

Episode 8 - One House; Many rooms - What is analysis?

Overview

Reflective, sometimes funny and occasionally heretical, this episode pulls together the threads of the series so far. Revealing how all analysis hinges on one thing: how we think, and sometimes, how it can sometimes drift into ritual rather than insight.

What does it mean to analyse? Where did modern analytical thinking come from? And why do so many disciplines: intelligence, academia, business use the same word but mean entirely different things?

Transcript

Mark

To be honest and start by saying this one is going to make me nervous because this topic is potentially very divisive. The old joke goes if you have three analysts in the room you have six opinions. I want to stress that neither Howard or I will make any firm definition as to what analysis is or what it isn't.

We're just putting past comments on what the mainstream interpretations of that word are and how it bled into different schools of thought. Because analysis for me, and forgive the strange analogy, it's a little bit like dancing. You can have some types of dance that's very structured and highly ordered and highly ritualistic. And you've got other schools of dance that are kind of more casual, more relaxed, but still got a bit of structure there. To freeform, do what you like, do what feels natural and just dance where the spirit takes you. And the same can be said of analysis.

If you look at the history of the word analysis it goes back to an old Greek word meaning to break something apart into its component pieces. The idea being that sometimes you come across things that are so big or complex that the only way to deal with them is to try and disassemble them and kind of take the key bits to the key parts, try and gain some hidden insight or meaning.

That's kind of held true, but in the English language, it now means analysis can mean so many different things. It can be a very scientific and logical breakdown, like a chemical analysis. It can be something very broad, and narrative in structure, as you would see in intelligence analysis.

You can have quantitative or qualitative analysis, I've barely skimmed the surface. That one word analysis does so much heavy lifting because it features in so many careers and means so

many different things to different people. And the thing with analysis is, it can even mean different things to people in the same job, in the same team sat next to each other.

It's that potentially divisive. So Howard, I'd like just to introduce you, to get your analysis is and anyway you'd like to start basically.

Howard

I think that's a really good intro and just like Mark would say I would not say in any way that what I believe or how I perceive analysis is the one right definition. My experience in my life and in my professional career is that kind of like you alluded to Mark, sometimes people and organisations like to define something not only so that they can understand it, which is fine, or put it to use and use that understanding as a way to explain their analyst approach to somebody else.

That's fine. But there's also an element of trying to control and own analysis. So kind of if you create the definition by definition, any other interpretation is wrong. And my experience within law enforcement, within the private sector, within all fields of life, including professional life, is that everybody has a different take.

Like you say, from even the same people in the same organization doing the same job, they'll have a different perspective based on their outlook on life, their processes, their education, their culture, the organizational culture, so on and so forth.

The way I do deal with everything in life, analysis included, is I like to break it down into first principles and then try and rebuild it to see if it ends up being where I thought it was. And it never does with analysis. And if you look at the dictionary definitions, which aren't related to law enforcement or any one profession, it all talks about examining anything, complex in order to break it down and try and understand its key features. And you do that examination in detail.

And that's what we all do as human beings, whether we're trying to choose which smartphone we buy, where we go on holiday, what kind of meals and clothes we're going to wear, or professionally in whatever our professional setting is.

The thing is, the term analysis is just that, it's term. And you just look at it as a noun, the many other words that you could use to describe it. And I'm looking here at just one collection from one of the dictionaries online. So this isn't me. This is just, it just shows how;

Cataloging, classification, codification, enumeration, arrangement, separation, examination, evaluation, deconstructing, diagnosis, tabulation, segmentation, reduction, scrutiny. cataloging, indexing, subdivision, anatomizing, assessment. But I agree with all of those.

You could look at each one of those as a separate factor, but they are all relevant components

in the big umbrella that is analysis. So I think that's where you need to start. But then my career has been in law enforcement, primarily. And that trains you to be

primarily an investigator of criminal information. I don't mean information about crime. It might be information about how human beings are involved in crime, it as victims, witnesses, criminals, societies, whatever organisations. And if you think about it like that, part of the process of analysis within law enforcement is you're actually trying to investigate.

In this case, crime and criminal behavior. But if you were an academic, you would be investigating information from data related to some scientific or other academic field of study. If you are in business, you analyse data and information to develop better business practices and models and be aware of the marketplace and whatever the business objectives of your business. Governments do the same.

It's all analysis. I've always... I like to steal. I'm a good, I'm a thief taker. I like to go to places and capture new knowledge and think, is there anything in that that I could maybe use in my tasks, in my daily role as a human being, as a professional or in my workplace role? And that's what gives me around a perspective and takes me almost to a philosophy of what analysis is.

So that kind of doesn't answer the question but it just shows how, like you say, people all arrive at an understanding of what they think as analysis is or isn't. And I get very tired and frustrated sometimes with people standing on one particular definition, kind of, you know, I'm going to fight for this definition above all. Anything else by definition must be false.

For me, those people, [are not] good practices of analysis, because they are deliberately excluding or prioritizing data and information and processes of analysis to control it to be what they want. And that's not what analysis is. Analysis is this basic simple function of human beings, be it as individuals or as organisations. Does that kind of set the scene?

Mark

Yeah, absolutely. think the first big split I think I should talk about and we will cover each in more detail in separate episodes. But the first big split is between academia and intelligence analysis, right? Because what confused me when I first got started is I went to uni and did information science degree back in the 2000s and analysis was a very small thing in support of academic research and usually when you had an analytical example or where you would use analysis you might be analysing survey results, you might be analysing some sort of quant data but nine times out of ten the analysis basically resulted in the creation of some sort of chart, a line chart, pie chart, whatever.

So it's usually kind of quite quantitatively focused, even if was qualitative in origin, it was quantitative in outcome. And then when I got into the police, and then suddenly I didn't have any of those traditional data sets. I didn't have surveys. I didn't have things I could precisely

measure. I didn't deal with sales or transactions. And I was surrounded with things like crime reports, incident reports, intelligence reports, forensic or scientific reports, lots and lots of narrative, lots of unstructured data or barely structured data. And then at the same time, as I'm being trained, I'm being told that research supports analysis.

And that's the first big switch is that in academia, because we talk about qualitative and quantitative research methods, we talk about qual and quant analysis. Analysis supports research. In intelligence analysis, it's the other way around. And the reason why I think it's important to reflect on that is sometimes...to notice that these same words can mean very different things because in academia, analysis is usually a very focused activity, focused at a singular data set and has a very often statistical approach.

Not always, but most of the time. And in intelligence analysis, analysis is you're not analysing a single piece of data. You're analysing a situation usually, and it's usually situationally focused.

