

CONSTRUCTING YOUR DATA HOUSE

From foundations
to frameworks

Building a data strategy for public
and private sector organisations

GAME CHANGERS



The Data Era

A Reality for all Organisations Today

Most organisations today, public or private, tiny or titan, have a lot of data. Held across multifarious systems, subject to complex regulations and serving sometimes esoteric purposes, there will be no shortage of the stuff. Despite having a lot of data, many organisations do not have a Data Strategy leaving them unable to capitalize on data assets and vulnerable to breaches, leakages and the tedium of data duplication, confusion and wasted effort.

A Data Strategy is not merely protection from litigation – it is a foundation upon which an organisation can reap the financial and non-financial rewards of its data as well as manage and safeguard it. Our Ipsos' experience in helping our clients build

Data Strategies has shown us that they are, above all, about trust. Trust in the systems data inhabits, trust in the people who use it. In this paper, we outline how an enterprise should approach building a Data Strategy that is as beneficial to corporations as it is to governments, as trusted by consumers as it is by citizens.

The Ipsos Data Strategy Framework, created and used by our Data Advisory Team is a best-in-class methodology for organisations to 'get their arms around' the complexity, velocity, dispersion and crucially, *potential* of their data and derive value from it. The strategy and the principles underpinning it, are agnostic of organisation size, sector and data maturity.

“ Despite having a lot of data, many organisations do not have a Data Strategy leaving them unable to capitalize on data assets and vulnerable to duplication, confusion and wasted effort ”

The Ipsos Data Strategy

What Good Looks Like

The Ipsos Data Strategy Framework was built on the logic that an organisation is positioned to deliver strong returns as well as create advantage that competitors cannot easily replicate when four key pillars are in place. In the public sector returns can be thought of as the strength of economies, the health of citizens and efficient use of public money.

Based on our experience working across leading private and public entities, the strategy is an aspirational state to safely manage data and release its potential.

The strategy consists of four pillars from which gains, commercial or societal, will accrue:



Strong Foundations – data is secure, organised, and accessible at the point of need.



Data Intelligence – data can be used by people in the organisation (not a select few) to drive value.

