-- [00:00:00] Ross Butler: You're listening to Fund Shack. I'm Ross Butler, and today I'm speaking with Yaron Valler, a founder at Target Global, a venture capital firm with offices in London, Berlin, Barcelona, Tel Aviv and elsewhere. Founded in 2015, the firm has invested in 15 unicorns, had 21 exits and seven IPOs. Yaron has been a successful entrepreneur. He's invested in dozens of companies, he's had several billion euro exits, and before Venture capital, he was part of the team at intel that developed the Pentium processor Yaron. Welcome to Fund Shack. I don't like talking about themes that everyone else is talking about, because I tend to feel like the value is elsewhere, but that's not always the case. And I think it might not be the case with AI. There's a lot of hype around it, but that could be for a good reason. What's your view on AI?

[00:00:46] Yaron Valler: First of all, thank you for having me. It's great to be here.

I think that like any paradigm shift or any revolution, there is a lot of substance, and then there is a lot of hot air.

And over the next few years, we're going to separate the hot air from the substance. The advances in AI are staggering. Right? It's going to change. Anyone who's played with it, who tried to even do something as simple as edit an email, which is something that I did last night, has seen the impact that this can have on our lives. Anything from content generation searches, creation of academic content, creation of books, is something that we're seeing now, creation of artwork. So the impact of this revolution is astounding. I think that we are only scratching the surface now when we are talking about things like customer service and classification of transactions. So things that are very trivial, relatively, we're going to start seeing AI integrated in every walk of life. I think that interaction with medical professionals is going to change because of AI. A lot of the diagnostic procedures are going to change.

I think that banking is going to change in a profound way.

I think that industry, in some cases, when we look at the integration of vision into industry, visual inspection, this is going to change whole industries. You mentioned the fact that I was part of the team that created the pendulum with Intel.

Finding faults in silicon is a huge challenge.

Training an AI to find these faults, training an AI to uncover things that would have taken a human a very long time to uncover, especially in the resolutions that we're talking about when we're talking about semiconductors, is going to be a major change for this industry.

We can talk about the agricultural industry, that's going to change profoundly because of AI. So we're going to see profound changes in quite a few industries, I think, where I think that there might be some, shall I be polite, over exuberance in the market is around the rails for AI.

The creation of LLMs, and the number of LLMs that the world would actually need. And the value that will be generated by these LLMs, I think, is the last point. I think that here we need to be careful. We need to stick to more traditional valuation methods when we look at this technology, like when we look at every technology.

Otherwise, we are risking the creation of disparity between the valuations of these companies and real value, and this can lead to a crash, which would be very dangerous and would impede the market.

[00:03:55] Ross Butler: Okay, you're going to have to explain the distinction between those two things a bit more for me, because I understand. So, first of all, you outlined a fantastic range of potential applications and industries, but then you said that there might be exuberance in the LLM, the large language model domain. Could you explain what the differences are?

[00:04:16] Yaron Valler: In every industry? You create rails, and then you create applications. On

-- e application.

The risk is when there is exuberance in the market, that you value the underlying applications incorrectly, the underlying sorry infrastructure incorrectly. And when you do that, you create a risk, an ongoing risk of disparity between prices and actual value.

And you could see that in almost every bubble that we had. You can see that in the bubble that formed around rails for crypto. You can see that in the hype that was created even around ecommerce during the.com boom. There is a very, very big difference, and therefore significant importance to the differences between the valuation that these businesses garner, which is affected by the fact that private markets are not always rational, and the underlying value, and therefore the need to evaluate the distinction between LLMs, the applications that they enable, the actual markets that they open, the world of acquirers, for these LLMs, there is a need to value those very carefully.

[00:06:10] Ross Butler: So the hierarchy of, say, an AI industry would it be a small number of LLMs upon which various applications are built?

[00:06:18] Yaron Valler: I believe so.

