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I’m a great believer in the adage ‘before you judge a man (or woman) you should walk a mile in their shoes’.

A good old fashioned dose of empathy and humanity goes a long way to understanding the challenges and pressures that others are facing. This is particularly pertinent to the world of criminal investigation especially as it is become more complex and pressured than ever before.

It’s heartening to me that the majority of the leaders who are in senior positions in criminal investigation and policing in general have risen their way up through the ranks.

Those featured in this issue include Simon Bailey from Norfolk, Gareth Wilson from Suffolk, Mike Barton from Durham, David Tucker from the College of Policing and David Nolan from the Scottish Anti-Ilicit Trade Group. They are now in very senior positions in policing and the wider law enforcement community but they are all united in the fact they started their professional life at the frontline of criminal investigation, gaining valuable operational experience.

What’s more, they all talk with a fondness and pride about their previous roles, especially those who were Senior Investigating Officers and they are united in their obvious respect and appreciation for the role of the SIO.

Indeed Gareth Wilson, the Chief Constable of Norfolk and Chair of the Homicide Working Group is calling on the service to show more recognition for SIOs and to appreciate the challenging job they do.

As I’ve mentioned, this operational experience and real empathy for the pressures faced on the frontline is particularly crucial in today’s policing environment, especially as the role of the investigator is arguably under more scrutiny than ever before.

The complexities of today’s investigations, fuelled by technology and in particularly the internet, coupled with a greater recognition that the service must do more to protect the vulnerable, means that we need these ‘champions of the frontline’ more than ever.

What concerns me is the current shortage of DCs and DS’s across the country as it could pose a serious threat to the future calibre of leaders – particularly those in CID – and this valuable experience and empathy could be quickly eroded if it isn’t nurtured and developed.

Let’s hope that positive action is taken by policing as a whole to ensure that we continue to develop and nurture future police leaders whose time can on the frontline will make them better able to step into someone else’s shoes.

Carol Jenkins
A new breed of counterfeit criminals is using the internet to facilitate a multi-million pound trade in the supply and distribution of fake goods. The alarming rise in Intellectual Property Crime (IP) is not just the domain of organised crime gangs. Opportunistic members of the public have also spotted the potential to make big money with relatively little effort and they are pedalling their wares through social media sites including Facebook.

IP crime costs the UK millions of pounds each year. The Government is concerned about the effect of IP crime on the economy and has launched a four year IP enforcement strategy called ‘IP enforcement 2020’. Last year, it also appointed Baroness Neville-Rolfe as the first IP Minister to spearhead efforts which include promoting greater inter-agency co-operation. In the foreword to her first IP Crime Report, Baroness Neville-Rolfe raised concerns about the fact the Strangeways area of Manchester had acquired a reputation as being the ‘hub’ of counterfeit goods supply in the UK.

**Partnership**

Scotland has recognised the seriousness of the growing scourge of IP Crime and has created an innovative multi-agency partnership called The Scottish Anti-Ilicit Trade Group (SAITG). It comprises representatives from Police Scotland, HMRC, Trading Standards, the UK Intellectual Property Office, the UK Border Force, the Crown Office and members of the music and sporting industries.

David Nolan, a former police investigator, is an active member of the Group and fierce advocate of its work. He explained that before its inception, Scotland’s approach to IP Crime was piecemeal and that there were

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**Scotland’s law enforcement agencies have formed an innovative taskforce to tackle the growing scourge of Intellectual Property (IP) Crime. Carol Jenkins reports.**

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various disparate agencies carrying out their own investigations with little co-operation. “It took a lot of hard work to bring all the different agencies together but now we are working as a team we are reaping the benefits,” he explained.

Success
The secret of the group’s success is that it carries out multi-agency-led investigations that are fully co-ordinated and planned. All partners share intelligence through a dedicated intelligence hub at the Intellectual Property Office, that ensures investigations are conducted in a co-ordinated manner and have the buy-in of all the relevant agencies.

Mr Nolan says that to date the group has carried out operations that have resulted in the recovery of millions of pounds worth of counterfeit products, over a hundred arrests and substantial prison sentences.

He explained that the SAITG’s strategy is three fold and focuses on: strengthening collaborative approaches to prevent (deter and deter); strengthen collaborative approaches to information and intelligence gathering and dissemination and to strengthen collaborative approaches to investigating and prosecuting those involved in the illicit trade in Scotland.

The SAITG launched the Scottish Prevention Emerging Risk Evaluation (SPERE) Project with the aim of evaluating and disseminating information and intelligence to affected communities, which evaluates the emerging IP threats focussing on live and recent intelligence.

Mr Nolan explained that ‘the benefits of this strategy focussed a targeted reduction in victims of crime, operational risk and intelligence gaps with partner IP agencies using the National Intelligence Model focus.’

“We have also been proactive in running high profile National Anti-Illlicit Trade events focussing on how the culture of accepting illicit trade erodes communities,” he said. As part of this, a fake market was set up and Scotland’s schools took part in a nationwide competition submitting short films focussing on educating young people on the dangers of purchasing fake goods.

After establishing itself as a legitimate force, the SAITG piloted an enforcement group called Scottish Illicit Trade Enforcement Sub Group (SITES) which promoted the sharing of intelligence between all partners. Police Scotland plays a lead role in the SAITG and SITES and serving officer DC Andy Law from Police Scotland, is the police representative.

SITES has also rolled out bespoke training packages to officers at the Scottish Police College.

Experience
Mr Nolan’s background makes him well-placed to lead the charge against the growing band of IP criminals. He spent 25 of his 30 years’ service as a Central Scotland Police officer in CID dealing with some of the most high profile crimes including the Dunblane School Shootings.

He was asked to set up one of the UK’s first e-crime units in response the Operation Ore, the UK’s largest ever investigation into online child sex abuse. At the time he was part of the working group who produced the ACPOS guidelines and devised the policies and arrest practices for e-crime in Scotland.

He began specialising in IP Crime by default during his time on Operation Ore when he and his colleagues were examining illegal DVDs that contained child sex images.

He has spent the past 15 years developing an enviable expertise in IP Crime and was a former investigator with the Federation Against Copyright Theft (FACT).

Trends
In terms of current trends in IP Crime, Scotland is seeing a rise in IPTV, where criminals offer showings of football matches and films using illegal software. This is costing the TV and film industry millions of
pounds each year due to the fact that the crimes are now widespread. Other examples of IP Crime including counterfeit tobacco, drugs, pharmaceuticals and fake consumer goods.

Law
IP Crime is unique in that it can be both a criminal and civil offence and the legislation differs in Scotland from that of England and Wales.

Infringement is the legal term for an act that involves breaking the law. IP rights are infringed when a product, creation, or invention protected by IP laws are exploited, copied or otherwise used without have the proper authorisation, permission or allowance from the person who owns those rights or their representative.

Future
Looking to the future, Mr Nolan predicts that incidents of IP Crime are only going to increase and that law enforcement agencies will continue to struggle to keep up with the growing online criminality.

“We have proved in Scotland that you can successfully stem the flow of IP crime by providing a robust multi-agency approach to the investigation and prosecution of crimes as well as focussing on the prevention aspect to try and educate the public about just how damaging IP crime can be to communities.”

For more information about the SAITG contact Mr Nolan at brandprotection@intelectsolutions.im or Detective Constable Andrew law at andrew.law@scotland.pnn.police.uk

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When Durham Constabulary was given an ‘outstanding’ rating in the recent HMIC police efficiency report, the question on everybody’s lips must surely have been ‘what’s their secret?’

It was high praise indeed and only West Midlands Police was also deemed as outstanding out of the 43 forces in England and Wales. The majority of forces were deemed as ‘good’ while a handful of forces didn’t make the grade.

HMIC report author Mike Cunningham told us that both forces ‘demonstrate an ambition and pace for innovation that other forces would do well to match.’

“They are forward looking, they are restless and they want to improve,” he explained.

Pedigree

You might assume that the chief constable behind such glowing praise is a precocious young pretender who is keen to make his mark at the helm of the force with a view to eyeing a more high profile gig in a southern force.

Think again. Chief Constable Mike Barton couldn’t be more different. He is a highly experienced officer with an impressive policing pedigree – notching up an enviable 37 years’ police service.

Mr Barton served for 28 years in Lancashire Constabulary before joining Durham in 2008 as ACC. He has been Durham Chief Constable for the past five years.
Success

When I spoke to Mr Barton, hoping to get an insight into how he has managed to steer the force to be so successful, I was struck by how open and unassuming he is. A self-styled ‘proud Lancastrian’, he is straight talking and frank and is extremely passionate about his force and proud of the people within the organisation.

“When people ask me what our secret is, I always point out that you can’t achieve success without good people,” he explained.

“That doesn’t mean to say that other forces don’t have good people, but what we have tried to do is free our staff up so they can express their latent genius.

“Policing is unique in that frontline staff are the least experienced but yet they are given a tremendous amount of discretion and they can take away people’s liberty.”

Unique

He describes this as a ‘huge responsibility that lands on our rawest recruits which is what makes policing unique.’