And in some respects, I would say intelligence analysts, but also sometimes academic analysts, we're in the business of opinion formation. And what analysis is, you alluded to with your dictionary example, is lots of different ways you can work with data to change... first of all your own worldview as the analyst or the investigator but then the worldview of others right because essentially it's all belief work, it's all opinion work all this stuff is to try and extract meaning from the real world so we can say "Before we looked, we thought X. We've looked at this thing. We now think Y". And in an intelligence analysis context, that's usually a very broad piece. So you might be thinking, is somebody going to invade or is so is in a law enforcement context is a one organised crime group going to be more of a threat than another one.

And I think that's the barrier is like a dictionary example, like my professional examples, the same words are being used for many different things. But ultimately it's not to say one is better than the other. It's to recognise that regardless of where you sit in an intelligence analyst chair or a calling qual or quant analyst chair or any other chair, if you're spending, a detail, sorry, if you are spending a lot of time working with data or information in order to gain more understanding to change your or the other people's worldview, you're dealing in analysis. And I think that's the value of analysis is trying to recognise that it's a very broad church, it's a very broad word, and there's many different types of analysis you can do.

Howard

I agree with that. What always surprised me was law enforcement as a profession and within that the intelligence and analysis profession that was developed and I'm talking globally here because I've had the privilege of working globally and being part of the formative process or the evolution of law enforcement information intelligence and analysis as well as the training and education and the professional development of the practitioners of these subjects and the products that we would give or they would give to the customers, the law enforcement organisations and the wider public.

Some of the law enforcement perspectives when I first started, they were just as almost didactic as this is what it is. And I learned those on my journey of, I need to start understanding law enforcement analysis rather than what I might call the scientific model of analysis that I picked up in academia as a student in science.

And when you actually look at how law enforcement approached it, a lot of the training within law enforcement first of all was derived from a military history where intelligence had been used throughout the various world wars and more subordinate wars. So kind of like I'm a thief taker, law enforcement had stolen what they thought the best bits of those ideas were to use in law enforcement for their business objective. Nothing wrong with that.

But one of the training programs that was developed in the mid to late eighties actually came from a recognition within law enforcement globally that maybe there wasn't a universal standard here and maybe having one would be a benefit not only to each organisation in dealing with its own business issues but this recognition of a problem shared is a problem halved.

Maybe there was a need to have a common language and common processes to allow us to talk about the issues of crime and criminality, the tasks of law enforcement if you will, in a way that the other parties would understand and help us to help each other. And again, nothing wrong with that. was a noble aspiration.

But what happened, it started in America where a private company was tasked in America to actually look at what life processes were at the time and come up with a structure. And that company was a company called Anacapa Life Sciences, based in Santa Barbara in California.

And they were a group of people who would actually do what maybe you call decision tree analysis. I can remember talking to the key players in that very small organisation and they would design the sort of decision process for launching a missile from a submarine or a ship.

You know, if you get this information, who tells what and what is the answer? Kind of a yes, no decision tree. And they were given the task by law enforcement. I can't remember which particular law enforcement organisation in the US asked them, but they came up with a model, which they called criminal intelligence analysis. And they created a training course.

I was lucky enough to be one of the first in the UK to go and train on that early in my law enforcement career and worked with that company and the key players in that for many years. Firstly, to take on their methodology and my task for my organisation was to bring it back and train my force and ultimately the UK and the rest of the world.

But also to help them develop it because they weren't law enforcement employees. So whilst some of their perspectives were very good, some of them didn't necessarily match some of the real world problems and situations and tasks and challenges that law enforcement might face.

But when they first started their modeling, they created something called an analysis pyramid. Their term, not mine. And it started out with information. Now, semantically, I think that's wrong. It starts with data. Information is something beyond data, and we've discussed that in other episodes. But they talk about how you collect and collate and evaluate data and describe it. Which is basically what perhaps you and I would term information.

But then they would go into something and say, analysis is, you start working with that described, evaluated, collated and collected data pot (information), as we would call it now, or I would. And then through intellectual processes, and they would talk about inferences and hypotheses, and nothing wrong with that.

You would come up with theories, you would assess them and test them against the data kind of scientific method or some method and you'd come up with a product and the product was intelligence.

So basically, analysis was the process. You put data that had been turned into information through to get intelligence as the product out of the end. That's not a bad model from a zero-sum start point. But you very quickly realise it's full of a number of flaws. But one of things I did like about it was it had these stages and in real life we know these stages on different bits of data might be coming in and working, being worked at different times.

So you might have lots of different separate processes, collecting data, collating it, so on and so forth, and then being fed to the analyst to pick up and process. The analysts themselves may well ask for further data collection and collation to better create information products that they could analyse in the task that they're in.

But the other thing was it reflected the reality that the definition of analysis, the generic one of this kind of trying to understand conflicts information and make it more simple and easier to comprehend and therefore think about. Because a pyramid has a very wide base. And the top of the pyramid has a point or a very narrow point. And at every stage, what you're trying to do is actually reduce the volume. So you're kind of going from a quantitative, high number, but potentially unknown quality.

And at each stage you're trying to reduce the volume but increase the quality for the particular purpose, if that kind of makes sense. So it's a more derived product at every level. And I was always a big fan of this intelligence pyramid as a kind of indicator for a process because in law enforcement at the time they would train the intelligence cycle.

This idea that we've discussed in other episodes about you collect data and then you analyse, you turn it into information and then you analyse the information and you come up with a product and you go out and act on it and then you look at the data that comes back about the

actions and assess this kind of cyclical process. But a cycle isn't the pyramid.

The pyramid gave conceptual models of this stage process of reducing, reducing something down from size in quality to something else. But what that started me to think about was what is the task for analysis? And the first task has to be what data have we got? Not information. What data is available? Is it the right data and is it relevant to the problem we're looking at? And testing that is a precursor because you can analyse the heck out of any, any pot of data.

But if it's not relevant or providing some raw material to process to get to an outcome of value to the problem you look at, you're just spinning your wheels really. You're doing a lot of work for no real progress. And that's something that law enforcement organisations, I always found struggled with because they would say to the analyst, and sometimes for a good reason, look, this is the only information we've got, or this is the only data we've got.

And the answer to that is, that's fine. I can work on that. But if you want me to get you a more relevant product in terms of intelligence derived through analysis, if you go and collect me this kind of data from this kind of place, that would allow me to improve my information product and therefore my analysis and my intelligence products.

