Scalability

SmartUp Foundations Course - Lecture 15

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So I'm pretty surprised that we are on lecture number 15. And I got from a few people here that they say, don't stop, keep coming up with things I said. I start repeating myself. They said that's good because at my age I don't remember anything anyway. So. Right, so I'll probably just repeat myself. The subject of this lecture is kind of surprising, scalability. And the reason I'm bringing scalability up, as you will see amply in the presentation, is because this is one of those keywords that venture capital firms use all the time. And so I thought it will be useful to analyze what scalability means. Is it good, is it bad? And what does it do? But as usual, I'll start with what is SmartApp? And that's myself. Ayalao is sitting there and Libby, who is running the whole thing.

I want to make the introduction what SmartApp is slightly differently. So the common knowledge or idea is that 9 out of 10 startups fail or as VCs say, 1 out of 10 succeeds. And when it succeeds, it returns all the money. And we are very excited and kind of they gloss over that nine out of 10 founders fail, which I think is a devastating statistics. So the purpose of SmartUp is that you can succeed. That's really the purpose. If we talk about it in one word, this is it. Now, what is success? So we define success as three things. Number one, that the company is profitable, but really profitable. I mean like not one month, yes, one month, no, but profitable every month. That it's fast growing. That this is not a lifestyle business.

You know, I'm making money enough so I can spend my time in Hawaii and that it requires a modest investment so you don't have to pour in $100 million before you reach profitability. That's our definition of what successful company is. And our objective is to increase the success rate. So if the success rate today is 1 to 10, we would like to get to 1 to 2, maybe 1 to 3. We don't know. That's why we are working with companies, because we want to check that really this is doable, that we can increase the success rate significantly by following certain methods and principles. And what is modest investment? I've been thinking a lot about it.

I think it's somewhere between 2 million to 5 million, depending on the company, depending on what needs to do, but definitely not the 30 to 50 million that VCs talk about. We discussed a lot about why VCs do what they do. I won't go into it Right now, what is the infinite gain that. Keep talking about the vision of SmartApp. If we increase the success rate from 1 out of 10 to 1 out of 5, 3, or maybe 1 out of 2, then we multiply it by 3 or maybe 5, so it's a major multiplication. And if we reduce the investment by a factor of three or five, we're actually talking about reducing it maybe by a factor of 10.

But let's just say factor of three, then we, which means you and us can grow the startup industry by a factor of 10, not 10% factor of 10. I think that's a vision in an infinite game that is worth pursuing, which is why I do that. And we can have 10 times as many successful entrepreneurs, all of you, and you can count below there are 10. I made sure that if we want to have 10 successful entrepreneurs, they are right here, all of them. And I'm serious about it.

I mean, one of, I think wastes that are very painful are the people who fail think that they are idiots and failures and leave the pursuit because you have to be really strong to fail when you do something and then come back and say, no, I can do it again and this time I'm wiser. Most people will just give up and move on. And these are the right people to do because they already kind of know what not to do. So it's very

important. So what is the SmartUp Academy? It's a program to teach the engineering profession. So it's a profession. I teach it. Okay. I show people a lot of things about what does it mean to build a company. And now I can say it's 15 lectures.

You see, probably next time I write it, I'll say 16 lectures that cover all the aspects of building a company, from branding to marketing, sales, product pricing, packaging, how to recruit people, you name it. They're all part of what we try to show, teach and explain in the context of startups. They behave differently, these things when you are a big company. But when you are a startup, there are some very simple rules that you should be following. Obviously, the jewel in the crown is the residency program. Very much like the picture shows in here. If you want to be a doctor, it's not enough to be on the dean's list after six years of school. You really need to spend a few years in a hospital, work with real patients and doctors and understand what you're doing. Same goes for here.

So when we work with, and right now we work with about seven companies and we learn a lot from it. And I hope they learn a lot from it. Okay, so what are scalable business models? So when venture capital firms prefer to invest in companies that have a scalable business model, it's a term. What is a scalable business model? Basically, it means that you can multiply your revenues without multiplying your costs. I talked about it before. You want to be in a situation where when you start growing, your growth is not linear with the inputs. So that if you want to grow twice as much, you don't have to put twice as many resources into it. But that's not the problem. The problem is the next item, that they don't like non scalable business models.

Actually, they don't like anything that has the feeling of non scalable. So the entire lecture today, the entire analysis today will be around deadline, which is why it's highlighted. So I heard it too many times from people and from VCs. They said this is not scalable. Actually, I'll tell you a story. I won't say the names because I didn't ask permission, so I won't say the name. But there was one of the angel investors that we deal with came in with a company he invested in and he's the active chairman and he wanted to get our opinion and insights. The company, what they do is they have basically a software that simulates the processes of growing bacteria and yeast. Why they want to grow bacteria and yeast? Because nowadays these are factories for all kinds of chemicals like insulin and other molecules.

They change the yeast or the bacteria and now they need to grow it incubator. It turns out that this is a very delicate and sophisticated process. Each experiment or each round of improvement takes weeks and months and costs a lot of money. So they built a simulator where they can run the experiment on the simulator before running it in real life. Obviously the simulator is just push a button and you get the simulation. So I looked at it and it took a while to explain it to me and I'm kind of open minded and I think I got the point and I told him. But I trust that most people you go to will not understand what you're doing. And if they understand, they won't believe you because it looks like magic.

And honestly, I think that your idea is nice, but it will require a lot of iterations before you really get a simulation that works. So he said, okay, so what should we do? So it's pretty simple. So instead of selling the software, you should sell the output of the software. So if they want to run an experiment and you talk to them and say, we expect that this experiment, if it works, will increase productivity by 10%. You run it in your simulation and you believe you can actually change the recipe for the experiment and get 17%. So you should tell them, look, I believe we can do 20, 12%.

And if we do 12%, then we're going to charge you $10,000 and we want $2,000 for every percentage above 12, then the person doesn't take any risk because if they didn't get to 12, they pay nothing, which is what

they expected is to get to 10. And I said, and then all the knowledge remains in your hands and you're the only ones touching the machine so it doesn't really have to work because you're going to fix it anyway. And then the angel investor said something that really floored me. He said, this is not scalable, we won't be able to raise money. I'm like, why is it not scalable? He says, no, only SaaS is scalable. This is not scalable. Honestly, I was shocked. He was.

He's a very sophisticated guy and made a lot of money in many ventures and he truly believed that if he's not selling software, but selling the results of the software, it is not scalable. That's what made me decide that we're going to discuss scalability today. Because I think this is really missing a huge opportunity by many companies, driving them into a lot of trouble, as I will show with one of our companies. And it's a waste. What are non scalable models? If we talk about scalable, what is the non scalable model? It's basically anything that has to do with people. Look around you. We are not scalable. Actually, each and every one of us is a whole world, as we say in DYGMA range. And when we are the whole world, that means a lot of trouble. So you know my opinion about companies.

Keep it down to only you if you can. If you don't have a choice, bring your wife.

Keeping it down to you is not scalable.

Basically so. But in reality, everything that you say, oh, I need to build consulting, I need to do services, training, whatever it is that requires people in the mind of VCs is not scalable and they will not invest in a company that has non scalable elements. One of the companies, I don't know where he is, he gave me his materials, but he's not here. So one of the companies we're going to talk about, when they arrived in here, he said, I talked to him about something. And he said, oh, I told it to one of the VCs and he said, no, never say that word again and I'll talk to you later about what the word was because this is not scalable, we're not going to invest in you. So this seems to be like a very important word for VCs.

And since many of us do talk to VCs, I wanted to discuss it. That's still what scalable and growth engines have to do with one another. Because if you look at when I presented it in lecture number seven, basically say the same thing. A growth engine is a process that the company does or plans to do many times repeatedly in marketing or in sales or in any other critical part or activity. It's scalable process. You can double its output with a small increase input. And it's not linear. A small increase input can yield a large increase in output. What's the difference they have, you know, it's the same exact definition, so probably we missed something.

So I thought a lot about what is the difference between the two here it is what they mean by scalable and what I mean by a growth engine are two very different concepts. So venture capital scalable business models are basically generic business models which I will show in a moment. There are several of them that can scale well if implemented properly. That means if you follow those models, they can literally grow like on a spaceship, grow like this. You know all of those things. You have seen them before, right? Many of you will recognize the names I bring. So yes, there are several business models that are scalable and there are many well known companies that use them to grow to become big companies. So that's what VCs mean.

And the only problem is, and I will show it later on, is that this business model require a lot of investment upfront and a bit of luck or a lot of luck because a lot of people try to do them and it's usually one winner.

That's about it. So you need a good amount of luck in order to succeed in building that. And as you know, if I want to bring the success rate from 1 out of 10 to 1 out of 2, luck is not what we want to take into account. We want it to be far more repeatable business. So if that is what VCs mean, what do we mean? We mean us. So when I thought about growth engines, I thought about three different problems that we are trying to solve.

