And please welcome by doing some really great clever bossy welcome, maybe, Wave your hands in the emoji section. I am going to introduce Simon Wardley he likes maps.

Yay.

Simon Wardley
Thank you. Thank you very much, right. So maps do that let me just get everything together. I think I better start by sharing some slides so hang on a second screen.

Do

Simon Wardley
you see it says an introduction to Maps Oh

Mark Littlewood
yes,

Simon Wardley
fantastic news right, first of all, I suppose I'm gonna ask a question, just wave your hand if you've, you've done any of my mapping before. No, right. Okay, super duper capital.

Okay have you.

Simon Wardley
Okay, so what am I going to go through, I'm going to go through. First of all, the origin of the work that I did around mapping started 16 years ago, quite some time ago. And then I'm going to go through what is a map. Then I'm going to talk about patents, and then I've got a bit of a magical mystery tour at the end where we can get into things like meaning or organization or or culture or things like digital sovereignty, but, or you just might have questions, of course we've got a session afterwards, which is all questions and answers and I'm sure we'll use mirror boards and have lots of fun then. So let's start with the origin,

maps,

Simon Wardley
where do you begin. So 16 years ago, I was working for this company. It was called for Tango online photo service had about 16 different lines of business. One of them was being a photo service. In total across all the businesses must be close to 10 million users. And it was doing very well. Profit profitable revenue was rapidly growing. It was great, except I had a big problem. And the big problem was the CEO. The CEO was completely clueless, didn't, didn't have any idea what they were doing, they were making it up as they went along, and I know this because I was the CEO. I mean I used to come up with these wonderful statements of, you know, strategy and things like this, I mean, this is for Tango in 2003 Our strategy is customer focused. We will lead an innovative effort in the market through our use of agile techniques and open source, I'd adopted something called Extreme Programming, was written by a friend of mine Kent Beck. I've been a fan of it back in the 19 late 19 nine t nine, roughly. So this was before the Agile Manifesto came out and we were heavy users of open source I almost exclusively recruited from the Perl community, we have most the pole camp begins working for me. The problem with this vision statement, though, was I pinched it from another company and just changed a few words. I am exactly this. So I used to go around listening to other CEOs talking about strategy and I've done this many, many years. I used to record common words or what I call business level abstractions of a healthy strategy or blogs for short. So I would create these list of blogs, I think this was 2014. Common blast Digital Business Big Data disruptive innovative, collaborative, competitive Advantage is just the words they would use blah blah blah. And then I created something called the blog template, so I took all these various statements by companies and created our strategy is blah, we will lead a blah effort of the market through our use of blah, and blah, to build a blog, and then what I would do is smash the blogs, and the blog templates together and auto generated random different

strategies, things like this. Our strategy is innovative digital business we will lead a growth effort of the market through our use of customer focus competitive advantage and disrupt our total jibberish, but remember I was, I had no idea what I was desperate. I was worried everybody would would rumble I was this fake CEO, but I used to send these around. And the last time I did this. I got about 400 responses of three basic types. The first was, this is the exact wording from our business plan. The second was I've seen two of these used already and my, my third favorite was are you for hire. So, basically I started to realize, I might not be the only person who was making stuff up. A friend of mine, by the way is put this all online. If you ever need a strategy. This is strategy as a service, you just type in the URL and it will randomly generate you one based upon nothing whatsoever. I mean, occasionally they update the blogs and they add in things like I don't know, AI blockchain so you'll see those words appear as well. So our strategy is collaborative. We will lead an open effort of the market through our use of big data and it's just pure gibberish. If you don't like it just press refresh it will automatically create you a new one. You can pretend there's AI and blockchain or whatever else you want behind it, maybe there's you pretend there's a horde of McKinsey consultants, tapping away but it's, it's just,

just gibberish.