People used to get really hung up on all this and I found this training to students globally in my early years involved in this. So I came up with a system. And I said, well, look, if you think about crime, the kind of questions that law enforcement organisations ask about crime is, we've got data about crime, tell us who did it. So you've got kind of the bottom of the pyramid and the top of the pyramid is the 'who done it?'. The sort of the typical detective story.

And the other way around was we're looking at a criminal or criminals plural and we want to know what they've been doing. So in effect you're starting at the top of the pyramid or does an organisational task and going down to find out what they're doing or are they doing it or not. So you're going from the target, the offender to the crimes or back the other way from the crimes to the target up and down that pyramid.

And if you think about that good analysts ask questions. If you're starting with crime information, the first question is what changing in the environment in the data has created or increased the opportunity for that type of crime to occur? And it may be a new IT tool, it may be a new road network, it may be a new type of crime, but if you if you look in in data that may give you a clue and then out of that pot of information what crime has occurred that might be grouped or if you can group it what are the patterns and common features in which those groupings are made so there may be many opportunities for crime around the world they're all are always are but you think well there's some opportunities here for cyber crime there's opportunities here for human exploitation there's opportunities here for burglary, whatever the organisational problem is or societal problem you can group them in some way.

And then the other thing for me is if the crime is goods orientated, i.e. people are ultimately

stealing or acquiring goods to dispose of them and therefore acquire assets, where are those goods being recycled into the public domain? i.e. yes, okay, the crime report might say that somebody came and stole somebody's car at a particular time and day and location, but clearly a criminal stealing a car unless they want it for themselves isn't the end of the criminal activity.

The end is when they dispose of it and get another asset, usually money back. So there may be no pattern in the crime, the theft, but there may be a pattern in the disposal and the financial return. And it's kind of like 'follow the money', that old adage, which is a pretty good process for looking at human motivation. And then when you look at the two, the crime and the disposal in this kind of goods crime. What are the patterns that link those features? And then what's the organisation behind the pattern?

And I don't mean who are the people doing it, but if you were building a business model to carry out that kind of crime, you think, right, well, we need somebody to steal the car. So they need to know about how to steal cars and be able to drive cars. We need somebody to transport that car to somewhere where it can be sold or disposed of. We may need somewhere to store it and alter it on the way. We need somebody who can recruit and identify buyers and then once they've sold it we need a way to get the funds back in and pay our costs and share the money.

So you can build this model of how they operate and activity charts might be called back in the day in law enforcement. You don't know who they are but you can see how they might go about that business and that allows you again to start looking for the people behind it because organisations don't commit crime. People commit crime. People who are part of organisations are on their own.

So if you've got that kind of organization that helps you think about who are the people behind the organisation. And it's all hypothesizing is this, but if you've got the people, right, where are they in the hierarchy?

And if I can explain, here am I, Howard. I'm an old man. When I was in law enforcement, I was a middle manager in terms of rank. So I had a position mid in the organisational structure. But I actually, because of my role, had a lot of influence, both on more junior roles, subordinate roles, and higher roles as well.

So functionally, I had a lot more clout than, shall we say, the wage I was being paid might have reflected. But take me out of that. In my hobbies, I have a different placing. You know, I may be higher in the hierarchy with one thing, lower in another, within the profession of analysis.

I started out as a member of various professional bodies and I ended up being one of the senior managers and the direction drivers for probably two decades globally. So my position in that hierarchy changed.

But I guarantee you when I came home at night to my family, my position in the family was

beneath my wife, beneath my kids, beneath the kid, beneath complete strangers, any member of my family. It's still me, but I had a different place in different organisations.

And knowing that helps you think about not just where are they in these different organisations, i.e. in the crime organisation, but sometimes if they're in crime, they're very well protected if they're quite high up. They have this kind of armor that they build to defend themselves from investigation.

But if they're in a different hierarchy where there's not criminality and everybody is, we're all human beings, we do different things in our life. That different position they're in in that hierarchy, if you can identify it, might give you law enforcement an opportunity to, shall we say, investigate and infiltrate where they are more vulnerable. And this is just the kind of trade craft.

And the final bit was a reference to good old scientific method. Okay, we've gone through all this process and we've gone from crime to a target or potential target. Is there other information that we've got in our data pot that fits this overall theory or doesn't and does that affect how we process it?

So that was my idiot's guide, the simplistic Duffer's guide to how to work through the intelligence pyramid. You can do the same the other way around from crime to target. You've got crime. What's the structure behind the crime? What are the patterns? Organisationally, how could you build a model of people who would commit that crime? What assets and skills would they need? And you know what I mean?

All the way up to, well, those are probably who the people are. And it's the same pyramid. It's just turned the other way around. breaking down the analysis process as a part of the intelligence process or the information process is really important and none of that I've said there has talked anything about how we as law enforcement analysts would analyse data.

The sort of thought processes and the skills and training that we would have in dealing with data, quant and qualitative analysis, bias, inference, logic, argument, all those kind of methodical processes.

But most of law enforcement didn't care about those. Our customers just wanted a product they could have confidence in. We might know all those things and study them and you and I both have and good analysts always do till the day they stop functioning. Otherwise they're not current and relevant. A bit like training for sport, know, the moment you stop, you start losing capability or currency. But that's a kind of the practical position of analysis within law enforcement rather than purely what the analysts do. Does that move us forward a little bit?

Mark

Yeah, I think what I have to do is acknowledge that what you've done there is you've basically

outlined, you've gone into intelligence analysis, you've then gone into kind of formal criminal intelligence analysis, and then you went into a, like a, your model of criminal intelligence analysis that you developed and with little bits and pieces. And what you've demonstrated, I think, is something that I didn't really appreciate until much later in my career that I should have done, which is analysts outside of academia and business and public sector. We have far more scope because usually we are left to deal with situations, because everything you said there was about multiple generations of hypotheses. It was about lots of different lines of inquiry. There was lots of what if this then that and then. All the rest of it, you're kind of, there's so much scope there, so much kind of, and this was what looking at at the start when I talked about academia, analysis is usually a very singular piece of work on a singular piece of data, and it's what can that data, what could those data points tell me about this one thing?

Whereas that, and I think we should explain to people who are not from a law enforcement background that most scientists, sorry, most analysts who are not ex-law enforcement or state security or military do not have that scope. And to try and demonstrate that, like, so the reason why I'm not in the police anymore is because of essentially the financial crisis, a change in policy, and unfortunately the police got a lot smaller and, you know, a lot of the intelligence function had to go back in the early noughties and that's just the way that it was.