“What we tend to do as a service is give them this discretion and then treat everybody as if they are incapable of making a cogent, wise decision. We hem them in with our restrictive policy, procedures and rules.”

In contrast, he reveals that Durham encourages its officers to develop their unique qualities.

He describes the approach as the ‘Durham Difference’ and says that there are four elements to this approach: positivity, fairness, courage and integrity.

“The Durham Difference is a term that describes our values: they are the things we value the most.”

Accessible

Central to his leadership style is to be as hands-on as he can and he regularly runs Problem Oriented Policing (POP) master classes for up to 30 staff at a time ranging from secretaries and handymen to detective superintendents.

“What that does is allow me to be visible and relevant to staff. I’m not just some doddering old ‘Mr Grace’ type figure,” he said.

“It’s important to me to be accessible to staff and for people to leave the master class sessions with a smile on their faces. I talk about the workplace as being fun and that’s not about being disrespectful to people about the work they do but if the workplace isn’t fun then you are not going to get the best out of people.”

Planning

Forward planning is an integral part of the way the force does business and the senior team meets every Monday morning to discuss scenario planning.

As a chief he is used to balancing competing demands and his strive for excellence in times of austerity has come at a cost. The force made the difficult decision to make some 450 staff redundant and it has come through a process of streamlining and pruning of service provision. It is a process Mr Barton believes has made the force ready to face the challenges of modern day policing.

He agrees wholeheartedly with HMIC Mike Cunningham’s comments in his latest inspection report about the importance of keeping up to speed with advances in cyber and digital.
“As far as I am concerned, cyber and digital are now an integral part of the way we do business. If I’m not pushing the digital envelope on a daily basis then at the end of the day I feel I’ve not done my job. If we don’t sprint, if we don’t move at pace then I think we are going to be fatally behind the curve.”

The force is working hard at equipping its officers with what Mr Barton describes as ‘world class software’. It recruits the expertise of local undergraduates to work in force as interns in order to create the latest operational software.

Pilot
Durham is part of a pilot with Gloucestershire to develop ideas about what a digital model might look like for forces in the coming years.

“It’s my view that you’ve got to challenge everyone in the organisation to see the digital work as an integral part of policing. Nobody within my organisation can say they don’t understand the internet – it can’t be allowed. It is utterly woven into everything we do.”

Investigation
The force also places great value on the investigation process and attends between 95 and 98 per cent of crime.

“My view is that if you don’t attend crimes you can’t investigate them. The reason we insist on investigating such a high per cent of crime is that it enables us to build up a high level of expertise. This means that when you get a serious job, you can raise your game.”

He is quick to silence critics, who surmise that the force is a ‘sleepy hollow’ with very little crime challenges.

“We live in a part of the country that has been devastated by industrial exodus and in some communities the only role models are now drug dealers. We are one of the most deprived areas of the country; it’s definitely not a sleepy hollow.”

Future
During our phone interview, renowned academic Professor Nick Tilley arrives at his office for a meeting.

He has been commissioned to work with constables and sergeants to promote best practice in crime prevention. Mr Barton is keen to involve academia in empowering his staff to bring about positive changes to frontline performance.

It is part of Mr Barton’s approach of ‘never standing still and always moving forward.’

Despite spending nearly four decades in the service, Mr Barton has no intention of hanging up his hat and he is as enthusiastic and as motivated as he has ever been.

“My job is to encourage our staff to think creatively and to support them in developing their own unique voice – for me that’s one of the most important aspects of the Durham Difference.”
Investigating Fake Online Digital Personas in cyber crime offences

Trends, tactics and investigation tips to detect deception techniques and reveal the true identity of online criminals – exclusive workshop.

29 March, Hazlewood Castle, Tadcaster

The Investigator is hosting this exciting one day workshop that provides a fascinating insight into the trends, tactics and behaviours that criminals are using to dupe unsuspecting victims online by adopting false identities.

Digital communities are now providing criminals with new ways of exploiting victims online in a range of offences from child grooming, radicalisation and terrorism and fraud.

Investigation challenges
One of the biggest challenges for investigators is online criminals conceal their identities by adopting fake personas – even lying about their age, sex and background.

In child grooming case, adult criminals are pretending to be children in order to gain the trust of their victims.

The day is an exclusive course that you won’t get elsewhere. It will be led by recognised online crime experts from the University of Lancaster who will provide a fascinating insight into the tactics and techniques online criminals resort to in order to exploit their victims.

Current online criminality
Our experts will provide practical advice for the frontline investigator about how to look for clues about a person’s age, gender and background by analysing the use of language as well as their wider online behaviour.

It is aimed at all investigators who want to expand and enhance their knowledge and understanding of the current and future picture of online criminality. Whether you work in major crime, cyber crime, CSE, or counter terrorism, this workshop will provide
you with a not-to-be-missed opportunity to expand your learning in this rapidly evolving area.

The day will include:
• Uncovering masquerading digital personas
• A look at the different online language styles that criminals adopt online
• How to use language analysis to predict an author’s identity
• How to identify and mimic authors
• Choosing useful markers of authorial style
• Good versus bad datasets
• How new software developed by the team at the University of Lancaster can help investigators carry out sophisticated analysis of digital personas

Our experts
The workshop will be led by Dr Alistair Baron and Dr Claire Hardaker from the University of Lancaster who are both recognised experts and in online criminality.

Dr Baron is a lecturer from the School of Computing and his expertise is around applying natural language processing techniques to serious online crime including child sexual abuse, extremism and social engineering.

Recent examples of his work include using online text features to predict author demographics and linking social media accounts to assess an organisation’s social engineering attack surface.

Dr Hardaker is a forensic corpus linguist in the Department of Linguistics and English Language. She is an expert on online aggression, deception and manipulation.

This involves analysing anything from cloned and fraudulent accounts to trolling and threatening language to grooming strategies.

Booking details
Venue: Hazlewood Castle, Paradise Lane, Hazlewood, North Yorkshire, LS24 9NJ

Accommodation is available at the hotel for a discounted price of £84 B&B please call 01937 535353 and quote The Investigator when booking your room.

Details: Registration 9.30am, start time 10.00am, finish 3pm. Refreshments and lunch are included in the price

Cost: £249 per delegate.

Booking: Please send the delegates name(s), email address and purchase order to info@the-investigator.co.uk or telephone 0844 660 8707 for further information. Payment can be made by debit/credit card.

The venue
The first records of the house are to be found in the Domesday Book, described as being owned and occupied by Sir Mauger the Vavasour (a vavasour is a type of sub-tenant). Hazlewood was then inhabited by descendants of the Vavasours for over 900 years. During the Second Barons’ War (1264–1267) the house was burnt down by a rival branch of the Vavasour family. It was rebuilt in 1283 by Sir William Vavasour and in 1290 fortified and crenelated.

In 1217 Robert Vavasour was Sheriff of York and his statue was placed above the door of York Cathedral in recognition of the fact that he gave stone from his Tadcaster quarry to maintain the cathedral.

Sir William Vavasour was High Sheriff of Yorkshire for 1548 and 1563 and MP for Yorkshire in 1553. His son John Vavasour was host to Mary, Queen of Scots on the night of 27 January 1569, when she passed through Wetherby en-route between Bolton Castle and Tutbury Castle.

John was convicted in 1610 of being a Catholic recusant. His nephew and heir William was gaoled for five years in Newgate prison for the same reason. William’s son Thomas was forced to pay an annual fine even though he had been made a baronet in 1628. The second Baronet was a Royalist during the Civil War and was obliged to flee to France, not returning until the restoration of the monarchy in 1660.
A growing breed of ‘virtual burglar’ has replaced the more traditional house burglar as the new public enemy number one in policing warns cyber expert Matt Horan.

Traditional notions of a burglar as being a shadowy figure who jemmies his way into a door or window and wreaks havoc and heartbreak in a home or a business have been turned on their head with the proliferation of the internet.

According to the latest crime figures released this year, by the Office of National Statistics burglary dwelling rates have reduced by a staggering 72 per cent since 1995. The figures, released in January, included for the first time rates for cyber crime and fraud. They revealed there were 3.6 million fraud and two million computer misuse offences for the first full year in which such questions have been included in the figures.

It seems that today’s burglars are hanging up their balaclavas and the unsociable hours are joining the growing army of home workers who are taking to their computers to make money.

**Exploit**

This new breed of cyber burglar has one aim in mind: to exploit vulnerabilities in a network and ‘virtually rob’ the business or individual of their most valuable asset: their data.

Cyber expert Matt Horan, the head of C3IA solutions told us that online criminals are now becoming expert at permeating a network, often without a business or individual’s knowledge. Once they infiltrate the system then it’s too late and their actions can cause devastating consequences.
“In the past, burglars have traditionally tended to target houses with weak security. They are now doing the same on the internet – if they think they can exploit a vulnerability on a network then they will stop at nothing to get a stranglehold on the system,” he explained.

**Data**
The criminals will then hold the company or individual to ransom and demand a particular sum of money. Mr Horan warned that even when a company or individuals pays the money to release the data – there is no guarantee they will get it back.

