

## [Transcript] Founders / #300 James Dyson (Against the Odds)

So in the episode you're about to hear, you're going to hear James Dyson describe the very primitive environment in which he had to build 5127 prototypes of his vacuum cleaner. He didn't have plumbing, didn't have electricity, didn't have internet. And slowly over time and with much difficulty, he was able to add all those things. What's interesting is that it's very easy today to get power and water into your commercial space, but it's still a pain and a headache to get fast, secure, reliable internet and Wi-Fi. And so one of this episode's sponsors is actually solving this problem. Meter is actually making fast, secure and reliable internet that's as easy to switch on as water or electricity. That is actually why the company is called Meter. There's power meters and there's water meters for every building. There should be one for internet, networking and Wi-Fi. Meter now makes it way easier for you to get faster, simpler and more secure internet and Wi-Fi wherever your business operates. Meter works in all commercial spaces, offices, warehouses, labs. It doesn't matter. It works everywhere. Meter has designed an all-in-one solution. They give you streamlined design and installation, powerful hardware and smart software that's all fully managed and give you expert support. And one of my favorite things about meter is how easy they make it for the customer. All you have to do is give your address and your square footage of your commercial space and meter takes care of the rest. Even better, there is no upfront cost to you. As a business owner, you're going to love meter because it's going to save you money and your IT team will love meter because it saves them time. Check out their website. It's absolutely beautiful and it explains all the value that meter can provide your business and you can see it at [meter.com](http://meter.com) forward slash founders. This episode is also brought to you by Tiny. Tiny is the easiest way for you to sell your business. They provide straightforward cash exits for founders. You're going to hear James Dyson struggle with his first company. This company called the Ball Barrow winds up getting kicked out of his company and then winds up after that being sold off. But not before having to deal with a bunch of headache and hassle. If Tiny had existed back then, James could have just emailed high at [tiny.com](mailto:high@tiny.com) and sold the business very quickly and easily. Tiny is doing this for founders of businesses of all sizes. They have bought businesses in the past for deals ranging for as low as a million dollars to deals ranging well over a hundred million dollars. So if you have a business that you want to sell now or in the future, get in touch with Tiny. You can actually email them. They respond within 48 hours. You can email them at [high@tiny.com](mailto:high@tiny.com). This works for founders and investors in businesses that aren't going to raise again, but are looking for a quick and painless exit. Make sure if you have a business that you want to sell today or one in the future, make sure you go to [tiny.com](http://tiny.com). It must have been sometime in 1979 that I first heard the words, but James, if there were a better kind of vacuum cleaner, Hoover would have invented it. That was just before I left the first company that had set up. I gave up security, income and respectability, and persuaded an old friend to come in with me on a project that I was developing in the garage behind my house. For 12 years, I labored under heavier and heavier debt. I tried and failed to interest the major manufacturing companies in my product. I fought terrible legal battles on both sides of the Atlantic to protect my vacuum cleaner. And in 1992, 13 years later, in the cold, wet English countryside, I went into production on my own. As sole owner of the machine, I had conceived, designed, built and tested alone. After thousands of prototypes and modifications and millions of tests, I was in terrible debt, but in love with the cyclone. By 2002,

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one in four British households owned a Dyson. My company was selling a million vacuum cleaners a year and turning over 300 million annually. And my products had achieved total worldwide sales of more than \$10 billion. Finally, late last year, I fitted the last and most important piece of the jigsaw. I entered the biggest, most innovative, most exciting market in the world. I came to America. This is the story of how I did it. That was an excerpt from the book that I just read for the fourth time and the one that I'm going to talk to you about today, which is *Against the Odds and Autobiography* by James Dyson. If you're asking me for like a top 10 list of my recommendations of books that I cover on the podcast, you should read that is kind of that top 10 list is always changing. The number one spot never changes. It is this book by far. This book was actually published

over 25 years ago. He has since written a second autobiography that came out a few years ago. If you want to listen to that episode, it is episode 205 for the sequel. James Dyson is 50 when he publishes this book and he was 74 when he published his second autobiography. And so I want to jump

into the introduction and we'll see you right away. The reason this is my number one recommendation

is because 90% of this book is about the struggle to build his company. And so he says the funny thing about the story of the dual Dyson Cyclone is that I knew it all turned out like this from the beginning. Despite all the setbacks, the lawsuit, the cash crises, the ridicule, the bad feelings and the doubt, I always knew deep down. This is a book about the things that I have made, the products, the companies, the decisions, the enemies sometimes, and the mistakes often.

I'm a creator of products, a builder of things, and my name appears on them. That is how I make a living. And they are what have made my name at least familiar in a million homes. I lay no claim to the epitaph, household word, though I harbor a secret dream and imagine a time years from today when Dyson replaces Hoover and becomes a verb out there on its own and detached from me to such an

extent that most people will have no idea that there ever was a man called Dyson. His person, the reason not is just an incredible story. You fast forward to the present day. He still owns 100% of Dyson. It makes billions of dollars a year in revenue, makes him and his family billions of dollars a year every year in profit. He's still working at it. He's still inventing new things. I think it's like 75 or 76 now. But what I love about this, in addition to the fact that he doesn't hide, this shows you the difficulty and pierces the myth of like the overnight success, right? But his personality jumps off the page. So he's like, you know, I can't wait till Dyson replaces Hoover and he's just funny. He's hilarious. So he says, I like the idea of a child in the 21st century telling his friends that he can't come out for, for a little bit because his mom wants to dice in my room. Listen to this. And I wrote on the next page after I reread this, how could you not love him? Long after my bones have crumbled and I am no more than a potential clogging irritant for lesser machines. And then he goes into why he's taking time away from his company to write this book. This is something he shares with a ton of entrepreneurs. The fact that they are writing, they write their autobiographies for the benefit of future generations of entrepreneurs. And he says, right, straight up, I'm writing this book to help other inventors. Part of this has to do with all the correspondence I receive from other inventors. And when I say inventors, I do not mean men with workshops and science degrees and designs registered at the patent office. I mean ordinary people who have had an idea. Believe me, there's a lot of them.

They ask for advice on developing their ideas. I cannot offer real advice to all these people individually. So to an extent, this book represents my attempt to enter a dialogue and answer the questions that are put to me so often. I want to go back to a couple words in that sentence I think is extremely important. This is my attempt to enter a dialogue the way I describe when you sit down and whether you read this autobiography or any of the other autobiographies that you and I have talked about on this podcast. What you're doing at that time is you're having a one-sided conversation with one of history's greatest entrepreneurs. It is one of the highest value ways to spend your time. This is also an exposition of a business. This is also why I love him too. I absolutely love, I love his stubbornness. I love how difficult he is. I love the fact that he knows exactly what he wants to do in life and he does not allow anybody, anybody to convince him

to deviate from that path. This is also the exposition of a business philosophy, which is very different from anything you might have encountered before. The thing about this philosophy is it wasn't conceived by a businessman and it has worked. It is said that to be an overnight success takes years of effort, so it has proved with me. That's the entire book. That is why it's so valuable. You read this book and you'll think about it. Two years, three years, five years from now you're going through an unbelievable difficult part of building your business or your life like James didn't give up. All right, I got knocked down. I'm going, I'm getting back up. That's so important. There were 20 years of debt. Four years ago I came out of the dark and now I had a company

turning over hundreds of millions of dollars a year. Most bizarrely, it has all happened rather without anybody noticing and then he tells us why he believes this all happened. It's the excellence of the product. Really, if you think about his philosophy, he's a very anti-business philosophy, it's going to sound very familiar to what we covered last week on the Steve Jobs episode. I would say this anti-business philosophy that James Dyson has, it reminds me of Steve Jobs, it reminds me of Yvonne Chenard and it comes down to the fact that these guys are unbelievably obsessed with the quality of the product that they're making. It reminds me of what Henry Ford said, one of my favorite quotes from the history of entrepreneurship, money comes naturally as a result of service. If you focus on making an excellent product and you maintain control, you'll wind up with the money anyways. Steve Jobs, James Dyson, Yvonne Chenard, these are anti-business billionaires. It has all happened, I really believe, because of the intrinsic excellence of the machine, because it is a better vacuum cleaner than anything that has gone before and because it looks better than anything like it has ever looked. And then he goes into the fact that he was very unlikely that he was the one that was going to do this because the vacuum cleaner, he goes through the history of the vacuum cleaner in the book, I'm going to skip over a lot of that, but this could be an idea, the vacuum cleaner for a hundred years remained essentially unchanged. If anyone was going to step in and shake this up a bit, it was very unlikely to be me. I wasn't even a qualified engineer and yet that is how it turned out. I own it exclusively and with it, you might say the key to every household in the developed world. And this is the first time he brings up two things that he repeats throughout the book. First, he thinks of himself primarily as a designer. Design is where his heart is, right? The second thing is get this idea out of your mind that you need some kind of formal education to build wonderful products. So he says the first thing to forget is any notion that you have to be a qualified engineer to make an impact on engineering.

