Most people don't know we have to be assigned a second 27. Definitely one of them background one. We have a. All of the computer science but some of the same age group. This topic exactly. What I. Okay I have a one time one transfer to extension. Yeah members of the people that. Well. So. Okay thank you Ryan and welcome to the small band of people who have made it here today well done and very pleased to be with you again and welcome to everybody who's watching this online recording wine and I were just talking about the challenges of teaching and learning online it's unfortunate that at the moment we can't have you all here but we thinking of you so my background is partly in IT and partly in law or regulation I've been a lawyer one of my proudest cases was known as the Qualtrics case with the greenies the tried to stop endangered habitat being destroyed what I will to prove without help that in fact that was stopping at a greater crime than they were charged with and we went all the way to the New South Wales court of criminal appeal everyone laughing at us all the way there and the court reading the law very strictly and not interested at all in the greenies and calls and whatever just said you're right the charges inappropriate out to go in the end in that case it was actually quite significant to a an issue or topic that I'm going to mention a few times today and that was what's in the person's head your your knowledge but particularly your intentions or your motivations in that case the particular offense was started with a view to preventing someone else doing what they were lawfully entitled to do you do something else and and all people in that case many many years ago had helpfully pasta litter around to the district forester and to the people in the clearing that when they interfered and caused a lot of trouble to try and block proceedings I said we think your breaking the law we think you are. Killing endangered species your breaching section blah of the the now and in fact they got it slightly wrong that they started off at an agreement which didn't have the force of law but there was another little said that what correct in that what what that was doing was illegal but the great thing was that I created evidence of what I thought we think you're doing the wrong thing we don't think your doing what your lawfully entitled to and so when it finally got to the not the highest court in the land but the Philly I'm serious because they said well look they said they were doing is to block people who I thought had a right to do this that would doing it in part because I thought that with their interfering with unlawful activity get out of here and so it was a very interesting moments with the fact not only that people had a certain degree of knowledge and it was a little bit wrong but that inform their motivation and there was evidence of that absolutely it went to the house of what was a quite a significant use of a of a strange old criminal law and I'm told that people protesting in the forest no longer get arrested on that that charge they do their research and homework and I only need a few things that I arguably sort of unlawful and it's not worth anyone's time so anyway that's gone way back in the past it's a criminal part of my past a much more recently a lot of things look my work's been about dasa so I'm helping professor Wilcox at the school of business and put together a new data an ethics course into a flag some of the. Insights that do it we've got a to running that because the first time a few months ago with you in some ways it's it's actually a similar sort of issue when you're thinking about what you're doing are you thinking are you assessing your motives or use it assessing what actually happens in the world so that's a concern of the latter is consequential ism has various times for the former D. ontology will all just it's all about me and it turns out that as we go through all of them I might touch on a few examples in the legal and regulatory system where your motive and intent is important and there's others where they say we don't care what you're doing it was what sorry we we don't care what your motives where what you thought why you were doing it you broke the particular prohibition he is sorry it's interesting that the there's a similar sort of a parallel. Based on what's inside your head if you like and how the legal and regulatory system traits that I'm that's awesome because of mine the same all the way through here. Other things are involved in at the moment is the all's track privacy as a panel in the people that do the financial tracking of online transactions particularly for large scale cash transactions then now in the process of trying to implement ubiquitous so violence all of every transaction in order to try and pick up I suppose criminal efforts that don't rely just on one bank accounts or just on one bunch of people that things that are swapped between different banks different accounts different people they say well let's now what organized crime is doing to a bite out more simple to violence before so we'll just have to go in Honda and we want everything inside it's rather challenging has a sort of a privacy and data protection advocate to be engaged with this but it's a a quite an interesting engagement exercise is inside the dump that very powerful law enforcement body has deliberately set up high prices with the talking to the council of civil liberties that talking to the information commissioner's office with the privacy commissioner's hosted the talking to other privacy advocates to try to you know engage and to understand what some of the concerns are. That is unusual and it seems that in because of it it seems like the end now thinking about what we just stopped doing this so it's a contingent thing one of the other things about the legal system is that it's all very particular it's all very not so much random but Overton's serve types are something that works in one situation one work over there something that used to work want work now the there are sort of systemic ideas but there's a myriad of just tiny and sort of random individual instances and then and that's what makes it very difficult for people trying to learn the legal system there is you know a lot of detail and some of it is makes sense and is part of a broader scheme and some of it is just stuff that pops up so here at the moment this is quite interesting accountability mechanism in a major government surveillance scheme next week it might not be there or at the attempts of all the people on the last meeting about a week ago to site this is really valuable we really hope you continue that might work who knows so it's it's also quite difficult in some cases to work out exactly who makes the decisions who has influence over those decisions so when you're trying to understand how the legal system and a regulatory system. One of the other things to keep an eye on is exactly who's involved. Hi I'm. The one of the it the the the the the 2 parts of the discussion that of course is that the first part is. About Lorne ethics generally there's a lot of material here will make the slides available for for wine I will skip through some of them so I don't sort of feel like you're being short changed on what I'm trying to sort of touch on some of the issues some of the frameworks is give you a a lie of the land sort of I love you but I want going to do tile in in each of them I'm I'm trying to help you coming from a computer science or information systems or adopted a perspective with enough of you know talk to work with with with people in this back up for a long time and some of the preconceptions of some of the ideas you might have I'm trying to point out some of the features of some of the weird anomalies or some of the really awesome things about fragments of the the the legal system so that you can make more sense of it later on the the the the lower house and the regulatory system and I. T. in computer science I really quite strange bedfellows both of them us look from outside like they dealing with laws or rules or that that's sort of very clear prescription about how things should work but hello those actually manifesta a quite so difference lower in particular is very self referential yeah the lord is what someone says it is what the judge says it is what these politicians who were bundled together in a parliament site it is it's not some universal law of nature it's not some little it's the same everywhere over the world so it's it's in that sense it's quite maddening there's no particular reason why the law is a particular way and not the other way other than you know history and politics and persuasion public cultural assets of inputs I'm one of the issues it will touch on is the question of liability it's a. If we ask a question what could possibly go wrong that's a very very interesting question when something does go wrong the next question is well you know who was responsible for all who was liable for was it just you because you should have read the fine print and bad luck the individual involved the purchaser of the consumer the citizen Eric Khant really blame anyone else but themselves or did someone trick you with someone holding a gun to your head had someone put you in a position where they refused to negotiate a contract and therefore they became responsible or whether I someone who already has a response you know some sort of obligations to you like perhaps a teacher a doctor your financial adviser a lawyer where the fact that they've engaged with you means that they have some responsibility or liability for you the reason my flag this is that there's a of a very strong culture in parts of the. Let's say the startup world that's tries not to be responsible not to be liable for anything it's a in one sense it's a it's understandable you don't want to pay bills that you don't really I don't you don't really I mean you don't necessarily want to pay tax if you if you don't really have to have an awful lot before but in one sense it's gone right to an extreme self make some observations at the end about where that's come from but it means even the very idea that someone should be responsible for something is for some people a bit of radical somehow just wanted flag here that's a central concern of the legal and regulatory question the that with the the the the direction here is the idea that software development IT development software development particular very creative and it's incredibly spectacular in in the rise of change what it can do but as an industry it's a bit immature the systems are not predictable and so the the questions about what's the right way of doing things and therefore did you do something the wrong way that's a much harder to answer especially at the leading edge Sir. Let's I'm I'm not saying this to be serve insulting but it's a it compared to should some traditional professions it's a much more difficult so the area I will touch on the concept of professions briefly and it's a bit of a professional is a term that's thrown around very loosely lawyers like to be pretty precise there are some things that are actually recognize legal professions are a doctor is one thing an architect a psychiatrist and there are some others but a lot of the people who claim I'm professional