So I found myself looking for a job. Now I thought that with all these intelligence analysis skills that I had, it's true, I was very good at analysing situations and I was very good at kind of generating hypotheses and competing hypotheses and what if scenarios, was really really good at that and I thought yeah well these roles transferable skills I should be able to get a job somewhere else and then I started looking at analytical jobs in the public sector and the private sector and strangely, nothing in the role profiles or the or the other cvs or the requirements matched any of the stuff that you've just been talking about or any of the stuff that I've been doing.

It was all qual quant you know performance reports management information reports essentially kind of statistical analysis or also some early forms of financial analysis and it's because the rest of the world kind of went in a different direction because the rest of the world, and I know I've been picking on academics here, and feel like, at different parts of this episode, I feel like I've been walking a tightrope and I'm in danger of falling off into an abyss of annoying lots of people.

I did have a slight superiority complex about intelligence analysis leaving the police because I thought of it as superior to the other forms of analysis out there. On reflection, I think the problem that you have is if we go back to my example of analysis can be different types of dance schools, if you like.

The Intelligence Analysis School of Dance gives its operatives so much scope and so many tools and free reign. You're almost like a private detective except it's out of a body. You have a situation. You have a situation where your boss will say to you, we need to know about X, go away and think about it. I don't care how you think about it. I don't care what processes or tools

you do it. But as long as you can explain to me at the end, the understanding you've come to and how you've got there. And as long as it makes sense to me, if I can go on that same journey as you, you've got free rein to do whatever you like. And there's blessings and curses with that.

The blessing is you've got free rein to think what you like and explore what you like. But the curse is you've the job of exploring every avenue to kind of think of everything and lift every stone and look underneath.

And where I looked down on my non-intelligence analyst colleagues who were in analytical roles was they were very formal and structured. And they were never given the scope or the opportunity. They were just basically told, here's some invoice data, some sales data, some other information or in a public sector context, here's this metric about a certain performance measure, just collect it and just report in the following structure.

Because it turns out policymaking, and suppose this is the other big difference. And I'm on the second tight rope here is in military and police intelligence analysis, not only do the analysts and intelligence have scope, but operationally those agencies can do a lot of things, right? We can kick in doors, we can arrest people, we can put in surveillance devices, we can pay informants, we can go through bins, we can use satellites, we can do all sorts of stuff to try and increase our sense of what's going on.

Our situational awareness is based on all these different assets. But you then try and transport that into a private sector organisation or a public sector organisation that's not police or military or security. They don't have access to any of those means of gathering intelligence. And even if they did have access to go through people's bins and satellites and tap phones and kick doors in, what could they do about it?

Because when with policy formation, usually if you're for informing policy, policy is used as a guide for what you're going to do over the next year, five years, 10 years, 20 years, 50 years. In our old world, it's what are we going to do tomorrow? Or sometimes even what should we do right now? So I think sometimes I used to think of it as a dichotomy between intelligence analysis and not intelligence analysis.

But going back to your dictionary, I think that IA is a very broad scope and we will do a full episode on intelligence analysis later on. But I thought it's important here to kind of explain to people from a non IA background that those distinctions between because intelligence analysts get a lot of scope, they have access to a lot of kit and the organisations they serve get to play around with stuff a lot more than the non-intelligence analysis agencies.

And that's not to take anything away from those agencies. There's plenty of people in public life and in private companies who are making very important decisions based on data. And their analysis matters. Their interpretation of survey data matters. Their interpretation of quantitative data matters. It's just they don't get the opportunity to ask the types of, generate the type of

hypotheses you're talking about and even test them.

So I think both sides can learn from each other. I think people from the intelligence analysis community can benefit from understanding how analysis works everywhere else in the rest of the world, because here's the other big fly in the ointment with intelligence analysis, right? We all think IA is awesome and we all think we've got the secret sauce and we go into the world thinking if you know, the whole world could use this, right? But here's the thing, IA has been around a long time. It's been the public sector a long time. It's a degree level now. It's not a secret. It's been around for decades. It's not taking over. It's not bedding in. You know, city of London and all the financial sector are not jumping over intelligence analysts.

Other sectors, big tech, aren't jumping over intelligence analysis. Now there might be an argument whether they should. Maybe it's a missed opportunity or not. I'm not sure. But I think the problem with intelligence analysis is that there is so much tied up when the sector you're in, the organisation you're in and the problem you're trying to solve, that sometimes that doesn't translate well to the rest of the world.

And what I'm hoping is maybe this can be the start of a conversation or at least a catalyst for some further thought so that people from the Intel analysis world can think about how does it work in the rest of the world? And maybe the rest of the world can think about, actually, what am I missing? What could I do? Obviously with an a legal framework and and scope, but perhaps getting out of that dogmatic structured pigeonhole approach. And that's fully acknowledging that a lot of the time the analyst doesn't get to choose what data they collect, right? Or what, or who collects it and how much they pay for it.

But I think there's that interplay there. I think the most important thing for people to take away from this is intelligence analysis is a very different thing to non-intelligence analysis. And it's worth exploring that and being mindful about that because, the other thing is both sides.

When you swap from one to the other and I've transferred both ways, it's tricky. It's hard because they're very different worlds. you, I can talk to a fellow intelligence analyst in the police or the military or security services and we talk a common language and we understand and get each other. I can try and explain these things to somebody from not, if it was an analytical background outside of that, and they have no idea what I'm saying. And the reverse is true.

So that's, think a challenge and I think maybe an indicator that further work needs to be done analytically. Maybe we need firm analytical standards. Maybe we need to kind of tighten this and bring these together because we will touch on these in the full episodes, but I think IA has got problems and I think the rest have got problems.

Howard

I kind of agree with you but I actually think we are all birds of a feather. You were right to talk

about law enforcement. Yes, on the plus side we have the opportunity to intervene and act and collect data and information that maybe other sectors do not.

But think about what the business goal of law enforcement is. It's to protect society from crime and criminality. So the risk of us getting it wrong is far bigger than some other areas. And I think you might see the same in medicine or in the military.

I'm just picking two professions where the risk of failure is very high if you get it wrong. So in other organisations, the private sector I would argue and it's not that they're worse or better than us, they merely have a different business goal.

Imagine if you were going to set up a fast food chain. If what you do results in success you open more fast food outlets and you make more money and that's the object of the business. If you fail you may not have that business or go out of business but nobody dies.

Nobody suffers other than maybe losing their job and I'm not you know making that subordinate or minimising its impact but it's very different to somebody losing their life through criminality or through war or through serious crime.

I like to look at other methods that other business processes use and just for fun before we were going to look at this I looked at one of many, and the internet is full of business experts or business platforms that will share with you how to do stuff for business. And I just pull this one as symptomatic. "How to analyse data if you're in business. Establish a goal. Determine the type of data analytics to use. Determine a plan to produce data. Collect the data. Clean the data. Evaluate the data and visualize the data."

