TRANSCRIPT Episode 20 – Brad Bacigalupi

Jonathan Bench: Today I'm joined by Brad Bacigalupi, founder of Red Wolf Technology. Brad was born and raised in central California. He served a mission for the Church of Jesus Christ of Latter-day Saints in northern Italy, earned a BA in Italian with a manufacturing minor, and an MS in manufacturing engineering from Brigham Young University.

A serial entrepreneur, he has founded, scaled, and sold companies; holds multiple patents; won multiple industry awards; and speaks other Romance languages. Brad has lived abroad in Malaysia and Italy, traveled to over 50 countries, and pioneered technology now used in one and a half million retail stores and on more than 2 billion phones worldwide. He loves exploring the world with his wife and three daughters. Brad, this is going to be a great conversation. I'm very excited. Thank you for joining me.

Brad Bacigalupi: Yeah, great to be here. Thank you, Jonathan.

Jonathan: So let's start with the origin story. I always like to start here. We got a little bit of it there, but give me a flavor for how you ended up going to Italy and then deciding that China was the place to go. That seems like a big step, and maybe there are things in between that are important for us to understand.

Brad: Yeah, yeah, yeah. So are you talking even as early back when I was 19—how I decided to go to Italy?

Jonathan: Yeah. Yeah.

Brad: That wasn't a choice of mine. That was a choice of church leadership. So I consider myself lucky to have gone to Italy, the cradle of civilization, that period. But I think going to China was—anybody in manufacturing or high tech—it's kind of a requirement, a rite of passage.

In fact, my first time to China was in college, kind of the traditional backpacker college kid thing. And I had a company—I was doing some work, building another startup at the time. This is early internet where Alibaba didn't exist. And you kind of… I can't even remember how you find these suppliers, but I remember going to Hong Kong for the first time with my laptop and a MapQuest.

And I guess as a young scrub college kid, I figured out—

Jonathan: Was your MapQuest printed at the time? Was this printed MapQuest, or was it on your computer still?

Brad: No, I had a Dell laptop with an extra battery I could smack in the bottom when things were getting low, and you had to find an internet café. So you land in the airport, try to find where they have Wi-Fi and the internet.

Maybe if they have print, you print it out knowing you're gonna be offline. And so I remember going to Mong Kok for the first time in the early 2000s with my printed-out MapQuest—or my laptop—to my room that was as long as I could lay down.

And then doing my work in Hong Kong and then going to mainland China for the first time before Shenzhen was blowing up. So… I don't know, does that kind of answer your question?

Jonathan: What years—yeah, what years are we talking? Give me—orient me a bit—what years are we talking when you were in Mong Kok? Because I was in Hong Kong in summer of 2001.

Brad: So this had to be summer 2005, after I'd gone to—you come out of my mission Italy, right after I'd come back out of my mission in Italy—and was already kind of doing sourcing work in China in 2005, 2006. So yeah, right in there.

Jonathan: Okay, that's really helpful because I was a missionary in Hong Kong 2001 to 2003. And then I went to Sichuan province in 04 to 05. So we would have been in the same places at slightly different times.

But I have good memories of what China looked like at that time, including Shenzhen. I remember hiking up the closest mountain I could get to—it's called Tseng Tsui—at the top of the north part of Hong Kong, and looking out and seeing Shenzhen laid out.

And even then, it was like you said: it's not the manufacturing hub it is now, but it was still really impressive even back in the early 2000s.

Brad: Yeah. No, in fact, I remember—so I kind of had a little mini reunion. I was in Hong Kong and Shenzhen four months ago in October.

And I remember I checked into my hotel and I'm like, "Where am I? I don't recognize this place." And I go through some of my photos and I'd been in that exact area 10 years before, but it was totally unrecognizable. Like the trees are grown and the city—new buildings are popping up.

So it was just kind of, for me, a 10-year anniversary of like, the pace of things is just wild. I think Shenzhen itself—you kind of sense is maybe kind of cooling off—but it's still… it's kind of maturing. The trees are bigger and things work better. The buildings aren't crumbling like they used to, but yeah—they stood the test of time.