[00:06:19] Ross Butler: Right. So if I could take like an analogy like the Internet, because it's very hard for people outside of the AI industry to really understand. Everyone says huge potential, but it's hard to understand what is the potential. And so 25 years ago, everyone was talking about the Internet, and I guess the Internet has swallowed the world. But you've got a couple of Internet giants that are clearly Internet companies, like Google and Facebook. But in another sense, almost every other business is a.com business, but they just tap into it with their own website. Now, maybe this isn't a relevant analogy, but let me keep going with AI. Will you get the situation where you will have a very small number of AI superpower companies, do you think? And then every other company will in a sense use AI. It'll be an AI company, but it will use it in a very vertical, application specific way.

[00:07:10] Yaron Valler: I think that what makes this question more relevant is the amount of computing resources that are needed to deal with AI. First of all with the creation of LLMs and then training of LLMs, and then later with the querying and interaction with LLMs. So you need massive compute resources, and when you need massive compute resources, then you need someone that has a lot of infrastructure and that restricts you to a relatively low number of providers. However, we are seeing that implementing localized LLMs that have specific applications doesn't require such heavy infrastructure. I think that what we will see is slightly different than what we saw with Google, where the provision of the services, or with Facebook, where the provision of the services is so heavy that you end up with a relatively small number of providers. By the way, also there, I think that this is a reaction to the market, and I think that had the market behaved in a certain way, maybe this in the long term will also be something that will be disrupted. I think that we're seeing a lot of developments in the data center arena that will also disrupt that side, the infrastructure side. But let's stick to LLMs for now. I do see a myriad of companies that have local instances of LLMs, either homegrown or adapted from things that are available, that are running on their infrastructure, in some cases even running in the edge. So running in the actual devices especially, I mentioned semiconductors before. So even in the edge you've got very substantial compute resources when you are running a semiconductor design or a semiconductor fabrication operation.

And therefore I see instances of LLMs, localized instances of LLMs that are being run on these relatively limited infrastructures.

[00:09:18] Ross Butler: Right. So it could be more decentralized.

[00:09:21] Yaron Valler: More decentralized, yes, it could be more decentralized. And that is exactly the counterweight to my previous answer, because if it is indeed decentralized, then there could be place for more LLMs, and there could be a lot of value derived from these smaller

-- e efficiency gains.

There's something else going on. What does AI actually promise to provide?

[00:10:00] Yaron Valler: Let's take an MRI.

Deciphering the MRI requires skill.

It requires a good eye, I guess.

And if a computer, an AI, could identify a tumor when it's 1 mm, as opposed to a doctor that would identify it when it's 3. Guess that there is a substantial advantage that is created here.

This is a relatively simple to understand medical applications. Medical application. Let's take something as benign and as painful as taxes classifying your expenses in real time. I'm talking about a business classifying your expenses in real time and adapting them to the tax legislation, something a machine needs to understand the tax legislation. Again, it's not a complex task. You're talking about a lot of data and a lot of conditional data. Basically an algorithm that a computer is very apt at understanding. You combine that with access to your bank account, and suddenly you can get your tax preparation work at the end of the year. Can become a lot easier, can become a lot easier, if not automatic, certainly more accurate. I've given you two extremes of applications, right? Two very different applications that both will have very significant impact on our lives. I think that this is when you are talking about AI.

You're talking about mainly two things. One is pattern recognition. Intelligence is usually highly connected to pattern recognition, so AI is good at recognizing patterns. The second thing you're talking about, and that's where it gets more interesting, is when the AI stops being passive and uses what it learned and used that in order to generate new stuff.

I'll give you one example that is overlooked, but is, I think, an incredibly powerful example, and it's something that I use AI for quite a lot.

I want to write an email to you, and I want that email to be persuasive. I want it to be persuasive in a way that is persuasive to you, not persuasive to someone else.

If an AI analyzed all of the emails between me and you for the past few years and identified the ones that you reacted to more favorably and adapted the language of the current email that I'm sending to you so it would fit these patterns and therefore I could be more convincing.

This is something that has tremendous value and something that you can do today.

[00:12:53] Ross Butler And it's something you do.

[00:12:55] Yaron Valler: Yes, of course, an off the shelf thing. I did some prompt engineering. I use a few LLMs to do that.

And yes, I've basically asked or analyzed a bunch of old email communications and several times had really good results with an LLM producing basically new email that is taken from concepts, from a summary, a skeleton that I write.

