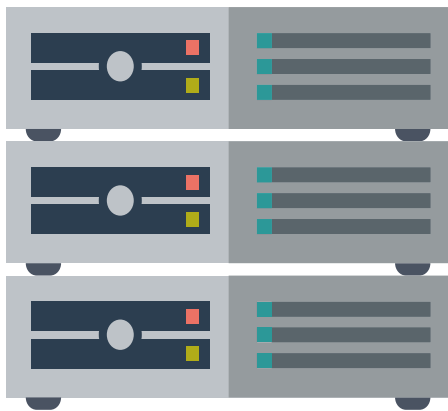6 December 2018

Local government use of data

Monmouthshire County Council
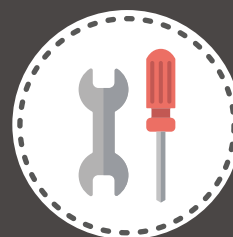
Methodology and structure of this report

The growth of 'big data' strategies in the private sector and the availability of 'open data' has been unprecedented in recent times, and has revolutionised the way organisations make decisions. With the technology available today, and the rate of technological change, data-driven decision-making is becoming the norm rather than the exception. However, is this approach extending to local authorities in Wales?

Given these challenges, this report summarises the findings of the Wales Audit Office national study looking at whether local government has the right building blocks and culture in place to capitalise on the data that it holds.

Part 1 of this report summarises why making use of data is important and is drawn from national research with leaders in data usage in the public sector.

Part 2 - summarises the key issues from data tool responses provided by senior officers and elected members for Monmouthshire County Council

Part 3 - sets out some good practice examples we identified in our research which we believe can help councils make better use of their data.

> **The findings in Part 2 this report are drawn from and based on the collected responses to the Wales Audit Office Data Tool provided by senior officers and elected members in Monmouthshire County Council**

Consequently, it only provides a summary of the views of those council staff and elected members who responded on how the council manages data and should be considered as useful evidence in how the council can improve its use of data.

Consequently, the report should be read alongside the national study report, which provides more detailed findings and makes a series of recommendations for all local authorities in Wales.

Part 1 - Why making better use of data is important

In a period of sustained austerity, there is a pressing need for **innovation** to help local authorities deliver better outcomes with decreasing resources.