Jonathan: And so those early trips to China—were you working for yourself? Were you working for others?

Brad: I mean, I guess in the end I'm always working for myself, right? So yeah, at that time it was for a project I was working on for me. And then, yeah—kind of personal research, finding an excuse to go to China for little items that we were sourcing, and figuring it out.

Jonathan: Excellent. And through the years, have you always been—so I find a lot of people, and I have a lot of friends in the space, who turn into sourcing experts for a particular industry, or they have their core of clients and they kind of look after them. You've always been working on your own projects since the beginning?

Brad: I mean, I've had a handful of—you know, throughout college and in my professional life—early college was kind of client work or small personal projects. And then as I've kind of gone into more established businesses of my own, it's been my own business. So sourcing my own stuff, meeting with my own vendors.

Jonathan: I have a very distinct memory of being at BYU in the China wing and talking to one of my friends. We'd been missionaries together in Hong Kong. And he was into fashion, but he was showing me some of the things that he had gone and built.

And he said, "Well, we're building our own line of fashion clothes. We're sourcing it in China." And I had never really been exposed to entrepreneurs in my life. My parents were both teachers and I grew up in a small town, so I didn't have a big sampling experience.

And I was just amazed at the audacity of the idea of getting on a plane, going to somewhere like Shenzhen, and looking up potential partners for a business. It was something that was so foreign to me.

Now I live and breathe that kind of stuff, but back when I was in my early twenties, I just didn't know that people did that kind of thing. Did you have a model? Did you have mentors along the way? Or are you just the kind of guy who said, "I'm going to piece together every piece of this business I'm building"?

Brad: I think going into formative years, having lived—I came from a small, insular town in California. Went to Italy and thought, "Wow, the world is a really big, interesting place." And I was hanging out with interesting people, and I kind of caught the bug.

And so the widget—the thing that I was doing—was in some ways kind of secondary. I was kind of at that age just in it for the adventure to get out and see cool stuff. And this is pre-YouTube. We had to—I think this is when we were reading National Geographic or watching Discovery Channel to see the world.

And so, as a young kid making pretty good money as an independent guy, a flight to Hong Kong—if you don't have a mortgage or a car payment—pretty affordable as a scrub college kid. So I thought, "Heck yeah, this would be awesome."

So I caught the bug of international travel on my LDS mission and having done a little bit more travel. And usually I'd go with a friend or another college roommate, or a friend who had a similar interest.

I remember one of the guys I went with was a big FJ Cruiser guy. He had made all these plans and figured out how to do the CAD design for his hubs for FJ Cruisers that in the U.S. cost 300 bucks because the FJ Cruiser guys loved it.

And he could find a factory in China that would make the mold and do it for some silly number like 12 dollars a hub. And so he thought he could build a whole business out of just selling FJ Cruiser hubs.

And on that trip, I recall I was going there—I had a project for squeeze tubes and cosmetics. And so I went to this factory in the middle of nowhere. As a Western guy, to see what these factories look like—20 years ago, even today—is totally mind-altering when you think about people living on site, eating on site, making that squeeze tube you had for Neosporin, for example. Like where things actually come from was super interesting for me. So yeah, that's kind of a little bit of background on the early days going to China.

Jonathan: I love that. We have some time toward the end—I'd love to hear more of your stories about what hit you differently when you were visiting factories in China. It's a place with a scale unlike anything else and such transformation in the last 20, 30 years.

So let's pivot to ProtectionPro. You built and scaled global systems—165 countries. So from your perspective, how have changes in China and Hong Kong's trade environment reshaped the way global manufacturing and retail have happened in the past decade, let's say?

I mean, it's been—every year in China something changes. There's never been a stasis point in China's last 30 years of history. A lot of it's built on this global manufacturing. So what have you seen—monumental changes in the way that you've done business there and others?

Brad: Yeah. There's a big convergence of a lot of things. Big picture, I think the world has—particularly in peak globalism—the world became a lot smaller and the playing field became a lot flatter.