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I fiddled with wood for a while, then I got into plastic and drifted into product design, convinced that engineering was no more than a state of mind and determined to develop the products that was designing technology technologically, as well as visually, I began to moonlight as a

professional. The look of the product, the intangible style that sets one thing apart from another is still closest to my heart. And then he speaks about this really important design principle. He uses this entire life that comes from the fact that James, like every single other person that you and I talk about, studied the great people and the great work that came before them. And we see this here. James was the one that introduced me to this guy with the crazy name, right, who was unbelievably well known and famous in his day, just alive, you know, 150 years ago, whatever it was, Isambard Kingdom Brunel. So the last time I covered this book, it was Episode 200, then reading about James' affinity for Brunel, I went and found a biography of Brunel and immediately read it. So if you want to learn about the guy that James studied, I made an Episode 201 where you can, you can learn from actually, you know what, I'm going to read, I'm going to read one of my favorite quotes from that biography in one second. So it says, it is only by remaining as close as possible to the pure function of the object that beauty can be achieved. My greatest hero was always Isambard Kingdom Brunel, whose inverted catenary curve was crucial to the structure

of his bridges and gave them the distinct stylistic power that still wows onlookers today. So you and I are going to talk about Isambard Kingdom Brunel a few times today. But I need to read this to you because James, when you, if you read this book, should already be obvious, we're only a couple pages into the introduction. He's unapologetically extreme, has unbelievably high standards for excellence for the excellence of the company's building and the product he's building. And Brunel was the same way. And so listen to how this is a letter that was published in Brunel's biography. It was a letter he wrote to one of his employees that was not living up to his unbelievably high standards. And so Brunel writes, plain gentlemanly language seems to have no effect upon you. I must try stronger language and stronger measures. You are a cursed, lazy, inattentive, apathetic vagabond. And if you continue to neglect my instructions, and to show such infernal laziness, I shall send you about your business. I have frequently told you, amongst other absurd, untidy habits, that that of making drawings on the back of others was inconvenient. By your cursed neglect of that, you have again wasted more of my time than your whole life is worth. So then James goes back to this idea on the importance of learning by doing. My own success has been in deserving objects in daily use, which it was always assumed could not be improved by lateral thinking, which he calls the Edisonian approach. So another one of his heroes and somebody he talks about over and over again in this book is his admiration for Thomas Edison. It is possible to arrive empirically at an advance. Anyone can become an expert in anything in six months. After the idea, there's plenty of time to learn the technology. My first Cyclonic vacuum cleaner was built out of cereal packets and masking tape, long before I understood how it worked. And this is funny too, because from that time, from the first idea, that first prototype until he actually makes money on it, it's going to be about 13 years, the greatest lesson for aspiring inventors was yet to come. The actual making of money, paper stuff in thick wads, which they finally give to you because you've done something good. And then we'll wrap up the

introduction before we go into his early life. And inside the end of the introduction is about a

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five sentence summary of the book, which I'll get to in one second. The best kind of business is one where you can sell a product at a high price with a good margin and an enormous volumes. For that, you have to develop a product that works better and looks better than existing ones. That type of investment is long term and high risk, or at least it looks like a high risk policy. In the longer view, it is not half so likely to prove hazardous to one's financial health as simply following the herd. This is the beginning of what I consider a five sentence summary of James's thought process and what he's trying to basically teach you and I. Difference for the sake of it in everything, because it must be better. From the moment the idea strikes to the running of the business, difference and retention of total control, that last sentence being the most important, different to James, and I think great advice to you and I, difference and retention of total control. This is not even a business book. It is, if anything, a book against business, against the principles that have filled the world with ugly, useless objects and unhappy people. We all want to make our mark. We all want to make beautiful things and a little money. We all have our own ideas about how to do it. What follows just happens to be my way. And then James has exactly one chapter on his early life, essentially what he's telling us there is let's skip over all the fluff that you know, you find in a normal biography, he says, though writing an autobiography, I am not so terminally afflicted as to think you want much of my parents' birth and all that kind of crap. I have been a misfit through my professional life, and that seems to have worked to my advantage. Misfits are not born or made, they make themselves

and a stubborn, opinionated child, he's describing himself, and a stubborn, opinionated child, desperate to be different and to be right, encounters only smaller refractions of the problems that he will always experience. And he carries the weight of that dislocation forever. So he chooses just to tell us a handful of stories from his childhood that will really give you an indication of who he is and why he's doing what he does. This is devastating, on episode 205, you know, he's what, 75, 76, something like that, writing that book, his father's going to die from cancer when James is nine, right? So over 60 years later, in his second autobiography, he's still talking about the impact that his father's death had on him. And so what I think is like from our vantage point, it's a reminder to how important we are to our kids. And to take that job as a father and mother, don't take that job lightly because many decades after you're gone, the impact that you have on your children will still be resonating. Listen to this, my father died of cancer in 1956. I was only nine at the time. His death put me at a great disadvantage compared to the other boys. It made me feel like an underdog, someone who was always going to have things taken away from him. It made me feel that I was alone

in this world. I had no one to help me through my boyish problems. And no one to cite his own useful experiences. And as an example to me, when I thought I may be troubled by something no one else had ever been through before, life became something I had to make up as I went along. And I had to work everything out for myself. I suppose it made me a fighter. It also made me very competitive.

And so the great thing about rereading this book so much is now that I get to see my past highlights, but I also get to see my past notes that I have not thought about or maybe even forgotten. And so you get to this point where he's essentially saying, hey, I'm going to learn from my dad's experience and I'm going to make a vow to myself to not wait to do work that I love.

And I'm going to read this to you. Let me read James's words and then I'll read the note that I left two years ago when I read this book at the time of his death. So his dad was a teacher. But what he really wanted to do was be an actor and to produce plays. And so it says at the time of his death, he had been about to join BBC television, but his move to change careers came too late. Seeing him thwarted by death in that way, having done something else for so long, made me determine that that should never happen to me. I would not be dragged into something I didn't want to do. I double underlined that. It's really important not only for the book to understand James, but I think as a reminder to you and I, I would not be dragged into something I did not want to do. And so the note I left myself a few years ago when I read this book, it says, it's from the Jim Carrey quote, that you can fail at what you don't want to do. So you might as well take a chance at doing what you love. And so just like James is using the example of his father, he loved his father, but he's like, I want to work on things I love and that I want to do, right? Time is, which is extremely rational if you think about it, because all that matters in life is how we spend our time. That is literally the ingredient of life. And you're going to spend a third of your life doing something you hate and you think you're going to get your end of your life and think, oh, look back, oh, I had a great life. No, you just wasted a third of it, maybe a half of it, considering that we're asleep for a third of it. And so Jim Carrey is giving that speech where he learned he avoided the mistake that his dad made, just like James avoided the mistake that his dad made in his life. And so Jim Carrey says, my father could have been a great comedian, but he didn't believe that that was possible for him. And so he made a conservative choice. Instead, he got a safe job as an accountant. And when I was 12 years old, he was let go from that safe job. And our family had to do whatever we could to survive. I learned many great lessons from my father, not the least of which was that you can fail at what you don't want to do. So you might as well take a chance on doing what you love. That's incredible and something

I don't want to forget. So then James is telling us what this chapter is all about. And we see his personality jump off at the page, which I absolutely love. Some people might feel that he's a bit arrogant. He says he has a line in here. He goes, sometimes I fancy the supremely arrogant genius. And I was like, yep, I kind of feel the same way. I should go through a few little epithenies in my childhood that might have contributed to my story, which is ultimately about how I took on the big boys at their own game and made them look very silly just by being true to myself. And one of these stories is the fact that James competed in running. He ran a bunch of races when he was young, especially when he was a teenager. And so there's two things that are going on here that he does his whole life is the fact that he learned from great people that came before them. He would read their books and be like, oh, that's a good idea. I'll apply it to my career, which he's about to do here in his running career. And he did his business career as well. And then difference for the sake of it. He says that over and over again. And he realized, oh, difference is why I was winning at running. Difference is why he's going to be winning at business. It's the same idea. So he says I was 14 years old and went into the race expecting to come in last. But as the race went on, all the other chaps started to slow down. This puzzled me a bit because I had been jogging along thinking about this and that rather enjoying the running, and I wasn't tired at all. And suddenly the leading pack was only a few yards in front. I gritted my teeth and ground out every last bit of energy I had to battle past them before we got to the line. This success delighted me to no end. I was not doing very well at school.