Effective use of data presents **huge opportunities** in providing services in the face of these acute and on-going financial pressures.
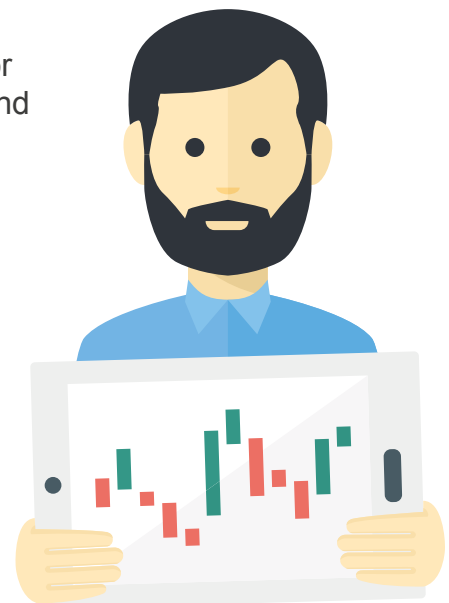
However, our national study found that **local authorities across Wales are slow to develop a culture that values and uses data effectively to improve services and outcomes**.
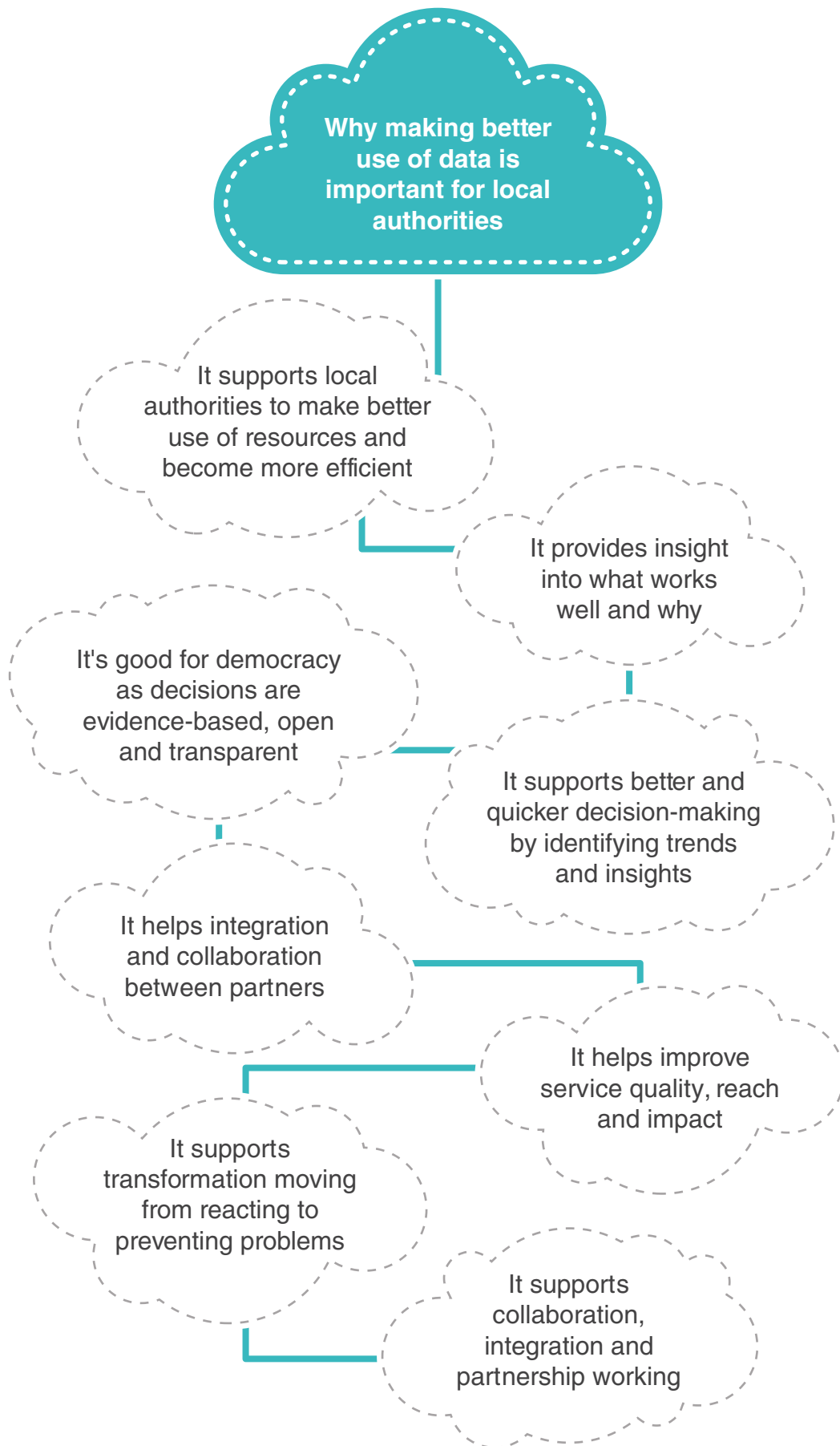
Our national report – **The Maturity of Local Government in Use of Data** – can be viewed on our website **audit.wales**.

The benefits of making better use of data

Being smart and strategic in using data brings many benefits for local authorities, their partners, the communities they work in and the citizens they serve.

Why making better use of data is important for local authorities

It supports local authorities to make better use of resources and become more efficient

It provides insight into what works well and why

It's good for democracy as decisions are evidence-based, open and transparent

It supports better and quicker decision-making by identifying trends and insights

