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Tiny has been called the Berkshire Hathaway of the internet.  
The founders, Andrew and Chris have spoken about  
how the thinking of Warren Buffett and Charlie Munger  
has influenced the way that they are building Tiny.  
Stick around to the end of this episode.  
The last six minutes is actually a masterclass  
on product differentiation from Warren Buffett.  
I compare the ideas that Warren writes about  
in his shareholder letters to Tiny's approach  
to building their business.  
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or in the future, make sure you go to [tiny.com](http://tiny.com).  
And one more thing before we jump into today's episode,  
do me a favor.  
Whatever podcast player you're listening to this on,  
do me a favor and search for Invest Like the Best  
and follow that show.  
Invest Like the Best is one of my favorite podcasts.  
My friend Patrick is a world-class interviewer.  
I was just listening to his podcast yesterday with Dan Rose.  
It's episode 316.  
It's called How Stunning Founders Operate.  
Dan worked directly with both Jeff Bezos and Mark Zuckerberg  
at the beginning of Amazon and at the beginning of Facebook.  
He shares a lot of lessons,  
what he learned from both Zuckerberg and Bezos  
on the episode.  
It's absolutely excellent.  
And if you want to listen to the episode

that I did with Patrick,  
it is David Senver Passion and Pain Episode 292.  
David Packard rejected the idea  
that a company exists merely to maximize profits.  
I think many people assume wrongly  
that a company exists simply to make money, Packard said.  
While this is an important result of a company's existence,  
we have to go deeper to find the real reason for our being.  
Do our products offer something unique?  
Are people's lives improved because of what we do?  
If the answer to any of these questions is no,  
then Packard would deem HP a failure.  
Most entrepreneurs pursue the question,  
how can I succeed?  
From day one, Packard pursued a different question.  
What can we contribute?  
As a result, HP attained extraordinary success.  
This success, in turn, enabled them to invest more  
in making a contribution,  
which produced even greater success,  
which led to increased contribution,  
which created even greater success.  
This virtuous cycle eventually enabled Packard and Hewlett  
to personally contribute at levels far beyond  
what they would have dared to imagine as young men.  
In 1995, Packard attended a dinner at Stanford University.  
The Dean of Engineering mentioned to Packard  
that he and Hewlett had donated on a present value basis  
as much to Stanford as Jane and Leland Stanford  
had given to fund the university.  
Upon his death, Packard bequeathed nearly all  
of his \$5.6 billion estate to charity.  
But if you were to think of David Packard  
and the HP way as being all about benevolence and charity,  
you would be terribly mistaken.  
Packard and Hewlett demanded performance,  
and if you could not deliver, HP held no place for you.  
Customer satisfaction, second to none,  
is the only acceptable goal, admonished David Packard.  
If you cannot lead your organization to achieve that goal,  
we'll find somebody who can.  
That is an excerpt from the book  
that I'm gonna talk to you about today,  
which is David Packard's autobiography.

It is called The HP Way,  
How Bill Hewlett and I Built Our Company.  
And so nearly all the words from here on in  
are going to come directly from a very wise,  
82-year-old founder.  
What's amazing to me is how many times you and I've seen this,  
David Packard publishes this book in 1995  
and he passes away in 1996.  
There's at least 20 episodes in the Founders' Archive  
where you'll find the exact same thing.  
This desire to document what they learned over,  
in David's case, over 50 years, half a century,  
as an unbelievably successful entrepreneur,  
to document what he learned during that time  
and pass it down to future generations of entrepreneurs.  
And so I'm gonna put this book down.  
I wanna revisit that section from the introduction though,  
because really if you read between the lines  
of what he's saying over those several pages is,  
it's gonna be very similar to the lesson  
that you and I just went over in episode 282.  
The third time I read Jeff Bezos' Shareholder Letters,  
something Jeff repeats over and over and over again  
in those letters is that you need to obsess over customers.  
That's the exact same message that David Packard  
is writing in that introduction.  
So I'll come back to that in one second.  
In the meantime, I have another book in my hand.  
It is called The Intel Trinity,  
how Robert Noyce, Gordon Moore, and Andy Grove  
built the world's most important company  
and is written by Michael Malone.  
I read this book like four or five years ago.  
I'm going to eventually reread it in the next few weeks  
and make another episode about it.  
And the reason I wanna start here is because I think  
a lot of people can look at HP and its current state  
and not realize how important David Packard  
and Bill Hewlett were to the history of Silicon Valley.  
And so the author of the book that I hold in my hand,  
Michael Malone, you can consider him  
like a historian of Silicon Valley.  
He's written, I think at least 10 books  
on Silicon Valley history.

This paragraph that he has towards the end of this book is an excellent overview on why you and I should spend time learning from David Packard.

He says, in the Valley, the ultimate career standard was set by David Packard.

Start a company in a garage,  
grow it into a leading innovator in its field,  
take it public, and then take it into the Fortune 500,  
then take it into the Fortune 50,  
then become the spokesman for your industry,  
then go to Washington,  
and then become a historic global figure.

Only Packard had accomplished all of this.

He set the bar and the Valley had honored his achievement by making him the unofficial mayor of Silicon Valley.

And then I want to pick up the biography of Steve Jobs written by Walter Isaacson and just read you this paragraph.

Steve called me late on the afternoon of New Year's Eve, 2009.

He was at home in Palo Alto with his sister.

His wife and his three children had taken a quick trip to go skiing, but he was not healthy enough to join them.

He was in a reflective mood.

And we talked for more than an hour.

He began by recalling that he had wanted to build a frequency counter.

Remember this for later in David's autobiography.

He began by recalling that he had wanted to build a frequency counter when he was 12.

And he was able to look up Bill Hewlett, the founder of HP in the phone book, and call him and get parts.

Bill also gave a young Steve Jobs a summer job working on the assembly line, assembling frequency counters.

Back to this.

Jobs said that the past 12 years of his life, since his return to Apple had been the most productive in terms of creating new products.

But his more important goal, he said, was to do what Bill Hewlett and David Packard had done, which was to create a company that was so imbued with innovative creativity that the company would outlive them.