And suddenly I had something in which I could kick people's asses. And this is how he figured it out. There was no one, he's talking about the death of his father again, right? There was no one to teach me how to run. There was no dad to tell me how great I was. And it became a very introverted kind of obsession with me. Herb Elliott was a big name at the time. He's a runner. So I read a few books about him and discovered that his coach had told him that the way to develop stamina and strengthen the leg muscles was to run up and down sand dunes. So he had been doing this. He'd been

training himself. He's doing something. He found an idea in a book that none of his competitors knew about. He starts doing it and he starts kicking their asses. I would get up at six in the morning and run for hours. He'd also do this. So his work ethic is also extreme. So he's running at six in the morning and then he'd go back out running 10 o'clock a night and not reappear back home until after midnight. Out there alone on the dunes, I got a terrific buzz from knowing that I was doing something that no one else was. They were all tucked up in bed. I knew that I was training myself to do something better than anyone else would do. I was out there learning how to do something and getting a visible result. The act of running itself was not something I enjoyed. The best you could say was that it was lonely and painful. But as I started to win by greater and greater margins, I did it more and more. He's technically talking about running. This is a metaphor for his career, though. Listen to what he's going to say. I started to win by greater and greater margin. I did it more and more because I knew the reason for my success was out there on the sand dunes. I was doing something that no one else was doing. Apart from me and Herb, no one knew. They were all running

around and around the track like a herd of sheep and not getting any quicker. Difference itself was making me come in first. This entire story, this decade and a half of struggle is him running into people that are incapable of thinking. The equivalent of them running around in tracks is like they think in tracks, too. He talks about this. Most people are incapable of having an understanding of anything that's different from their current environment or their current business or the current idea. James is obviously able to step apart. He's like, hey, I have a better idea.

You guys just can't see it. Okay, I'll just do it myself, which is the main theme of the book.

In so many ways, this taught me the most significant lessons of all my youth.

I was learning about the physical and psychological strength that keeps you competitive.

I was learning about obstinacy. I was learning how to overcome nerves. As I grew more and more neurotic about being caught from behind, I trained harder to stay in front. To this day, it is the fear of failure more than anything else, which makes me keep working at success.

Okay, so we're going to fast forward to when he is in art school. He has this idea, which I love, that you should have a personal pantheon. His personal pantheon, when he was a college student, was his Buck, Mr. Fuller, and Isambard Kingdom Brunel, and we'll go into what he learned from them and how he took ideas that they'd learned in their career and applied it to his own. He says, I wanted to focus my enthusiasm for designing things on the real, rapidly changing world outside. So one of his, he talks about a handful of people, mentors, teachers that played an unbelievably important role in his development. And one of them was his structural engineering teacher, this guy named Anthony Hunt. And why is that important? Because Anthony Hunt is going to tell James about Buck Minster Fuller. Then came Buck Minster Fuller. Anthony Hunt often mentioned this American engineer who I was sure I had never encountered. I found myself a copy of the book, The Dimaxian World of Buck Minster Fuller by

Robert

Morales. Buckminster Fuller had been described as one of the century's greatest dreamers, an epitaph, which I first took to be critical. So they thought he was, they were insulting him. And then you realize, oh no, but I could not have been more wrong. Fuller dreamt because his vision was a world, was of a world that did not yet exist. The value of dreaming was the first thing that I learned from him. Here's a second thing that's going to, Dyson was just telling us in the introduction. Fuller had no technical training at all. Fuller was an ardent admirer of Henry Ford, who also had no formal technical training. See how these ideas are echoing? Like the, he's describing Fuller, he's describing Ford, but he's really describing himself. A few pages later that continues, he's describing Fuller. And so what I wrote in the margin is, who does this sound like? Mocked in the early stages of his career, Fuller knew full well that the only way to make a genuine breakthrough was to pursue a vision with single-minded determination in the face of criticism. That is James Dyson all day long. If you try to change things, then you upset the, upset the establishment. When James goes and tries to sell, at first he's like, Hey, I invented this, let me license it. It makes sense. I'll go and license it to the existing vacuum cleaner manufacturers. And then he runs into an unchangeable aspect of human nature.

You invented a vacuum cleaner that doesn't need bags, and you're trying to sell it to a company that makes \$500 million a year selling bags. What do you think is that company's response? I says, if you try to change things, then you upset the establishments, which is why invention and vilification have always gone hand in hand. I saw then that to do what Fuller did, to make real progress in the way we live, it was not enough to be just a designer. You had to be an engineer as well. But remember, this entire thing is about having a personal pantheon, right? So he leads us into his second and most important person on that personal pantheon. While Buckminster Fuller inspired my first idealistic design dreams, he takes ultimately second place in the pantheon of my personal gods. This is these two paragraphs, these three paragraphs. Really, it's an indication of the why behind Y Founders Podcasts exist, but also is what convinced me to read. James sold me on reading about Brunel. And how could you not? Listen to what he says about him.

Isambard Kingdom Brunel was unable to think small, and nothing was a barrier to him. The mere fact that something had never been done before presented to Brunel no suggestion that the doing of it was impossible. He was fired by an inner strength and self belief almost impossible to imagine in this feckless age. While I could never lay claim to the genius of a man like that, I have tried to be as confident in my vision as he was. And this is the sentence that made me jot down like this is the why, right? Like we, the why behind what you and I getting together every week and having these conversations, we're sitting at the feet of masters and learning from them. And what happens is like that these ideas get into your brain, like we're brain, we're positively brainwashing ourselves. And then like, they're just going to fire you on. Like it is inevitable that you and I are going to run into all kinds of problems, roadblocks, whatever, even when things are going really, really well, eventually something's going to happen over the long term, right? And just like a young James Dyson, it's like, man, knowing Brunel's story fired me up. It gave me the fuel to persevere through a decade and a half of terrible, like just straight agony. I have tried to be as confident in my vision as he was. And at times in my life, when I have encountered difficulty and self doubt, I have looked to his



example to fire me on when I was deeply in debt. And the dual cycle looked as if it might remain a drawing board dream. I thought of his father, Mark Brunel, who spent time in debtor's prison and seemed destined for failure. When I have considered relinquishing total control, remember his whole thing about the book, I'm going to pause right here because it's really important, difference and retention of total control. He's going to tell you, it's like, you can make a product, you can sell it, you can manufacture yourself, just control it. You don't need other people's opinions. In many cases, he's not at all polite about the opinions that he was getting for the decade and a half of struggle. He's like, these people are idiots, and I'm going to prove that they're idiots. So he says, when I have considered relinquishing total control and taking a backseat consultants role, and there have been fantastic buyout offers, I have remembered how Brunel never accepted such a position in his life. I have tried in my own way to draw on Brunel's dream of applying emergent technology in ways as yet unimagined. He was never afraid to be different or shocking. He never shirked the battles with the moneymen, and he had to overcome the most incredible resistance to his ideas. When he applied the system of the screw propeller to a transatlantic steamship, he actually filled a boat with people and sent them across the sea. I have asked people only to push my inventions around, not get inside of them and try to float. And so I have sought out originality for its own sake and modified it into a philosophy which demands difference from what exists. I have modified it into a philosophy which demands difference from what it exists, or what Jeff Bezos told you and I in his very last shareholder as Amazon CEO, differentiation is survival, demand difference from what exists. And I have told myself when people try to make me modify my ideas that the Great Western Railway, which is what Brunel was building, that the Great Western Railway could not have worked as anything but the vision of a single man pursued with dogged determination that was nothing less than obsession. Throughout my story, I will try to return to Brunel and to other designers and engineers to show how identifying with them and seeing parallels with every stage of my own life enabled me to see my career as a whole and to know that it would all turn out the way it has. What is the value to James's career in discovering Buckminster and Brunel and building a relationship with Jeremiah Fryer, what we're about to get to? Billions, that is not hyperbolic, that those ideas, the fact that this idea that inserted into his mind that caused him not to quit. And so this idea where it's just like him discovering these ideas and using this as fuel and he doesn't hide the struggle, like there's going to be parts in this book where he is laying in bed crying his eyes out, thinking that he is destined to be a failure. What is the value? What did he just say? Throughout my story, I will return to Brunel to show how identifying with them and seeing parallels with every stage of my own life enabled me to see my career as a whole and to know that it will all turn out the way it has. I am led to the belief that in the case for inventors, for vision, one might equally as well read stubbornness. And so at any stage of my story where I talk of my vision and arrogance seems to have gotten the better of me, remember that I am only celebrating, I'm celebrating only my stubbornness. I am claiming nothing but the virtues of a mule. And then he ties us back to his father's death. My father was dead. External figures had to count for a father. It is why a man called Jeremiah Fry became so important

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to me. If I was to push further, there had to be new fathers. There had to be Buck, Mr. Fuller, and Brunel, and Fry. And so during college, he's doing a bunch of design work and he realizes like, listen, I don't want to put icing on other people's creations. I want to make things. So he's trying to make this thing called a triodesic dome or a triodesic theater. Don't worry about this. It's when he's trying to pitch people on this that the other people he's trying to pitch actually introduce him to Jeremiah Fry, which is going to be one of, I would say, his main mentor and a friend.