don't know what professional means to be so we'll we'll touch on that and all flag the possibility that there might be a new profession let's sort of could be born at some stage tune might not succeed not everybody working in IT or software or computer science will even be interested in that but there are some really important sort of areas of application where a really high level of professional ethics of legal compliance and all I'm thinking about what can go wrong and how to avoid it a much more important than you've you might think of if you're just happily answer hacking around. I will touch very briefly on how the law was made on a will skip over this but just in case you haven't they're separated out the components is not hugely complicated but there's there's 3 parts the differences of principles and standards and also some concepts like the rule of law and natural justice some of the stuff in the past would have been seen as actually be Dalzell taken for granted don't worry about it as we can see in the U. S. at the moment the whole idea of the rule of law is radically on the challenge it's I encourage you to sort of keep an eye on what's going on then not for the daily trump distractions but what sort of pressure is being put on the traditional concepts of the rule of law. If we ask the question what shapes the low or some regulatory scheme it's not eternal it's quite changeable so I told Vance legal research and one of the focuses of legal research is can you get up to date so can you say what the law is now can you say what it was at an opera tree died in the past so sort of like the way back machine there was quite stringent mechanisms for change and for doing that sort of research becomes a black cast at a certain point inside a good law students are really good at mapping of when a particular thing happened what the particular provision was at that stage what case lower blood lead sort of thing so it means for them outside if you got an idea of just little it's basically really really sort of fluid and it's it's also as I said before it's not given it's it's something that's created the struggle between different interests no one would be between workers and employers Olson onus of things in Australia you had a really quite successful. Just as legal struggle between those 2 major social interests and so you actually had at the when the strategy was formed a more less of a form of compromise in the form of regulation of employment that's we don't see in some other countries where the interests of employers or of of owners of of businesses were more dominant we see another clashed decide today between the ideas of the gig economy which is workers who have even less rights than traditional employees who doesn't have a whole lot of rights and companies that on the one hand try to project all of the the risks and costs on to them and extract all of the the value out of their work but the the the other hand side this is not the traditional employment context this is that you know we have no obligations but not we don't have to pay sick pay or insurance or proper wages or anything they just contracted this inside the they're also very persuasive so in all of this there's a lot of rhetoric and has a lot of arguments and a lot of marketing and spin and so those same companies are putting this propaganda war trying to say to people who are working for them in the gig economy you're free you know this is great this is cool you know your independent and that that's just sort of snowing and confusing them about the underlying interests which would probably be to have more rights and more protection and more reliable. Inspect Tyson's if you like sorry that's that's sort of one example it number one is a very traditional economic one but if we jump to the current day we can see that those interests. Juggling a different sort of way this that the lord's office might have checked by commercial reality by technical reality by public standards and expectations and also things happening in other countries international fix which is it's often don't have a direct impact in Australia so later on or sorry in a particular country later on we'll we'll mention some of the things happening in the U. S. and the E. U. and the struggle between the mother and her daughter transfers. The tragic thing is whatever comes out of that the effects or the benefit the strands might get of a renegotiation of the balance between various interests data owners and data subjects whatever it's very peripheral because it's outside our particular little legal battle just mention very quickly and and this is partly to counteract things you might have learned on TV with the girl a lot of shows about criminal law there's a big split down the middle criminal law and everything else often called civil law criminal law it's launched by the state a case a you know a legal proceedings there's a trial you're charged with something you know you as a defendant charged with breaking a particular very specific Lawrence are committing an offence so that's the crime you're supposed to have committed and you read that convicted which means you did it or you requested which has you'll not guilty civil law is about being the state typically doesn't have any role in it provides the courts but at the end of it it's 2 individuals this could be you in the person of the back fence they called you something terrible and unite is hurting you so you've defined to me that's a classic sort of civil case just individuals but maybe be between an individual and a company a bank is trying to bankrupt you because you didn't pay back you'll learn something like that maybe between 2 big companies or in some cases it can be between I studied regulatory body like the I. triple see. Or some other government department and some business and they're saying it either you've you've done the wrong thing by thousands of consumers or you interfering with competition or whatever but it's really important whenever you hear anything about law and regulation the directly it was one of the other where the the. Lore comes from them the obvious one is the locals optical statutes services statute law sometimes you might save someone's got a statutory obligation to not not spit on the pavement that's it's comes from I a law is passed in the in many many countries just despite all the differences the the set up like this there's also individual cases this is where the dispute goes before court yeah you spent on the pavement therefore you should pay the fine no I didn't or was reading my phone at the time I'm not responsible some argument over that and the outcome of that that that judgment is often called the case in some systems like. Australia the U. S. common law system that becomes president and so the higher you get up in the court system is very hierarchical court system where the high you out them the more lands of appeal in the U. S. A. gets to the Supreme Court in Australia the top is the High Court that doesn't happen when you have the sort of the legal system in for instance some Asian countries and some European countries where president doesn't matter so much so they don't don't spend so much time arguing that caseload makes it a little bit simpler but it's also a little bit less flexible there's a question about jurisdiction or jurisdictions of crony namely which the country are you in which state are you in therefore what laws apply and so in Australia if if we're in Sydney now if we were in this room would have the Commonwealth national sort of federal law said the privacy act of 1998 from the Commonwealth but we also have a state law in New South Wales loyal so the. Privacy personal information protection act over of a different year and we have a local government so maybe this is the Randwick council they might have parking ordinances that said you know you can't park outside this this these are so these 3 lies of jurisdiction here in some of the country's anti national and in the very local but it means that sometimes you have to trying to work out what level of ridiculous dispute is happening or or at what level it in that particular country the the legal system is engaged the I suppose the the biggest thing is. Laws are different in different countries and so stuff that you read about happening in the U. S. the legal system is quite different and so it might not apply here the maybe principles of a quite similar and well there might be some agreements to apply some U. S. law for some sort of purposes but just from the first first base that we I'm quite different there's also the question about is not needing to rely on a little or I. A case of to to look at what what the the real actually is and we can just do a deal between us either as individuals or between you and the company that's a contract and that's where the details of that are supposedly left a negotiation you know it's it's about an agreement they say you know we're going to talk if they definitely gonna sell deliver and we going to make you suffer forever and we guarantee let you fly on Facebook for that is that a fair deal and you go on now I like to keep my feet and not be disemboweled and all that sort of stuff and I got no no no no we're not negotiating it's a unilateral contract that's the deal you don't even read it no you're not reading it I mean we can change it whenever you like you agree that we can change it whenever you like so. Okay and most people got him whatever I didn't even read it I don't know that you know all that bad stuff is going to happen though I might be at risk all my doctor might be tortured or or whatever and that's because that's actually probably an unfair contract there's a technical term an unconscionable contract with the balance of power is so bad that 1 party 11 of the 2 sides of a contract is so much stronger than the other than that they can dictate that and some courts will intervene and some locals will actually say if it's too bad we will step in and rip up the contract but until that happens you've you've you've got a lot of the the details of things in contracts up there's also a whole area of little and this is more to do with regulation on the way you've got instead of strict laws or or explicit contracts you've got codes Larry Lessig has no idea of coding bracket that's what software code allows you to do and other conventions are by convention the lore of the C. applies in the ship outside its it maybe in international waters but it turns out that there's a whole lot of other sort of has to resign less explicit less rigid unless the tiles for the things that influence and the losses some of them. For instance that they used to be a a lower New South Wales coal the critics of 994 that was really fantastic from my perspective when I first got out of any I've blended into this legal center that was running a massive class action that had hundreds of thousands of of contracts and it was using that law that basically said unless the bank does the right thing they can't charge interest which is automatically self enforcing it enough to get a quote about it it was amazing so we won there's a huge cross sectional it and said the the banks then lobbied instead when I lock that as you know we don't we like being the dominant 1 we don't want to have to the even if we don't want to have a fair