And so if you think about the context around that paragraph in that biography, Steve has less than two years to live.

He is so sick, he cannot travel with his family on vacation.  
And one of the things on his mind is how much Bill Hewlett and David Packard influenced his building of Apple.  
I think that speaks to why you and I should learn from David Packard.  
So let's go back to the introduction, which in my opinion is just really several pages of, hey, you need to obsess over your customers.  
And I think David demonstrates the importance of that by some of the phrases that he uses.  
These are spread over multiple pages, but the theme is consistent.  
Do our products offer something unique?  
Our people's lives improve because of what we do.  
What can we contribute?  
And finally, customer satisfaction, second to none, is the only acceptable goal.  
And then the autobiography starts, and the first thing he does, the first page in the first chapter, he highlights an institution and a person that changed the course of his life.  
As we get older, we have the opportunity to look back over many years and see how certain events, seemingly unimportant at the time, had a profound effect in shaping our business and our professional careers.  
The first event that he's referencing is the fact that he was admitted into Stanford University.  
The second was who he met at Stanford.  
The second event was becoming acquainted with Professor Fred Terman at Stanford.  
It was Fred who sparked my interest in electronics and who later encouraged and helped Bill and me go into business for ourselves.  
His interest and faith in our abilities, even at a young age, and in the midst of the Great Depression, gave us confidence and helped set a course for us.  
And then he tells us a little bit about his childhood, the fact that his love of reading and experimenting was something that was present from a very early age.  
You'll see that he has,

HP has founded on the fact  
that they want to produce electronics.  
He was interested in electrical equipment  
since he was a little kid.  
He says, even as a young child,  
I spent hours curled up  
with the family world book Encyclopedia.  
I got a thrill from looking at pictures of railroads,  
bridges, motors, generators,  
and other mechanical and electrical equipment.  
I tried to simulate some of these devices  
with small scale models in our backyard.  
So this idea where he's sitting down,  
he's reading the entire Encyclopedia as a child  
and teaching himself about the world around him.  
We just saw this last week,  
a young Bill Gates did this exact same thing.  
His mom in that book says,  
I think when he was like seven or eight years old,  
he read the entire collection of Encyclopedias  
that the family owned.  
One of the things that you'll find if you read this book,  
spread throughout the pages,  
is there's these random hints  
that has polite and well thought out  
as he appears to the reader.  
There'll be these flashes where you understand,  
oh, underneath all that is a person  
that possesses this steely level of determination.  
You don't live the life and build the career  
that Michael Malone described that David Packard did  
without turning yourself into a formidable individual.  
And this is the first hint of the extreme levels  
of determination that David Packard possessed  
while he was alive.  
When I was 11 years old, my father bought me a horse.  
I would saddle him up in the morning  
and when I got on him, he would buck and rear up.  
Then my father would hit him on the behind with a broom  
and the horse would go out of the driveway at full gallop.  
The horse would spot a patch of alfalfa,  
race up to it at full speed  
and then plant his legs to stop and eat.  
I would go flying overhead and hit the ground.

Remember, he's 11 years old when this is happening.  
He knew, the horse knew, all the tricks  
to get rid of its rider,  
such as running next to a barbed wire fence  
to scrape him off.  
And this is the most important sentence in this section  
and describes a very important lesson  
that his father is teaching him.  
My father wouldn't let me quit, however.  
So I finally learned how to handle the horse.  
And so I think that's David's preferred method of teaching.  
He's gonna tell you these little stories,  
those little anecdotes,  
and from there you'll infer the lessons  
that he's trying to impart to you.  
And so then he moves the timeline forward.  
He talks about what he learned  
from competing in high school sports  
and we're gonna see again another inclination  
that he's a very determined individual.  
I enjoyed athletics and learned some lessons  
that were helpful in managing Hewlett Packard.  
And so then he tells us a lesson  
that he learned from his coach, Mr. Porter.  
Mr. Porter said that many times,  
two teams playing for a championship  
each have equally good players.  
In this case, teamwork becomes very important.  
Given equally good players and good teamwork,  
the team with the strongest will to win will prevail.  
I have remembered that advice  
and it has been a guiding principle  
in developing and managing HP.  
Get the best people,  
stress the importance of teamwork,  
and get them fired up to win the game.  
And so we see another example of one of my favorite quotes,  
this idea that Jeff Bezos says that  
we don't choose our passions, they choose us.  
And so David Packard said,  
I had decided as far back as grade school  
that I wanted to be an engineer.  
And because of my interest in radio and electrical devices,  
I had narrowed that to electrical engineering.

That's actually a really important sentence because this interest leads him to going to Stanford, which then leads in turn to the founding of HP. Because when he's at Stanford, he is still pursuing this grade school interest in radio and electrical devices. It says Stanford had an amateur radio station. The radio station was near the laboratory of a new young professor named Fred Terman. Fred invited me into his office and suggested that I take his graduate course in radio engineering during my senior year. That was the beginning of a series of events that resulted in the establishment of the Hewlett Packard Company. And so Stanford is also where David is going to meet his co-founder, Bill Hewlett. He gives us a brief overview of Bill Hewlett and something that pops out that I can't really explain, I'll tell you that in one minute. It says, as a youngster, Bill gave early evidence of what became a prominent trait, an insatiable curiosity. He wanted to know how things worked and why they did what they did. And he often conducted homemade experiments to find out. Some involved explosives, and like me, he was lucky to survive. And so what David's referencing there is, earlier in the book, he mentioned that he liked to experiment with explosives as well when he was young and that one of these experiments actually exploded in his hand. And then he says the fact that he, ever since that experiment, he had lived his entire life with a distorted left thumb. And so when I said, this is something that I can't really explain, what I'm referencing there is how many times this comes up in the early lives of these company founders, the fact that they like building bombs. This was front of mind because a few weeks ago, I think on episode 278, I just reread Peter Teal's book, Zero to One, and there's a line in that book that talks about this.