Those are all processes that we use in law enforcement. But you're right, do you notice that the end of their process of analysis is visualizing the data? It's not talking about generating an intelligence product and then communicating and having some kind of seat around the table with the decision makers. Not to make the decision, but to help guide and advise them on what the data means.

And for me, that's part of the private sector management structure, the business management structure tends to be where senior managers, and you could argue the same in politics, particularly these days when you look at the global trend towards personality politics rather than collaborative politics or, you know, this tribal infighting between parties rather than people thinking, I'll do what's right for my constituents and the, you know, the nation as a whole, which is what their role is supposed to be.

The decision making is done far more at those higher levels. And if, I've done this many times, I've gone to leadership conventions and spoke to them as an outsider. I love being the outsider because it challenges me and I hope it challenges them and makes them think differently. And they'll say to me, well, we don't need an analyst to drive the decision making. Just give us the

data and we'll interpret it. And I've got loads of scenarios where business failures where these senior managers and their arrogance, and I mean intellectual arrogance, I don't mean the necessarily arrogant people. But their business process is arrogant and it thinks that only that group of employees within the organisation has an influence on decisions.

And I would take them back through their processes, even where their analysts were only doing what I would call the lower level analysis, not the higher level, and say, well, look, even though you're making the decision, you're taking more of the process over in your own heads as senior managers. You're still relying on the information from those people beneath you. The collection, the collation, the visualisation and everything else. So if they get that wrong, your decision making is still going to be flawed even if your processes that you use when it gets to you are right, because you're working with a flawed product.

So I would, for me it's, it's a broad church and, and I've grown in my abilities and my flexibility and I would hope my professional skills as an analyst by working in those kind of challenging circumstances just like you were going from the police to the private sector.

I'll give you one really good example back in within law enforcement. The professional bodies in law enforcement to support analysis started back in the 80s and through the 90s and the 2000s.

They kind of went on this journey of becoming important and influential and then kind of like when law enforcement couldn't afford intelligence and analysis and maybe decided there were other better processes and maybe we don't need all that we can work it out for ourselves. Almost a migration to the private sector business model and I have my own thoughts on that but I would say that's my view of the reality globally.

The profession has had a process of, and it reached a high point and it's maybe stepped back in influence and maybe it'll come again, I don't know. That's just the culture of the business. There were two particular professional bodies, formed like most in America initially, and therefore having a heavy North American influence on their structure, even though they were called international.

And one was a body that included in its name an association of one was an association of intelligence analysts and in Australia there was one called, that had in its title, intelligence officers. And I can remember, I was a member of all of these and I actually served in various roles in each of them just to make my contribution to the profession and ended up being very high in, in one in particular. And I then left them all because I realised they were flawed and from an ethics and integrity process.

They created me process problems as a law enforcement officer. I want to maintain an ethical standard that they struggled to. That's just me. But I can remember sitting down with two that were very competitive. The intelligence analysts and the crime analysts. They'd say, no, we're crime analysts, we're the best, we're the ones who are best informed. And the intelligence

analysts would say, no. We're the best.

And I said, well, why are either of you the best? You're both working in law enforcement. You both are dealing with the same problem. You, the crime analysts, would argue that you are dealing with crime data. What's a crime report? It's a piece of paper or an electronic record, which is a summary collected from a human being contacting law enforcement to say, I've had my house burgled, some kind of criminal event, somebody else in law enforcement collecting that and attending officer or somebody on a telephone, maybe scenes of crime officers or specialists going to the scene and examining it.

Analysts don't by and large go to the scenes of crime so they can't collect data firsthand. So the crime analysts are dealing with purely crime information. But when you talk to them, they said, well actually no, we do get information from informants and from other officers. I said, well, so you're information analysts? "Well, yeah". Right.

I went to my intelligence analyst colleagues, where do you start with? Well, we'll deal with intelligence, not just crime. says, yes, I agree with you, but we've already established that the crime analysts are already dealing with all those products. You're dealing with all those products, including crime data. What's the difference?

And you could see them thinking, and there was a lot of resistance to it. Well, you don't understand us. Well, I'm trying to, I'm not being provocative. I'm genuinely trying to understand. Am I missing something in what you do? from first principles I don't see the difference.

It may be your organisation requires a different product, but that's nothing to do with your skill set particularly, your generic professional training and experience and what you bring to the table as an employee. And finally they had to agree. And although many of those organisations have kept going on their own because they have a business need as an organisation to have power and influence, not necessarily merit.

Some have come together and grown. That's kind of why I've stepped back from them all because there's not one of them that represents my perspective. You'd never see a business analyst around any of those professional bodies.

I've worked with professional bodies for business and for management and for leadership for years and I've worked with the private sector building databases and data sets and computers. I wouldn't know the first thing about those things but I understand how users of those products And therefore, it's important you understand how the IT people build these machines, because they don't always do and give you what you think they're giving you. And it's just this, this idea of picking apart

So, yes, there's, there are differences in terms of what maybe the training, the culture, the, the, the life journey, the professional journey of the individual analysts are within these organisations.

But stick them all in a room and actually get them to take the blinkers off and think about first principles rather than their particular definitions like analysis, what is analysis? And I've never found a situation where those who were real analysts, ie open to looking at methodology and studying it and picking it apart and challenging themselves. I've never had a situation where they didn't see that they got more in common than they did that divided them.

Even though their clients, senior managers and their organisations may have different business requirements of them. And maybe that's not a bad situation to be in because going forwards, having that perspective, that ability to be a student of all things rather a master of one, know, jack of all trades rather than master of one, that's where analysis will come back to the table as a function, which is still here.

But as a profession worthy of credit, where it starts to build and blend all of these things, particularly in these days of globalisation of organisations of data sets. If you took away every profession and the term analyst and the term analysis, and we're just human beings walking around. Every single human being is an analyst. You're analysing data all day and every day. But it's subjective and individual for how we interpret data in the real world and live as part of your survival and, you your quality of life.

So I think we've put a lot of models in that you would hope would be designed to help us think and improve those processes for analysis. But sometimes they actually divide and create barriers, artificial barriers to us exploring what analysis really could be and therefore the opportunities it can provide.

Mark

Im going to gently push back I know most the time we agree but I think and may have maybe I've misled you my said previously no so I don't think I've articulated properly what the tension is that I'm trying to refer to because I'm saying now 12 years in public sector but outside of public sector to do some private sector work as well and I've observed a difference and I'm going to struggle to articulate it, but this is what I've talked about tight ropes. I'm not going to get my BMX and try and go along this tight rope because I am going to fall off, but I'll give it my best shot.