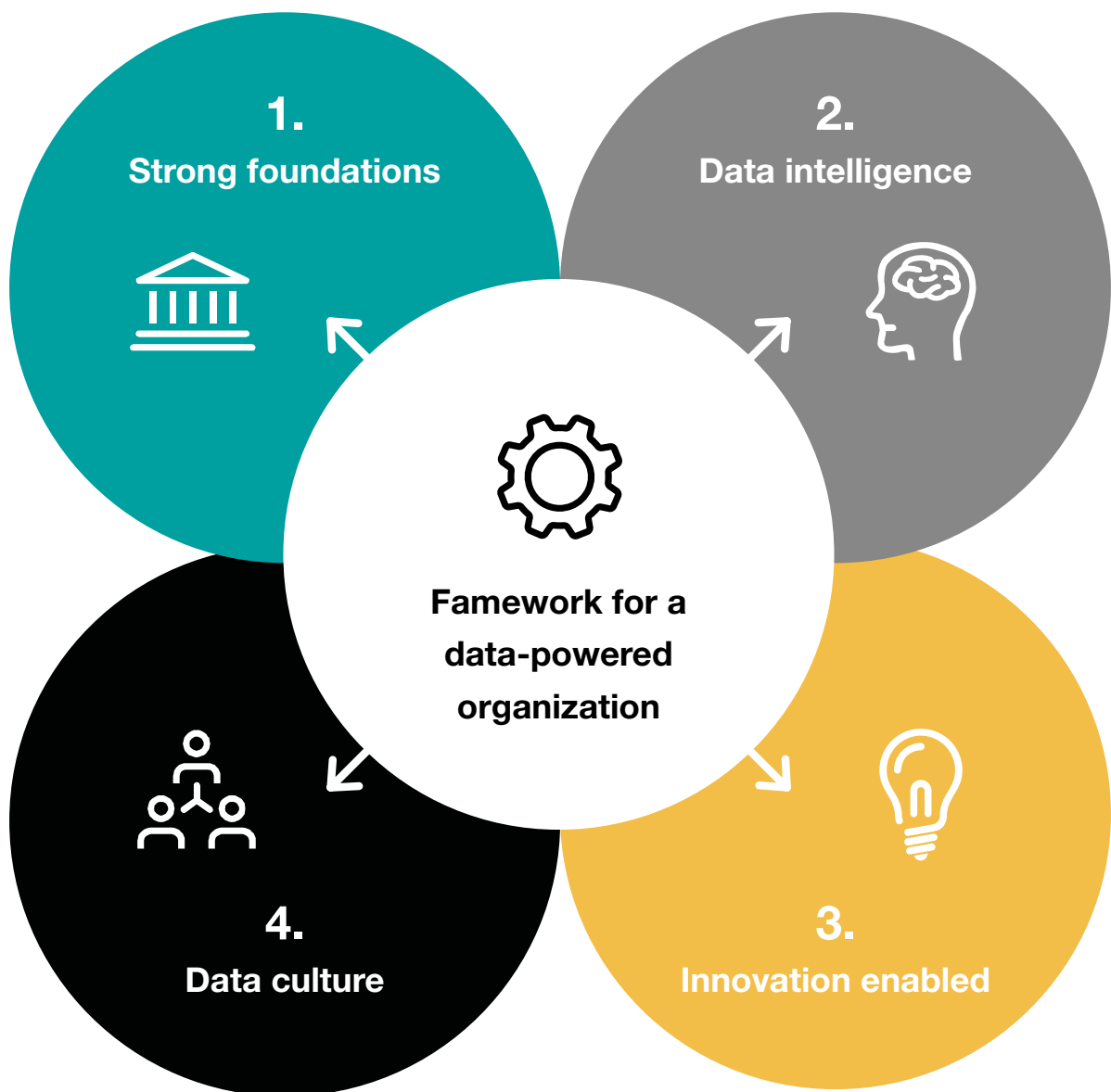


Innovation Enabled – the organisation exploits data to predict future events and help prescribe next best actions.



Data Culture – an agile culture of experimentation, and a commitment to being ‘good data citizens’.

“ The Ipsos Data Strategy is built on the logic that an organisation is positioned to deliver strong returns when four key pillars are in place ”



1. Strong foundations

Get your data house in order!

Data needs to be organised and structured. Accessible at the point of need. Secure. Most fundamentally, it needs to be trusted and data providers need to trust you will hold it securely and treat confidential data appropriately. These are big things to ask and they're only achievable by taking the time and making the investment in robust, resilient foundations.

Access to the right data by the right people at the right time is crucial. A good private sector data organisation will have a system of decision rights and accountabilities ensuring data integrity and compliance. The gold standard model is where the data organisation owns the responsibility for governance but distributes the actions of governance.

Best practice data governance example

Let's illustrate using the example of a finance function in a large corporation: ultimately, the CFO will be the finance data owner. Throughout the finance function, there will be a network of data stewards, maintaining data control and governance on a day-to-day basis. The stewards are people who work in the business and understand both the business and the data over which they hold guardianship and will act as the conduit between the central data organisation and the finance data user community. Should a finance analyst require access to sell-out data, she'll put the request through to the steward. If she finds that the sell-out data contains anomalies affecting the quality, she'll escalate this to the steward.

There is clear data ownership, accountability and points of escalation and support in the finance organisation – leaving finance professionals free to focus on their roles.



Data itself needs to be trusted. The quality, accuracy, and relevance criteria rely on rigorous meta-data (basically ‘data about the data e.g. details of the content, format and structure, job execution logs etc.) Best in class organisations will have a structured approach to data quality with defined quality metrics, a set of data quality procedures and regular scheduled data quality audits.