The first one, we spent two lectures to talk about branding and marketing. Notice the same the first word, how to ignite growth from zero. So all the models that I showed you in those two lectures, the whole idea was that you can start them from zero with no investment or very little investment, which is very different than what we're going to see with what VCs do. The whole idea there is you can start building a brand and marketing and do that with a relatively little investment. The idea was to choose the ones that will continue to grow as you grow. The second, which is the main thing I want to talk about today is introduce a new product concept to the market. How do you introduce a new product concept to the market? The last item is overcoming what is usually non scalable process.

Give you an example if you look at Volt, okay, so what voltage, what Vault did is they built a whole service with thousands of people that commit suicide on the street. Every time I go on the street, I don't know about you, but every time I go to Tel Aviv, I get a heart attack. Somehow not all of them die. I don't know how they do it, but they are not Vault employees. They are independent contractors. They, they're called partners, I think that's the term that they use. So they can grow, Volt can grow as much as they want because they don't have any fixed cost of employment. So that's kind of a scalable business model. But I want to show others that apply to other things. So these are the three things. So let's go back to what the VCs talk about.

So what is a scalable business model? The most famous one is what's called the marketplace or platform models. And they go by industry. So let's first with the services and labor market, Fiverr, scalable business model. You build the platform, people put their skills, people look up for people with those skills, talk to them, contract them. Fiverr is just the platform doesn't do anything. But there are many of them upwork. It's freelancers, TaskRabbit. TaskRabbit is the lowest of them. In July I went with the family to Boston because I have an apartment there and I needed to clean it and take everything back to Israel. So we had about 12 suit stuff that I needed to take and we live on the third floor. And I was scratching my head because I was not planning on taking 12 suitcases. I have only girls, okay, so.

And I was not planning on taking a no elevator. So my daughter said, what's the problem? Talk to TaskRabbit. I said, what the hell is DeskRabbit? DeskRabbit is exactly that. People. You want them to do some dirty job and you're willing to pay them by the hour. So I walked on TaskRabbit. They have this funny idea that all the Prices are like $44.44 per hour. I don't know why they do this is kind of one of their jokes. And so I found a guy and I said, I need you to come on this day, at this hour, you have to take 12 suitcases down the stairs, put them in the car, and drive with us to the airport so we can take them out of the car and go and stand in line. He agreed and he came and I talked to him.

It turns out that he is doing his master's degree in physics at mit. So he was the best schlepper I ever got, you know, with a degree. But it works. I paid him, I don't know, $200 or whatever. And I didn't break my back. And they are care.com about babysitters and Rover about pet sitting and dog walking and blah, blah. Okay, very. Doordash is the vault in America. And Vault is also here. So this is a scalable marketplace platform. And there are many others. So same goes for transportation and mobility. Uber, we all know, is ride sharing. Get, which is basically a taxi, a cab dispatcher. Lyft, which is a competitor of Uber and all the others. I don't even know Bird lime for scooter. Anybody knows them here? Okay. And Blablacar is my favorite. With a name like Blablacar, what can go wrong?

And obviously we have the commerce, ebay. All of us know Craigslist. People here know what Craigslist is. If I were you, I wouldn't nod my head because it shows how old you are. The new generation have no idea what Craigslist is. The Craigslist is the original. Before all of that stuff, the UI was just text. I think it's still just text. I haven't gone there in a long time. Okay, I think you got the point. Now, what's the strengths and the weaknesses of these business models? Okay. And that's really the important things. Let's start with the strengths and let's talk with the model and then the market. The first one is they solve a real problem. That's a strength. They connect and coordinate between suppliers and customers of services of all kinds of things. They basically do this connection.

Second, they have this benefit of the network effect. Network effect. Means every customer brings another customer. So more suppliers attract more customers attract more suppliers. So it starts to expand really rapidly. And that's exactly why it is scalable, because the more business you do, the more business you do. The growth by network effects creates defensibility. What does that mean? It's going to be tremendously difficult for company to compete with Volt in Israel. Right? Because once they get in, they get to a certain level, nobody's going to do another auction site like ebay, because ebay already control the market. So as you grow, the moment you get to a certain size, you basically dominate the market and you don't have competition anymore. And they reduce transaction friction and build trust.

So many times the question is the person that like an ebay, you pay, you didn't get the product yet. So you have to trust that you're going to get the product or your money back. So the platform, many times is the in between that guarantees that the transaction is going to happen. And if not, they have the money still in their hand and they're going to give it back to you. So that's a very important element of this. And also they can change liquidity even if they don't control the entire market. So task grab it is focusing on a very narrow part of the market and can reach enough power and enough size to be sold, even though they don't control all the work of all consultants and everybody.

If you see, you will see that a lot of these platforms are very specific to very specific tasks or geographic locations. Volt is a Dutch company, I think they're in Israel, in Holland. Finish. So what else? Cost benefits. So providers handle delivery and service. So if you are on eBay doesn't do anything. It's the person who wants to sell who is taking your money, then packing it and shipping it to you. So all the platform does is handle the matching and the money. Okay, so that's a tremendous benefit. They make money as a percentage of a transaction, usually all of these. So every transaction they take a cut, anywhere between 5%, 30% and maybe even more. And they also have a strong unit economics. So once scale is achieved, once you get to enough dollars, then everything else is on top of it.

So once you paid all your costs, which is what's the beautiful thing about these scalable models, once you paid for all the servers and the developers and everything else, then every dollar above it is pure money. That's really nice. So these are the Strengths and benefits. But what about the weaknesses? Well, there's a little problem. There's a chicken and an egg problem. You open a website and you say, put your whatever on this website. Nobody ever heard about it. Then nobody's going to put anything on it. So to ignite, remember that I said before that when we talked about branding and marketing, we talked about igniting them to ignite. A platform like that is very difficult. Now you start to understand why I said it requires a lot of money and luck.

Because you start with an empty thing and you need to start building it very rapidly. It often requires subsidies on both sides. So Uber, why did Uber raise so much money? I mean, if everything is so great,

why do you need so much money for Uber? Well, the answer is there's a nasty secret. So if they launch Uber in Tel Aviv and you go on the phone with the application and you look for drivers and there's none, you will not use it anymore. So if you get disappointed once or twice, that's it. You're never going to look at it again. So they have to make sure that they have enough drivers waiting for your call. But the drivers don't want to be there because there are no customers.

So what Uber did is whenever they wanted to penetrate a new city, they hired thousands of drivers and paid them to sit there waiting. They had to do it for weeks and months so that whenever a customer wanted a ride, there was a ride available. Not an hour from now, but now, because people are impatient, they want ride right now. That's why they needed huge amounts of money in order to launch from city to city. And each city you start from scratch because it's the same problem each city. You see, there are some hidden secrets to all of these phenomenal business models that people don't talk about. So it can be very expensive. This is what I just said. There's a little bit of another problem.

If you have a seller that wants to sell you something on ebay and is going to lose 20 or 30% of the transaction to ebay itself. That's, by the way, what happens with all the phones. If you put your application on iPhone, on Apple or on Google, once you reach a certain level, you have to pay 30% of the transaction to Google or Apple. 30% is a lot of money just to be on the platform. There's a poor economics there, and that can create a lot of issues with customers because usually the people who pay for it are the vendors, not the customers. So it's not all Nice and easy with all of these scalable business model. So in order to ignite it, many of them are actually buying revenues through subsidies. That's what happens.

Okay, let's move on to another one very famous PLG product led growth. If you talk to a lot of entrepreneurs, they have this vision that the product will sell itself. It's such a nice product and it's going to work. So let's look at it. Collaboration and productivity. For those of you who know Slack to the messaging Zoom which we're using right now in order to record this meeting. Discord, communication, figma, canva, blah blah. All of them have the same concept. It's free for individual users and you upgrade to enterprise. Cost you money. So if you want to use it as a company, you have to pay. Which immediately brings the question how do you know what is an individual user for free and how do you know that it's a company and it can pay? And how do you do that?

I won't tell you. Another is the sales and marketing calendly mailchimp. All of you know HubSpot, SurveyMonkey. All of them have the same business model of product led growth. Same thing. GitHub. Just so that you remind you, they acquired by Microsoft for $7.5 billion back in 2019, I think so it works if you are the lucky one. MongoDB, GitLab and all of that stuff. Let's look at the strengths and weaknesses. Lower customer acquisition cost, right? Because most of the growth happens by word of mouth. That's the way that these models work. That you have a nice product, really good product, People start talking about it, people start using about it, other people look at it and it starts to grow. The users usually find the product themselves. It's kind of magic. So it's not really by themselves.