And in the biography that James writes when he's an older man, he talks about Fry over and over again.

That, you know, ideas that he learned from Fry when James was, you know, maybe 22, 21, he's still using 50 years later. And he sees that, you know, Jeremiah is an inventor, but he's also like getting his hands dirty. He's in there doing the actual work. And he says, in those days, multimillionaire businessmen simply did not wear jeans and pull their own roofs up with ropes. It just, it just wasn't done. And so I was impressed. I found a modern day Brunel. So he winds up cold calling. He initially, he's like, Hey, maybe this guy will fund this project. I don't have any funding. And then what Fry's going to do is actually give him a job, which is even more important. So he calls him up says, Hey, you know, I'm James. It's gonna sound a lot like when a young Steve Jobs called Bill Hewitt, you know, I'm a young enthusiastic person. I like your products. I like the way you think. I'd like to get to, you know, like to come talk to you.

So Jeremiah Fry invites James Dyson, who he's never met, to his house. And they just have like this long conversation over dinner. And that one decision changes the entire trajectory of James's life because he's 21 when he's doing this. So began my association with Jeremiah Fry, a mentor as important to me as any of those engineering heroes of the past, with the great advantage of being alive and keen to nurture such talents that I possessed.

I was really very much in need of a teacher outside of college. And the reason he talks about that is because in the design school, they're all he says they were all being encouraged to produce something essentially the same, but with an odd little variation. And then they, you know, they start doing this for maybe like a lamp and then they try to do it for like a washing machine. And he's like, this is the very antithesis of Buck, Mr. Fuller and is embarking to Brunel.

I don't want to do this. And he realized, oh, Fry is like a Fry is the way I can access people doing something different. And so he undoubtedly learns more from Jeremiah Fry than he did in all of his formal education. As a novice anything, you're like a sponge looking to soak up mentors and models. And in Fry, I had an ocean of experience to absorb. Like Brunel, he operated empirically. He had no regard for experts from other fields, always teaching himself whatever he needed to know as he went along. And he was an engineer interested in building things that derive not only excellence from their design, but elegance as well. And so then he realized, even though Fry is older than him, that they both want to do like they're both want to do the same things in life. I wanted to change the world by building extraordinary things. Here was a man who was not interested in experts. He meets me. He thinks to himself, here's a bright kid, let's employ him. And he does. He risked little with the possibility of gaining much. It is exactly, it is exactly what I now do at Dyson. This attitude to employment extended to Fry's thinking in everything, including engineering. Like Brunel, he did not, when an idea

came to him, sit down and process it through pages of calculations. He didn't argue it through with

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anyone. He just went out and built it. When I came to him, and I said, Hey, I have an idea, he would offer no more advice than to say, you know where the workshop is, go and do it. But we'll need to go weld this thing. I would, I would protest. Well, then get a welder and weld it. When I asked if we shouldn't talk to someone about, say, hydrodynamics, he would say, the lake is down there. The Land Rover is over there. Take a plank of wood down to the lake, tow it behind the boat, and look what happens. Now, this was not a modus operandi that I had encountered before. College had taught me to revere experts and expertise. Fry ridiculed all that. As far as he was concerned, with enthusiasm and intelligence, anything was possible. It was mind blowing. No research, no workings, no preliminary sketches. If it didn't work one way, he would just try it another way until it did. And as we proceeded, I could see that we were getting along extremely quickly. The root principle was to do things your way. It didn't matter how other people did it. It didn't matter if it could be done better. As long as it works and it is exciting, people will follow you. I'm going to pause right there because this is something that comes up in a lot of conversations with entrepreneurs. They're looking for like the right way. And it, this is so important. The root principle was to do things your way. The personality of the founders is embedded into the company. Lean into that. Apple with Steve Jobs with 10,000 lives. The root principle was to do things your way. As long as it works and it is exciting, people will follow you. So James is still in college when he's doing all this. And this is very interesting. Something that people, there's no really right answer to this either. Something people have been struggling with for, you know, it comes up in these books over the last two centuries is, you know, I was the son of a poor man. Now I'm rich. And you know, my son is the son of a rich man kind of thing. And he's talking about the difference between his work ethic. I mean, obviously, you're not going to own 100% of a multi, multi, multi-billion dollar company without being driven and disciplined and ambitious, right? But we see that these traits, James had these traits when he was a young man. And he's just talking about, you know, he worked all the time. So therefore he got to miss the normal college experience. And his son got a chance to actually, like he basically had to live that experience vicariously through his son. I had been by no means your typical 60s wild child. I didn't smoke and I didn't do drugs. And I drank very, very little. I was pretty well organized and I was disciplined and I worked late at night and on holidays. Maybe it was my own unusual home life or the lack of money that maybe behave so deadly seriously during my own education. Maybe it was just a desire to be rich and successful that motivated me for I was motivated in an almost devilish way compared to the other students. And so he says, I regret that now in a way. I saw my own son having a whale of time at college, going out clubbing, drinking, never seeing daylight and doing all of his work at the last minute. It is perhaps the only thing that I actually regret not having conformed with. And so the great thing about this autobiography is the fact that it's filled not only his life story, but he's got just like, he'll randomly hit you with, Hey, this is a good idea for my career. And there's no fluff on it. So there's this idea that he's, he's working on with Jeremy Frye. There's a bunch of inventions that he has before the Cyclonic Vacuum Cleaner. And so you can actually take a look at these are available online. So like James Dyson Seatruck, James Dyson Ball Barrow, if you want to see what he's been making or what he was making. But I want to skip over a part of that, like the actual like story and just get to some

of the crucial business lessons that he repeats over and over again. And then if you want more detail, you can obviously read the book. And so he says, first, don't try to sell a half finished product. They kind of skimmed on the beginning of the Seatruck, which looks kind of like this like flat bed, like low profile boat. And he's like, we need to put a cabin on this thing. And they wouldn't invest the money in putting on a cabin until he sells a bunch, but he can't sell a bunch because he doesn't have a cabin. And so he has, he's like, it just took him a lot longer to get where he's going. He's like, you should have just, if you just put the cabin on, like don't stint on investment at the very beginning stages of your, your, your product, especially if it's going to help sell more of that product. And so I'm just cutting right to the punchline here. I learned then one of the most crucial business lessons in my life to stint on investment in the early stages to try is to try to sell a half finished product is to doom you from the start of any project you embark on. So don't stint on investment in the early stages. Once he finally convinces them to put on the cabin, which he's been telling for a long time, his sales wind up taking off. So think about how much missed opportunity we had trying to sell these things and use that money and like, just essentially don't sell a half finished product. The second crucial business lesson that he uses later on in his career is that people do not want all purpose. They want high tech specificity. So you could make the sea truck or the sea truck for all kinds of things. People use them in war, people use them in construction, people use them all kinds of stuff. And so this is the mistake he made. My big mistake had been presenting the same craft to each customer and telling him this can be adapted to suit your needs. If someone wanted a diving boat, I would explain that it could be fitted with compressors and heated and have a diesel engine and all that stuff. If an oil company wanted a crew bus, I would tell them that suitable seating and a faster engine could be fitted, et cetera, et cetera. To the military, I said we could bulletproof it on and on. And so this is the problem. I convinced not a single one of them. People do not want all purpose. They want high tech specificity. So out with the universal modular craft, he was pitching a universal modular craft and his sales reflected this, that was not a successful path. And then he changes. If he's talking to a dive boat, he doesn't even talk about all the other stuff you could do. He says, listen, I have just the boat for you, my dear sir, a purpose built diving boat. Third lesson from this, figure out what is the main value proposition you're offering to the customer and only talk about that. Just because your thing can do four or five different things, just say what's the most important thing and only focus on that. You simply cannot mix mess your messages when selling something new. A consumer can barely handle one great idea, let alone two or even several. So his dual cyclone vacuum cleaner, right? It's actually works phenomenally well as a dry clean dry cleaning tool. He never mentioned that. And this is why how could I expect the public to believe that this was not only the best vacuum cleaner ever made, but also something completely different. Number four, learn to sell your own product. He did this with the C truck. He did this with the ball barrel. And he had phenomenal success. This is the only thing that kept him from giving up on the vacuum cleaner is you have to learn to sell your own product. You are in the best position to tell other people its value. So he says, I set off around the world to start selling it properly. He's talking about the C truck that he designed, right? The designer of the product knows this product better than anybody else. I set off around the world to start selling it properly. Let me pause here again. Who did the, when Steve Jobs returned to Apple, who did the presentations for new products? Very similar idea to what James was telling us