fight so let's get rid of that little trick that put in place something called a car boot and the great thing about the code is you can't actually enforce how bout that they can consume as old fort Madison Pollock said this is terrible you know the the consumers 1 that we can't have that and so what we've now got is no credit checks the 994 in New South Wales you get a much weaker and basically unenforceable coat it was a lot of areas with these codes and we've we've done it when I was at the subspace Lauren policies and we did a a big research project on codes and drowning in codes with the name of the report I'm still sort of interesting in principle of a big survive all of the codes that affect people online in Australia and the very very able as to whether you can Forsman what they say what they cover I'm very convenient for a certain sort of industry or if if you're a company that's going to cut you can say look into we doing the right thing with following the block code but as a consumer when something goes wrong even finding out which code is involved can be quite difficult anyway that's this sort of range of different sources of those obligations. And the other thing that's really hard for scientists or engineers or people who are concrete think is to get out of it is there is no right answer the whole job of a lawyer is to be able to argue anything to to find good logical reasons to find evidence to find data to find president or analogies but to say well you might think the blackest black but actually black is white and people who think this is one reality or this there's a right way of doing things find this really shocking because you know the the the right or the wrong but in low a lot of it is contingent or it may in fact be dependent on exactly what you well who's involved with a particular diet told him an amount of money involved all I sort of little details but it's it's important as well as makes it quite hard to to follow some of these things you know because you're trying to make sense of it I just quickly jump over this the 3 wings of government the executive that's what people call the government and it uses the legal powers there is the legislature or someone's going to parliament Congress that's makes the laws that that passes the the statute lows and there's the judiciary it's sometimes called the courts with the judges and they make decisions on individual disputes between various people or parties using the laws that have been created the government basically says we've passed the budget act of this year with spending all that money or with pasta the metadata retention lore so we are going to be now bully every ISP in the country to retain all that data because they have to comply with that and we get the power to set up inspections we get the power to find them and all that sort of thing so they're using the powers that the good lord scripts create up often important to try and makes sense of. Which level of which one of these wings is involved in a particular thing I'm I'm not gonna go it in detail through this it's a title that shows you the different sources of loyal from the statutes we we mentioned the codes. Norms and conventions the final one they're just mention it again it code as in software then example was digital rights management Larry Lessig of observed that you know if this software system or a we know it and I. T. system doesn't let you do something computer says no. Even if you've got a legal right to do it you've got a real difficulty and soak in practice that's the sort of the software code sitting up what you're allowed to do for a long time there was a bit of a conflict just on that particular sort of question and then in the U. S. Australia free trade agreement of think about 2004 they said well why don't we make it so that if software stops you doing something and then you go past that that in itself is not just a breach of copyright that's a crime and so this was a great victory by the interests behind copyright the copyright owner is because it turned out that many of the things like your students there's this particular provision in the Copyright Act this pot 59.5 B. that you have to go to education as a special case where you're allowed to do certain things that would be illegal if you're just doing it as a consumer or as a a business or whatever most of the DVD players that existed at that stage or or copying tools did not take any notice if I were a DRM sensitive I just stop you doing it inside do you have a legal authorization to do this they just blocked it anyway so you'd be legally entitled to do it but you couldn't do it in reality and after was they came on with this the strap on rule it said if you break it if you hack through to do what you would be entitled to do that hacking through in itself is a crime so it's very interesting how that convoluted capability has been used to push out the boundary of the the the rights for instance of copyright owners in a way that parliaments and LOLS wouldn't actually do the that they tended to try to reflect a balance between uses and. And researches and owners and whatever so it's it's important to to not just around the age that up IT systems and code has a very interesting and can be contested role in in in changing what they did in the defacto you're able to do physically and then in some cases of its back filled with low that the change the actual law behind it. I'm one of the questions of Austin in this a part of this discussion is. And coming to this phone call you're getting all the kids medalists and and why does it matter what actually matters it's important to get an idea of some of the different level some of the stuff is legal some of it is ethical and some of it is is something else breaking the lord's inside the that little says they'll shall not copy. X. unless you have a license you've got a question of liability you are liable because you've done this and it broke that particular hello that's the sort of the first thing that lawyers give advice on yes you will your late legally allowed to do it or not you'll note the next question is are you gonna get course and so I want to ask here in the room has never copied something without authorization because it would be too many hands to count. The people here but almost everyone because that lower side streets will have have broken it how many people here have actually been fined in court and prosecuted all litigated against for breaching copyright. No hands or less people with things in the future through the television screen now I don't see any has there is so in fact almost nobody gets enforced for common or garden sorts of breaches of copyright law even though they are liable for that have broken the law the separate the next question and that's sort of what the police do what in inspectors to and so you might say I think I'll get away with speeding or I think I'll I'll get away with I know who's looking at certain sorts of content which might actually be arguably illegal but I think I'll get away with it one of the important things just on that point I was it's sort of random with you do you get away or not if you then get court next week because it's it's no use saying but you didn't catch everybody else or you didn't catch me last week they just didn't enforce that of either the contract rights holders or the law enforcement or whatever and Smith because it it's too intolerant questions your exposed to the liability this means if you're a big company if you are a very a public company with lots of assets in a fixed address and you're a sitting duck your very courses you've got a due diligence and a compliance committee another source of high level governance by people who actually say what are we liable for you might still do it but they are very exposed to that because I don't know when the inspectors going to come along and we will get back up to 7 years will look into your tax affairs that sort of thing so I'm certain entities in society have to be you're very risk averse about the lack of enforcement other people individuals might decide I don't know anyone that's ever been court for breaching copyright so I'm just gonna ignore it as if it doesn't exist and. Yeah in one sense that's just random in one stage in the U. S. a lot of the big music and then the movie operators started to sue people in there you know this this is a woman in a trailer park in the mid west of the U. S. was similar to $0 fines for you know $20000 a song something on that order of magnitude everyone was shocked but it's just that the enforcement started to happen it was sort of arbitrary and at the discretion of other people whether they actually carried out so you know I'm just flagging that that that the fact that you get away with it doesn't necessarily mean that it's not illegal and it doesn't actually mean that all of the legal consequences about liability when come to you later on so it's it's it's an important does 2 different levels that there's other things too so. If you do the wrong thing it might not actually be illegal but it might look bad for the company you might lose your job thank you saying but that was legal and you know I didn't get course and you know we did something really weird that there's not a liability for that this is really one of the pictures so when your trying to develop your sort of since about you know thinking of risk and think about the right thing to do you need to consider both that's why the company your employer and your own interests separate from what you can probably get away with there's also a question about self respect or peer respect social respect you know you might be working for Facebook and they might employ people to do all this really unbelievable stuff but at a certain point the tide might change and it's no longer cool to work for Facebook and people going you know what they do there and that might matter to you but it might also be because people take an ethical view of that maybe Facebook's been successful in lobbying not to have the laws change or not to have investigations I'm going to it like this this in the last couple of years been investigations in the E. U. the U. S. in Australia but they often get away with it they spent a fortune on lawyers and on regulatory response and so they don't necessarily get enforced against but they can still be revealed to do stuff that that that the changing public opinion doesn't look very good on the other hand maybe but everyone stupid they don't realize how bad the stuff he's never I think it's really cool that you can scroll in that you get addicted and you just want to scroll diet and is really stuff just sort of comes in it's just fantastic and you yourself minor something not quite right about that and I don't know whether VFM been following the the the for the film was that the social dilemma. It it's based on engineers and sort of Lee moves inside some of the big companies particularly Facebook and Google saying I sort of knew it wasn't quite right it's you know I realize this you know it exploiting the addictive potential in people's cognitive functioning was sort of a bit creepy and you know they haven't been court there is then they may not have been a little about that there's no risk of enforcement and the company rewarded them hugely and for a long time face because