If I have used Zoom and I really like it and I want to talk to you, I'll tell you Zvika use Zoom. It's good because I want to talk to you or WhatsApp, all of these applications. Anyway, you see why these applications are in communication a lot because that inherently creates the network effect. They spread within organizations. So if I start using Zoom in my organization and I start setting up the meetings on Zoom, then everybody else is going to use the meetings on Zoom and that's how it spreads. And it's very easy to figure out that you have opportunities. LinkedIn used to do it a lot. So if LinkedIn saw that people start using LinkedIn, the sales navigator. If you can use one, just put your credit card.

Use two, you just put your credit card, but then you get a call from a salesperson, selling, telling you, oh, I see that your company have at least three users. Whoa, we have a package for you. Okay, so I got, remember that at Zoom, I even got it. And in other companies, so they actually have a very simple system. They look at how many users from each company. Once it reaches a certain threshold, you get a phone call from a salesperson. Very simple. Now that's a whole different discussion. I won't go into it. It's not what? No, no, it's just people talk to one another. Yeah, this is for free. There's no. The one that you got a coupon and it's payable and all that stuff. I have a long conversation about it. That's my next lecture. Maybe. But it's not this one.

It's not this one. And the interesting thing in here is that it creates two dynamics. Bottom up adoption that leads top down purchase. So people use it within the company, either free or they even put their credit card, but it's a personal credit card. And then when it reaches a certain usage inside the company, usually the higher level management says, no, no, we need to standardize, we need to do it correctly. Let's see that it's an enterprise level product, that it doesn't introduce security issues in here, blah, blah, blah. So it starts to be a top down discussion. The usage price is also very interesting. So even when I got a call from LinkedIn for Sales Navigator, they still sold the packages by number of users. Zoom did the same. Really?

When you have an organization, you have people using it within the organization and suddenly you want to turn it into an enterprise deal. The enterprise deal is still usually by the number of users. So it gives you a tremendous opportunity. Five people in a company of 500 is using it. Suddenly you have the opportunity to sell 500 licenses or 100 licenses, depending on what the product does. So highly attractive business model. So as you see, VCs are not stupid. These are really good business models. What are the weaknesses? Okay, they're kind of nasty and they're quiet. The product must be at a very high quality to begin with. You can't start with a broken product that works sometimes and crashes all the time. It just doesn't work.

So you have to invest good amount of money to polish the product before you put it out in the market because otherwise you're going to ruin your brand. So you have to come with a very big investment in the product going back. And that's why I started with what is the purpose of SmartApp. When I talk about small investment, these kind of things immediately say, I'm not sure that you can really get to success with $2 million. It's just too risky. You're not going to do it in that. So you clearly start to see that if you want to be successful at a very high probability, the business models you want to go after look different than these ones. I said before, the transition from free to paying is not trivial. I put these words, artistry, ingenuity and imagination.

These are all very sophisticated words. What does that mean? People love free products. They hate when you suddenly say, no, you have to pay for something you used for free. We get used to free products very quickly. You get addicted to them. If Google started charging US$10 a month, even YouTube. How many people pay for YouTube without the interruptions of advertising? Tiny fraction. Why? Because it's free, for God's sake. It's just free. What? It happened to Microsoft with Hotmail, right? Remember Hotmail? Yeah. 50 mega free. Yes. Listen, it happened. Why is email free? Because the people who started it gave it for free. Think about it this way, okay? In the phone today, no, but when I started, I'm a little bit older than you. You pay per minute on a phone, right? Nobody pays per minute anymore. It's unlimited. Unlimited, right. Why?

Because the cost went down enough that they can afford it and there was competition that says it's unlimited, so they had to do it. Same goes for Internet use. We pay a flat fee for Internet use. And there's a huge argument in the US about net neutrality. Have you ever heard about net neutrality? No. Shame on

you. So net neutrality is the question, who pays for Internet service? So obviously you think you pay for Internet service, but that's not true. Because when you sit and watch Netflix movies from 8 o'clock in the morning till 8 o'clock in the morning at 24 hours a day, you run this Netflix stuff. Who pays for it? Not you and not Netflix. The people who wanted to change it are the carriers, the people who really move the traffic.

And they said the huge users like Netflix, Amazon, Disney, all the people who stream like mad, they should pay for the access to the Internet. They should pay for it. Because I think they take like 70% of Internet traffic. It's just like 10 companies. It's ridiculous. Okay, YouTube. But when the Internet started, they had this concept of net neutrality, which is you're not interfering with what's going on in the network. That's it. We're neutral. We are the un. We hate Jews, but we don't say it right. So. So we're neutral completely. We don't care what's going on there. And there's a huge fight going on still today. Probably Trump. Trump will change it because he's for the money. So I don't know. But you see that this is not simple. To move from free to paying is a very difficult things to do.

I think I told you about my tremendous respect for Zoom for having this great idea. 40 minutes free, then it disconnects, which immediately, if you are a business, raise your hand, right? No, no. I can't afford to look like cheap, so I'm going to pay. It's really smart ingenuity. That's what I'm saying. It's really smart. And there are many of those that people figure out how to move you from personal use to business use and make the distinction very subtle. They don't tell you if you're a business, you have to pay. Zoom doesn't tell you that they have WhatsApp for business. And it costs a lot of money, the WhatsApp for business. And it grows like crazy. The other problem is you need a very large user base for meaningful revenues. What do I mean by that?

Because the conversion from free to paying is relatively small. So that means for every paying customer, you have 100 non paying customers. And they use resources, they use servers, they use stuff. One of the questions that I was once asked, oh, I don't have it. How much energy does your phone take? Most people look at it and say, nothing, I charge it at night. It's nothing. The answer is a cell phone takes as much energy as a refrigerator. And you say, how comes? Well, your phone is just the end of a very long process. So you run Waze. There's a lot of work behind Waze. You'll just see the map. But it starts somewhere in the server. So all of these servers take a lot of energy. So all of these free services are not free. Really.

It costs a lot of money to run that. So big investment in making the product enterprise ready. If you want to move from consumer to enterprise, the product has to be enterprise ready, which means you need to make sure that it's secure, it's scalable, and blah, blah, all the good stuff that goes with it. Very, very important. You start seeing why all of these are really good scalable business. Models but have a problem with them. So LinkedIn, I'll tell you a story. So it was co founded by Reid Hoffman in 2003, launched the product in May of 2003. Now who is Reid Hoffman? So prior to founding LinkedIn, he joined PayPal. The founders of PayPal or the top managers of PayPal, basically started a lot of the famous companies in Silicon Valley.

So he was Senior VP of Business Development and he reported to then CEO of PayPal. You might heard the name Elon Musk. All right. It's like musical chairs, all of these people. And before it became did an IPO, they raised $155 million. Now why do I tell you all of that? Because of this. I had dinner with him back in 2005 because were a competitor of LinkedIn and I thought it would be an interesting idea to sit down and compare notes. So I set up a meeting with him. We had dinner in California, I don't remember it was Silicon Valley or San Francisco. And we started to compare notes. He basically said to me the following. What you do is really interesting, but we want to dominate the social network of business people. That's what we want to dominate.

And I'm going to buy every single piece of it and I'm going to raise as much money as possible. I didn't know he was so well connected at the time. Okay, so it wasn't difficult for him to raise $155 million. But he says, I couldn't care less about profitability. It's irrelevant for us. We are going to do, you know, dominate that market space and that's what I'm going to do. I'm just going to raise a lot of money for doing it. And just to remind you, zoom in for got to where it was when with $3 million, we reached profitability. Okay, so both business models worked really well, at least for me and for him. But you can see the stark difference. They needed a lot of money to accomplish what he wanted to accomplish.

So all of these scalable business models require a lot of money and a good amount of luck. And at the end of the day, he sold himself to Michael Microsoft for $26 billion. Oh, poor guy. My heart pours to him. I went to check how much stock he had when they sold it, when they went to IPO. When they went to the IPO, he had, I think close to 30% of the company still after the $155 million. So the poor guy is not poor. So just to go back to our objectives, and vision. So we want to increase success rates. And now you see that the success rate of these kind of business models is not 1 out of 10 in my mind is 1 out of 100. And we want it to be profitable. And it's just not working.

With these kind of scalable business models, it's very difficult to do. So what do we do is. Here it is. So this is something I learned when talking to one venture capitalist. He came up with this VC ratio. So what is VC ratio? It stands not for VC venture capital, but V is value at the exit and capital invested. So if you take. What did you get for your investment? That's what he called the VC ratio. I thought it was really cute. So I'm. His name is Jeroen. A company that raised $30 million and was sold for 300 million have a VC ratio of 10. You can check me. 300 divided by 30 is still 10. Not many companies are sold for 300 million. It's 30 million for 100% of shares. I'm not even getting there. You are right, but I won't. You're right.

