Topics

➢Body Worn Video

➢Advanced Predictive Analytics & Visual Graphics.

➢Mobile Digital

➢Robotics

Introduction to Avon and Somerset Constabulary

1.65 Million population

1,850 square miles

2700 Police Officers
2300 Police Staff

The core city of Bristol

Rural areas such as Exmoor

Body Worn Camera

Why Body Worn Video?

- Maintaining the trust between the public and the police service.
- Increasing evidence led prosecutions.
- De-escalation of public order incidents.
- Reducing Complaints.
- Providing best evidence from an independent source.
- Officer skill enhancement/career development.
- Improved personal safety of officers.

Body Worn Video

Benefits of Use

- Reduction in complaints – 66% reduction since launch.

- Reduction in Use of Force – 20% decrease.

- Public confidence – 7% increase.

- Keeping staff safe – 66% drop in days lost through injury.

- Earlier guilty pleas – 4% increase where BWV used.

The Context we are operating within…

Demand management

Staff wellbeing

Harm and risk

Budget cuts

Productivity

Partnership/collab

A typical Day for Avon and Somerset police…

2348
Phone Calls

2
Reported Missing People

Mental health related calls

> **Police SeanUnderwood** @sean_police · Nov 20
> What a shift.
> 1 x sudden death (Not suspicious).
> 2 x medium risk juvenile #mentalhealth missing person's
> 1 x high-risk mental health missing person
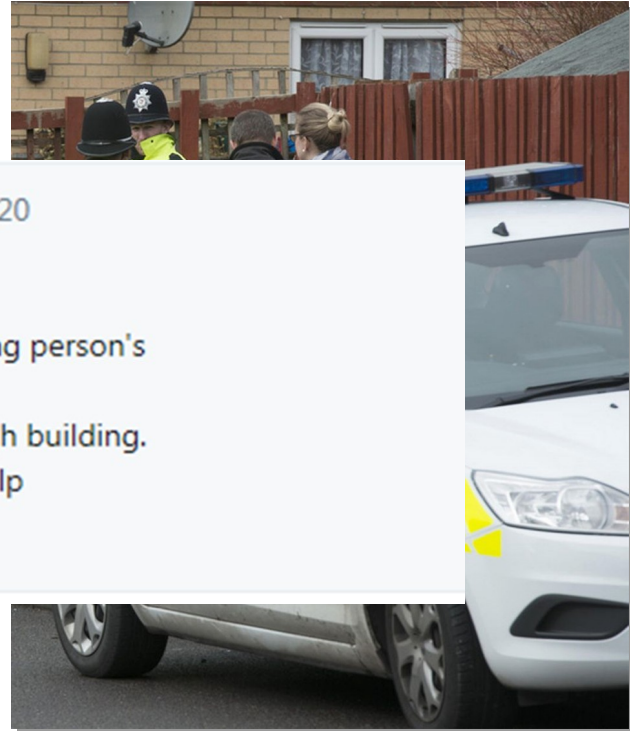> 1 x mental health person to negotiate of a high building.
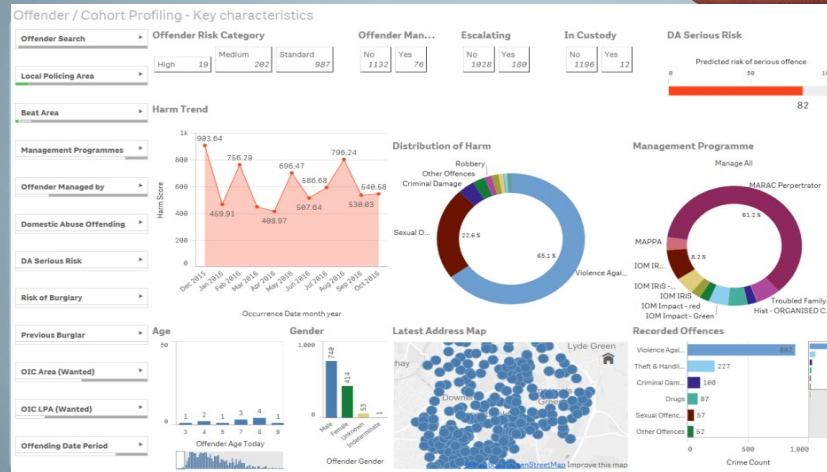> All 4 persons eventually safely now getting help
>
> 💬 3   🔁   ❤️ 56   ✉️