it was really cool but I'm I'm just trying to Inc you know it I've been up your imagination about the different possible ways just because something's illegal. It's not the end of the story it might not even be part of the story and just because something is you can get away with to dye mine also be that way all the time so is some of this is maybe sort of arbitrary of of an academic and it might not come and and but you but you know don't say you haven't been warned that some of the the big dramatic effects that that some I. T. systems can have cont bubble up and and create some of these sorts of effects. Just very quickly touch on the rule of law this is the idea that no one is above the level so I don't think I'm going out on a limb saying Donald Trump is is reputed to be pushing all of this he's trying to table I just don't have to follow the law I could walk down it was a Fifth Avenue and shoot someone and my supporters would still follow me and if they bite me and I'm still president so I can change you to any general and nothing surpasses there is a big deal also about the separation of powers and I think this again is probably filing in the U. S. the judges and the legislators and the government the executive theoretically in many systems of government should be separate what you got in the US is a very very partisan control over who the judges out there nightly do you support the government in power against the other sort of party that's a that's a threat there but there's also. As a strong sort of finally out of the I have a site between the legislators and the governments that that is a lot of criticism in the U. S. about the Republican Party the sentences in particular who who's still have them a majority filing to ask deeper questions and filing to look into for instance manipulation on the internet yeah I have it elections because it's in their political interests for the person who's running the government and so whenever you say that it's a bad thing you know in in terms of the idea of the rule of law and the separation of powers this principle of natural justice that that this is at the core if your cues of something you need to know what it is you need to know what the facts are and you need to have a chance to put your side of it if someone just says we looking you up because we decided that you spent on the pavement and you bridge the ordinance you know in joy being in jail for 10 years the website. Hang on that wasn't me or it wasn't a speed or even it was 10 years is too much if you don't get to say that you haven't had natural justice there's some things that the more important I the more difficult the issue is. The more likely you should be able to peer in court you should have lawyers you should have a long time to pass on this but even something pretty trivial you probably should be able to just pick up the handset I'm not happy with it or why do you think that and so it it gets down on a very lovely level in administration or in many people's I'm sort of workplace the other ideas of the the is that in the rule of law the decision of a court is actually binding and so you've seen some examples in the US and forgive me for using that as a as an example but it is sort of a textbook it was like a lebar tree of how to attack the rule of law some government. Heads of state secretaries of department to running large offices are refusing to accept refusing to implement the orders of course and there's a lot of pressure on them and some of them meant to give up but they're actually now sort of thing will. I don't have to take any notice and once that happens everything starts falling apart statutes are interpreted by known principles this is what you have lawyers this is why you you know it should be noble it should be understandable it should be predictable so businesses should be able to get advice that says if you do X. that'll be treated as tax dodging if you do why that's just very creative funding of a start up and you should it's not just about them making stuff up they should be rigorous and pretty specific and clear sort of principles and once you start getting decisions based on who's interested in our she's a Republican I'm sorry she gets everything he's from another party he gets nothing and the interpretation of decisions are based on things other than you know what are the principles what's the evidence and that sort of thing it becomes something entirely different becomes. A one party state or whatever I'm the interest in arguments are taken into account in some cases they just ignore stuff so. One of my biggest frustrations in I think it was the metadata retention prices in Australia in parliament there were submissions made by a lot of civil liberties bodies about how weak the evidence was that Mister doctor retention actually does anything in in gold and they're full of that it's justified and I referred to the US weather review this and cancel some of them it's a data retention laws and the E. U. whether reviewed it and actually invalidated the entire middle daughter retention scheme and this argument and what wasn't in the court but it was supposedly the parliamentary joint committee on intelligence and security one of the scariest committees in a strategy and what did they do that went out to lunch this virtually nobody up the front listening and so he's thinking how can they take into account the arguments to put from the if they're not there it's almost you know they would have to cancel it the the meeting and it was like a really visible display of contempt and of lack of interest and I thought you know they're not taking into account these the comparative arguments with other countries in the arguments about evidence and the the logical stuffy they've made up their mind already you know the governments pushing for metadata retention that's the end of story said that felt like the ideas of the rule of law that the lawyers been brought up with were being trampled by sort of pre pre judgment on on other reasons and this restraint on the arbitrary hello Sir and and there's a whole discussion now that America was set up to avoid the true power of the rule of the king of the queen whatever and there's a certain person at the moment he seems to think that they have open ended so Skype so in a sense not only is known about the little bit the the everybody's pals out some quite limited the more pay. Just try to expand their capacity and took a ride all of these ideas. The the more that's under threat and finally if you don't like it there's something going on you can change a little you can fix it and so if things for instance if these efforts to undermine the electoral process and and to make a how to divide it and so that the legislature wanted to change the name of these laws will change then that's a real threat as well. I'm I'm not gonna go into the natural justice. Of the of touch on some of those things there this is an example and this is bubbles up every now and then and it's it's bubbled up again more recently the with the we get greater and greater focus on the apps tools and so in the U. S. this is anti trust investigations about. Now apple and Google's control of their apps tools in one sense help them to dominate markets and extract monopoly rent them out of that and if they refuse to let people apple in particular is it now is in trouble for refusing to let developers. You know who is essentially sell software that works on the platform without giving them accounts but what one of the other complaints before that and in fact maybe it's this that made that exploitation more easily is that you don't know what the rules are you know the apple says you break the rules or the intent of content sometimes face because you pretend rules and you want to be else I will which rule what things that we've actually done what's your evidence what we've done is wrong and in a can we talk about is you often don't get heard before the the seasons are natural justice with high apple is telling you you know sub rule 47 day you concert and I able someone to trigger a subscription on a website if it's not coming through the store and giving us 15 percent and we think that your little picture it's not even a functionality it's just a hints that maybe if you go to the website that might give you an alternate way of getting a subscription that breaches their rules at the moment as far as I understand it this is that they often don't give you that specific so data inside the developers the tearing their hair out saying what do I have to fix so is that even fair is that what that picture was that was supposed to mean so you can't bring the counter evidence you can say look he has the courage he is performance testing he is actually what happens with that and also this the the question of hospitality bias or corrupt influence there if apple's operation of the system is just to harvest bits of your cash flow is that corrupt will possibly not but it's certainly possible they putting their interests again ahead of your interest in possibly the the consumer interests which is why the antitrust and anti competitive reviews take. In case of in other cases infant face book for instance at one stage it looked like that of certain sorts of criticisms of Facebook would mysteriously turned up being treated as breaches of their community standards you never quite find out but it it turned out that it would allow certain you know large amounts of outrageous abuse and whatever but some things just disappeared if I'd touch on some hot button so that might be a form of bus one of it and the other thing is there's typically no procedure review all of those things if you're a developer and you know at the miss U. of Google's app store or apple's app store and you know your last version of your best selling amp was suddenly blocked you'd be whining and complaining and outraged at how unfair it was and in fact many of the things that you would be complaining about is the lack of natural justice that those sorts of principles what is the meant to do not this is to give you the right answer at the end but at least to give you a sign to make it visible and to give you a chance to interfere before it all happens so down the bottom of got the concept of a private Petry unilateral contract so apple juices he is the deal you have to be one of the developers of Google says that we can change it you have a great one of the terms is we can change it and actually we're not negotiating guess what you know it's it's it's not an agreement because I it's a saying take it or leave it and guess what because we are a near monopoly because you can't get on to the the iOS ecosystem with the android ecosystem easily you effectively you've got no choice so that's an example of something on the one hand this concept of natural justice is very old and it's you know a sort of a a course of legal principle. Yeah I'm I mean if fast forward to today the sorts of abuses that happen when you've got sort of monopoly power turned out to be. At heart you know you you you probably wouldn't be complaining that it wasn't actual justice but some of your feelings of outrage and hurt and exasperation would be for these reasons. I'm gonna skip past risk risk is very very interesting. Of the 1.I would make is that. Intention and motive when you're designing something