I'll get to it in my next lecture. The numbers lie. I know, I know. Okay, what about the following? Now let's talk about the company that raised $3 million and was sold for 30 million. Not exciting, right? But same VC, same multiple of 10. And the chances of fetching a $30 million valuation or exit is much higher. And a company that is profitable and fast growing can easily fetch 30 million. Why? Because people look at it and they calculate if it grows by 20% a year and it generates a half a million dollar, then next year it will generate 600,000 and the following year 750 and so forth. So they can calculate how much profit they're going to generate in the coming years. And that's what dictates the price. Not anything strategic or whatever.

So this kind of company that are just cash generating and growing fast are an easy sale and you can make a lot of money on them. Second, to answer your comment, so if you raise $30 million, you have probably diluted already. It was pre seed round A, round B, round C, you are now down to 3% ownership of the company. So even if they sold it to 300 million and you have 3% of the company, $10 million. Not that I'm joking about $10 million. I'm sure many of you will be happy to have it in the bank. But it's $10 million for 300 million. If you build a $30 million company using what SmartApp is doing and you raise $3 million, you might be still owning 30, 40, 50% of the company.

And if it's 40% of the company and it's sold for $30 million, you get $12 million. Nobody's going to write in the news except you and your bank and your wife. Nobody will know about it. But these are the important people. So with all of that, let's talk about growth engines. Okay, so remember what I said, that smart app growth engines come to solve three problems. This time I changed the order. So we're talking about, remember we're talking about building a company. This is a startup, okay? So you build a company from

nothing. And probably you're going to introduce a new product or a new concept. And the question is, how do you successfully introduce it? We talked about the scalable business models and we discussed how difficult it is to scale them up at the beginning.

Once you are in the big loop, that's okay. But to go from 0 to 100 million is very difficult. How do you do that with a new product and a new business and you don't have money? That's the question that growth engines talk about. The second thing is overcoming what traditionally is non scalable. So in every company you have non scalable activities. The question is, can you scale them up even though inherently they are non scalable? If we have time, I'll get to it. If not, we will talk about it all the time. Obviously. The third one, if I get to it, is branding and marketing, which as I said, we talked about it already in two lectures. There are two books, one I mentioned already several times and there is another one that I'm mentioning now.

The Innovator's Dilemma by Clayton Christensen and Crossing the Chasm by Geoff Moore. What's unique about these two books, which I said several times already, is they start with the concept that if a lot of companies get into trouble, you can't really give a million answers. Oh, the entrepreneurs were idiots. They didn't have enough money, the market was not ready. All kinds of stories. But if you see something, a pattern that repeats itself time after time, maybe there is some really deep issue with the subject, which is why I say when 9 out of 10 companies fail. I described it in my previous lecture. There is a real problem. And the problem is that the business model of VCs, the way VCs raise money and invest money and the way entrepreneurs manage companies are just not compatible. They bump against one Another.

So what these people were talking about is how do you introduce new products? The innovators dilemma obviously deal with you start a new innovation and you want to make it a business. And crossing the chasm. So let's talk a little bit about them. It was written by Clayton Christensen in 1997, almost 20 years ago. No, almost 30. Yeah. See, 300 divided by 30 is still 10. But this didn't work. So it became one of the most influential business books because of the way this talked about disruptive innovation. The Harvard Business Review later named it one of the most important management books ever published. And I agree with their comment. I think it's a really brilliant book. What about Crossing the Chasm? So it was published even before that in 1991. I read it about that time in the 90s. Really?

Again, it's one of those influential books and it's the first book to identify and explain why many promising technology startups fail. So he talked about it that he brings a lot of examples of companies that started, ran out of the races, had great success at the beginning and then stuck, just couldn't go beyond that. And he called it the chasm. Chasm is this. Yeah. And he explained why that happens and he introduced several ideas. First of all, the notion of bitch heads. Those of you who listen to me know that I use that term a lot. And a bitch head is you have to focus your attention on a small sector of your market and just drive into it as far as you can go and then spread out.

If you try to attack the whole market, you just don't have enough resources to do so. And the other thing is the whole product which came with technology innovation here is the crossing the chasm. I'll explain to you. The idea here is that the market is divided into different groups of customers. As you can see, it's the usual bell curve. To the right of the middle you have the conservatives and the skeptics. These are the people that will buy a laptop by the time their child is already used. ChatGPT. Then they finally get to it. On the left are the people who will buy any gadget that comes to market. These are the people when Apple introduces a new product, they're going to stand from midnight onward to be the first to get the gadget. Both of these are the end results.

In the middle there's still people. For example, I'm not one of those who will buy an electric car. Why not? Because there's just not enough stations. So I rather go in the car and know That I can get from here to Eilat or to Metula easily because there are enough gas stations, I would buy a plug in. Why? Because I can benefit for most of my drives, which are short distance, using electricity, and I can fill up with gas whenever I want. But you can see there are a lot of people who buy electric cars, have no problem with that. So that's kind of the division of the market. They are the people who will jump just when the new invention comes in. They are the people who wait, see that it's working, and then buy it.

And there are people like me who say, it's not that good enough. I'm fine with my old car, it's working, and that's about it. So every market looks the same. Bear in mind that if you are an entrepreneur and an innovator, you're talking to these people. That's the problem. There are very few of them. That's where the chasm is. The question is, how do you move from these to here? He pooped here. The visionaries. I kind of skipped that. I don't think that this is really important. I think that what you have is the people who will buy everything, but they are very few and rare and far between. And then there is the main market, which behaves radically different. If you think about what he calls the custom. The whole product. We just call it jobs to be done.

It's the two people that I mentioned, jobs to be done. Is Christensen in the Innovator's Dilemma. Actually, that's the innovator solution. And Jeff Moore talking about the same idea that you really. In order to move into this market, you have to sell a different product. Different not in the sense that it's radically different, but the way you package and present it and package it is different. There's this chasm, but it's really around new products. And the question is, what's the problem with new products? Especially if you are a startup, you don't have money, because I don't give a lot of money. Most founders, when they start, really don't have a penny to their name. So with very little money, what are the problems that you encounter? There are two very different problems that you encounter.

The first one is that new products are difficult to explain and comprehend. You think it's obvious, but you're the only one that thinks it's obvious. Everyone else doesn't know what you're talking about. That's the reality. Because it's a new product, even if it is the same as many Other products, you want to differentiate it, right? So you need to say something that is different than the product that they're used to buying. Now you lost them. Unless you say it's the same exact product but cost half the price. Let people understand. But if no, it's the same product, kind of the same, but it can do A, B, C, D, E. The A, B, C, D, E you lost. So there's a real big problem. How do you explain to people what is the product you bring to market and why is it worth anything?

The reality of it, yes, there is always these early innovators and so forth who understand, but this is not the big market. Most people don't understand what you're talking about. And second, which is a totally different problem, but still a huge problem, that new products by definition are not mature, they don't have customers. So you don't really have seen the problems yet. Right? So in your shop it might be working, but when you give it to a customer, what I call an unsuspecting customer, and it starts to bang on things and nothing works. Okay. So it's hard to use usually because you build it to be easy for you to use. You understand the material, they don't. It fails often. And it takes many iterations to really get to a smooth working product. Iterations means time means money.

To get a product to work really well costs a lot of money. Nobody knows what you're doing. You're spending a lot of money. Nine out of ten you're going to fail. That's the reality. Now you have to think about, that's what I called in here, growth engines. How do you solve this kind of a problem? And that's what is the core of what we're talking about. So the solution is you use nine scalable methods to grow and reach profitability

on modest investment. While solving these problems, here is where this. You know, after an hour of talking about scalable, non scalable, non scalable, I completely confused all of you. What I'm trying to do. So this is the moment of truth. What I'm trying to tell you is that using non scalable methods smartly can solve you the two problems. That's the key in here.

You can use things that other people, that no VC will invest in you, but if you do them smartly, you have a much higher chance of success. Now I got your attention. Finally, let's talk about one of our companies. It's called Bioform Beyond Data. I'm sure you will understand the first sentence. It's a product to convert clinical trial data to the standard STTM format. Those of you who didn't understand, raise your hand. The other understanding. Yeah, it's a highly technical gibberish thing usually done by biostatisticians. So they are the people who do the job. They basically take the clinical data, write some code in a language called SAS and convert it to a different format. Rocket science. The customers are CROs. CROs are the companies, they are called Clinical Research Organization. These are the companies that actually do the clinical trial.

They are not the pharma company. The pharma company hires them to run the experiment because many times the experiment run in five different countries and they have representatives in five different countries. They know how to do it. These are called CROs. They are the one collecting the data and they are the one many times that process the data. And also of course the pharma companies themselves that run the experiment on a higher level. This is what the market is. We started working with Bioform at the end of 2021. They were working on a product. Instead of having biostatisticians work in SAS in this language. They wanted to build a drag and drop product. I want to take this piece of data and stick it in here.