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here. I set off around the world to start selling it properly. It was time to spend away from designing, but it was to teach me that only by trying to sell the thing you have made yourself, by dealing with consumers problems and the products failings as they arise, can you really come to understand what you have done to bond with your invention and to improve it. Only the man who has brought the thing into the world can presume to force it on others and demand a heavy price with all of his heart. And so he does this for many years, but this is where he's like, okay, I want to switch from employee to entrepreneur. I want to be my own man. He winds up selling over 250 of these C trucks, as many, many millions of dollars in revenue they generated. But he's like, there's just have to do this. There was an itch, an itch that just had to be scratched four years out of college, four years selling for road torque, which is Jeremy Fry's company, four years waiting for something that could be mine. And so he discovers what that product is and the first company he's going to start by using by something that he uses over and over again in his life that you just if you observe the products that you already use, then just think about how to make them better. And so he's going to do this with the wheelbarrow and obviously he does with the vacuum. He lives in like this farmhouse in like the English countryside.

And so he's on the weekends, he's doing like a bunch of like gardening and moving and renovation work. And so he kept having to spend a lot of time, he says, in the company of a wheelbarrow. And he said that he discovered it's a pretty crummy piece of equipment and it was riddled with faults. And so there's like a list in the book and like he writes out everything he doesn't like about it. He's like, all right, well, I'll just go about changing all the things I don't like about it. Other people probably don't like that either. And then I can make it even look better because no one's really changed it for over 100 years. And so he makes this thing called the ballbarrow, which actually, it's amazing. I think he made this in the 1970s, and it still looks great.

Like you can look at pictures, I was like, oh, I don't know if they sell today, but it looks like a product that we could use today. But one of the interesting things is he thought he had the best job in the world. He loved Jeremiah Frye, was learning a lot. And he's like, I'm leaving the best job in the world. This is how you know he's an entrepreneur. He has to be, right? He's like, I'm leaving the best job in the world, so I can make a better wheelbarrow. So he says, here I was kissing goodbye to the best job in the world, a \$10,000 a year salary, a company car, only because I was driven by a desire to do something on my own.

I had seen most of my efforts go to rewarding the shareholders, and I just thought it was time I started doing it for myself. It was in retrospect, a stupid decision, not least because my mortgage was large and my two children were small. I still marvel at Deidre's, this is his wife, who is absolutely unbelievably supportive. You can't put a price on a supportive spouse, right? I still, I have friends that have unfortunately the opposite of this, and it's just, it seems like hell to me. I still marvel at Deidre's encouragement of me at that time, leaving Jeremy, the man who had given me my first chance at such a young age, and had been such a good friend to me ever since. But basically what he's telling us is that he's not leaving because he was upset with him. Like, he even says like, I feel almost like he's going to take this like I'm betraying him. And he's like, I don't feel like I'm so grateful for him. They went to being partners later on too. I felt very grateful to him for all he had taught me and felt deep down as if I might be betraying him. But I had been working under a great man for a long

time now, and it was time for me to be my own man at last. Jeremy was shocked at first, quite understandably, and then to his undying credit offered to back me financially. I thanked him but declined. And so it's this idea is like, I have to try this on my own, I have to be my own man. He realizes that's a mistake, because it's not like Jeremy's going to tell him what to do, we just wanted to help him financially. So he's going to eventually go back. And they wind up being partners on like a vacuum cleaner before the cyclone. But really, I want you to understand James' personality, because I think like this is something that you and I could adopt in our life. He just, you tell him something can't be done. And he's like, oh, thanks for adding that fuel to my fire, I'm going to show you it can't be done. So people are saying like he's trying to get people to manufacture his product. And they're like, can't be done. The ball is not feasible. You cannot mold plastic into a complete sphere. This only strengthened my resolve and made me determined to prove them wrong. And so the reason he tells us all these stories is because most of it is him making a mistake and learning, oops, I'm not going to do that next time. He tries to sell the ballbarrow to stores and all the store buyers say no. And so then he realizes like, Oh, like, okay, I have no other choice. Let me just go direct to customers. And what happens? And so he says it was an interesting lesson in psychology, teaching me that the entrenched professionals is always going to resist far longer than the private consumer. So in the book, it shows he essentially just puts a small little ad in a newspaper, you can see the ad on the page that I'm holding my hand, and starts making money. So this is in desperation, I turn to the newspapers and slap down some direct response ads. And you know what, the check started rolling in, I was astonished. This was the same object that had been rejected completely by builders and retailers who had been able to see it in the flesh. And it was being bought up by members of the public who were sending off checks to a company no one had ever heard of on the strength of a little drawing and a tiny newspaper advertisement. It was fantastic. The business began gradually to show a profit. And we were reducing up to 30 a day from here on things snowballed. And then this is the first time he repeats something over and over again in the book, that it's his belief that one great editorial or even one average editorial is worth 1000 ads. And so it says the gardening correspondent of the Sunday Times newspaper had seen one of our ads and called me up asking if he could see one I drove to his home and he loved it. So he writes this article. And article comes out and the sales just skyrocket. It is also the very best way of convincing the public one decent editorial counts for 1000 advertisements. This is something he's going to talk about with the vacuum cleaner as well. This is what again, the book is just excellent because you see him learning. So that's a good idea. And then he used that idea for decade after decade. From that point on and throughout my struggles to launch the dual cyclone, I made editorial the basis of all my thinking about publicity. And so let's go back to this idea that Warren Buffett and Charlie Munger talk about. It's like, hey, you have a good company and you're going to make a decision that actually your competitor is not necessarily have to work worry about. It's like your own self. Like you're going to mess up something good. And you know, James is a young person. He's inexperienced. He has partners on this, including his brother-in-law, you know, they raise money. So he's got all these like people, these advisors and board of directors all trying to tell them like what to do. And none of them know anything. And so they're making, they're selling 45,000 ballbearos a year, 45,000. And the product never even existed a few years before. And they're going direct. And this idea

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like a direct relationship with the customer is the holy grail. Do not abandon it. And what happens is the board of directors like, okay, now we're a serious company. We're selling tens of thousands of these things, right? We need to bring in a sales manager. And the sales manager is dumber than a bucket full of rocks and a liar and going to betray him too. The board felt that we should take on a sales manager. The sales manager name was John Brannon. He turned out to be a complete

bastard. I love, love how James talks about talks about this. In following his advice to abandon direct selling and supply shops via wholesalers, we began to lose that contact with the consumer that was the basis of our success as with the dual cyclone. So with the ballbearos, see what I mean? He's constant, you see him learning these ideas like, okay, he's smart enough to, to not make the same mistakes twice. The establishment of a client based by word of mouth is what gives a product longevity and integrity, a sort of wise man building his house on rock principle. And so the board hires this guy, the guy gives terrible advice. James, I think they're going to have to keep raising more and more money. So his, he gets diluted. So not only does his ownership get diluted, but his influence gets diluted. He's going to wind up getting kicked out of his own company. We were only making half as much money now on each sale because we had to incorporate a margin for wholesalers. The business became cash

negative, good gracious. And we started to find ourselves sinking into debt. What was the response of the board to expand? I love what Warren Buffett says in his shareholder letters that his contribution to the performance of his subsidiaries that are run, all run by fantastic managers is that of applause. And he says, because you just see so much poor thinking and poor execution of business that once you have somebody truly great, you just get the hell out of their way. I think he says something like, you know, you don't tell Babe Ruth how to hold a bet. And you just see this. It's like, these people should not be running the company. And so they're now losing money. So let's expand. And the problem is they're doing it on borrowed money. This is, I skipped over this part. They're borrowing money at this point in history. You know what they're paying, their interest rate, they're paying 25%. Imagine, first of all, you got, now you got a negative, you're losing money on every sale, then you expand and when you have to expand, you have to pay 25% interest. How do you think this is going to turn out? How do these people

not know this, right? We had to sell off to keep going, we had to sell off a third of the company. I was now only a minor shareholder. I was becoming a more and more isolated voice despite being the

venture of our product and the only one who had any real relationship with it. And so the story of the blowing up of this, this one time successful company is really important because it gives him the main idea for his career, the main idea for the book, the main idea is always to maintain control. One of the strains of this book is about control. If you have the intimate knowledge of a product that comes with dreaming it up and then designing it, I have been trying to say, then you will be the better able to sell it and then to go back to it and improve it. From there, you are in the best possible position to convince others of its greatness and to inspire others to give their very best efforts to developing it and to remain true to it and to see it through all the way to its optimum point. To total fruition, if you like, this is what he's able to do with Dyson. The company that he's at now is called Kirk Dyson and he says, this did not happen at