It helps integration and collaboration between partners

It helps improve service quality, reach and impact

It supports transformation moving from reacting to preventing problems

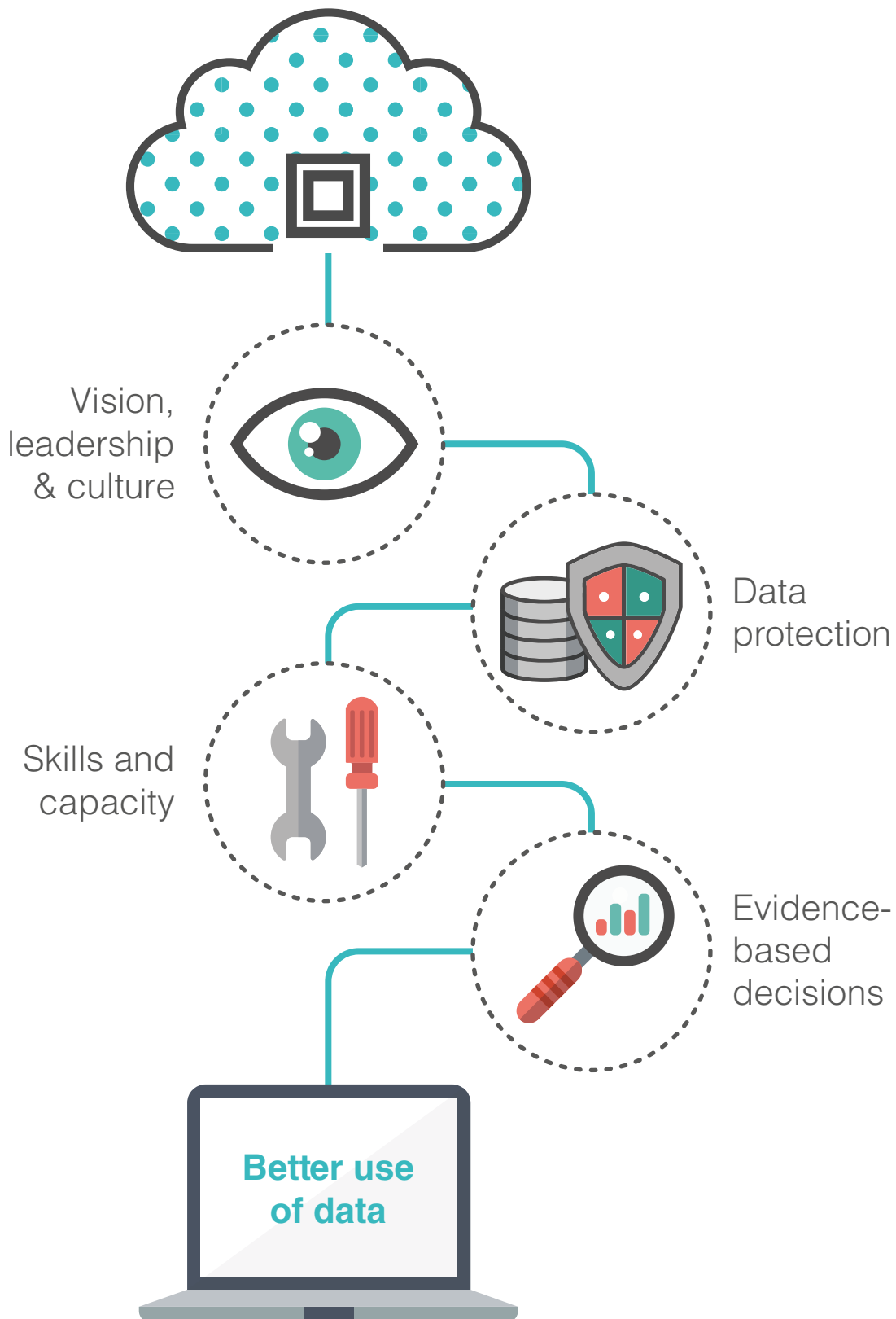It supports collaboration, integration and partnership working

Our national report on the use of data identifies seven key components in making better use of data

From our work, we have identified what we consider to be the key aspects of how well local authorities use data and have set these out in the following table. Overall, we conclude that most authorities are characterised by the descriptors at level 1 and level 2.

Key Characteristic	Level 1	Level 2	Level 3
Leadership	Leadership on data and organisational culture encourages a risk averse approach, which does not value or seek to maximise data usage.	Leaders recognise the value of streamlining and improving use of data, both within the local authority and with partners. The culture in most of the authority has not progressed from 'identifying' the opportunities of integrating and sharing data to actually 'doing' it.	The organisation has a strong leadership culture based on transparency and valuing and using data to underpin decisions. The authority openly shares data and insights with citizens, partners and stakeholders setting out the rationale for choices. Data is valued and used across the authority.
Corporate Standards	Services operate independently in silos, and define their own data requirements. The local authority lacks corporate standards for how services should capture and use data and little integration or sharing of data takes place internally nor externally.	The local authority knows what data is collected by services and has some linked databases, but data networking has developed organically. The local authority lacks data standards and whilst data sharing and integration takes place, it is in narrowly defined areas.	The local authority has corporate data standards and coding structures. The local authority has identified its long-term data requirements and is streamlining systems to reduce duplication and improve accessibility. Data is integrated and coding gaps when identified are addressed.
Integrated customer data	Service users often apply multiple times for services or assistance. Duplication of data is common and some services rely on paper based manual systems.	Duplication is known, but not always addressed. Some standardisation takes place, usually around established parameters such as property gazetteers, but is limited. Most data is digitised but not linked.	Citizens apply once, and services are configured to meet their needs. Data is entirely digitised and regularly cleansed to ensure it is accurate. Data sharing and integration is well advanced. Duplication is kept to a minimum.