I think analysts, when you ask, when you really boil down to what are the skill sets that analysts have and what are the recruiting form, the job sites, right? If you're leaving uni right now or you create, create change, you're looking for jobs right now, I would argue that there's some fundamental differences between the intelligence and our analyst brigade, and they may come from North America, law enforcement, military, state security, whatever.

And yes, you're right. A lot of them have far more in common than they have separate, but we all as human beings, we like to pigeonhole ourselves and form factions and walls for all sorts of reasons that have nothing to do with getting the job done. We just like to specialise, right? And

we'd like to kind of professionalise things and perhaps, you know, it's more about career opportunity than actual furthering the method, shall we say. But I'll leave that to one side.

The analysts that I've worked with and trained outside of the IA community, the ones that work in public sector or private sector, I'm gonna try to explain by example, okay? So if I go to a public sector analyst and say, here's a survey, and let's say it's a survey about, I'm gonna pick something at random, customer satisfaction of the local swimming baths, okay? So it's a survey.

And I want you to imagine this survey has got 100 respondents. The public sector analysts and probably even the private sector analysts will say, well, I'll look at the survey, I'll analyse that survey and using principles which they're probably academically rooted whether they know it or not. But they'll essentially come up with patterns and trends, right?

They'll say X percent were happy with this and it's broadly positive, or it's broadly negative and they'll codify the comments and say, you know, a third of people mentioned the restaurant, a third of people mentioned the opening times. And they would cherry pick these things, but it would be based on basically the consensus in the data that they're looking at. Because consensus is evidence and that evidence will go either in a report and that report will go to, up through the management chain, to C-suite or maybe somewhere middle management.

But essentially the product they create is about the weight of the evidence. More people than not say the swimming baths are good and that they like the restaurant.

Secondly, there's a technical component to it. A lot of organisations use the word analyst in the title when they want you to jump over a number of technical hurdles. They want you to be the interface between the cutting edge tech and the problems the organisation faces. So what I'm getting at is a private public sector lot will get this survey. They'll be very technically well-trained and they will go cognitively for a scientific approach if you like we're saying the consensus is X and then when I sit down and say well did you know in a law enforcement context or in a military or state security context we take that survey of 100 respondents and we would analyse every single claim as a potential hypothetical scenario because it could be possible that there's some horrendous standards in that swimming baths and it could be that you've got the completely wrong sample maybe the people given the surveys that we're out free chocolate bars and milkshakes.

Maybe you surveyed the people on a Monday morning after the cleaners had been in, but you didn't survey anybody on the Friday. And that's why nobody goes because it's in a right state. We have to analyze every single possible scenario and we have to analyze every single possible truth claim from every single respondent. And I've had people say to me, that'd be, you'd go mad. You'd go, can't factor in all that type of stuff. And that's so much speculation. I can't feed that to my management. can't put that in a report. I can't say there's a possibility that, you know, I can't question the way it was collected. I can't question the structure.

And so that's what I was trying to allude to when I said that when sometimes in the public and private sectors, people in analytical roles are confined by the data they can collect because everything has a cost, right? So their collection methods are limited. The scope of what they can put in their reports is limited. And what I would also say is, and I think this is a, as a result of, and not in a bad way, it's not deliberate, I just think it's an unfortunate outcome.

I think when you try to be robust and scientific in a public sector context, it's not intelligence analysis. You try and remove as much of yourself out of the analysis. You want the scientific process, bit like you're back at school and you're doing the experiment, you wanna say, look, I ran this data through this process. I came up with this pattern that 40 % of people thought X and if anybody else went through this process, they would come to the same conclusion.

And here you go, it's in a report, move on. Whereas in the intelligence analysis, you know as well as I, you can give intelligence analysts the same data points, exactly the same data points, and they can generate hypothesis and ideas that are completely different, and equally as valid and worthy of consideration. And that's the tension.

And if I was being critical of IA before, I didn't mean to be. What I meant was the reason why I don't think IA hasn't got into, okay, I'll now go for a wheelie on the tightrope. I can't stand 'data science.' Okay, nail my clothes to the mast. I think it's a horrible term. I don't think it's very scientific. I think it's essentially at best, it's a shopping bag with some existing known concepts inside it. And yeah, I love machine learning. Yes, I love professional judgment. And yes, I love working with tech and data and I love statistics.

Those are all amazing things, but we've had those things for a long, long, long time to put them in a Gucci bag and call it data science. Yeah, it works. It sells stuff. sounds new, but we've been here before, right? We've been here with big data, data mining, business Intel, the commodification of information work has been going on for decades. And this is just the latest [incarnation]. And we've started to see it now.

I've stayed out of the data science arguments. Maybe I'm gonna be proven wrong. But the term specifically data science, I don't think he's got long left. At least, well, maybe I just hope not. Because I will hope that the underlying principles get some attention. That's a topic for a different pod. I'll come back onto the main topic. But does that make sense on where I'm getting at with the IA analysts versus the, or the other analysts? how that interpretation of survey data is an example of how we might go in very different directions.

Howard

It makes complete sense and I agree with everything you've said but I still semantically and philosophically don't see a massive difference. Let me explain. Yes, they have very little say in the data set they're given. I and you have been in situations in law enforcement when the task has been that's all the data we've got, volume and we haven't time to go into doing full analysis

and exploratory collection of other data and all the issues that you'd look at. We want what you might almost call a quick and dirty product.

So we turn out what for me wasn't really an analytic product. And we're using terms here and I'm very conscious of terms. It was an information product.

We'd taken data, we'd processed it, and we came up with information. And other people would then use that to form decision making. It wasn't the intelligence product that we were trained to do. So we're kind of half doing the job. Go to the private sector, completely get that. If that's all they do every day, and those are the constraints, there's no problem with that, because that's what the business organisation requires of them.

But I would hope in their tool set, and their ability to plan and be flexible for the future and business like everything in life has to be flexible or it will die. It will go through a cycle and be overtaken by more efficient and new business models.

Those analysts are part of their personal professional development in their role and maybe the organisations as well may think well we need to have a bit of blue sky thinking here, scan the event horizon what are the other methodologies like law enforcement the military or whatever that might teach us something that even though it doesn't fit our business model right now what if there is a point where we need some our analysts who are functioning as information generators the product of manipulating and collating data to feed to managers, decision makers, what if we find a point where we want something more from them maybe they change the management structure or the you know the way that the decision is made in the business maybe they have know, all businesses that survive have somebody looking at data sets outside their normal organisational data.