[00:13:28] Ross Butler: And you look at it and think.

[00:13:30] Yaron Valler: And adapting it to Ross, because we know that, or we've seen in the past that Ross reacts favorably to certain things.

[00:13:38] Ross Butler: So for my sins, I'm moderating a panel next week. It's a bunch of private equity coos. And the question is, how can AI improve private equity firms investment processes? You've kind of given me, I mean, it's much more broad than private equity investment

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The team writes investment memorandums, but is it the best use of the team's time to proofread them and to write them in a way that is comprehensive enough, that is something that is handled, that is a day to day task that AI is assisting us in, but not in investment screening.

[00:15:20] Ross Butler: And in terms of your role as an investor looking for exciting new companies with AI in mind, is there any specific things that you're looking at in terms of an AI enabled company.

[00:15:29] Yaron Valler: So all the stuff that I mentioned before, I'm looking for real world applications.

I'm less interested in the trivial applications. We mentioned customer service before, not that customer service is by any means of the imagination, by any stretch of the imagination, an easy thing to achieve. It's just a relatively well trodden application with very large companies that are doing good work in it. But I am very interested in applications that are very hard. Integration of vision, for example, in order to affect traditional industries, which I mentioned before.

[00:16:05] Ross Butler: That's a difficult thing to do, presumably.

[00:16:07] Yaron Valler: If it's a very difficult thing to do, how do you know? You're looking at melons on a packing line. How do you know that this is a good melon? This is a bad melon.

[00:16:19] Ross Butler: How do you know it's a melon?

[00:16:20] Yaron Valler: Yeah, how do you know it's a melon to begin with?

But there are so many applications I mentioned in traditional industries that affect all of our lives. I'm very interested in that. I'm very interested in what's going on in the medical world.

I think that this has the potential of profoundly changing our lives. And I think that a lot of what I do, I do because I think it's interesting and relevant for our lives. And I think in medical we're going to see amazing applications.

I'm much more keen on finding out where it disrupts.

Real life technology touches the lives of all of us rather than when it touches a select few. Because I think that you get better applications, you get better returns like that. At the end of the day, we are money managers and they need to create returns.

The broader the applicability of a technology is in some cases, not in all cases, it holds a direct correlation to returns.

[00:17:30] Ross Butler: Yeah. And this is what makes you a good early stage investor, presumably because you can't just come on board after there's some financial proof of concept you need to understand.

[00:17:39] Yaron Valler: I would hope so. Identifying the right teams and identifying the technology potential is probably a skill that.

[00:17:50] Ross Butler: I'm more comfortable with, although they're two quite different things. You got the technology, but then you've got the teams, the managers, the personal soft side as well. Both so important, but quite different.

[00:18:01] Yaron Valler: Yeah. I think that the good venture capitalist is in some ways a good psychologist. Right. It also has an impact on how you work with the companies later.

-- ity, but what it did was impress upon that fund the level of granularity in the thinking of that CEO. And that was the important thing. So you look for someone who knows their market, very detail oriented, knows their market, but at the same time is sort of a big personality, someone that doesn't have these traits, less likely to be a good CEO.

[00:20:07] Ross Butler: I get the impression, and maybe this is a little bit unfair, that for a long time, maybe about ten years ago, venture capital, particularly in Europe, was basically a consumer Internet play. The Pokemon goization of venture capital with developments like AI. Are we looking at more of a deep tech play going forward, do you think?

[00:20:30] Yaron Valler: This is one of my pet peeves, right?

I think that European innovation in general has been largely application innovation. That's probably a better way of referring to it than Internet. Yes, there has been a lot of Internet development, but even if we look at what is classified as deep tech in Europe, the vast majority of startups are building applications on stuff that other people, on technologies that other people created.

You see a lot of innovation, a lot of technological innovation in big companies in Europe.

As you might know, I've lived for a long time in Germany. Companies like Siemens, for example, are incredibly innovative.

But you don't see what is very prevalent in Israel, which is a large number of startups that are creating very basic technologies, bringing them to market and exiting based on these basic technologies. In areas like cyber or quantum, or semiconductors, or even software infrastructure.