He says, of the six people who started PayPal, four had built bombs in high school. And now we see with David Packard and Bill Hewlett, they did the same thing, but even younger than high school. So then David goes back to this idea where that HP will likely not exist if him and Bill did not meet Professor Fred Turman. A lot of the people that he's going to actually meet in Turman's class are going to form, he says it's the nucleus of the management team at HP. And he says, largely because of Turman's classes, the four of us, Bill, him and these two other guys became fast friends. It is not a coincidence that a few years later, this group would become the management team of HP. Many of them working for over 30 years in the company. Fred Turman's keen interest in radio engineering induced him to become acquainted with almost all the pioneers in that industry, many of whom were located in the Palo Alto area. Now, why is that important? Fred becomes friends with all these early company founders. Then he takes his students on tours. He says Turman's course included visits to some of these firms. And Turman makes the point, since this is the beginning of the industry, a lot of these company founders, it's not like you could be an expert in the field, they're creating the field, right? So it's like, what if you actually studied the field intently, then what could you actually do if you founded your own firm? I remember Turman saying something like, well, as you can see, most of these successful radio firms were built by people without much education, adding that business opportunities would likely be greater for someone with sound theoretical background in the field. That got us thinking. And so even before they're graduating, this small group of guys is like, okay, why don't we start our own company? And so they have tentative plans to start an unnamed company.

They don't know what products they're gonna make, they just know that they wanna build electrical components, but the Great Depression is gonna give this diversion.

Says, our plans were set aside when I received a job offer from General Electric.

The country was then in the throes of the Great Depression and jobs were scarce.

Turman encouraged me to take the GE job, pointing out that I would learn a great deal that would prove useful in our own endeavor.

And so he drives across the country, he goes to the East Coast.

There's two stories that he's gonna tell.

He's gonna be a GE for a few years, but there's two main stories that he tells about his time working for General Electric.

That he's gonna use later at HP.

The first one is that you should follow your own intense interest.

And at the beginning of industries or markets, you can't possibly predict how large they're gonna be.

So it says on my first day,

I met with a Mr. Boring, who as you'll see is aptly named.

He knew of my interest in electronics, his intense interest in electronics.

But he told me there's no future for electronics at General Electric and recommended that I concentrate my work and interest on heavy components for public utility plants.

And why was this conversation so important that David is telling us we're laying it 40 years after it happened?

I have often thought of the irony of Mr. Boring's advice because our electronics firm, HP, has become larger than the entire General Electric company was at the time that he gave me this advice.

And then the second important story about his time at HP is really this is how David is able to succeed where other people's failed and he's gonna use this idea over and over again when he's building HP.

The background here is he is responsible for quality control, they're producing, General Electric is producing these things called

mercury vapor rectifier tubes.

And the quality of the tubes are not good,  
a lot of them are failing, a lot of them are blowing up.

And so this is how he figured out how to fix that.

I learned everything I could about possible causes of failure  
and I decided to spend most of my time on the factory floor  
to make sure every step was done properly.

And so what he's gonna realize is the engineering department  
where he's working right, they're not communicating  
properly with the people that are actually making it,  
the factory people.

It soon became apparent that the instructions  
the engineering department gave the factory people  
were not adequate to ensure that every step  
would be done properly.

I found the factory people eager to do the job right.

We worked together to conduct tests  
and identify every possible cause of failure.

And as a result, every tube in the batch  
passed its final test without a single failure.

That was a very important lesson for me.

That personal communication was often necessary  
to back up written instructions.

That is his punchline, let's repeat that.

That personal communication was often necessary  
to back up written instructions.

That was the genesis of what became management  
by walking around at the Hewlett Packard Company.

And so after a few years, he's still talking to Bill,  
he's still talking to Fred, they still have these ideas  
like, hey, we should start our own company.

So he's on like a break from General Electric.

He drives all the way back across the country,  
back to Palo Alto and he has what they consider  
the first official meeting of what's gonna turn into HP.

We had our first official business meeting.

The minutes of the meeting are headed  
tentative organization plans and a tentative work program  
for a proposed business venture.

Must be a riveting document to read.

The product ideas we discussed included  
high frequency receivers and medical equipment.

And it was noted that we should make every attempt  
to keep up on the newly announced technology of television.

And so the reason that is important is because he's telling you, hey, we started a company before we knew what product we wanted to make. And so they decided to start the company in Bill's garage. This garage is gonna become really famous. This goes on for like, there's like about a year, year and a half, while he's on like a break from GE until he actually formally resigned. So before I wanna get to the founding of their company in the garage, which becomes like Silicon Valley lore, I just wanna read this one paragraph that I thought was fascinating and it really talks about like this, the feeling that you have when you're taking your jump from employment to I'm gonna run my own business. I'm gonna take this giant risk. And so even though this is just one paragraph and a few sentences, it's like, I paused here and I just stared at it after I underlined and made notes on it. It's just like, what is David's life if he never did this? What if he just stayed at GE? What if he just played it safe? And so he writes, I didn't formally resign from GE until nearly a year later. Lucille, which is his wife, always remembered the moment she dropped my letter of resignation in the mailbox. Mailing that letter cut our financial ties, but we were hopeful and excited about what the future had in store. And so this is his schedule at the very beginning of the company. He's also going to school and working. And so it says, Bill found a two-story house in Palo Alto. There was also a one car garage and that became our workshop. In 1989, so 50 years later, the state of California designated that garage as a California historical landmark and the birthplace of Silicon Valley. My schedule then was to go to classes at Stanford in the mornings, work with Bill and also find time to study in the afternoon and then go to Lytton laboratories in the evening. And so this is his first mention of Charlie Lytton, who's actually, he's working for, but it's also going to become a competitor in the future

and really a friend.

He learned a lot from Charlie Lytton.

They wind up exchanging information

and Lytton actually becomes really important in his life.

But there's something that jumped out to me

that you realize when you read all these founder biographies,

especially the American founders around World War II,

they didn't really believe that they had limits

on what they could do or what they could learn to do.

And they would do so many things themselves.

And so when I got to this section,

I actually thought of this book,

this biography of Edwin Land that I read for the first time

probably like four years ago, I think it was episode 40.

It's called Insisting on the Impossible.

I just reread it probably, I don't know,

maybe like a year ago.

But this is what David is learning from Charlie.

Says, Charlie was able to do everything better

than anyone else.