Key Characteristic	Level 1	Level 2	Level 3
Data Protection	Data protection legislation is understood and complied with, but is a block to sharing data.	Data protection legislation is understood and complied with and is not seen as a block to making better use of data.	Data protection legislation is complied with and implementation is supporting the local authority to appropriately share data internally and with other bodies.
Data analytics	Investment in data analytics – segmentation analysis, forecasting and predictive analysis – is limited. There is little capacity and a deficit in skills to improve use of data. There is no or little investment in upskilling staff.	The need to build skills and capacity and invest in making better use of data is recognised, but not always addressed. Improving capacity and upskilling staff is a known risk but progress to address this is slow or limited.	Staff have been equipped in data analytics, and services regularly use data from a range of sources to understand events, predict future scenarios and model potential demand. Data analytics is recognised and valued as a core function and is resourced sufficiently.
Data Driven Decisions	Data is reported and performance is analysed. The focus of performance reporting is limited to local authority service information, is mostly historical and backward looking, and not reported in real time. Data analytics is rarely used.	Data is reported and performance is analysed. The local authority is focussing on monitoring and measuring impact. The importance of data analytics is growing but not embedded or sufficiently developed in most services.	Data is reported and through performance evaluation, corrective action is taken when the data shows a change in direction is needed. The local authority has a record of accomplishment of using data analytics to manage services and is focused on understanding future demand.
Open Data	The Local authority is not using data to effectively support decision-making. Open Data and public reporting is very limited.	The local authority uses data to underpin decisions but limitations in its coverage and analysis weakens 'real time' choices. Open Data is produced but coverage is limited.	Data driven decision-making is well established and accepted as the "way to do things". Open Data is made available in real time and a wide range of organisations use the information to develop new opportunities.

Making better use of data requires...

Vision, leadership & culture

Data protection

Skills and capacity

Evidence-based decisions

Better use of data

Part 2 - Summary of key issues from data tool responses for Monmouthshire County Council

This resource summarises the position of **Monmouthshire County Council** within the context of our national study findings. It also explores some of the barriers identified locally. Overcoming these barriers will help to ensure the Authority and its citizens reap the rewards of better use of data. This resource is structured around four key themes identified in our national report as vital steps in the data journey. These findings are based on an amalgamation of all the data tool responses.

Vision, leadership & culture

A strong data culture and data success are intertwined, and authorities cannot have one without the other. To improve the use of data, authorities need visionaries who recognise the importance of empowering people to take well-managed risks and learn from failure. Local authorities that make the best use of data perceive the wealth of data they hold as an invaluable resource and devote the appropriate monetary and human resources to ensure it is used as effectively as possible.

Data protection

Local authorities are often the gatekeepers of very personal and very sensitive information. They handle all sorts of data on a daily basis, covering everything from income to detailed health and care records. However, using data in the public sector is a delicate balancing act. Local authorities need to protect personal information from data misuse but without suffocating innovation. As a result, many public sector organisations are wrestling with the benefits and risks of data sharing.

Skills & capacity

Local authorities hold a vast resource of insight, intelligence and data that has the potential to drive efficiency, direct resource allocation and fundamentally improve the delivery of services. A mature local authority will use data to improve services and transform their organisation, and will have staff and Elected Members who are skilled and confident data users. Having good data analytical skills to inform and direct resource decisions is a key component of a mature approach to using data.
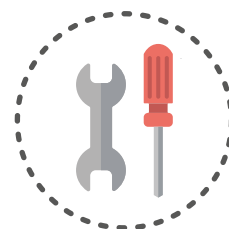
Evidence-based decisions

Data driven decision-making is an approach to governance that values decisions that are underpinned by verifiable data. However, the success of the data-driven approach is reliant upon the quality of the data gathered, the effectiveness of its analysis and interpretation, and the processes established to judge impact and performance.