The need to draw insight from large volumes of data

In **12 months** every part of Avon and Somerset Constabulary will be driven through **predictive analytics and visualisation**.
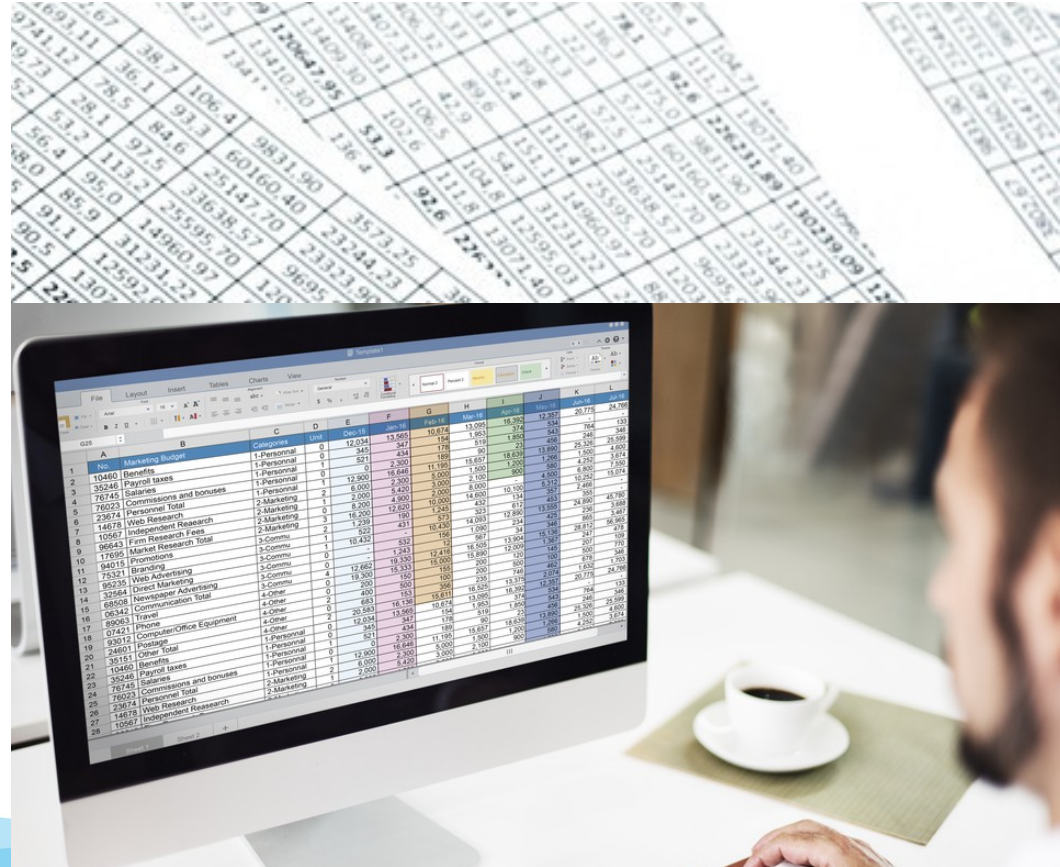