“ Best in class organisations will have a structured approach to data quality with defined quality metrics, a set of data quality procedures and regular scheduled data quality audits ”

One version of the truth

Data objects in a business exist in multiple departments and systems. Think about where you work. There’s probably a lot of data in a data lake or a warehouse. Probably there’s a lot on different operational systems, hard drives, probably even (whisper it) spreadsheets. Basically, everyone needs to use the same data.

Enterprise-wide data architecture and technical infrastructure as well as rigorous master data will help to enable this. Master data refers to the core data objects around which the enterprise conducts its business. Data that doesn’t change frequently such as product details, vendor addresses, factory locations (as opposed to the transactional data). These aren’t easy things to do. They require investment and specialist skills.

When strong foundations are in place, the benefits are sizable. An organisation will be able to avail of accurate reporting – finance teams don’t have to go to multiple systems and manually manipulate data. They can get what they need easily and focus on their jobs. The business can make quicker, better decisions based on accurate, trusted data.



2. Data Intelligence

Power to the people

The potential of data is released through its people. A company or government body that invests in the data intelligence of its people is one that is investing in its future.

Data skills should not be the preserve of the data team, they should be pervasive throughout the organisation. Whilst technical data skills (e.g. running data migrations or building statistical solutions) are specialist skills held by data professionals, the ability to reframe business questions as data questions need not be.

“ A company or government body that invests in the data intelligence of its people is one that is investing in its future ”

Data Capability Case Study

A best-in-class example of an organisation taking decisive steps to proliferate data capability can be found at a global food and beverage company. This company knew that many of their teams felt unable to have conversations about data. They weren't familiar with the language. They didn't feel able to challenge agencies (whom they paid) when it came to the data they provided because they didn't understand it sufficiently and felt constantly on 'the back foot'. These teams had lost status compared to more data-oriented teams. These are serious issues. This company engaged Ipsos Data Advisory Practice to roll out a data literacy program.

Ipsos' Data Advisory is working with this company to raise the level of data literacy and participation in two ways:

- 1. Fundamentals:** the skills, the concepts and applications of data. We believe people should not shy away from conversations when they hear words like 'machine learning', 'Bayesian', 'Boolean query', or 'API build'. We want people to participate in those conversations and actively bring an opinion to the table.
- 2. Data Synthesis and Integration:** this company, like most, has a lot of data held across teams and systems, much of it accessible. We're training people how to access, interrogate and analyse datasets, not just in isolation, but with frameworks to help them understand how the metrics fit together they can be used to tell a story and share insights.

Interactive training, hands-one experience with data using real world business questions is how we at Ipsos believe that data literacy, data participation and data enthusiasm will be proliferated in an organisation.





“ Data intelligence requires an organisation to be structured intentionally around its data assets ”

An intelligent organisation

Data intelligence requires an organisation to be structured around its data assets. This is a departure from most organisational structures where data is incidental to a team’s activities and purpose.

A large consumer goods multinational can show us what good looks like here. This company recognised the complexity of data sources and the criticality of the outputs across several different functions; finance, analytics, sales and supply chain. Instead of function based ‘silos’, this company built a team around the data - people who were specialists in interpreting and analysing this data; there was intentional hiring and neat synergies between financial analysts looking at COGS (Cost of

Goods Sold) data and net sales performance and analytics teams analysing market share data and competitor intelligence. The result of this ‘data-first’ structure was that trusted, aggregated reporting could be produced, not just for country and category leads, but also for demand planning teams to understand and plan for actions in the supply chains and factories.

A final element to data intelligence is making data into something people can interact with intuitively brilliant data visualisations and tools that allow a marketing manager check on the success of a live advertising campaign or lab technician to evaluate machine capacity as easily as they can check the weather forecast on their phones.

Data Intelligence Case Study

We like this example from data-savvy Sport England who oversee English sports funding. Sport England's Active Lives survey measures the amount of activity people engage in – a vast undertaking of considerable data complexity with 200k people surveyed yearly, 30k statistical variables, multiple weightings and additional data inputs such as weather data. Ipsos' Public Affairs department run this survey and their team of data experts have worked closely with Sport England. Intensive efforts around data efficiency and processing improvement as well as smart API linkages between source data and a Power BI visualisation front-end have given Sport England access to regularly refreshed reports expanding their utility throughout the organisation. This data, and the ease through which it can be accessed and understood help inform policy and campaigns (such as the 'This Girl Can' campaign) making Sport England a great example of a data-driven organisation.