“Criminals will find servers and your information that are stored in various suppositories and it will encrypt the data using coded encryption and the only way to get it back is to pay the ransom,” he explained.

“However, there are is guarantee that you will ever get your data back so the implications of just one attack can be catastrophic on a company or an individual.”

**Repeat**
He also pointed out that once they have been attacked, companies can often be mistaken for thinking they won’t be a victim of a repeat attack when often it is the companies who have already been attacked that could be potential future victims.

The current picture of online criminality is diverse – ranging from lone attackers to organised crime groups.

“It’s very much a numbers game for today’s online criminals,” said Mr Horan.

“They will regularly target millions of people across the world, often for smaller sums of money. You can now even buy tools online that can check your coding and your viruses to make sure they are efficient before you carry out an attack.”

**Prevention**
C3IA is a UK-based company that is one of fewer than 20 that is certified by the Government’s National Cyber Security Centre (NCSC). It is currently providing cyber security advice to companies and law enforcement agencies with the emphasis on helping detect attacks at an early stage as well as preventing them happening in the first place.

It carries out data capture and analysis by running tools on the network that can identify malicious software and lock it down on the spot so that attackers can’t get in. Experts can then work on making the network more secure to prevent future attacks.

C3IA has a subsidiary company called GoSecure that has a specialist cadre of ‘cyber hunters’ who run an Active Response Centre (ARC) where they can monitor a network 24 hours a day to try and detect potential attacks from an early stage.

**Funds**
One of the biggest challenges for police is that attacks are often carried out by organised crime groups who have got more funds available to them to carry out an attack than the police could ever have.

Despite the fact C3IA experts pride themselves on keeping ahead of new trends and threats, Mr Horan admitted that it can be a real challenge for organisations as internet criminality moves at such a fast pace that it can be a real challenge to stay one step ahead.

“The big issue for us all is if you’re not ahead of the game then you can’t beat it. The pace of online criminality is moving so fast that we have to do all we can to stay ahead of the attackers.”
The increasingly complex nature of today’s investigations has prompted the UK College of Policing to devise a blueprint for officers on the frontline to help them better support vulnerable people. Carol Jenkins reports.

As a former frontline officer with 30 years’ experience working at the coalface of policing in London, David Tucker knows only too well how challenging it can be to deal with vulnerable people and communities.

Now head of Crime and Criminal Justice at the College of Policing, Mr Tucker, was involved in a number of ground-breaking initiatives that were pivotal to the way the Met shaped and delivered its diversity agenda in the early noughties.

As well as serving in the Met, he has also worked as Head of Policy for the NSPCC and so is well-versed in the challenges surrounding vulnerable children.

His operational experience makes him well-placed to lead the programme of work for the College of Policing around vulnerability.

The work has been prompted by the fact that over the past decade, investigations have continued to become increasingly more complex and challenging for frontline investigators.

This has been exacerbated by the rise of the internet which has promoted the sexualisation of both children and adults online leading to an increase in criminality and victim exploitation.

Domestic abuse is also a major concern that can be complex to investigate due to the fact the victim has a relationship with the perpetrator and so legal action can be problematic.

Concerns
Her Majesty’s Inspector Mike Cunningham recently raised the same concerns and told the Investigator in an interview that one of the most fundamental challenges facing the area of criminal investigation is today’s policing is around vulnerability – both adults and children. He said there has been an increase in crimes such as child sexual exploitation, adult exploitation and issues
around mental health and the vulnerable. He spoke of the importance of getting that complex picture of sometimes latent unreported demand in communities’ and admitted that the police service across the board needs to improve to ‘develop the new skills needed to deal with the new types of demand.’

Clarification
Mr Tucker hopes College of Policing work around vulnerability will help bring about some clarification and provide greater support for frontline investigators around dealing with vulnerable people.

He emphasised the importance of producing guidance that has real resonance for all investigators not just the specialists. “Where we need to support people more is on the frontline, to support those who deal with the whole range of policing challenges on a daily basis,” he explained.

Simple
“They have to deal with a whole range of challenges often with very little support and advice. What I’ve been trying to do is make things simpler and clearer for people. This means moving away from the very technical knowledge and encouraging people to take a step back and ask themselves ‘what is the fundamental issue here?’”

Everyone can be vulnerable. Whether a person suffers harm depends on how that vulnerability interacts with the environment. He explained that by asking yourself what was the vulnerability that was the cause of the harm from the outset then this can act as a valuable starting point for investigators to take immediate action.

Once it has been established that a person is at risk, the investigator can then decide whether the environment that the vulnerable person finds themselves in is actually increasing that risk and thus increasing their vulnerability.

Mr Tucker uses the example of a disabled person who might be viewed as vulnerable but need not come to harm if various support mechanisms are put in place to control their environment.

“A disabled person may have an inherent vulnerability but if we can ensure they have the appropriate medication, the social support and provide whatever else that person needs then that doesn’t mean they should suffer harm;” he said. A vulnerability that any person has does not mean that they should suffer harm or risk of harm if their environment is well managed.

Individual
He acknowledges that the police can’t do this alone and that it is the responsibility of a range of local agencies as well as the person themselves.

“I’m a great believer in the agency of the individual. I think we do need to understand what people are capable of doing for themselves.”

The College of Policing definition seeks to go beyond the traditional definition of vulnerability and recognises that often the average adult can be vulnerable, particularly if they are experiencing highly stressful situations such as a car accident or have been burgled for example.

“People may have suffered harm or maybe at risk of suffering harm so we are trying to come up with a non-exclusive approach to this that recognises that anybody can be vulnerable in a situation and that the police need to take action accordingly.”

He said the new approach is about ‘standing in the shoes of victims and looking out at what’s available rather than us standing on the outside looking in and throwing services at people.”

Best practice
Whilst Mr Tucker admits he wants the guidance to provide greater support for officers, he acknowledged that many officers will already be well-versed in dealing with vulnerability and that the College of Policing
work around the subject will help strengthen and develop existing best practice.

“There are lots of investigators out there that are doing exactly what we are saying but there will also be those who will find it more difficult and will need more help.”

There is now a growing recognition that the police cannot respond to vulnerable people alone and that it is the responsibility of a number of local agencies. It is hoped that the vulnerability guidelines will also encourage investigators to think about where the policing role starts and then ends.

“We have to find a way to say when our role begins and ends,” explained Mr Tucker.

**Research**
The College of Policing work around vulnerability began last year when a research map was created to set out both the current knowledge and existing gaps that need to be addressed.

It found that while there is some good evidence on issues where vulnerability has been traditionally recognised, it finds little or no research evidence in other areas such as radicalisation, gangs and honour based violence.

Funding for the work was provided by the Home Office through the Police Transformation Fund and it also includes provision to train officers.

As part of the work around child sexual abuse, the College of Policing will be trialling a Licence to Practice. The aim is to improve the quality of investigations in this high risk area of policing. The trial is intended to ensure that benefits are obtained and negative impacts are avoided. The aim is to improve the standing of people working in this difficult area of policing as well as improve investigations.

There will also be a project led by the College of Policing to create a cadre of child investigative interviewing specialists to support frontline investigators in all forces. The training programme is currently being devised and is due to be rolled out later this year.

Looking to the future, Mr Tucker hopes the work will bring about a culture change in the way investigators view vulnerability.

“We don’t want to produce guidance for guidance sake, we want to produce something that is really practical and simple and that is very much focussed on supporting those officers on the frontline who are now being required to deal with vulnerable people, often in challenging circumstances, on a daily basis.”
An unprecedented increase in incidents of child sexual abuse has brought about a radical culture change in the way investigators do business says Chief Constable Simon Bailey. Carol Jenkins reports.

In just four years, incidents of child sexual abuse have risen by a staggering 80 per cent in England and Wales. It’s a statistic that makes uncomfortable reading and it must surely lead us as a society to question why there has been such a sharp rise incidents of that are among the most horrendous of crimes.

The shock value is not lost on Simon Bailey, Chief Constable of Norfolk and the head of the National Police Chief’s Council’s Child Protection and Investigations Working Group. He admits he is concerned about the ‘sheer scale of the threat’ that has place unprecedented demands on the workload of investigators across England and Wales.

It is the reason why he is promoting the edict that ‘vulnerability is now everybody’s business’ to highlight just how integral dealing with vulnerable children as well as adults has become to the world of criminal investigation. Despite his concern about such a steep rise in incident, He doesn’t accept however, that there has been an actual increase in the number of child abusers in society.

“I don’t accept there are actually more people out there committing crime. I think that the internet has opened up far more opportunities to people to get their sexual gratification from looking at this imagery and from engaging in indecent acts against children.”

Online
He points out that in the past, if someone wanted to purchase pornography they would have to endure the embarrassment of walking into a newsagent and taking the ‘walk of shame’ to the counter to pay for their pornographic purchase.

“There has been a huge culture change in the way people access this type of material and they can now do it in the privacy of their own home,” he explained.
“Porn now makes up a massive part of the web and there are some sites that attract 16 billion hits a year which really does concern me. I’m not sure more people are more interested but what has happened in that the opportunities that are now available to them to access the material in their own homes has increased.”