I want to take this, display data, add to it that piece of data and drag it to there. Basically drag and drop. Kind of an ETL for those of you who know what ETL means. When I started working with them, I said, what's the difference between that and etl? ETL is the standard of how do you take data from one place, put it in another place while cleaning and normalizing it? They said, well, it's a much more complex process. They tried to convince me, doesn't matter. But what became clear to me when I started working with them was that if they are right that this is a complex process, the chances that customers will know how to use their product is very limited. Remember what I said, what you think is obvious. Your customers don't understand what you're talking about.

And chances are that the product is not going to work. It will take a long time to really clean it. I convinced them to actually not try to sell their product, just continue to sell the service. They were doing services. They were actually the ones with the biostatisticians converting the data from the original to the SDTM and they were making money on the hour basis. So they basically were a services company. They're still a services company. So I said to them, if your product works, then you can deliver the results at the same price you delivered before, except your margin will not be 20% or 30%. It will be 80%. So you basically have a softer margin. And the customer doesn't have to do anything. He got an SDTM file before, he gets an SDTM file now. Nothing changed. So easy sale.

Let's just do that. That was the model in 2021. Today we have one large customer called Medidata and they do a lot of these projects. They do about two, three projects a month. These are very complex clinical trials, mainly in oncology. It turns out that a lot of the work today in pharma is about oncology, cancer. And these trials are actually fairly complex with a lot of data. We will generate about a million and a half to $2 million in 2025. We are generating revenues. Until now. Everything sounds really great. Now let's go to the ugly side. The product is not yet ready. They've been working on it. When I came in, they were already working on it for three, four years. And 2021 was a long time ago. And there's still not a product. Why there is no product?

I don't want to go into the details. Lots of reasons, but nothing unique. You know, a lot of startups don't get to the product. And so I had to bring in a new CEO. And the lucky thing is that went in that direction. So we have revenues, we have income coming in because we have customers, we still do the job and the product is kind of limping along. We improve on it, but it never worked, really. The point is that they were trying to do it with a product and the product is not ready. It's not really working. But because we changed the focus and we said we need to get to customers, and customers really don't care about products, they care about their results. We do have a very large customer and some more customers now. Meanwhile, a lot of things happened.

The world is changing and there's an AI revolution. As you know, AI is really good at converting one thing to the other. Translating from English to Hebrew so people can listen to me in Hebrew or read about me in Hebrew. Same goes for. Why wouldn't we take the data in one format and tell it just convert it to sttm so it's not that easy. Doesn't matter. But the technology has changed dramatically since the time the whole thing was invented. And luckily we have customers. So instead of just working from our figment of imagination, we have the people who are doing it day in and day out. Trying to use the product and trying to do this work so we have enough examples, real examples and real people who do it internally that we can start checking all of these ideas.

The company, I can assure you, would have failed if not if didn't change the business model from selling a product to continue to sell services. So it's not scalable, it's ugly. It's not scalable, it's ugly. But the company is alive. And as you, I don't know if, you know, Ariel Sharon used to say that in politics, it doesn't matter if you're up and down as long as you are on the wheel. So it's the same with business. Yeah, sometimes you're up, sometimes you're down. But you have to remain alive and you have to have your team and keep working. So as long as we have customers and we have revenues coming in, we are alive. Now, you see that when I say one out of two. One out of three. Yes.

That means that one out of two fails or two out of three fail. And I don't think it's going to fail. Yarden is the CEO. I think it will succeed. But it's a struggle. Yes.

Isn't it, like a concern that now that they are focused on clients and service, they have less bandwidth and resources to build, to focus and build a good product?

Absolutely. Life would have been so much better if there was Rothschild or Montefiore who said, hey, take some money, play with it, you know, But I don't know. I'm not Rothschild. And. And so you have to do some, you know, the move from product to service. No, they were in service, wanted to move to product, and I brought them back to service. But do you see it as the ultimate solution or as a temporary way to get to the product market? That's a wonderful question. Really wonderful question. So there's another thing that is missing in this picture. There's no brand. I haven't talked about branding at all. Why? Because we don't have branding in this company. We didn't figure out yet how to do the branding. And in my mind, that's a huge problem.

So what we're doing now is Yarden is really a very capable technical guy in addition to being great manager. And we are looking at what can we do with the new technologies in order to bring value to the market on, you know, in small capsules, not something as disruptive as they had before, and potentially put some of this into the market for free. And essentially, instead of having this monolithic product that does the

estimate? We are thinking about doing it in piecemeal and charge a lot less money than they wanted to at the beginning, but have a much higher acceptance because it's going to look very similar to what they're doing today. So we're basically taking the company in a totally different direction, same overall concepts.

We're also talking to another person company that came up with another set of tools that look even more promising. So like Sharon said, as long as you're on the wheel and we have revenues and we have customers, we can continue to innovate. Do I have a solution? No, but I have good people there. So I think it will become really, well, really good. Will take time. Hey, one out of three means two out of three failed, right? So it might be a failure. I hope not, but it might be okay. I said about market maturity so new products are hard to explain and comprehend. Here's what I did. I went to one of the VCs literally by just chance opened their portfolio companies, looked at the first two and this is what I found.

So Infinipoint is a pioneer in the device identity as a service security category to extend a true zero trust security policy posture to devices. Infiniprint is the only solution that provides single sign on SSO authorization integrated with risk based policies and one click remediation for non compliant and vulnerable devices. Same thing, right? This is taken from their press release. I'm sure that the person who wrote it understood each and every word and he thought about each word long time to make sure that he is precise and easily understood. So if you think this is the only one, so here's Nvidia is the leading insurtech provider of a cloud native data driven insurance management system.

Using an open API architecture, Novidea's software platform enables brokers, agents, MGAs and carriers to modernize and manage the customer insurance journey end to end and drive growth across the entire insurance distribution life cycle. If you want me I can Continue reading in German this time nobody understands it. Would you buy it? You don't company I know insurance market cost me. They won't buy it because by the time they look at it they say they understand every word. But at the time okay, so new products are hard to explain and comprehend regardless of what you're going to say. Customers don't get it not because they are idiots, but because it's very hard to explain in words, concepts. And remember this is a new product. If it was exactly the same as the previous one then you are not an innovator. Right.

So it has to have something that is very different by definition. And just to explain what is different, you lost them. That's the reality of life. And they don't want to really change or make changes. That's also the reality as much as we keep talking about, yeah, you know, this is so much better. I drive my old car. I'm not going to buy an electric car until there are as many electric outlets as possible. Why? And you can't really say that I am not the guy who likes new stuff. But when it comes to my personal life, forget it. And many people are like that. They don't like change. And those that like change are not good customers because they disappear, they won't change. And this is something really interesting. Prospects are much more risk averse than seeking benefits, saving or improvements.

And in parentheses there is a name of a person who got a Nobel prize in economics. Kahnman. In his experiments, he did a lot of experiments on perception. Not the Homo economicus, which was the original idea behind economics, which means people calculate to seven digits after the decimal point to figure out if this is better than that. And he proved that people are totally illogical, but in a highly predictable way. One of the experiments he did was if you play a game and you throw a coin and you can win $10 or lose $10, it clearly showed that people would like to win the $10, but they are really angry when they lose the $10 up to the point where it's about an order of magnitude. So if you put.

They have to put $100 on the table and their money, okay, and they can throw a coin. And if the coin falls

one side, you will get $200. If the coin falls on the other side, you lose $50. People will not play the game because they hate losing. Even though statistically they should not be at all sensitive. They are tremendously sensitive. People don't like to lose. And change has the risk of losing something they don't want, that people don't want change. And because. And you just encountered it, right. It's human nature. There's nothing you can do about it except knowing it in advance and dealing with it in advance. When you try to sell, you should know that even though you prove to your customer.

I remember in one of my first companies we did payback analysis and we showed return on investment and we had all of these graphs and charts and spreadsheets and whatever. And I realized after a while that I can talk about it for as much as I want. It doesn't matter. They just don't want to change. I can prove to them whatever I want. It's just on the paper. They don't want to change and they don't care about it. The most famous real life experiment that was done on it is years ago when fluorescent light bulbs came about and they were much more energy efficient. There was a company that said, we're going to go to large establishments, whether it's malls or factories or office buildings, and we will change all the light fixtures in the building for you at no cost.

We will do the work. The only thing we want is we will measure how much you pay per electricity now and then we will look at the electric bill after we made the change and we split the difference. You can only win, no risk. We're going to do all the work and you're going to get half the gain. And the company failed. I'm just telling you that people are risk averse and when you come up with a new product, it will make changes. The next point is even more subtle and I've seen enough companies making that mistake. So you go to a company and you say, if you use my product, I can save you a lot of money. And how am I going to save you a lot of money?