And I think we're on the end of peak globalism. The early 2000s to 2019—it kind of felt like was peak globalism. Trade was super easy, the world was super open.

And the things that created that—one was the internet. Alibaba appears and suddenly... early days, you had to get on a boat, sail to China, get the spices, do your deals, and bring them back.

You had to go to China to learn about it. And then we get into the jet—we're flying there. Certain people who had means could go there, do the deals, and bring the products back.

But then with Alibaba, factories and vendors are all pushing to get their products up there. And without even going on the trip, with the internet you can go and see a staggering number of vendors.

Then you look at other things the internet brought: these Chinese workers—the business people, the salespeople—suddenly are doing mass education in English. So now they're mobile-first, they have internet, they can talk to anybody in any country in the common language of English.

What's changed a lot for me is in the early days, there are a lot of retailers and customers that are saying, "What value is a distributor adding to me when I can talk to the factory directly?"

"How does that erode my margins? How does a Western company position my brand or add value? If everybody can already see the factories I'm working with, how do I collaborate with factories differently?"

So in the past three to five years we're seeing a lot—distributors are dying. We're seeing Chinese companies buy Western companies, fill it with Chinese leadership or a blend. The Chinese have new resources to make executive teams, and they have very close ties directly with the factories.

So brands have to really, really focus on what they do different if they want to thrive in the West or have some special relationship when everything is so open.

Jonathan: I remember being in Hong Kong in 03, and the internet—we'd go to people's apartments and we'd see these bundles of wires because it's all concrete structures. So bundles of wires everywhere.

Brad: Yeah.

Jonathan: And the internet was hardwired in. When I went to mainland China in 04, 05, same thing—hardwired internet. I remember thinking at one point—I'm still an ignorant 20-something year old at this time—I'm thinking it's going to take forever for them to build out their broadband internet. It's going to take forever.

And I had no inkling that just a few years later Shanghai would be able to put up towers everywhere and spread broadband Wi-Fi—boom. And that they leapfrogged so fast.

I don't think a lot of China even went through that part of the industrialization process where we had to, with our larger distances and more spread-out population. So that was really interesting.

And I remember being at BYU and then in business school through the early 2000s and the early 2010s and reading articles about how commerce was changing and the way that they connected—streaming.

Not like we didn't have streaming in the U.S. My dad still buys stuff on the Home Shopping Network. He's almost 90 years old—that's his streamer. Those were the original streamers.

But the way that anybody in China with a cell phone and a good internet connection could then turn into an instant channel to get directly to consumers—it's something that for whatever reason in the U.S., maybe Home Shopping Network did us all wrong, and we got sick of thinking about buying things on TV and being directly talked to.

Brad: Yeah.

Jonathan: Like, stay out of my way. I want to make the decisions. I don't want to be sold in real time. So it's been very interesting watching from afar as China's progression and especially the internet adoption changed the way that they consumed. It's a different culture and different methods.

Brad: Yeah. Yeah, I agree 100%. I'm thinking about Home Shopping Network—just the format. Like I think today our generation, we don't have the attention span to wait for the close. You're like, "I already want to buy it. How do I buy it? I need it now." Amazon has trained us so quickly.

You're telling me I've got to watch 20 minutes of pitch before I can pick up the phone and call. Yeah—crazy.

Jonathan: So tell us a little bit about Red Wolf. I'd like to get into that. Tell me how long you've been in business, what you do, what you're doing very well right now, and maybe even some of the challenges and opportunities you're seeing in your own industry.

Brad: Yeah. So it probably helps if I take even a step back before Red Wolf, because that helps set the table for why I'm here and what we do.

So you mentioned ProtectionPro. That was, of the many startups I've done, the one that went the biggest. And we were the first on-demand screen protector machine in the world.

We launched with Best Buy Canada. I'd have to look at my PowerPoints—my sales PowerPoints—remember the number, but it was right when I was having my first kid. I remember that. So yeah, that puts us about 11 years ago, 12 years ago.