Mr Bailey reveals that the extent to which child abuse is being driven by technology is evident by comparing the findings of a Home Office study in the 1990s into indecent images to today’s figures. The study found that in the 1990s, there were less than 10,000 images in circulation as opposed to now where there are some ten million in circulation.

Last year, police investigated a total of 70,000 abuse cases – the majority of cases – some 66 per cent were of familial abuse.

High profile cases of child sexual exploitation (CSE) in areas such as Rotherham, Peterborough and Oxford also highlighted just how at risk children are off-line in our communities.

High profile investigations into celebrity figures such as Jimmy Saville and Rolf Harris as well as public figures in the world of football and even policing have also led to an eye-watering 172 per cent increase in reports of non-recent abuse cases.

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Mr Bailey believes this is largely due to the fact that these reports now regularly dominate the news headlines and victims now have more faith that they will be taken seriously by police.

He believes no stone should remain unturned in rooting out these people and despite the impact on resources, he continues to encourage the public to come forward to report incidents.

“It’s increasingly more in the public conscience and people are now having more confident to come forward and report crimes in a way they perhaps weren’t in the past. I genuinely look upon this as a validation of the work we have been doing to reassure victims that they will be taken seriously.”

Challenge

Behind the figures and the headlines is a police service that is trying to take stock of such a crime increase and to figure out how it keeps up with the constant demand. It’s an issue that Mr Bailey admits that all investigators in all forces have had to face. “What we have had to do is realign existing assets to be able to deal with the demand. I now have more reports of sexual offences in Norfolk on a daily basis than I have burglary and so the figures have brought about a culture change in the way we do business,” he said.

Vulnerability

“In today’s world of criminal investigation, the main focus has simply got to be around vulnerability. The police have to recognise when a person is vulnerable; we have the responsibility of safeguarding them.”

He accepts that increased training and awareness do go some way to enhancing and developing the police response but that a key element is for investigators to exercise their ‘professional curiosity’.

“It’s your detective’s nose that says something is not quite right; a good detective will have that. It’s every officer’s responsibility to tune into their natural intuition and inquisitive demeanour to spot when something is not right.”

Unique

Mr Bailey knows from personal experience that a ‘detective’s nose’ is one of the most valuable assets an officer has. He is in the unique position of having served as an investigator of all ranks from DC to the Head
of Crime at Norfolk and has worked on some high profile cases and in specialisms including homicide, covert and anti-corruption.

Proud to call himself a ‘career detective’, he remembers with great clarity just how challenging the role of the investigator, particularly the SIO can be and he fully appreciates just how much today’s investigators are challenged on a daily basis due to the unprecedented increase in child sexual offences.

Intelligence
Despite the alarming rise in offences and the fact they are placing unprecedented demand on the service, Mr Bailey praised investigators for their efforts.

However, he is realistic and points to areas that could be improved. One such area is around multi-agency working and the sharing of intelligence.

“My biggest bug bear is that there is still a reticence to share information. If only we could share information more effectively between agencies then the whole situation would improve,” he said.

He described his vision as about ‘creating a culture and an environment where we share information to collectively safeguard the vulnerable in a way we are not doing at the moment.’

“What needs to happen is that the key systems leaders across the whole of the sector need to make it their number one focus. If we do that then we will drive an important cultural change and a cultural shift which means we will give our staff the confidence to share information.”

Expectation
He is cautious about ideas muted in a Home Office consultation about the proposed introduction of mandatory reporting offences.

“The intent around it is positive but there are a number of really negative implications which outweigh the positive benefits such as the sheer scale of the number of reports the system would be receiving and probably not being able to cope with. My fear is there is a danger of creating an expectation.”

Demand
Looking to the future, he believes that it can meet the demand and provide an effective response that is agile and responsive.

“If you look at how the service is responding to the emerging threat of online abuse, we are arresting 375 suspects around the country and we are safeguarding 450 children every month and that from my perspective is a massive success,” he explained.

“I know that this is just the tip of the iceberg and that it would be wrong for us to be complacent; we are forever learning and honing our response.

I do see that there is a real dedication and a drive among officers to grapple with this challenge and to really make a difference.

“What I’m pleased to say that we are doing is making people think twice about going online and viewing indecent images and that for me is a success and something I’m hugely proud of.”
Gareth Wilson has risen up the ranks to become Chief Constable of Suffolk Constabulary, a role he admits he is relishing. He has also recently been appointed as the new chairman of the National Homicide Working Group, a role he describes as ‘one of the best in policing.’

Despite his obvious enthusiasm for both top jobs, he still recalls with fondness the time he spent as an SIO working in Essex Police, where he dealt with his fair share of testing investigations. His time as an SIO culminated in being given the role of Head of Kent and Essex Serious Crime Directorate.

Memorable
Like all of the SIOs I have interviewed, he can remember individual investigations he has worked on with great clarity and admits that each case leaves an indelible mark that is hard to erase. One of his most memorable jobs was the murder of a 25-year old woman called Jayne Poppy who was killed by her boyfriend on Christmas Day 15 years ago.

“Any murder is extremely tragic for all those involved but what was particularly poignant about this case was that the victim died on Christmas Day which is always very much associated with families getting together and enjoying the day,” he explained.

“You’ve got the victim who has died in the most horrific circumstances; her family who have found out their daughter has died on Christmas Day and the suspect who was clearly incredibly ill. There are never any winners in these cases.

“On top of that you’ve got the uniformed response team that have been called out to the scene of the crime and have had to deal with such a tragic event on a Christmas Day.”

Investigations
The fact he has been an SIO and has led a number of major crime investigations makes him well-placed to head up the National Homicide Working Group.

“It is the best job without a doubt,” he said. “It is the working group that is the most talked about as it’s a really active and dynamic group. It was evident from my first meeting just how much experience, passion and intellect there was in the room.”

Champion
One of his aims as the new chair is to...
champion the efforts of the SIO, a role he believes is often undervalued by the organisation.

“The one thing that I think chief officers consistently under-recognise is the huge amount of responsibility that sits on an SIO’s shoulder.

“I think it’s because most chief officers haven’t been as exposed to the role of the SIO as I have. I also think that it’s because SIOs are quite unassuming and don’t tend to recognise the importance of the job they do. To them, it’s an everyday occurrence and they tend not shout from the roof tops about their successes. They are a pretty modest bunch.

Preventative
As well as championing the efforts of the SIO, Mr Wilson also wants to continue to explore how the HWG can be at the fore of more preventative strategies.

This will involve exploring existing research and expertise around homicide prevention and using this to inform strategic national programmes to assist in the reduction of serious violence and murder.

“We need to look in more detail about what could have the biggest impact on reduction and then from there we can propose nationally some solutions.”

Demanding
He also wants to explore ways to further the continuous professional development of SIOs to reflect the fact that the role of the SIO is evolving and becoming more demanding.

“The focus is very much moving towards vulnerability and we are now seeing SIOs who are being asked to lead complex child abuse investigations,” he explained.

“We need to make sure our SIOs are properly training and supported and are able to deliver an effective investigation.”

Shortage
He is concerned about the current national shortage of detectives, not just within homicide but across the field of criminal investigation.

“What we are seeing is that the pool of people who want to going into CID is reducing and there are a number of reasons for that. The fact that uniformed colleagues have a more attractive shift system that enables them to enjoy a healthy work/life balance is, I think, one of the main reasons alongside the ever increasing scrutiny they are under” he said.

“I also think that being an investigator brings with it a huge amount of responsibility and there will be some people who will question why they should take on extra risk and responsibility for no more remuneration.”

He accepts that the problem is the responsibility of the entire service and he hopes that a more attractive package of conditions can be put in place in order to attract the SIOs of the future.

Future
“I hope that as the Chair of the Homicide Working Group I can do my bit to fly the flag for the SIO as it’s my view that it is one of the most valuable and pivotal role in policing.”

As a service we need to better recognise this fact and provide more support and greater recognition for the SIO in future years.”
The heartbreaking murder of nine-month-old Mollie Norman by her Uncle Trevor Stoker in 2007 was a stark reminder of just how emotive and tragic sudden infant deaths are to investigate.

Stoker punched his baby niece in the face and body through a pillow and then lifted her ankles in the air and swung her down against a bed.

The fact that a family member could carry out such a brutal attack on a defenceless tot is an uncomfortable reality that we as a society find difficult to accept.

Behind the headlines, the Senior Investigating Officer who led the investigation for Greater Manchester Police was Geoff Wessell. The case is just one of many child death investigations that he has led throughout his 26 year service. He is now a Det Chief Supt who is head of Prevention and Protection at Avon and Somerset Constabulary and the Chair of the National Child Death Investigation Group.

Challenging
He acknowledges just how challenging sudden infant deaths are to investigate and how important it is for officers to be given adequate guidance to support them through such complex investigations.

“It is an emotive crime and I can fully appreciate that an SIO might be reluctant to want to run one of these cases precisely for that reason,” he explained.

“One of the biggest challenges for the SIO is that you quite often have a situation where the actual homicide is not immediately
apparent because you don’t get that visible injury.