So

Simon Wardley
I ended up in a bookstore and I was in this bookstore, and I was talking to the bookseller and I explained to him that I read every book I could find on strategy, and I was getting nowhere. And so she persuaded me to buy two copies of Sun Tzu's The Art of War she had asked me had I ever read it, I said no. And he said well the different translations are by two different copies, and I've got to say, I'm so grateful for that. Fantastic, because it was in the reading of a second copy, but I noticed a pan. So, when Sunsoo talked about competition talked about five factors that mattered, have a purpose, a moral imperative. Understand your landscape the environment you're competing in, And then understand the heavens so the climatic patterns, how the landscape is changing, then you need to orientate yourself around this with doctrine and principles, basically. And then you need to, you know, that's when you apply that leadership the gameplay, what we're going to do. And this overlap with something else I read from John Boyd, John Boyd US Air Force pilot talks about the OODA loop. So you have the game your purpose. The first thing you need to do is observe the environment so this is where like landscape and climatic patterns come into play. So, what is your landscape. How is it changing, then you need to orientate yourself around this so this is where principles and culture and you know your genetic sort of background come into play, or the genetic background of the organization, and then you need to decide where you're going to attack. And then you act. And I was like, fascinated by this. And at the heart of this a two Why's the why of purpose, your moral imperative to do something like playing game of chess, my way of purpose might be to win the game, and the why of movement. So, how do I decide whether to move this piece or that peace. Okay, and that depends a lot upon the landscape, your orientation around the space and the gameplay. So, you're into your leadership. So I had this I was like, This must been more Gosh, bleak 2004 2005 I just really sort of like this sort of made sense to me. So I started to look a bit, a little bit more, and I started looking into the question of landscape. I really got into military battles. And so one of my favorite is the Battle of Thermopylae. So, this is the mystic please ancient politician Greek general from the Athenian city states, the Greeks were independent city states and had a problem. The Persians were invading now there's about 140 to 170,000 Persians invading what they decided to do was block off the street Sparta museum forced the Persians along a coastal road into an era pass called Thermopylae, where a small number troops could defend against a larger forces, because you're a forcing function for change. Now, there were about 4000, Greeks, including 300 Spartans, which is where we get the story of the 300 from time a slight fascination, because you could use this to discuss what we're going to do and learn from this battle. I thought well how do we decide in my business. Now we used something called swats. So I decided to create a SWOT of this battle. So, strengths are well trained Spartan army, a high level of motivation, not to become a Persian slave weaknesses the ephors might stop the Spartans turning up a truckload of Persians are turning up opportunities, get rid of the Persians get rid of the Spartans we're Athenian we actually hate the Spartans so if we can win the battle and get rid of them as well that's a, that's a plus. And the threats, the Persians get rid of us. And why I did this a bit later, the Oracle said really dodgy film might be produced a few 1000 years later. So I was looking at the SWAT diagram. And I lined it up against the map, and asked myself, What would you use to communicate and determine strategy and battle, would you use position and movement described on some sort of map, or would you use some sort of like magic framework like a SWOT diagram. And I thought well it's obvious I'm gonna use a map. But then I looked at what I was doing in business, and I went, I'm using swats. So, this got me into asking the question. All right, where am I maps, because obviously I need maps, that's

obviously the thing I'm missing. I hadn't done MBA, and so my mapping, by the way is now taught to places at Harvard Kennedy LSC Peking University Moscow Institute of Technology. But, anyway, back then, I hadn't done. You know, I had no interaction with business schools but I assumed this is what you learn how to do an MBA, you don't. By the way, and so I had to create my own way of mapping, or at least find my maps. So I started looking around in the organization we had loads of things called maps, we have mind maps, we had business process maps we had even things called strategy maps, We had systems maps I was like wow this is really great. So I took one of the systems maps here it is. It was on part of the online photo business, I took one component CRM, customer relationship management, and I simply moved in. And I said right how's that changed the map. And the answer is, it hadn't, I thought well that's a bit odd, because if I take a geographic map, and I move Australia and put it next to England, that's definitely definitely changed the map. So why isn't it changed the map here. And the reason why it hasn't changed the map is all of these maps had one thing in common. They weren't maps, they're graphs. So to explain the difference. The three diagrams at the top. Not in London Dover, not England today but connected by two rates M one m two, the three diagrams at the top are all graphs, and they're all identical. Now the three diagrams at the bottom. Again, not in London David not in London Davao connected by two roads. The three diagrams at the bottom are all maps, and they're all completely different. So the difference between a graph and a map. Is that an a map space has meaning. So when you move one of the nodes in a map it fundamentally changes the context of meaning of the map, which is why maps are good for exploring landscapes. Now in order for space to have meaning, you need three basic characteristics, you need an anchor such as magnetic north for geographical maps, you need position of pieces, relative to each other, so this is north, south, east or west of that, and you need something called consistency of movement. By the way if you hear lots of birds in the background I live in the countryside, so we have huge numbers so apologies for that I can't shoo them away and I'm not going to anyway, so you need anchor position and consistency of movement so if I'm going north I'm going north, if I'm going south. I'm going south. So I thought, right, I need to recreate this for a competitive landscape. So being a Brit, I started with a tea shop. And I thought right once my anchors. Well, I'm going to take public who hopefully want to drink tea, and the business who wants to sell tea. There are other anchors involved. There are, You know, regulators and people like that but we'll start simple. And they have a need. One is for a need to sell tea. One is a need to hopefully drink tea, but a cup of tea has needs. It needs tea, it needs carpet it needs hot water, and a hot water has needs. It needs cold water it needs kettle, and a kettle has needs it needs power. So what we've got is an anchor at the top. And we've got position described in a chain of needs, and the further sundeck is away, the less visible ball becomes so for a public consumer, a cup of tea is very very public to them the power to heat the kettle is very distant. Alright, so I've got anchor on position. But I also need movement. It turns out that all of these stocks of capital, all of these nodes are actually stocks of capital and all of them evolve, and there's a common pattern, by which they evolve, you start off with the genesis of novel and new items, custom built examples, products and rental services, and then more commodity and utility services. So what I can do is I simply take that chain of needs and position things according to how evolve, they are. And now what I've got is anchor position and movement described through evolution, and that is a map, and if I, if I move any component on this map, it changes the fundamental meaning of what the map is. So this enables people to you know, and tell me things I'm missing, so it helps me understand the details of what I'm doing because somebody might come along and say oh your maps great but you're missing stuff, and somebody might get all stuff we want to use robots well we can add that to a map. And then it also enables people to challenge assumptions. So somebody might go, why are we using custom built kettles, why aren't we using standard kettles and somebody might go or it's brand exclusivity or something like that. We can also put metrics to it. So each of these nodes or stocks have capital in each of the lines of flows of capital, so we can put value so we can assign, you know, create a p&l from this. And the point about this is it doesn't matter if you're from engineering, oh you're from marketing, or you're from finance, so you're from the business side or whatever it happens to be. We have a common language, which we can talk about the space. Now I'll give you an example of use, and we'll start with the insurance company because this is quite an old project. So, this particular insurance company had they had a bottleneck. They use things like value stream mapping and all this sort of stuff, they're not maps their graphs by the way, and what they wanted to do was improve the process flow. So they would, they needed compute order server server comes into goods in modifying mountain racket. Now they had a problem. The problem was this bottleneck. And so, in terms of modifying and mounting servers. So they spent six months working on this all these vendors came in, they came up with the idea of using robotics to do this wonderful business case return investment calculations everything else I mean, it's great. And so they asked me what I thought. Now, here's the problem. I can't say why using robots. And the reason why I can't do that is because they've already created a story about the use of robots, and one of the biggest problems we have in organizations is that we keep on telling people that good leaders are great storytellers. And what that means is that when you give your story. If it doesn't succeed, it's because you're not a good leader, because you're not a great storyteller. And so we've made stories highly political, it's very difficult to challenge a story without challenging the person. So what I did was simply say could you map it because I can't challenge your story. Just Just put it on a map, and there was like more I don't see the point of