And what we saw was at that time the cell phone industry was still emerging. Like we still had billions of people who didn't have a smartphone. So the smartphone industry was going like this. And the early players were Samsung and Apple. But then the market started to fill in all the other gaps beyond flagship high premium phones. And we saw dozens of tier-two economy phones entering the market—Oppo, Vivo, Xiaomi, Huawei, Motorola, Kyocera, right?

And so in the early days, it was very easy—like an Apple Store—it's very easy for Apple… they make great money off the handset, but they make really, really great money off the accessory sales. We often compare it to a movie theater making all the money on the popcorn. They're not in the movie business—they're in the popcorn business.

Jonathan: Sure.

Brad: And so a lot of cell phone shops aren't in the cell phone business—they're in the accessories business because the margins are so crazy. But retailers were losing huge opportunities because people would walk into the store with a Huawei phone or an LG phone, and they had nothing to offer them.

And so we—again, this is part of the advent of the internet, part of the advent of mobile computing and mobile apps—we saw that there were some fairly standard off-the-shelf equipment that was digital that we could put in a store.

Being here in Utah, there's a very big scrapbooking industry, right? And scrapbookers use these little machines that cut out stickers and photos and do things. It's a pretty powerful little digital machine.

And what we did is we wrote some code that went with one of these types of machines that would allow a retail store on site to make a screen protector for any phone—period. So it would cut—if you had an iPhone 3—it would cut a little square in the exact shape of an iPhone and put a screen protector on.

And again, we were the first in the world. We presented this concept to Best Buy, and they said, "We love it." They could see—it was very easy math for them. This would add tens of millions of brand-new revenue to them, and there was very little downside from inventory obsolescence. They only sold what they made—very lean.

So yeah, we built it. We were using, in the old days, an old Acer tablet that we would bolt to this machine. And then stores started coming online with Wi-Fi, and we could in real time add—Apple would release a new phone, we would add it to the library, and the stores—while they were waiting for inventory to arrive from China on the slow boat—they could now make accessories in real time with our technology. So word got out and we got acquired super fast by one of our suppliers. And so I had a war chest to go and build out the global sales and distribution.

So in that period, I was traveling all over the world. I didn't have any kids at the time. I was married, but it made it easier for me to start building out the global network. And we grew it up to 30,000 stores, 160 countries, and it was a great ride and got to see a lot of interesting cultures and people. And so I did the corporate thing for a while. We were just joking about the Dilbert—that was kind of my outlet for frustration, that kind of dry office humor—because the company that acquired us was a Japanese multinational, and you don't get more corporate than white shirt, business tie, suit Japanese stuff.

And so learned a lot and decided the pace of Japanese-style business was frankly holding us back. The Chinese were starting to out-innovate us—the first movers. And I thought, "It's time to do it again, but do it better."

So all of that to say: the thesis of Red Wolf Technology is that there's a whole world of retail stores that need on-demand solutions.

So we have a screen protector offering that's newer, better, improved. And then again, doing the first-mover advantage, we built a 3D printing platform that allows retail stores to 3D print phone cases. But we're seeing a lot of other really cool applications of how stores are using it. For example, we work with a lot of cell phone repair shops. And every country all over the world, cell phone repair is a huge industry. People are breaking their phones. They take it into the shop and it needs to be repaired. Cell phone cases—3D printed on site—is an easy add-on. Like, "You just broke your phone. Let's put a phone case on it." They print it on site.

But we're also seeing cell phone repair shops printing repair tools that are part of our library. So you need a special pick to open a cell phone before you swap out the battery or put a new screen on it. And usually they have to order it from China or order it from their distributor. They're like, "No, no—just make it right there." Made in South Africa, made in Guatemala—made right there on site with digital 3D printing technology.

So yeah—I love what we're doing. We're Red Wolf. We're doing the same thing we did previously, but bigger, better, and broader—embracing the newest digital technology, which right now is 3D printing.

So yeah—hope that helps paint the picture where we're at.