When he wanted to build a new plant,

he didn't hire a contractor to do the excavating.

Instead, he bought a caterpillar, like a bulldozer,

and excavated the site himself.

I helped him and then I became fairly proficient

with a bulldozer.

When Bill Hewlett and I acquired a ranch in 1954,

so it was at 15 years later,

I bought a bulldozer and then helped build

more than 20 miles of roads.

And so I have no idea why,

but when I got to that paragraph,

I thought about this paragraph that I've never forgot

since I read it four or five years ago

whenever episode 40 came out.

And I'm gonna read it to you.

And what's fascinating, now, this is crazy

how all these things fit together, right?

So David Packard and Bill Hewlett are building their company

at the exact same time in history

that Edwin Land is building Polaroid.

And back on page 437 of this giant biography,

almost 500-page biography of Edwin Land that I read,

there's this young guy named Ken Olson

who's going to wind up being an entrepreneur.  
He was gonna wind up founding  
DEC Digital Equipment Corporation.  
Now, here's the crazy part.  
He is describing, actually,  
I'll tell you the crazy part after this.  
Let me read this paragraph  
from *Insisting in the Impossible*.  
It's Ken Olson who's a generation younger  
than Packard and Edwin Land is.  
And he's describing just how different they were.  
Says, lands represented a generation of scientists  
that Olson encountered as a young researcher  
in the late 1940s.  
These older generation scientists blew their own glass.  
They did their own machining.  
They made their own parts.  
They knew everything and they were independent.  
They created radar and the atomic bomb  
and all these wonderful electronics.  
These self-reliant old-timers came up  
against the fearful challenges of World War II  
and said, you know, this war is not going too well.  
What problem should we solve for them?  
And so what Ken is picking up there  
as a young researcher, right,  
looking at these older generations,  
this generation older than him,  
he's like, this is extreme levels of self-reliance  
which is exactly what David Packard  
is describing what he learned from Charles Litton  
in the book.  
Now, here is how this always blows my mind  
how this all connects.  
This is why I think about founders  
just as one giant conversation you and I are having  
on the history of entrepreneurship  
that just spread over,  
has to be separated in episodes  
but it's just one conversation, right?  
Ken Olson is quoted in the Edwin Land book  
that I'm holding in my hand.  
Later in David Packard's autobiography,  
he talks about meeting with a young Ken Olson

and trying to buy his company  
Digital Equipment Corporation.  
So let's go back to this book.  
There's several pages that goes on.  
They're trying to figure out, okay,  
we know we want to develop electronics.  
What do we want to build?  
They're not too sure.  
They're going to do a bunch of different things.  
They're going to do contract work just to pay the bills.  
Oh, interesting to note,  
HP was profitable from the very first year  
and it was profitable every year for 50 years after that.  
That's crazy, but the reason it's called HP  
is because that was a result of a coin flip.  
They couldn't decide is it going to be Packard Hewlett  
or Hewlett Packard.  
We flipped a coin to see whose name  
would come first in the company.  
Needless to say, bill one.  
And so eventually they think they have an idea for a product.  
It is called an audio oscillator.  
And we see very, very humble beginnings  
to what is going to become a very valuable company.  
So it says the audio oscillator represented  
the first practical low cost method  
of generating high quality audio frequencies.  
We built one model and then we took it  
to a radio engineers conference.  
The response was positive.  
So we decided to take pictures of it  
and produced a two page sales brochure  
that we sent to a list of about 25 potential customers  
provided by Fred Turman.  
There's Fred again.  
We designated this first product, the model 200A.  
This made me laugh.  
We designated this first product, the model 200A,  
because we thought that the name would make it look like  
we had been around for a while.  
We were afraid that if people knew  
we never actually developed, designed,  
and built a finished product, they'd be scared off.  
We weren't expecting much from our first mailing,

but amazingly enough, in the first couple of weeks, several orders came back and some were accompanied by checks. And so they don't have a bunch of money at this time. So this is where Charlie Linton does them another favor. He was a tremendous help in getting us started in production. He gave us access to his shop so we could do things we weren't able to accomplish in the garage on our own. And this is what I meant. That technically they're competitors, but they're sharing information and they're friends. Charlie Linton and his equipment made an important difference during a period when time and money were very tight. He never saw us as competitors, but always as compatriots. And he also thought it was very important for them to get together and share ideas. He also did something else that was very important. He loved to expound and philosophize on new ideas. And whenever he wanted to learn more about something, he'd organize a seminar at his shop and he would invite me and a few other people. These seminars occurred several times. We also talked about business philosophy. So in addition to mailing and trying to do outbound sales for their audio oscillator, they actually take it to all these conferences. So they take it to another technical conference and this is where they're gonna get their first big sale. They actually sell a batch to Walt Disney. And more importantly, David tells us why he's able to get the sale. There was people who expressed considerable interest in our audio oscillator. One of them was Bud Hawkins. He was the chief sound engineer from Walt Disney Studios. Hawkins was developing the sound equipment for Disney, the Disney movie Fantasia. He was planning to buy audio oscillators from another company for \$400 each. Our model would cost less than \$100. Hawkins decided to buy our oscillator instead of general radios. And so David summarizes the advantage that his young company had and why he received Disney's money

as opposed to general radios.  
We enabled Disney to buy a good product  
at a price considerably less than our competitors.  
And so one of the things I loved  
as David takes us to the history of the company  
is they grow, they need more space  
and every time they need more space,  
it's like we can't possibly need more space than this.  
And so this is the first of many examples.  
I says by 1939, our business had grown  
to the point where we needed additional space.  
We set up an office in the front section of our new building  
while the back room held a few machine tools  
and assembly benches.  
It seemed as if we had all the space  
that we would ever need.  
In those early days, Bill and I had to be versatile.  
We had to tackle almost everything ourselves  
from inventing and building products,  
to pricing, packaging and shipping them,  
from dealing with customers and sales reps,  
to keeping the books, from writing the ads,  
to sweeping up at the end of the day.  
And so essentially what he's describing there  
is this is a form of education.  
Many of the things I learned in this process  
were invaluable and not available in business schools.  
Cash flow was a frequent problem during those early days  
and he's gonna give us advice  
that you need to shop around for your financing options.  
So he goes into the largest bank in California,  
the largest bank in California at the time,  
is Bank of America.  
We tried to establish some credit with the Bank of America.  
They sent a man out to look us over.  
He was not impressed, so that's a no from Bank of America.  
So then David walks over to his little local bank,  
which is called Palo Alto National.  
And I introduced myself to its president,  
this guy named Judd Crary.  
I described our initial success and then I explained  
how we now needed a loan to expand our business.  
He listened carefully, asked some questions,  
and then wrote out a note for me to sign.