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Kirk Dyson. The story so far, if I have told it right, has been about my dream of doing something on my own, how I gradually had to let others in and how they occasionally let me down. And so as soon as things start turning south, the guy that told him to do this to begin with, the guy the board hired, betrays him, winds up leaving for one of their competitors, this came as a bit of a blow to the board who were shocked at Brandon's disloyalty. I wasn't, by the way, for I suspected he was a rat all along. We talk about the idea that entrepreneurs usually only experience two emotions, euphoria and terror. This book is almost all terror. So he's going through a terrible time in his business. He's losing control. He's about to be kicked out of his business. And then his mom dies from cancer young. His father died from cancer young. Now the same thing about two decades later, he's going through with his mother. This is devastating. I was very low at this point, but business traumas were put in perspective by the sad death of my mother. She had been suffering from incurable cancer of the liver, a disease whose discovery in her own body had seemed a bitter twist of fate after the death of my father from it 20 years before to be deprived in only her mid fifties of seeing her children and grandchildren mature was very cruel that that when I read it again, even though I know this happened, and I had read this part multiple times. This happened to my mom too. And what he's talking about here is that's the part that fucking kills you. It's this part where like my daughter was real young when she died. My son was born after and I remember her like talking about I can't wait till I'm in my eighties. I have gray hair. I'm good get to watch my grandchildren grow up. And this line this is like books hit you so hard like to be deprived in only her mid fifties of seeing her children and grandchildren mature was very cruel. That's the way I think about it's so cool. During her sickness, Deidre had been pregnant with Sam who was born just before she died. And I will always remember her cuddling him. The death of my last parents was a terrible blow and outweighed all all my own personal disasters. And then right after this, he gets kicked out of his own company. And this is not only like he and then it destroys your mom, your dad's dad, your mom just passed away. Your business partner is your brother-in-law. And he's going to destroy his relationship for a decade with his sister. I weep to recall it. I had in my naked naivete assigned the patent for the thing, meaning the ball-barrow to the company rather than to myself. I had no rights at all to the invention I had created and labored over for so long. It was not a mistake I was ever to make again. It wasn't the fact that I just talking about just being deeply depressed. It wasn't the fact that I felt that I'd been pickpocketed by my friends and family. It was a bigger loss than that to lose my invention was like losing a limb. No, it was worse than that. It was like giving birth and then losing the child and I was completely shattered by it. The effect of my relationship with my sister was sad. She and her husband claimed they couldn't talk to me for legal reasons, but I didn't even try to put up a fight. I hated legal actions back then. And once they had thrown me out of the business I had built, I wanted only to turn my back on them and get on get on with my life. I didn't speak to my sister for 10 years. And I suppose it only goes to prove the old cliché that you shouldn't go into business with relatives. And so that experience was not all bad because then he goes back in time. He just been kicked out of the company. But there's two things that happened while he was still at the Ball Barrel Company that are going to actually lay the foundation for this like extremely valuable company that he's going to build over the next



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was at 40 years of his life. And so he just talks about how annoying it was that he's pushing around this Hoover Junior vacuum. And really the way to think about James is like he's fueled by this like righteous indignation. If he's using your product and it just sucks, he feels like just like with the wheelbarrow and then the vacuum, he's like, I could do better than this. I'm going to do better. You're selling millions of these things and they suck. Like how dare you? And he says like it had been annoying me for years. It just seemed to push the dirt and dust around the house. And I came to think of it as more even more expensive broom than a cheap vacuum cleaner. And he gets matter and matter and matter. I was furious. I felt the same anger towards the vacuum cleaner as I had towards the wheelbarrow. We were victims of a gigantic con by the manufacturers. They fit these bags and the bloody things clog up immediately and had done so for 100 years. And so that's what he discovered when he's like doing work around his house. When they're manufacturing, the ballbarrow, they have this issue because they have to do their, they have to do powder coating for the ballbarrow. And it just throws up all this like dust everywhere. They can't eliminate it fast enough. They have to actually stop the conveyor belt and close down the entire production line to clean this out. And so they're trying to figure out like how do you deal with this? He contacts other people and they're like, Oh, you need to be using you're doing it the wrong way. You should actually be using a big industrial cyclone. And James is like, what the hell is a cyclone? It turned out to be a 30 foot high cone that spun the dust out of the air by centrifugal force. And so he winds up welding up a 30 foot cyclone. This was the the end result. Production just went on and on with no stoppages until the end of the day. And so then he's driving home and he realizes, wait, that's the same concept that I can just apply this lesson. I just learned about my factory and apply it to my crappy vacuum. So remember at the beginning of the book where

he's like, listen, I made my first prototype was made out of like cereal packets and cardboard. This is the start of what's going to turn into the Dyson Empire. And so we see his righteous indignation is actually used as fuel that same night, a cold bleak one in October 1978. I leapt into my car and dashed home through the storm thinking of nothing but bagless vacuum cleaners. In my kitchen, I said about the old Hoover Jr. with the zeal of a revolutionary. I tore off the bag and tried a little vacuuming just to establish that the mechanics were all in order. My next move was to lay my hands on a quality of cardboard and model up a miniature version of the 30 foot thing, the 30 foot cyclone that I had been building at the factory. I then plugged the vacuum cleaner in and flicked the switch expecting the worst, but there were no explosions, no blast of dusty air into the kitchen. I just pushed it around the house and it seemed to be perfectly happy. After a few minutes, I disconnected my cardboard construction and peered in to find a deposit of dust in the bottom of the cone. I vacuumed the whole house from top to bottom. And then once more

for luck, occasionally disconnecting the cyclone to empty it and check that it was all not a dream. I was the only man in the world with a bagless vacuum cleaner. He is 31 years old. 31 when the idea strikes and he has his first prototype. It is 14 years from this point in his life till he's able to manufacture a vacuum cleaner up to his standards that he owns completely. And so now begins James trying to figure out what way to do this. Now here's the crazy thing about how many different iterations he goes through, company ownership, should we manufacture ourselves, should we license it? The first idea he has, remember, we've just gone back in the story. The first idea he has, he offers the cyclonic vacuum idea to the

ball barrel board as a way to turn the company around. They don't believe in it and they actually tell him that it's a stupid idea. And so he says I would stop by one of them with the words I was to hear over and over and over again for the next 10 years. But James, he said smugly, your idea can't be any good. If there was a better kind of vacuum cleaner, Hoover would have invented it. The refusals of the board then turn to outright hostility. Look, James, you are not to develop this any further. It is a stupid idea. And so shortly thereafter, he gets kicked out of the company. And this is going to be the start of the vacuum cleaner business. I was despondent. Why could no one see the potential of my cyclonic dream? I set out to work in a garage that had been used as a garden shed behind our house. The garage had no water, no heating, no phone, no gas, or electricity. I was determined that here I would make the damn thing myself. But he's got no money.

And so he's like, okay, what do I do? And then then he finally rectifies the mistake he made earlier. He goes, the obvious man was Jeremy Frye. Because what he's talking about is like, listen, there's gonna be no, like, I don't even know if I can build this thing yet. So like, I need somebody that understands what I'm about to go through and not say, hey, you have to make money next week, next month, you know, there's actually many years from now. And so he says the obvious man was Jeremy