Because if they don't, they die because they didn't know. And the one, the example that you gave, feedback or client feedback. That's great. And you can collect and use qual and quant data analysis tools that are scientifically, academically proven and tested over the years. They have statistical and all the rest, significance you want to put to it. They pass that QA test in terms of a data set.

But if the survey asked the wrong questions that they were designed to try and give understanding about, or they asked the wrong people or were at the wrong time or collected in the wrong form or any of the data identification and processing issues to generate information, the information product's not going to take them where they want. They're going to act based on false information, like you say.

The survey showed that 80 % of people are highly satisfied with the baths, the swimming baths. Well, where does that take us in the business? Well, if you're a business that's running swimming baths, it might give you a comfort zone. And then when somebody dies in the baths, because the data, you know, the customers that you surveyed weren't aware of key process

issues in the business model that might lead to risk. You're in trouble as a business, as an organisation.

Or somebody comes in from the outside and say well it's all right it's all of this. The customers might be really happy but are they getting the most efficient service for what they want which is to go somewhere and have a swim because if they aren't another business provider of swimming opportunities who's been a bit more aware of what the trends are and the opportunities of the marketplace because they've looked at other forms of data might come in and find an opportunity and take your customers away from you.

So for me it's almost a natural selection. Law enforcement's the same. Although the military are the same. The processes might be a bit more evolved but the risks are far higher. But we're still in a business model of survival because successful Intel analysis within military structures hopefully is part of the team of decisions and responses and resource allocation that result in success, i.e. we win the war or we're able to defend or we minimise our losses or we're able to sustain the logistics of supply of training and recruiting soldiers, of managing them effectively in the field, of providing the weaponry that they need, of managing the many other stakeholders in it, the public, the victims, the other nations, the politicians, you know what I mean?

Move it into law enforcement. The same thing. Well if we get it wrong we are going to, in our customer surveys as well as the many layers of quality assurance that are applied to law enforcement globally, usually, we're going to get found out we are going to be blamed for when we get it wrong because there'll be a spiking crime or there'll be a disaster or a risk that we've not minimized or even identified.

Look at all the academic and professional literature for the law enforcement and the military is littered with the best learning examples of all in life, are situations where hindsight shows that they failed. Success you don't always notice because it's just every day. But failure you notice because in our world and the military worlds or the medical worlds, the consequences of failure are far higher in many ways than the private sector. And I've already discussed that.

So do see where I'm coming from?

Mark

Yeah, depends on the perspective when you say that it's higher because it's from a financial cost. But I think this is at the crux of it, mate, is that the problem is, that I would say intelligence analysts deal in almost Hail Mary insights, which can be afforded in a military or law enforcement concept, because sometimes that's the only way you detect the crime. It's the only way you would do the intervention.

Mark

A lot of businesses can't afford that level of high risk, high return. They want low risk standard return. Because what I'm saying is if I'm a director of a company, if I have two choices, okay, let's say I've got a set budget, I've got 50K, right? And I've got 50K on the table and I can hire a former intelligence analyst and hopefully just retrain them in my business area and get them to do all that kind of blue sky thinking, all the hypothesis generation, all the stuff you spoke about. And I do think that's got value. In my heart, I'll always be an intelligence analyst and I do think it's got value. And I actually think when AI starts to take over a little bit more, think you'll see IA, I think intelligence analysts might drive some of the large language models in new and interesting ways, but that's a separate topic.

But from a risk point of view, I can hire somebody who's technical and has a statistical background. I'll be honest mate, probably do it cheaper. And I can take less of a risk and get more of a less of a Hail Mary insight, but more of just a kind of a regular routine insight and I've got somebody techie, I've got somebody who stats wise and you know what?

I will let my managers and I'll let my executives do the thinking because I think at this heart of this and again stealing from thunder from another episode but you and I both know where IA came from and very very long story short we have a certain individual who tried to professionalise in terms of analysis because I saw the tension between military officers and civil servants and try to kind of standardise how information should be collected and analysed. And that was the birth of the profession.

The guy was called Sherman Kent. And again, we'll talk about him later, but essentially he led the way for the professionalisation of the discipline of intelligence analysis. He also led the way for the creation of it as a specialism. What I'm saying is I've not yet seen much market demand, outside of those sectors for that skill set. I'm not saying it's not needed. I think it would be. I just think that IA is expensive, high risk. And if you buy, if you buy a, okay, I'll choose my words carefully here. If you hire an average data stroke stats analyst, the output's probably gonna be okay, because you can test the statistical methodology, you can test the technology, you can do that.

If I hired an intelligence analyst, and even if they're the best analyst in their previous sector, there is a risk that they won't generate any insights from me. They may descend into mysticism, they may generate lots of hypotheses, but when I'm doing my quarterly return or my annual return, I'm trying to work out how much money, how much profit have you generated? How much money have you saved me? Or if in a public sector context, you know, you can never put in a white paper or a government report that here's the 20 different hypotheses and in ranked order, it's just not gonna happen. But don't get me wrong, mate, I'm not saying one is better than the other. I'm not saying that one should replace the other. I'm saying that in the whole area of analysis, we should recognise the scope and limits of who's being asked to do what and what skill sets and what background. And yeah, we are far more in common than we have the separates us, but there are some gulfs that need to be managed.

Howard

I agree with that but think and again I'm looking to the private sector. Think about the sea changes or the sudden changes of direction of business models in commerce and I'm thinking back to obviously we're both British so we have the the history of the UK being this nation that had ships and built trading networks around the world.

The change of business, we had the Industrial Revolution, something we've gone from the horse and plow to steam engines, doing the work of many horses and many plows, a bit like the Golem, you know, it's just... those opportunities, the businesses that identified them and took those risks early on, and yes, they would have to invest in resources and the risk was maybe they may not return on those investments. But that's, that's life. You take a risk in everything you do. That's a business decision. It's kind of like betting. Do you go for the safe odds or do you bet on the, the horse that's got really little chance of winning, kind of the national lottery, and you bet on them to win, not, to, to place or show. It's bigger risk, bigger reward. But the businesses that took those risks, and I'm sure there were millions that failed, tried and failed.

The ones that did and succeeded changed the face of business. The Industrial Revolution changed the whole of the UK in terms of its commercial model, its business model, the way it employed people, the way it had management structures and staff, the logistical and business structures that it had, involvement in politics, involvement in international collaboration that continues to this day.