That little leap of faith on Crary's part was the beginning of a long and happy relationship between us. When we finally grew to the point where our financing requirements went beyond the bank's legal limits, we went to Palo Alto Nationals Associate Bank, Wells Fargo. The Wells, this is so important, he's gonna repeat, this is one of the greatest lines I've ever heard, but he's gonna repeat this piece of advice that he gets from the gentleman at Wells Fargo a few times throughout the book. The Wells Fargo bank sent a retired engineer to visit us. I spent a full afternoon with him and I remembered ever since some advice that he gave me. He said that more businesses die from indigestion than starvation. I have observed the truth of that advice many times since then. More businesses die from indigestion than starvation. So at this point in the company history, America gets pulled into World War II. Bill Hewlett gets called into service in the Army. So now David's gotta run the company while Bill's gone. And it says Bill and I decided that we were going to reinvest our profits. This is something he repeats over and over again, grow from profits, grow from profits. He is very, because he grew up in the depression, which he goes into more detail, very wary of debt and growing way faster than you should. Bill and I decided we were going to reinvest our profits and not resort to long-term borrowing. I felt very strongly about this issue. We found we were clearly able to finance 100% growth per year by reinvesting our profits. And then we see an example of good guy David, the note I left myself when I read the sentence that he's about to describe here, that you need to, it's very important to work with people that you like, admire and trust. I kept my salary at a lower level than it should have been because I did not think it was fair for my salary to be higher than Bill's army salary. So as you can imagine, the demand for the war, their business is gonna grow

because they're selling a lot of these, like their devices and electronic equipment to the US government, but even then, even when they were selling them to companies, they kept their, he talks about keeping the importance of like keeping control of your costs. Obviously a main theme for history or entrepreneurship, but he's like, just because we're selling to the government doesn't mean like we can artificially inflate like what these things cost. He says we had controlled our cost to the extent that the government could not get better products from anyone else at a lower price. And then they also did something very smart here. They're building products for the Naval Research Laboratory to US government and they just asked them, like what else do you need us to make? What else do you guys wanna buy? We were interested in selling them our standard products, but also interested in finding out what other instruments they might need. When I got to that section, I thought of Jeff Bezos in the early days of Amazon, he sent 1,000 emails to some of, to 1,000 early customers in Amazon. I was like, well, okay, you bought a book for me, like what else would you buy? One guy replied back, he's like, what do you learn about that, those emails or the email interactions, was the fact that the answers that people, the answers to Jeff's question were whatever they happened to want at that particular moment. And that's where he realized, he's like, oh, like one guy's like, hey, I really wish that you would sell, that I'd be able to order windshield wipers from Amazon because I need to replace the windshield wipers on my car. And Jeff's like, oh, like I can sell, we can sell anything this way. And so as a result of asking this question to the Naval Research Laboratory, they wound up being able to build a bunch of different products for the Navy.

And more importantly, the knowledge on how to develop these instruments that they previously did not know how to manufacture. And so he's describing all these different things that they're building in the war. And he's like, listen, they may seem, it almost seems like counter to the advice he's about to give us, which is like the importance of maintaining a narrow focus and then optimizing for the longterm. But he's like, these products may look different but they're all complimentary. So he says, those these instruments differ from one another, all were designed to measure and test electronic equipment. That is their main focus in the early days of HP, measuring and testing electronic equipment. They reflected our strategy to concentrate on building a group of complimentary products rather than becoming involved in a lot of unrelated things. I believe this decision to focus our efforts was extremely important. I felt that we should take on no more than we could reasonably handle, building a solid base by doing what we did best, designing and manufacturing high quality instruments. And I think that's one of the main themes of the story that he's telling us is the fact that they were very methodical. They were not trying to rush their growth. They're very, it says we had built a good foundation on which to grow. So do you remember early in the book where David is talking to, I think he's the Dean of Engineering at Stanford? It's like, hey, it's pretty incredible that you guys actually donated more to Stanford than the actual founders of Stanford. And part of that is because Packard felt he, oh, not only did him and Bill attend there, but they got so much value from their close relationship with Stanford University and all of the talent that came out of that school.

And so this program that David and Bill are about to start with Fred Terman, you can actually think about like, what's happening here? It's like, they're figuring out how to create an edge in hiring talent.

And so they start this thing with the university called the Honors Cooperative Program.

And this is what it is.

It allowed qualified HP engineers to pursue advanced degrees at Stanford.

This program made it possible for us to hire top level young graduates from around the country with the promise that if they came to work for us and we thought it appropriate, they could attend graduate school while on full HP salary.

The company would pay all of their tuition more than 400 HP engineers have obtained masters or doctor degrees through this program.

It has enabled us to hire the top engineering graduates from universities all across the country for a number of years.

This was an important factor in the ultimate success of our company.

And so in addition to building a company with Bill, David and Bill also purchased ranches and they actually in like their spare time would actually act as full on cattle ranchers.

And so this is another example of what I mentioned earlier, the fact that a lot of the way that he's conveying these lessons to the reader to you and I is the fact that he tells like these little stories of experiences that may not be directly related to business but they're actually lessons he drew from those, these life experiences and applied them to his business.

I've enjoyed many pleasures as a result of my experience as a rancher.

I've learned a thing or two.

Every season we would round up the cattle from the range and drive them to the corral.

Along the way, we'd come to a gate.

The trick was to get them through the gate and not stampede them.