in one sense the relevant because you should be trying to do the right thing and you should be sort of guided not by maliciousness or you know decided to wreck everything or whatever but for you know taking constructive relations but if the outcome of your design if this is a risk that causes lots of harm it's that actual outcome that's significant so. The the the the your motivation your intention is not the end of the story of a just say this just in he briefly about risk because a lot of people when something goes wrong often think but I didn't mean it meant no harm I was trying to do the right thing or want to help everyone or whatever and I just need to flag it that is important and significant but if you've killed someone or if you ruin someone's life we expose this secret or you know because the massive blackout that's what whatever then rather than you deliberately wanting to do it you are in the realm of what the lawyers called negligence you know you didn't mean to do it but you didn't take enough care so I just I just wanna flag there that there's a whole lot of adverse things that can go wrong in a a risk situation that because of failure on your part on your imagination or in your planning or your testing or your consultation with people and asking what could possibly go wrong and listening to all the creative ideas not necessarily your intentions. Adjusted touch very briefly on the concept of proficient I mentioned here professional liability I said at the start not everybody in computer science and IT software would want to be a professional. It's not a trivial thing so one of the big things about being a professional is you can get struck off the membership cannot work unless you're on that list and so if you're struck off as an architect or the doctor or as a lawyer I'm sorry get another job tied to reskill gig economy fermented blend software whatever it's very exclusive in that sense so it's it's. It means that. You can't just. I put a sign on the front and side I'm a thanks hi Amy for that work there's a form of self regulation as it's called within the disciplines and so. It's typically you're not going to the police if something goes wrong you go to the professional standards board of the nurses registration board over the psychiatrist registration board. The sort of things that can happen that says your P. is there a nice side note saying psychiatrist could ever have given allies amphetamines to this person in the middle of a psychotic break down and not expected them to go a bit crazy you know your your professional standards you'll you'll clinical knowledge your pharmaceutical matching of prescriptions to problems you're thinking of side effects all of that stuff is so bad as to be dangerous and here this person is now you know data or in a in a terrible terrible state therefore we you'll P. is I think essentially for the protection of the public and also for the rest of the profession because we you know we don't want people to think of a psychologist as people could you know but surely do something that that dangerous we are going to put a restriction on your practicing certificate you can only work on the supervision or. Your house you know we we can cancel it you can never work again as a so whatever it is you often need professional indemnity insurance if something goes wrong if you'll that Sarkar to store you'll that loyal whatever and you've really stuff someone up typically you would have the money to pay for it you know maybe it's 1000 people that you've killed or something like that and so these massive amounts of professionally dimensions guess what those insurers up pretty interested in what you're doing and also we want a review committee we want to check your practice we want your records we want to see your standards we want to see your education we want to see your updates and you know is your toilet clean and. People find that you know pretty pretty stem in intrusive. But that is another thing that's pretty scary and that's pia attitudes you know you think using some really quick and dirty technique and just throwing stuff at the wall and see what happens is a fantastic way to make software and it actually works in some disciplines but you're making a traffic control stuff and when you through the wall and it just sort of crashed at 3:00 AM there's a couple of airliners crashed as well and your peers are sort of thinking I mean you can't use that technique for this high risk sort of area I'm sorry you might think you're clever you might think you're leading edge or you're an inventor or unique or a genius or whatever but we think you're a disgrace your danger to shipping you are in fact. Sex your house your your unregistered and go into something else that's E. if you've got that for instance sort of dispute it within a discipline about whether using one software methodology this is another tool this is another framework is the best way to work and some are really dangerous and some are really cheap and some are really fast and some are really flexible for the future you may not have that pia understanding about what is a proper way to do things and this is one of the reasons why I think that software because it said plastic is a very difficult to the area to think of as a as a proficient because at the core of it having you know you might not want to be exposed to your PS I mean maybe then all the generation that doesn't even know what you're trying to do and that you know doesn't even know how to use the tools that you've just been invented and you might think well having the older experienced people set the standards actually just blocks me doing you know we had a crazy stuff and in software that's more likely to be true in another architecture behalf true but if the building falls down actually we knew how to build a building that's tied up for hundreds of years and if if you're so clever then you have absorbed that cultural history in that engineering history and all of that sort of competence and it's perfectly reasonable of us to say that's the standard where is in in software when you can just change everything so constantly it becomes much more difficult I'm there's also an echo of the concept of reputation and of being in good standing with your P. is this some very crazy individual sort of programs or small groups who might be on the Elsa I'm thinking here of someone not in this theater but another theater very nearby Richard Stallman is a single handedly. The reinvented the concept of free software doesn't think open source is a is a concept written quite a bit of the stuff around Lenox buddies at very pedantic and very strappy and very argumentative sort of a person a lot of people find it very difficult to deal with and he's been sort of rude and abusive to various sorts of people what should peer reputation sort of do it which is really important in in in many professions in terms of working out what's proper standards it even even totals you know is if you get so it gets that's gotten so grumpy at some stage that people within Linux access going not so with with the work for this yeah how do you in something as intangible and as of what's the word. A diverse and constantly evolving as a software how do you balance those sorts of. Personal and interpersonal and collaborative sort of approaches so again you know these people have it created incredible stuff all that stuff help Thomas credible creativity if they were professionals in many professions they would've been in the handed out or isolated or they're forced to leave and go to a different country something like that and so I don't think you know that there's a role for professions but before we have a discussion about that and software I think it's worth being really Frank about that. The. One area where it might actually work yeah I'm in I T. is in those areas where the doctor is really really important and so I've marketing advertising is typically not one of them and so Google Facebook and a lot of the other big Dada Piney is have started their work and in the techniques using data in in context where it's not really life and death or of people didn't think that it was that important as they've gotten bigger it becomes clear that they reach is itself in over a piece of questions but by comparison outside inside a law firm inside medical informatics systems or you know obviously a traffic controllers sorts of prices control or what about something that does. Is it extraction of patents from exercise to try and see if someone's got sort of a cancer insurance claims what what about the prospect that someone might be refuse insurance claim because of an algorithm that improperly just took into account certain factors that it couldn't explain to anyone I'm in some circumstances particularly the the the more that there is stuck in the higher the risk the the more these the questions of the integrity of the data and all of the algorithms and of the whole system of becoming potent so and I've I've had discussions with people at the the top of some of these industries and with a body called the council of a professions and the discussion was heading down the direction of a lot of people working in sight running IT firm I. T. systems aside the legal firm IT systems or medical informatics hospitals medical research would like to have to deal with I'm a professional whose not necessarily going to be you know the the next service creator of of a tick tock or something like that but can be relied on to look after IT security and privacy and perhaps algorithmic transparency and testability and all of those sorts of things. They possibly would be a full certification the be a training curriculum of talked with with people in several different disciplines about what that might be. Query registration I mean maybe for certain absolute mission critical sort of things you might want registration it's it's an open to the question. They might be a role for self regulation if it's a small and very bounded and and you know not necessarily very fast moving sort of area and so. Some of those examples of of given my Fitbit is there a role for complaints and exclusion that's the sort of thing that the profession does have they would be a body of expertise a definable experts and so this is probably suggesting I I discipline or an industry sector that is a bit more mature and is not a sort of fast moving but is very serve high risk and highly sensitive sort of data. I'm also the the data subjects like may be keeping psychiatric records you know you confess to the psychiatrist all of your fantasies all of the most terrible things I've ever done all of your dreams and someone looking at my site wow what a welcome you know should that person even have a driving license so you know I don't want my children go to school with this person but must much of it is. Means nothing or is that totally out of context and so this this would be a lot of this is about the sensitivity and about data protection at about and about privacy and how you have a system that allows some people to deal with this very sensitive information and gives the particular the data subject great protection including the ability to sue you or to give you up to be struck off if you set up a system that is so sloppy that well guess what all about psychiatric records been sprayed