Because right now you have five people doing this job and with my product you only need one. And he goes to the head of the department and he says, look at how much money I can save you. And the head of the department says, I'm a senior manager, I have five people. Now I'm going to have a computer. What do I want? I guess I'll stick with the five people. A lot of the savings that people talk about actually impact people. These people start to even make some noises. It's not that easy to introduce a new product. Okay, so the last point is that people and markets are usually far less sophisticated than entrepreneurs think. We at the outer skirts of technology understand all of that stuff. And ChatGPT seems normal to us. And all of that thing.

People don't know how to use Excel, trust me. Take a random set of people, give them a really simple task in Excel and you'll be shocked, totally shocked. Okay? That's life. They don't know how to build an Excel spreadsheet. So when you start talking about all of these new inventions, you lost them before you even started. So life is hard and you need to figure out how to do that. And even worse, the more disruptive the product is, the harder it is to Sell. If you want to make a huge change, you don't need this anymore. You can use that and it's going to do things for you. You lost it because people are very scared of big changes. The more disruptive it is. The disruption usually happens when there is a maturity in the market and then suddenly you see an overnight change.

What people forget is that the previous 20 years were a preparation for the overnight change. It takes a long time for these changes to happen. And when they happen abruptly. I remember seeing the Internet back in 1993, 1990. One of my investors wanted to communicate with me through a whole new method. He said, I use email. I said, you use what? He said, email. Said, what is email? And he said, well, you know, I have an Internet provider. I don't remember, it was WorldCom or somebody. He says, I log in and there's the modem. I don't know if he reminds me. It connects in the moment and you can send and receive

emails. So I said, show me. So he showed me. I signed up for this service and we used email. And I was tremendously impressed by this idea.

But there was nobody else to send emails to. You corresponded with yourself. But it changed really rapidly. I'm talking 93, 94 by the end of the 90s. I don't have to tell you, my wife, my kids, everybody had an email. And we all used email all the time. And it was free, which made it really easy. He took me to see something called Mozilla. Mozilla, My Mozilla. I didn't know what he wanted from me. And he showed me this browser and he said, there's a website behind it. Honestly, I think I convinced you that I'm not the biggest idiot in the world. I looked at it and I didn't know what they want. Literally. I said, who's going to build all of that? You know, it's useless. Yeah, I said, so, okay, so yes, some things are disruptive. Most things are very incremental.

And the last point is long sales cycle cost a lot of money. We keep forgetting it. But while the sales cycle goes on, you pay salaries all the time. So it's tremendously expensive. So when you need to convince somebody that your product is really great, you lose a lot of money along the way. So what do you do about it? The possible solution is to break the sales cycle into steps and package each step into as a product that is sellable and turn problems into opportunities. The problems exist. There's nothing you can do about them. The question is, do you treat them as problems or do you treat them as opportunities? It's really a mindset. And if you start looking at the problems as opportunities, you might go a long way. And I explain to you why the problems are not only yours.

Everybody has the same problem. You didn't invent the problem. Okay, so what makes it hard for you makes it hard for everybody else. Therefore, it's an opportunity. Because if you figure out a way to go around the problem or above the problem or below the problem, you are ahead of everybody else. So look at the problems as opportunities. So that's why I asked Rohit to sit in the front so I can praise him. So intelligent where he is. The CEO came to me with a product that is demand forecasting tool. Did I say it right? Yeah, kind of. What do you call it? Demand planning tool. Okay.

But it does focus and initially aimed at small to medium company came to me and he said, listen, they are the big guys, SAP and JDA and whatever and they sell at hundreds of thousands of dollars to big companies. But there's no product at the low end of the market. What I want is to get a really good product with artificial intelligence and smart intelligence and you name it, blah, blah, sell it for $10,000 and we're going to capture the low end of the market. Okay? So he smiled. He joined in mid 23. And before that Roy worked at Ernst & Young at EY in that area of snop, which is supply and operations and there did a lot of consulting and he had two small design partners to work on the product and several lengthy sales cycles.

Every time I met with him, he says, oh, I had another meeting with this customer and I had another meeting with this customer and then another meeting with that customer. And I said, for God's sake, when are you going to get the contract? It's coming. It was coming. It's still one waiting for them. One week close, right? One we close. Yes. Okay. So it's not his fault. That's the way life is. So were looking at some ideas for doing branding growth engine with some revenues. So we're asking ourselves, how do you do branding? One of the things that we immediately agreed upon was I asked him, how big is the Israeli market? He says, oh, it's pretty big. I said, let's focus on Israel at the beginning. Okay? Let's not try to conquer the world. Beachhead, our beachhead is going to be Israel.

Let's FOCUS on Israel THEY ALL SPEAK HEBREW Roy was teaching in university as well as in ey, and he had a few courses ready. All the materials were ready. We said, how about if we package courses and we

start selling courses? As you remember from about an hour and a half ago, I said, courses is a non scalable business model. Roy was looking at me and he says, are you sure you want to do courses? Because all the VCs told me that if I do courses, they don't want to talk to me. That's about it. That's the end of conversation. That's not a disruptive product. Now, what's beautiful about courses? My wife is a psychologist, so I'm going to teach you some psychology. As I said before, people are averse to change and all of that stuff.

They like to know what they're buying and they know what the course is. You sit in class, somebody does that, you can think about the world. You don't have to listen because there are no tests at the end. And it's a wonderful time pass. I know what courses are. It's not threatening. To the contrary. I will have a diploma at the end. Now I'm smarter, right? My job security is higher. It's great, no problem. Nobody's going to replace me. To the contrary. It sounds funny. It's not. Think about it. You take the resistance out, you move them to your side and now they're your friends, right? Of course, Absolutely. The company pays for it. If it's frontal, it's even nicer. And if it's on zoom, I don't have to listen. I look like I'm listening, but doesn't matter. And everything is great.

Here are the customers. Branding. Okay, just look at it. Coca Cola, Netafim, Nuva, SodaStream, Sugat, Diplomat, Elbit, Toyota, BYD. Did we get a car? No, not yet. Checkpoint. I want you to really look at this and start thinking by changing what we sell in the first step, what a change it is. Why? Because it's a known product. It's just a known product. There's no change and I feel good about it at the end. Here are the number of companies that took the course. First course 100%. The interesting thing is about 18% took courses and 8.3% took three courses. It became habitual, they were addicted. It's a funny course. He's a nice guy. Once a month I won a course with Ori because it's funny. There are people who took the same course twice or three times even. Right?

That was the Extreme.

They failed in the first one. I don't know what. Okay, so let's look at the wholesale cycle. So that was the standard sales cycle. Several meetings over two, three months. First of all, you want to understand the customer needs, explain and demo the product, agree on the next steps. Then comes the proof of concept, okay? Free use of the product and so forth. Okay? It's a long sales cycle. So Roy came to me and he said, I did my homework and I have it now down to the details. Exactly, exactly what we're going to do on day one, day two, day three. You see, it's really detailed analysis of the sales cycle. I looked at it and got a heart attack, literally. I said, are you nuts? Am I funding all of that? This is ridiculous. This is what we want to do.

I said, all of that is going to be a product. Okay? And we call it value analysis, not proof of value analysis. We are going to show you the value that this product gives to you program, right? Yes. Okay. And I wanted to charge $9,731, and we're still fighting. He charges 7,200. I said, it has to be a number. That doesn't make any sense because then people think that you spend a lot of time thinking about your cost and that's the price. But it's $7,200. Here's how the sales funnel looks today. If we take all the people who took the courses request for intro, that means half the people want to talk to us. Then we sell them this value analysis program. That's the VAP and the software. Look at the small number here. But meanwhile, we make money.

The course costs 2,500 shekels for the course person, and the value analysis cost 7200. And. And how much you made last year in 2024? No, all together, we did almost half a million dollars. Not bad for a company in its second year of life. Okay.

I think, Jonathan, it's worth mentioning that the beauty of this transition between courses to Intro, they look at you much differently because they don't see you as a salesperson, they see you as an expert. One of them even said, wow, it's very exciting to talk to you face to face. I feel like I'm talking to a celebrity. Okay. So it's a very convenient point to start a selling process.

Also in the course, probably they are more open to tell you about the problems. Of course. Yeah.

And by the way, another interesting thing that happened is that some, as you can see, they didn't move forward and requested an intro. It's not because they didn't want. Okay. Because they couldn't do it because of many other aspects. But some of those actually they moved to a different world, different company and then they reached out and then we moved forward.

So it's. And they already paid something, right?

Yes.