Europe is woefully short on these categories. It needs to change. It needs to change. And the role of the sovereign and the regulator here is to help drive this change.

I'm jumping to another point or a question that you didn't ask. No, but the importance of governments in venture capital is often misplaced, or the power that they can bring to bear is often misplaced. What the government should do is help solve inefficiencies, help solve problems, not scale and bolster what is already working.

When talk about the UK, when the British Business bank is allocating funds to a fund, it should try to affect what that fund does in a way that is good for the long term planning of the British economy. If it doesn't do that, then it is not a strategic tool.

It's not the government's role to help me make money. It's the government's role to help push forward the UK economy and set it up for success for the next few decades.

And it would only be able to do that if it has an impact on where these funds are allocated.

Governments don't do that as much, they're more generalists, adopting a somewhat less affair approach, allocating capital to funds and letting the funds make decisions. And here I think the governments need to be a bit more strategic. You're asking me when we spoke before the recording, we spoke about AI in the UK. And of course, in light of the Prime Minister Bletchley park summit on know, very important that the UK is taking AI so seriously. Very important that it's looking at the ethical sides of AI. What it should be doing more of is impacting where investment money goes to. And that would be a practical way of really embedding the cultural values that we think are important, that we as Westerners think are important.

And that's largely the topic of the conference. Right. Having Responsible AI, safe AI, by carefully directing government investments, you can achieve two goals. You can A, embed what is important for your society into technological development and B and more importantly, you can push technological development and push development of the economy subsequently into a direction which is beneficial for the country.

-- t that did was help proliferate the impact of tech to other parts of Britain. Tech should not be a London phenomenon, and it is too much of a London phenomenon right now. You want people in Manchester and Liverpool and Bristol and places that are further from London to benefit from access to higher paying jobs, to benefit from access to technology. And more than anything, when you look at it as a country, you have to assume that your talent is spread evenly across the country, so you're not harnessing vast majority of your talent when you are restricting tech to London. Now, why are semiconductors, and in general, things that are more capital heavy, more important in this respect? Because it lets you train a huge number of people in technology, and then these people create startups afterwards, a generation afterwards, sometimes there's going to be some creative destruction. When a company is shut down and people start forming startups, it proliferates the tech economy again. Israel is a much, much smaller country than the UK, so it's hard to draw parallels. But if you look at the proliferation of semiconductor fabrication plants in Israel, which has been basically pushed by the government into the south of Israel, which is traditionally a less affluent area, this has had a major and very deep impact on that region in all walks of life.

I don't want to digress to politics, but even when you're talking about the integration of Israeli Arabs, or Arab and Jewish populations in Israel, this had an impact because it moved the factory to an area which was more equally populated by Jews and Arabs. So it even assisted in that goal, in a goal that has nothing to do with the proliferation of tech. You can think about social equality, you can think about, especially when you're trying to draw parallels to the UK and huge salary gaps between London and other.

[00:27:31] Ross Butler: Places in the UK, the problem is, I think, I don't doubt at all that Israel has been hugely successful here. But I just wonder whether there is a problem of scale. The EU tries to do precisely this. They try to foster a venture capital ecosystem in Latvia and in Athens, and they're trying to do it everywhere. And it's been, I think, pretty unsuccessful, because everything's concentrated in Berlin and just, I think maybe you can do it in a kind of a small, cohesive region, but when you get to a certain size, and maybe, I don't know where that size is. It's probably smaller than Britain. It becomes difficult.

[00:28:08] Yaron Valler: But that's why I'm talking about manufacturing. I'm talking about things that are on the periphery of tech. I'm not talking about.

You are right that talented people usually congregate, and there is sort of an untrivial correlation between certain cities and tech hubs, and that will probably continue.

What I mentioned was, or what I meant. Sorry. Was that when you build plants, when you build highly technological fabrication plants, or anything that requires a large number of employees, you are creating a generation of tech savvy people. That generation will then go on and create startups. Whether these startups will be created in Bristol or in London later, I don't know.