that but anyway 15 minutes later, this is the map they gave me user needs compute compute order server server, good said so order server server goods in or commodity for some reason, you know, this was 2000 Back 10 years ago, they thought compute was more of a product and that's okay. And they went rack mount modify. I simply looked at the mat and said, Why have you put racking custom bill. And one of the people said, Well, it's because we have this company who makes our racks for us. And they're custom built Yes. So what are the modifications you're doing to service, well they don't fit our racks, so we have to take cases off through new halls and new plates. And that's why you need robotics, yes. And of course somebody in the room went, hang on. Why aren't we using standards side of racks, and this is the most common problem that I see people optimizing process flow, When in fact I need to first deal with evolutionary flow, and these people aren't daft, but it's been six months working on this problem. The issue is they're trapped by context. So at some point in the past, it made sense to use custom built racks, and now they're just trying to improve that process. And until you take them out of the story, and give them a way of looking at environment, it's very difficult for people to challenge.

Okay,

Simon Wardley
so I often put it this way if the user needs a slice a toaster you buy a toaster for $40 Or do you spend nine months lovingly building a taster $1,000 from raw materials, which is the Thomas Thwaites toaster project well, obviously, you know you don't spend $1,000 spend nine months building it, okay. Right, well if the user needs some compute do you use a compute utility like AC to or resort Do you spend years and millions of dollars leveling and building your own compute environment or in private cloud from raw material. It's amazing how many people went oh we're going to build a right. Okay, it's very common. So I'll give you another example. This is HS two high speed rail, big heavy engineering project. It's about 60 70 billion odd. This James Finley, good friend of mine. He was the CIO he's now doing interesting stuff with lifeboats etc. Anyway, they needed to build the entire railway in a virtual world, because it's cheaper to dig up the virtual world and go whoops, we've got that wrong when they got being rich countryside. So, this is the system's diagram for building HS two in a virtual world. Now the problem. James had is how do I manage this. Do I, which bits do I outsource, which bits do I use off the shelf products for which bits do I build in house. That simple diagram that graph. There are 387 million possible permutations of that question in that single graph. So have you choose what in government what we used to do was a lot of this, we would outsource it all. And then we break it into lots, why we group things together so that sounds engineering, so we'll have that as a lot one engineering that's one contract. Well I will group this stuff as user experience II stuff. So that's another contract this seems bad prophecy stuff, that's how we used to do things. And it used to go terribly, terribly wrong. A lot of the time. So James sat down, and it was a Sunday afternoon, and I taught him how to map beforehand. He created he mapped it out, and he sent this map, to me, and he gave me a phone call this back in 2012 so I tidy up the map a little bit. He said, How do we manage this. I said, Well, it's quite easy actually, because I got all agile. Extreme Programming back in 2000 to 2003, and of course by 2004 We'd like it doesn't work everywhere. And what we'd learned is that you need to use multiple methods, so extreme programming was very good on the left hand side because it was good at reducing the cost of change and changes the norm, whereas Six Sigma and outsourcing was good on the right hand side because it was good at reducing deviation and that's what you want to do. Whereas lean was good in the middle there say scrum MVP, all those sorts of artifacts, because it's focused on learning and reducing waste, which is what you need to do. So you simply apply there. You go right the stuff on the left hand side will build in house with Agile techniques stuff in the middle we tend to use off the shelf products that we're building we use Lean stuff on the right hand side, we're outsource to utility providers and, you know, use six sigma. And so that's why they didn't they ended up being in front of the Public Accounts Committee being praised for being ahead of schedule, had a budget and way under budget. Fantastic. So what would have happened if we had done it the normal route. Okay, so let's take one of those contracts let's take lot one engineering. So let me have a look at lot one engineering there it is, we're outsourcing it all. I can tell you before we've even started because we're going to try and specify this in a contract that the stuff on the right hand side will be efficiently treated and the stuff on the less left hand side will always incur excessive change control costs. And the reason for this is we can't specify. So we try and specify stuff we can't specify, we're always going to get massive cost overruns. It's quite it's quite funny, you can sit down with these enormous projects map it out overlay the contract structure, and you can literally go get that contract, you know before you've signed, it's not going to work, we're just going to loose bucketload of money, that one, that's not going to work either bucketloads, that one's okay that one's okay, simply by mapping it out. I mean this sort of stuff we did in UK government so I read something called the better for less paper with a friend of mine Liam Maxwell now there's Mark Thompson Jerry ficient and this was for Francis Moore, this is back in 2009 2010. This led to something called spin control and help support the formation of something called GDS government digital services. And