Smart Data creates **Smart Policing**

Past

Before self service analytics and insight…

- Static Spreadsheet/PDF Based Reports

- Only basic questions could be answered via reporting

- Not engaging for staff

- Limited ability to democratise insight effectively

Now

Dynamic, interactive and near real time Insight

- ➢ **Dynamic, Interactive and near real time dashboards**

- ➢ **User driven diagnostic and predictive capability**

- ➢ **Engaging and empowering for all staff**

- ➢ **Business driven data democratisation at all levels**

- Advanced analytics
- Cutting edge visualisation software (app based)
- Self-serve environment
- Near real-time
- Enterprise role out
- Built into operational processes e.g. tasking
- Boardroom to front-line
- Transformational
- Agile, low cost and high benefit realisation
- Presents significant savings opportunities
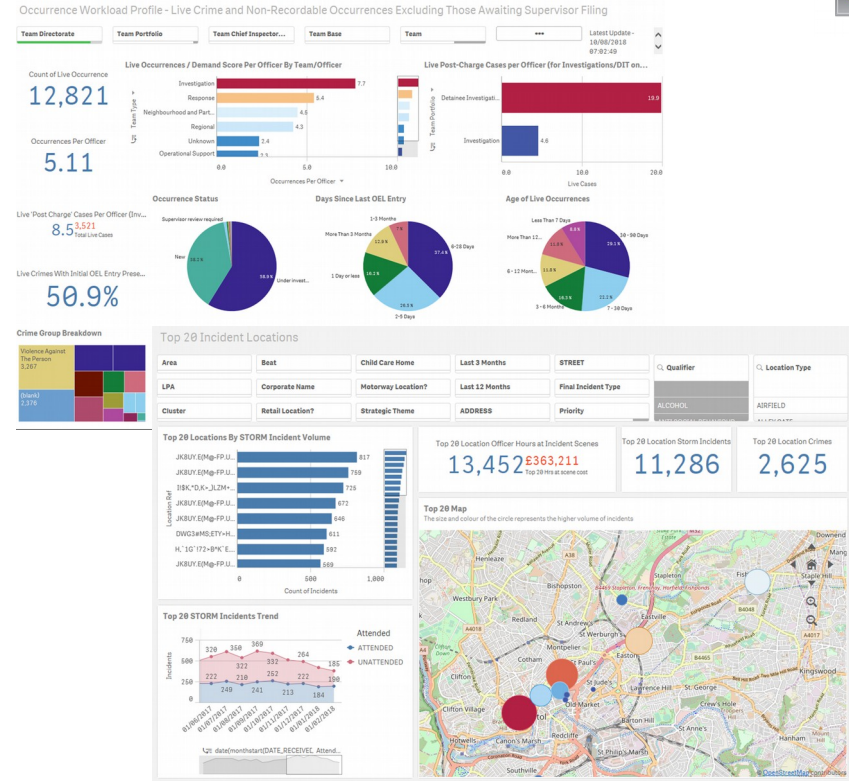
Democratising Insight

The critical people delivering our service! They are thirsty for insight to support day to day decision making...

Operational practitioners
First line managers
Problem Solvers

KPIs

Diagnostics

Operational Data

Executives
Analysts
Researchers

The privileged few, who <u>can not</u> scale the required level of organisational insight.
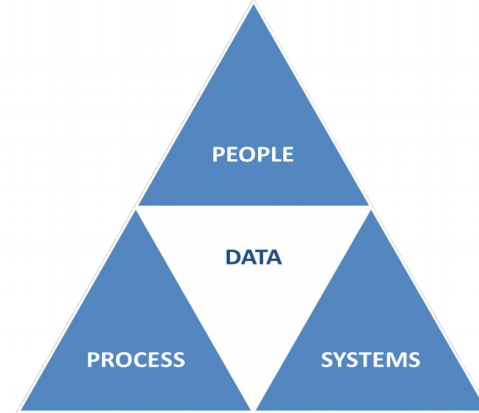
Critical Operational Insight

A 'data-first' culture and the importance of data literacy

This is not just about the technology, the journey also requires us to....

Create a culture and mind-set that is 'data-first', where data-driven thinking is at the core of everything we do – baked in to the DNA of the organisation at every level.

"Data literacy is **the ability to read, work with, analyse and argue with data** regardless of your role, skill level, or the tools you use"

Insight to Action

This ...

Through strong data driven Leadership

Must convert to...

- ✓ **Improved response**
- ✓ **Better service standards**
- ✓ **Reduced harm**
- ✓ **Reduced demand**
- ✓ **Efficiencies**
- ✓ **And so on.**

The Benefits

Benefit Areas

Understanding and reducing Demand

Improved call handling productivity

Better Problem Solving

Tighter Offender / Victim Management

Tighter Case Management

Improving Data Quality

Problem Solving Benefit Deep Dive

Our response to the number of calls relating to missing people and concern for safety from our local hospital trusts.