Jonathan: That's excellent. Tell me what you're printing right now in the background.

Brad: Right now I am printing for my niece. I was a bad uncle and I told her I would have a gift for Christmas. She wanted this Ben & Jerry's cup that you put in with a handle and a thing for your spoon. And so I'm behind. And so we're printing a late Christmas present behind me.

So most of the time this printer is doing something either work-related or not, but it's kind of a compulsion I have to always be making something.

Jonathan: It's the hum. It's like when I have the white noise machine in my office so I can stay focused. You need the white noise of the printer moving.

Brad: Yeah, I need a good dose of microplastics in the air before I can start—like the smell of coffee or the smell of melting plastic.

Jonathan: Love it. So let's talk about innovation because you touched on that with this last piece we were talking about. How do you—this is a big question—everyone's wondering: how innovative is China? Can the U.S. stay competitive?

And of course you have the comparison of having worked and traveled in many other countries too. So maybe let's start with the initial question of: who do you think innovates well, or what makes a great innovation economy work?

Kind of the mindset within a community or within a country.

Brad: Yeah.

Jonathan: It's a big question.

Brad: I mean, if I take kind of broad swaths—call it stereotypes, call it trends or culture—but the Chinese youth are very driven, very well-educated, and I think are playing catch-up on some of the more Western entrepreneurial mindset things—how to start a business. I think to the average Chinese kid, it's kind of scary, but they're figuring it out.

So I think the hard sciences—they've got loads of really great engineers. However, culturally, there's a lot of big gaps. For an average Chinese person to come to Europe or come to Latin America or come to America would be really, really hard—to understand the humor and the culture of their products or their software and the user interface. All that to say is they're getting way better. We use examples like DJI—in my space—they have become so dominant in the software, in the hardware.

Then you kind of say, what's left? Service. I mean, it's almost like the hardware is so good it doesn't need service. So they've almost eliminated some of the service aspect by how good the hardware and software is.

And so I think the most dynamic Chinese companies have learned to bring in Western executives—or Chinese people who have lived abroad—that can bring that back and say, "No, no—in Europe, it's important to sit down and have coffee. It's not just business." Or in Italy, you need to sit down and have some wine with the guy. So all of that to say: the Chinese economy is huge and the working class is very powerful.

However, I follow all this stuff pretty carefully out of interest for my industry and in general, but the thing I'm watching is we're starting to hit the demographic changes as people are aging out. So I don't know—it's a wild time to see what's going on. There are a lot of very impressive Chinese brands that have a lot of government support.

I think the West—we're okay, but we need to focus on… a lot's changing right now. How do we bring manufacturing back to the U.S. or to Europe or Latin America? Do we have the workforce to support it? We can't do it all. So what are we choosing? USA is focusing on defense, software, AI, digital manufacturing through robotics and automation.

So I don't know—it's a very interesting time to observe global trends in this stuff.

Jonathan: What do you think is going to happen next? It's another big question, but where do you see—from a manufacturing perspective—do you think the U.S. pulls this off? Do you think China reacts well and integrates a little more with the U.S. supply chain side? Or do you think China entrenches or focuses on a different part of the world? It's massive, I know.

Brad: Man, I know people say it's a bubble with AI, but I kind of fall back to: I think that's where it all begins right now going forward, because whoever is master of AI will master mass robotics, will master data computation, and have a new kind of superpower and guiding strategy. So I feel like that's why we're seeing such huge amounts of resource going to that most fundamental baseline.

And so you say, okay—and so we go back to microchips and we go back to energy, kind of. And we talk about the fundamentals: who's got the electrical infrastructure to support the AI that's driving the robots that are doing our full economy?

And so my opinion is that China's in a good spot from a standpoint of if they have to turn all of their manufacturing capability on their new middle class, there could probably be some retraction.

But then again, they've got a lot of people to feed. So I don't know. It'll be interesting to watch. I think USA is putting a huge emphasis on robotics. For example, in my small little world, I had my first long road trip with full self-driving.

