacher era.

Tom Ehrenfeld:

Can you name any of their songs?

Dan Heath:

I'm a master, and I'm a David Lee Roth aficionado, the Sammy Hagar era is of no concern to me. In any case, now that I've started a fight among your listeners.

Tom Ehrenfeld:

No, just for the benefit of our listeners too, Dan is a dead ringer for David Lee Roth.

Dan Heath:

That is it. Give or take about 80 points of good lucks in his direction, but we are both white men, so that's what we have in common.

Tom Ehrenfeld:

Sorry, last thing.

Dan Heath:

Yeah.

Tom Ehrenfeld:

That's from a guy whose doppelganger is Stanley Tucci.

Dan Heath:

Hey, I hadn't thought about that. You're right. I like that.

Tom Ehrenfeld:

Go ahead, Dan.

Dan Heath:

Can I finish this story, or not, Tom?

Tom Ehrenfeld:

Please.

Dan Heath:

Here we go. So Van Halen in those days was doing 100 road days a year, or a 100 shows a year, and they were known for bringing really sophisticated technical productions to even small markets. They would show up in Chapel Hill, North Carolina with multiple 18 wheelers full of gear, and because it was so sophisticated they published this technical writer, hundreds of pages, about how to set up the show for them, because of course they're just going to pull up drunk in the tour bus and be ready to play, right?

Dan Heath:

There was some danger associated with this because this was the same era when there're had been some public stages that collapsed for big shows, and artists were hurt. This was the same era when Michael Jackson got his hair caught on fire in that Pepsi commercial because some pyrotechnics weren't set up right. And so, the fear that Van Halen always had was how do we know if we're going to get to a show and some yahoos have set things up wrong, and that exposes us to risk of injury.

Dan Heath:

It turns out during this same era there was this rumor that spread about the band, this nasty rumor, that in their contract they required there to be a bowl of M&Ms to be put back stage with all of the brown ones picked out. And the way this rumor circulated, people were horrified by this, because they thought, gosh, what a diva-ish thing to do, like just because you're this rich famous rock band you're putting these provisions in and now some poor roadie backstage in Chapel Hill is going monotonously through the M&M bowl.

Dan Heath:

But it turns out this was a tripwire for Van Halen. The first thing they would do when they show up drunk in Chapel Hill is march back stage, look for the bowl of M&Ms, see if there was even one brown M&M in the bowl, and if there was, they would demand a technical line check of the entire production, because David Lee Roth said "Look, if they are willing to put the entire show at risk ..." I should've mentioned that one part of that M&M clause was that if any brown M&Ms were found in the bowl, the band would get paid, and the entire show would be forfeit.

Dan Heath:

So David Lee Roth said "If they're willing to risk the entire show over a bowl of M&Ms they clearly haven't read the technical rider, and they haven't paid sufficient attention to ensure that we stay safe." And I've always loved that vision of David Lee Roth as an operational genius, that he was smart enough to anticipate problems before they happen. And weirdly, Tom, I have to tell you just as a side part of this story. I mean, it's almost uncanny that you pick this out, because when I first started collecting research on what became this upstream book it was in 2009, and that story was the first item in the file. The first. No joke.

Dan Heath:

The parable that I told earlier was the second by the way. So it's weird that you called back to this thing that was actually part of the genesis of the project.

Tom Ehrenfeld:

It just brings to mind a very relevant quote from Spinal Tap.

Dan Heath:

We're covering all of the classics today.

Tom Ehrenfeld:

There's such a fine line between clever…and stupid.

Dan Heath:

Yes. And seeing.

Tom Ehrenfeld:

And seeing. So let me shift gears. There's a really interesting quote in the book on page 63 that says "The need for heroism is usually evidence of system failure." And basically you talk about how thinking upstream obviates the need for heroes. That heroism is anathema to good upstream thinking. Can you talk about that?