simply by using mapping, I mean we say one project was 425 million about 1.5 billion this lifetime, really simple exercises. This stuff was common. All right. But the other thing about what happens with maps is you start to share them, the real value is in sharing maps, not just allowing others to challenge your assumptions, but you can also find duplications and bias. So you get maps from borders police immigration, you start putting the single dots onto a common map and you start finding we're building multiple user registration systems and sometimes we're custom building stuff which others think is a commodity, that's quite common. Now before you think I'm having a puppet government. The worst example of gulp and government, I found of duplication is 118 workflow systems, doing the same thing we've managed to build prisoner registration 118 different ways. Mat is nothing compared to the private sector, if you aren't wasting inefficiency the private sector beats government hands down, I mean the levels is just astronomical. I've got a bank you've managed to build risk management over 1000 times, we stopped counting at that point, he was just like, wow, I mean, the vast majority that p&l is nothing but waste. One of the best ways of challenging I mentioned spend control is to introduce a system of spent control it's not to take people's money away from the massive departments budgets, it's to do basically pre mortem challenge and post mortem chair, learning, basically. So pre mortem challenge you map out the environment before they go off and do it and say, and you challenge what they're doing. And then after they've done it, then you use the same map and update it and we do some post mortem learning, and that's how we learn patterns. Which brings me to the next section which is patterns. All right, there are three common patterns that you need to know about one is climactic patterns. These are basically the rules of the game, there there are the economic patterns, there's about 30 of those, if there's supply and demand competition going on these patterns will occur doctrine, these are universally useful patterns that you can apply. So climatic patterns won't happen to you whether you like it or not, unless you've been stopped competition doctrine, you've got a choice over but they're universally useful so you tend to use them all the time. And there's about 40 of those. There's pathetic climatic patterns, and there's about 100 Different forms of gameplay so these are all context specific patterns, things like open source, great for forcing something to industrialize or encouraging industrialized nation. So I've mentioned a whole bunch of patents regarding doctrine principles. So these are things like know your users, focus on user needs, understand the details. So it's not just enough to know. You know who your users of the tea shop and the business and what their needs are. You've got to understand the details. Another one is understand what is being considered. So, it's, it's not enough to just know there's a cattle, you've got to know there's a world of difference between a custom built cattle, and a commodity cattle. Another one is to challenge assumptions. That's a universally useful pattern. So, once somebody's got a map. Just don't just leave it there ask why are we custom building kettles. Another one is to have a common language. So it doesn't matter if you are finance or business or engineering we can all talk about the same space using a single map. Another one is to use appropriate methods, so agile over here outsource over here, no such thing as one size magic fits all methods. Another one is to remove bias and duplication. Another one is bias towards data. So having a map, challenging on it, they're doing something, and then, again, learning from it useful thing to do. Anyway, as I said there's about 40, commonly universally useful patterns, and the ones at the very very bottom are the ones we've gone through there, I call them the Phase One patterns so common language challenge assumptions understanding what is being considered now your users, things like that. Most organizations are hopeless, really hopeless at this step. Okay, so there's another set pans called climactic patterns. So these are like the economic patterns. And so if you take a single line, and this is compute circa 2005 user needs an application application built in best coding practices built on a runtime, but an operating system built on best architectural practice built on Compute, as a product. The first pattern you learn a climactic pattern is that everything evolves, nothing is static, your map is static it's moving. So we knew compute was going to a utility, and that brings benefits of efficiency. The second patent you learn is the past success breeds inertia. So, there are about 16 different forms, pre existing capital political capital that sort of stuff. So it's like Blockbuster Netflix fast with a website blockbuster, first with video ordering online blockbuster, first with video streaming blockbuster, first to go bankrupt blockbuster. So, Blockbuster out innovated everyone, including Netflix. The problem was is they had inertia, created by pre existing business models made basically late fees, past success, that's what that's what got next patent you learn is CO evolution, so as things evolve. You see, new, new practices a match. So what we had is best architectural practice for computers a product versus an emerging architectural practice based upon computers a utility or cloud. So this was circa 2008 And that's because the underlying component is characteristics change it goes from the case of computers a product high MTTR mean time to recovery to to cloud which was looming time to recovery so I mean by that, you'd take weeks for a server to turn up, and you move to a world where it was seconds. So suddenly we could distribute systems designed failure, do things like continuous deployment, I mean there was no point in doing continuous deployment if you're waiting weeks for the machines to turn up. Anyway, eventually, Andy Patrick gave those new emerging practices a term named Bear Flag, we call it DevOps. Next pattern you learn is that efficiency enables innovation. So, as things evolve they enable higher order systems to appear. And these higher order systems create new sources of value of worth. So we get things like Netflix. Pretty straightforward. Now the point about this is that by simply taking a line and seeing how it's changing by applying these