3. Innovation Enabled

In a business, data innovation is where a company can really capitalise on its data assets. In the public sector data innovation has endless applications to improve the lives of people and the growth of economies. We've already seen how data has been a huge enabler in shaping responses to a pandemic or in helping us get to grips with the climate crisis.

Where data starts to become incredibly valuable and compelling is when it's exploited to predict future events, their implications, and next best action. There are hundreds of private sector examples from predicting the amount of inventory stock a warehouse should hold to understanding the impact

of programmatic buying of digital advertising rather than TV on sales.

The area of trends and futures is increasingly important. A large healthcare multinational we work with at Ipsos is using data in the futures space to impressive effect. Social, research and trends data are fed into a dynamic tool to discover the trends impacting healthcare and wellbeing and monitors the extent to

which these trends will 'go mainstream' versus those that will peter out. The result is that this company can see early shifts in consumer behaviours and plan for them.

Public sector applications for trends prediction include forming the basis of policy setting, government investment decisions, responses to emergencies and many more.

“ Where data starts to become incredibly valuable and compelling is when it's exploited to predict future events, their implications, and next best action ”

Data products – the best in class way to deal with the complexity of data today

A data product essentially facilitates an end goal through data, for example tools that tell a company what type of media advertising will increase their sales and by what amount. Ipsos' Marketing Management Analytics ([Ipsos MMA](#)) is a gold star provider in this space.

Data products are generally based on large data volumes from multiple sources. Integrating and connecting data, building models, designing visualisation front ends and getting them into the hands of users is an undertaking involving many people and crossing borders, business functions and companies. How to handle such complexity? Enter the Data Product Owner. This person is a data professional overseeing development of the data product end to end. Tasked with understanding the regulations and provisions as the data crosses borders and systems and encounters new regulations and requirements. Teams built around data products can work globally to deliver data tools whilst respecting data compliance and integrity every step of the way.



Agile data products – a framework to deliver data innovation

Core to building innovative data science tools is a robust system for building and deploying data products. Orienting data innovation around the concept of data products is the way best in class organisations deal with the complexity of data today.

A data product in action can be seen with a piece of work the Ipsos Data Advisory Team are doing with a large electronics company looking to understand which cities and regions they should expand into. Getting to an

answer requires modelling and analysis of different macro-economic, socio-economic and behavioural datasets to find pockets of affluence and premium goods affinity, now and projected into the future. Refining the business hypotheses and creating a framework through which to apply the ~25 different data sources is as much part of the work as building the model and testing the MVP (minimum viable product). With input from many business stakeholders and a commercial positioning, the product owner is the architect of the many threads and the safe pair of hands that will deliver the final solution.

“ Orienting data innovation around the concept of data products is the way best in class organisations deal with the complexity of data today ”



4. Data Culture

In our working and our personal lives, we will all experience the power of culture. A culture of adherence to rules which can help stem a pandemic and protect public health services... or a culture of casual disregard for accountability which can result in an MPs' expenses scandal. Data is no different. When data, its potential and its safe, respectful use are championed by senior leaders, a positive culture of curiosity, learning and 'good data citizenship' will flourish.

A good data culture encourages innovation and experimentation. Agile methodology particularly lends itself to development of data products and has the advantage of bringing in

many people from across an organisation thus meaningfully contributing to the proliferation of data culture. A great example comes from a manufacturing multinational. In building a data product to reduce factory emissions, their Agile team included people from the factory production lines, building engineers, the sustainability team, branding and marketing, a finance controller and a procurement specialist. All these people who had very little prior knowledge of data before the project were not only vital to the development of the product, but left having first-hand experience of how to build and deploy a data science solution.