Frye. He was someone who knew that things don't always work out immediately, that innovation takes time and persistence. I was fed up with the type of non executive directors I had been with at Kirk Dyson, right? So let me just go back to a founder that actually thinks like a founder, not these other guys. With \$25,000 from Jeremy and \$25,000 from me, the rest was borrowed from my

home as security. So he puts up his house multiple times throughout this next 14 years, he's constantly like putting basically betting everything he has that this is going to work out. So they set up this company, it's called the airpower vacuum cleaner company. I was in the vacuum cleaner business at last. And this is one line that the very, very first time I read this book, which is over five, I don't know, five years ago now, that I have never, ever forgotten, he just described where he's working, right? I mean, this little garage, we got no water, no heating, no phone, no gas, electricity. Before I went into production with the dual cyclone, I had built 5127 prototypes. So far, you only know about one. Well, this little room is where I built most of the other 5126 prototypes. This is all struggle, he's going to go through three years of toiling with nothing to show for a day in and day out, I made cyclones, I would have breakfast with Deidre at half past seven, take Jacob and Emily to school. And then at 9am, I'd go to the coach house, which is the garage, I would break for a half hour at lunchtime and see a bit of Sam, Sam is his youngest child, and then go back to work until half past six, all the while I was making cyclones for three years, I did this alone, I could not afford to pay anybody to help me. When you start out, you just don't think it's going to take that long. Sam grew up and started walking, and then talking, and all the while I made cyclones. Over the next three years, we used up all the money that had been borrowed, and our mortgage grew steadily bigger and bigger

and bigger. And again, one of my favorite lines in the book, there is no such thing as a quantum leap. There is only dogged persistence, and in the end, you make it look like a quantum leap. While it is easy for me to celebrate my doggedness now, this is one of the most important

paragraphs

in the book. While it is easy for me to celebrate my doggedness now and say that it is all you need to succeed, the truth is that it was that it demoralized me terribly, I would crawl into the house every night covered in dust, after a long day, exhausted and depressed, because that day cyclone had not worked. There were times when I thought it would never work, that I would just keep on making cyclone after cyclone, never going forwards, never going backwards until I died. This was three years of constant work, making at least one model a day for over 1000 days. I was exhausted, and the company had not made any money, the money problems were getting more and

more serious every day. And I had to make this project work, or we would go under, I was pretty driven, and a combination of fear and hope had kept me at my task. So after this takes over 1000 days, right? And so they have this idea, they finally get to a point where, okay, I have a working prototype, but it's been three years, we have no money originally, they set out to manufacture it itself, like, well, to set up a factory to hire all these people, it's going to be too expensive.

And so they do something that is going to wind up being a mistake, but he's going to try to license it to other people. James is very clear in his personality, he does not want to rely on anybody, but himself, he wants complete and absolute control. I think a lot of entrepreneurs like this.

And so unfortunately, they're going to try to relinquish control and say, okay, we have an idea, you manufacture it, and you just pay us a royalty, that seems pretty straightforward. And it's just another few years of hell. Jeremiah Fry and I decided that rather than attempting to produce the thing ourselves, we should try to sell a license for its production. And so we go from three years of toiling all alone in this garage behind his house, to two years of toiling, and having these meetings are just a gigantic waste of time, he has meetings all over the world.

And so it was that over the next two years until 1983, I approached every manufacturer you could think of, it was really extraordinary and quite unexpected. Every single one of them seemed to miss the point that here was an innovation of real benefit to the consumer, a massive leap from a crappy old carpet sucker to a cleaner of total efficiency and undiminishable power. For each manufacturer intern, it represented an opportunity to bring out a new

product with a major technical advantage over their competitors. In those two years that I plotted around, I survived on a sort of manana attitude, tomorrow would always be better, you have to think like that, otherwise you just can't go on. And so it's just page after page after page of agony. This is his state of affairs right before he signs his first license agreement. He is 38. Remember, when he when he milled his first prototype, he was 31. This is he's 38 right before he signs his first license, licensee agreement. In the early weeks of 1985, I was broke, hungry, and depressed. The outlook was very dreary. My dogginess and self-belief in the absence of any real evidence that they were justified was beginning to look more and more like insanity.

And so the book just details, you know, even to the people that it was signed agreement, they would screw them over, they'd be in lawsuits, they would string them along, it was just absolute torture. And yet he didn't give up. And then the Japanese, there's a Japanese company that loves it, right? They get the concept right away and the deal is done within just a few weeks. So literally we could be arguing with somebody about a clause and their attorney's going at it for like six months and these people just get it done in a few weeks. They thought the machine was wonderful. Unlike anyone I had met so far, they understood exactly what I was trying to do and knew exactly how to

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sell it. And within three weeks, we had signed a deal in which I was to get an upfront fee. So the license agreements, he makes the point that there is no such thing as a standard license agreement. You can like, it's an you should look at it like an act of creativity. And so for him, because he has no money, the important part is like, I need large upfront, like an upfront payment. And he says he knew he knew of stories where large companies would guarantee like a very fat royalty on the on the back end, and they would just wait and drain individual and innovators. So they'd essentially like sell off their agree to like sign over their invention to them because they just essentially just let them dry. So he's like, I'm never doing that. He gets \$35,000 upfront and then 10% royalty and a minimum guarantee every year of making at least \$60,000 from this one one license agreement. And so he's happy, but he's also like frazzled, not sleeping. He's traveling all over the world. He has to go and essentially like live in Japan for weeks at a time. From the very beginning of 1985, the GeForce, which is what this company is going to call his invention, was all consuming. It had to be I had lost these two other licenses. I was heavily in debt and I had to survive. My nerves were fragile enough to be susceptible to such doubts. I needed a success to help knock down the doubting Thomas's. I spent much of the next year living in Japan in stints of six weeks at a time, designing the GeForce and seeing it into production. In March 1986, the GeForce went on the market at a cost of \$1,200 per machine. And despite or perhaps because of its enormous price, it soon became the must have domestic style item in Tokyo. This is really fascinating. He's not essentially like people bought it. He thinks they just bought it because it was like a design, like a piece of art. Did they ever use it? Who knows? They don't really have houses. So there was no identifiable need for this full size cleaner. The suspicion in the design world was that this futuristic pink, I forgot to mention that, they insisted that it's like all of them were made in pink. So like bright pink. This the suspicion in the design world was that this futuristic pink machine, half spaceship, half vacuum cleaner, just stood in the corner of most Japanese homes and generated ooze and Oz. But it stood in a lot of corners. And though it took off only gradually within three years, it was making sales of \$12 million a year. Now here's the problem. This is it goes back to his whole thing. Don't really push control. It sells very well, but his license deal was bad. And so he only the most money he ever makes is the guaranteed minimum of \$60,000 a year, because you're relying on another company to tell you how many they sell. He says like they would turn in like sales reports. They were like, handwritten on like little scraps of paper. Then you'd have to have an attorney to try to fight it out. But he's in Britain, they're in Japan. Then he hires a local guy in Japan to try to figure out like if they're they're screwing them on on the deal. The guy comes back, winds up having like, you know, tea with with the people manufacturing James product says, oh, no, everything's okay. And he's just like, essentially, like he never got to the bottom of it. Later on in the book goes into more detail. But a couple years later, he's just like, okay, just buy me out completely. And I'll come back and compete with like my own version of this later on. And so that's what he does. And so in the middle of this, as he gets to know Japanese and Japanese culture, though, he's like, oh, they're they're, we think the very same way that he believes he believes in progress in stages over a long period of time. And he says Japanese believe in progress by stages and in the iterative development that I have described as Edisonian, the persistent trial and error that allows them to wake up one morning after many, many mornings with a world beating product. They were

learning

all the time, improving little by little. So it says the Japanese took an opposite view of like, some other cultures believe in like brilliant Eureka, like strikes of genius moments. James doesn't believe that at all at all. He says the Japanese took the opposite view. They put no faith in individualists and they lived an anti-brilliance culture. And that was healthy. They knew full well that quantum leaps are very rare, but that constant development will result in the end in a better product. And that is a mindset I share with them. I am not a quantum leaper. So now the year is 1991. Remember we got started in 1979. Things are a little better. He has a couple license, small license agreements, but he's really wants to launch in his home market in the British market. And then this is going to be like very difficult for a time. He also got ripped off by Amway and he's going through like this, this like patent lawsuit that's very expensive. But what's happening here in 1991 with this company called Vax is really important because this is where he just realizes like forget all this, I'm doing everything myself. By the time I got a call from Vax in early 1991 asking if we could build them an upright vacuum cleaner for the British market, I was already beginning to feel the world growing lighter on my shoulders. World T's were rolling in now from our various licensees as well as down payments and design fees for new products. So I signed up with Vax and we began designing a prototype immediately, but there was no sign of them starting production for a while. Then I started to ask them why? Oh, we don't like the design of the handle, they would say, or oh, we think this is a bit weak, they would say. And so then I would go and redesign whatever they wanted. And then we'd hear nothing for a while. And then

they would find something else they needed fiddling with. It became clear to me, this is almost a year later, eight months went on like this, it became clear to me that they could go on procrastinating