common income, economic trends, then we can we can work out, you know where we should place our bets. And so that's exactly what I did with Ubuntu. We are used to run strategy for a company called canonical they provide something called Ubuntu. This is what we did in 2008, we were two to 3% the operating system market against Microsoft, and Red Hat, who had all the money and all the share, we simply use the maps to work out where to target. And we targeted, and took us 18 months to half a million, and we went from being two to 3% 70% for cloud. If you were around in cloud space, you might have remember it was Microsoft Red Hat and then suddenly it was a boon to everywhere, that was us. You were Matt, that was me, I was running strategy for. Of course, things don't stand still. The emerging practices evolve got a name DevOps, the best architectural practice for compute as a product got a new name. Legacy The runtime then evolved runtimes gone from lamp dotnet to to lambda. And so we're getting the same patterns of new emerging practices, new needs being created all fairly basic stuff. And the point about this is that strategies interact is interesting. So what you would do in 2010 is fundamentally different to what you would now do in 2021. So for example, 2021 things like DevOps cloud that's just building the new legacy. So if you were going to start off on our we're gonna, we're gonna create a cloud and introduce DevOps into our organization, I'll tell you seven years to get that done, where to ethics seven years by the time you finish you've built the new legacy well so what was the point. I mean, to you know, great for 2010. But today, you'd attack the serverless space. So you'd look at companies like iRobot so AI robot, they have about 10 15 million robots out there they're rumbo they Loma, the Hoover's. The entire thing runs with 100 lambda functions 30 AWS services, there's zero EC two instances, zero containers, certainly no data centers or anything, any of that nonsense is all gone, and the number of people, how many people do you need to maintain support into 50 million robots besix Okay, it's a completely different world. Great. So, so we've done the sort of doctrine patterns and the climactic patterns which we use for anticipation. There's another example. These are the gameplay. I won't go through, there's 100 of those so I'll just quickly mention a few. Now, I mentioned one. My favorite one is the IRC pen. It's very simple. You take a product you turn it into a utility, and you make it available publicly to others. So you can't do this if it's in Genesis or custom bill, because it's not stable enough I hear people say we're gonna API and stuff. Well if it's in custom built or early product it's not developed enough. So it's a really bad time to do it because you just slow down innovation. What you do is you attack it when it's sort of late product, Turn it into a utility exposure, like compute. And then what happens is everybody hopefully fingers crossed build on top so you get componentization effects. That's great. As in, people will use it to build new things on top, and so they might go and do kitten internet, They might go and do. I don't know, big data stuff on that. The thing is they're consuming your service so you can't look at their data, their data is their data, but you have to build them. And in order to build them, you have to see how much they're consuming of your service and that's the metadata, and that tells you what's becoming successful, so that you can mine the entire ecosystem to spot new patterns which you commoditize to new components services, I don't say Elastic MapReduce, and then everybody cheers, because they've got this new service they can build things more quickly componentization effects, except for the people you've just harvested from, and they're saying you've eaten my business model. And isn't it terrible, and everybody else cheers because progress moves much more quickly they can build new things. So what you're doing is you're getting everybody else to innovate for you, you're mining the metadata to spot future patterns, and then you're commoditizing to Component Services. And so your apparent rate of innovation, customer focus and efficiency all now simultaneously increase with the size of your ecosystem. So the bigger your ecosystem gets, the more innovative you appear because everybody's your free research lab. The more customer focused you are because you're mining metadata to give people what they really need. And you're more efficient economies of scale. And so it's a fantastic path as I write about this in 2005 years at Amazon, I think there's great job of doing less compute machine learning, they, they drive up the right hand side, I know people say, alright, it's terrible they have, they are forcing progression and the problem is China government does exactly the same gameplay, so I know people go and say oh well we need to break up Amazon, whatever nonsense they come up with. Well that's great but if China doesn't do that to people like Alibaba and so forth, all you're basically saying is we want to be behind a future further behind. I mean it gets you nowhere. All right. So, you what you have to do is you have to adapt and learn how to play the game properly. So, you know, they do a great job of doing this. There's a wonderful book called reaching clown velocity, March, where it's Jonathan Island, and Thomas blood, well worth reading you'll find there's about 17 pages of mapping in there, including the whole IRC system. This is I think AWS is second ever book. That's Amazon web services they're they've, they've done some really good books recently, as in their own books. Okay, a couple of things about mapping all maps are imperfect representations of a space. So, if you wanted to create a perfect map of France, it would have to be one to one scale, which means it would be the size of France, which means it would be France. Okay, so in order to be useful. It's got to be in perfect. Secondly, underneath maps and models. So in this case the model of change is evolution and all models are wrong. So the first things you need to know about a map is they're all imperfect and they're all wrong. But that's okay, because they also turn out to be useful. I mean we've used maps in government to say billions. Yeah, I mean that's that's I like the things like this Jackie Taylor, Dr. Jackie Taylor, are using maps in terms of small cities and other bits and pieces of there's some great stuff