Dan Heath:

Absolutely. If you think about the way we conceive of heroes, our schema of heroes, we're thinking about people who rush in when there's an emergency, the firefighters who put out the flames in a burning building, or the lifeguard who jumps in the pool to save the drowning kid, or the policeman who come to fight off a burglar, or whatever, but what I want to point out is that an even better hero is someone not that saves the day but keeps the day from needing to be saved.

Dan Heath:

And we do this thing in organizations where we reward unnecessary heroism. The times in organizations when colleagues are staying up all night to finish the critical grant application, or to make sure the software release cycle goes off. We always hold these people up. I've had a couple conspiratorial readers email me and say they've been in organizations where they actually suspected that people created fires on purpose for the sake of being the one that was able to put it out and getting the glory.

Dan Heath:

And so, that's what I mean when I say the need for heroism is usually a sign of systems failure. I'll give you a tangible example. This book, I didn't end up writing about this, but the YMCA is obviously a hugely prevalent organization nationally. More people swim in YMCA pools than anywhere else, and they've done a lot of work over the years to prevent drownings. And if you think about what that work looks like it's real boring incremental stuff. It's you put the lifeguard's chair a little close to the pool to ensure that there's no visual blind spots, and you teach them techniques of scanning the pool so that they scan the entire pool every 10 seconds.

Dan Heath:

And you make sure they don't have access to their cellphone in the lifeguard chair just to make sure there's no distractions, and you rotate them so they don't get bored just like a TSA agent at the airport, and on, and on. And so, these process improvements that make all the difference. And then, if you ask, well, who's the hero to me there're a lot of heroes but none of those people ever got any glory. None of the process consultants, none of the trainers, none of the lifeguards that changed their behavior. The net effect of all that work is that nothing happens, but nothing happening is a wonderful thing.

Dan Heath:

I mean, everybody that's got a child should be delighted that nothing happens, but it's just this glory asymmetry that I think is a really interesting wrinkle in thinking about downstream versus upstream work.

Tom Ehrenfeld:

It's absolutely counterintuitive, and it cuts across the grain culturally that we just have a bias to celebrate heroic interventions, heroic individuals.

Dan Heath:

And I should be clear, I mean, look, if my child was drowning in the pool I would be deeply, deeply grateful for the person to come in and save the day. It's not that I'm being dismissive of the downstream heroes. It's just that what we should aspire to is a society where we need fewer of them because the systems work the way they were supposed to work. In we recorded this we're right in the middle of the coronavirus era, and so all of these themes are fresh in mind.

Tom Ehrenfeld:

I was holding back on that. Let's shift gears. How does upstream relate to the current days? You even have a chapter in the book about preparing for black sheep events. In the book you talk about preparing for Katrina, but I'm going to leave this open ended. Your book is essentially about ways to think about problems before they occur.

Tom Ehrenfeld:

Again, it's open ended, based on what you learned and reflected on from the book itself. What do you think about this situation today where it's late March, we're dealing with a crisis, a global pandemic, and I'm not going to work backwards and find blame points, because that's been done, but how does this stuff that you learned apply?

Dan Heath:

It's a great question. Let me zoom out, because I'm not a pandemic expert. If you're listening close to when we recorded this I don't have any tips about social distancing that are going to be relevant. What I think I can add is a perspective on how does something like this, this being a pandemic, which is entirely foreseeable. People that are experts in public health have been warning about pandemics for literally decades, how does this seem to catch us by surprise? And I think that maybe an analogous experience related to the preparations for Hurricane Katrina.

Dan Heath:

So I uncovered something in researching the book that I was never aware of before. I always just thought of Katrina being one of the most grotesque failures of government action in recent memory, and to be clear it still is, but I think you might look at it a little differently after hearing this. So back in 2004, so Katrina was in 2005, in 2004 one of the top executives in FEMA had hired a contractor to work on what he thought was the single most troubling natural disaster scenario on his radar, which was a serious hurricane in New Orleans, so exactly the right problem.