I found after much trial and error  
that applying steady, gentle pressure from the rear  
worked best.  
That is the most important sentence in the section  
that applying steady, gentle pressure  
from the rear worked best.  
Eventually, one would decide to pass through the gate,  
the rest would follow.  
Press them too hard and they'll panic,  
scattering in all directions, slack off entirely  
and they just head back to their old grazing spots.  
This insight was useful through my management career.  
And so this is where he goes more  
into his company building philosophy.  
One theme that he repeats over and over again,  
the one I mentioned earlier,  
it's his belief in the growth,  
growing your company from profit  
and he's gonna tie this into his experience  
during the Great Depression.  
And so he goes into the fact,  
all companies, they have access to people,  
materials, facilities, money and time.  
These are the resources available to us  
for conducting our business.  
By applying our skills, we turn these resources  
into useful products and services.  
And if we do a good job,  
customers will pay us more for our products  
than the sum of our costs and producing and distributing them.  
This difference, our profit represents the value  
that we add to the resources that we utilize.  
It is impossible to operate a business for long  
unless it generates a profit.  
The profit we generate from our operations  
is the ultimate source of funds we need to prosper and grow.  
It is the foundation of future opportunity  
and employment security.  
And then he states why he optimizes  
for growing for profit as opposed to like growing from debt.  
60 years ago, our country was in the depths  
of the Great Depression.  
Thousands of businesses had shut their doors.  
Bill and I were raised during that depression.

We had observed its devastating effects on people, including many families and friends who were close to us. And a matter of fact, when I got to the section and maybe realized, or maybe remember that in one of the biographies I read on Warren Buffett, talks about the fact that he keeps newspapers from the Great Depression on his office wall to serve as a reminder about how bad things can get. So back to David, my father had been appointed as a bankruptcy referee for the state. I often held my father in looking up the records for those companies that had gone bankrupt. I noted that the banks simply foreclosed on firms that had mortgaged their assets and these firms were left with nothing. Those firms that did not borrow money had a difficult time, but they ended up with their assets intact and they survived during the depression years that followed. So that is something like a main theme of this book. That experience he's having with his father, this idea is like, okay, well, who are the companies that actually went under during the depression? Like why did they fail and who are the ones that survived? I noted that the banks simply foreclosed on the businesses that mortgaged their assets and those businesses were left with nothing. The businesses that did not borrow money, they had a difficult time, but they ended up with their assets intact and they survived. From this experience, I decided our company should not incur any long-term debt. For this reason, Bill and I determined we were operating the company on a pay-as-you-go basis, financing our growth primarily out of earnings rather than borrowing money. And we have for more than half a century. And so eventually HP is gonna go public, but what he says, he did not like that Wall Street had this like fixation on quarterly earnings. And he points out that those are really easy to manipulate, that like you could cut back on like R&D and suddenly you have more profits and Wall Street's like, oh, that's fantastic.

This company may be doing well.  
He's like, no, this is a description of short-term thinking.  
You have to avoid that  
because you're a technology company  
and technology companies need to constantly create  
great new products.  
It is always possible to improve profits for a time  
by reducing the level of your investment  
in new product design and engineering.  
But in the long run,  
we will pay a severe price for overlooking  
any of these areas.  
Good new products are the lifeblood of technical companies.  
And so then he has an entire chapter  
on his commitment to innovation, right?  
And so go back to the beginning of this podcast  
where it's like one of the first things he says is like,  
are our products offering something unique?  
And if the answer to that question is no,  
and if people's lives are not being improved  
by our unique products,  
then he would consider HP a failure  
even if it made a lot of money.  
And so there's just a single sentence here  
in the chapter on commitment to innovation  
that spawned an entire,  
like I just filled up the page with notes.  
And it says, Bill and I knew  
we didn't want to be a Me Too company,  
merely copying products already on the market.  
And so that biography of Edwin Land  
that I was reading from earlier,  
insisting on the impossible,  
there's a line in that that says the exact same thing.  
Edwin Land clearly did not wish to waste his powers  
on Me Too products.  
They use the exact same language.  
And then that line also made me think  
of something I learned  
when I was reading Johnny Ives biography.  
This is episode 178.  
You've got to listen to that podcast,  
listen to it.  
If you haven't listened to episode 178,

Johnny Ives, the genius behind Apple's greatest products,  
listen to it after this episode.

I think you'll really like it.

But there's a story that they tell  
that Johnny's telling in that book  
where at the time,

I think this is like late 90s, maybe early 2000s,  
there was this computer product called a netbook.

And so at the time,

netbooks accounted for 20% of the laptop market  
and Apple never seriously considered making one.

And so this is Steve Jobs explaining  
in the Johnny Ives biography  
why he doesn't want to make a netbook.

Netbooks aren't better than anything.

They're just cheap laptops.

Johnny tells the story.

Steve directs the energy  
instead of using Apple's resources, time and resources  
to make a netbook.

They actually start doing development  
and experimentation on a product  
that eventually turns into the iPad.

And then the last thing that popped to mind  
is in Jeff Bezos to share our letters.

He talks about, this is a couple of like,  
probably like 15 years into Amazon.

We talked about like,  
we have a lot of experience.

There's a lot of company history  
where people inside of Amazon have seen  
what starts out as like a small business,  
you know, maybe a \$10 million a year business  
grow into a billion or 10 billion a year business.

And he had a line in there  
that stuck in my mind.

He's like, listen, we don't demand  
that these new businesses that are born inside of Amazon  
are big on the day that they are born,  
but we do demand that they're differentiated.

And that's just Jeff's way of saying,  
I'm not wasting my powers making me two products.

And we see that exact same thinking,  
you know, 40, 50, 60 years ago with Bill and David.

Bill and I knew we did not want to be a Me Too company merely copying products already on the market.

Let's go back to this idea

that David repeats over and over again.

Hey, your company should have a very solid foundation that you can build upon for, you know, half a century in David's case.

And so he does this fantastic description of like why that's so important because he talks about HP survive long enough.

You know, they started in the 1930s.

There is no such thing as what we think about computers at that point.

He's like, and yet we've successfully transitioned into the computer age.

It's not that he designed this.

He was actually, he says he's pulled into the computer age.

But look what he says here.

He's like, in 1994, HP sales and computer products were \$20 billion, 30 years earlier.