going on there, but the ones I like things like this, we use maps, James Finley use maps to improve communication processes within lifeboats and that saves lives. I mean they got it down to about 14 minutes to 18 seconds for call out time. So when people fall in the Thames, they're actually bringing people out alive, rather than dead and that's just incredible. So I love that sort of stuff. Mapping also gets used in things like combating illegal fishing, and the slavery trade as well, so I, you know, really good stuff i mean i friends at the UN, Matt from reducing global poverty all the way down to different statistics organizations and all this sort of stuff so I love the stuff where it's more doing good. A lot gets done with venture capital firms with mapping, this is who backer is an Indian VC firm startup accelerator, they've got about 100 startups now all using mapping, and they've got a I was talking to them recently about 65% Roughly a cashflow positive within two years, it's just incredible rates that they've got. There's lots of books out there, there's the UN book on IT strategy which is just full of maps Amazon's book there's a science fiction book by a wonderful chap called tail climb. It's the new Ready Player One. So this is all described as being turned into a film, science fiction book but in order to write the science fiction book he used maps to map the future, and then use the maps to create the book it's a bit like Jr talking my one of my favorite quotes for Lord of the Rings. Was he said he fortunately wisely sorry started with a map, he actually produced the map before he actually produced the book. So in this case it was a technology map, which was used to write the book, and it's been turned into a film. A lot of my stuff is nation state competition. So China USA all this sort of stuff. But anyway, we also have something called math camp where 1000s were last time there's 1400 mappers from around the world. Turned out, it's all virtual. So if you mat camp.co.uk You'll find it on there we've got great speakers from all over the place coming along. I suppose that gets me to the X with the Magical Mystery Tour, I see I've got about 18 minutes left, so I could do meaning, organization, or we can get into Culture and Sovereignty, or you may have some burning questions you want to ask now. Anybody want to shout out, continue more I'm overloaded. Oh, can I ask questions, and by the way, I'm at home, so you're gonna hear birds, you're gonna hear banging people ringing on the door. I guess it's.

Scott Berkun
I have one very brief question which is I'm seeing a lot of people say continue and that's kind of in the boat, I'm in.

Okay, real quick,

Scott Berkun
what is a good resource for if we aren't able to get to organization and we weren't able to get to meeting and we go to culture, what's a good resource for us to independently learn more about this and kind of keep that going off the call,

Simon Wardley
so it's all crazy cotton share like I made it crazy come and share like backing all the 2005, you'll find there's something called lists dot Wardley maps.com It's an awesome list created by the community which has links all over the place. There's lots of mappers out there teaching people how to map they've got slack groups and everything else. I've written about 600 pages of book it's all Creative Commons medium.com forward slash Wardley maps. You can find that there. There's lots of presentations and other things people are organizing there's meetups that go in Australia, in the US, there's been map camps in the US, and there's an entire community out there. Does that answer your question,

that does Thank you.

Simon Wardley
Pleasure. All right, so, um, how long have we got 16 minutes meaning. Alright, let's start. See how far we get. So I said about user application best coding practices runtime operating system best architectural practice compute. And what happened is you apply one pan, things will evolve, and you know another pattern, a climactic pattern, which is coevolution as things evolve characteristics change you'll get a new emerging practice. Okay, so one of the things about this is the best architectural practice and the emerging architectural practice had a common meaning as in architectural practice whenever you get this coevolution of practice, they have a common meaning. So, DevOps and ITIL both have a common meaning, but what we're actually talking about are two different competencies, linked to a material change in the underlying technology. So one competence is best for computers a product, and one competence and DevOps is now probably good heading towards best is best for computers a utility. Now can also go the other way, in terms of if you have a meaning, such as I did a thing like teleportation or compute or I don't have money. It evolves. So you start off with computers, either tell us about well we haven't done teleportation to what would compute computers Genesis

1940s up roughly, then you get computers products and computers utilities. And so you have three different material instances. And so what's happened is certain practices have evolved to be competent, for a particular material instance. This is why Agile has evolved to become sort of good practice for building something which is relatively novel ending at the bottom, those labels Genesis custom product commodity really should say stage 123 and four for evolution but that's meaningless. But you can use different labels, or there's novel emerging good and best you could replace it with that when talking about practice, so agile is probably good heading towards best practice for building new things and you've got Lean and Six Sigma have evolved to be good at different stages as well. Unfortunately, they all have a common meaning, which is project management. So we have this wonderful world where we have a common meaning. So, compute or say teleportation teleportation Genesis teleportation is a product teleportation is utility, three different material instances, but we'll all call it teleportation. And we've got project management, which we call common meaning, even though it's three completely different evolving competencies, and we keep on trying to find, well what's the right project management for this thing, it depends. It depends on how evolve the thing is, because if it's novel use agile if it's more commodity use six sigma. But we don't like that we love our, you know Ashby's law requisite variety we try and pretend the reality is simple rather than cope with the complexity. So we lack our simple methods so we keep on building cults, things like, you know, agile works everywhere, or Six Sigma works everywhere or safe works everywhere or the one size fits all. No, It's just a cult, that's all. It's not possible. So, well I'd love the latest ones in the Agile because these these all grand all singing, all dancing agile methods work everywhere. And then when they don't, because they can't because they change your characteristics fundamentally different. And people say well you use the wrong bits of the Agile method, which case I go, well so it's process over people not people over process then is it because that's like the opposite of what Agile actually is. Most of this stuff has become caught by, you just remember use appropriate methods. Alright organization.