We don't talk to anybody who doesn't pay us, even the cleaner. You know what I'm trying to show again is you can look at problems as opportunities. And that's the main thing that I'm trying to tell you have to make sure you survive and you make money along the way. And when you really put that as the target and you distance yourself from. I have to be disruptive. I have to develop this phenomenal product that will change the world. You start thinking practically and creatively and what comes out at the end is actually very disruptive products which I'm going to show in a few minutes. Okay. So the fact that you are becoming practical and chase the next dollar doesn't mean you lose or miss your vision. That's the interesting thing in here.

To the contrary, because now you are in the market, you talk to potential customers and you really understand how to shape your vision into something realistic. Something that people will buy, something that people will use. Remember what I talked about Bioform and sdtm? They had a bombastic view. Right now when Yarden is looking at it, he says I think they are not touching the real issues and they are spending way too much effort on the non real issues. Why? He came from the outside. He looked at it with no emotion whatsoever. And he feels that with the new tools that exist today they can develop a much nicer, better product that will fit the market much better. So you have to. But we can do that because we have customers, because we have revenues. So we are in the market.

We are on the wheel. So here's the vap, the value analysis program. Okay. So you can see it's a four to six weeks program. You had all of these. I won't go into them. But that's what we present to customers. Let's talk about turning problems into opportunities. Interestingly enough, the market is immature. That's what we're coming to understand. So even though I know university and in consulting firms they talk about SNOP sales and operations and it's a whole new things and they talk about it all the time. The reality of it that most companies don't know what they're talking about and it just doesn't fit their culture. They want to do anything about it. But they do have problems. They do have problems. They just look at them and say, all right, we live with them for 20 years, we'll live another 20 years.

It doesn't matter to us. But they do have a problem. So when you give them the courses, we kind of highlight to them that there are better ways. It's not threatening, okay? They sit in a course, they listen. It's nothing about them, it's nothing that they have to make a decision about. They get a diploma at the end, they're relaxed and they listen. And suddenly they say, you know what? Interesting. Yeah, we can improve our inventory. Yeah, we have about $5 million of dead inventory sitting on the shelves. It's kind of scary. Yeah. And we want to think about it. Okay. But it's non threatening. Then we do consulting. So they say, you know what, you understand what you're doing, come and help me. Specifically, not in your courses, generated. Now, consulting is again non threatening. Right.

And people know how to pay for it. Kind of tell me a price, I'll argue with you, I will cut 20% of it. So we add the 20% in front. They cut the 20%. They feel good, they negotiated. Everything is great. The legal department dots all the I's and crosses the t's and everybody is happy. And you get tens of thousands of dollars for what? For telling them their problems, that you can solve them with the software, but you don't. It's now they're leading the whole thing. They called consultants. They control the situation. They are not sold to, they are there in the position to make decisions. So you convert, you invert the problem you into an opportunity and meanwhile we make money and we clearly. Can I talk about Coca Cola? That's the most bizarre consulting job ever I ever heard.

How about you talk about it? So Coca Cola wanted a consulting job from Intelligent. And the consulting job was, can you please help us interview all of your competitors and help us decide which ones we need to choose. So Ray, being an honest guy, said, excuse me, there's no way I can be objective. And he said, yeah, we know. They pay good amount of money. Roy interviews all of his competitors and gets every detail of their product. Life is bizarre. But again, if you think about it psychologically, it makes sense. The guy gives courses. He was at ey. He knows what he's doing, they trust him. Why he wouldn't give them good advice. And they trust he will be honest. I Just want to show you that introducing a new product, how complicated and complex it can be. It's not that simple.

Then I said, okay, we do all of that in Israel, but it's not really scalable. If we want to go to the us, what are we going to do when we want to go to the us? So our original idea was to become the kind of the expert or the thought leader of this Snop market, which is basically supply and demand. So we wanted to start interviewing people, fill out questionnaires, create content, which I like, content that you can show in a pie chart. People believe numbers. And you know my famous story about the chart that I once saw, you know, it was like, 11% of the people do this and 33% do that, and 77% do this. And I started laughing, and people asked me, why are you laughing?

I said, because they interviewed nine people, and they were not smart enough to know that I can divide by 11. And I see, you know, it jumps at you, 33, 40. Give me a break. People believe numbers. It's just magic. You give them a pie chart, you give them a graph, and it suddenly smacks from truth. So we wanted to start doing that. We use it in the courses. We have a questionnaire, we interview customers along the way. So we produce a lot of that stuff, but it didn't have the stickiness we wanted. So we send emails to people, we show them this stuff, we want them to fill out questionnaires. It just didn't lift, you know, it didn't go the way we expected it to go. So Rory and I were sitting and saying, okay, what else can we do?

And then Roy said, we did this kind of a consulting job at ey, it's called maturity assessment, which essentially, they go to a company, they interview all the stakeholders in this supply chain, and based on these interviews, based on like six concepts or six ideas, whatever it is, six topics, they give them a grade between 0 and 4, right? I failed because I didn't go to the course. And so you create this chart that look nice, that show them. In this area, you good. In this area, you are bad. Here's where you need to improve,

and here's how we can help you improve in those areas. And that's called maturity assessment. And it was a pretty big project. They charged between 50 to $100,000 to interview the people and do this.

And we came up with the idea, why don't we do that online and have people fill out the forms themselves for free, and we give them A maturity assessment for. For free. Great idea. So knowing that before you develop anything, you start selling it. So we started selling. So we built a nice email with explanations. We sent the emails and Yael, who is the director of marketing, came back and she was shocked. She said, we got about 37% open rate and like 35% click through rate, which is kind of out of your charts completely for a spam email to people who don't know who you are. But they opened, they clicked and they did nothing. Nothing.

Only for the American market.

Yeah, only in the American market. I wanted to go to the American market. So we're still there in the nothing, but we're working on it. So we did already two or three iterations. We are still in the nothing, but we hope to improve. The open rate and click rate are still good, but nothing. But we'll crack it. But along the way we said, wait a minute, you know what, let's start thinking about it from the perspective of the customer. So they get this questionnaire trying to assess them on six topics. We use a lingo that was developed in universities or consulting firms. Nobody understand that lingo. So maybe we should explain to them, what are these six topics? Then came the idea that maybe we can start developing a lot of content to teach people about their maturity.

And a lot of content is good because you can break it down and we can create a lot of pages explaining all the concepts and blah, blah, so we can have a vehicle potentially to build a brand. Because now we are explaining to people about themselves. So we are the thought leaders. Still work in progress. What I wanted to show you is how every failure and every this brings you to the next level of thinking potentially we can do something. What is SNOP is this process. There's a research done. I think once that this entire chart is from one research. Remember that all of these research everybody quotes is usually three people that did something, but people believe in it. So what can I do?

Essentially what they showed in this research is that companies that try to do the process took these consultants, spent a quarter of a million dollars on consulting and built this internal process of snop. And for a while they see tremendous improvements in their supply chain. And then surprisingly, it drops down. They get tired of using it and they go back to their old ways. I go like this and then go down. How many people were involved in the research? We don't. I don't know. I think three. Maybe it's five, definitely not 500. But still it tells you something. It tells you that however you look at this process is not natural. It's not something that people say, yeah, let's do it. This is great. This is really simplifying my life. No, it complicates my life.

Roy came up with this idea of doing an Agile Snop, essentially developing a really simple product that just tracks the activities, doesn't do anything beyond that. If you need to have a monthly meeting between the VP sales and the VP operations, then put it on the calendar and this Agile Snop product will send them two days in advance a memo. You have to be at that meeting for that meeting, you have to prepare this document, you have to prepare that document. And then when they submit the documents, we keep them in this. So you can go back a year and say, you know, we had to have these monthly meetings and we had a huge fuck up, you know, last year. Let's look at what did we say then and why didn't we realize that this is going to happen?

So we'll have a paper trail. Simple. Everything is simple. So we're thinking about it. Haven't done anything about it yet, but again I'm trying to show you same thing. Problems can be looked at as opportunities. The last one I want to talk about is really simple. I think I mentioned it before, which is how do you take non scalable processes and turn them into scalable processes? In my old days I did a product called Card Scan. You all of you heard about it, but that was in the old days. I'm talking about 93, 94. And at that time machines were desktop machines. So what you see in here is an open desktop machine. Okay, so that's the front of it. They took the COVID out. All computers look like that. They were closed by the way, when you bought them.

And there was no way to connect anything to the machine. So the only way to connect something to the machine was to have a card installed. You opened the font, you had to install it hoping that you didn't create any short by touching something you shouldn't touch. And then you had to restart the system and install the software. Simple stuff takes just about half an hour and you need to be a licensed technician. But other than that everything is just simple. And our product, which was a small scanner, needed one of those to be installed in your PC because there was no other ways to connect. USB didn't exist then. So I show a demo to the board and one of my very smart and funny investors says, there's no way on earth I'm going to do that. Just forget it.