Dan Heath:

So this contractor which is called IEM they put together a simulation of a really bad hurricane. They called it Hurricane Pam, and they assembled in 2004 all the right parties to go through this simulation and figure out how would we respond, how would we collaborate, what kind of supplies would we need, where would we get them. I mean, they had all the right state agencies. They had the federal agencies. They had the city people. They had politicians. They had academics. It was a beautifully designed exercise that really surfaced a lot of the things that they would need to envision for the emergency when and if it came, if at that time. Of course, it came in real life a year later.

Dan Heath:

So this was the first in what was planned to be a series of planning slash simulation exercises to get them ready for the big one. What happened was after that first Hurricane Pam simulation FEMA apparently balked at paying travel costs for the remaining regiment of the training simulations. The cost were estimated to be about $15,000 for employees. A year later Katrina happens and the Federal Government went on to spend more than 62 billion dollars in supplemental spending for rebuilding the Gulf Coast.

Dan Heath:

And there's something about that story that just says it all, right? That $15,000 was balked at for a problem that would eventually cost us 62 billion. And look, it's not that FEMA could have prevented Hurricane Katrina. There's no preventing a hurricane, at least at this point, but it says something about ... Back to this idea of asymmetry between downstream and upstream, when something bad happens it demands action. I mean, there was no one in the government that was saying let's be careful how we act after Katrina. Everybody wanted to help. Everybody wanted to rebuild. Spend, spend, spend. Money is no object. No one was watching the dollars at that point.

Lean Enterprise Institute

Dan Heath:

But beforehand, it's like all of these things become discretionary. Well, should we be spending on these simulations, and there hasn't been a catastrophic hurricane in New Orleans in many years. I mean, don't we have other priorities, and is it worth $15,000. And this is something that surprised me about this upstream versus downstream tension is that downstream more tends to be demanded, and even obligated. When someone shows up in the ER and they need heart surgery there's no discussion of whether to do it. When a toddler soils themselves there's no discussion of whether to change the diaper. Downstream action is obliged, but upstream action despite how big the stakes are is often voluntary. It's often optional in a weird way.

Dan Heath:

I mean, it requires someone to step up and say, by God, we're doing this. That didn't happen with Katrina, and it didn't happen with preparations for pandemics. I mean, it's not that nothing happened. We've been building in public health better and better surveillance systems, better communication systems for many decades, but it's very, very clear, I mean, if you ask the top experts did you have the things that you thought were most important to prepare us for this moment? Did you have funding to make sure those things were working, and operational, and tested the answer's going to be no.

Dan Heath:

Why? The same reason FEMA said no to $15,000 because there was always something more urgent at the moment that seemed to require downstream action, and that starved us of the attention we needed to prevent what we're enduring right now with the coronavirus.

Tom Ehrenfeld:

Yeah, and I think it's hard to prioritize actions for threats, for people to decide which tangible preventative measures to take.

Dan Heath:

I think it's ambiguous and I think it's complex, but I don't think it's unsolvable. A telling part of that Katrina story to me is this top administrator at FEMA was asked "Hey, what's the thing that keeps you up at night?" and he said "A catastrophic hurricane in New Orleans." You know what I mean? There were lots of threats. It was complex. It was ambiguous. But he was still able to triage and say of all the scenarios the one that really bugs me because of the natural geography of New Orleans is this, and he was dead on right.

Dan Heath:

And I think the same thing is true, I mean, there's lots of talk of existential threats to humanity ranging, from asteroid collisions to AI taking over the world, to pandemics, but I think if you canvassed the world's top 100 public health leaders and you said "What's the number one threat we should be preparing for?" My guess is pandemics would've been one or two on that list. So I don't think the difficulty of forecasting is a good excuse for the lack of preparation.

Tom Ehrenfeld:

Yeah. Let me ask you to comment on what ... It's a little anticlimactic but there was one interesting quote in the book from Maureen Bisognano from the local Institute for Healthcare. IHI. I forget.