all over the internet love turned up on my Facebook wall or whatever. You might also want very good legal evidentiary criteria so this is the concept of forensics both in terms of how the algorithms rules were formed how they applied in a certain place sorry one of the big things about the big data systems is often live based on probability machine learning neural networks we just throw the daughter in and we get this sort of answers out in this sort of good enough to change which adds you guessed are they good enough to decide who gets the pension or you know who's locked up or who's uninsurable that sort of thing it may well be that some of the sloppy ist big data systems are not suitable for use with really serious system so I think I've read about it where basically the government just want to claw back some money and if they didn't have the daughter that said you have equipment you'll recognize it US 10000 Bucks and it turned out those debts will not legally owning that they didn't have a the daughter if you had a a debt collector or a lawyer do their due diligence trying tries a through there was nothing there but they set up this messy system and then defended it for years there was you know it wasn't even really big Dada neural networks it was just really sloppy sort of low grade programming. That sort of system we should be the sort of thing that I dont have integrity professional would not touch or would ring the bell on blow the whistle on inside we have to fix this now this cannot go live this is unfair possibly illegal script compliance problems got liability problems it's not a bad programming of sort of low grade on site security sort of whatever and what one of the other things in this field is the idea that. You can work with different sorts of people so the be the B. a team here multi disciplinary team and you have someone with a bit of legal knowledge and someone's bit of I. T. knowledge someone of risk or compliance or insurance sort of person and someone engaged directly with the the customer's customer service store understanding the risk so for individuals and that someone in this discipline whether they came from I. T. or whether they can visually kind from little from a medical research would know enough about the language and love about the challenges that I can actually say I'm going to manage this sort of time so I'm flagging if you had people with those sorts of skills and it's not everyone here who would be interested in developing them but if you do they would probably be very interesting and very useful to this is somewhat restricted to mine off of problems and industry sectors that we just mentioned up in in a sense you should probably be forming in your mind a picture that says a lot of software working is a bit different from that the some of it really and and I'm using the idea of of ad targeting this this some really serious consequences but ultimately doesn't matter that much about which educate to see I'm sorry applying this sort of approach and and insisting on a professional in there might be a kill although you might avoid some of the other problems that we've seen along the way so I think this is an argument for a real profession like this in in some areas of IT I think there's a lot of other areas that they stop the there's some sensitivity there is some risk there's some exposure of the the data subjects and some of these sorts of thinking with a lot of it's about ethical thinking a lot of it's about risk in problem solving thinking. Needs to be very strongly developed but perhaps not serving that framing it forgive me for going into some sort this out he ought to I think it's it's a really useful mental exercise if you like to see something that's maybe forming at the age of the legal and regulatory and ethical systems for software. Yeah in this part of the discussion I'm going to be looking at some of the examples about this of violence a call to me the the violence. So this is data protection this is data security privacy confidentiality. So then starting off by asking well what's this question about. To help you to understand the complexity of debates on the regulation of online surveillance it comes and goes but it's it's been you know who'd been bubbling away for the last 30 or 40 years there are some successes for the proponents of strong protections and some losses and it's in one sense it's useful for you to get a feel for the history and the evolution so you know if you go to work on a particular project or in a particular phone or to a particular industry sector you've got a feel for the sort of issues that have occurred there in the past and maybe looking into the future is is this going to be the next area where there's a big problem or in fact have a pick something that's really sci fi I'm so. We really need to sort of understand why you might care about privacy personal information in the information security and confidentiality some people get it and from time to time you know privacy or whatever the the ease a hot topic and everybody is really intuitively grasps at another at times or with some sorts of spin this sort of thing what what's the problem you know nothing to hide nothing to fear everybody does it get over to kids and so it's important for you to have a sort of a a potential to understand at the extreme case what could be going on is it a critical view of governance and oversight so some of the problems with all of this and not down at the individual level some program I decided to just fade out all the data into the hard disk and take it home and see what they can do with it it's that you know any time a company or a government department or even at an international coordinating group have. Not being influenced strongly enough by the for the sort of issues that should be in place the the example I'm thinking of there's a something called the F. I. T. if the financial. The action task forces in the. Financial transaction so violence and win on the talking to people it alls track the the strategy in government financial transaction tracking body I ask on this thing called if I. T. if which is an international so coordinating body between the the law enforcement bodies of a half dozen different countries do you have anyone who's saying less is more all data minimization or privacy is really important it should be regularly reviewed or data protection should be one of the fundamentals and I gotta earn no we're just specifically just cops you know we like information we want more so we going around and we claiming that it's an international standard when it's not so they misrepresented what it actually is because there's no politics of looked this up and we just say you should be collecting more and more more more and we Gera next year will come to Australia was I only end up collecting is enough more than we said last year you you're bad you haven't met your targets and so I'm saying we'll who set this targets is there any reality therapy or is there any restraint on on the ratcheting up so this constantly Donna maximization as the the model without even thinking about it and it turns out that there's not sorry from my perspective that the government's value it's an oversight Tanya it's a sort of a systemic floor if you like that the the. Also check is sort of good enough to have this little group on the side of of talking to outside people but the the international coordinating body that innocents die society they are beholden to the I have to sort of meet the standards they set doesn't have that that influence and so it's it's useful for you to try and get that's a picture I mean you might feel a bit overwhelmed you might say well you know what can I do about that and. In some cases that'll be a resemblance but they may be from time to time input that you can give you may be able to provide examples of clarify this the significance of things all show that an alternative methods but possible so one of the things I've been talking about at the moment in sort of awestruck and I don't think I'm breaking any confidences is a sort of differential privacy sort of model with of trying to essentially hide the identity of individual sort of transactions I know of the account holder and have a sort of doing the analysis doing machine learning on encrypted data and at the end of it when they find something suspicious that's when you sign up this is you know the mafia group with the tribe group or the you start to group for whichever interesting sort of bodies involved here we found some of the tentacles and some of the their ways into the Australian economy all those other people started that we've looked at we never knew who that was and when it didn't make it sort of threshold criteria for suspicion suspicious activity reports with difficult to say that so that's an example where these people have introduced quite a sophisticated form of data protection and privacy protection and we're saying right you know it is good to say that they've got skills that they've got technical technologists and they've got the resources and they've got to you know a capability to to do that a commitment but it's just a pity that. You know that that only gets applied in certain sort of instances and it's actually applied as a. A way of saying these are the much larger collection that we now want to start doing so we collected everything about everybody this is you know the reason for signing with don't worry about that we've got to protect it and so for instance what would be really interesting is outside people looking at that and saying how would you crack through that encryption on the fly well that differential privacy or that attempted you know partial anonymize ation yeah how would you break it how would you what would you need to do to get past the such protections are are they doing ethical hacking of a you know and we've we've made these sorts of suggestions on this discussion group M. the and I feel that was sort of interesting in bed and I wished I'd known a lot more technologists that I could sit down talk to professor so and so or doctor X. 4 to 118 or whoever and you know they can help you do the sort of testing and debugging or debunking that might actually reveal that you know that your system is flawed or else that it's it's it's pretty rock solid but at least then it will be as of exposed so what 1 of 1 of the questions is what degree of outside transparency and visibility is there for these systems hearing do we see the code we see how the service run to say with the Dada sort of guys that sort of thing but also who's involved in thinking about help should be working. I just mentioned there the Snowden revelations one of the reasons why this discussion has been bubbling on if you haven't looked at it in any detail. Did I just remind you that a contractor for I think it was the NSA Edward Snowden took vast amounts of data and since we published it through the guardian New York times other bodies about in 2013 and what he revealed was absolutely massive programs of data retention and off analysis of a particularly raise questions about international stuff a lot of fun Donna travels through the US select other travels through some countries in Europe and the information from people in other countries gets sucked up in that there was quite a lot of rules about restrictions on investigations and it looked like quite a lot of the activities that he revealed wasn't taking much notice of that so that really said a lot of the the hay is running if you like and in a sense we still dealing with the aftermath of a renewed interest I'm one of the you know it's been a very mixed response so in in some ways some of the most the scariest things are still there people just going home will just have to live with it in other cases things have been reviewed and shut down so there was a a major data retention program in the U. S. that was revealed by Snowden to publicize and you know there's a tiny footnote of it in in some of the government report and once I saw it wasn't completely sacred but was unknown about and they asked how many terrorists did you catch you know you've retained billions of Medidata items about phone calls in the U. S. for supposedly foreign SO terror Sammy tested to catch all the code looks like it only looks good the number. 