Data tool responses for Monmouthshire County Council

We ran a suite of six data tools at each of Wales' 22 local authorities to help inform our national local government study. The data tool recipients and the response rates for Monmouthshire County Council are set out below.

Our data tools asked questions against a range of issues relating to the use of data. Comments received shed further light on the barriers the Authority faces to make better use of data.

Data tool recipients	Number invited	Responses received	Percentage responded
Officers	31	15	48%
Elected Members	42	8	19%
Total	73	23	32%

What we found in Monmouthshire County Council: Vision, leadership & culture

The Authority has already experienced some of the benefits of making data-led decisions, for example, in using live service data to assist with budget setting, managing resources and managing performance. A change in culture to develop a more unified and corporate approach will help to build on this and extend the benefits of data-led decisions to all service areas.

The Authority needs a clear data vision. A lot of data is collected but much of it remains either unused or is not linked up to gain a better insight into issues and challenges facing the Authority. Many respondents to the data tool noted that a change in culture and stronger leadership on data would support the creation of an environment that treats data as a key resource.

The Authority already holds a wealth of data, and breaking down departmental silos to integrate data across the Authority will help other services to put it to best use. Completing a data audit to identify who holds what data, for what purpose and how it is used will help the Authority identify how best to streamline and integrate data. Setting corporate data management standards and coding for services core data will support data sharing across different teams and service areas.

What we found in Monmouthshire County Council: Data protection

Local authorities' perception of data protection regulations provide an indication of their appetite to make the best use of data; for example, are regulations perceived as 'a barrier to data sharing', or as 'a framework within which data can be shared safely'? A lack of understanding of data protection regulations is a bigger contributor to risk aversion than the regulations themselves.

The Authority collects data at almost every interaction with its citizens, whether face to face, over the phone or on social media and needs to ensure it continues to protect the information it holds. To address this, the Authority should provide refresher training to service managers to ensure they know when and what data they can and cannot share and update data sharing protocols. A number of respondents to the data tool noted ongoing challenges in sharing information and reporting performance openly.

We asked about the awareness of local authorities' use of personal data in a survey of 750 people across Wales…

Only **36%** were satisfied that the information their local authority holds is used effectively to plan and provide services.

Only **12%** had been told what their council does with their personal data.

What we found in Monmouthshire County Council: Skills & capacity
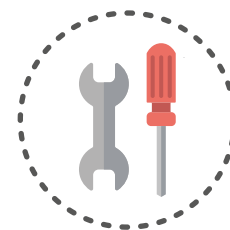
Ensuring adequate resources and sufficient capacity are ongoing challenges for local authorities. However, without upskilling staff to make better use of data, authorities risk missing opportunities to improve efficiency and effectiveness. Investing to make better use of data will result in better outcomes for citizens and create long-term efficiencies for the Authority. The Well-being of Future Generations (Wales) Act 2015 provides the perfect impetus for the Authority to think long term.

Respondents to our data tool highlighted ongoing resource challenges, acknowledging that the Authority needs to do more to develop staff skills and abilities to make the best of the data that is collected. The Authority should map the staff who have a role in analysing and managing data to build and develop capacity in data usage. This will enable the Authority to effectively invest and support the development of staff data analytical, mining and segmentation skills.

What we found in Monmouthshire County Council: Evidence-based decisions

More than ever, local authorities have a need for analysed data to form robust evidence to inform decisions. The Authority has already taken steps in this direction and cites its leisure services, building control and social care data as supporting the Authority to better understand and improve service provision. However, there is also recognition from respondents that other services lag behind.

Data tool respondents have a difference of opinion on whether the Authority uses data to inform decisions and whether this is thoroughly embedded within the culture of the Authority. The Authority should review the range and quality of the information needed by decision makers and the format it is presented in.

Understanding the data and the level of analysis provided to inform business planning and decision making is an area for improvement. The Authority should set data reporting standards to ensure the data that is presented to decision makers is accessible, easily understandable and supports decision makers to fulfil their responsibilities.