Dan Heath:

Institute for Healthcare Improvement, yeah.

Tom Ehrenfeld:

Improvement. Founded by the way by Don Berwick.

Dan Heath:

Yeah.

Tom Ehrenfeld:

Yet another lean zealot who helped Jim Womack set up the Lean Enterprise Institute.

Dan Heath:

Oh, is that right? I didn't know that.

Tom Ehrenfeld:

Yep.

Dan Heath:

Don Berwick, I consider him such a hero. Talk about an upstream hero. Earlier, we were talking about central line infections, and errors, and I feel like that's one of Don Berwick's greatest legacies is the fact that he and the IHI shook awake the healthcare system in this country to the danger of preventable errors. At one time, and it still may be sure, I'm not sure. At one time preventable errors were one of 10 largest sources of deaths in the US, I mean, that's how big of a deal this was.

Dan Heath:

And the IHI for many, many years has just relentlessly gotten people focused on quality and gotten people to reject this idea of just because something happens doesn't mean it's normal. One central line infection is one too many. But anyway, sorry, go ahead with your question, Tom.

Tom Ehrenfeld:

Just one interesting ... It reminds me of Ralph Nader. Whatever your opinion of him I've read that the number of deaths during the time of the Vietnam War by people who would've survived if they had seat belts exceeded the number of people who died in the Vietnam War.

Dan Heath:

I would believe that, yeah.

Tom Ehrenfeld:

I'm just saying the material impact of that type of upstream thinking it has a big impact. You quote Maureen about “being impatient for action, but patient for outcomes.”

Dan Heath:

Mm-hmm (affirmative).

Tom Ehrenfeld:

Can you explain what she means by that?

Dan Heath:

I think what she's trying to say is when we get in really thorny complex problems, for instance, youth asthma. So the healthcare system that we got today is very well-equipped, and very efficient at handling asthma downstream. Your kid comes in with asthma, we've got all the tools and medications, and behavioral processes you need to manage that and to reduce your symptoms. That's what we're great at. If we start talking about going upstream and preventing asthma, which in many cases is preventable, then it gets very, very messy, because then you're talking about issues of hunger, and subpar housing, and lack of access to healthcare, and the ability to monitor a patient over time reliably.

Dan Heath:

That feels uncomfortable to people in the healthcare system. They were trained to diagnose and treat, not to worry about what kind of housing their patients are coming from. So I think what Maureen is trying to say is when you get involved in an effort like trying to prevent asthma, or trying to prevent homelessness, or trying to prevent school shootings, we need to have the hunger to act. We need to be doing something, but the systems are so complicated, and the causation is so uncertain or unproven that it may take a long time for us to figure out what the right leverage points are.

Dan Heath:

And so, when she says "Be impatient for action but patient for outcomes" I think she's just cautioning a kind of resilience that we need to keep our eye on the good that we're trying to do for the world, and we need to accept that the world's very, very complicated, but we also can't allow that to slip over into a feeling of helplessness that we owe the world action. And so, I thought that was a very powerful sentiment. I've had some people push back on me, by the way, for that idea, and I think probably many of the listeners that do great lean work might push back because I think lean is a set of tools that often can provide quick payoff.

Dan Heath:

Even in listening to some of your podcasts I was struck by people talking about some of these quick wins that they got that bought enthusiasm for lean thinking. And so, I think it just varies. It varies on what weight class of problem are we tackling, and I think the problems in the highest, their heaviest weight class, probably require more patience in some of the more operational challenges.

Tom Ehrenfeld:

Yeah. And as you show in the book often the outcomes are iterative, that it's hard to diagnose ahead of time the metabolism of change that will take place, and sometimes focusing on micro, not macro, cumulatively forms bigger, broader, deeper change in the right direction.