“You might have a bruise but very often there will be non-visible injuries which could lead the SIO to conclude that the child died due to a natural but tragic cause such as sudden infant death syndrome or cot death as it used to be known.”

Non-Accidental Inflicted Head Trauma is an unfortunately common cause of injury that results in suspicious deaths in infants. Thankfully low in numbers these crimes are often wrongly referred to as ‘shaken baby’ but are caused by an infant being subjected to heavy rotation of the head and impact with some form of surface. While there is often no visible injury, the violence of this action does cause internal brain bleeding that often results in death.

Guidelines
Recognising the complexity of such investigations, The National Homicide Working Group has been part of a multi-agency working group led by the Royal College of Pathologists and the Royal College of Paediatrics and Child Health to produce revised guidelines entitled Sudden unexpected death in infancy and childhood to help support all those agencies who are involved in cases of sudden infant deaths.

The original guidelines published in 2004 followed high profile cases of miscarriages of justice involving the prosecution of mothers for causing the deaths of their babies.

These events raised serious concerns about the role of the expert witness in court, issues about standards of proof, the quality of evidence and about the procedures adopted for the investigation of sudden unexpected deaths of infants.

Baroness Helena Kennedy QC is Chair of the Working Group said the report takes a fresh look at how agencies can investigate unexpected deaths in infants with ‘thoroughness, care, compassion and to the highest possible standards.’

The implications for the SIO of the new guidance are significant. As Det Chief Supt Wessell emphasised the need to maintain currency of knowledge, particularly as the crimes are so infrequent, is important, “You cannot expect to go into one of these investigations ‘cold’, you have to be able to ask the right questions of our health colleagues as part of a joint investigative approach”

During the 12 years since the last protocol, medical science has now moved on and the revised protocol sets out to reflect these changes.

Trends
Overall, the number of natural deaths of children under the age of two has reduced nationally largely due to advances in medical science. However, while homicide prosecutions have remained low they are static which means that proportionally to overall death numbers the number of child homicides has actually increased.

Det Chief Supt Wessell explained that while these statistics are important, SIOs should approach with caution and avoid presuming that all child deaths are as a result of homicide.

“Whilst we do advocate a low threshold of suspicion, we also advocate care and compassion. One of the most unique aspects of investigating child homicide is that the vast majority of offenders are from the family. This means that it’s difficult to obtain forensic evidence as there will always be DNA from the parents on the dead child. Therefore other approaches apply which might not sit naturally with the SIO”.

Parents
The protocol advocates that even if an SIO suspects the parents of a death child then they should be allowed to cuddle their child in the hospital under supervision.

Due to the fact that there are often no visible injuries in the aftermath of a child death it can often take months to investigate.
“Child deaths can be so difficult to investigate as there are so many early decisions and pitfalls than an SIOs is faced with that can often mean the difference between a homicide and a natural death outcome” said Det Chief Supt Wessell.

“Our involvement can leave a real lasting legacy on the family.”

**Dignity**

As a result, the protocol advises that any unexplained child death should be a joint police investigator and a child paediatrician response from the outset with a joint scene visit within the first 24 hours after the death.

It also advises that during the initial response, officers should refrain from using blue tape and visible scene logs at the scene and to treat all parties with dignity, regardless of suspicion. Refer to the child by its name and avoid language such as “the body” or “the victim” around the parents and family members.

The first responder should always be a plain clothes officer instead of a uniformed officer and there should always be a joint post mortem carried out by both the forensic pathologist and paediatric pathologist.

**Cold Cases**

Another significant challenge for investigators is that advances in medical science now mean that a child that has been injured could now survive while in the past they would have died. However, this could lead to the child suffering serious repercussions 15 to 20 years later that could result in its death.

Det Chief Supt Wessell advises SIOs to be very mindful of this and to ensure that everything is photographed and that all evidence is written clearly in the policy book to ensure that officers in the future are given as much information as possible about the incident.

He points to a recent case in a UK force where a cold case was thrown out of court because officers could not produce the original audio recordings of the investigative interview.

He also points out that it is essential for child protection officers to carry out the investigative interview of suspects as they are used to speaking to people who injure children.

**Future**

Whilst, he acknowledges that best practice does exist in some forces in the UK, that this is piecemeal and that more needs to be done to standardise the policing response in future.

The National Child Death Investigation Group hold an annual symposium event to promote best practice and provide support for SIOs. They are also working closely with the College of Policing to provide supportive investigative advice for all elements of the policing response.

Det Chief Supt Wessell hopes that the revised protocol will help highlight the problems, pitfalls and best practice associated with Sudden Unexplained Death in Infancy and will ensure that the police service and other agencies will continue working to maintain a professional response and to provide justice for child victims and their families.

The Netherlands Forensic Institute (NFI) is at the forefront of international science and technology innovation. CEO Reinout Woittiez reflects on his organisation’s successes and sets out his vision for the future.

Tell us more about your career before you became CEO of the NFI.
Originally I’m a biologist, the last few years I was CEO for the Environmental and Safety Agency at the Amsterdam Metropolitan Area. I studied biology at Wageningen University and Research Centre.

My former positions included working as Deputy Director-General at the National Institute of Public Health and Environmental Protection (RIVM), and as Director of the Environment and Safety Sector, also at the RIVM.

Before that I worked amongst others as Director Investigations at the General Inspection Service of the Ministry of Agriculture.

Environment and safety have been the key themes in my career. At the Amsterdam Agency, I examined the set of needs in the area of environmental safety, such as safety in the harbour, safety at the subway stations, car pollution, noise pollution etc.

These needs had to be translated into customised licenses. When I look at the NFI, our focus will be more and more on scientific sound ways to find and report on traces. In addition to this, my sense for political/administrative matters in combination with science comes in useful.

What are your aims and objectives as CEO of the NFI?
The NFI must focus on a proper supporting role in the forensic domain. Continuing innovation by science and technology will enable us to help the criminal justice system in the long term, by safeguarding locating and reporting traces according to the widely accepted new standards of science and technology.
In the criminal justice system one should say: the NFI helps us to make our work easier and more effective.”

**What do you consider to be the main role/function of the NFI?**
The NFI has a supporting role in the forensic domain: To make the professional work of our partners in the justice system more efficient and effective (i.e. using scientific sound methods on an efficient way).

- To underline the above I have joined the advisory council of CSAFE, the new American academic consortium for forensic science, as an adviser. This appointment emphasises the strong forensic links between the Netherlands and America. The NFI’s role in CSAFE not only makes a valuable contribution to CSAFE’s development, but also further enhances collaboration with forensic institutes and academic institutions across the world, and especially in the United States”.

**What do you consider to be the current challenges in forensics internationally?**
The boost in technology pinpoints us as chain-partners to focus and choose the most relevant position in the chain. Mass-work will demands other expertise than scientific safeguarding.

The differentiation between positions has to be compensated by new ways of cooperation in the chain.

We have to reconnect as partners, to close the gap between science and application in the field, a gap that is deepening in high speed.

The novelist Foer said: “Ask a medical doctor to tell more about your unborn child and you get information. Wait and see what happens at the moment of birth, and you will get a miracle.”

Science is bringing objectivity in the forensics and thriving out ‘the miracles’ of craftsmanship.

A dynamic and changing society creates new forensic evidence and trace patterns and new forms of crime, the challenge is to keep up with these changes to ensure that you provide added value through the forensic portfolio you offer.

And as an exponent of this the forensic community needs to embrace and invest in the forensic investigation of digital evidence. Another challenge is to keep up with the developments in science and to create an ecosystem that allows you to quickly and constantly introduce new science and technology in your casework.

**How can an organization like the NFI address these challenges?**
Our motto is to reconnect, reconnect to our partners in the criminal justice system, reconnect to science and reconnect to society. We need to be outward looking and embrace collaboration.

**What do you consider to be the current opportunities/positive aspects about forensics internationally?**
There is a lot of interest to further strengthen forensic science and this creates opportunities for new international research and development collaboration (see for instance CSAFE and NIST in the USA), we should take on the challenges with the international forensic community, there is a tremendous potential out there.

**How important is it for you as an organization to combine research expertise with practical application?**
Do you see it as important that your work is as relevant as possible to police and other relevant organizations?

It is essential in the end all innovation efforts should provide new opportunities for forensic investigations to assist law enforcement and the rule of law. We do not just invest in forensic science to create nice scientific papers and to boost our image, we invest to create the next generation of methods that solve crime (and the next generation of forensic talent as well).
The challenge for forensic organisations worldwide will be to keep up the high scientific standards in this fast developing world. My feeling is that we should more and more focus on our “reference-role”:

Let the application on to the field, it is their unique selling point, and we should help them safeguarding the proper methodology and integrity of data-storage and use.

**At present forces in the UK are working towards accredited standards in forensics and digital forensics. Is this something you think is important for the international forensic landscape?**

Yes, it is very important to have standards and accreditation to ensure that new methods are used in a robust and trustworthy manner in actual case work.

Whenever possible the NFI will conduct its casework under ISO17025 accreditation and we also adopt the ISO17025 framework when we conduct complex specialist case work.