Transparency and respect for the use of data, clearly communicated, understood and adhered to will place

trust, not only in data but in companies, in leaders and in governments. Adherence to data regulations is a minimum standard, not an aspirational state. Clear ownership and accountability is crucial. In many ways, this is what the Data Strategy is really about. Encouraging our colleagues to be good data citizens, demanding our leaders be good data citizens and bringing up our children to be good data citizens are where the future of an organisation, public or private, will live and die.

How to get there

Leaders in this space have not got here by accident but through intention. Here are four things you can do now, regardless of the size, sector, or data maturity of your organisation.

Understanding now and the future

1

‘Getting your arms around the data’ at either an enterprise or function level can be done with a Data Diagnostic – essentially an in-depth review of data, technology, capability, and data partnerships through a business and commercial lens. This exercise pinpoints how ‘data ready’ the organisation is along with a shortlist of 3-4 prioritised data product use cases, aligned to strategic goals and ready to commence agile sprint development. Data diagnostic work has the advantage of being able to rapidly home in on and surface the high value data work even if an organisation does not have an existing data strategy or organisation in place.

Measurement that matters

2

Most organisations we work with have an impressive array of data tools, dashboards, metrics, and KPIs. A huge set of KPIs can easily overwhelm people and many of these tools sit in a metaphorical drawer gathering dust. One of the most effective things an organisation can do is carry out a measurement framework to understand the KPIs and metrics currently available, assess the value they are providing and whittle them down to a key set of metrics that are agreed and used throughout the business and aligned to strategic goals. Fewer measurement indicators that are embedded into the business are infinitely more effective than more KPIs, more tools, more data, ‘more stuff’.

Planting the seeds of a data culture

3

Capability programmes which develop the ability of your people to work with new datasets can be a game changer, transforming them from passive recipients of data to active participants. It’s not just about getting people to ‘do data’, but about getting people to think analytically and recognise data-oriented questions. ‘Learning by doing programmes’ which use hands-on exercises and real-life business questions are best practice. Having an external partner run a data hackathon is a great way to expose people to Agile and proactive data exploration as opposed to waiting for a brief. These skills are neither impossible to learn nor ‘nice to have’. They are imperative skills for the future.

Conclusion

Becoming a data-driven organisation offers many potential rewards but is no small task. Re-orienting technology and skills in line with a data strategy take time and investment and commitment. Many of our best-in-class examples in this article came from small incremental improvements which created value for the organisation and made the case for further investment. However, not everything needs to be done at once and huge improvements can come without the need to kick off a behemoth transformation program.

The data journey of a thousand steps can begin with one meaningful intervention... we wish you well in your data journey.



Jane Smith

Head of Ipsos Data Advisory,
Ipsos UK

Jane is Head of Ipsos Data Advisory Practice and specialises in helping clients become data driven; from leading data strategy work to building data products that drive revenue, growth and insight – Jane is experienced across all areas of data work. Jane was previously data director at GlaxoSmith-Kline and additionally has over 15 years of experience in data consulting at Accenture and EY.



Karl Ashworth

Head of Public Affairs Analytics,
Ipsos UK

Karl is Head of Analytics in Public Affairs at Ipsos and leads on the design and delivery of a wide range of analytics. He leads on helping clients to understand how analytic techniques bring insight to answering the key questions that arise in their research, focusing on what the results mean and how they might be used to better understand policy. His previous experience includes 16 years as a statistical methodologist, mostly at ONS, and 12 years as a social policy analyst at Loughborough University.

Contributors:

Craig Glusick – EMEA Vice President, Ipsos MMA

Doug Warren – Associate Director, Public Affairs, Ipsos UK

BUILDING A DATA STRATEGY FOR PUBLIC AND PRIVATE SECTOR ORGANISATIONS

Jane Smith

Head of Data Strategy, Ipsos UK

Ipsos's Data Advisory Practice

- We carry out Data Strategy work to assess, benchmark and optimise organisations and functions' data readiness.
 - Our Data Capability programs upskill teams to become more data driven.
 - We partner with clients to leverage their (and other) data to build data tools and integrate them into business processes.
-