Dan Heath:

Yeah. You're bringing up what to me was one of the most interesting tensions that emerged from this research and that is on one hand as we talked about earlier to fix problems a lot of times you've got to fix systems, and that's really complicated in high level systems redesign. On the other hand, again and again in some of the success stories that I discovered they were using an approach that looks at first glance very different than systems change.

Dan Heath:

Let me sketch out a quick story so I can show you what I mean. There's a story in the book about Rockford, Illinois, the second biggest city in Illinois behind Chicago. There was a mayor a couple years ago named Larry Morrissey who was in the ninth year. I think he was in his third term, ninth year in office. He'd been working on homelessness the whole time. So Rockford's one of these places that had a manufacturing base and then the manufacturing businesses shut down, and so there was a lot of challenges in the community, a lot of veteran homelessness in particular.

Dan Heath:

He had been working on it for nine years. No real effect. They'd just been treading water at best. Within 10 months of something happening Rockford became the first city in the US to eliminate the problem of veteran homelessness. So the question is what was the thing that happened? And what happened was they encountered a movement that is reframing the way cities handle homelessness. And I'll just give you a quick sketch of the changes that are involved.

Dan Heath:

The first change is as with many problems both inside organizations and across organizations, homelessness is plagued by silos. So you look in any particular community there's a dozen different organizations, or even systems, that have some stake in the problem. There's the VA. There're homeless shelters. There're social service agencies. There's the healthcare system. There's the police. And all these people touch homelessness as a problem. They all have a stake in it, but there's no clear coordination behind it. So the first change that happened was all of these constituents were brought together for the first time to really focus on the issue of homelessness.

Dan Heath:

But the second part I think is perhaps even more profound, and that was a change of what they were being asked to do. You get 12 different organizations or systems reflected in the same room you're going to very quickly enter a pontification fest. If you ask them how can we fix homelessness I mean that's a recipe for two hours of fruitless discussion. What they did was they started keeping a census, a real time census of all the homeless people in Rockford. I mean, I saw this thing, it was a Google Doc, and it was like number one was Steve, and number two was Fred, and number three was Michael.

Dan Heath:

And as part of this census they monitored what their circumstances were, what their history was, their current location, how vulnerable they were to being seriously hurt. Many of them have health conditions. And when these people would get together across these different organizations what they were talking about was going name by name through the list. So the discussions would be, okay, Steve, who saw him this week? Well, we saw him. He was still in his tent under the bridge, but he's been coming into the homeless shelter to get lunch every day. Housing, okay, housing folks. How long will it be until we have some housing for Steve? We've got a unit. It just opened up yesterday. Okay, who's going to make the approach to Steve and make sure he's ready to be housed?

Dan Heath:

That was the nature of the conversation. Notice how concrete that is. You're not talking about homelessness as an issue, or as a political challenge, you're talking about what can we do for Steve this week, and that was the engine of how they managed person by person, situation by situation, to eliminate the population of veteran homeless. They were all housed within that first year.

Dan Heath:

And so, back to that tension I was highlighting I think that macro change often starts with micro change, that we can't really figure out how to help 1000 people, or a million, until we can help one, until we can help two, until we can help three, and I think what these groups figured out was you don't know what the leverage points are in the system until you've solved for one, and solved for two, because what you start to understand in dealing with these on a case by case basis is where the dropped batons are, and where the systemic issues are.

Dan Heath:

And so, it's almost like getting that close to a problem, and I know all the lean light bulbs are going off right now, you're like we've been saying this for years, and I get it. Getting that close to the problem opens up doors that you wouldn't of spotted otherwise.

Tom Ehrenfeld:

Yeah. In breaking it down, what is the problem we're trying to solve, and then framing that in an improvable way.

Dan Heath:

Mm-hmm (affirmative).

Tom Ehrenfeld:

That makes a ton of sense. Let me ask one final question because you've been really generous with your time. I'm going to point out to our listeners that you've written a number of really excellent books prior to this with your brother, Chip, called *Decisive* about making better decisions, a book called *Switch* about how to switch, and let's harken back to your first one, *Made to Stick*, which was just a phenomenon, and a book that successfully practiced what it preached, and managed to capture the attention of a large number of people and communicate ideas in a very pithy and let's say it, sticky way.