50 okay which 50 well 12 okay shows the 123 all right come on show us those 3. Well it was this one guy in Yemen and he passed a few $0 off to was an illegal organization. Then it okay that's it. Billions of interceptions you've exposed a lot of U. S. persons who happens constitutionally protected in the U. S. unlike us here. From illegal search and seizure the Fourth Amendment of the U. S. constitution gives brought you've you've prepped traveled on that and you've got one guy with a donation for. Okay that's not justified that's not proportionate shut it down and a couple of years later Congress actually possible to shut that down thank re authorized other things which you know you got a few more and if Europe did the same thing they they reviewed in 2014 the data retention directive that says all of the countries in Europe have to retain telecommunications data that have any criminals to control what's the increase in the conviction right well it's a lot tell us what's it about under one percent it's sort of an agreement and I think I mean it's like a rounding error site you know the again this this very intrusive and very expensive sort of system you can't point to anything that shows that good ordinary human intelligence traditional sort of data analysis good policing wouldn't have got that and again they said that serve. Roam at so unjustified and so disproportionate that is invalid and they actually got rid of that whole sort of directive it was in conflict with the data protection directive of about 1995 in that so that side at that stage in Europe the privacy directive trumped the data retention and went down unfortunately in Australia that is debate some mention to you before the degree of Riga and following through the Dada saying what's the differential benefit you know the the the marginal increase in the fictive nestled the number of actual outcomes you got L. politicians don't like to ask that now lot of agencies done like to produce that data because in fact much of it doesn't get revealed and so this is of oversight this is transparency I suppose an example we could look at at the moment is the virus the code safe at. There is. Attention extremely intrusive it doesn't sound like until. I'm track physical location but it doesn't track proximity so it's very good for social network analysis if you like so who knows who who's spending time with 2 who's in who's house at 3:00 in the morning you know how many people were in the drug dealers tile that afternoon blah blah blah blah blah soaked into quite significant the government talked to a lot of different entities in Australia about trying to protect that Dada and they did a reasonable sort of job and they they they tried to ban it from being used for other people for other purposes I did have a very interesting moment I ended up on the I've sought committee for the inspector of intelligence and security inspector general of intelligence secure security this is very scary former judge on a zoom meeting and let me tell you you know these people have incredible presence I was just. But anyway I asked and so does this actually this this very strong and actually quite drastic legal protection has been introduced to protect the data for the coverage as a doesn't actually stop this buys using it. And she said oh I'll be very upset if I heard that were using it. No no it doesn't because in fact it's very hard for any legislation on privacy or data protection strategy to override the great powers of intelligence and security and law enforcement and criminal intelligence sort of gathering and what I've heard from her not spelled out strong winds are done quite read directly on this was that. There would be some scope for some access to dislike them is anybody here had a look at that system have you have you tried to understand the shape of the because of its size. Anyone. No. And what what do you understand the architecture what is it do. Thanks to the people and okay yeah cases of a 2. And he's looking to buy and sell it. All right and how does it is intended for you. By. Okay. Sorry the the interesting thing is that have a look at the data architecture you know anybody in interested in this in this course so this session should probably do a bit more inquiry I think there is a central server it has a token dispenser every functioning app calls into that every 2 elves and gets a replacement tokens of the token is a pseudo identified sort of partially de identified I'm very interested in the house in this area the whole risk of re identification and so that means that what's gets passed between is not the 2 telephone numbers you you your telephone numbers used to register but the dasa the kids pasta as I understand it is that the tokens and they have to go back to the token login and then sort of reconnect that together the one of the big discussions and this is about the concept of proportionality no. Is this working and how how many people has its sights how many extra contacting Trice if it's has it done might as. Mental experiment and on my or what I've tried to encourage journalists to try and do is decide on who is running the metadata retention for the system where the. Does. 2 hourly updates of the tokens around that the server the because that would be a very interesting. Log off it was going in there secondly. How many people using this so you you did that that server they would tell you not what is being the numbers that are intended publicly which are only 3000000 people downloaded this 6000000 people the other 6 not many people and there's also not much discussion about the sort of the threshold the equivalent of the herd immunity you know what what what's the sort of heard compliance level it's required for it to have any sort of so tense I'm so at the moment we're existing in a.a vacuum in the end it's it's really unfortunate because we have daily statistics about infection writes daily statistics about death rights and in particular locations and and that turns out to be quite useful for not only government planning but also for individuals and getting a feel for am I living in a very high risk moment of a high risk price or anything like that and that I've been good enough to share that information that's public health information it's a public health so crosses so that's that that public health doctor is so transparently inviolable my suggestion would be give the dust off well and in fact because that you don't have the keys to identify the tokens you don't need to worry about it let someone analyze and say how many apps have ever login how many apps have logged in today how long does the people use that did I use it all day long to these adjusting can pick out when the traveling basically what's the patent you know it what could of assuming the act actually worked what could you possibly sort of get it into what what. What's the upper limit of of the benefits you get by the number of people using that data seems to be something that they very reluctant to share more of us journalists decide is this kit because you think as a sort of a program governance or is a a monitoring and I just thought question knowing whether it's being used would be useful who gets access to it can we have it and it seems to me that that would be very. Useful to have it as a discussion if you're going to say okay it's very intrusive bugs potentially very valuable and so the the interesting question as well how many things as it helped can anyone think of a counter argument so let's imagine that in fact we should look to this which I that there's not many people using it they don't use it for very long and it's not doing many triggers yeah so on the face of it into it it's probably very low activity and and that would help explain was very few reports of it finding things and in fact in some jurisdictions though that apparently stopped using our over reliance what is the counter argument so this is where you put your thinking caps on all of the up the back wake up wake up what if you are being called upon to make an argument for saying don't release that Dada this is a very important IT system we're in a public health crisis it's a high sensitivity high risks of area and that would give us a very clear transparent understanding of what's going on why shouldn't we do it. The the the PR person or the lawyer or the adviser for the person who's going to sign a what's your argument. Yes. Speak up. Why would it undermine confidence. Right so why is that a bad thing if it doesn't work. Right so that that's what this is exactly it. The argument would be if people knew how ineffective it is it would become more effective because no one would use it. And the flip side of that is saying well if we don't tell them how ineffective it is and we tell them it's really great then more people will use it. Okay Sir and that in one sense is a valid public health argument you know who is in the sense of if people knew the truth I wouldn't do what we want them to do okay now what's that sort of ethical problems. What could possibly go wrong in of it either on ethical level some of the little. So that the eagles let's say that's true that is that it that low usage if we if people knew that would use it less and we want them to use it. Also. Right. Yes so there's a question there of trust and so you know it there's the claim that we're in this very dramatic moment there is a lot at stake but we're all in this together we will gonna make sacrifices and you know the public health has a claim that's more strong than a lot of other individual economics what sorts of things and if you discovered that in the middle of that the do being lied to and they they promised this was going to work and it never quote you've got that risk but in a sense that's a that's a risk to the future an inmate wants is that that's a sort of a consequential this sort of argument what's what's another one about the sort of motives or the ethics of the system in the first place and I'm sorry I'm I'll jump in and give you my answer and that that is I'm looking at it from the concept of informed consent and so in medical treatment informed consent is the the standard of. Getting permission you know just getting a contract with the the person who's being affected by this about what you're going to do to them or what they're going to sort of work with. It's also the gold