And I am sure that the arrival of AI large language models like the arrival of the internet, the arrival of mobile devices or even computers from the days when you do it with a calculator and I mean a mechanical calculator, a slide rule or logarithmic tables. You know, I can do qual and quant analysis. I don't particularly enjoy it, but I can do it as a function. I'm trained to do it. And within my academic field, I'm always looking at my students coming up with academic products and assessing them based on that and in, in my research. It's not something I particularly enjoy, but it's a discipline and it's a value in the right circumstance applied properly.

But those spikes, like you say, most businesses don't want to invest. I understand that but in this world more than ever any other where the business opportunity for outliers to become involved in your business area from anywhere in the world and any group of society or class of people or maybe a cultural group you know you've only got to look at the internet where if I wanted to make a point and walked out in the street and started shouting the earth is flat. My audience is those people who can hear me who happen to be outside my house and within hearing distance.

I can post something on a global social media platform saying the world is flat. Very little effort and I reach millions and millions of people. That's a business opportunity for influence. Hence we've got these terms of these people who follow it, who have no scientific training or no business training, they are influencers. They're just people who are using those platforms.

And I do not decry and but they're often very successful in business because they're exploiting those new opportunities better than others certainly better than most business organisations because they tend to be legacy institutions that have a history and a bit I always liken it to the the Titanic versus little agile speed boats, you know the Titanic's this massive ship carrying loads of people to change direction, the decision path from the captain down to the guy with the wheel and the guy in the engine room or lady to turn the wheel can take a long time and then when you turn it you may have put the turning instruction into the rudder but it might be several miles before this big behemoth turns and eventually hits the iceberg even though you desire us to turn. A speed boat can nip in and out and be far more flexible. That's kind of where we are with individuals versus organisations and maybe analysis and the practitioners of analysis, regardless of their professional role or the organisational requirements of them need to have the ability to be at the same time to pick out of their toolbox, the ability to be part of the team on the Titanic or the captain of the speed boat that's just got them in and you know, nothing else. Does that kind of make sense?

Mark

I agree with you. And I think ultimately it boils down to what we're dancing around is analysis is thought. And we're talking about who pays people to think and what do they pay them to think about. And I think if organisations wish to analyse traditional data using traditional methods and traditional technology, they will yield traditional outcomes.

If they wish to seek unorthodox ways of thinking and producing insight, then I think it's not guaranteed, but they will get non-traditional outcomes, positive and negative. And to be honest with you, I think the other thing we're dancing around is, I think we're getting mixed up and probably talking past each other because I am not saying, I think we're talking about the analysis itself, the analysis itself and the analyst, the role.

Because lots of executives and lots of managers perform those analytical functions right now. They may do it informally, but they perform that function. And so I think not for today, because we're reaching the end, but perhaps for another episode, maybe we'll think about the best case for the analyst as a separate and distinct role, to analysis the function and whether even do we still need the analyst? And that's not because of chat GPT or anything. I just mean in a future where we have better access to data and the more crude forms of analysis.

Can we just get by with our executives, our managers and our core personnel? Or is there a benefit in having a dedicated person called the analyst, maybe a professional naysayer or cynic or friendly adversary inside the organisation, but that's a topic for another day. So I'm gonna bring it to a close there. Is there anything else you wanna close out with?

Howard

Yeah, one final point I've been very lucky in my career both through law enforcement and since to work with a massive number of different agencies and organisations and individuals and people with different roles in organisations through public private sector globally. And I've, I've always enjoyed collaboration because that it does create stress and challenge. That's part of what we call transformational change.

These things butt against each other. But then sometimes in that butting and initial problems of stress, what comes out of it is of greater benefit. I have worked on collaborative projects all my life. I've done it within law enforcement but the most productive projects given time I have to say and this is with me and my with my law enforcement background certainly the private sector would be when I go and lecture to the private sector they view me as the ex law enforcement investigator or intelligence analyst, even though I'm qualified in their fields as well, I've taken the trouble to be courteous to them and try and get my head around what they do as well as try and introduce them to what I do or did in my career.

I've always had greater success with public private sector collaboration where if I'd done it with purely just law enforcement or just private sector and that's the point these organisations are all part of one big society like the analyst is just one person or the analysis function is one function in the business model of an organisation

Society doesn't run because there is law enforcement out there it doesn't because there's policing business out there supply and demand or transport networks or medical networks or gas or weather pr control or politics blah blah blah. It runs as a group of individuals who operate individually and in groups and we're all in different groups professional groups private groups family groups all the rest of it relationship groups but all those functions have to work alongside each other and the more we can do within our professional roles to try and build those bridges and acknowledge the differences and look for opportunities for collaboration. The better the outcome both for society, individuals, for the customers and clients of these organisations and for the organisations themselves.

I was trained in something called disaster victim identification. And basically it's a process in the UK, but it's global where, say there's a natural disaster. It might be a terrorist attack but it might also be an earthquake or whatever. So suddenly there's an unforeseen event that requires support from organisations. A flood or an earthquake or a lightning strike or hunger.

You fly in teams. I would go in with the law enforcement and part of law enforcement's function is not only to control the situation from a disorder point of view but investigate any criminal activity but also support our medical colleagues in terms of who are these people who've died or been injured identifying them? That kind of process. So bagging bodies with forensic colleagues labeling them so ultimately we can figure out who died, who their families are so they're notified and any kind of process like that you're trying to return the actual situation in the environment to the norm. So you're trying to fix something that broke through this disaster.

But we were just one group in that. There would be local authorities, charities, community groups, community individuals, fire, rescue, the military. The society would come together and the role of the police in the models that we used and they replicate what many of the major nations use around the world is to act not only to do their bit of the pie chart, their law enforcement function if you want to call it that, but also to act as the kind of round table creators and managers to bring these people to the round table to say well this is my task with my law enforcement hat on what's your task from a local government task what's your task from a military task what's your task from a health task what's your task from a community representative task and again like in my training that practical experience was the only way to resolve that problem and come out with a success for everybody or the least possible negative impact for everybody to minimise the impact.

Does that make sense? And I know it sounds very highfalutin and aspirational, but these are real practical things I've done. And that's what's given me my view on life and on the idea of analysis and these divisions to say, we need to be above that. If we're thinking, forget organisations and roles, as human beings collaborating with each other if we think like that, analysis should be collaborative to some point, regardless of the organisational requirements in our backgrounds, because life is collaborative.

Mark

I think we're in violent agreement with each other mate. So I think we'll probably call it there. So thank you for today and we'll thank you to everybody listening and we'll see you on the next episode.

Howard

I enjoyed that. Nice one.

Mark

Yeah, me too.