indefinitely. I found their general lack of commitment infuriating. And so they're getting into big arguments and eventually he just snaps out on me says, listen, if you're not going to make the damn thing, I will. And so what he's talking about is like, he's fighting two mega lawsuits at this time. And any kind of revenue that the company's bringing in from any license agreements or anything else was just being eaten away in lower fees. And he's having to fly back and forth from America to America rather, multiple times. And he's just, he's finally like getting close to snapping. You know, this is 1991, he started this whole ordeal in 1979, he is not rich by any means at this point. He's still running into headache after headache after headache. He hates dealing with other people. And so he's like, okay, I think like this is it. Now he's in his early 40s. He's like, I'm going to go my entire life without actually succeeding in what I want to do. And this is the only sentence like this in the book. I began to consider forgetting the whole thing and doing something else with my life. I began to consider forgetting the whole thing and doing something else with my life. Then a wonderful thing happened out of nowhere. And so he's sitting there with his wife, they're having a glass of wine. They're looking at the English countryside and he's like, started to see the world in like a more mellow perspective, one that makes all of my troubles like seem so small. It wouldn't be the end of the world if this ended. And maybe, you know, it's not worth fighting. They're talking about like their future, what they would do. And again, his wife is super supportive, this entire thing, which is obviously very extremely important. And then the phone rang and it was his attorney and he says, guess what? James goes, I couldn't, I just don't want to guess. We're talking about resolving the case. However, no settlement had

been reached yet and it was due to fly to America to make yet another deposition. And so then a few days later, he goes to Heathrow Airport and he's heading towards the departure gate, gives him all his luggage and he goes, you know what, let me call Dick Baxter. You know, this is decades before, you know, wide cell phone use. So he gives him a call and like a pay phone and cannot believe what Dick is going to say. It's all over James. They don't need your deposition now. We are, and then it cuts out, he says, but the last word was lost in a cackle of static. I didn't need to hear it though, to grin with relief, no more legal fees. It is safe to say that this was the greatest turning point in my life since the day I tore the bag off of my Hoover, coming at a time when the single largest problem was a shortage of money to produce my own vacuum cleaner. The fact that I would no longer be hemorrhaging thousands of dollars in legal fees was like a gift from heaven. That leak in cashflow that had only days before made me consider giving up all together was now finally plugged. So now he has the strength to continue on. He's like, okay, forget this, I'm doing everything, everything myself, difference and retention of total control. But he's like, okay, I'm already like, I don't have a bunch of money. I'm already like highly leveraged. I have a bunch of debt. And he's like, I need to use other people's money. And I'm willing to give them equity in return. Remember, I started the podcast saying that to this day, he owns 100% of Dyson. But now the book is saying, wait a minute, I'm trying to sell off equity. What happens? He tries to raise money by selling equity and no one is interested. Every time with James, like he tries to take one path, and he gets so much pushback from other people, he's like, damn it, I'll just do it myself. I'll figure out other ways to do it. So there I go back in debt, I just need to find a bank. One or two banks were vaguely interested, but only as long as I did not run the business myself. You're a designer, Dyson, they would cackle. What do you know about business? I was tearing my hair out as these doors were slammed in my face for the most obtuse reasons. These poor buggers were so wrong to think that designers knew nothing about business. This is one of my favorite parts of the book, or about marketing or about selling. It is the people who make the things that understand them and understand what the public wants. And so all the banks say no. He said he got bailed out by the Lloyds. I think this is the Lloyds of London. He just calls it the Lloyds, and they're going to wind up lending him 750,000, and he has to put up his house as collateral yet again. But this is where he's finally getting to what he's been trying to do for a decade and a half. The whole point was to have a product of his own with his ideas applied without compromise. He does not want to compromise. A vacuum cleaner designed entirely by me incorporating innovations up to the very latest point at which my technology had arrived to be produced and marketed and sold under my own exclusive direction was to be frank with this whole thing had been about. I had gathered around myself a small team and we worked together in the garage in the coach house. We were a band on a mission to design a vacuum cleaner that would challenge the world and it was bloody exciting. With this team at last, I could put into unhindered practice all the things I believed about the interdependency of design and function about the way in which aesthetic perfection could be generated

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out of the engineering principles of the work rather than being used to hide them and about enabling the consumer to understand the technological benefits of new products by using them to make

the products fun. It was a fantastic environment to work in for. It was just engineers and designers and no one to mess us around. There were no salesmen, no advertising people, no marketing managers to interfere and to try to guide us in their own direction. We had nothing to do but deduce our own dream product. There was no market research and there was no focus groups. It was to be frank, a designer's wet dream. It was unique. The world just isn't like that.

You were not supposed to do things like that. Just go ahead and do it all on your own and then order a million pounds worth of tooling. It felt almost naughty. I was following the path of my long cherished dream that designers could lead businesses from the front.

And so then he goes into great detail like why he made the design decisions he did. This is one of his most successful products ever. But one thing he says is like, listen, is there a way that you can show a potential customer the benefit that your product provides very quickly? And so that's why they made the Dyson vacuum cleaners. You can see where all the dirt goes. It's translucent or see-through, right? And so he says, the sight of a transparent vacuum cleaner full of rubbish would draw the eye of the potential customer. If the customer sees a long line of pristine vacuum cleaners and then sees this weird looking one at the end, all visibly full of dirt, well, then clearly it works, doesn't it? And so then James breaks down his design philosophy. This is the same chapter. All the stuff I've been reading for you is from the Dyson dual-cycling chapter towards the end of the book. And this is just, he just gets into details of like what he learned from this experience and what he teaches the engineers at Dyson. So he says, I have often been asked about what my design philosophy is or my philosophy of invention. And I have occasionally

tried to put it on paper for those who do ask. It is a difficult thing to reduce to simple points because so much of it just exists in my mind and a weird concoction of things I have seen and learned. But it might look something like this. Number one, no one ever had an idea staring at a drawing board. So do not do this. Francis Bacon always got his ideas from walking in the countryside and observing nature rather than sitting in a study. So get out and look at things. And when an idea comes, grab it, write it down and play with it until it works. Don't sit and expect ideas to come. And always bear in mind, though, that Bacon died of pneumonia trying to invent frozen chicken. He's hilarious. Another one, everyday products sell. It is harder to improve a mature product. If you succeed, though, there is no need to create a new market. Try out current products in your own home and make a list of things you don't like about them. I found about 20 things wrong with my Hoover Jr. at the first attempt. Then he says he always tries to create new technology. The thing about truly new technology is that it makes your invention patentable, and then no one can copy it. You will find that in the case of almost anything you dream up somewhere, someone may have done something vaguely similar before. This is often extremely difficult. Another suggestion, use the Edisonian principle. Keep testing and retesting and believe only the evidence of your own eyes, not a formula or other people's opinions. You may have to fly in the face of public opinion and market research. They can only tell you what has happened. No research can tell you what is going to happen. Number five, constant revolution, constantly rethink and improve every aspect and function, never being satisfied until you have solved every problem. Do that. And you could be sure of consistently and reliably outperforming the

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opposition, solving functional problems at every level, and to a high degree of perfection as possible. The only way to keep possession of your invention is to keep strengthening it. Number six, go for expressive design. It is what is inside that is important to start thinking from the outside is to doom the project from the outset. Good design generated out of the function of the thing will explain why it is better and why it should be bought. Products can only be beautiful when they work well. And then you can allow the form to follow the function, then be different for its own sake, then make it orange and red or pink and lavator. Go further. There is nothing wrong with making the consumer laugh. Conventional looks do not make a product more marketable. Number seven, he's speaking about himself here for sheer stamina and conviction. Painful but true. This is really selling us that excellence is the capacity to take pain. Painful but true. Breaking the mold will upset people. It will take longer than you ever imagined. 10 years of development. Do you fancy that? And then negotiations on a knife's edge, a shoestring and hanging on by a thread, it will take balls. And finally, number eight, total control. From the first sprouting of the idea all the way into the homes of the nation, it is more likely to succeed if the original visionary or mule, he put the words mule in parentheses next to visionary, sees it right through. So let me repeat that entire thing. From the first sprouting of the idea all the way into the homes of the nation, it is most likely to succeed if the original visionary or mule sees it right through. I aim not to be clever, but to be dogged. And my doggedness had got me so far to a point where I had my very own cyclonic vacuum cleaner at last. On May 2, 1992, remember that date? On May 2, 1992, I found myself looking at the first fully operational visually perfect Dyson dual Cyclone. I was 31 years old when I tore the bag off my Hoover and stuck a serial packet in the hole. May 2, 1992 was my 45th birthday. I needed this right now. I needed to reread this book. I love this man. I love the way he thinks. I love this book. I hope you read it for the full story by the book. I will leave a link down below. I don't think it's available on Amazon for a decent price. I will leave the link to Bookfinder as well. You'll find that in the show notes and available at FoundersPodcast.com as well. If you want to support the podcast sign up for Founders Premium, you can listen to the AMA episodes I make and you can ask me questions directly. I finally found a format that I like where each episode is an individual question. I think there's like 17 or something like that up there already and I'm going to be doing a lot more. That link is down below in the show notes and available at FoundersPodcast.com. I will read this book again for episode 400. This is a book I hope I read and reread and revisit highlights constantly throughout my life, but for now that is 300 books down 1000 to go and I'll talk to you again soon.