And I have lots of business cards. But no. And he says, if I were you, I wouldn't introduce that product. I said, listen, that's the only product I have. So I either sell what I have or we're out of business. He said, I said what I have to say, do whatever you want. We introduced it to the market. I can tell you the end. The end is we sold 6,000 units of it, but obviously everybody who tried to install it had to call tech support. Tech support is non scalable because by the time you explain to them what they need to do and just to wait for it to reboot, which was about five minutes to reboot and meanwhile talk about the weather, talk about baseball, talk about basketball, talk about football, talk about whatever. Okay, five minutes.

And so we very quickly got to have three or four people in tech support. And they told me we're not handling it. The amount of calls go very high. So I said we need to make it scalable. This is not scalable. We have to make it scalable because I'm not going to start adding people. We're losing money. If you add people, then we came up with a really simple process. All of you know, you pick up the phone and you call any company or anything. You are number 17 in the line. How about if you hang up and we will call you back or leave your number or whatever it is, Any other thing.

If you actually call a company and somebody answers, you usually hang up because you think it was a mistake because there's no way that a real human being answered you. So I said let's change the way we work. No, I'm talking about tech support or complaints or where's my refund? Right? Where is my refund? Right? Forget it. So I said, let's change. We're going to have the first line will pick up the phone in 30 seconds. We have to make sure we pick up the phone in 30 seconds. And then the first line person just checks, you know, did you put it in power? Did you turn the computer on? You know, the stupid questions? Yeah. Did you take it out of the box? Exactly. All kinds of stupid questions. They always exist, right?

So I don't remember what the numbers were, but there's certain amount of problems that person can solve. Then if he couldn't solve it in three minutes, he would transfer it to the other guys. There were two more guys, that's it. Okay. And he would say, oh, sir or lady, this seems to be something more complicated. Let me Transfer you to our senior engineers. I already feel good. I'm now at the senior engineer. Okay. So we moved the person to the senior engineer. The senior engineer tried to figure out, usually it was a fairly

straightforward issue, but still you have to reboot the system and all of that stuff. He would say, okay, I'll send you an email. At that time there were already emails. I'll send you an email with clear instructions. Do it and if it doesn't work, call me back.

No, no, no. I have you on the phone, sir. How long did it take you to get to us? He says, actually you answered right away. Says next time, trust me, we will answer right away. Just say that you mean to transfer to Joe. They will transfer you to me. Just go do it. Take your time. And we got people off the phone. We made sure that our instructions were clear. We never waited for the reboot just by solving this. That when they call, we answered the phone. Psychology. When they called, we answered the phone. We got them off the phone much faster. We were able to handle many more calls than before. Many more calls. We never had more than four people in tech support and we grew to about 10,000 units a month later on.

So just to show you that if you think about it and obviously the most important thing we did is every week we had a meeting with the tech support people in the engineering which was a co founder and engineer to figure out what was the problem. So I rather solve the problem before they happen rather than fix them when it happened at the customer. So we kept improving the product. We had a top 10 all the time. We looked at the top 10. This is now common way of doing things. But at the time it was considered innovative. And that's how we grew the company. We never went beyond 35 people and we're very profitable. And that's how we started ZoomInfo. That's it. So Pitch Radio, same problem. Okay, great product market doesn't know what it does.

All the good stuff that we're still struggling with. And the question was, how do we create a growth engine for pitch? So what pitch does we have here? The person to blame is a wonderful product for video editing. And Daniel was a video editor for eight years, nine years, something like that, and understood what needs to be done down to the detail. And then she said, I'm just doing this work repeatedly. Why don't we build the software that will do it? And that's what Pitch Video with EE not EA was built. It's a wonderful product for video Editing. But the market is video editors. And you sell them a product that they never saw that needs to work.

As you already understand, when I see these things, I always say we get all the problems that I mentioned before, but there was an adjacent market that we started thinking about. As I told Daniel, I said, I'm a customer of yours. See this camera? It's generating a video. What do we do with this video? We put it on YouTube. Who's going to watch it? Nobody. Literally nobody. I know it. The only reason I put the video here is just to force me to dress nicely and talk. That's pretty much it. But there is tremendous value in it. Except that it is buried in two hours of me talking. And it's the same happened for every company. They have a roundtable. It's very easy.

You have it on a zoom call, you just click record and suddenly you have a 45 minute video with the gurus of the industry. What do you do with it? You put it on YouTube. YouTube. And nobody watches it because nobody watches this. That's about it. So what you really want me, for example, as SmartUp, is to take that valuable asset and make it productive. How do I make it productive? I need to do two things. Number one is I need to move it back from YouTube to smart app or to our website so that it is content in our website and not content on YouTube where YouTube is monetizing it. And second, we need to get people to watch it for that. We need to cut it to short clips.

They had the technology already to go over it, put the captions on it and then use ChatGPT or any other tool and to break it into pieces. That makes sense. That was it. If we do these two things, move the content

to your site and then break it down so that you can concentrate on the interesting things on the one minute here and two minutes there. That will give you value. Then we believe that we can create tremendous value. And we are now in the midst of doing that. So we are developing basically a second product in addition to the original product that does just that goes to YouTube and takes the video and does it, but listen to it. How do you find the customers? Well, it's really simple.

You go to YouTube and you say to YouTube, show me all the videos that were loaded in the last day or last hour or whatever it is with the term webinar, with the term conference, roundtable, whatever. Danielle created a list of keywords that we can identify. Those that are not cats meowing or my child snapping or whatever. It is. It is something that has to do with business. And then we go and we check, okay, who was the one, the person or the company that loaded it. We take that name of the company and we go and we look if we have anybody in marketing in that company and do we have their email address? So only if all of those are positive. It's a webinar by company X.

Joe is director of marketing and we have his email address only then we say, okay, that's good. Now let's go and process that YouTube. So we download that video and we do everything I just described and we create a page and we show it to them. So we send them an email, we get a very good open rate and.

It'S all done automatically.

Automatically, of course. And we get zero response rate. We have more than 70% of opening the email.

Wow.

Okay, so life is hard. Life is hard. But that's not the point I'm trying to make because we're going to figure it out. This is just my. We had a conversation today about it. I start to think maybe we provide too much information to the people. Even though it's their webinar, they recognize themselves on the webinar. Maybe we did too many things. We took them from putting the webinar on YouTube to something far more sophisticated. Maybe they just don't understand what we're doing. I don't know. I mean, we're now at. Remember, the whole thing is two months now, maybe three months. But right now we are starting to use the new product and not the demo one as well. And right now we are putting the track on it, so we'll figure it out.

But what I'm trying to show you again is the focus of. On how do you penetrate a new market that you need these growth engines built in so that you have something to work with. Because just between you and me sitting there and talking about it, nothing will happen. So you have to go out to the market, try something really inexpensively or in a way that people will pay you money just for that. Like with the training courses and the consulting, or with beyond data, with doing the SDTM conversion. Something that keeps you alive in the market and allows you to understand better gradually. It's not disruptive, it's gradual. But as long as it pays for itself along the way, then you stand the chance of being tremendously successful.

Because as you figure out each step of the way, you build a foundation for a large company. That's the point I'm trying to make in here. And a Lot of what stops companies and makes them fail is really basic understanding of human nature. That's really what kills you. You don't have time. Because of what we discussed about the VC model, you don't have time. You throw a lot of people a lot of money at things that

inherently take time. Just inherently take time. People don't understand what you're talking about. When I went to business back in 1982, three, four, I don't remember, we wanted something to manage sales. And there was a product called act with an exclamation mark at the end. That was a pre CRM, it's basically outlook. That was the first tool. And at that time already there was a CRM.

I don't remember name of the company was sold to Oracle later on. Right. Thank you, thank you. They sold it to Oracle. Nobody knew what, nobody understood it. Okay. It was kind of an arcane technology that some big companies played with. And that was from 85 to 25. So it's 40 years. It takes a long time before CRM is well understood. Every company needs it. It takes time. And what you need as a company is time. Okay, let's talk a little bit about what's going to happen next. So I don't know usually when, you know, I didn't plan to have 15 lectures, I plan to have 13. But what happens is we talk to entrepreneurs all the time. We talk to a lot of people all the time.

And when I hear something or I see something that I say, this is fundamental, like scalability. When people say, oh, it's not scalable, we can't do it, then I think it's worth building a presentation around it and go down to the details of what does it mean? I mentioned a few things in the meeting. I'm not sure I'm going to take them into a whole lecture. But since this is a lot of fun, at least for you or for me, there's a good chance I will come with something interesting, hopefully. And as you were kind enough to tell me, even if I repeat myself, it's okay. You don't remember anything. Right? So that was very kind of you. I don't remember, but I can look at the slides and see, oh my God, I said it already.

So there's a good chance we will send you an email in two, three weeks and say, yeah, we have another lecture. And if not, you're always welcome to come in here and talk to us. Thank you. It.