During the coming four years the NFI and the CTIT of the University of Twente (UT) are going to set up an ISO standard to validate methods for interpreting forensic evidence. This will eventually make it easier to compare and exchange forensic research results between institutes.

**What current projects are you particularly proud of as being unique or innovative?**

The strongest examples we have when it comes to reconnecting and added value for the criminal justice system are our NFiDENT en HANSKEN solutions.

We are creating and implementing forensic data platform solutions that allow police officers to perform their own forensic investigation, both in the field of drug identification (NFIDENT) as big data digital evidence (HANSKEN).

This is revolutionising the way forensic institutes provide their expertise. With NFiDENT the reconnecting pathway with the chain partners (the National Police) has developed in the proper way: They analyse drugs on location in one hour within strictly controlled circumstance and under supervision of the NFI, that takes care of the continuously safeguarding of the apparatus, the methodology and the chemicals used.

I am also proud of our longstanding collaboration with the University of Lausanne, we work with them on the use of Bayes Nets and complex forensic interpretation of evidence at activity level.

This is also an important development in the forensic community: forensic evidence needs to be evaluated at activity level because they were also created at activity level!

**Looking to the future, how do you see the role of the NFI developing?**

When looking to our NFiDENT en HANSKEN technology I foresee a future where forensic institutes will develop and maintain ‘do it yourself’ forensic investigative methods. The required robustness and forensic interpretation is all part of the method and instrumentation.

The need to be a technological expert to perform forensic investigations will diminish in due time and will shift toward the need to the domain of information handling from crime scene to court and our technology will have to ensure you that can do this properly without being an technological expert.

Through the use of forensic databases and platforms we will also be able to conduct forensic intelligence studies that will allow us to provide valuable information to design effective policies to combat crime.

For further information visit: www.forensicinstitute.nl
The rise in payment card use and the growth in the ‘cashless society’ can provide investigators with untapped opportunities to glean valuable intelligence. Financial investigation expert Albert James Galloni reports.

From low-key beginnings in the 1960s, payment cards including debit, credit and pre-paid, have steadily risen to the point of challenging cash supremacy in the UK. In 2015, 78 per cent of all retail spend in the UK was done using cards and the total number of daily transactions hit 34.7 million, Cards have evolved from a tool for high value payments to a convenience item.

Potential
The key benefit for investigators driven by this growth is the often untapped full potential that the data behind each transaction yields as well as the insights offered by a holistic view of the same data.

In order for investigators to fully appreciate the potential held by payment card data it is important to understand exactly how the cycle works and which party holds data.

Online
Plastic payment cards are provided to customers by ‘issuers’. Issuers can be banks, lenders or issuers of pre-paid cards. Once the card is in circulation, the ‘card-holder’ can use it to pay for goods and services with any business either with a card reader or the ability to take payments online.

Data Detective

The 1970s came up with the Electronic Funds Transfer System (EFTS).

Transaction
The crux of EFTS – a mechanism that reminds of the current card network with its ‘stored value’ and ‘points of sale’ – was its ability to record not just financial intelligence linked to spend data (which can be analysed to gauge, amongst others, spending power and personal preferences). Its central feature was its inherent ability to know where a target is each time a transaction is processed within the network.

In order for investigators to fully appreciate the potential held by payment card data it is important to understand exactly how the cycle works and which party holds data.
These businesses obtain their facility from so-called ‘merchant acquirers’ who in turn call these clients of theirs ‘merchants’.

Merchants (each with a unique ‘merchant account’ and a ‘merchant ID’ for each location) collect individual payments which are then cleared in the background by the merchant acquirer before, usually an average of three days later, the day’s total transactions are settled into the merchant’s bank account.

**Premier League**
Since merchant acquirers are subject to the same Money Laundering laws as banks, each merchant is subject to a full ‘Know Your Customer’ (KYC) process and acquirers are expected to monitor transactions. This was relevant in a case which hit the headlines featuring a Premier League team.

In this instance, the individual who was eventually found guilty had obtained a Chip and Pin processing facility using an alias. That was the same name given to the victims who had been defrauded using the suspect’s card reader.

Using the KYC on file as well as the data (time and location) it could have been possible to plot the suspect’s presence in the place and at the time when the fraud offence was committed. It could also have been possible to see that a card belonging to the suspect had been used for a ‘test’ transaction (usually 1p or £1) upon receipt of the terminal.

This particular ‘test’ behaviour is extremely useful when attempting to identify the individuals actually in control of the reader required to process payments.

In one case that I investigated, a network of six seemingly unconnected merchant accounts had been set up and used to process compromised transactions. Despite no obvious surface links between the entities, it emerged that the same payment card had been used to ‘test’ five of the six facilities.

**Victims**
A check with the ‘issuer’ returned the details of an individual. A further check on the second card used returned a different name linked to the first suspect using social media intelligence.

A reverse usage search against both cards identified a seventh, yet unused, sleeper facility ready to be mis-used to receive criminal payments. In total, seven victims of ID theft could be identified.

Time and location data is also vital in testing or corroborating theories around suspects and their modus operandi. In a relatively straightforward case of suspected money laundering investigated by the author, a suspect’s entire laundering journey was plotted using transaction data.

Having received suspected proceeds of crime
into a card (in order to meet ‘Phase One’ of Money Laundering, i.e. the placement of criminal money into the financial system), the main suspect took a short journey from her base to a nearby town to dissipate the first portion of suspected criminal funds (‘Phase Two’ of Money Laundering, or layering) with two seemingly unconnected merchants.

The velocity in processing payments (two separate payments into two separate facilities within less of a minute of each other despite the second premises allegedly located a mile away from the first) indicated collusion and the strong likelihood of both card readers being in the same premises.

This was followed by further dissipation twenty or so minutes later approximately fifteen miles away from the first location. At circa 45 miles per hour average speed between point A and point B, that was not just consistent with traffic at that time of the day in that location but could’ve also been used for reverse interrogation of CCTV.

A third payment was subsequently completed at a third compromised premises following a stop at the branch of a fast food restaurant chain; a chain where the suspect consumed meals for a total of 15 days each month at one particular branch always between the hours of 2pm and 3pm.

Therefore, it provided investigators with a crucial piece of information that could assist, for instance, with planning surveillance. All without leaving one’s desk.

**Lifestyle**

Lifestyle intelligence is one area in particular where payment data can make an impact. Empirical evidence suggests that most card-holders tend to unwittingly create patterns of usage that betray their lifestyle.

They tend to purchase the same coffee (identified by the same transaction value) at around the same time (transaction time stamp) from the same premises (identified by merchant ID).

Card-holders also tend to reserve most small, impulse and top-up expenses for outlets within walking distance of their residential premises and work premises. This can assist identify premises of interest previously unknown or even link associates through analysis of the same or similar usage.

**Persona**

Online spend is of particular interest since there appears to be a tendency for individuals to form the opinion that their ‘online persona’ can be kept detached from ‘real life’. In that respect, it is not uncommon for the purchase of ‘niche’ products online using cards that an individual may decide to use cash for in the face-to-face environment creating a false sense of detachment.

As electronic payments become more commonplace and cash diminishes, investigators are offered a unique opportunity to maximise their knowledge by the sheer amount of data inherent in each transaction.

Raw data can place suspects (card-holders), instruments (cards) and criminal assets (funds) at a given time, in a given place. Daily patterns can map out a whole day’s movements from the comfort of one’s desk. Behavioural analysis of historical patterns can assist in building a lifestyle profile but also help predicting a subject’s next move.

**Author Biography**

Albert James Galloni is the Money Laundering Reporting Officer for a London-based global payments firm and a freelance FININT (Financial Intelligence) and OSINT (Open Source Intelligence) Analyst and Investigator.
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Vulnerability in Investigations Conference
– an SIO’s guide

Identifying and managing vulnerable victims and witnesses to ensure a professional investigation

18 May | Rothley Court Hotel | Leicestershire
As an SIO, are you geared up to dealing with vulnerable people and formulating an effective strategy?

The growing complexities of today’s investigations puts greater onus on you the Senior Investigating Officer (SIO) to be able to identify and manage vulnerable people to ensure a fair and professional investigation that holds up to scrutiny in court.

History has been littered with examples of cases that have failed due to issues around vulnerability. Over the past year, the vulnerability agenda has stepped up a gear – Her Majesty’s Inspectorate reported that forces need to do more to improve on the way they deal with vulnerable people.

Forces are now formally assessed around their approach to vulnerability and the buck stops with the SIO who is responsible for the overall effectiveness of an investigation.

The Investigator is hosting this exclusive conference that is specifically tailored to the Senior Investigating Officer in all major crime investigations who has the responsibility of managing vulnerability issues.

During the day, we will look at what the whole area of vulnerability means for the SIO.

How does it impact on the management and strategic direction of your investigation?

How can you ensure you identify and manage the needs of vulnerable victims and witnesses to ensure a professional investigation?

What are the problems and pitfalls as well as current legislation and thinking?