And there's a few times throughout history where you're frankly kind of dumbfounded. I remember two years ago I had my first serious look at AI. I tried to have a conversation—talking to it in Italian—trying to catch it. And it nailed me. Like, it was perfect.

And I had that same feeling on this last road trip—on a full self-driving trip from Las Vegas back home. And the car drove flawlessly. And these are these times you're like, "Something big is happening. And then you compound that with all the geopolitical stuff going on in the world. And so all this is to say: I don't know, man. We're just holding onto our butts and kind of watching what goes on. Because you've got some linear things that we can account for, and then you get crazy stuff like pulling a president out of a country. Like, I can't believe the world we're in.

So I don't know, man. We're just kind of watching.

Jonathan: It's great. I had two really interesting data points come to me recently on AI. And they both kind of, in my brain, sit around the number 5%. So one person said that we are definitely no more than 5% along the AI growth curve right now. And I hadn't really thought about that.

Brad: Yeah. Yeah.

Jonathan: I'm like, okay, that's kind of staggering because I'm like you—about two years plus or minus into AI—and I lean in pretty hard at technology as well. So I feel like I'm not the super user, but I'm definitely in that upper echelon of people who are really leaning into AI.

Brad: Yeah.

Jonathan: The other is that in 2025, I can't remember which big group did a study on this, but of all the funds deployed in the AI use cases in 2025, only 5% of those funds were actually effective in moving the needle at those corporations and the companies that adopted AI.

So even though companies were throwing money at AI, it was a big sink in 2025. And so 2026 is going to be a lot different as to what's going to be required of teams that are adopting AI. Before it was kind of like, "Oh yes—look, we just made this expenditure on AI." But the actual internal adoption and training is so very low for most companies still.

So I have to remind myself of this whenever I'm talking technology with anyone: it's possible to be five or ten years into a new industry and have it still be the very early years of that industry. Even though for us, we entrepreneurs—we live day to day. We have to get things moving all the time and thinking, "How can I still be in the early phase of this technology adoption when I feel like it's all I've been living and breathing for a couple of years?"

But that's a startup life, right? We're all living this startup life together.

Brad: Yeah. Yeah. I agree. There's going to be some industries that have some lag, but think about what's happened for you and I in the last 20 years. Looking forward to the next 20 years—I don't know what to say. It'll be exciting.

Jonathan: Yeah. Okay. So last question. This is one I didn't prepare you for. If you were not doing the job you have now—if you're not running Red Wolf—you're not engaged in this—what would you be doing with your life?

If you had to do it over right now, you could go in any industry, anywhere, doing anything in the world—what would you be into right now?

Brad: I mean, if I had a do-over, I would just put all my money in crypto. Yeah.

Jonathan: We could have—2012, 2015 prices—we could—

Brad: Yeah. Would have put about $100 in crypto and then I'd be done. No, I mean—would I need to be working, or would I just—would I be good?

Jonathan: Yeah, let's say either. Let's say you got to answer both ways. So first is: you don't have to work—what would you be doing? Or you do have to work—what would you be doing?

Brad: Yeah. I mean, in my DNA, there's a requirement to build. And so I would be building something else if I needed to work.

And then if I didn't need to work, I have no shortage of curiosity. And so I would probably be enjoying life in Southeast Asia—in Malaysia, Indonesia. I love these kind of interesting cultural crossroads that have short access to cool places.

Or I'd be in Europe—Italy as a home base. Or I'd just have a house in Montana and just enjoy either very high adventure or no stress—but I don't know, maybe a little bit of both.

Jonathan: Or a way to flip-flop. You find your inverse and you swap time in Asia with time in a ranch in Montana.

Brad: Both. Yeah, exactly. So I'm pretty happy with that.

Jonathan: Excellent. Well, Brad, this has been a lot of fun. I really was looking forward to this, and thank you so much for taking the time. I loved hearing more of your story and perspective. I get smarter every time I have one of these conversations, so I really appreciate it.

Brad: Yeah, thank you. Good to see you.

Jonathan: You too.