Dan Heath:

And this is how we met of course. Just a little behind the scenes talk for the listener, Tom and I met for a bootcamp hosted by a business book retailer called 1800-CEO-READ, since rebranded to Porchlight Books. And so, it was like a collection of nervous business authors that all got together.

Tom Ehrenfeld:

That's a little redundant.

Dan Heath:

Yeah, true. Business authors all together in the same room, and Jack Covert, and Todd Sattersten, his name slipped my mind for four seconds, were hosting us and teaching us what this was going to be like, and how do you publish a book, how do you market a book, how do you think about speaking engagements. It was such a wonderful impromptu community. I still remember it fondly 12 years later or whatever it is. And anyway, you were there talking about writing.

Tom Ehrenfeld:

Yeah. What do I know? What would you apply for me to stick to this book. In other words, what are the kind of ideas about sharing ideas that you're trying to practice with *Upstream*?

Dan Heath:

I'll share my dirty secret about this book which is I think that just the basic language of upstream downstream is one of my top goals in publishing this book, because I think it simplifies a bunch of stuff that can be very, very complicated. There are these micro geek-er systems that all have their own jargon, among them lean and six sigma, and quality improvement, and continuous improvement, and everybody uses different labels, and different exotic terms, and I think that the heart of it is really just to contrast reaction mode, which is what I'm calling downstream, and prevention mode, which is upstream.

Dan Heath:

If people get nothing else from my book then the ability to go to the boss or the person that has the budget strings, and just be able to use that schema to make things a little bit simpler, a little bit easier to understand, that's a first pass victory for me. So that's one way I would link that first book about sticky ideas to this one is sometimes words can have a disproportionate importance that if we can share a common language about change, or a common language about what improvement looks like, that can be surprisingly important, just to talk about things in the same way, and to view them through the same lens.

Dan Heath:

And so, I'm hoping that this upstream versus downstream distinction becomes a kind of leg up, or a lot of the people like all of you listening to this podcast right now who are already believers in this stuff, to broaden your alliances, and to broaden the base of people who think this work is critical.

Tom Ehrenfeld:

That's fantastic. So talking to Dan Heath whose new book is titled *Upstream: The Quest to Solve Problems Before They Happen*. Dan, before I let you go tell us where people can read more about your book, and download your wonderful resources, the study guide…

Dan Heath:

Yes. So you can go to Upstreambook.com, and then there's some resources available on the site that are free. You just have to sign up for our newsletter that we lazily publish about three times a year, but it's all there for the taking.

Tom Ehrenfeld:

Okay. Thank you very much, sir.

Dan Heath:

Thanks, Tom. It was fun.

Dan Heath:

I was just talking to Tom offline and I was thinking for anybody who has listened to all 50 minutes or whatever of this conversation you are my people. You're who I wrote this book for, and I would love to get a copy in your hands, and I'm even willing to put my money where my mouth is. So here's the offer, the first 100 people who hear this and email me at Dan@HeathBrothers.com, that's Heath like Heath Ledger, H-E-A-T-H, with your mailing address, an asterisk here, I can only do US addresses. I know there's people from abroad that are going to hate me for saying that. I'm sorry. It's just a function of my books that come from my American publisher, and the expense, and blah, blah, blah.

Dan Heath:

So I'm sorry to those outside the US, but if you have a US address that I can mail to send it to me at Dan@HeathBrothers.com. The first 100 people to reply will get a free copy of Upstream, no strings. I hope you enjoy that offer.

Tom Ehrenfeld:

Thanks, Dan. This is the brown M&M test as well.

Dan Heath:

Exactly right. See how many people nodded off at minute 28.

Tom Ehrenfeld:

Okay.