Qlik used by neighbourhood teams to identify themes and build evidence locally to support problem solving plans.

Led by a local Chief Inspector this project achieved reductions in demand from all six trusts in the force area:

Better Problem Solving

	Concern for Safety/Missing Demand Storm Incidents % Change*
Weston General Hospital	-22.2%
Royal United Hospital Bath	-9.5%
North Bristol Hospital (Southmead)	-16.7%
University Hospitals Bristol	-42.5%
Taunton Hospital (Musgrove Park)	-19.5%
Yeovil Hospital	-2.6%

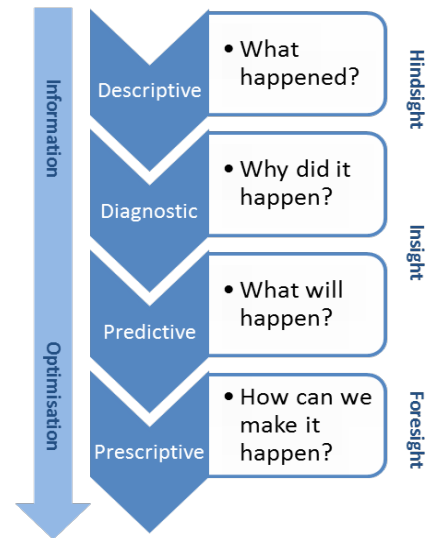*3 months data from Qlik Sense taken on 25 January 2019.

Technology and Creativity – Transforming an Organisation

Data Driven Insight at the heart of the business

A&S IT Mobilisation Expenditure

	2016/2017	2017/2018	2018/2019	2019/2020	Total
Laptops*	£30,000	£2,851,000	£202,000	£1,074,000	£4,157,000
Mobile Devices	£10,000	£1,263,000	£642,000	£166,000	£2,081,000
BWVC	£997,000	£3,000	£313,000	£0	£1,313,000
IT Infrastructure	£644,000	£3,997,000	£257,000	£0	£4,898,000
IT Rollout	£0	£611,000	£576,000	£41,000	£1,228,000
Total	**£1,681,000**	**£8,725,000**	**£1,990,000**	**£1,281,000**	**£13,677,000**

Includes expenditure on desktop replacement

CARING

COURAGEOUS

INCLUSIVE

LEARNING

Mobile Data

RPA at ASC;
A case for automation in policing

Robotic Process Automation (RPA)

- RPA is software automation of business processes using a 'digital workforce' which can be trained to mimic the activities of business users.

- RPA has been explored by Avon and Somerset Constabulary through a recent Proof of Value, a project which has been a **great example of bottom up innovation** and process owner interaction

- The proof of value has **proven the RPA capability against key systems** (Niche, DMS, SAP) and delivered several automated process into non production environments

- Through detailed discovery work, the PoV has identified the potential benefits of deploying RPA technology at the force leading to a powerful business case for its implementation

  - 12 opportunities, out of a total of 54 processes assessed are estimated to deliver **~20 FTE back to the business** if automated

- As well as saving officer and staff time, other significant benefits have been identified

  - **Increased support to victims** through more timely victim referrals and support
  - **Improved data and intelligence** for operational planning through automated linking
  - **Improved compliance** through improved data quality and accuracy

Use Case: Referring Victims of Crime to specialist support

Current process

Officers manually assign victims of a crime to a relevant Lighthouse Support Unit within the Crime Recording System (NICHE)

− Victims are then contacted by their nearest Lighthouse centre and offered the appropriate support

− Volume; approx. 4100/month almost 50,000/year

− Officer Time per case; 3 minutes

Key issues

inconsistent referrals leads to

− missed SLA

− significant backlog in Niche

− impacts victims who may experience a delay in receiving the appropriate support

RPA Process –

Robot will work through central database assigning victims to a relevant Lighthouse Support Unit within NICHE based criteria set by Lighthouse team

Benefits

− Officer hours saved per week – 45

− Increased compliance against the statutory regulation from Ministry of Justice to assign victim within 48 hours

− Lighthouse Support Unit have greater visibility of the workload and can prioritise accordingly

− Victims receive a more timely service from the force

"When you two have finished arguing your opinions, I actually have data!"

Questions?