**Topics covered include:**

- An exclusive look at the new definition of vulnerability and national training package that is being launched by the College of Policing this year with a discussion about what it means for the SIO

- Exclusive input from Her Majesty’s Inspectorate of Constabulary about the nature and extent of the current challenge and picture around the country

- Practical advice from an experienced SIO on formulating your vulnerability strategy to ensure an effective investigation including a lot at the problems and pitfalls and how to mitigate them

- A discussion around the differing interpretations of PACE Code C – mentally vulnerable - and the need for appropriate safeguards

- A look at the role of the registered intermediary

- Key considerations around investigative interviewing

- A look at the Psychological challenges around understanding vulnerability and risk and advice on Safeguarding your investigation and case building for court

**Booking and venue details**

**Venue:** Rothley Court, Rothley, Westfield Lane, Rothley, Leicestershire, LE7 7LG. Accommodation is available at the hotel for a discounted price of £74 B&B, please call the hotel on 0116 237 4141 (option 4) and quote The Investigator. Always check on comparison websites first as the rooms may be cheaper.

**Details:** Registration 9am, start time 9.30am, finish 4.15pm. Refreshments and lunch are included in the price

**Cost:** £265.00 per delegate.

**Booking:** Please send the delegates name(s), email address and purchase order to info@the-investigator.co.uk or telephone 0844 660 8707 for further information.

Payment can be made by debit/credit card.
Our expert line-up of speakers include:

David Tucker, Head of Crime and Criminal Justice, College of Policing. David is leading the current work to formulate the official definition of vulnerability and will be responsible for rolling-out vulnerability training to investigating officers across the country. Prior to this role, he was a Met officer for 30 years and worked at the forefront of the force vulnerability work in areas including counter terrorism, diversity and community policing. He was also Head of Policy at the NSPCC where he championed the rights of vulnerable children and young people.

Mike Cunningham QPM, is Her Majesty Inspector of Constabulary with responsibility for effective leadership and local policing. His recent inspectorate report raised concerns about how forces are dealing with vulnerable people and he has strong views about how the policing response can be improve. Prior to his role at the HMIC, he was deputy chief constable at Lancashire Constabulary and was then appointed as Chief Constable of Staffordshire Police

Brendan O’Mahony, is an expert witness, registered intermediary, lecturer and trainer who is considered to be one of the leading authorities on vulnerability within criminal investigations as well as providing input to police forces around Achieving Best Evidence. He is registered with the Health and Professional Council as a Forensic Psychologist and current working on assessments for Parole Board oral hearings and expert witness court reports. As an expert witness Brendan has been given the opportunity to review and comment on police witness interviews where vulnerable witnesses have had a Registered Intermediary present. He also examines police suspect interviews as part of his overall assessment for court reports.

Brendan has completed his Professional Doctorate in Criminal Justice (D(Crim)) at the University of Portsmouth. His research focused on the role of intermediaries with vulnerable defendants. He now lecturers at London South Bank University, Lincoln, Sheffield Hallam and the University of Liverpool.

Gary Ridgway a former Detective Superintendent with Cambridgeshire Constabulary where he led a number of high profile complex multi-agency proactive CSE operations including Operation Erle – the high profile investigation into sexual grooming in Peterborough which led to the conviction of ten offenders.

He was the PIP 4 SIO for Operation Clover in Rotherham, a successful multi-agency complex non recent sexual exploitation enquiry which concluded in February 2016.

While a serving police officer he was an active SIO and has a broad range of experience across public protection, generic investigation work and covert policing. His areas of responsibility include supporting good quality multi-agency working, ensuring that statutory processes are flexible enough to respond to adolescent victims of CSE, and developing victim management structures able to respond effectively to large numbers of adult survivors.

He is now an independent Assistant Director with Rotherham Metropolitan Borough Council. He is contracted by the Council, South Yorkshire Police and the National Crime Agency to provide tactical and strategic advice to these organisations in respect of current and non-recent Child Sexual Exploitation in Rotherham.

Dr Lynsey Gorna is a leading forensic psychologist Lynsey Gorna is a leading psychologist who is currently working in the field of Applied and Forensic Psychology at the University of Leicester. Lynsey provides professional advice and expert guidance to a number of police forces and has published papers in the area of investigative interviewing, deception, and psychological profiling.

She has worked extensively with forces and other agencies providing advice, training and consultancy in the areas of child sexual exploitation, public protection, vulnerability, and complex sexual offending. In addition she has conducted research in the areas of homicide prevention, kidnap, organised crime and firearms, and most recently revenge motivated acts developing a practitioner model for use in secure and community forensic settings.

Detective Inspector Mark Cuddihy, Management Of Sexual Offenders and Violent Offenders Team, Leicestershire Police.

DI Cuddihy has worked with MAPPA (Multi-Agency Public Protection Arrangement) offenders since 2009 and has overseen sex offender management , domestic abuse and CSE.

He has worked solely in sex offender management since 2012- I have worked on the ARMS (Active Risk Management System) and its development since 2013 and sits on the national MOSOVO and ARMS working groups . I am a qualified national trainer in the ARMS model and MOSOVO
By 2020 it is estimated that the global internet of things (IoT) market will have grown to more than $1.7 trillion. According to a study by Gartner, by the end of this year alone the number of IoT devices on the planet will have reached more than 4 billion. It is not unreasonable to suggest that by the end of this decade, these devices will outnumber humans.

Such exponential growth has facilitated two major developments. It has boosted technology markets around the world and it has also warped the landscape of cyberspace. The information superhighway that constitutes our digital communications can now be accessed through a plethora of different tools.

Superhighway
From fridges and cars to medical instruments and children’s toys, the IoT has given rise to an era in which almost every technology is being gifted with a connection to the internet, causing this superhighway to grow and become multifaceted.

For the cyber security industry, this has made cyberspace increasingly difficult to defend with existing security methods having remained relatively stagnant in comparison to this rapid evolution.

Artificial intelligence is one of the few technologies that is part of this new era of connectivity and therefore may offer a solution to the underlying problem within the IoT sector.

Capacity
This problem stems from the lack of security on IoT devices, a problem exacerbated by the sheer number of such devices. The vast majority of devices sport low-end processors and have limited capacity. Some altogether lack the capability to be extended with security software.

When you’re competing for processing power and space, security is either a secondary consideration or not considered at all by many manufacturers. This has seen the IoT become a prime target for cyber-attacks and is regularly exploited by cybercriminals.

Hacked
Take healthcare. Patient monitoring systems are becoming connected to allow for
continuous tracking and potentially, automated care routines. Yet there is proof that these can be hacked through a simple USB drop, providing a route to then infiltrate the wider hospital network.

**Connected**
The construction industry is undergoing similar transformations as a result of the IoT revolution. Building management systems (BMS) are being installed within constructions, allowing buildings to become more connected. Called Building Information Modelling (BIM), this new industry is expanding and is seeing technologies placed within constructions to track use across their lifespan and allow for better management of facilities. IoT is now a catch-all term that is not necessarily limited to just ‘things’.

Infrastructure itself is becoming part of the internet, expanding cyberspace on a grand scale.

The combined factors of intense growth and little regard for security has created an interconnected network with numerous vulnerabilities that stretches across the globe and is allowing compromised IoT devices to frequently become staging posts for more serious hacks in networks.

**Malicious**
Most recently, IoT devices were used to host malicious lines of code that served as a launching pad for a series of DDoS attacks on popular websites. Unknown perpetrators gained access to thousands of home devices by hacking easy-to-guess default passwords, hijacking the devices and using them to down popular websites such as Twitter, Reddit, Spotify and many others.

Traditional security measures are not always effective in dealing with this rapidly emerging threat.

But recent strides in artificial intelligence have the potential to provide a new level of advanced cyber security that could prove highly effective in contending with the unconventional and dispersive nature of IoT cyber-attacks. These programmes sit within systems, adapting their behaviour based on what they experience within that infrastructure.

The potential this technology has for defending businesses is phenomenal. By studying an organisation’s network the programme can determine what characteristics of the environment are abnormal. Systems using artificial intelligence will gather information about the network and connected devices and subsequently seek out anything that is out of the ordinary.

**Traffic**
They can monitor incoming and outgoing IoT device traffic to create a profile that determines normal behaviour of the IoT ecosystem and react to the slightest irregularities in a way that traditional security software is unable to do. Machine learning developed for this purpose mirrors the immune system of a human, allowing a system to detect anomalies and adapt to cyber-attacks it has not recognised before.

The rapid expansion of the IoT into various industries has afforded cybercriminals with a new and almost completely undefended attack vector. As a result, cyberspace has evolved and the cyber security industry must evolve with it in order to effectively contend with these rising threats.

Artificial intelligence offers one such solution and may provide the answer the cyber security industry is looking for. These advanced technologies have the potential to offer the appropriate defensive needs against a threat that is growing and altering very rapidly.
When the clock is ticking, Magnet AXIOM from Magnet Forensics uncovers the evidence quickly. So investigators can spend less time searching and more time building cases. And uncover the truth.

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Never before has the performance of Senior Investigators and other police leaders come under such scrutiny. Business coach Lynn Scott provides some sage advice more effective leadership in 2017.

If 2016 taught us anything, it’s taught us that nothing is predictable. The boat has been rocked, and it’s going to keep on rocking in 2017. This has a huge impact on everyone who leads and manages leadership teams.