But there would be more people from these areas that have access to technology, understand technology, and can create companies. And I think if you had to pick one area, which I think governments in general, not just the British government, should be concerned about and should be active in, it's that it's making sure that the impact of tech and the proliferation of the financial success and that tech has, would get to sort of further reaches of the country. Again, I mentioned semiconductors. Looking at Germany. Germany is now investing €40 billion into building semiconductor plants in eastern Germany.

Traditionally poor area, traditionally less educated, less affluent, less connected to Western values. All of these things are going to be disrupted.

[00:29:55] Ross Butler: Now, the silicon manufacturing, is that an example, though? So, for example, can we translate this over to AI? Is it manufacturing, or is it more like the foundational technologies we were talking about at the beginning? But if a policymaker needs to think about this in more abstract terms, what are those terms that they know?

-- d generation of people, or the third generation of people will create.

[00:30:27] Ross Butler: Right? And it's manufacturing because that's what brings together a large number of people.

[00:30:31] Yaron Valler: Correct. And trains them. That's the issue, again, when you talk about the proliferation of tech.

If you take, I'm trying to remember furthest town in Britain that I've been to Inverness, and you allocate venture capital to Inverness, the likelihood that this will have a positive effect is limited. If you make an infrastructure investment in Inverness, you train a very large number of people, and then you expect these people in a decade, maybe later, to come up with their own creative ideas. I think that has a higher chances of success.

[00:31:13] Ross Butler: So you've convinced me in principle. Now we have the little problem that in practice, politicians probably won't take your advice on this. And if they have the opportunity to direct investment strategically, they put it into some political pet project, like some tenuous net zero technology development.

Yeah, I guess it's a balance. It's how much can you trust the politicians to do the right things if you give them the.

[00:31:38] Yaron Valler: You know, I'm drawing a lot of parallels to Germany. I mentioned before that I lived in Germany for many years, and I'm full of appreciation to the way the German government has been managing its influence on tech. One of the things it did very well was to create public private partnerships.

The seed fund that is at least partially owned by the German government, HDGF, is a public private partnership. Private companies are providing most of the capital and are influencing where that capital is deployed. So you're mitigating the risk of having sort of irrelevant political considerations by creating a public private partnership. And again, this is something that Britain could do.

[00:32:30] Ross Butler: So, going back to the investment world and the general opportunities and deal flow we've spoken about AI, are there any other large themes that you're looking at that excite you?

[00:32:41] Yaron Valler: Certainly a theme that has been very important or discussed substantially in the last few years is augmented reality and its effect, again, its effect on daily life and every walk of life from, I mentioned, medical applications before, like surgery, but going to office, and basically every application that we have. So that's something that I'm very excited about.

I have one substantial investment in that field in Britain that I'm very excited about. I'm very excited about the proliferation of computing and software into SMBs. I think that many business processes in SMB, in small and medium businesses, sorry, have not benefited as widely from computers as they could have.

But then lastly, the thing that I'm most excited about, and this far away, and is perhaps not a good venture category for now, but would become one, is the quantum leap in computing into quantum.

That is a complete paradigm shift, and I don't think I, or most other investors can imagine the impact that this would have on our lives. And anything from finance, banking, cryptography, communications, everything we do will be disrupted.

If this revolution is successful, or when it is successful, computing will just look completely differently. Everything we do, the way we interact with computers will become different.

-- you keep your privacy?

But this is just a sort of simple to understand and application. But think about, we mentioned medical technology before. Think about the vast amount of data that you have to process in order to make decisions. And what if you can process and cross reference your diagnosis as a patient in a fraction of a second with the whole database of medical knowledge that is out there?

How would that make a decision? Making different decisions could be arrived to a lot quicker, a lot more efficient, and the decisions that the medical staff makes would be a lot more effective.

Think about things like high friction trading. You have to analyze massive amounts of data in order to make decisions. It would make algorithmic trading. It would remove the human advantage in algorithmic trading, so it would level the playing field. It would make the way the stock market behaves completely different.

We've been trading stocks and bonds same way since 16th century.

The way we trade is largely based on information gaps between the traders, right? Uneven information, uneven expectations. That could all change, and that could render entire markets ineffective. So I really don't know what the world would look like.

Think about self driving cars again.

Making a good decision is a factor of the amount of data that you can process and the speed you can process that data in.