Part 3 - Good practice examples for councils to learn from

Our national study report identifies some good practice in how organisations use data across the UK. Some of these examples are included below. You can see the full list of good practice in our national study report on our website audit.wales

## Single 'Gateway' to local authority services

The London Borough of Camden has developed a Residents Index (CRI) uniting information from multiple council data sources to create a single, consistent view of residents across the borough and the council services that they are accessing. In doing this, Camden united previously siloed information into a 360-degree view of residents' service engagement. There have been several positive outcomes from the creation of the CRI, including:

- helping to identify cases of illegal subletting of council housing and in identifying cases of school admissions fraud, thus ensuring that valuable resources go the residents eligible for them;

- enabling the Electoral Services team to maintain an accurate register of electors in the borough. The CRI could validate 80% of data from the electoral roll (which is higher than the 50% rate of the Department for Work and Pensions, which usually validates the council's electoral data); and

- providing critical information to support the council's Multi Agency Safeguarding hub to identify changes in the composition of households of vulnerable children.

Developing data leadership into organisational transformation

Carmarthenshire County Council's Digital Transformation Strategy 2017-2020 recognises appropriate digital technology is needed for the council to save money and improve services by collaborating with partners seamlessly by sharing and using good quality data. The Council recognises that central to improving access to services and supporting the move towards the generation of more open data is building public confidence in robust information security that protects citizen and business data from misuse and cyber threats
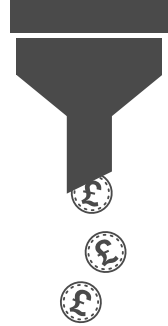
Capacity building to drive a more collaborative culture

Digital Flintshire 2017 – 2022 outlines how Digital Information and Technology will be used to support the County Council's Improvement Priorities and strategic plans over the next five years. What makes Digital Flintshire different from other strategies is the focus on improving the local digital infrastructure, and in ensuring customers have the digital skills to access services and information online. This includes working with local training providers, partners and the third sector to identify and deliver effective customer training to ensure take up of digital services and support inclusion.

Safe and secure data sharing

The Conwy and Denbighshire Public Service Board (PSB) has developed a range of information and policies to encourage safe and secure data sharing amongst constituent partners. The PSB has built on the previous work of the Local Services Board and an Information Strategy and Information Sharing Toolkit. Training material focuses on lawful data sharing including the Wales Accord on the Sharing of Personal Information (WASPI) and the development of a range of information sharing protocols and products. As a result, the PSB is more able to demonstrate how it has used good quality data to derive its strategic priorities for Good Mental Well-being for All Ages; Community Empowerment; and Environmental Resilience. A realistic discussion about the PSB's role was agreed which is to provide leadership and scrutiny within existing structures, rather than manage projects and integrate services delivery.

Using open data to build community capacity and drive economic wellbeing

Data Mill North is a collaborative project originally set up to tackle the challenge of increasing demands and decreasing resources in Leeds. The aim is to enable people and organisations to explore the different complex relationships between the city's services and businesses, by collecting Open Data from multiple sources in a single hub, offering a greater insight into the workings of the city than ever before. The project's three top priorities are to visibly improve health & wellbeing, drive more housing growth & standards and improve travel & transport infrastructure. Data Mill North is now the single repository in the region for all public services to share data, insight and intelligence on a wide range of topics including local public services, detailed business and economic performance and opportunities, adult education, and a high number of datasets and sources of housing information.

The project founders are supporters of the Open Data Institute HQ which was established in November 2013. ODI Leeds works to bring social, environmental, and economic value in Leeds by improving data literacy and skills development. To date the project has hosted 668 events, raised an additional £883k in funding and helped 228 people find better paid jobs. All data sources in the Yorkshire are currently being mapped – including the private, public and voluntary sector.

Data driven decision making to mobilise resources

London Fire Brigade (LFB) operates from more than 100 fire stations across London, and is the busiest fire and rescue service in the UK. LFB developed a Dynamic Cover Tool (DCT) with a private sector provider to assist decision-making in emergency service control rooms. The DCT helps to improve incident and risk coverage and ensures resources are used as efficiently as possible. Dynamic cover is the process of relocating available resources to maintain appropriate standards of risk and response cover across an area. DCT software provides a real-time visual aid to support the emergency control officer in moving emergency response vehicles.

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