Because ‘same old, same old’ just isn’t going to work anymore.

I’ve worked with more than 60 leaders and a variety of senior teams in fast-growing businesses, SMEs and the public sector in 2016. The organisations differ vastly but each one is continually challenged to deliver more with less when we’ve no idea what might be round the next corner.

I believe that with so much uncertainty it’s easy to fall into one of these three traps – none of which benefits us or our teams:

1. Feel like a rabbit in the headlights and do nothing;

2. Focus on the minutiae and detail that is right in front of our noses (what I call our ‘busy-ness comfort zone’) and avoid trying to look into the future;

3. Make grandiose plans which we’ll probably have to scrap come March.

So how do leaders move into 2017 and steer their own ships given all the noise, upset, ambiguity and unknowns that we’re facing in the immediate future?

Focus

I believe that there are three things that leaders should focus on in the first quarter of 2017. And they might not be what you think. Forget the latest fad, guru, expert and shiny new object. These are all there to distract
you from what you really need to focus on right now.

Focus on these three things instead:
Manage Your Time, Focus and Energy
As someone once said ‘time flies, but you are the pilot’.

So ask yourself and your team ‘what are we doing that is stupid?’ Then stop doing it. You need a ‘to don’t’ list as much as a ‘to do’ list. So stop attending or chairing meetings which don’t move the dial (if you don’t add or provide value, stop going); stop writing overly-long reports that no-one reads (with fancy-shmancy graphics that take ages to produce and don’t add much in the way of information) and stop obsessively checking email. Three times a day is enough for most of us.

Watch the most productive people you know and I can guarantee they won’t be glued to their inboxes and voicemail all day. Stop multi-tasking too. Research shows that every time we move from one task to another and back again, it takes us up to 25 minutes to get back on track. That’s a lot of potential wasted time in a day!

Work hard in ‘chunks’ of time (90-120 minutes) and then take a break. Since I started focusing on one or two key tasks for 90 minutes without stopping, then taking a break for 20 minutes or so (cuppa or a walk round the building!) and starting again I have become more productive than I’ve ever been. And I’m someone who is easily distracted and able to procrastinate if I don’t focus my attention!

Manage Your Team
If your team isn’t working as well as it should then 2017 is the year to sort this out once and for all. Seriously dysfunctional teams often need to be broken up. Poor performing team members need honest feedback and clear goals to help them get back on track – if that doesn’t work; it’s time to let them go. Every -one is waiting for you to take action, here.

And forget those ‘off-sites’ that don’t get to the heart of what’s really holding you back. Rafts and paintballing and reams of ‘actions’ on a flipchart (that, let’s be honest, never actually get done) aren’t going to fix things – at least, not in the long term. So if your team building efforts have had no impact thus far, you need to change tack.

Think about where your team is now and where you want them to be. How do you work on the ‘gap’ in the middle? What
perspectives do other team members have on the team?

What is the collective purpose and goal for which you are all mutually accountable? Is everyone clear on this?
Many teams who are struggling need professional support to get them back on track or help them make some difficult decisions or have some candid conversations. Some worry about the costs involved. But ask yourself this: What is the cost of doing nothing?

Time to Think
Make ‘thinking time’ a key focus area. Start with one hour a week of ‘empty space’ in your calendar. I recommend this to all my clients and they have been significantly more successful without working harder.
I can’t stress the importance of this highly enough. Go for a walk, get away from the office or simply go for a coffee somewhere different.

A quiet meeting room, a coffee shop - I guarantee you’ll get your best ideas when you’re not sitting at your desk. (One client of mine wrote her business strategy – in her head at first – as she went for her early morning swim.

This was something she’d been promising to do for months and had always been ‘too busy’ in the office.)

Many of us say that we constantly feel overwhelmed or overloaded with work - but, if we’re honest, busyness can be comfortable. It’s safe. We can ‘do’ busy. We’re experts. And if we’re busy, we’re important, valued, valuable.

And whilst we moan about ‘too much to do and too little time’ and how exhausted we are (and many people wear exhaustion, it seems to me, as some kind of badge of honour) we stay stuck on that treadmill that never stops.

So what’s really going on here?
I’ll tell you what’s going on: Outside that comfortable zone we’re novices; Or we’re vulnerable;
Or there are soul-searching questions that we daren’t even ask ourselves in case it opens Pandora’s Box. Or we can’t imagine what we would do if we weren’t busy being busy. (Or, more likely, we might have to tackle some of the scary things we’ve been avoiding).

Those leaders that focus on the three key areas above will be more successful without working harder and their teams and organisations will benefit too. And the beauty of this is that every leader can take responsibility for these three things immediately. They are beautifully simple. And with all the complexity around us, simplicity is just what we need right now.

Author Biography
Lynn Scott is an international ICF Master Certified Coach, Team Coach and Leadership expert who supports senior leaders and teams to build leadership capacity one step at a time.

Lynn Scott is an ICF Master Coach, leadership expert and blogger with fifteen years’ experience of supporting entrepreneurs, corporate leaders and teams to be more successful and more productive without working harder. She gets to the heart of what really holds you back, says the things that no-one else dares to say, and provides practical, no BS tools, tips and techniques that work in the 21st century.

Lynn had an international career in the highly competitive and fast moving travel industry which included management roles in Europe, USA and North Africa.

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Investigating and prosecuting offences on the Dark Web

The Dark Web – a challenge for all investigators

17 May | Rothley Court Hotel | Leicestershire
The Investigator is hosting a second workshop on the Dark Web focussing on the investigation and prosecution of offences on this ‘secret’ area of the internet

• A Leading cyber crime solicitors who has worked on the high profile Silk Road investigations joins the expert line-up for this exclusive workshop which provides ‘not to be missed’ advice on how to investigate and prosecute offences on the Dark Web

• Tailor-made exclusively for The Investigator – the experts will provide you with all the latest best practice, case studies, legislation and current thinking to help inform your investigations

• We’ll unveil the latest findings of exclusive research into the extent of current criminality operating on the Dark Web compiled by cyber threat intelligence experts Intelliagg

• Our experts will also access the Dark Web and explore a number of online auction sites that are currently offering illegal goods

The Dark Web – a challenge for all investigators
The Dark Web poses a real problem for investigators as it cannot be accessed freely like the conventional web without the use of specialised encryption software.

As a result, criminals are flocking to the Dark Web to pedal their illegal activity in a range of areas including firearms, drugs, terrorism, fake passports and luxury goods.

Our workshop will provide advice on how to investigate offences on the Dark Web with the emphasis being on ‘how to think prosecution’ from the outset of your inquiries.

The day is aimed at cyber crime and digital investigators as well as investigators working in major crime roles as many everyday investigations now have a Dark Web element to them. Criminals who are operating on the Dark Web are also operating on the surface web and are involved in organised crime gangs and other serious criminality.

Booking and venue details

Venue: Rothley Court, Rothley, Westfield Lane, Rothley, Leicestershire, LE7 7LG. Accommodation is available at the hotel for a discounted price of £74 B&B, please call the hotel on 0116 237 4141 (option 4) and quote The Investigator. Always check on comparison websites first as the rooms may be cheaper.

Details: Registration 9.30am, start time 10am, finish 3.15pm. Refreshments and lunch are included in the price

Cost: £245.00 per delegate.

Booking: Please send the delegates name(s), email address and purchase order to info@the-investigator.co.uk or telephone 0844 660 8707 for further information.

Payment can be made by debit/credit card.
Our expert line-up of speakers include:

**Gary Bradfield, head of Cyber Crime at Cartwright King Solicitors**
Gary is one of the UK’s most experienced solicitors in cyber crime, particularly Dark Web offences and he has worked on numerous cases including the high profile Silk Road investigations.

Gary will be providing an exclusive insight into the cases he was worked on and provide expert advice on ‘how to think prosecution’ from the outset. He will also highlight the potential pitfalls and challenges investigators might face when investigating offences on the Dark Web and provide expert advice about how to address such challenges.

Gary is also an expert on the Computer Misuse Act as well as serious and complex fraud so will give an overview about the current nature of cyber crime offences.

**Colin Tansley**
Colin is a specialist online investigator with over 35 years of investigative experience. A former police officer with an extensive background in Intelligence he retired at the rank of Detective Superintendent having served both in West Yorkshire and Cleveland Police. After three years with the Federation Against Copyright Theft as Director of Intelligence and Investigations he left to set up his own company.

A qualified trainer and lecturer, Colin works both in the UK and internationally to provide expert training and advice on Dark Web and other online investigations.

He runs Intelect Solutions – a company that provide independent investigation and intelligence solutions to a range of law enforcement and private sector organisations.

**Thomas Olofson**
Thomas is a Dark Web expert who has a wealth of experience in cyber crime. He works for leading cyber threat intelligence experts Intelliagg.

He is the author of ‘Shining a Light on the Dark Web’ one of the first studies of criminality on the Dark Web. He is currently working on a follow-up study to assess how criminality on the Dark Web is evolving and growing. He will release the findings of his follow-up research exclusively to delegates at the work.
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