Hello. Oh, that's

Simon Wardley
okay so this is Fandango 2003 2004 I made every mistake, every single one. So in 2002, I organized like this, CIA CFO CBO different silos. And we used to get lots of fights between the silos. So I came up with this magic idea that what I would do is have little teams and product owners, this was 2003. I thought this is great. This can be marvelous and all that happened is I got more fights. And so then I came up with this idea. The reason why I'm getting more fights is because within any one of these things. I have like development building new stuff, and core keeping the rest. So what I need to do is split the organization's into dev and core, whether it was it finance or whatever it was, and that was about 2004, and that just generated all out warfare. This was by modal, about eight years before Gartner came up with a term, and it's gibberish. Okay, all out warfare. And the reason for this was pretty simple if I map it, I had maps by 2005 so I could see what was going wrong. I had the core components and Dev would build new stuff, and as it evolve. Dev would turn up and say you look after this, and the core would go where's the documentation that would go well we don't do documentation they get into a big fight, and then dev would go and build new things on top of these unstable things, so nothing was involving in my organization, and all that was happening was I was getting increasing instability and open warfare between the two groups, because I had this missing middle. So what I realized is I needed three groups, I needed pioneers to build run and operate the novel in new settlers to find the common patterns and turn those into more products etc, and build run and operate that space and I town planners to take those products and industrialized components so I need to mimic evolutionary flow in a single organization, my pitch those ideas basically from accidental empires, which was a wonderful book written by Robert X cringe Lee that's a pseudonym back in 1993. So I reorganized chief pioneer chief setelah chief town planner. By attitudes. Some people like the sort of chaotic fading world of the pioneers. Some people are great at the industrialized empires of scale of the town planners, and then I would run aptitudes across. So finance was a group across within finance it's a common skill set, but there are pioneers settlers town planners within that. And then I would organize my cells with a common attitude, and to replicate. Evolution I introduced the system if that. So what would happen is the pioneers would build a brand and operate the novel and new and the settlers would look at what they're doing and at some point saying we're stealing that from you. We're turning that into a product and the pioneers would go, Oh no, we want to keep it inertia. Inertia but they would be forced to move on, and the town planners would be looking at what the settlers are doing and say that should be a component Utility Light service and was still that from you. And so we introduced a system of theft, into the single organization. Now to do this properly you need maps because you need to understand the landscape break down into small teams apply the right attitude. If you want to read more about this, our intelligence services GC HQ has a wonderful document called boiling frogs, which will take you through that more in more detail. All right, it's all open, help yourself, use a slightly different terms where you'll see my work. Here's the problem though, is people often look at that and go oh we need to

reorganize, and I have to say don't. And the reason why is that reorganization is the easy thing to die for. It's like being on a Titanic, the great big hole in the boat and somebody says if we move the deck chairs, everything will be great. No it won't fix the hole, and the hole is, is that doctrine that I talked about. So I mentioned there's like 40 Odd doctrine in here. Just to give you an example. This is a big web based giant blue is good, they're pretty good at most things. Okay, and that's the sort of organization you can mess around with Pioneer settler town planner and this is a bank, oranges warning. Okay, They are rubbish in it all. Now they survive because they're competing against other organizations who also look like this. They're all hopeless yeah and then we talk about survival of the fittest is survival at the least incompetent most of the time. I mean, it's okay to be rubbish as long as everybody else's rubbish, it's like running away from the bear in the woods, you know, you know if everybody's wearing concrete shoes, no one's gaining advantage that sort of thing. All right, and that's called the Red Queen prep Professor Lamballe. So this is the thing you need to fix. First, don't mess around with all structure, leave it alone. I know exactly like to go full stretch because it's a nice sounding thing to do. Which point nobody somebody says to me, it's all about culture, and it's just like this is where things get depressing. And I got seven minutes left. I'll do a little bit of