standard for Dadi use you know we get your consent you know you have to click that button that says yeah yeah yeah whatever I agree to everything and that's you supposedly your informed consent the problem is the in form side of it if you've never read that contract he said I have read and understood and agree in fact you align you haven't read you haven't understood and you can't possibly agree to something you don't know about it's just being used against you that there's a formality of that so it's an informed consent coerced consent or this little sort of week bad sorts of consent but the the the real problem is that if your doctor said well I want to tell you. That this could kill you because if you did if I did you wouldn't get the treatment. You're saying but maybe it would be good that I didn't get the treatment if there was a risk it would get and so the the reason why I'm a youth rise that is many years ago when I was an intern at this university of Kingsford legal centre there's a case coming with this an elderly woman who had a bad problem on one of mine and she was a delight as a doctor and he said he operated on that it was a file yeah so she didn't get her on the suspect on the other hi this is weird but very rare but very serious problem called sympathetic and ophthalmia which basically means when that our guys decide does as well in sympathy so she suddenly went blind and it's. What rare but not unknown so you know there was it had a name and it was it was not the sometimes happened so he didn't say well there's a few percent chance that you might go blind if I just try and clear that blurry beat off of that possible and after I left it on 10 years later I was told that went to the High Court or the federal court is now the leading case on medical informed consent and the doctor was wrong because the more serious cities the more important it is that you tell the person even though it's not very common alternatively if something was quite trivial but you always go to that probably also say well you should tell them because it's guaranteed you're gonna get this you know you can each year or something like that and so at the at the heart of this was the idea that. The risk the what could possibly go wrong and the sort of help weighing up how important it is is something that you have to hand over to the person involved to. To help them make a choice and so what what this does is is exposes the dilemma of public health which is in a sense this is not all about you this is about public health and so we're saying well you might be healthy but you need to do all these precautions to help for public health okay well I came on well I I think I will not get away with it. And in one sense you know paperless instead of almost willing to deal with that but if we said and we get to lie to you because if we told you the truth you wouldn't do the right thing. I think that's pretty scary and on I'm I'm not sure what the right answer is but I do I do think it would blow the credibility and blow trust and low confidence in that government in the future and it's already actually quite weak because I've done a whole series of things at the time of trying to conceal things it probably would be after well I don't know what it is but another thing is it could blow up at any moment so you know someone could just leak the things I own living lying to us you know it doesn't actually sort of work and I suppose that there's another question to this might be contingent if even though more people used it it wasn't gonna work. Would you be justified in lying to try and get them to use it. Or. Cicero illicit let's say it was it was a.apple you know that the model is wrong and it it's it's it's assumes it's from the speaker of the vital. Doesn't tracked the 2420 I die surface contamination thing which we just saw yesterday on stainless steel and glass which is very scary but not surprising but you know the app I think has an entirely different sort of model for that and wouldn't necessarily catch it wouldn't show you've been somewhere with someone else 28 days ago what the hand on the stainless steel so there's a whole lot of reasons why the app so might not work. I'm so if it eventually wouldn't work anyway would you be justified in the hope that it might on the other hand maybe if we did get 80 percent of people using it and everyone had to be deceived and wrongly believe it would work in order to think it's worthwhile me doing that would that justify it you could sort of get closer to it so this is this is the question of proportionality and you sort of trying to Y. sort of things but will we ever even have that discussion if it's sort of to blue to to narrow and and to for to be public knowledge how effective it is at the moment so it you know it's it's some. I'm I'm I'm not proposing a a right answer into all of this but in one sense it's a very deep surveillance mechanism with the voluntarily observe sign up to that and so in that sense it's it's it's a very topical thing it's also serve useful because it's a hard problem with you know to we could problem it's it's some. Something with this there's no right answer but it's it's also something where the details matter with the proportionality if you needed to get to another 80 percent for to have any raising the prospect of being anywhere near as good aside traditional contact tracing then almost certainly not gonna work maybe it would work if you go to 20 percent in any little bit would help windows 10 that remarkably good happen it is it's very sensitive in the trick is much more than I thought and that might justify even a few people to wrongly believed but I suppose it is it is a really quite difficult legal and ethical so about him in the middle how do you do that that that winding up and yes as well as people thinking the act is going to work they also have to trust the government which is in effect in a sense in conflict with that in the more they know about what the government's doing maybe the list I trust them and and and so in that sense you've got a conflict here between. Sort of a very micro operational sort of concerned about will people trust this particular app their views on that particular system and the natural skepticism which might actually say well maybe it won't work and we trying to. You know conceal data from them on the other hand it might be that. You know this is the more the the the government exposes it that it's thinking like this the less willing people might be to do that I'm I'm not sure that that is it is a strange one answer it's in one sentence if it's a fantastic case study or or example to to consider all of these sort of conflicts there was a lot of effort passed to make sure that the can there was legal controls and restrictions about the reviews and there's actually technical control of the whole dasar Teigen mechanism was in good faith and after a couple of consultation trying to say how can we set up a system that people can trust and I think you know of got my wife's of concerns about it but it was largely successful in that it was it was siphoned often of and and you know they're not different eyes looked at it and the the the restrictions were was quickly enough it will possibly wouldn't keep the spa services out but it looked like it was enough to prevent Sir I've been sort of slander I suppose there's some. Another. Aspect of this it's also useful to discuss let's move on sideways to the Google and apple version of these this would have been I'm not I'm something of a centralized and so it had some features that perhaps you know less intrusive than the Australian government's one which is based on the Singapore one that required that central server and you know you to trust what the server does and what the doctor doesn't want to DO dedication talking mechanisms what sort of thing the problem with the the Google and apple one is that they both have conflicts of interest that both really want to get into health dasa and they both really sore if we can have something that people say you know with. Apple and Google have been part of the solution that they've produced this app framework that was sort of privacy protective and also sort of really worked and I suppose my concern and there would be well. The way you know where the hell could die misuse the renewed and possibly misplaced trust of the people not putting them if say the Google and apple sort of kind of in app so had some sort of benefits would would that be valuable enough to counteract the fact that for instance Google in particular is completely ferocious when it comes to Dada and loyalists and and deserve to be to regulate and apples actually so big to it as I mentioned before it's it's the the subject of reviews in Europe and the U. S. based on monopoly and and that sort of things so is it just a PR opportunity for them and what what what would the answer be different if for instance it was so successful that you could happily use their app and everything just worked out the virus what's went away with the answer changed if it was actually hopeless and it could never possibly work or does it matter somewhere in the middle of it would have to be a certain degree effective and you would say what okay it's worth that risk and it's worth allowing them to actually update them the software by the way does anybody know if you've got the app framework already on your phone. We've been paying attention. Been chopping. I think if you've got the apple iOS if you got for us 14 you've probably got that they're already. So I don't think they asked and Sir what looked like it was actually in a more friendly in some ways than the straining government system looks like it might be less friendly in that I can just update so in that sense to that their. Their role as platform providers and as in in apple's case in particular the with the capacity just to roll out so software with most people not even knowing. Google scholar entirely different problems with with drawing stuff out the temp. And that may be an issue as well. Just continuing a single open close with this that there's other examples in the slides he of of the people are looking for serve other issues to follow up with them let's have another. The discussion about the name of the app in Australia was cold the covered side if yep. And so my question is would it make you safe. If you use the app would make his life if so why if not why not. One out. Yeah that's right it's not a preventive tool what does it do. In. How does it hinder that. They set eyes contact tracing if you've already been in contact with someone who Liza was tested and said to be infected so it will tell you to light for you so for personal individual health it one make you safe it will possibly make the community more safe if contact tracing was really good after that the trigger that and by the people cost laser light tries whatever so that's that's the so that that broad social public health safety factor might be in the bus for you as an individual it will tell you. Padlock you know you've been in proximity with something would once are you infected then you you've passed out criteria of 15 minutes 1.5 meters and the person had the app and it was running and it was in range and it actually worked. Now that I've had significant discussions with a bus the straining coming.