Okay.

So 1994, they're making 20 billion from computer products.

In 1964, 30 years before our sales total were just 125 million and they were entirely in instruments.

Not a penny was from computer sales.

And I think that's another example of something you and I see in these books over and over again.

And you have to do the best with the opportunities in front of you.

And if you do the best with the opportunities in front of you,

it will unlock, in some cases, giant opportunities in the future that you cannot possibly predict.

When David was operating, he's already, think of it, he's 30, almost 30 years into his business in 1964.

He's got a successful company, he's doing \$125 million a year in 1964 dollars, that's insane, right?

Making entire, only instruments.

He was able to succeed to hold on to the best of his ability with the opportunities in front of him.

So 30 years later, the company is doing, and that's 20 billion in computer products.

That's only 80% of their total revenue.  
That's incredible.  
They're doing 20 billion a year and 30 years earlier,  
not a penny was from computer sales.  
And then we get to what might be my favorite story  
in this book, it is titled A Maverick's Persistence.  
Or another way to think about this,  
this is the type of teammates that you want to hire.  
Sometimes management's turn down of a new idea  
doesn't always effectively kill it.  
One of our bright energetic engineers, Chuck House,  
was advised to abandon a display monitor  
that he was developing.  
Okay, so he's told by his bosses, including David,  
hey, don't do that, this is what he does instead.  
Instead, he embarked on a vacation to California,  
stopping along the way to show potential customers  
a prototype model of the monitor.  
Their reaction spurred him to continue with the project,  
even though he found that I had requested it  
to be discontinued.  
And so what happens?  
Not only is he not going to stop,  
he's going to speed it up.  
He persuaded his R&D manager to rush the monitor  
into production, and as it turned out,  
HP sold more than 17,000 display monitors,  
representing sales of \$35 million for the company.  
Several years later, I presented Chuck with a medal  
for extraordinary contempt and defiance  
beyond the normal call of engineering duty.  
So how does the company distinguish  
between insubordination and entrepreneurship?  
To this young engineer's mind,  
the difference lay in the intent.  
I was not trying to be defiant, he said.  
I really just wanted a success for HP.  
He started the book saying,  
hey, we're going to obsess over customers.  
We're going to create new differentiated products.  
They're going to make the custom lives  
of our customers better, customer satisfaction.  
Second to none is the goal.  
He repeats it again.

The fundamental basis for success in the operation of HP is the job that we do in satisfying the needs of our customers.

We encourage every person in our organization to think continually about how their activities relate to the central purpose of serving our customers.

And then he's got another great story about the lesson he learned.

So this is how the Japanese division of HP is going to teach David Packard and the rest of the company the importance of working with people with excessively high standards.

So they have this joint venture going on in Japan.

It's like middle of the pack in performance.

It's not the best, not the worst.

They're thinking, okay, I guess this is just what this thing is.

And then this is going on for a few years.

And then it says a bright young Japanese manager named Kenzo Sasako cornered Bill and me one day.

He said, why don't you let me run this?

You send an American manager to us to oversee our work.

We think we can do better.

And so Bill and David are like, okay, you're going to run the operation.

The following year, this division grew at a faster rate than ever before, but that is not the most important part.

This is the most important part.

This is how they find a 400X improvement.

We had been making printed circuit boards.

Our best failure rates were about four and a thousand.

We thought that was pretty good, a little less than 0.5%.

And that was the rate we found a lot of other companies were achieving.

So remember, this is a story about how David and the rest of the company are going to realize the importance of working with people with excessively high standards.

So okay, we have a half of a percent failure rate.

We think that's good.

We stick our head up.

We look around the industry.

They're about accomplishing the same thing.

This must be as good as it can get.

Wrong.

Our Japanese unit, on the other hand,  
came in with a failure rate of only 10 per million.  
So they were doing four per thousand, right?  
Now the Japanese are doing 10 per million.  
That is 400 times better  
than anything we had been able to do.  
That shook a lot of people up  
and it changed a lot of thinking within the company.  
It clearly showed that our targets on quality  
just were nowhere near what could be achieved.  
The result was that the thinking and the work  
that they were doing in Japan  
was soon reflected all over our company.  
We were able to raise quality targets  
in many divisions far beyond anything  
that we thought we could have done before.  
And it was an issue of how much time you're willing  
to put in.  
They just analyzed how the hell did you guys do this?  
The people in our operation in Japan  
spend considerable time making sure  
that every adjustment was done just as accurately as possible.  
That same adjustments were done at HP and Palo Alto  
just as quickly as possible.  
So one had the goal of being as accurate as possible.  
The other had the goal of being as quick as possible.  
And this is the main punchline  
to what David learned from this.  
Gains in quality come from meticulous attention to detail  
and every step in the manufacturing process  
must be done as carefully as possible,  
not as quickly as possible.  
This sounds simple, but it is only achieved  
if everyone in the organization is dedicated to quality.  
And one of the things I absolutely loved  
about David Packard's perspective  
is the fact he's writing this book  
when he's in his 80s very close to the end of his life  
and he's still relentlessly optimistic.  
When I think of the phenomenal growth  
of the electronics industry over the last 50 years,  
I realized how fortunate Bill and I  
were to be in on the ground floor.  
But it reminds me of a story I like to tell on myself.

In my sophomore year at Stanford,  
I took a course in American history  
and had the opportunity to study the westward movement  
beginning with the early pioneers  
and continuing throughout the 19th century.  
I remember lamenting that I had been born 100 years too late,  
that all the frontiers had been conquered  
and that my generation would be deprived  
of the pioneering opportunities offered our forebears.  
But in fact, we went on to make breathtaking advances  
in the 20th century.  
In the 20th century, we have experienced dizzying progress.  
Everywhere look, I see the potential for growth,  
for discovery, far greater than anything  
we have seen in the 20th century.  
Exponential growth is based on the principle  
that the state of change is proportional  
to the level of effort expended.  
The level of effort will be far greater  
in the 21st century than it has been in the 20th century.  
Just as it has in the past, growth in the future  
will come from new products.  
By new products, I mean products  
that make real contributions to technology,  
not products that copy what someone else has done.  
This must be our standard in the future,  
just as it has been in the past.  
The 21st century will be an age  
in which many kinds of new products  
contribute to a better life for all the people in the world.  
And that is where I'll leave it for the full story.  
Highly recommend picking up this wonderful little book.  
If you buy the book using the link  
that's in the show notes in your podcast player,  
you'll be supporting the podcast at the same time.  
The link's also available at [founderspodcast.com](http://founderspodcast.com).  
You can also support the podcast  
by signing up for the founder's premium feed.  
I just recorded another AMA episode.  
I'm getting excellent questions.  
One of my favorite questions that I've gotten  
is who would be on my seven-person personal board  
of directors, which I just answered that  
and along with other questions from listeners

in the latest episode.