Mark Littlewood
culture,

Simon Wardley
right, here's the problem with culture Kroeber, despite a century of efforts to define culture, and there is no agreement amongst anthropologists so anthropologists are the experts on culture, and they can't agree what culture is. And they've spent 100 years doing this, and it's not because they're daft. Okay, so I love it when people say it's all about culture because they say, What do you mean by that and they go, Oh, anyway. So if I look at a map, and I talked about principles, okay principles are very different from values which are beliefs. So I said principle use appropriate methods, but on that single map. We've also got two beliefs. One is a belief of people over process which is the Agile world and one is a belief in process over people, which is the Six Sigma world. Now, you can have polar opposite beliefs, happily coexist in the same environment. If you understand their appropriate context some polar opposite beliefs can't exist like a belief in God, not belief in God or whatever, etc. If you're a religious organization but some can happily coexist. Right. So what's the problem with culture because you've got values, a beliefs, we've got principles. Well the problem is that Margaret me one of the greatest anthropologists there's ever been. Language is a discipline of cultural behavior. And what does that mean it means language is part of culture. And so you can't model it in language, but this is the, it's girdles Incompleteness Theorem. So how do you actually model, or how do you describe culture if you can't use language, because it's part of it. Well, I said, you know, the axes of the bottom map are they're just labels. We can use other labels, they all share the same common characteristics. So I often use when looking at ethical values concept emerging convergent accepted. So if I put that on the bottom. And here's a map from a collective universal basic income paid holiday unionization links to anti discrimination laws workers rights, civil rights, Martin Luther King talked about the twin pillars of democracy, workers rights Knights of Labor Movement to the US comes from the abolition of slavery, underneath this are concepts of reciprocity and fairness, so you can map out legal structures and ethical values in a society. Now, you've got a collective, and we'd like to succeed at collectives, and that collective has many values so I just compressed that entire map of values into a pipeline, and that's what the squares mean it means there are many different forms. If we start there we can expand it out, and we can basically map culture, or a representation of culture, with things like enablement systems doctrine gameplay behavior concepts of safety, etc. Now it's not singular. We belong to many cultures, you can't just copy values and expect your organization to look like another organization oh we just copy their values would be like there no there are many other things involved. There are feedback loops. So timing is important, but you can adopt things you can adopt things like principles doctrine. Okay. So this then brings me into sovereignty. And the reason why is when we talk about physical Secretary well we use maps, and we go, here's map. Here's our border, and within our border is our collective our behaviors, and our values. And those collective behavior values exist in this map of culture, and then linked to the landscape, you're actually at a commercial landscape your opera, you're operating it. So what does that mean, well, I'll go back to the China example. I said I do nation state competition. So this is the automotive industry rolled forward, and that was just looking at gameplay, But basically, a lot of the stuff when the auto, automotive industry is becoming commodity like. So user just wants to get from A to B increasingly self driving cars it's going to start disappearing. But the other thing people want is status. So this is what we wrote about this government about six years ago. This is what a car manufacturer is completing things like route management introduction of digital subscription models and sure enough 2018 BMW started talking about digital subscription models in cars, and what that means is you won't own a car in the future but you get in the car and the experience you get depends on if you're a platinum member or not. More importantly route management. As your self driving car goes along the road, other lower subscription members make cars move out the way we've just embedded

inequality to the transportation system, not a great idea, particularly if we have a flood, because the poor people don't get out the rich people do and the next day we've got pitchforks. Anyway, the point about this is that was a landscape of the economic patterns study with the automotive industry. And those users belong to a collective, those collective has values. These values are embedded in the simulation models, which is been embedded in the agents, which is why we have the whole Beijing Washington AI ethics debate. The trolley problem car comes along, do you kill four or one person, depends on which society the Confucian society, tough luck for the one person, if you're neoliberal neoliberal type society, if the one person's very wealthy the four people are unemployed, tough luck for the four people. And, you know, don't put it beyond people to do that sort of stuff. But the point about this, whoops, is when we talk about digital sovereignty, it's the same thing. Our collective our behaviors, our values, where are the borders that we want in society on our maps, a joke is the course is that most of the conversation has no maps at all. It's just a bunch of people giving a good old story about oil, data is really important. We're gonna have ethics and AI that's really important. Yeah, why wisdom, they have. Anyway, at that point, I've hit the time on the nose, I'll shut up, let you get

Kirk Baillie
think we need more than an hour to go through that.

You've all gone quiet

because our heads are spinning, how is that useful.

Kirk Baillie
I think, I mean everything come back saying great fascinating. Awesome, well done. I've run over leave

Simon Wardley
to go get heavy break and then we got q&a Afterwards we can go in more details and everything I just want to show you what was possible. So, it's an entire field, and be very able to show you the sort of potential of where it can

Mark Littlewood
go. Like a gateway drug, Simon. Thank you so so much my computer, kind of crashed and things about three minutes before you finished, and it takes about four minutes to restart so I'm Joe Hello

Simon Wardley
Joe my brain kind of crashed. I'm sorry.

Mark Littlewood
Already, my brain is crashed but I'm just really delighted that it was, it was recorded, but I think we can teach we've had enough as well. But I'm just super, super, brilliant. I didn't want to

Simon Wardley
give you something boring, I wanted, and the fact that you say you're gonna go back and look at it again hopefully your, your, your train explore this space as well.

I have

Simon Wardley
to be very see problem with me is that I've been doing this for 16 years. I am very, I can some, it's very difficult to know how to judge, I, well, you know, hopefully you found something useful in that.

Mark Littlewood
I think I can speak for most people, I'm sure everybody. But yeah, there was was really, really great stuff. Thank you, thank you so much, it was, it was fabulous. Right.

Simon Wardley

So what do you want me to do, do you want me to hang on here, and are you going to push me into breakout rooms

Mark Littlewood
we will. We'll push you into breakout rooms so I headed in on where you are in the world you might want to have breakfast lunch tea supper dinner, Midnight

Simon Wardley
outside with a shotgun and shoot the birds away now. I have not been added to sometimes, sometimes they appear, and we get murmurations and all the rest of it, so. And so they become, they can become quite noisy and everything else but

Mark Littlewood
murmurations used to be quite common, but they've yeah much rarer than that. So, yeah, we'll be we'll be back.

Oh,

Simon Wardley
hang on, fantastic questions just somebody what are the limits to maps. So one of the things I do this in the q&a, but one thing about maps. The biggest limit of maps is they don't tell you what to do. If you see maps are fundamentally a framework, they show you a landscape, or help you agree a landscape to which you have to apply thought to to work out what you're going to do, they don't tell you what to do, and models tend to tell you what to do, and sort of model, unfortunately. So, the biggest limitation with maps is they don't give you an answer.

Mark Littlewood
Or they can you can interpret maps, if you like, that's fantastic