Undoubtedly, computers are better at making deterministic decisions than humans, right? They're not good at making judgment calls, but they're very good at making deterministic decisions.

[00:37:29] Ross Butler: Although with AI, presumably they're getting better at making.

[00:37:31] Yaron Valler: They're getting better at it and then add quantum to it. You can make the model so much more complex that they would really mimic the human brain, and you can go on and on and on and on. Basically, the combination of processing power and memory is everything. Your sole advantage over a computer today is that you have more memory, you have more flexible computing power, so you're better at doing a lot of things. You're not good at doing specific things, you're not good at multiplying matrixes, for example. You're very good at making logical deductions.

[00:38:09] Ross Butler: I also have a body.

[00:38:10] Yaron Valler: Yeah, but I'm not sure that's an advantage.

No, because I carried a lot of units, but I'm referring only to brain power now. So I'm saying that it would make a computer closer to what we are.

[00:38:27] Ross Butler: Yeah. And this is where people start to get a bit worried because it does sound a bit scary. I was thinking about this on the drive over, actually, and I was thinking, well, why weren't people worried about the Internet in the same way as they're worried about AI? Because clearly the internet has had a hugely destructive as well as constructive role in human society. We never really spoke about it. We just saw the opportunity. Now we're very conscious of the AI threat, maybe because of all the Sci-Fi movies and not so conscious of the opportunity. I would say.

[00:38:59] Yaron Valler: I think that, know, I'm going to make a somewhat controversial statement.

-- hen make sure that it's.

[00:40:23] Yaron Valler: Never used, that the other side doesn't have it or whatever you've tried to prevent proliferation. Absolutely. And which American president said that foreign policy is speaking softly and holding a big stick? Roosevelt.
So you need to speak softly and hold a big stick. And if you don't hold the stick, then someone's going to hold the stick over your head.

[00:40:42] Ross Butler: Could we talk mean, your company is called Target Global. Can we talk about geographies? We have spoken about the UK and Israel, Germany. YoU're a fan of the policy there. Are there other regions where venture capital, growth capital is know, one of the.

[00:40:58] Yaron Valler: Things that we've tried to do is explore other regions and where we have seen quite a bit of success and I'm very keen on doing more in these regions is Africa, the Arab world. I think both of these regions have a lot of characteristics that make them interesting for technology.

In the case of Africa, we are shareholders in biggest digital bank in Africa today, called CUDA.

Not many people know what is the population of Nigeria, but Nigeria is two thirds. Yeah, it's almost as big as Europe.

[00:41:40] Ross Butler: Right.

[00:41:40] Yaron Valler: So it's an unbelievable market and very young.

[00:41:45] Ross Butler: It's going to be more populous than America in about 20 years or something.

[00:41:48] Yaron Valler: It's unbelievable and mobile first and young. And so you've got all of these and lack of infrastructure. So you've got so many things going for this region.

Again, speaking about the proliferation of tech and the proliferation of startups. This is our mission. This is our mission as a world.

I am a huge believer generally in humanity, in the fact that everyone should have the same opportunities.

A lot of the political strife that we are seeing and the violence that we're seeing in the world is tied to economic disparity.

It's impossible to have a lasting peace with economic disparity and with educational disparity. So it's our duty to do these things. Now, you speak about regions with a massive number of young people.

We didn't speak about the immigration into Europe, which is, in my mind, the only way the continent will survive long term.

So the proliferation of technology, the proliferation of knowledge, the proliferation of affluence.

We want to live and we want our culture to live, these are things that, from very self serving point of view, we should be keen on and we should engage in.

And that's why I'm so excited about the investments in these regions. They're woefully short on investments, especially in Africa, and all the characteristics that make investments successful.

[00:43:24] Ross Butler: Is this hypothetical? Is this something you're looking.

-- e of. So again, this is a cyclical phenomena and I think that long term we will see a return to know. I don't see this as having a lasting effect on the industry. I think that we are going to see some heartbreaks, but that's how it is.

[00:45:59] Ross Butler: Yaron, thanks so much for sparing your time for Funjack.

[00:46:02] Yaron Valler: My pleasure. Thank you very much for having me.

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