That link, if you're interested in that,  
is down below in the show notes, as with every other link,  
and is also available at [founderspodcast.com](http://founderspodcast.com).

That is 291 books down 1,000 ago,  
and I'll talk to you again soon.

Okay, so I'll be back on episode 227.

I read this fantastic book called  
The Essays of Warren Buffett.

So all the way back on episode 88,

I read every single one of Warren's shareholder letters.

But what this book that was put together by Lawrence Cunningham  
called The Essays of Warren Buffett

did that was so smart is that he took the shareholder letters  
and instead of organizing them by year, which is standard,  
he organized them by topic.

And so in the original podcast I did on this book,  
which again is episode 227,

one hour and 28 minutes into the podcast that they're about,  
I go over this letter that I'm about to read to you now.

It's under the heading titled On Selling One's Business.

And the reason I'm bringing this up

is because one of the sponsors of this episode is Tiny.

And one way that Tiny has been described

is that they're building the Berkshire of the internet.

And you can go to [tiny.com](http://tiny.com) and read the testimonials  
and see all the founders that have sold their business to Tiny  
and how their main differentiation,

just like Warren Buffett and Charlie Munger is,  
there's no BS.

We're going to make this transaction as simple  
and easy as possible,

where a lot of people that buy businesses  
make you jump through hoops and it's just a headache.

And so if you think about what Warren is doing here  
in this letter is his business is buying businesses.

And so his customer or founders or managers of businesses.

And so he is essentially writing a letter to a guy.

So he wrote this letter in 1991 to a guy who indicated  
he might want to sell his family business.

And so I'm just going to pull out a few highlights here  
and really think about what Warren's doing is

he is differentiating his services

from other people that also buy businesses.

He says, if you should decide to sell,  
I think Berkshire Hathaway offers some advantages  
that most other buyers do not.  
Practically all of these buyers  
will fall into one or two categories.  
And so now Warren is going to describe his competition.  
If you go to tiny.com, you'll see they described  
their competition in some ways,  
their competition, which is typically VCs  
or private equity companies.  
So Warren says, number one, a company located elsewhere  
but operating in your business  
or in a business somewhat akin to yours.  
Such a buyer, no matter what promises are made,  
will usually have managers who feel they know  
how to run your business operations  
and sooner or later will want to apply some hands-on.  
And he puts the word help in quotation marks.  
Obviously, Warren does not think that the managers  
that are going to install in that business  
are actually going to be helpful at all.  
The second other option, a financial maneuverer  
invariably operating with large amounts of borrowed money  
who plan to resell either to the public  
or to another corporation as soon as the time is favorable.  
Frequently, this buyer's major contribution  
will be to change accounting methods  
so that earnings can be presented  
in the most favorable light just prior to his bailing out.  
And then listen to this persuasion technique that he uses  
because he's writing to somebody  
that he knows it's a family business,  
which means they put a lot of their time  
and life energy into.  
So he says, if the sole motive of the present owner  
is to cash their chips and put their business behind them  
and plenty of sellers do fall into this category,  
either type of the buyer that I just described to you  
is satisfactory.  
But if the seller's business represents  
the creative work of a lifetime  
and forms an integral part of their personality  
and sense of being buyers of either type have serious flaws.  
So he's just described his competitive landscape.

He says, listen, there's option one, there's option two, but then there's a new option, something that's completely different and better. And he's describing the services that he provides to founders, right? So he says, Berkshire is another kind of buyer, a rather unusual one we buy to keep. Tiny does too, by the way. All of the businesses we own are run autonomously to an extraordinary degree. When we buy a business, the sellers go on running it just as they did before the sale. We adapt to their methods rather than vice versa. And in Tiny's case, it's up to the founder if they wanna stare, if they wanna go. Tiny's fine with either solution. And then Warren does something fantastic. He's like, listen, you know who the past businesses that we bought. In fact, I'm including in this letter a list of every single person we've ever bought a business from. Tiny does something very similar on their website which you can go see. You know some of our past purchases. I'm enclosing a list of everyone from whom we have ever bought a business. And I invite you to check with them as to our performance versus our promises. And then Warren says, hey, I'm gonna keep it simple with you. If you should decide to do business with Berkshire, we would pay in cash. Tiny says the exact same thing on their website. Your business would not be used as collateral for any loan by Berkshire. There would be no brokers involved. Warren also says, you deal with me. And finally, you would know exactly with whom you are dealing. You would not have one executive negotiate the deal only to have someone else in charge a few years later or have the president regretfully tell you that his board of directors required this change or that change. And because Warren has hacked away at the unessential,

all that is left is simplicity.  
And his pitch is simple.  
Do you want a great home for your business?  
Then call me and I will do a cash transaction really fast.  
Same thing that Tiny does.  
I will not pester you.  
If you have any possible interest in selling,  
I would appreciate your call.  
I would be extraordinarily proud to have Berkshire  
along with the key members of your family own blank.  
So he took out any identifying information  
of who he's writing to, okay?  
I believe we would do very well financially  
and I believe you would have just as much fun  
running your business over the next 20 years  
as you have during the past 20.  
Sincerely, Warren Buffett.  
I think reading the entire letter is worth your time.  
If you buy the book, it's on pages 230 through 233  
and makes you go back and listen to episode 227,  
the essays of Warren Buffett.  
If you have not done so already.  
And if you have a business that you're interested in selling  
now or in the future, make sure you go to [tiny.com](http://tiny.com).